Research Abstracts on Health

1998 – 2008

2009

Documentation Centre for Women and Children
National Institute of Public Cooperation and Child Development
5, Siri Institutional Area, Hauz Khas, New Delhi - 110016
Project Team

Guidance and Support : Dr. Dinesh Paul
Dr. Sulochana Vasudevan

Project In-Charge : Meenakshi Sood

Abstracting : Punita Mathur

Computer Assistance : Pawan Kumar
Foreword

Research on women and children reveals that there are several areas which require the attention of planners and programme implementers. Policy decisions based on research findings are rooted in ground reality, and therefore have the capacity to bring about tangible improvement in the situation, whether it is with regard to nutritional status, health practices, income generation, domestic violence or rights of women and children. Research on social issues in India is conducted by a plethora of organizations, namely research institutes, government ministries and departments, autonomous organizations, home science colleges, social work departments, university departments, medical colleges, international and voluntary organizations. As research is a vital input for development, planners, administrators and researchers are on the look out for social factors which have the potential to impact the outcomes of various programmes. With this aim in view, the Documentation Centre for Women and Children (DCWC) of NIPCCD is engaged in the process of collecting and documenting valuable research in the areas of women and children. DCWC collects research from many widely scattered sources for the convenience of users. Hence this project was undertaken to bring out compilations of research abstracts on various areas for the benefit of users.

"Research Abstracts on Health, 1998-2008" has been compiled to present widely scattered research in a compact form, and assist in making encapsulated information and recommendations of research available to planners, programme implementers and researchers. Research studies conducted by various organizations during the period 1998 to 2008 have been summarized on various subjects such as teenage pregnancy, anaemia/iron deficiency, child health, nutritional status/child nutrition, child morbidity, etc.

It is hoped that this document would be of immense use to all stakeholders working for the survival, development and empowerment of women and children. It would not have been possible to bring out this document without the cooperation of various organizations who have very kindly shared their research studies with NIPCCD. I wish to place on record my appreciation of the efforts put by the staff of DCWC specially Smt. Meenakshi Sood, Deputy Director and Dr. Dinesh Paul, Additional Director (TC) for overall guidance and support in completion of the project.

(A.K. Gopal)
## Contents

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject and Titles</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Abortion</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Situational analysis of abortion services in Rajasthan. (2005).</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>- ARTH, Action Research and Training for Health, Udaipur.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Assessment of training of traditional birth attendants in rural areas of Gujarat.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>- Visaria, Leela and Nanda, Satyajeet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gujarat Institute of Development Research, Ahmedabad</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Visaria, Leela, Barua, Alka and Mistry, Ramkrishna.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Institute of Development Research, Ahmedabad</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Adolescent</strong></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Formation of partnerships among young women and men in Pune district, Maharashtra.</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>- Alexander, Mallika, Garda, Laila and Kanade, Savita.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Population Council, New Delhi.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Health needs of adolescents: a study of health needs of adolescents in higher</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>secondary schools in Goa. (2002).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Andrew, Gracy and Patel, Vikram.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sangath Society for Child Development and Family Guidance, Goa.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Reproductive health on the ground : meeting women’s needs in southern Rajasthan :</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>report of 3 year experience of understanding change in health seeking behaviour.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- ARTH, Action Research and Training for Health, Udaipur.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Health needs of poor unmarried adolescent girls: a community based study in rural</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Tamil Nadu. (2005).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Balasubramanian, P.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Indian Journal of Population Education.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Do adolescents need reproductive health information: school teacher’s perspective.</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>(2004).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Centre for Operations Research and Training (CORT), Vadodara.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Study of some epidemiological factors in teenage pregnancy - hospital based</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>case comparison study.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Chahande, M.S. et al.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>10.</td>
<td>A process documentation of advocacy for mainstreaming: reproductive and sexual</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>CHETNA, Ahmedabad.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deb, Tuhin and Mishra, Rakshit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indian Journal of Population Education.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goyal, R.S. and Khanna, Anoop.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indian Institute of Health Management Research, Jaipur</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Reproductive health awareness of school going, unmarried, rural adolescents.</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>(2004).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gupta, Neeru et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Indian Journal of Pediatrics.</td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>A Study of reproductive health awareness and sex behaviour among adolescents.</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Indian Council of Medical Research, New Delhi.</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Study of health problems of adolescents in urban field practice area, Sadar,</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Indira Gandhi Medical College, Dept. of Preventive and Social Medicine, Nagpur.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International Centre for Research on Women, New Delhi.</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Prevalence of obesity amongst affluent adolescent school children in Delhi.</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>(2002).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kapil, Umesh et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indian Pediatrics.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Majumdar, Ratna et al.</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Reproductive health education of college adolescents through self-instructional</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Nagarajan, N.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indian Journal of Population Education.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
  - National AIDS Control Organization, New Delhi.                                                                 | 24       |
  - Pachauri, Saroj and Santhya, K.G.  
  - *International Family Planning Perspectives.*                                                                 | 25       |
  - Pande, Rohini et al.  
  - International Centre for Research on Women, Washington, DC.                                                                 | 26       |
  - Patel, Pallavi et al.  
  - Centre for Health Education Training and Nutrition Awareness, Ahmedabad.                                                                 | 28       |
  - Paul, Dinesh. et al.  
  - NIPCCD, New Delhi.                                                                                                                          | 29       |
  - Paul, Dinesh and Gopalakrishnan, Shanta.  
  - NIPCCD, New Delhi.                                                                                                                            | 30       |
  - Ram, Usha.  
  - *Health and Population.*                                                                                                                    | 31       |
  - Sandhya, K.G. and Jejeebhoy, Shireen J.  
  - Population Council, New Delhi.                                                                                                              | 32       |
  - Shivpuri, D., Rajesh, M.S. and Jain, D.  
  - *Indian Pediatrics.*                                                                                                                        | 34       |
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject and Titles</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-Trikha, Sonia.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Journal of Community Medicine</em>.</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>Anaemia / Iron Deficiency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Jain, S et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Rawat, C.M.S. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Journal of Community Medicine</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Shah, Binay Kumar and Gupta, Piyush.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Pediatrics</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sharma, Anshu et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Pediatrics</em>.</td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>Childhood Diseases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Karonde, Sunil et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>The Indian Journal of Pediatrics</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Madden, S.J. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Child: Care, Health and Development, the Multidisciplinary Journal</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Mitra, Nilanjan Kumar.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Journal of Community Medicine</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Pokharel, P.K. et al.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Singh, Madhu, B., Haldiya, K.R. and Lakshminarayana, J.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desert Medicine Research Centre, Jodhpur.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Singh, Madhu, B. and Lakshminarayan, J.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desert Medicine Research Centre, Jodhpur.</td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>Childhood illnesses and malnutrition in under five children in drought affected desert area of western Rajasthan, India. (2006).</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Singh, Madhu B. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Desert Medicine Research Centre, Jodhpur.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Child Health/ Nutritional Status</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ananthakrishnan, Shanthi et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Indian Pediatrics.</em></td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>Safe water, safe waste disposal and health outcomes. (2007).</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>Ghosh, Meenakshi and Goldar, Bishwanath.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Institute of Economic Growth, Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kulkarni, Sumati and Chitanand, Rejeshri</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Manpower Journal.</em></td>
<td></td>
</tr>
<tr>
<td>44.</td>
<td>Prevalence of Trichuris trichura in relation to socio-economic and behavioural determinants of exposure to infection in rural Assam. (2000).</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Narain, K. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Indian Journal of Medical Research.</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pareek, Satendra, Sanadhiya, Monisha and Rothagi, Parul.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seva Mandir, Udaipur.</td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>Changes in nutritional status and morbidity over time among pre-school children from slums in Pune, India. (2000).</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Rao, S., Joshi, S. B. and Kalkar, R. S.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Indian Pediatrics.</em></td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>47.</td>
<td>Malnutrition as an underlying cause of childhood deaths associated with infectious diseases in developing countries. (2000).</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>- Rice, Amy L. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sarkar, Nihar, Ranjan et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Pediatrics.</em></td>
<td></td>
</tr>
<tr>
<td>49.</td>
<td>Development of a scale to assess maternal and child health and family planning knowledge level among rural women. (2000).</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>- Sood, A.K. and Nagla, B.K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Health and Population.</em></td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td>Coverage and quality of maternal and child health services at sub-centre level. (2001).</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>- Sunder Lal et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Journal of Community Medicine.</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Child Survival</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Catholic Relief Services, Lucknow.</td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>Serum Cortisol and thyroid hormone levels in Neonates with sepsis. (2002).</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>- Das B.K., Agarwal Pooja, Agarwal J.K., Mishra O.P.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Jain, S. K. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Paranjpe, Priya et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- SEARCH, Gadchiroli.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Ramanathan, K., et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Tomlinson, R. and Sainsbury, C.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Child: Care, Health and Development, the Multidisciplinary Journal.</em></td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>Centre for Communication and Development Studies, Pune.</td>
<td></td>
</tr>
<tr>
<td>58.</td>
<td>A Cost analysis of CARE India’s reproductive and child health, nutrition and HIV/ AIDS (RACHNA) program : final report. ((2006).</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Fiedler, John L. and Jain, Meenakshi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CARE, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gopalan, Saji Saraswathy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public Health Resource Network, Bhubaneswar.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>India, Ministry of Health and Family Welfare, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pathak, Priyali et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Indian Journal of Pediatrics.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chandra, R. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upgraded Dep of Community Medicine, King George’s Medical College, Lucknow.</td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>Knowledge and attitude of mothers about oral rehydration solution in few urban slums of Delhi. (2005).</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Rasania, S.K. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health and Population Perspectives and Issues.</td>
<td></td>
</tr>
<tr>
<td>64.</td>
<td>Association of diarrhoea and upper respiratory infections with weight and height gains in Bangladeshi children aged 5 to 11 years. (2000).</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Torres, Alberto M. et al.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>- Anand, Harpreet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Seva Mandir, Udaipur.</td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td>Adoption of family welfare measures among four communities in fringe villages of Bhubaneswar city. (2003).</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>- Behura, B.K and Mohanty, R.P.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Nabakrushna Choudhary Centre for Development Studies, Bhubaneswar.</td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>Quality of family welfare services in Madhya Pradesh. (2002).</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>- Centre for Operations Research and Training, Vadodara.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gujarat Institute of Development Research, Ahmedabad.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Kaushik, S. and Vemusi, Murali Dhar.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Demography India</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Kumar, B. L.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gujarat Institute of Development Research, Ahmedabad.</td>
<td></td>
</tr>
<tr>
<td>71.</td>
<td>Sex preference and contraceptive use in Manipur. (2006).</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>- Ladusingh, L., Minita Devi, N. and Singh, Jitenkumar.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sociological Bulletin.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Nanda, Satyajeet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gujarat Institute of Development Research, Ahmedabad.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Patro, B. K. et al.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>74.</td>
<td>Marriage and fertility behaviour of slum dwellers of Jabalpur City. (2004).</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>- Sahoo, B.K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sinha, R.K. and Singh, S.K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- International Institute for Population Sciences, Mumbai.</td>
<td></td>
</tr>
<tr>
<td>76.</td>
<td>Impact of literacy and socio-economic status on population control. (2004).</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>- Yadav, Kalika.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Goitre/ Iodine Deficiency</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gakkhar, R.K. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Health</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Anand, K., Pandav, C.S. and Kapoor, S.K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- All India Institute of Medical Sciences, Centre for Community Medicine, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Bose, Ashish. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Health for the Millions</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gupta, Indrani.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Institute of Economic Growth, Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Health Functionary</strong></td>
<td></td>
</tr>
<tr>
<td>81.</td>
<td>Daily up down : why would an Auxiliary Nurse Midwife (ANM) of Rajasthan prefer to reside within her work area ?. (2003).</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>- Mohan, Pavitra et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Udaipur : ARTH, Action Research and Training for Health</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
- Daga, A.S.  
- *Indian Pediatrics.*                                                                                                                                                                                                                                                                                    | 86       |
- ARTH, Action Research and Training for Health, Udaipur.                                                                                                                                                                                                                                                | 87       |
- CARE, New Delhi.  
- AIIMS, New Delhi.                                                                                                                                                                                                                                                                                 | 88       |
- Chhattisgarh, Dept. of Health, Raipur.                                                                                                                                                                                                                                                                       | 89       |
| 86.   | Outcome evaluation of the Mitanin Programme : a critical assessment of the nations’s largest ongoing Community Health Activist Programme. (2005).  
- Chhattisgarh, Dept. of Health, Raipur.                                                                                                                                                                                                                                                                       | 90       |
- Tamil Nadu, Dept. of Health, Chennai.                                                                                                                                                                                                                                                                     | 92       |
- Uttar Pradesh, Dept. of Planning, Lucknow.                                                                                                                                                                                                                                                                   | 93       |
- Bandyopadhyaya, Bhaswati et al.  
- *Indian Journal of Community Medicine.*                                                                                                                                                                                                                                                                       | 95       |
- Mukherjee, Suzanne et al.  
- *Child: Care, Health and Development, the Multidisciplinary Journal.*                                                                                                                                                                                                                  | 96       |
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject and Titles</th>
<th>Page No.</th>
</tr>
</thead>
</table>
- Bhasin, S K. et al.  
- *Indian Journal of community Medicine*. | 97       |
- Chatterjee, Anirban and Fawzi, Wafaie W.  
- *NFI Bulletin*. | 98       |
- Family Health International, New Delhi.  
- USAID. | 99       |
- Gross, Miriam.  
- Seva Mandir, Udaipur | 100      |
| 95.   | Appraisal of NGOs to implement AIDS control project. (2002).  
- Institute of Development Studies, Jaipur. | 101      |
- Marchant, Rashid H. et al.  
- *Indian Pediatrics*. | 102      |
- Mehra, Jyoti.  
- Manipur State AIDS Control Society, Imphal. | 103      |
- Niranjan, S, Singh, K.S and Rao, G.  
- *Indian Journal of Social Development*. | 104      |
- Population Foundation of India, New Delhi. | 105      |
- Pratinidhi, A.K. et al.  
- *Indian Journal of Community Medicine*. | 106      |
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject and Titles</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Pradhan, Basanta K., Sundar, Ramamani and Singh, Shalab K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Rajkumar, Vijay.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Save the Children, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Verma, Uday Kumar and Sasikumar, S.K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- V.V. Giri National Labour Institute, NOIDA, UP.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- World Bank, New Delhi.</td>
<td></td>
</tr>
</tbody>
</table>

**Immunization**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject and Titles</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Bhatia, Vikas. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Das, R. K and Dasgupta, Purnamita.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Economic and Political Weekly.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Deshpande, Renu et al.</td>
<td></td>
</tr>
<tr>
<td>108.</td>
<td>Verification of last doses of vaccines for various vaccination programmes and verification of third pre-natal checkup of pregnant women and third post natal check up of women after delivery. Guwahati (2001).</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>- Kalita, D.K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Guwahati University, Population Research Centre, Guwahati.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Kar, Malini et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Indian Journal of Community Medicine.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>110.</td>
<td>A Study to determine the factors contributing to the low rate of immunization among children and pregnant women in Girwa and Kotra blocks served by Seva Mandir. (2004).</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td>Lyngdoh, Bremley A.B.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Seva Mandir, Udaipur.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Munshi, Rakesh and Lee, Sang - Hyop.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International Institute for Population Sciences.</td>
<td></td>
</tr>
<tr>
<td>112.</td>
<td>Immunization status of children of India. (2000).</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>Padam Singh and Yadav, R.J.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indian Pediatrics.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Padam Singh and Yadav, R. J.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Puri A., Gupta K. and Chakravarti A, Mehta M.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indian Pediatrics.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rao, G., Rama, Parasuraman, Sulabha and Unisa, Sayeed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>International Institute for Population Sciences.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Swami, H.M. et al.</td>
<td></td>
</tr>
</tbody>
</table>

**Infant Mortality/ Infant Health**

<p>| 117.  | Infant mortality variations in space and time: analysis of West Bengal data. (2001). | 121 |
|       | Agnihotri, Satish B.                                                                |          |
|       | Economic and Political Weekly.                                                     |          |
|       | Bang, Abhay T. et al.                                                               |          |
|       | Indian Pediatrics.                                                                 |          |</p>
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject and Titles</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>122.</td>
<td>Stalling of infant mortality in India during the recent period: a state level analysis. (2005). &lt;br&gt; - Das, N.P and Shah, Urvi. &lt;br&gt; - Baroda University, Population Research Centre, Vadodara.</td>
<td>125</td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>--------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Pandey, Arvind et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Demography India</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Paranjpe, Priya et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- SEARCH, Society for Education Action and Research in Community Health, Gadhiroli, Maharashtra.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Ram, Usha.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Demography India</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sharma, Suresh.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Institute of Economic Growth, Delhi.</td>
<td></td>
</tr>
<tr>
<td>133.</td>
<td>Watching television 2 to 3 hours at night by pregnant women causes sleep disturbance of newborns. (2004).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Tirunelveli Medical College, Dept of Community Medicine, Tirunelveli</td>
<td></td>
</tr>
</tbody>
</table>

**Injury**

<p>| 134. | Evaluation of the WHO/UNICEF algorithm for integrated management of childhood illness between the ages of one week to two months. (2000). |
|       | - Gupta, Renu et al. |
|       | - <em>Indian Pediatrics</em>. |
|       | - Gururaj, G. |
|       | - National Institute of Mental Health and Neurosciences, Bangalore. |
|       | - Tiagi, Chandini, Walia, Inderjit and Amarjit Singh. |
|       | - <em>Indian Pediatrics</em>. |</p>
<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject and Titles</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Leprosy</strong></td>
<td></td>
</tr>
<tr>
<td>137.</td>
<td>Eliminating leprosy: so near...yet so far. (2005).</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>- Srivastava, Alok.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Centre for Media Studies, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Low Birth Weight</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Anand, Kiran and Garg, B.S.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Journal of Community Medicine</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Indira Gandhi Medical College, Department of Preventive and Social Medicine, Nagpur.</td>
<td></td>
</tr>
<tr>
<td>140.</td>
<td>Incidence of low birth weight in rural Ballabgarh, Haryana. (2001)</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>- Kapoor, S.K. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Radhakrishnan, T. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Pediatrics</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Birth weight at Changlang, Arunachal Pradesh.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sreekumaran, N. et al.</td>
<td></td>
</tr>
<tr>
<td>144.</td>
<td>Intellectual psycho-educational and functional status of low birth weight survivors beyond 5 years of age. (2000).</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td>- Tandon, Anita et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Mental Health/ Psychological Disorders</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Anita et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Journal of Community Medicine</em>.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>146.</td>
<td>Who manages the care of students with attention deficit hyperactivity disorder in higher education. (2003).</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>- Bavenstock, A.C. and Finaly, F.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Child: Care, Health and Development, the Multidisciplinary Journal</em></td>
<td></td>
</tr>
<tr>
<td>147.</td>
<td>Urban mental health services in India: how complete or incomplete. (2004).</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>- Desai, Nimesh G. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Institute of Human Behaviour and Allied Sciences, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gupta, Anita.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Delhi University, Department of Psychology, Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Khurana, S. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Lalvani, Sanjeev et al.</td>
<td></td>
</tr>
<tr>
<td>151.</td>
<td>Clinical characteristics and outcome of children and adolescent with conversion disorder. (2002).</td>
<td>152</td>
</tr>
<tr>
<td></td>
<td>- Malhi, Prabhjot and Singh, Pratibha.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Pediatrics</em>.</td>
<td></td>
</tr>
<tr>
<td>152.</td>
<td>Psychological problems in paediatric cases. (1999).</td>
<td>153</td>
</tr>
<tr>
<td></td>
<td>- Sangeetha, S, Oommen, Anna and Shanmugham, V.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>NIMHANS Journal</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Mortality/ Maternal Mortality</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Ahmad, Omar B. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Chaudhari, Sudha et. al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Pediatrics</em>.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>- Elango, S.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Medical College, Deptt of Community Medicine, Tirunelveli, Tamil Nadu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Hill, Kenneth, Abouzahar, Carla and Wardlaw, T.</td>
<td></td>
</tr>
<tr>
<td>157.</td>
<td>Report on reduce maternal and child mortality and morbidity rate in Assam.</td>
<td>157</td>
</tr>
<tr>
<td>158.</td>
<td>Scale for identification of &quot;at risk&quot; families for under five deaths. (2000).</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>- Kumar, G. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Rajaram, S.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Demography India.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Save the Children, Westport, USA.</td>
<td></td>
</tr>
</tbody>
</table>

**Multi Indicator Cluster Survey**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject and Titles</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Murali, R.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Institute of Rural Health and Family Welfare Trust, Population Research Centre, Gandhigram.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- UNICEF, New Delhi.</td>
<td></td>
</tr>
</tbody>
</table>

**National Family Health Survey**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Subject and Titles</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- International Institute for Population Sciences, Mumbai.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- International Institute for Population Sciences, Mumbai.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>- Jhingan, A. K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Delhi Diabetes Research Centre, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Subramanyam, Vedavati et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Pediatrics</em>.</td>
<td></td>
</tr>
<tr>
<td><strong>Polio</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>167.</td>
<td>Polio surveillance - the model used in India for polio eradication. (2000).</td>
<td>169</td>
</tr>
<tr>
<td></td>
<td>- Banerjee, Kaushik et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Bhagwat, Sadhana et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Health and Population</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Chincholikar, S. V. and Prayag, R.D.</td>
<td></td>
</tr>
<tr>
<td>170.</td>
<td>Accuracy of the national polio surveillance project data in Rajasthan. (2002).</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td>- Paul, Yash.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>The Indian Journal of Pediatrics</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Rajesh Kumar, et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Journal of Community Medicine</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Rasania, S.K. and Sachdev, T.K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Journal of Communicable Diseases</em>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Swami, H.M. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- <em>Indian Journal of Community Medicine</em>.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>174.</td>
<td>When every child counts: engaging the underserved communities for polio eradication in Uttar Pradesh, India. (2004).</td>
<td>173</td>
</tr>
<tr>
<td></td>
<td>- UNICEF, Regional Office for South Asia, Kathmandu.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Anderson, Mary Ann.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- CARE, New Delhi.</td>
<td></td>
</tr>
<tr>
<td>176.</td>
<td>Reproductive health on the ground : meeting women's needs in southern Rajasthan : report of 3 year experience of understanding change in health seeking behaviour. (2000).</td>
<td>176</td>
</tr>
<tr>
<td></td>
<td>- ARTH, Action Research and Training for Health, Udaipur.</td>
<td></td>
</tr>
<tr>
<td>177.</td>
<td>Qualitative study on community values and perceptions on teenage pregnancy. (2005).</td>
<td>178</td>
</tr>
<tr>
<td></td>
<td>- ARTH, Action Research and Training for Health, Udaipur.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- CARE India, New Delhi.</td>
<td></td>
</tr>
<tr>
<td>179.</td>
<td>A Study on reproductive and child health care of women aged between 18 to 35 years in different strata of society. (2005).</td>
<td>181</td>
</tr>
<tr>
<td></td>
<td>- Dubey, Viraj and Verma, Pooja Chandran.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sarojini Nadu Govt. Girls Post Graduate College, Centre for Women's Studies, Bhopal.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Garg, Sunneela et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Maulana Azad Medical College, Community Medicine, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gulati, S.C and Sharma, Suresh.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Institute of Economic Growth, Population Research Centre, Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gulati, S.C and Sharma, Suresh.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Institute of Economic Growth, Population Research Centre, Delhi.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>- Gulati, S.C and Sharma, Suresh.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Institute of Economic Growth, Population Research Centre, New Delhi.</td>
<td></td>
</tr>
<tr>
<td>184.</td>
<td>Reproductive and child health district level household survey 2004: Uttaranchal, 186</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- International Institute for Population Sciences, Mumbai.</td>
<td></td>
</tr>
<tr>
<td>185.</td>
<td>Reproductive and child health district level household survey 2004: Uttaranchal, 188</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- International Institute for Population Sciences, Mumbai.</td>
<td></td>
</tr>
<tr>
<td>186.</td>
<td>Reproductive and child health district level household survey 2004: Uttar Pradesh, 189</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- International Institute for Population Sciences, Mumbai.</td>
<td></td>
</tr>
<tr>
<td>187.</td>
<td>Reproductive and child health district level household survey 2004: Uttar Pradesh, 191</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- International Institute for Population Sciences, Mumbai.</td>
<td></td>
</tr>
<tr>
<td>188.</td>
<td>Self-reported symptoms of reproductive health problems of women in India. (2004). 193</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Kanitkar, Tara and Radkar, Anjali.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Demography India.</td>
<td></td>
</tr>
<tr>
<td>190.</td>
<td>Marriage and motherhood: an exploratory study of the social and reproductive       195</td>
<td></td>
</tr>
<tr>
<td></td>
<td>health status of married young women in Gujarat and West Bengal, India. (2006).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Ram, F., Sinha, R. K., and Mahanty, S. K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Population Council, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Swaasthya, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Taneja, D.K. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Indian Journal of Community Medicine.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>- Visaria, Leela.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Gujarat Institute of Development Research, Ahmedabad</td>
<td></td>
</tr>
<tr>
<td></td>
<td>School Health</td>
<td></td>
</tr>
<tr>
<td>194.</td>
<td>Structural and organizational features of school health schemes in Delhi. (2000).</td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>- Chaturvedi, Sanjay and Aggarwal, O.P.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Kakrani, Vandana. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Indian Journal of Community Medicine.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Panda, P. et al.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Indian Journal of Community Medicine.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toys Toxicity</td>
<td></td>
</tr>
<tr>
<td>198.</td>
<td>Toying with toxics : an investigation of lead and cadmium in soft toys in three cities in India. (2006).</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>- Toxics Links, New Delhi.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tribal Health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- ARTH, Action Research and Training for Health, Udaipur.</td>
<td></td>
</tr>
<tr>
<td>S.No.</td>
<td>Subject and Titles</td>
<td>Page No.</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
<pre><code>   | - HNB Garhwal Univ., Department of Anthropology, Srinagar, Uttarakhand. | 206      |
</code></pre>
       | - Kumari, P. Vasantha, and Obulesv, M.C.  
       | - Mishra, Niladri Biharo.  
       | - *Vanyajati* | 208      |
       | - Prasad, Rajiva, Paswan, Balram and Singh, S.K.  
       | - International Institute for Population Sciences, Mumbai. | 209      |
       | - Sengupta, Sarthak Purnugla.  
       | - *Vanyajati* | 210      |
|       | **Vitamin A Deficiency**                                                             |          |
       | - Sircar, B.K. et al.  
       | - *Indian Journal of Medical Research*. | 212      |
       | - Swami, H.M. et al.  
       | - *Indian Journal of Pediatrics*. | 212      |
       | - Swami, H.M. et al.  
       | - *The Indian Journal of Pediatrics*. | 213      |
ABORTION

Situational analysis of abortion services in Rajasthan. Udaipur: ARTH. 84 p.

Key Words: 1. HEALTH 2. ABORTION SERVICES 3. ABORTION 4. MEDICAL TERMINATION OF PREGNANCY 5. RAJASTHAN 6. VISTAAR PROJECT.

Abstract: Despite legalization of elective abortion through the Medical Termination of Pregnancy (MTP) Act in 1971, the availability of abortion services particularly in rural areas remains limited. The present study was done to assess the availability and adequacy of abortion services in districts of the state, and to assess institutional readiness for delivery of quality MTP services in the state. The study was conducted in 2 districts of Rajasthan, Jalore and Kota. Data was collected through interviews, secondary data was collected from the Directorate of Family Welfare, and a qualitative assessment was done of 5 training institutions. The total sample was of 618 informal service providers. Out of these 355 (57%) admitted to treating delayed periods. Providers who treated delayed periods included female paramedics (40%), male paramedics (17%), male unqualified practitioners (34%) and female untrained practitioners (8%). The most common method used for treating delayed periods was tablets (89%), followed by injections (58%). Invasive or surgical methods were tried out by a minority (7%) of providers. The commonest instrument used was the curette and occasionally a syringe, catheter or copper - T. The cost of such procedures was high, ranging from Rs.315 to Rs.516 per procedure. Out of 618 respondents, 90% gave injections for common ailments, 84% provided IV fluids, 61% applied stitches for injuries, 52% conduct deliveries, 61% treated incomplete abortions, and 64% treated menstrual problems. The study also enumerated 63 providers of Indian Systems of Medicine in the two districts, most of whom were male. Their practices and methods used to treat delayed periods were similar to those of informal providers. Eighteen of them were in government service, while the rest worked through private clinics. These 2 districts covered 42 government health centres all of which were mandated to provide abortion services. However, only 22 government facilities were actually providing abortion services. In the private sector there were 40 facilities providing abortion services, and only half of these
were certified to do so. Around 19 uncertified facilities did not report any abortions, 30% certified private facilities and 23% government facilities also did not report all MTPs. At government facilities, the average minimum and maximum cost of abortion were Rs.195 and Rs.457 for a first trimester abortion and Rs.317 to Rs.575 for second trimester abortion. At private facilities, the average minimum and maximum costs were Rs.540 and Rs.724 for first trimester abortion, and Rs.1144 and Rs.1681 for second trimester abortion. Data from State Directorate of Family Welfare revealed that 338 private facilities had been certified to provide MTP services in Rajasthan as of 2003. There were 8 MTP centres in Rajasthan. At the time of study they included 6 medical colleges. The total number of doctors trained from 1971 to April 2002 was 1056, of whom 786 had been trained after 1980. Enhancing access to safe abortion in Rajasthan would therefore require measures that allowed more legal facilities to be approved in a smoother way; use of modern, simpler and safer technology; and widespread dissemination of information about the MTP Act and technologies available.


Abstract : According to the NFHS II conducted during 1998-99, close to 75% of poor rural women belonging to disadvantaged groups in India were reported to depend on traditional birth attendants (TBAs), generally known as dais to deliver their babies. At macro level, in societies where TBAs were the major providers of delivery services, maternal mortality has not been able to come down below 100 per 100,000 live births. The Gujarat Institute of Development Research at the request of SEWA, Ahmedabad undertook a study of the dais in Gujarat. Three categories of dais were selected for the study - those trained by SEWA, Government or other NGOs, and those who received no training at all. 269 dais had undergone the 3 month training from the year 2000 to 2003. Eight batches of dais were trained. The dais was distributed into three groups: 76 dais were trained for 3 months and given refresher training, 20 were given PHC training, and 22 were untrained. More than 90% dais belonged to backward communities and scheduled castes. The average age
of *dais* was 53 years and 70% were widows. The average number of live births that the *dais* attended per month was more than 4. Nearly two thirds of the *dais*, besides conducting deliveries, provided other services to women such as pregnancy check up before the delivery, advising women about taking enough rest, tetanus toxoid injections, nutritious food, etc. Nearly 20% *dais* provided delivery care as a social service; nearly 50% of them received payment partly in cash, and 20% were paid only in cash. Nearly 70% *dais* reported that they were not paid immediately. 62% of the *dais* reported that the payment did not vary based on the sex of the child. Nearly 75% of them had to travel for more than an hour to reach the training location. Almost 90% of SEWA trained *dais* indicated that they applied mild pressure on the stomach of the woman when the placenta did not come out on its own. More than 50% *dais* did not apply anything to the stump, and less than 10% used ghee or something similar on the umbilical stump. 40% of the *dais* knew that first cry of the child was of prime importance. Two fifths also reported wrapping the baby in a clean cloth. Nearly 60% *dais* gave pre-lacteal feed to the newborn. Two-thirds of the *dais* reported that they visited pregnant women more than five times before conducting the delivery. In Focus Group Discussions (FDGs), women unanimously indicated that they called *dais* only when labour pains begin. 15% *dais* reported no maternal death in the villages in the past one year, while 25% reported maternal deaths. 79% of SEWA trained *dais* did not wash their hands before the training but more than 80% did wash after the training. 58.1% *dais* under SEWA training did not boil instruments earlier, but after training 41.9% boiled all instruments. More than 80% of the *dais* had cordial or reasonable relationship with the public health functionaries such as ANMs. *Mamta dai* kit was provided to all the PHC trained *dais* and 71% of the SEWA trained *dais*. Nearly 30% of SEWA trained *dais* received supply of iron tablets from SEWA health worker in their area, and 70% of the SEWA trained *dais* accompanied women to the referred centers, if the need arose. The emphasis during the training should be that *dais* should be able to recognize abnormal position of the foetus and complications during pregnancy, and instead of trying to manage these they should seek the assistance of better trained staff. Trained *dais* were more suitable to take on these responsibilities as they live in the villages, and can be called at any time. Duplication of training efforts should be minimized.

Key Words : 1.HEALTH 2.ABORTION 3.REPRODUCTIVE HEALTH 4.WOMEN’S HEALTH.

Abstract: A medical abortion is brought about by taking a drug or a combination of drugs orally, intramuscularly and/ or vaginally to terminate a pregnancy. It is an alternative to surgical procedures. To induce medical abortion, a combination of Mifepristone along with Misoprostol were used. The present study was an exploratory qualitative study, carried out in Ahmedabad urban area. The study aimed to understand the perspective of the service providers in making medical abortion available to the client. As a part of the study, a few chemists were interviewed to understand the marketing strategies followed by the drug industry. Using snowball sampling technique, 13 chemists and 10 service providers were interviewed. Pharmaceutical companies provided the drugs for medical abortion directly to gynaecologists as well as chemists to stock. Getting information about availability of drugs was a sensitive issue, as chemists feared they might get into trouble with law enforcing agencies. On an average, there was a demand between one to four customers asking for abortion pills in a month. Some chemists also give abortion pills to their “regular or known” clients without prescription. 69% chemists did not advise the customer to consult a doctor before taking the pill, and 85% did not inform customers about the possible side effects. Chemists themselves had little knowledge or understanding of when to take which drugs and did not provide much information to the client. Chemists received limited feedback from the client, and hence were not sure about the efficacy of the drug. Service providers came to know about abortion drugs through medical representatives of pharmaceutical companies. The cost of medical abortion was quite high if the service providers followed recommended protocol, thus they did away with either the ultrasound examination or the clinic visit. Most service providers informed their clients of various options available for abortion, and did not insist on using any one method. Service providers claimed that they prescribed medical abortion largely because it was the client’s preference. Service providers said that religious beliefs of clients also determined the choice of methods. Almost all service providers reported that they counselled their client, and said that counselling for medical abortion took much more time than counselling for surgical abortion. All the service providers
rated the efficacy of the drug regimen, if properly adhered to, to be above 90%. Only in 5% cases, abortion was not complete and required surgical intervention, which rarely posed any problem. Since, the medical abortion technique was non-invasive, therefore much less fraught with risk. Also, medical abortion was patient friendly and the woman did not have to be admitted to hospital. In addition, women could use this method without informing their family. However, there was no training for medical abortion, and providers had to rely on satisfied customers word of mouth that they provided medical abortion. Service providers were not clear whether MTP Act applied to medical information. Service providers should be provided with technical knowledge about dosage, side effects and their benefits.
ADOLESCENT


Key Words: 1. HEALTH 2. ADOLESCENT REPRODUCTIVE HEALTH 3. PARTNERSHIPS 4. MALE INVOLVEMENT 5. REPRODUCTIVE HEALTH 6. DECISION MAKING ADOLESCENT 7. FAMILY VIOLENCE 8. DOMESTIC VIOLENCE 9. SOCIALIZATION.

Abstract: In India, pre-marital partnerships, including those that may not involve sexual intercourse are taboo, and little is known about the lives of young people and the contexts in which they form romantic, marital and other partnerships. This study was conducted by the KEM Hospital Research Centre and the Population Council in Pune district, Maharashtra (2003-2005) to examine the formation of partnerships among young women and men aged 15-24 years. The study focussed on formation of the following partnerships, romantic and casual, pre-marital and marital, with and without physical and sexual contact. It also explored young people's own capabilities, notably their decision making authority, perceptions of self worth, mobility, gender role attitudes and awareness about sexual and reproductive matters, as well as their family relations and social networks. The research was conducted in three phases: a pre-survey qualitative phase that explored norms and experiences; a community survey of 8,595 young people; and a post survey qualitative phase in which survey respondents reporting romantic or non-romantic relationships (in all, 28) were interviewed in depth. Findings suggest that opportunities for the formation of romantic and sexual partnerships existed and 25% - 40% young men and 14% - 17% young women reported friends of the opposite sex. About 25% rural men and over 33.3% urban men reported either receiving or making a proposal of romantic partnership. In contrast, 13% married and 26% unmarried rural women and 13% married and 31% unmarried urban women reported receiving or making such proposals. In total, 16% - 17% rural men and 24% - 31% urban men reported having a pre-marital opposite sex romantic partner, whereas only 5% - 8% women reported such an experience. Gender differences were also evident with regard to the number of partners reported, and as compared to about 7% women, 25% men reported more than one romantic partner. Respondents also engaged in a range of intimate behaviours and their awareness of sexual and reproductive health matters was far from universal. In contrast with pre-marital
relationships, partnership formation within marriage is subject to a different set of norms of interaction. The median age at marriage was 21 years for men and 17 years for women. Majority of marriages (88% - 96%) were arranged and fewer than 20% respondents had met their future spouse before marriage. Married women reported low levels of communication with their spouse and marital family in the first 6 months of marriage. While 14% urban women and 24% rural women did not go out with their husband even once during the initial marriage period, however, majority of both men and women (73% - 80%) reported speaking with their spouse about whether or when to have children, money matters and love. High rates of domestic violence and sexual coercion existed, and there were limited choices in the area of contraception and child bearing for both men and women. Hence, just 10% and 17% rural and urban men, respectively, and fewer than 5% women practiced contraception before their first pregnancy and 32% - 44% experienced pregnancy within 6 months of marriage, though 40% of all respondents wanted to delay the first birth. Pre-marital partnership formation and sexual activity among young people is not rare, and calls for attention to significant multiple steps such as universalization of sex education; building skills and agencies among young women; promotion of new concepts of masculinity and femininity among youth; development of programmes to address parental inhibitors and encourage greater openness and interaction between parents and children. Findings highlight the need for India's reproductive health programmes to be inclusive of unmarried young people and argue strongly for services and programmes that enable both unmarried and married youth to make their partnership safe, wanted and informed.


Key Words : 1.HEALTH 2.ADOLESCENT HEALTH 3.HEALTH NEEDS 4.SEXUAL BEHAVIOUR 5.SCHOOL STUDENT 6.STUDENT 7.HIGHER SECONDARY SCHOOL 8.PROBLEMS OF ADOLESCENT 9.ADOLESCENT PROBLEM.

Abstract : The study was conducted among students of Higher Secondary Schools with an objective to explore the needs of adolescents concerning their education, health, parental relationship, peer relationships, sexuality and sexual behaviour, sexual knowledge and attitudes, and violence and abuse; and to examine differences in need and concerns between boys and girls, and between urban and rural school
populations; and also to generate suggestions on appropriate interventions. A sample of 430 boys and 381 girls of age 16 years studying in XI Standard in Higher Secondary Schools in South Goa were taken for the study. Qualitative research methods like free-lists (to list their own choices), focus group discussions and key informant interviews were used in the first phase to understand the general concern of adolescents, and a cross-sectional survey was conducted in the second phase. Significant findings of the survey were then presented at focus group discussions held with teachers and adolescents, to validate the findings and consider their implications. The study revealed that 57% boys and 55% girls reported facing difficulties in studies, and they felt studies were a burden due to high expectations of parents. Adolescents expressed concern about their appearance. Girls were worried about their hair loss, pimples and skin colour, whereas boys were worried about pimples and being underweight. Family was the most commonly preferred career guidance provider for both the genders, followed by teachers and career counsellors. Health complaints such as cold, tiredness, eyestrain and white discharge from genitals were common complaints of the students. Less than 10% consulted a doctor in case of health problems. Around 18% girls avoided household work and 13% avoided going out with friends during menstruation. Substance abuse was rare; only 1% girls drank alcohol and 1% smoked during the previous month, while 9% boys smoked and 11% drank alcohol during the previous month. About a third of adolescents had poor mental health and nearly half of those felt that life was not worth living. Girls had poorer mental health than boys. Girls interacted freely with their mothers. Boys were more free with their fathers as compared to girls. 43% girls and 17% boys felt that restrictions imposed on them were due to their gender, like talking and moving out with opposite sex, which was a major restriction for girls, and coming home late and watching TV were common restrictions for both genders. 87% of girls knew how AIDS was caused: but less than 50% knew that using condoms helps prevent the transmission of HIV/AIDS. Adolescents were ignorant that mosquito bites do not transmit AIDS. Nearly half the boys (47%) approved of premarital sex, but only a fifth of the girls shared this view, and both were agreeable to this only if precautions were taken to prevent pregnancy. For around 70% adolescents, a friend or a book acted as a major source of information regarding sex. Blue films were an important source of information for most of the boys (51%), and a third of the girls (36%) depended on mothers for their information. 11% boys and 5% girls reported homosexual feelings, and 6% boys and 2% girls reported intimate homosexual relationships. 13% adolescents reported to have been physically abused by family members, 4% by teachers, and 9% by fellow students. There were no significant differences between urban and rural students regarding difficulties with studies or career choice, mental health, parental
relationship, and restrictions on moving out with friends. Major source of information on sex for urban students was a friend or blue film, but for rural students it was either the kin or the doctor, and they were more likely to indulge in homosexual relationships than urban students. Verbal abuse by fellow students was most commonly reported by urban students (39.7%), and rural students (32.5%), whereas physical abuse by family and fellow students was reported by 12.5% and 9.4% rural students, and 12.4% and 8.2% urban students respectively. Based on the suggestions made by adolescents and teachers, intervention programmes for adolescents within school premises were suggested, which included, both primary prevention as well as secondary prevention strategies. Primary prevention aims to facilitate the healthy development of all adolescents and thus prevent health problems and risk behaviours, and secondary prevention aims to provide professionally trained counselor within the premises of the school. SANGATH is implementing health and child development programmes in North and South Goa, where 20% of the clients are adolescents.

Reproductive health on the ground : meeting women’s needs in southern Rajasthan : report of 3 year experience of understanding change in health seeking behaviour. Udaipur : ARTH. 130 p.

Key Words : 1.HEALTH 2.REPRODUCTIVE HEALTH 3.ABORTION 4.HEALTH BEHAVIOUR 5.UDAIPUR 6.RAJASTHAN 7.VISTAAR PROJECT.

Abstract : The present survey was conducted to record baseline data about socio-demographic profile of 10 project villages of Kumbhalgarh Tehsil. Further, the availability of Trained Birth Attendants (TBAs), Anganwadi Workers, literacy volunteers, women’s groups, and health providers in project villages were also mapped. The study covered 1058 women aged 15-49 years, and included ever married women with 1 to 2 living children, adolescent girls aged 15 to 19 years, childless women (married women with no living children), and women who had delivered within the past 2 years. The sex ratio in the area was 927 females per 1000 males. More than half the population was in the reproductive age group. About 66% adolescent boys aged 13-19 years were currently married, and the median age of marriage of husbands of recently delivered women was 16 years. More than 90% respondents were married before the age of 21 years. The median interval between marriage and cohabitation (gauna) was 2 years. Approximately 14% women and 16.2% men had gone through customary marriage (nata). Women of the area had high
fertility. Findings revealed that 38% women had unmet need for family planning. These include 25% women who did not want any more children and 13% who wanted to have the next child after 2 or more years, or were uncertain about whether or when to have the next child. Only 2.5% women used contraception before at least one living child had been born. 55% adolescent girls were not aware of any reversible contraceptive method. Knowledge of sterilization was universal. Contraceptive pills were not readily available in villages. Some respondents also felt that using pills might adversely affect subsequent childbearing. The Maternal Mortality Ratio in Rajasthan was 670/1000 live births (Sample Registration System (SRS) 1998). More than 40% of the women suffered at least one problem during pregnancy. About 25% women had breathlessness, and 11% women had night-blindness, which is indicative of Vitamin A deficiency. Pre-eclampsia was found in nearly 5% women. Convulsions were reported by 4% women. 21% did not consider any kind of work as being heavy. 38.1% men had borrowed money for their wife's last delivery. The median amount borrowed in such cases was Rs. 1500 (range Rs. 200-12000). Money was borrowed from village moneylender (43%), friends or neighbours (16%), and family members. About 40% women reported having had at least one problem (burning urination, abdominal pain, vaginal discharge, and pelvic infection). In 2000, 15.7% and 2.4% currently married women said that they had heard of STDs and AIDS respectively. 24% women resorted to faith healing, while 27% made use of medical services. The median cost of treatment among women who could remember the cost was Rs. 500. 12.4% women felt that gynecological problems were not serious. 30.1% women felt that they would recover on their own, 16.3% didn't have enough money, 17.6% felt shy, 2% felt problems were due to spiritual forces, 7.8% did not understand them, and 5.2% were afraid of treatment. The study found that 53% of the childless respondents were suffering from primary infertility and 47% with secondary infertility. The mean duration of childlessness was 8.1 years. It was suggested that there should be regular availability of good quality and confidential reproductive health services, which could rapidly change this situation. An outreach programme must approach both men and women. There is need to promote long term reversible methods of family planning if unmet need for limiting family size is to be met. A differential approach to deliver health services within heterogeneous communities, with greater focus on underserved groups, is required.

Key Words: 1.HEALTH 2.ADOLESCENT HEALTH 3.ADOLESCENT GIRLS 4.UNMARRIED GIRLS 5.RURAL POOR

Abstract: Adolescent girls constitute one fifth of the female population in the world. In countries like India, adolescent girls face serious health problems due to socio-economic, environmental conditions and gender discrimination, which makes them more vulnerable to health risks. A vast majority of girls in India are suffering from either general or reproductive morbidities. The main objective of this study was to explore health needs of 391 adolescent girls in the age group 11-18 years. A complete house to house survey of unmarried adolescent girls was done in 13 villages of Chunampet panchayat, Tamil Nadu, not only to assess their general and reproductive health status, but also to assess their care seeking behaviour for their illness and to document their menstrual practices and patterns. Findings showed that the mean age of girls was 14.56 years and a majority of them (89%) had attended school. All were Hindus except 5 who were christian and an belonged to the 'Dalit' community. About 67.26% of the girls interviewed had reached menarche, and two-fifths of these girls felt tense, anxious and angry during their periods. It was also observed that prevalence of reproductive morbidity was very high, and 82% of girls who had attained puberty had one or more gynaecological problems. The mean age of menarche was 13.48 years. A negative association was observed between age at menarche and morbidity i.e. prevalence of morbidity increased with age at menarche. Dysmenorrhoea and menstrual irregularities were highly prevalent. There was a close relationship observed between menstrual hygiene and reproductive morbidity. Girls who bathed in rivers, lakes and ponds reported higher morbidities. About 130 girls (33.25%) were working. The prevalence of reproductive morbidity was higher among working girls. The prevalence of general morbidity increased with age and it was higher among illiterates than literates and was slightly higher among girls who did not work. An overwhelming majority (87%) of adolescent girls in the survey had any one of the morbidities, reproductive (46%), general (5%) or both (37%) at the time of the survey. The treatment seeking behaviour for reproductive illness was very low, however it was comparatively good for general illnesses like cold, cough, headache, fever, etc. Around 50% of the girls had undergone treatment for these illnesses. It was apparent that adolescent girls had some reservations in seeking treatment for reproductive illnesses even though they...
had these for a long time. Findings indicated that girls suffered the health consequences of their socio-economic status, poor personal hygiene and lack of nutrition. Improving awareness about self care practices and care seeking behaviour may prevent the reproductive morbidities that were an outcome of poor personal hygiene. Also, there is an urgent need for accessible health services for adolescent girls in rural areas in all dimensions including reproductive health.


Key Words: 1. HEALTH 2. ADOLESCENT SEXUALITY 3. REPRODUCTIVE HEALTH 4. HEALTH RISKS 5. SEX EDUCATION 6. AIDS 7. SCHOOL TEACHERS.

Abstract: The study conducted by Centre for Operations Research and Training (CORT) and supported by UNICEF, aimed to assess the knowledge, attitude and perception of school teachers, counsellors and school administrators regarding adolescents reproductive health in 5 cities namely; New Delhi (Delhi), Varanasi, Meerut (Uttar Pradesh), Kakinada and Hyderabad (Andhra Pradesh). From these cities, 2 schools, one with English Medium and the other with a local language were selected; and from Delhi, 2 single sex schools run by Delhi Municipal Corporation were taken. A sample of 46 teachers (30 females, 16 males) of secondary and higher secondary level, 1 counsellor and 4 school principals were selected. Data was collected through interviews and questionnaire method. It was found that more than 50% teachers agreed that there should be free interaction between boys and girls for their normal development. 74% teachers felt that incidence of premarital sex had increased, 60% disapproved of premarital sex, and only 30% teachers favoured the use of contraceptives for sexually active adolescents. Only 18 teachers and 1 counsellor were aware of the Adolescent Education Programme of NCERT. More than 50% respondents felt the need for special training regarding sex education; and 50% believed that increased knowledge of sex makes adolescents curious about it, and they tend to experiment. Only 39% teachers felt that they would be very comfortable providing sex education, while 54% said that they would be comfortable to some extent. It was revealed that to gain reproductive health information, adolescents depended mainly on electronic and print media, followed by friends. It was recommended that there should be a professionally trained counsellor in schools and the counsellor should be accessible to students all the time.
Chahande M.S. et al. (2002).

**Key Words** : 1.HEALTH 2.TEENAGE PREGNANCY 3.PREGNANCY COMPLICATION.

**Abstract** : The present hospital based cross sectional study with comparison group was carried out on in-patients of Department of Obstetric and Gynecology at Government Medical College and Hospital, Nagpur. The data was collected using a pre-designed and pre-tested schedule, using interview technique. Data was analysed and appropriate statistical tests were applied wherever required. It was revealed that majority of cases were in the age group of 18-19 years. Mean age of the cases was 18.5 years. In the comparison group, majority (81.0%) were in the age group of 20-22 years. 65.3% cases and 62.6% females from comparison group belonged to Hindu community, rest of them belonged to Buddh, Muslims and Christians. Incidence of still birth, preterm delivery, low birth weight and complications during pregnancy and labour like toxemia of pregnancy, eclampsia, cephalopelvic disproportion were more in teenagers. However, caesarean section rate was not significantly different in two groups. Relation of antenatal care services and favourable outcome did not show any statistical significance.


**Key Words** : 1.HEALTH 2.ADOLESCENT HEALTH 3.ADVOCACY FOR MAINSTREAMING 4.REPRODUCTIVE HEALTH 5.SEXUAL HEALTH EDUCATION 6.CHETNA PROGRAMME 7.NEHRU YUVA KENDRA PROGRAMME 8.MODULE ON REPRODUCTIVE HEALTH 9.HEALTH EDUCATION.

**Abstract** : The present study was conducted by CHETNA to know details about the Reproductive and Sexual Health Education (RSHE) in Nehru Yuva Kendra (NYK). Data was collected by interviewing 10 members of CHETNA team, 12 members of NYK team, Mehsana, 2 members of NSS Team, Bhavnagar and North Gujarat, etc. Secondary sources such as training reports and literature on adolescent reproductive and sexual health were also consulted. A total of 53 persons were interviewed, which included some adolescent boys and girls between 10-19 years.
Focus Group Discussions were conducted in 10 villages for needs assessment. This pilot project initiated several processes, both at organizational and personal level. One of the most intangible gains was increase in the level of knowledge on RSH and enhanced level of self-confidence and esteem of peer educators. This was also the first time in the history of a village community where RSH was discussed so openly, with all members of the community namely parents, teachers, school principals, village leaders and youth, participating. The more tangible outcomes however were increased demand by the schools to orient their students. Different streams of non-formal agencies like NSS and Scouts and Guides also came forward to request for orientation training on RSH for their students. Some of the macro level suggestions are to make RSH a part and parcel of all programmes, irrespective of availability of funds. It was also suggested that RSHE should be mainstreamed. NYK should incorporate this issue in their regular and special programmes. The design of the training curriculum of RSHE should be supported by a Government Resolution and should be issued to all NYKs. A common platform for coordinating all activities of RSHE may be created in which NYK and CHETNA may take a lead. A permanent District/State/National Youth Centre may be created. It was suggested that CHETNA may set up a resource centre on RSHE. CHETNA needs to develop a gender and rights based perspective for all stakeholders involved in this issue. Strict monitoring should be done so that the quality of training imparted at any level does not get diluted. CHETNA and NYK should focus on married adolescent youth and school dropouts. A long term strategy regarding this issue should be carefully considered by all stakeholders on how best this information can percolate to the adolescents and youth in an enabling environment at the earliest. The community at large must be sensitized simultaneously on this issue with a gender and right based perspective.


Key Words : 1.HEALTH 2.POPULATION EDUCATION 3.ADOLESCENT 4.ADOLESCENT NEEDS.

Abstract : This study analyzed the counseling needs of adolescents, and the awareness about physical and emotional changes, reproductive health and HIV/AIDS. Two villages, namely Rajania and Chhamrachh, from Sidhi district of Deosar block, Madhya Pradesh were selected. From a sample of 350 households, 290 males and 60 female adolescents were taken. Out of the total sample, 174 were
married and 176 were unmarried. Results showed that 221 respondents favoured three or more children in the family. 206 participants felt that a couple should keep having children till they get a male child. Approximately 200 respondents preferred boys to a girl child. Only 11 females did not prefer boys to girls. 202 participants believed that a larger number of members in the family increased the earnings of the family. 20% females felt that the wife was responsible for deciding the number of children, while 71 respondents felt that the couple was responsible for deciding the size of the family, and 49 respondents felt that the husband only was responsible for it. Only 87 adolescents felt that a gap of 3 or more years was ideal, while 167 preferred spacing of a maximum of two years between two children. Condom seemed to be the most popular contraceptive. 49 respondents opted for contraceptive pills and 127 opted for other measures. Except 18 respondents, all were unaware about the sex determination test. 208 participants were against aborting the girl child, 60% females opposed this idea, and only 11 males supported girl child abortion. 194 adolescents had not heard about HIV/AIDS. Only 60% were aware of HIV/AIDS in the late adolescent age group. Radio was a leading source and TV was a distance source of information on HIV/AIDS. 5 respondents got information on HIV/AIDS from magazines and other periodicals. 221 respondents supported the idea of gender discrimination while 75% girls opposed it. 344 participants were not aware of the existence of cultural and youth clubs. 124 were aware of the existence of Self Help Groups. Strategies should be designed to educate mothers on adolescent needs. A process of sensitizing adolescents on gender discrimination is an urgent need of the hour. Adolescents are not aware of the ante- and pre-natal care services available, so special awareness programmes regarding medical care are required. Participation of adolescents in community activities should be promoted.

Reproductive health of adolescents in Rajasthan : a situational analysis.
Indian Institute of Health Management Research, Jaipur. Jaipur : IIHMR.
35 p.

Key Words : 1.HEALTH  2.ADOLESCENT REPRODUCTIVE HEALTH  3.ADOLESCENT HEALTH  4.ADOLESCENT SEXUALITY  5.REPRODUCTIVE HEALTH 6.EARLY MARRIAGE 7.TEENAGE PREGNANCY.

Abstract : Adolescence is a crucial period in the life of an individual. Policy interest in adolescents began to grow only when ICPD (International Conference on Population and Development) held in 1994 in Cairo emphasized the need to focus on
adolescents. India has nearly 200 million boys and girls in the adolescent age group of 10-19 years (NFHS-II: 1998-99). In India, not all adolescents are able to seek education. In the 10-19 years age group, 2 out of 3 boys and 2 out of 5 girls are literate. Rajasthan has a population of 56 million (Census 2001). A large proportion of the population suffers from deprivation in matters of health, safe water supply and housing. 31% rural and 11% urban families live below the poverty line. There are nearly 13 million adolescents in Rajasthan. The sex ratio of this age group is 927 females per thousand males. In Rajasthan, nearly 70% children in the age group of 11-14 years and 46% children aged 15-17 years attended schools in 1998-99. The schooling of children 11-14 years old showed improvement between 1992-93 and 1998-99. The study also revealed that 70% teenage married women did not have regular access to any media. To get information on sex and related issues, many times adolescents refer to sex magazines, pornographic photo albums, adult movies and such other means. A girl in Kerala waits for marriage for almost five years after attaining menarche, whereas a Rajasthani girl gets married before she attains menarche. Rajasthan is the only state in India where the age at marriage is lower than the age at menarche, and more than 61% girls in Rajasthan got married before 18 years of age. Teenage fertility increased from 112 in 1992-93 to 126 in 1998-99. Nearly 70% of them did not receive iron and folic acid supplementation. More than 75% adolescents were aware of AIDS. The level of awareness was significantly higher among literate girls than illiterate girls. In a study conducted in Madras, 71% teachers felt that sex education would negatively influence the morality of adolescents; and in Rajasthan, 59.3% teachers said that education on sexual and reproductive health issues should be provided through teachers. The study by IIHMR (ICMR) found that 65.8% girls had information about the onset of menses and a UNICEF study found that 38% girls were unaware of menstruation at the time of their first period. More than 15% adolescents had sexual intercourse. Rajasthan does not have any state specific education policy, but the State Government has prepared action plans to implement the National Policy on Education. Low nutritional status of adolescent girls has emerged as a serious cause for concern. Nearly half of the teenage girls suffer from some degree of malnutrition. This situational analysis clearly indicates that there is no appropriate fit between the current programmes and the needs of adolescents. The following guidelines may help design and strengthen the programme interventions for adolescents, namely to provide fundamental skills; address social norms and practices; exploit peer pressure to promote desirable behaviour; impart necessary skills to teachers and health providers; build an environment of family and parent support; develop community based programmes; promote programmes for boys also, and implement these in a phased manner.


Abstract: This research was conducted in rural areas of 22 districts located in 14 states of India to test the awareness level of adolescents regarding reproductive health issues, and to identify knowledge gaps about number of children, STDs/AIDS, etc. A sample of 8453 school-going adolescents aged 10-19 years was selected out of them, 56% were boys and 43% were girls. Data was collected through questionnaires. Nearly 53% adolescents were in their early teens (10-14 years) and 47% were in late teens (15-19 years). It was found that 56.8% respondents gave correct answer to legal minimum age of marriage for boys (21 years), and 64.6% knew about legal minimum age of marriage for girls (18 years). Around 75% boys wanted to marry between 22-25 years and 28.3% wanted to marry at 25 years of age. 78.3% girls wanted to marry between 18-22 years. About 39.7% boys and 46% girls felt that early marriage was the main cause for mother and child health problems. Data showed that 70% boys and 72.9% girls wanted 2 children and of them, 96% wanted one male and one female child. Around 5.7% boys and 17.6% girls preferred one child norm, and of them, 74% boys and 43% girls wanted a male child. Only 21% boys and 17% girls were aware of at least one method of contraception. Awareness of STDs was found among 14.7% boys and 11% girls in their early teens, and among 25.6% boys and 21% girls in their later teens. Nearly 24.6% respondents felt that STDs were an infectious disease, 65.6% thought it was the same as AIDS, and 9% gave incorrect answers. About 42.4% boys and 35% girls were aware about AIDS. 53% adolescents described it as a dangerous disease, 16.3% felt that it was caused by HIV infection, and 11.8% answers were incorrect. 40.8% adolescents felt that it was transmitted by sexual intercourse and 12.9% said that it spread through relations with multiple sex partners. 30.4% respondents opined that one should limit oneself to one partner and 17.4% were in favour of condom use. Awareness about immunization against childhood diseases was present among 60.2% adolescents, and it was higher among boys (61%) than girls (59%).
was recommended that there is a need for education, and to prepare communication strategies to raise awareness on reproductive health and gender related issues. Telephone helpline services should be provided, both confidentially and free of charge. Socio-cultural research is required to find the right kind of sexual health services needed by young boys and girls.


Key Words: 1. HEALTH 2. ADOLESCENT REPRODUCTIVE HEALTH 3. ADOLESCENT HEALTH 4. SEXUAL BEHAVIOUR 5. ADOLESCENT SEXUALITY.

Abstract: A study was conducted at 7 centres in the country on adolescents from schools and colleges from urban areas, urban slums and rural areas to understand their awareness level and attitudes towards reproductive health matters including sexual behaviour and views of parents/teachers about sex education to them. At each centre, the data of about 2000 adolescents and 200 parents and teachers were collected using structured questionnaires, focus group discussion and case study approach. The results indicate lack of awareness, misconceptions and risky behaviour of adolescents regarding critical aspects of reproductive health such as safe sex, genital hygiene, STDs, MTP, safe period in the menstrual cycle for pregnancy, HIV transmission and its prevention. Adolescents living in slums followed by rural and female adolescents were particularly poorly informed. A large number of adolescents in all states had exposure to sex and pornographic literature. Sexual intercourse was reported more by boys than girls. The range of sexual intercourse varied from 2.9% among urban girls to 28.8% among rural boys in Rajasthan, and 1.6% among urban girls to 14.4% among urban boys in Delhi. Most of the adolescents expressed their willingness to know more about these issues in schools and colleges by outside experts. Parents and teachers advocated that adolescents should be imparted sex education by mothers and teachers from 13 to 15 years of age.
Indira Gandhi Medical College, Dept. of Preventive and Social Medicine, Nagpur. (2001).


**Key Words**: HEALTH 2.ADOLESCENT HEALTH 3.HEALTH PROBLEM 4.PROBLEMS OF ADOLESCENT 5.TOBACCO CONSUMPTION 6.ANAEMIA ADOLESCENT.

**Abstract**: Adolescence is the period of transition from childhood to adulthood. Adolescents constitute 21.8% of the population of India numbering around 207 million. The present study was carried out in field practice area of the Medical College at Sadar, Nagpur to study the various health problems among adolescents and factors influencing these problems. 575 families were residing in this area, constituting a population of 3498 as per the survey data of November 1999. A total of 700 study subjects were examined of whom 336 (48%) were males and 364 (52%) were females. The maximum number of adolescents were educated up to high school (39.43%); 9.5% had primary education; 31.43% had education up to middle school; and 19.57% had education above high school. All male adolescents were unmarried (336) but 6 female adolescents were married. About 50.28% adolescents belonged to low socio-economic status. About 384 (54.85%) adolescents had the habit of chewing tobacco and *gutka*, and of them 197 (58.63%) were males. Of these 197 male adolescents, 31 (9.22%) were in the habit of smoking and 11 (3.27%) had the habit of alcohol consumption. Even females (51.38%) were habituated to chewing tobacco and *gutka*. It was observed that majority of fathers (78.85%) and mothers (37.15%) also had the habit of chewing tobacco and *gutka*. About 45% fathers smoked bidis and cigarettes, and 50.28% were habituated to alcohol consumption. The habit of chewing tobacco and *gutka* was higher in nuclear families (60.47% males and 53.03% females) as compared to joint families (45% males, 41.17% females). Habit of chewing tobacco and *gutka* was higher among adolescents belonging to upper and upper middle socio-economic status groups (83.67% males, 80.77% females). This habit was higher among employed adolescents (95.45% males, 93.75% females). The age of menarche in females ranged from 10 to 17 years. Around 25.27% adolescent girls had attained menarche at the age of 13 years. It was observed that 62.71% adolescents were suffering from acute nasopharyngitis (common cold) and acute tonsillitis; 57.28% adolescents were having anaemia; 35.58% had chronic energy deficiency; and 43% had low weight. Prevalence of anaemia among adolescents was higher among females (60.16%) as compared to males (54.16%); 37% adolescents had dental caries; 34.28% deposit of nicotine stain on teeth; 3.42% dyspepsia (APD); 5.57% multiple boils; 7.57% urticaria and 54.14%
acne. About 84% adolescents were going to school and 16% had left school. Prophylaxis Programme against Nutritional Anaemia among children should be extended to male adolescents also as it was extended to female adolescents under the RCH Programme. As most of the morbid conditions were related to environmental sanitation and personal hygiene, health education should be imparted regarding the improvement of environmental sanitation and importance of maintaining good personal hygiene. Parents should be given health education about the complications arising due to tobacco and gutka chewing, as they act as role models for adolescents.


**Abstract**: The International Centre for Research on Women (ICRW) is leading a large scale collaborative initiative, DISHA (Development Initiative on Supporting Healthy Adolescents), to improve the reproductive health and well-being of young people in the states of Bihar and Jharkhand, India. The present study was done to improve the skills and capacity of youth regarding reproductive health and livelihood opportunities, ensure the provision of youth-friendly health services, and mobilize the community to support young people’s access to reproductive health information and services. The study covered a sample of 1750 boys and 1767 girls between the ages of 14 and 24 years and adults (n=1231) who were 30 years and older. It was found that 57% girls and 27% boys aged 14-20 years were married. Around 93% married girls and 91% married boys in the sample had at least one child, and the first child was born 18-24 months after marriage. 59% males and 38% females reported that household elders never took their opinion into account regarding childbearing matters. In the total sample of both states, 64% adolescents were aware of the pill and 60% were aware of the condom, compared to only 34% who knew of intrauterine devices (IUD), and 22% who knew about injectable contraceptive methods. Reproductive health knowledge was greater among boys than girls, a greater proportion of boys (78%) than girls (46%) could identify how to obtain at least one method of contraception. The baseline survey showed that youth
access to reproductive health services in Bihar and Jharkhand was inadequate, and just over half (57%) of adolescent girls who had children received any check-ups during their first pregnancy. Only 12% married girls and 15% married boys used any method of family planning. Limited mobility and lack of parental support were the major barriers to youth access to reproductive health services, particularly for girls, and for unmarried youth. Boys and girls in Bihar reported higher levels of school enrollment and lower levels of paid economic activity than their peers in Jharkhand. Young people in both states express high self-esteem and self-confidence with regard to their qualities and roles in the household, despite their impoverished setting. While differences exist between girls and boys, particularly in Bihar, there was relative gender equality in terms of perceptions of self worth and abilities in Jharkhand. Interventions need to address the multiple spheres of young people’s lives in order to improve the lives of youth in a sustainable way.


Key Words: 1.HEALTH  2.ADOLESCENT  3.OBESITY  4.ADOLESCENT SCHOOL CHILDREN.

Abstract: The present study was conducted to study the prevalence of obesity amongst affluent adolescent children in Delhi. The study was a cross sectional study conducted in one public school of Delhi catering to the affluent segment of the population. A total of 870 school children were included in the study. Semi-structured pre-tested questionnaire was administered to each child to collect data on socio-demographic profile (age, sex, socio-economic status), dietary pattern, and nutrient intake. Anthropometric measurements of weight, standing height, mid-arm circumference (MAC) and triceps skin fold thickness (TSFT) were measured by utilizing standard methodology. International cut off points for body mass index were used for classifying children as overweight and obese. According to this classification (i) if BMI analogue for age and sex is 25 Kg/m² and more, but less than 30 Kg/m², then the child is overweight, and (ii) if BMI analogue for age and sex is 30 Kg/m² and more, then the child is obese. It was revealed that overall prevalence of obesity according to international cut off points was found to be 7.4%. About 8% of boys and 6% of girls were obese. It was found that 17.0% of all adolescent boys and girls had their energy intake 100% or more as compared to their RDA. It was found that both obese boys and girls had higher anthropometric
measurements as compared to non obese boys and girls, and this difference was statistically significant. The present study has highlighted that obesity is an emerging health problem in adolescent children belonging to affluent families in Delhi.


**Key Words**: 1. HEALTH  2.ADOLESCENTS  3.HEIGHT 4.WEIGHT.

**Abstract** : The present study was undertaken to study the growth, beliefs, emotions, ambitions and relations of adolescents in Indori village, situated at 41 km from Pune. The students of Class VIII and IX of Pragati Vidya Mandir were selected for the study. Their height and weight were recorded and also medically examined. A total of 230 students participated in the study. The principal investigator guided the medical interns to carry out the survey. The findings of the study revealed that mean height and weight in different ages of boys and girls were better than ICMR standards. Personal hygiene was found to be good/satisfactory among most of the adolescent boys and girls, however, a few of them had poor personal hygiene. While analyzing their ambition, it was observed that a total of 54 students were interested to become doctors, 38 engineers, 56 teachers, 34 defence officers and the rest wanted to join family business and salaried jobs. As far as their role models were concerned, the study revealed that film heroes and heroines were role models for 72 students, cricketers for 29 students, national leaders for 18 students and for the rest of the students parents/teachers were the role models. The study further revealed that only 33 boys and 31 girls knew about conception but their knowledge about contraception was poor. Also 28 boys and 24 girls had some knowledge about contraception.

**Key Words**: 1. HEALTH 2. REPRODUCTIVE HEALTH 3. ADOLESCENT 4. ADOLESCENT REPRODUCTIVE HEALTH 4. COLLEGE ADOLESCENTS.

**Abstract**: The present study was undertaken to understand the level of knowledge and attitude among the college adolescents regarding Adolescence Reproductive Health Education (ARHE). Pre-study and post study method was used to measure the effectiveness of self-instructional material on Adolescence Reproductive Health Education among the college adolescents in terms of knowledge gain and attitudinal change. The study involved pre-study and post study quasi-experimental design. The study covered 509 undergraduate 1st year students selected from 6 urban colleges and 4 rural colleges of University of Madras. The study revealed that knowledge and attitude levels of different groups of college adolescents regarding adolescents reproductive health education were similar and comparable in nature at pre-study and post study. It was observed that the knowledge gain through learning of self-instructional material on Adolescence Reproductive Health Education among the different groups of college adolescents was taking place significantly and also uniformly. It was found that favourable attitudinal changes were taking place uniformly among the different groups of college students through learning of self-instructional material. The self-instructional material was very effective in imparting the necessary information as evident by significantly higher scores on the post study. All students invariably gained knowledge and changed favourably in their attitude level towards ARHE uniformly which indicated that the material was appropriate for the level of the students. The results suggested that providing self-instructional material on various aspects of Adolescence Reproductive Health Education will tackle the problems of disseminating appropriate health and reproductive health information within the norms accepted by the society.


Abstract : There are an estimated 3.97 million HIV infected individuals in India in 2001. The present study was done by NACO (National AIDS Control Organization) and UNICEF (United Nations Children's Fund) to find out the awareness level, attitudes and sexual practices of young adults all over India. Data was collected through baseline behavioural surveillance surveys which were conducted among the general population (26716 respondents), female sex workers (2081), men having sex with men (561) and injecting drug users (287) in the age group of 15-24 years. Overall, 50.1% were male and 49.9% were female respondents. It was observed that the literacy status of the population was high both in rural and urban areas among males and low among females in rural areas. The study showed that awareness level of general population about HIV/AIDS was found to be highest among urban males (91.8%). Awareness among rural females was low in Jharkhand, Gujarat, Chhattisgarh, Uttar Pradesh and West Bengal. Only 27% respondents were aware that a mosquito bite or sharing a meal with an infected person could not transmit HIV. More than 50% of the respondents were aware that consistent condom use and having sexual relationship only with uninfected faithful partners protected against HIV transmission. Overall only one in five respondents were aware that STI patients had a higher risk of HIV. More than 10% male respondents in Bihar, Delhi, Haryana and Uttaranchal, and more than 10% female respondents in Delhi, Haryana, Jammu and Kashmir, Madhya Pradesh, Chandigarh and Uttaranchal reported symptoms of STI in an year's recall. Awareness about condoms among males was high as compared to females in both urban and rural areas. Television and radio were the most common mass media sources of information on HIV/AIDS/STI in many states. More than 35% respondents aged less than 19 years from Andhra Pradesh reported indulgence in casual sex. Around 52% respondents reported using condoms in the last casual sex while 34% reported that they used condoms with all casual partners in a one year recall period. Only 40.7% of the respondents had a positive attitude towards HIV infected individuals and were willing to share food with infected persons. The
adolescents' awareness levels of older and younger FSW groups (more or less than 24 years) were similar. Female sex workers (FSW) had better awareness and higher condom use rates in relation to women of comparable ages in the general population. It was observed that younger MSM were more advantaged compared to their older counterparts. 10% MSMs reported that they were bisexual. Older MSMs (25+ years) reported significantly higher proportion of bisexual relations in a 6 months recall. Among injecting drug users the use of sterile injecting equipment was lower among the younger respondents (below 19 years) compared to the older respondents (20-24 years). The study suggested that there is a need for creation of higher level of awareness among the community people, FSW, MSM, etc. on issues such as HIV/AIDS/STI for a better future.


Key Words: 1.HEALTH 2.ADOLESCENT HEALTH 3.ADOLESCENTS 4.REPRODUCTIVE HEALTH 5.CONTRACEPTIVE BEHAVIOUR 6.PRE-MARITAL RELATIONS 7.EARLY MARRIAGE 8.ADOLESCENT SEXUALITY.

Abstract: The study was conducted from late 1980 to 1990 in South and South East Asian countries, namely, Bangladesh, India, Nepal, Pakistan, Sri Lanka, Indonesia, Thailand, Philippines and Vietnam. The aim of the study was to examine adolescents' knowledge about the use of contraceptives and its implications for both, public health and population growth. Demographic and Health Surveys (DHS) were used to collect the data, using questionnaires, qualitative interviews, surveys and clinical observations. The sample was limited to married women aged 15-49 years, except for Bangladesh and Philippines. Results showed that the knowledge of traditional or modern contraceptive methods were higher in Bangladesh (99.9%) among currently married adolescent women, while in Pakistan, only 76% were aware about contraceptives. In Vietnam, for 13-22 year old youths, the most common methods known were condoms, followed by pills and IUDs. About 67% of the respondents were aware of condoms in Vietnam. In South Asia, awareness about condoms among married adolescent women was 18% in Pakistan, 48% in Sri Lanka, and 85% in Bangladesh. In South East Asia, the level of knowledge about condoms was higher - 53% in Indonesia, 85% in Philippines, and 89% in Thailand. Except in India, most married adolescents used reversible contraceptive methods because of their higher educational attainment. Less than 2% adolescents used non-reversible
methods. The use of modern methods was high in Indonesia (44%) and low in Pakistan (2%). Pills were mainly used in Philippines (6%), Sri Lanka (7%), Bangladesh (18%), and Thailand (25%). Condoms were hardly used in Nepal (2%) and Pakistan (1%). IUDs were used in Vietnam (10%), while tubal ligation method was mostly used in India. About 29% of 13-24 year old women discontinued the use of contraceptives, compared with 39% of 25-34 year olds, and 32% of 35-49 year old women, because of side effects and health concerns, desire for a more effective and convenient method, problem of access or their husband’s disapproval. The level of unmet need among married adolescents was higher in South Asia, 19% in Bangladesh and 41% in Nepal, compared to South East Asia, 9% in Indonesia, 10% in Vietnam and 32% in the Philippines. In India, 20-30% adolescent males and 10% adolescent females were sexually active before marriage, and 38% unmarried males and 6% unmarried females were sexually active by age 18. About 15% young men and 2% young women reported sexual experience in Vietnam, and 20% young men and 6% young women reported experience in Indonesia. It was suggested that there is a need for policy and programs which should be designed to promote shared responsibility and active involvement of males as responsible sexual partners, husbands, and fathers to prevent unwanted pregnancy and STIs. All adolescents need accurate, user-friendly information and special counselling to clear the misconceptions about contraceptive side effects and health concerns, and to enhance their negotiating skills. To improve the reproductive health of adolescents in South Asia, there is a need to raise the age of marriage and delay child bearing. In South East Asia, the focus should be on delayed child bearing. This analysis revealed an urgent need for research on adolescent sexual and reproductive health in Asia, and design of suitable programmes.

Pande, Rohini et al. (2006).
Improving the reproductive health of married and unmarried youth in India: evidence of effectiveness and costs from community based interventions: final report of the Adolescent Reproductive Health Programme in India.

Key Words: 1.HEALTH 2.ADOLESCENT REPRODUCTIVE HEALTH 3.ADOLESCENT HEALTH 4. EARLY MARRIAGE 5.COMMUNITY INTERVENTION 6.INTERVENTION PROJECT 7.INNOVATIVE PROJECT 8.INNOVATIVE PROJECT ADOLESCENT HEALTH.

Abstract: Youth reproductive and sexual health has become a priority in India due to its large adolescent population and high rates of child marriage and child bearing.
The International Centre for Research on Women (ICRW) worked with five in-country partners namely Christian Medical College (CMC, Vellore, Tamil Nadu), Foundation for Research in Health System (FRHS, Ahmednagar, Maharashtra), KEM Hospital Research Centre (Dhamari, Maharashtra), Institute of Health Management (Pachod and Pune, Maharashtra) and Swaasthya (Delhi) to coordinate six intervention studies across India. This program of intervention research aimed to develop models that could improve adolescent reproductive and sexual health for married and unmarried adolescents and youth; build and strengthen the capacity of implementing partners to carry out intervention research; and link programs and research with policy so that research could feed into policy implementation. Results of the formative research (1996-1999), which were used for intervention research (2001-2006), highlighted gender-based constraints as a primary obstacle to youth’s access of reproductive and sexual health information and services. Project specific results showed an increase in age at marriage for girls by one year (from 16 years to 17 years), improvement in nutritional status of unmarried adolescent girls, increase in young married women's knowledge and use of services for a wide variety of reproductive and sexual health concerns, greater support by decision makers in young married women’s lives (husband, mother-in-law) for their reproductive health needs, and an overall rise in unmarried girls’ self-confidence and their ability to negotiate with parents and their social environment. The projects also suggested various processes and models to achieve desired health outcomes such as preparation of life skills and adolescent development models, development of an integrated health care programme with reproductive health education, clinical referrals and sexuality counselling, training of village level female health aides, and community involvement and mobilization for creating awareness and building a supportive environment for youth reproductive health. The research program identified four themes namely developing cost effective strategies, reducing gender constraints, involving communities, engaging men and boys as crucial to successful youth reproductive health interventions. By integrating these suggestions into policy and program design, policy-makers and programmers can improve youth reproductive and sexual health in India to a great extent.
Patel, Pallavi et al. (2000).


Key Words: 1. HEALTH 2. ADOLESCENT REPRODUCTIVE HEALTH 3. REPRODUCTIVE HEALTH 4. ADOLESCENT MOTHERHOOD 5. TEENAGE PREGNANCY 6. ADOLESCENT SEXUALITY 7. SEX EDUCATION.

Abstract: In India, according to the 1991 Census, there were approximately 183 million adolescents aged 10-19 years, constituting over 22% of the country's population. Sizeable proportions of them continue to be illiterate, out of school, unemployed and hence neither served by educational nor school health programmes. The study focused on knowledge level of adolescents about reproduction, sexuality and HIV/AIDS; their information needs and sources of information; sexual behaviour of adolescents; and their morbidity patterns related to reproductive health. Interviews were held with 151 boys and 93 girls in three slums where CHETNA was planning to initiate a health awareness programme for adolescent boys and girls. Qualitative information was collected by observing the functioning of the services provided at the clinics and through informal discussions with the service providers. Findings revealed that level of education was good among adolescents as more than 72% boys and 75% girls had studied beyond middle level. No interest in studies, responsibilities of household work, poverty and distance of higher level school were the reasons for discontinuing studies. Girls (29%) were occupied mainly in the unorganized sector working as domestic help, whereas boys (56%) were more in skilled professions/ or were self employed as auto rickshaw drivers, masons, managing bicycle repair shop, tiffin (snacks) distribution or selling balloons. The minimum age at marriage among boys and girls was 16 years and 13 years respectively. Less than half of the adolescents knew about the legal age at marriage. Films were one of the common topics discussed among peers of the same sex and also opposite sex. 25% boys and no girl admitted to having seen blue films. 57% adolescents in slums felt the need for placing restrictions on boys and girls when they are growing up. The perceived restrictions on boys were on not getting into addiction and on roaming around at night. Adolescents had poor knowledge about physiological changes during puberty among boys and girls, process of menstruation and conception. Only 5% girls reported the period between 7 and 17 days after
menstruation to be the most fertile period. Knowledge about STDs, their mode of transmission and curability was also very poor. The study recommends that useful life education needs to be imparted to adolescents, and they need to understand the meaning of education in a broader sense. Complete scientific information should be provided on puberty changes, menstruation, pregnancy, contraception, safe sex, STD and HIV/AIDS. Adolescents should be empowered with information and services to reduce gender biases prevailing in the community.


Key Words: 1. HEALTH 2. ADOLESCENT MENTAL HEALTH 3. MENTAL HEALTH 4. MENTAL HEALTH ADOLESCENT 5. STRESS ADOLESCENT 6. BEHAVIOUR PROBLEM 7. JUVENILE DELINQUENT 8. MORBIDITY ADOLESCENT.

Abstract: In India, adolescents constitute 20% of the total population, but none of the existing health policies or programmes are specifically targeted at this group. The objectives of the present study were to identify needs and problems of school going adolescents, to identify the correlates affecting adolescent mental health and to identify adolescents with problem behaviours. Data was collected from schools of South West Delhi through purposive sampling. In all 1302 adolescents in the age range of 12-19 years were selected randomly for the study. The tools employed were personal data sheets (for adolescents and teachers), Youth Self Report (YSR) by T. M. Achenback and identification of sources of daily stress. Only about 35.41% adolescents had secured marks above 50%. About 76% adolescents girls were found to be undernourished. Factors associated with this were gender discrimination, nutrient deficient diets and media influence for encouraging slim physiques. Eight core problem behaviours identified were withdrawn, somatic complaints, social problems, thought problems, attention problems, delinquent behaviours, aggressive behaviours and anxiety/depression. These were further classified as Internalising Syndrome (withdrawn, somatic and anxious/depressed), Externalising Syndrome (delinquent behaviour and aggressive behaviour) and Neither Internalising Nor Externalising Syndrome (Social problems, thought problems and attention problems). About 630 students were identified as having psycho-social morbidity, and among these 422 were categorised as high risk cases. Social problems (34.41%) was the leading cause of morbid conditions, followed by anxiety/depression (19.74%), somatic complaints (19.12%), thought problems (14.13%), delinquent behaviour...
(10.75%), attention behaviour (10.52%), aggressive behaviour (8.92%) and withdrawn behaviour (6.91%). Ten common concerns which were sources of stress were too many things to do, concern about weight or physical appearance, doing home work, frequent nagging and scolding, meeting deadlines at work, taking many decisions, attending tuitions, meeting responsibilities outside home, and arguments with friends and family. Also, a significant positive correlation (Karl Pearson’s Coefficient of Correlation) was found between the class in which adolescent was studying and the problem behaviour. It was suggested that once the problem is diagnosed, therapies should be planned and administered keeping in view individual needs for not only the problem behaviour but also to bring about holistic development of adolescents. Also, other than school curriculum, emphasis should be laid on other components of development, particularly life skills, problem solving, developing competence and dealing with psycho-social difficulties. With this purpose, outreach programmes should be organized by specialist organizations, NGOs and expert teams for group counseling. Appointment of qualified counselors in higher secondary schools and intermediate colleges is the need of the hour.


Key Words: 1.HEALTH 2.ADOLESCENT REPRODUCTIVE HEALTH 3.ADOLESCENT GIRLS 4.REPRODUCTIVE HEALTH 5.HYGIENE 6.MENSTRUATION 7.KNOWLEDGE AND PRACTICES.

Abstract: Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity in all matters relating to the reproductive system. The present study was done to assess the socio-cultural health, nutrition, sanitation and education related practices that were followed at menarche and during menstruation among adolescent girls. The study was conducted in Assam, Delhi, Karnataka, Madhya Pradesh and Uttar Pradesh and covered 500 adolescent girls and 500 mothers of adolescent girls, around 93% women opinion leaders, 150 women functionaries of Integrated Child Development Services Scheme (ICDS) and health functionaries. Data was collected through interviews. The common signs and symptoms reported regarding Reproductive Tract Infections (RTI)/ Sexually Transmitted Infection (STI) were discharge from vagina (81.3%), burning during micturation (80%), itching in private parts/ vulva (79.3%), ulcer in
pubic region (44%), pain in lower back (54%), sterility (2.6%), and menstruation related problems (17.3%). It was found that the level knowledge of health functionaries with regard to RTI/STI was better than that of ICDS functionaries. Around 50% adolescent girls admitted that they did not know how a baby was conceived, and almost 46.4% adolescents were aware about the methods of family planning. Almost 50% adolescent girls of Delhi knew about safe sex, and use of condoms as a means to prevent HIV/AIDS. Majority of adolescent girls had limited knowledge of pubertal changes that they were or would be undergoing. Knowledge about prevention, early detection and management of RTI/STI and HIV/AIDS among adolescent girls was very limited. More than 33% adolescent girls, nearly 50% mothers of adolescent girls and women opinion leaders had vaginal discharge accompanied with itching. Dysmenorrheoa was a common problem among adolescent girls. Majority of the adolescent girls (93.6%) were literate and only 49.2% adolescent girls were still in school. About 41% adolescent girls did not know how to access toilet facilities. About 70% adolescent girls were not aware about menstruation till its onset. Mother was the main source of information about menstruation for 37.6% adolescent girls. Majority of the respondents were of the opinion that low cost sanitary pads should be introduced for adolescent girls/ women in the area. Multi-pronged strategy should be adopted using all form of media - print, electronic, folk etc. to disseminate information on reproductive health of adolescent girls with special emphasis on hygiene during menstruation.


**Key Words :** 1.HEALTH 2.PREGNANCY 3.ADOLESCENTS 4.MINORITY GROUP.

**Abstract :** The study was carried out in 1999 to examine and understand the dynamics of unwanted pregnancies/births among adolescents in two minority communities in Thane districts of Maharashtra. In addition, this paper correlates the relationship between unwanted pregnancies/births, women’s literacy, mass media exposure etc. The analysis in the present paper is based on the subset of data of a larger study entitled "socio-economic & demographic determinants of unwanted pregnancies/Birth in Tribal Muslim area of Maharashtra " conducted by the author. A Total of 32 primary sampling units, 8 from each of the four selected community development blocks using probability proportion to the population from the 1991 census for village situation was taken. The findings revealed that among
the tribal adolescents unwanted pregnancies/births were about 20% consisting of mistimed 19% and never wanted 1%. On the other hand among muslims it was only 10%, consisting of mistimed 7%, never wanted 3%. Analysis indicate that tribal adolescent had about 20% unwanted pregnancy/birth whereas it was 10% in muslim adolescents. In tribal area, age at marriage is comparatively low and those who marry early do not want to have child immediately. Every effort should be made to enhance the contact of health workers with adolescents not only in tribal area but also in muslim area. Oral pills are very popular among Muslims but accessibility is very poor. These adolescents must be provided pills at door steps.


Key Words: 1.HEALTH 2.ADOLESCENT REPRODUCTIVE HEALTH 3.REPRODUCTIVE HEALTH 4.NEEDS OF ADOLESCENTS 5.HEALTH NEEDS 6.ADOLESCENT EDUCATION 7.YOUTH 8.OUT OF SCHOOL YOUTH 9.YOUNG PEOPLE.

Abstract: This study was an overview of key policies and Government programmes intended to reduce HIV vulnerability and improve sexual and reproductive health (SRH) among young people in India, and identifies the extent to which these policies and programmes have addressed the gamut of unique SRH needs of young women and men. It also explores the extent to which programmes have been adapted to accommodate state level differences in the sexual and reproductive vulnerability of youth. Two states, namely Andhra Pradesh, characterized by both early marriage and high HIV prevalence, and Madhya Pradesh, characterized by early marriage and low rates of HIV prevalence were covered. The review focused on four programme dimensions awareness building, service provision, reducing gender disparities and developing a supportive environment. While the age at marriage for women has shown increase, more than 40% of all women aged 20-24 were married by 18 years, and 16% of all girls aged 15-19 years have already experienced pregnancy or motherhood. 24.5% married young women aged 15-24 years currently practice contraception by self or husband. 77.5% married young women aged 15-24 years received any antenatal checkup. 42% married young women aged 15-24 years delivered at a health facility. HIV prevalence among women seeking antenatal care was 0.88. 54.7% females aged 20-24 years were married by 18 years in Andhra Pradesh, and 53% females aged 25-29 years were married by age 21 years in Madhya Pradesh. HIV prevalence among women seeking antenatal care in 2005 was
2% in Andhra Pradesh and 0.25% in Madhya Pradesh. While several national and state-specific programmes have been implemented to raise awareness about sexual and reproductive health among young people, communication programmes appear to stress HIV/AIDS and safe sex over other aspects of reproductive health. The focus of awareness raising programmes has been some what skewed in favour of sub-populations covered; but married young women, for example, are least likely to be reached. Policies and programmes have recognized the importance of improving reproductive health of young people in Madhya Pradesh, plans were outlined for the provision of life skills education at the school level, and for training 250 school principals, 500 school teachers and 2000 student peer leaders in 10 districts for the implementation of youth activities under the RCH programme. In Andhra Pradesh, the School Education AIDS Programme has been implemented for students, and AIDS awareness programme has been implemented in 5,000 colleges in the state, covering about 1.2 million students. Village AIDS awareness clubs have been initiated in some districts. Strategies have involved training youth as peer counsellors, supporting groups to meet regularly, and involving counsellors from the Indian Red Cross Society to make regular visits to youth clubs and provide one-on-one and group counselling. Fewer activities to raise awareness about SRH among young people have been conducted among out of school youth till recently. The Village Talk AIDS Programme is implemented through Nehru Yuvak Kendras and other youth clubs in 385 districts. The Nehru Yuvak Kendra Sangathan has 8 million rural youth volunteers in more than 200,000 youth clubs. The number of secondary schools was 144,409 in India in 2005-06, and 41.9% schools implemented the Adolescent Education Programme. The RCH programme is a major departure from earlier programmes as it is inclusive, and addresses the needs of different groups of young people. Friendly services were to be made available for all adolescents. Two new schemes have recently been launched under the National Rural Health Mission that may have the potential to address the SRH needs of youth and young women. The first is the establishment of ASHAs (Accredited Social Health Activists) and the second is Janani Suraksha Yojana. ASHAs can play a positive role in accessing newly wed women who may not be permitted to access health centres or anganwadis. While the Janani Suraksha Yojana focuses on the first two births, it is expected to focus on women aged 19 years and above, thereby excluding the vast number of women who become pregnant at younger ages and are particularly vulnerable. Programmes intended to reduce gender disparities and enhance the status of girls and young women tend to be limited in their reach and variable in their content. They need to overcome these limitations.

**Key Words**: 1.HEALTH 2.ADOLESCENTS 3.MIGRAINE 4.RECURRENT HEADACHE 5.ADOLESCENT HEALTH.

**Abstract**: The present study was undertaken to assess the prevalence and characteristics of migraine among adolescents children at Jaipur. For the purpose of this study, screening Questionnaire A was distributed to 1000 boys and 1000 girls studying in Classes VI to X (11 to 15 years). Questionnaire A consisted of a single question to parents, "Does your child suffer from recurrent headache?" To those who responded in the affirmative, a detailed Questionnaire B was distributed. Questionnaire B consisted of twenty Questions pertaining to characteristics and associations of headache. From Questionnaire B a diagnosis of common migraine was made according to HIS criteria (1988). The prevalence of recurrent headache was found to be 18% in boys and 21% in girls, while the prevalence of migraine was 9% in boys and 14% in girls. Among the other causes of recurrent headache, tension type headache was seen in 3.6% children, eye problems in 0.38% children, sinusitis in 0.22% and undetermined etiology headache in 2.14% children.


**Key Words**: 1.HEALTH 2.ADOLESCENT GIRL 3.ABORTION.

**Abstract**: The study explored the socio-behavioural context of abortion among adolescent girls in 9 recognised and 5 unrecognised MTP Centres in Rohtak City. Age, literacy, rural, urban location, marital status, safe sex, awareness level and facility used were various variables of the study. Results revealed that out of 83
adolescent girls, thirty six girls (43%) belonged to Rohtak and 47(57%) had come to the city for abortion. 75 (90%) girls under going abortion were unmarried. In 16% cases incest was responsible for the pregnancy. 11% teenage girls were under going abortion for the second or third time. 56% of the abortions were carried out at unapproved centres by unqualified personnel. Confidentiality and procedure’s cost factor were given more importance than safety considerations by 89% of the abortion seekers. Contraceptive awareness was low. AIDS awareness (47%) was higher than STDs in general (31%). Seven cases of septic induced abortion were reported. The study recommended adoption of a more empathetic and respectful approach towards adolescents to enable them to avail of less expensive and safer health services.
ANAEMIA/ IRON DEFICIENCY

Jain, S. et al. (2000).

Key Words : 1.HEALTH 2.ANAEMIA 3.NUTRITIONAL STATUS 4.IRON SUPPLEMENTATION 5.IRON DEFICIENCY ANAEMIA.

Abstract : Iron deficiency anaemia is the most wide spread micronutrient deficiency disorder in the world, being most prevalent in women and young children. The study was carried out among 137 children in the age group 1-2 years to assess the prevalence of anemia and its contributory factors, and the impact of early iron supplementation in urban slums of Meerut. The study revealed a high prevalence of anaemia in the study group (59.9%). The socio-economic status, mother’s educational status, birth weight, sibling order, and type of weaning food did not show any significant relationship with the prevalence of anaemia in these children, whereas, exclusive breast feeding up to 4 months followed by weaning, adequate nutritional status and early iron supplementation had a positive role in prevention of anaemia in children. It was thus recommended that iron supplementation should be started from the age of 4-6 months to prevent anaemia in early childhood.

Rawat, C.M.S. et al. (2001).
Socio demographic correlates of anaemia among adolescent girls in rural area of district Meerut (U.P.).Indian Journal of Community Medicine, 26(4) : 173-75.

Key Words : 1.HEALTH 2.ADOLESCENT GIRL 3.ANAEMIA 4.RURAL HEALTH.

Abstract : The study was conducted to find out prevalence of anaemia among adolescent girls in rural Meerut. Information on socio-demographic characteristics for anaemia was collected using oral questionnaire method, supplemented by physical examination and haemoglobin estimation of 504 girls in the age group 10-18 years. The study revealed the overall prevalence of anaemia was 34.5%. The prevalence of anaemia was significantly higher (45.2%) among girls belonging to
joint families as compared to those from nuclear families (28.3%). Significant association of anaemia was found to be with type of family, socio-economic status, father's occupation, mother's education and family size. The study recommends that strategies should be developed for intensive adult education, nutrition education and dietary supplementation including anaemia prophylaxis.


Key Words: 1.HEALTH 2.ANAEMIA 3.ADOLESCENT GIRLS 4.PREVALENCE.

Abstract: The present study was conducted to determine the prevalence of anemia in adolescent Nepalese girls in a semi-urban setting. A total of 209 apparently healthy girls between the ages of 11-18 years were recruited and information was collected on menarche status and socio-demographic profile. All girls were subjected to anthropometric examination and haematocrit estimation. Anaemia was defined as hematocrit less than 36, as per WHO cut off. It was revealed that the prevalence of anaemia in adolescent girls was 68.8%. The haematocrit values ranged from 24 to 42. The prevalence of anaemia was maximum (76.9%). Prevalence of anaemia was not found to be associated with parental education or occupation and type of dwelling unit. The study highlights a high prevalence of anaemia in adolescent Nepalese girls.

Sharma, Anshu et al. (2000).

Key Words: 1.HEALTH 2.ANAEMIA 3.ADOLESCENT GIRL 4.IRON SUPPLEMENTATION.

Abstract: Nearly 1.5 billion people all over the world are affected by iron deficiency anaemia (IDA). The present study was conducted to obtain baseline data on haemoglobin levels of adolescent girls belonging to low socio-economic groups, to investigate the comparative efficacy of once 'weekly' and 'daily' administration of iron-folate tablets, and find out the impact of added ascorbic acid supplementation on the efficacy of iron - folate administration with respect to increment in Hb levels. In Delhi 520 girls, and in rural Rajasthan 185 girls were
covered. Results indicated that rural girls were shorter and lighter than urban girls. The haemoglobin status of urban girls was better than their rural counterparts. About 61.1% girls in urban areas and 85.4% girls in rural areas were anaemic. The response of Hb levels to daily iron/folate supplementation was better in comparison to once-weekly supplementation. Increment in Hb levels of subjects due to addition of Vitamin C to iron/folate supplementation was more than that with iron/folate supplementation alone. The study recommended once-weekly distribution of iron/folate supplementation throughout schools and child welfare centres like ICDS in developing countries like India, for combating anaemia in adolescent girls.
CHILDHOOD DISEASES

Karande, Sunil et al. (2000).

Key Words: 1.HEALTH 2.URBAN HEALTH 3.POVERTY 4.NATURAL DISASTERS 5.DEVELOPING COUNTRIES.

Abstract: The present Study was conducted from July to August 2001 in Mumbai slum children. Diagnosis of acute leptospirosis was suspected by following the Indian lepospirosis society working definition of leptospirosis. Diagnosis was confirmed by detecting anti-leptospira antibodies, using either aleptospira genus - specific latex agglutination assay or a dipstick assay or by a macroscopic slide agglutination test. It was revealed that thirty out of 93 children admitted had acute leptospirosis. Fever, bodyache, chills, abdominal pain, headache, vomiting, cough, hepato splenomegaly, edema and crepitations were the common presenting signs and symptoms. Twenty two children had anicteric leptospirosis and 8 had weil disease. Response to penicillin treatment was good in all except in one child with weil disease in Mumbai. It was recommended that during monsoon, parents should ensure that their child does not have contact with the contaminated flood water.

Madden, S.J. et al. (2002).

Key Words: 1.HEALTH 2.END STAGE RENAL DISEASE 3.PSYCHOLOGICAL ADJUSTMENT 4.MATERNAL STRESS.

Abstract: The study explore maternal and child perspectives on children's adjustment in the context of pediatric renal disease and maternal psychological variables that may account for variance in child and maternal rulings. Forty three children with end stage renal disease and their maternal care givers completed the Strengths and Difficulties Questionnaire (SDQ). Mothers also reported on their own mental health and the strategies they used to cope with their child illness. It was revealed that compared with normative data for the SDQ, mothers reported...
their children at increased risk of psychological problems. However, the children themselves reported no more problems than a normative sample. Mother’s coping and mental health explained the variance in their ratings of the child adjustment but were not predictive of the children self ratings. The results suggest that maternal factors may not explain the variability in children’s adjustment to chronic illness, perhaps especially within the age range studied here.


**Key Words**: 1.HEALTH  2.ARI  3.UNDER-FIVE CHILDREN.

**Abstract**: A longitudinal study for 6 months was conducted in Durgarampur village (population 548) of District Hooghly to determined the Acute Respiratory Infection (ARI) morbidity among all 63 under-five rural children. Results revealed that there were 1.17 episodes of ARI per child during six months. The overall incidence density rate of ARI episodes was 19.57/100 persons/month. Incidence was highest among infants (23.9/100 persons/month). Risk ratio analysis showed that low socio-economic class, low birth weight, under nutrition, inadequate immunization, children not exclusively breastfed and indoor smoke pollution were significantly associated with increased number of ARI episodes. The study findings strongly point towards the importance of basic health promotional measures like proper infant feeding practices, proper nutrition of the child, and improved general conditions of living in prevention and control of ARI.


**Key Words**: 1.HEALTH  2.ASTHMA  3.RISK FACTOR.

**Abstract**: The study was conducted in Dayalpur and Ballabgarh block of Haryana to investigate the factors influencing development of asthma in children. 2000 school going children in the age group 11-15 years were screened for the symptoms of asthma using a questionnaire suggested by International Study of Asthma Allergy in Children. 40 children were identified with bronchial asthma. History, clinical
examination and in-depth interviews were carried out for all cases. Passive smoking, inadequate ventilation and pets at home were significant risk factors associated with presence of symptoms of asthma in rural children. Factors such as family history of asthma, history of worm infestation, fuel used for cooking, location of kitchen and food allergy were not significant on statistical analysis.


Key Words: 1.HEALTH 2.CHILDHOOD ILLNESSES 3.CHILDHOOD DISEASES 4.MORBIDITY PATTERN 5.MALNUTRITION 6.PRESCHOOL CHILDREN 7.DESERT AREA 8.MALNUTRITION PRESCHOOL CHILDREN 9.RAJASTHAN.

Abstract: Malnourished populations are more susceptible to most infections and the severity of illness and mortality rates are worse. The present study was done to examine the morbidity pattern of preschool children and find out the diseases prevalent in desert areas of Rajasthan. The study was conducted in the desert districts that were Barmer, Jaisalmer, Nagaur, Bikaner, Churu, Jodhpur, Sirohi, Jalore, Sikar, Pali and Jhunjhunu. A total of 538 households were covered and 834 preschool children were examined. The average family size was 6.34. Out of 834 preschool children, around 16.4% were found to be sick at the time of the survey. About 10.7% children suffered from skin morbidities, 8.9% from eye morbidities and 7.2% from fever. The study found that skin morbidity increased according to age and was maximum at the age of 2 years and then showed a decline. In most age groups, skin and eye morbidities were higher among females as compared to male preschool children, which could be due to the fact that girls were not given proper care as compared to boys in the desert areas. Another cause was typical to desert climatic conditions such as scarcity of water, extremes of temperature with high intensity of ultra violet rays, low rainfall and high density of silica particles in the environment. The overall prevalence of clinical Marasmus as judged by muscle wasting was 4.8% and the peak prevalence was observed between 12 and 24 months of age. Prevalence of the various signs related to protein calorie malnutrition (PCM) were dispigmentation of hair (21.6%), dryness of hair (8.5%), sparseness of hair (3.2%) and moon face (0.5%). Regarding Vitamin A deficiency signs, the overall prevalence of Bitot's spots and Conjunctival Xerosis was observed to be 1.6% and 2.8%. Angular Stomatitis, the major deficiency sign of B-complex vitamin, was
observed to be 2.2%. Around 11.8% preschool children were anaemic. Other deficiency signs such as bleeding of gums (1%) were also observed. The study showed that morbidity was found to be higher in the low income group (up to Rs.600/ pm) i.e. 52.6%, and it was low in the high income group. Morbidity decreased as the level of education increased, i.e. from 44.5% to 15.6%. Regarding the type of family, nuclear families had higher morbidity (16.6%) as compared to joint families (15.9%). Poor housing conditions correlated with high morbidity (20.3%) compared to good housing conditions (11.9%). It was suggested that a strong need exists for planning and programming intervention activities for nutrition and health education in the desert area so that the percentage of morbidity among preschool children can be reduced.


Key Words : HEALTH 2.CHILDHOOD ILLNESSES 3.MATERNAL BELIEFS 4.FOOD BELIEFS 5.FOOD TABOOS 6.DIET DURING ILLNESS 7.DESERT AREA 8.THAR DESERT 9.RAJASTHAN.

Abstract : Malnutrition is a major health problem in developing countries where poverty and lack of education are also prevalent. The study was carried out in rural households of Thar Desert and the target population was young women having preschool children. 17 villages were selected, from three ecological sub-regions, i.e., Marusthali, Shekhawati and Luni basin. The sample size was 434 rural households calculated on the assumption that 12% to 15% of the total population was preschool children. Information on maternal beliefs regarding diet during common childhood illness, demography and other socio-economic aspects was collected through interviews from 434 rural young mothers who represented the entire caste groups present. About 94% of the women were illiterate, 48% belonged to lower and upper middle income groups, 98.6% were Hindus and 79% had nuclear families. The young mothers categorized food according to seasons. Nice food according to them was mung (green) bean and arhar (red gram) pulses (96.2%), onion (58.7%), kair (59.1%), sangri - dry pods of prosopis cineraria (54.6%), kumathia - seeds of acacia senegal (29.11%), spinach (57.7%), tomato, desi ghee, butter milk and oil (11.7%). Pearl millet (79.8), milk (58.2%), jaggery and water melon were considered as hot food. Wheat (79.9%) and chhachh - butter milk (69.5%), rice, rab (wheat flour cooked in curd),
and Bengal gram are considered as windy food. Millet was considered as heavy food by 96.2% women. During diarrhoea, 37% to 42% women preferred to give rice, curd, zeera and turmeric as they considered these as cold and light foods, which help in reducing the frequency of diarrhoea and dysentery. Restricted food included pearl millet roti (bread) (37.4%), vegetables (37.1%), ghee (38.8%), oil, jaggery, chillies and pulses. It was observed that during attack of measles and typhoid most women gave only lebta (slush) of pearl millet with sugar (33 to 40%), khichri (rice and pulses), milk and tea, roasted gram, and raisins with jaiphal (nutmeg) considering these items as hot and helping in early appearance of rashes. Results revealed that 80% to 90% women avoided roti, vegetables, ghee, oil and khatai (sour food). Restrictions on food were followed by majority of mothers, which is no longer a part of modern system of treatment. Human body requires more nutrients during illness due to increased metabolic demands of the body. Restriction of food due to prevalent beliefs in rural population reduces the nutrient intake and may lead to protein calorie malnutrition. The study recommends that while planning a nutritional and health education programme for desert areas, culturally accepted food should be given due consideration, by encouraging useful practices and discouraging harmful ones.

Singh, Madhu B. et al. (2006). 
Childhood illnesses and malnutrition in under five children in drought affected desert area of western Rajasthan, India. Jodhpur : Desert Medicine Research Centre. 9 p.

**Key Words** : 1.HEALTH 2.CHILDHOOD ILLNESSES 3.CHILDHOOD DISEASES 4.MALNUTRITION 5.DROUGHT AREAS 6.PRESCHOOL CHILDREN 7.UNDER FIVE CHILDREN 8.MALNUTRITION PRESCHOOL CHILDREN 9.RAJASTHAN.

**Abstract** : In desert areas of western Rajasthan, drought occurs frequently. The present study was undertaken to assess the impact of drought on childhood illness and nutrition in under five children of the rural population. The study was carried out in 24 villages belonging to 6 tehsils of Jodhpur district which was a drought affected desert district of Western Rajasthan. A total of 914 under 5 children (0-5 years) could be examined for their childhood illness history, malnutrition, dietary intake and clinical signs of nutritional deficiency. The main childhood illnesses observed during drought were respiratory (7.5%), gastroenterological (7.5%), and fevers (viral, malaria and jaundice) (5.6%). Male children were reported to have significantly higher illnesses (28.5%) than females (18.7%). Other illness observed
were ear disease (2.1%), skin problems (0.5%) and eye disease (0.2%). All childhood illnesses showed increasing trend with age, i.e. 13% in infants to 26.0% among children in 4-5 years age group. Recent malnutrition (weight for age) was observed to be 39%. Highest level of recent malnutrition was observed in 1-2 years age group. Girls were found to be more malnourished (40.8%) as compared to boys (36.1%). Overall 25.8% children suffered from chronic malnutrition, i.e. long term malnutrition. Chronic malnutrition was also higher in girls (31.2%) than in boys (20.4%), particularly among children aged 1-2 years. The overall prevalence of anaemia was observed to be 30.5%. Prevalence of various signs related to Protein Calorie Malnutrition (PCM) was observed to be high, i.e. dispigmentation (20.2%), dryness of hair (21.6%), and others which accounted for 2.6% only. Prevalence of Marasmus was 1.7%. All signs associated with PCM were observed to be higher among girls (46.3%) than boys (42.8%). Vitamin A deficiency sign (Bitot Spot) was observed in just 0.2% children, and no night blindness was observed. The overall prevalence of Vitamin B complex deficiency was seen in 3% children, and Vitamin C deficiency was observed in 0.1% children. The study suggested that firstly, gender differences should be removed by giving proper education to community people; also, effective measures to make adequate calories and proteins available to all age groups, especially to under 5 children through the ongoing nutrition programmes, needs to be ensured.
CHILD HEALTH/ NUTRITIONAL STATUS

Ananthakrishnan, Shanthi et al. (2001).
A comprehensive study of morbidity in school age children. Indian Pediatrics, 38(9) : 1009-17.

Key Words : 1.HEALTH 2.MORBIDITY 3.SCHOOL CHILDREN 4.CHILD HEALTH.

Abstract : The study was conducted in Kedar village in Tamil Nadu to evaluate the health status of 1349 school children and assess the community’s perception of their health problems. Through focus group discussions and in-depth interviews, data was collected on perception of the community regarding important morbidities among school children and etiology of these conditions. People generally felt that fever, respiratory infections, abdominal pain and headache were common morbidities affecting school age children, besides dental and skin problems. Change of water, exposure to cold, intake of indigestible food, excessive heat, fear, eye problems and poor hygiene were considered some of the major factors causing morbidity in school age children. When compared with the National Centre for Health Statistics, USA and affluent Indian children, the mean heights and weights of these children were found to be less than the reference standards. The overall intake of calories, iron, riboflavin, vitamin A, etc. was significantly less than the recommended dietary allowance (RDA). The important morbidities observed were anaemia (57.1%), worm infestation (46.4%), malnutrition (57.6%), riboflavin deficiency (32.9%), nutritional skin disorders (11.6%), and dental caries (27.9%), etc. The study revealed that what the community perceived as morbidity among school age children was different from the morbidity actually observed in them on clinical examination. The study recommends that the community should be educated about the important morbidities in school age children, their etiologies and their prevention. Other measures that may improve the health status of school age children are increased energy, iron and vitamin A supplementation, and periodic deworming.

Key Words: 1. HEALTH 2. HEALTH STATUS SLUM CHILDREN 3. HEALTH STATUS SLUM DWELLERS 4. SLUM CHILDREN 5. SANITATION 6. DIARRHOEA.

Abstract: Despite the progressively increasing outlays under plans, universal provision of safe drinking water and improved sanitary facilities is still a distant goal. Only 64% to 74% of the rural population of the country draws its drinking water from protected sources leaving the unserved population exposed to dangers emanating from consuming contaminated water. The corresponding figures for the urban population are relatively better; about 91% to 93% of the population enjoys access to drinking water from protected sources. Only six states have been able to ensure full coverage in rural areas, while on the urban front, only 77% of class I cities enjoy full water supply coverage. Regarding sanitation facilities coverage, data from various sources reveals that only 18% to 19% of all rural households, and 75% to 81% all urban households have access to toilets. It was found that the incidence of diarrhoea is relatively higher among households with low standard of living. While the incidence of diarrhoea is 23.09% among households with low standard of living, it is lower at 20.22% among households with medium standard of living, and still lower at 16.71% among households with high standard of living. Comparison of incidence of diarrhoea across states shows a wide variation in the rate. Some of the states for which the incidence is found to be relatively high include Jammu, Delhi, Madhya Pradesh, Orissa and Maharashtra. On the other hand, the incidence is found to be rather low in Assam, West Bengal, Punjab, Karnataka, Kerala and Haryana. The incidence rate is relatively lower for private tap water users and private hand pump users in a majority of states. In many cases, the incidence rate for public tap users is higher than that for private tap users. This may in part be due to the fact that in the process of collection of water from public taps contamination takes place. It was concluded that interventions resulting in better access to piped water and sanitation facilities can have significant health benefits. However, policies aiming at improving coverage may often be compromised by deteriorating distribution systems, contamination during storage post collection, or lack of hygienic practices, which may undermine the quality of the water at point of use. Universal provision of safe drinking water supply and sanitation in urban and rural India has emerged as major challenge, but the realization of this goal will still take some time.

**Key Words**: HEALTH, CHILD HEALTH, GENDER DISCRIMINATION.

**Abstract**: The study examined whether a gender gap existed with respect to various child health indicators viz., mortality, immunization, nutrition, morbidity and treatment, etc., and observed whether gender gap narrowed down with development. Data was based on the National Family Health Survey for three states, namely Maharashtra, Kerala and Rajasthan. In neo-natal mortality, there was no gender gap in Rajasthan, but in Kerala and Maharashtra the situation was more favourable to females than males. With respect to post neo-natal mortality, the situation was worse off for females in Rajasthan and Maharashtra. Regarding the child mortality indicator, both Rajasthan and Maharashtra revealed an unfavourable situation to female children. Regarding immunization, gender gap was found only in Rajasthan. No clear cut evidence was found regarding gender discrimination in nutrition and morbidity. Evidence of discrimination regarding treatment given to sick children was found. The situation in Rajasthan was worse compared to the other two states. In Maharashtra, results revealed that mother’s education, standard of living and birth order were important factors affecting the decision regarding whether treatment was to be given or not to the sick child. On the whole, the available gender gap evidence in NFHS data is inadequate to explain the higher mortality of girl children especially after the neo-natal period. Social development factors like mother’s education and programme efficiency play an important part in narrowing the gender gap.

Narain, K. et al. (2000).

**Key Words**: HEALTH, CHILD HEALTH, WHIP WORM, TRICHURIS TRICHIURA, INFECTION, RURAL HEALTH, RISK FACTOR

**Abstract**: The study was undertaken to explore, quantify and study different socio-environmental risk factors and find out their possible association with Trichuris trichiura which are known to be responsible for stunting, anaemia, and
poor level of mental development. The study comprised 244 children aged 15 years and below and 336 adults from three villages of Dibrugarh, Assam. Results revealed that open field defaecation, large family, earth flooring, source of drinking water were the risk factors associated with the infection. 22% children in the age group 5 years and below were affected with Trichuris infection. Installation of pit latrines, provision of safe drinking water and construction of cemented floors are recommended to reduce prevalence of T. trichiura in the community effectively.


Key Words: 1.HEALTH 2.CHILD HEALTH AND NUTRITION 3.CHILD HEALTH 4.CHILD NUTRITION 5.COMPLEMENTARY FEEDING 6. RAJASTHAN.

Abstract: To bring out the prevailing profile of health and nutritional status of children aged 2-5 years attending the balwadi and anganwadi schools at Barawa, and to draw out the most prevalent nutritional disorders, this study was carried out in Barawa village of Udaipur district. The total population of Barawa is 500, spread over 340 hectares. Population comprised mainly Bhils, rebaris and rajputs. Agriculture and livestock rearing are the main sources of livelihood. One Balwadi school was being run by Seva Mandir. A model structured and close ended questionnaire was developed for obtaining data regarding the health and nutritional status of children. Anthropometric measurements of 59 children was taken and compared with available standards. Data was collected through participatory rural appraisal method, and exploratory home visits. Information was gathered regarding immunization status, breastfeeding, introduction of complementary foods, nutrient intake, and occurrence of deficiency diseases. Out of 59 children, 14 children were born with weight less than 2.5 kg. 42% of the children were observed to be suffering from Vitamin A deficiency. Out of these, 34% were females and 48% were males. About 46% of the children were observed to be anaemic in the village. It was also observed that balwadi children were less prone to anaemia with 41% suffering from anaemia as compared to anganwadi (50%), school going (50%), and rest (48%) of the children. About 79% males and 88% females had suffered from one of the respiratory infections in the last six months, 69% children suffered from eye, ear, and skin infections in the last one year. Around 78% of the children had long duration fever in the past one year. 27 children out of 59 (45%) suffered from diarrhoea in the last one year. 28% suffered from measles, once in their life time.
Vaccination rates were about the same as in Rajasthan. Out of 59 children, 25 (43%) had BCG vaccination and the same number of children had DPT immunization. Stunting was measured by Anthropometric Index. 32 children out of 59 (54%) were found to be in normal condition, 27 (46%) children were stunted, and 15 (25%) children were severely stunted. This condition was worse compared to Rajasthan, where only 19.5% were wasted. The indicators show clear gender bias in nutritional status. After 72 hours of delivery, babies are given breast milk. Supplementary milk is generally given after 6-8 months of age. In the case of a working woman, the child is looked after by the elder sibling or grandmother. Strengthening the team coordination of Seva Mandir in Barawa will motivate the villagers to adopt nutritional and health practices beneficial to the child. There should be close collaboration between Government and voluntary organizations to achieve better results.

Changes in nutritional status and morbidity over time among pre-school children from slums in Pune, India. Indian Pediatrics, 37(10) : 1060-71.

Key Words: 1.HEALTH 2.NUTRITIONAL STATUS 3.MORBIDITY 4.PRE-SCHOOL CHILDREN 5.SLUM CHILDREN.

Abstract :  Children in the age group 0-5 years from three slums in Pune were studied during 1992-1995 to investigate changes in nutritional status and morbidity. Measurement of weight and height, morbidity (in the last 7 days) and clinical assessment of 845 children was undertaken once every four months for 2 years. Crude estimates of infant and child mortality were 87 per thousand and 70 per thousand respectively. Deterioration in weight for age status was observed in 34% children while stunting was observed in 49% children. The proportion showing improvement in weight and height status was 13% and 10% respectively. Fever, gastrointestinal and respiratory illness were the major illnesses contributing 50% of the total morbidity. Total morbidity was highest in the rainy season, followed by that in the summer season. Shorter period of exclusive breast feeding resulted in malnutrition at an early age among slum children. Morbidity further deteriorated the nutritional status. Diarrhoea was more prevalent among slum children. An intervention programme planned for rural children may not be applicable to slum children, as morbidity profile, clinical profile and type of malnutrition are totally different among the two groups. Therefore, it is essential to make further attempts to examine the etiology of malnutrition and poor environmental conditions in slum communities for planning appropriate programmes.
Rice, Amy L. et al. (2000).

**Key Words**: 1.HEALTH 2.CHILD NUTRITION 3.MALNUTRITION 4.CHILD MORTALITY 5.INFECTIOUS DISEASES 6.DEVELOPING COUNTRIES 7.CHILDHOOD DISEASES.

**Abstract**: The study reviewed published literature to examined the relation between malnutrition and child mortality due to diarrhoea, acute respiratory infection, malaria, measles, etc. which account for over 50% deaths among children. Malnutrition measured as poor anthropometric status, is associated with about 50% of child mortality. The strongest and most prominent relation between malnutrition and child mortality was observed for diarrhoea and acute respiratory infection. A less consistent association was observed between nutritional status and death from measles. The risk of malnutrition related mortality varied for different diseases. Results also highlighted the fact that children with even mild to moderate malnutrition had an increased risk of dying. For India, the risk ratio of fatal cases increased from 1.0 and 2.79 in case of 1st and 2nd degree malnutrition to 6.08 and 6.01 for 3rd and 4th degree malnutrition (Gomez Scale). These findings have important implications for evaluation of nutrition intervention programmes and child survival programmes, and designing intervention programmes that promote the survival of children.

Sarkar, Nihar, Ranjan et al. (2002).

**Key Words**: 1.HEALTH 2.ASCARIS 3.DEWORMING 4.WEIGHT GAIN 5.SLUM.

**Abstract**: The study was carried out in Mirpur Slum, a suburb of Dhaka, Bangladesh, consisting of 900 households. The randomized double community trials was conducted on Ascaris infested children (n=85) aged 2 to 12 years and was aimed to study the impact of deworming on nutritional status, in an urban slum of Dhaka, Bangladesh. The change of weight gain was significantly higher in children given anthelmintics than those given placebo (0.92 Kg VS 0.54 Kg). A multiple linear regression model shows that after controlling sex, deworming & height were positively correlated while age and weight were negatively correlated with weight change.

**Key Words:** 1. HEALTH  2. MCH  3. FAMILY PLANNING  4. RURAL WOMEN  5. KNOWLEDGE OF WOMEN.

**Abstract:** The study attempted to develop a scale to measure the knowledge of rural women in Rohtak regarding maternal and child health and family planning. Information was collected in relation to maternal and child health care, family planning beliefs and cultural practices based on discussions held with local workers and women in the study area. Out of 163 women included in the study, 47 per cent had formal schooling, 90.8 per cent of their husbands had formal schooling and 23 per cent belonged to under-privileged communities. Nearly 64 per cent were from joint families. The mean score for maternal care, child care and family planning was higher among women living near health institutions as compared to those in far off villages. The mean knowledge score for maternal care, child care, and family planning were 18.46, 73.98 and 32.24 respectively. The child care score was significantly correlated with education of women/husbands and exposure to mass media.


**Key Words:** 1. HEALTH  2. HEALTH COVERAGE  3. MCH  4. QUALITY OF SERVICE  5. RURAL AREA.

**Abstract:** The study assessed the coverage and quality of Maternal and Child Health Services at the sub-centre level in Rohtak. 500 mothers having children between 1-2 years of age were interviewed during the period 1996 to 1998. Study variables included antenatal care, delivery practices, postnatal care, contraception, immunization and management of diseases in young children. Results revealed that only 10 sub-centres could achieve impressive coverage level of 95% in respect of antenatal registration, giving tetanus toxoid injection to pregnant women, fully immunizing children, having delivery conducted by trained personnel and providing vitamin - A prophylaxis. There was low level of coverage of iron and folic acid (5.8%), postnatal care (4.4%), weighing infants at birth (29.4%), and only 28% women had 3 antenatal check-ups at the sub-centre. Quality of antenatal care was
graded as excellent in one centre and good/poor in the remaining nine sub-centres. Immunization and delivery services were graded as excellent in all the sub-centres but postnatal care, new born care and contraceptive services were graded as poor in all the sub-centres. Diarrhoea management was graded as excellent in one sub-centre area, good in 3 and poor in the remaining six sub-centres. ARI management was considered excellent in 5 sub-centres, good in 4 sub-centres and poor in one sub-centre area. The study recommended that although collaboration with the ICDS system had resulted in high level of registration, the health workers should maintain enough contact for providing full range of antenatal services. Outreach sessions on fixed days should be held. Most health workers were non-resident, and as only 5% deliveries were conducted by them, the health system should support traditional birth attendants (TBAs), give incentives to TBAs and provide them with disposable dai kits.
**CHILD SURVIVAL**

Catholic Relief Services, Lucknow. (2005).


**Key Words**: 1.HEALTH 2.CHILD SURVIVAL SAFE MOTHERHOOD 3.INFANT MORTALITY REDUCTION 4.CHILD HEALTH 5.MATERNAL HEALTH 6.BEHAVIOUR CHANGE COMMUNICATION 7.COMMUNICATION FOR BEHAVIOUR CHANGE 8.STREET PLAYS 9.HEALTH EDUCATION 10.NUTRITION EDUCATION 11.NUTRITION AND HEALTH EDUCATION 12.UTTAR PRADESH 12.VISTAAR PROJECT

**Abstract** : Linkages and Catholic Relief Services (CRS) proposed to conduct a process evaluation of its Behavioural Change Communication Programme to improve infant feeding and maternal nutrition practices in the Safe Motherhood and Child Survival Programme (SMCS) project implemented in Rai Bareli district in Uttar Pradesh. The primary objective of the process evaluation was to improve understanding of how programme strategies contributed to achieve the objectives of the project. CRS and Gramin Vikas Sansthan (GVS) launched SMCS in 6 Gram Sabhas of Shivgarh block in Rai Bareli district. It was extended to 15 and 39 Gram Sabhas in 1999 and 2002 respectively. Rai Bareli is an under-developed district of Uttar Pradesh. Sex ratio in the district is 931 women for every 1000 men and female literacy rate is 17%. Two villages named Guriya Garhi and Goorha were selected and focus group discussions (FGD) were conducted. The FGD points provided to the research team were very helpful in getting the perception of different groups. Personal or group counselling as well as awareness activities were well received by the communities, but the same level of acceptance was not reflected as far as adoption of practices was concerned. In spite of addressing target groups and making continued efforts in the adopted villages, community initiatives were not observed to the expected levels. The activities were effectively operational but the initiative of GVS/CRS could not mobilize adequate support and resources from other groups or institutions working on similar issues. Based on experiences, felt constraints and feedback from CRS and communities, the Project Team identified a few strategies to be adopted while implementing further activities of the project. It was realized that programme activities should be owned by communities; hence their involvement at every level of project implementation vis-à-vis planning, operationalization, monitoring and evaluation is important. Messages should be designed and communicated to target groups in a more specific...
manner on a one-to-one basis, according to local, agro-climate and cultural situations. To achieve effective results and obtain maximum output from the efforts put in, it is necessary that resources and activities of different actors should be converged. Such coordination is required to be forged at institutional levels. It was found that non target groups were also important and should be involved so that a chain process is triggered and the whole community plays an active role. To enhance the impact of SMCS activities, CRS and LINKAGES developed a systematic Behaviour Change Communication (BCC) strategy as a Pilot Project in the area. It was expected that communications related to behaviour change would facilitate acceptance and adoption of good practices related to better infant feeding and maternal nutrition and lead to better long term effects. In the BCC phase, message clarity was ensured and messages were also developed. It was observed that messages from fellow community members, based on their own experiences, were very effective and well received. Efforts had been made to involve the community at every level during implementation of SMCS programme. This helped develop an environment of trust and ownership. Communities came forward to help in the project and contributed their time and resources. The community provided rooms, chairs, mobility, help in wall writing, awareness campaigns and other such support. Identity of the programme and organization shifted from food providers to social change organization. Collaboration showed results and the success of events like Health Melas (fairs), health campaigns, polio immunization drives, etc. were a few examples of such collaboration. Although efforts were made to influence practices on all the identified behaviours, the impacts have been more pronounced on some behaviours than others. Significant changes have been made within a limited time, and the adopted communication strategies were effective; however, there are still challenge areas where more efforts are required.

Serum Cortisol and thyroid hormone levels in Neonates with sepsis. The Indian Journal of Pediatrics, 69(8): 663-665.

Key Words : 1.HEALTH 2.CORTISOL 3.MORTALITY 4.THYROID HORMONE 5.NEONATAL CARE.

Abstract : Study was undertaken to evaluate the thyroid hormone and cortisol levels in neonates with sepsis in relation to the final outcome. It was hypothesized that the hormonal level could act as some prognostic guideline. Forty nine neonates aged 8-28 days, diagnosed as neonatal sepsis were selected for the study. Neonates below 8 days of age, 35 weeks of gestation and 2000 g of birth weight were
excluded from the study. Twenty FT-AGA beyond day 7 of life served as control for the study. The hormones were estimated by radio immunoassay. The neonates with sepsis had significantly higher mean serum cortisol and lower mean serum total T4 at admission as compared to healthy neonates. The mean serum total T3 level was also lower, but the difference was not statistically significant. The mean serum TSH levels were comparable in both the groups. The levels normalised following recovery. Sixteen neonates succumbed to the disease process. The non survivors had significantly lower mean total T3 and total T4 level as compared to the survivors.


Key Words : 1.HEALTH 2.CHILD SURVIVAL AND SAFE MOTHERHOOD 3.IMMUNIZATION 4.DELIVERY OF SERVICES 5.RURAL AREA 6.RAJASTHAN

Abstract : This study was planned to evaluate the Mother and Child Health (MCH) services, particularly immunization in rural areas of the poorly performing state of Rajasthan. A survey was conducted in rural areas of Alwar District among 210 children aged 12-23 months and 210 mothers of children aged 0-11 months. Less than one third (28.95%) of the children aged 12-35 months were fully immunized with BCG, 3 doses of DPT, 3 doses of OPV and measles vaccines. Around a quarter (26.5%) had not received even a single vaccine (not immunized), and little less than half (44.5%) were found to be partially immunized. Around half of the eligible children were vaccinated for BCG (55.9%) and measles (43.6%). Though nearly two-thirds (66.8%) were covered with first dose of DPT and OPV, about one-third of these children dropped out of the third dose of DPT and OPV for various reasons. The main reasons for dropout or non-immunization were "lack of information about the immunization programme" (41.3%). Three-fourths (74%) of the mothers of infants (0-11 months) were found fully immunized with tetanus toxoid. Though nearly all (more than 96%) of the children were immunized through Government established centres, but immunization cards/ documents were made available to only 27.6% children. The problem of low coverage and high dropout rate of immunization could be overcome by creating awareness about its importance. Increasing community participation through intensive and extensive health education campaigns should also be undertaken. Since most of the deliveries took place at home under the supervision of untrained midwives, training programme as well as involving them in IEC activities should be contemplated.

**Key Words**: 1.HEALTH 2.CHILD SURVIVAL 3.NEWBORN CARE 4.CARE OF NEWBORN 5.HOME BASED NEONATAL CARE 6.TRAINING HEALTH WORKERS 7. MAHARASHTRA 8.VISTAAR PROJECT.

**Abstract**: Home-based Neonatal Care (HBNC) is an effective approach developed by SEARCH in which village women are trained as Community Health Workers (CHWs) and empowered to help mothers care for their newborns, and if necessary, to treat them when they are sick. This study was conducted in 39 villages in Gadchiroli district of Maharashtra, where this scheme reduced neonatal mortality rate by 70% and infant mortality rate by 57% over an 8 year period (1995-2003). Training was given to a large number of personnel (CHWs, TBAs, Supervisors) in different places to deliver HBNC of comparable quality. Further, a project named ANKUR was started in Gadchiroli in 2001 to implement a Home-based Neonatal Care Project on a wider scale. Local women were selected and trained as CHWs to provide home-based neonatal care. Ankur project was completed in 2005, with the promising result of achieving nearly 50% decline in neonatal mortality from baseline in 1998-2000. Ankur Project revealed that with proper intervention 50% reduction in NMR can be achieved, competence of CHWs and Supervisors can be improved with proper training and supervision, women living in communities can provide essential and emergency newborn care and make a difference. It was observed that 84 out of 92 CHWs evaluated were judged competent to deliver home-based neonatal care. Only 6 out of 92 CHWs scored less than 70% on a written test. Although CHWs performed well, it was found that they need continuing support to maintain and strengthen their skills, especially in providing health education, and in the management of asphyxia, sepsis and breastfeeding problems. The training manual and material developed and used in this training was highly effective in a variety of settings such as rural, tribal and urban areas, and subsequently in the ICMR trial, these were found to be effective in 5 different states of India. The entire training was done without hospitals, proving that it is possible to train CHWs in the classroom and in the community. The health education flipchart has been very well received by mothers, who find the information useful. The traditional birth attendant (TBA) was trained for 6 days under Ankur. TBA practices appear to be
good, and old ideas are changing. While many of the TBAs have been trained (some as long as 15 years ago) under the Government programme, the fact that they have been re-trained under this Project, received a token stipend for identifying pregnant women, and are regularly visited by Supervisors seems to have been instrumental in the high level of cooperation. It was observed that most of the trainers and Supervisors performed well. The detailed training material and support from the master trainers were instrumental in this success. It was suggested that CHWs need continuing support to maintain and strengthen their skills, especially in providing health education, and in the management of asphyxia, sepsis and breastfeeding problems. More training was needed on health education, ARI management and breastfeeding problem management.


**Key Words**: 1.HEALTH 2.CHILD SURVIVAL 3.KANGAROO MOTHER CARE 4.LOW BIRTH WEIGHT INFANT 5.BREAST FEEDING 6.VERY LOW BIRTH WEIGHT.

**Abstract**: The study was conducted in a Delhi hospital to study the effect of Kangaroo Mother Care (KMC) on breast feeding rates, weight gain and length of hospitalization of very low birth neonates and its acceptability by nurses and mothers. 28 babies with birth weight less than 1500 gms. and who attained stable cardiopulmonary status were included in the study. The baby received Kangaroo care after shifting out from NICU and at home. Results revealed that neonates in the KMC group demonstrated better weight gain after the first week of life, and were discharged 7.4 days earlier than the babies in the control group. Significantly greater mean daily weight gain, and shorter mean duration of hospital stay were achieved with Kangaroo care method. Mothers did not report any feeling of discomfort about holding the infant in Kangaroo position. Nurses were also very favourably inclined toward KMC. Kangaroo mother care, because of its simplicity, is recommended in the home care of low birth weight babies. There is need for larger community based clinical trials on KMC in India.

**Key Words**: 1. HEALTH 2. ACCIDENT PREVENTION 3. INJURY PREVENTION 4. ACCIDENT 5. CHILDHOOD ACCIDENTS 6. HEALTH PROFESSIONALS.

**Abstract**: This article examined the responses of health professionals about the minimum age of children for a number of activities and scenarios. It was conducted in South-West England. A sample of 215 health professionals were taken of whom 120 were general practitioners, 23 health visitors, 19 paediatric consultants, 30 paediatric registrars, 12 paediatric senior house officers and 11 A&E nurses. A questionnaire consisting of 11 statements was taken; and these were adapted from the BBC book 'Play it Safe'. 33% respondents felt that the ideal age for children to eat whole peanuts was 5±2 years. 41% of the sample said that children can take an unsupervised bath after 6±2 years. It was found that 54% health professionals recommended 9±2 years of age for walking to local shops which involved crossing a road. For riding a bicycle on the street, 60% persons interviewed recommended the age of 10±2 years. About 81% respondents felt that a child can be left alone in the house at the age of 10±2 years. No recommendations were given regarding age at which children could climb trees, use matchboxes, make a cup of tea, play with other children in the local estate and near water. The responses given suggested that many health professionals would advise parents to be either overprotective or dangerously careless in the supervision of their children. But carefully structured and timely risk-taking behaviour is an important aspect of a child’s development, and health professionals should be a resource to parents providing reliable and consistent advice. Injury prevention advice should be consistent, and where possible, evidentially based.
COST OF HEALTH CARE


Key Words: 1. HEALTH 2. COST OF HEALTH CARE 3. HEALTH CARE 4. HEALTH FOR ALL 5. HEALTH SYSTEM 6. POOR 7. PATENT 8. PATENTING HEALTH DRUGS 9. DRUGS 10. RIGHT TO HEALTH 11. NATIONAL HEALTH POLICY 12. PUBLIC SPENDING ON HEALTH.

Abstract: The study was conducted to assess the spending by Government on health care: spending by persons on health services; and to know how poor people coped with health problems. It was found that India needed 7415 Community Health Centres (CHCs) per 100,000 population, but India had less than half the number of CHCs. The basic staff was not in position. Only 38% Primary Health Centres (PHCs) had the required medical personnel. As the primary health infrastructure was in shambles, the poor could not count on government health centres. Children died of snake bite for want of anti-venom vaccine, and women in labour were turned away from CHCs. These case studies were recorded at public hearings in different states in 2004 by the Jan Swasthya Abhiyan and by “Info Change Agenda” correspondents. Citizens were denied the basic human right to effective health care. At Mumbai’s JJ hospital, 1000 HIV positive people were among the 4000 nationwide that were accessing the government’s free Anti-Retroviral Therapy (ART) programme. There were around 2,50,000 other patients in India urgently in need of ARVs, who could neither access the programmes nor afford to buy the medicines. Nagaland has 500 doctors for 2 million people. Patients often travel to Assam for medical attention. Meghalaya has set up permanent accommodation in Vellore, Tamil Nadu for patients travelling there for treatment. A severe shortage of medical personnel and facilities is the major problem in the north east. In 2002 Manipur (14) and Kerala (10) had the lowest IMR in the country. Both Kerala and Manipur have better availability and a more equitable distribution of health services in comparison to the rest of the country. A survey of households in poverty showed that 85% of 134 households in two districts of Gujarat, and 74% of 335 households in three districts of Andhra Pradesh said that health expenses were the main reason for their economic decline. Public financing is critical for good health care and health outcomes. Yet in India, only 15% of the Rs 1,500 billion healthcare sector is publicly financed. As investment
and expenditure in public sector is shrinking, the public health system is on the brink of collapse, and there has been a 30% decline in the use of public healthcare facilities. Less than 1% of our health budget is spent on mental health. Morbidity among women was higher than among men. But women were less likely to access health care for several reasons such as high cost, could not get time off from work, and low status within the family. There was gross under supply of drugs at public health facilities, forcing patients to buy over priced drugs from the profit driven private sector. A labourer earning Rs 60 a day would have to work more than two years to afford treatment for tuberculosis. The third amendment to the Indian Patents Act is likely to adversely affect the availability, accessibility and affordability of medicines. In the absence of a robust state funded health infrastructure providing free care, around 75% people prefer the private sector. However, the National Rural Health Mission (NRHM), launched in 2005, aims at strengthening rural hospitals for effective curative care and accountability.

Fiedler, John L. and Jain, Meenakshi. (2006).  

Key Words: 1.HEALTH 2.REPRODUCTIVE HEALTH 3.RACHNA PROGRAMME 4.CHILD HEALTH 5.CHILD NUTRITION 6.REPRODUCTIVE AND CHILD HEALTH 7.CARE PROGRAMME 8.AIDS AWARENESS 9.VISTAAR PROJECT.

Abstract: The Reproductive and Child Health, Nutrition and HIV/ AIDS (RACHNA) Programme is a USAID funded project designed to reduce infant mortality, child malnutrition, and HIV transmission, and to increase the rate of contraceptive prevalence among vulnerable section of the population in India. The RACHNA Programme consists two components, INHP-I (Integrated Nutrition and Health Project) which was started in October 1996 and ended in September 2001, and follow-on project, INHP-II, which was initiated in October 2001 and covered 95 million people, 95,000 Anganwadi Centres in 95,000 village located in 78 districts of nine of India’s 29 states. The second component of RACHNA was Chayan started in September 2002, and comprised two set of activities, reproductive health and HIV prevention. The study was conducted to know how much it would cost to replicate the RACHNA programme. Data was collected by CARE staff, and also by State Office staff, district teams, NGOs, CDPOs, ICDS Supervisors, AWWs, ANMs, Medical Officers, Lady Health Visitors, change agents CAs), members of the community, mothers' committees, and mothers and children participating in the
ICDS programme. The Chayan – Rural Programme was spread over 29 districts, with coverage at the block, sector, and AWC levels as per the prototypical state. It was found that the total estimated cost of INHP was Rs.57,487,788, total estimated cost of Chayan – Rural was Rs.25,235,602, and the total estimated cost of RACHNA programme was Rs.82,723,389, if one state was added to the RACHNA Programme. The composition of RACHNA’s estimated total annual recurrent costs divided into different parts in percentage were 17% for capacity building, 21% for NGOs, 19% for district level, 8% for state level, 10% for behaviour change communication (BCC), 11% on CARE India head quarters (CIHQ), and 15% on other expenses. RACHNA Programme has addressed almost all the issues properly. RACHNA Programme is effective in impacting the nutritional status of the beneficiary ICDS children when they avail long term benefits from the ICDS programme. RACHNA should try to develop a system of tracing its children’s participation rates, which can be used as a tool to monitor the programme. Still, there is need to restructure the Programme content in future, if any effort to scale up or replicate the Programme is required.


Key Words: 1.HEALTH 2.FINANCING HEALTH CARE 3.HEALTH CARE 4.ROLE OF SELF HELP GROUPS 5.SELF HELP GROUPS 6.LOANS FOR HEALTH CARE 7.KERALA.

Abstract: SHGs have become a movement in the state of Kerala, but their impact on society in general and poverty in particular is still unknown. Household health expenditure in Kerala has increased over five times (517%) during the 10 year period 1987-1996. This increase was significantly higher (768%) among the poorest sections of society as compared to the richest (254%). Kerala spent on an average Rs. 2548 per capita per annum on health during 2004-2005. The present paper analyzed the possibility of micro finance as an alternative to finance health care. The study is based on the analysis of primary data. The rural area was selected because of its importance as the region of the inception of Credit Development Societies (CDS), the premier SHG in Kerala. The semi-urban area was selected because of its proximity to the capital city of Kerala. The study concentrated on women SHGs only. Questionnaires were separately needed for SHG beneficiaries and officials. 4 SHGs were selected. SHG 1 and SHG 2 were rural SHGs and SHG 3
and SHG 4 were semi-urban SHGs. The study found that nearly 50% women had no assets or very few assets. The success of SHGs in enhancing income appeared to be highly significant. The highest percentage of enhancement was found in rural areas. In the category of currently held up loans, the percentage of loans for health was significant (9%) in proportion to the loans for other purposes like employment, housing, debt, etc. Rural areas had the largest share of loans taken for health (7%). During the period 2003-05, 238 loans were disbursed by the four SHGs. Out of these, 22 (9.2%) were for health care purposes. 16.6% members of SHG 1 and 7.1% of SHG 2 took loans for health purposes. The total amount of loan disbursed for health was 3.6%. The average monthly expenditure was Rs. 26,630 for SHG member and Rs. 15,100 for spouse. A vast majority (77%) of SHG members utilized both government and non-government health facilities for treatment of their illness, whereas 23% relied only on government facilities. There was no significant difference in the exclusive access to government health facilities between rural and semi-urban areas. The participation of the elderly as well as women below 30 years of age was very small; which could be due to lack of autonomy of women, either financial or in decision making. Women had low capacity to meet their requirements, especially health care, and also felt the necessity for informal financial arrangements like micro finance to meet their emergencies and other felt needs. Majority of the respondents were without any personal income, had a very low standard of living, low health status and low health seeking behaviour, especially women. More than 40% of the families living below the poverty line were headed by females. Experiences with Grameen Bank in Bangladesh and SEWA in India show that micro credit linked health insurance schemes as well community financing schemes were the most effective way to save the poor from the cost of health care. The small amount of loans taken for health purposes reveals that people were not considering micro finance as an option for major health care expenditures. It was suggested that there should be more support from the local government system for the functioning of the micro finance mechanism in terms of mobilization and management of resources, which could win the confidence of people and thereby add to their sense of security. Community financing and other risk pooling mechanisms for meeting emergency health care expenditures can be explored.


**Abstract**: The importance of economic growth, measured by increases in Gross Domestic Product (GDP) and GDP per capita, for policy purposes can hardly be over emphasized. The role of health in influencing economic outcomes has been well understood at the micro level. This study is confined to the major Indian states excluding Jammu & Kashmir, Goa, and Himachal Pradesh. The range of variation in growth rates is from a low of about 0.9% and 1% respectively in Madhya Pradesh and Bihar to a high of 3.8% in Maharashtra. Kerala stands out as an exception; though it does not have very high per capita income, it has the lowest IMR of 14 infants deaths per 1000 live births. A strong positive association is observed between initial per capita income and long run economic growth and growth in per capita income across the states. States that have experienced higher (lower) levels of growth over the thirty year period witnessed a lower (higher) level of poverty, the exceptions being Kerala and West Bengal. Analysis shows that a thousand rupee increase in per capita health expenditure would lead to a 1.3% increase in Life Expectancy at Birth (LEB), while a 10% increase in per capita income is required to increase the LEB by about 2%. A survey conducted in 6 states to assess the technical capacity of these states to implement maternal health (MH) programmes showed that except one Deputy Director in Kerala, there was not even one officer in the other 5 states namely Tamil Nadu, Maharashtra, Rajasthan, Gujarat and Chhattisgarh who were exclusively earmarked for monitoring the maternal health programme. In the surveyed districts, there are a total of 9457 health facilities run by qualified providers, and of these, 61% are private. The 52nd Round of the National Sample Survey (NSS) showed that 35% of those hospitalized in Bihar got pushed below the poverty line on account of meeting the cost of medical treatment. VHAI is one of the major national networks of more than 4000 NGOs spread across...
the country. Questionnaires were sent to the 27 State Voluntary Health Associations to provide names of the organizations in their network that provide medical care. The responses received were brought out in volume two of the series titled "The Study on Macro Economics and Health". This study was undertaken to understand the financing patterns of health care. It showed that it is not possible to put the not-for-profit sector into one typology because of its heterogeneity in terms of organizational structure, pattern of funding, ownership, nature of services and its changing character. Other than these, many organizations were directly contacted and questionnaires were sent to them and also to those organizations/individuals who could give any further leads in the form of names of not-profit health providers. As the processes of globalization and liberalization are intensifying in India, controls and regulations on a lifeline industry such as the pharmaceutical industry are being lifted. Financing of disease control programmes are affected through societies, created for the specific programmes at State and district levels. It is clear that a substantial amount of health expenditure (presumably curative care), in India is not covered by insurance schemes, and thus have the potential of leaving people who incur such expenditures worse off. Education is a key factor for human resource development. The quality of education depends on the quality of the educators. This study analyses the resource requirements for meeting certain targets of the health sector and analyses the gap between the required and the actual expenditure in 15 major states in India. Improving the health status of the population is a critical component of human development, and the States will have to re-assign their priorities in favour of the health sector in the interest of development.
DEFICIENCY DISEASES

Pathak, Priyali et al. (2003).

Key Words : 1.HEALTH 2.PREGNANCY 3.ADOLESCENTS 4.MICRONUTRIENTS 5.ANEMIA 6. VITAMIN A DEFICIENCY 7.GOITRE 8.IODINE DEFICIENCY.

Abstract : The present study was undertaken to assess the prevalence of iron, vitamin A and iodine deficiencies amongst Rural Adolescent Pregnant Mothers (APM). Survey was conducted amongst APM in a rural block, district Udham Singh Nagar. In the district, villages were randomly selected. All APM residing in the selected villages were included for detailed study. The data on socio-demographic parameters was collected utilizing pre-tested semi-structured questionnaires. Anaemia was assessed by haemoglobin estimation with the help of Hemocue instrument. Vitamin A deficiency was assessed by presence of night blindness utilizing a pre-tested semi-structured proforma. Iodine deficiency was assessed by clinical examination of the thyroid gland and estimating the Urinary Iodine Excretion (UIE) levels of each subject. Nutrient intake was assessed by the 24 hour dietary recall method. One hundred and fifty one APM, belonging to low socio economic group were selected for the study. The occupation of the families was farming, but the APM were housewives. The mean age of APM was 17.81 ± 1.5 years, and 89% of APM were in the age group 16-19 years. It was found that 46.0% of the APM were anaemic. Sixteen per cent of the study subjects had presence of night blindness. Fifteen per cent of the subjects had Goitre. Median UIE level in the subjects studied was 95.0 ug/I. Concomitant prevalence of the three deficiencies was amongst 2.0% of the population. The 24 hour dietary intake revealed that the mean consumption of retinal and iron was only 13 and 28% of the recommended dietary allowance respectively. It was concluded that the findings of the present study indicated that anaemia, Vitamin A and iodine deficiency existed as public health problems in the APM of the study area.
DIARRHOEA

Chandra, R. et al. (2000).
Home management of diarrhoea in Uttar Pradesh (and other studies).
 Lucknow : King George’s Medical College, Upgraded Dep of Community Medicine. ~10 p.

Key Words: 1.HEALTH 2.DIARRHOEA 3.CHILD HEALTH  4.HOME MANAGEMENT.

Abstract: The study was carried out in 18 districts of Uttar Pradesh (except hill districts) in 30 clusters using cluster sampling technique. A minimum of 20 children below 5 years were surveyed in each cluster to assess diarrhoea management practices used by mothers during the preceeding three months. ORS was used only in 21.9 per cent diarrhoeal episodes. Availability of ORS was also poor as it was available only in 15 per cent villages, which may be the reason for low use of ORS. Use rate of ORS varied from 8.3% to 71.4%. The drug use rate was 61.4 per cent. Feeding was continued in 72.5 per cent of the episodes and more fluids were given in 21.9 per cent episodes. About 8.5 per cent children suffered from diarrhoea during the past 3 months.

Knowledge and attitude of mothers about oral rehydration solution in few urban slums of Delhi. Health and Population Perspectives and Issues, Apr-Jun, 28(2) : 100-106.

Key Words: 1.HEALTH 2.ORAL REHYDRATION THERAPY 3.ORAL REHYDRATION SOLUTION 4.DIARRHOEA MANAGEMENT 5.URBAN SLUM 6.MOTHERS 7.KNOWLEDGE OF MOTHER 8.HEALTH EDUCATION 9.DELHI.

Abstract: Diarrhoea is one of the major causes of morbidity and mortality among young children and about 60-70% of diarrhoea related deaths are caused by dehydration. Scientific basis of Oral Rehydration Therapy (ORT) has revolutionised the concept and management of diarrhoea. Since the use of oral rehydration solution (ORS) largely depends on the level of knowledge and attitude of mothers, the study was undertaken to determine the same in women living in the slum areas adjoining Lady Hardinge Medical College, New Delhi. Also, an attempt was made to correlate the literacy level of mothers with the use of ORS. Out of the 457 families surveyed, 579 children were found to be below 5 years of age. A diarrhoeal episode was considered to have occurred if any child had loose/watery stools thrice or more
during the last 24 hours preceding the study. The prevalence rate of diarrhoea was found to be 10.1% at the time of the study and 16.01% in the month preceding the study. Out of the total 457 mothers interviewed, 210 (46%) used ORS packets when the children had diarrhoea. The common sources of ORS packets were hospitals (44.8%), dispensaries (21.01%), private practitioners (21.1%) and chemist shops (13.3%). Only 38.7% mothers were able to tell the correct method of preparation of ORS solution, 41.6% had knowledge about the exact quantity of ORS to be given to the child, 13.3% of the mothers knew the harmful effects of giving too much ORS at a time, and 28.4% knew about the danger of keeping ORS for a longer period. The findings also revealed that many mothers (29.3%) had misconceptions about the use of ORS and it was significantly high among the ORS non-users and less literate mothers. Though 69.8% mothers had knowledge regarding the role of ORS during diarrhoea but only 46% had ever used ORS. Among the ORS users, most of them (89.5%) had correct knowledge regarding the role of ORS during diarrhoea and 67.6% knew how to prepare ORS. Hence, there is a need for extensive IEC activities to raise the level of knowledge among communities regarding the use of ORS and its preparation, as poor literacy status and lack of awareness limits the ability of mothers to utilize ORS properly for preventing diarrhoeal deaths due to dehydration.


**Key Words :** 1.HEALTH  2.DIARRHOEA  3.RESPIRATORY TRACT INFECTION 4.BANGLADESH  5.BODY WEIGHT  6.BODY HEIGHT.

**Abstract :** The study examined the association of infectious diseases with child growth among Bangladeshi children aged 5 to 11 years. The subjects were 135 households randomly selected from 4 villages in the Matlab area. Data was collected on weight, height, dietary intake and morbidity. The most frequent infections were respiratory (mean 4 episodes or 27 days per year), followed by non-dysenteric diarrhoea (mean 0.2 episodes or 2 days per year), and dysentery diarrhoea (mean 0.2 episodes or 2 days per year). Results revealed that diarrhoeal morbidity slowed growth in children well beyond the weaning age. Over a 12 month period, the mean weight gain was 1.3 kg and mean increase in height was 2.9 cm. It was suggested that increased attention should be given to the study of the continuous impact of diarrhoea in children aged over 5 years.
FAMILY PLANNING/ FAMILY WELFARE


**Key Words**: 1. HEALTH 2. FAMILY PLANNING 3. CONDOM 4. AIDS PREVENTION 5. HIV/AIDS 6. SEVA MANDIR PROGRAMME 7. RAJASTHAN.

**Abstract**: More than 5 million people are estimated to be living with HIV in India, and it is the country with the second highest number of HIV/AIDS people in the world. 84-86% of the HIV infection transmitted in India is due to unsafe sexual contact. Seva Mandir in Udaipur city works among the migrant community to educate them about condoms and bring long term behaviour change about sex and sexuality in the target group. CARE, the project supported by Seva Mandir, advocated the social marketing of condoms to combat the HIV/AIDS epidemic. In this study, 89% migrants interviewed were males and the remaining 11% were females. 90% were married and 10% were unmarried. 80% said that they had knowledge about condoms, and 37% utilized them. Condom use was not high among the migrant group; 63% have never used it, 35% sometimes and 2% always used condoms. 11 migrants used it with their wives; 12 with others; 13 with both, their wives and others. 63% of the migrants engaged in extra marital relations. 19% used free government condoms, 10% used condoms bought from stores, and 8% used both sources. 52% had knowledge regarding correct condom use. 27 persons reported that they could not afford to buy them. 22 said that they felt shy purchasing condoms. The findings of the study revealed that 80% of the migrants knew about condoms. 52% had correct knowledge, but only 37% had used condoms in the past. It was critical to the Project Team to understand the gaps in knowledge about condom usage. To bring about effective behaviour change related to condom use, the Study Team needs to plan a condom promotion strategy. Gender inequality and negotiating safe sex with their partners is very difficult for women and often results in violence. Thus, educating and empowering women is an important component of the condom promotion strategy. As most of the migrant population is illiterate it would be useful to create information education communication (IEC) material that is more visual and relies more on pictures rather than words. An effective condom social marketing strategy is one that improves access, increases awareness, and generates demand.
Adoption of family welfare measures among four communities in fringe villages of Bhubaneswar city. Bhubaneswar : Nabakrushna Choudhary Centre for Development Studies. 154 p.

Key Words: 1.HEALTH 2.FAMILY PLANNING 3.SEX RATIO ORISSA 4.FERTILITY RATE 5.DECADAL GROWTH RATE 6.FAMILY WELFARE PROGRAMME 7.POPULATION PROFILE 8.ORISSA.

Abstract : In India, marriage is considered as a social and religious rite without which an individual cannot be considered as a full-fledged person. The present study covered 200 eligible couples of four communities to analyze the field reality on different aspects of family planning, i.e. sex preference, birth control measures and awareness level regarding the Government schemes on family planning. These communities were Brahman, Chasa, Bauri and Santals, who were settled in different slums of Bhubaneswar city, Orissa. Data was collected through primary and secondary sources. Results showed that in these communities the socio-cultural and economic importance of men was more than that of women. As far as the preferred number of children was concerned, 70% Santals, 48% Brahman and 28% Bauri opted for two children, but 38% Chasa felt that one should have a maximum of three children. Of the total 200 eligible couples, 77.5% male spouses and 58.5% female spouses were of the opinion that the family size should be limited or small. It was found that 94% Bauris, 86% Santals, 84% Chasa and 76% Brahmans wanted male/boy child because they considered them as an economic asset. A total of 40% Brahman, 32% Chasa, 42% Bauri and 16% Santals couples had adopted a modern family planning measure, namely sterilization. Of the total sterilization cases, 79% were women. Of the couples who adopted family planning 67% had gone in for tubectomy, 7.6% for vasectomy, 7.69% were using copper-T or other Intra-Uterine Devices, 10.7% took oral pills, and only 6.15% were using condoms. Regarding the knowledge of all couples on family planning methods, it was found that every male and female spouse of the study communities had knowledge about at least one modern family planning measure, whereas all the male and female spouses had knowledge about sterilization method. The major sources of information about methods of family planning for couples were ANMs/ doctors (44.6%), radio (44.62%) and television (43.06%). The couples who had adopted family planning methods (59% females and 33.3% males) suffered from several health problems such as abdominal pain, waist pain, headaches, chest pain, gastric problems, etc. It was suggested that Government and non-government agencies should focus on motivating the community about the need for reducing family size, importance of family planning and there...
should be provisions for cash payment or other incentives for family planning adopters.


Key Words: 1. HEALTH 2. FAMILY WELFARE SERVICES 3. FAMILY PLANNING 4. STERILIZATION CAMPS 5. FAMILY PLANNING SERVICES.

Abstract: The study was conducted in Vidisha district of Madhya Pradesh to assess how clients and health service providers interact, quality of services provided, and to suggest possible interventions for improvement. Study was carried out in 2 Primary Health Centers (PHCs), Nateran and Borrow, 6 sub-centers, and outreach areas. Data was collected through focus group discussions, observations, and interviews. Study revealed that there were wide variations in the infrastructure facilities between PHCs and sub-centers. Sub-centers lacked basic facilities like proper space, examination table, weighing machine, sterilization equipment, BP instrument, and were not in a position to provide ANC or family planning services. PHCs had refrigeration facilities but they were not functioning, therefore, vaccines were procured in thermocol ice boxes from the district hospital on the day of immunization. At PHCs, atleast visual privacy could be maintained, as physical examination of FP, ANC and PNC were done in a curtained area, while at sub-centers neither visual nor auditory privacy could be maintained. Health workers were found to be more courteous to clients at PHCs compared to outreach areas. Due to lack of proper residential facilities at sub-centers, ANMs lived at far off places and spent major time travelling. This gave time to contact only 7-8 clients and their visits to outreach areas were irregular and infrequent. Study also revealed that ANMs gave more emphasis to sterilization than other family planning methods. Health workers were found to be withholding information on side effects of contraceptives, and in most cases decided the method for their clients. Laproscopic sterilization camps at PHCs had better facilities and back-up support compared to sub-centers. Vidisha district had only 2 trained surgeons for laproscopic sterilization, and they attended 3 camps a day at different locations, hence they had an overload of cases. Even though equipment and instruments were available, needles and syringes were used repeatedly without disinfecting. Auditory and visual privacy in outreach camps was poor. Post-operative care was found to be very poor in sub-centers and outreach camps. It was recommended that infrastructure facilities should be strengthened and efforts should be made to...
improve the counselling skills of service providers to ensure better provider-client interaction. Despite limited resources, health providers gave their best; and as a result, no cases of infection were reported after sterilization, ensuring confidence in the prevailing system.


Key Words: 1. HEALTH 2. FERTILITY 3. RELIGIOUS DIFFERENTIALS 4. BIRTH INTERVALS 5. PROPORTIONAL HAZARD 6. RELIGIONWISE DATA 7. KERALA.

Abstract: Fertility differentials by religion and other cultural factors have been observed in developing as well as in developed countries. NFHS-2 reported Total Fertility Rate (TFR) for Muslims to be 3.59; Hindus 2.78; Christians 2.44, and Sikhs 2.26. Fertility changes and variations can be meaningfully studied through an analysis of the family building process. This study had two principal objectives: firstly, to examine the magnitude of the religion effect and net effect of other socio-economic factors, and Secondly, to assess trends whether the religion effect has changed in recent years. The sample covered a fairly large number of ever married women belonging to each of the three major religions, 2346 Hindus, 1147 Muslims and 824 Christians. Data comprised the fertility histories of women interviewed in the survey, who were in the 13-49 years age group during 1992-93. The level of education was higher among Hindus and Christians compared to Muslims. Standard of living was better among Christians than others. Work participation was much lower among Muslim women compared to Hindu and Christian women. The analysis was carried out for three birth intervals, second, third and fourth and three time periods, 1972-76, 1977-81 and 1982-86. There was a steady decline in mean second birth interval for Christians. The mean third birth interval declined for Hindus and Christians, but was stable for Muslims. The median among Muslims has been shorter than Hindus and Christians in all the periods, clearly showing a greater tendency to have higher order births early among Muslims. During 1982-86, the risk was lower for Muslims and higher for Christians. For second birth, Muslims do not have higher propensity than others. The risk of having the second birth was higher in urban areas during 1977-81 and 1982-86, working women had higher risk in 1982-86 period. Sex of first child did not seem to influence the chances of having the second birth. As expected, at higher levels of education the risk of the third birth was lower and the effect was clear from high school level onwards. Death of the second child during infancy increases chances for the third birth. During 1972-76
and 1982-86, the relative risk of having the third birth was higher if the second birth was a female. Working women had lower risk of having the third birth during the recent period (1982-86). A greater proportion of Muslim women had an additional birth after the second and third births, as compared to Hindu and Christian women. Finally, the results clearly showed that though fertility in Kerala has fallen below the replacement level, the differentials by religion have widened.


Key Words: 1.HEALTH  2.FAMILY PLANNING  3.CONTRACEPTION  4.UNMET NEED.

Abstract: Unmet need for family planning identifies the group of women who want to avoid or postpone childbearing but are not using contraception. The study was conducted to examine the extent and reasons for unmet need for family planning among women. A primary cause of unmet need for family planning was the desire of women to have additional children for security reasons. The most important reason for unmet need relate to deficiencies in the family planning programme itself. 19.8% women were not using contraception due to the fear of side effects, and this fear has not been overcome by the programme. Men in India believe that sterilization causes physical weakness, thereby making them unfit for hard physical labour. Women who are not using contraception often attribute social reasons like opposition of spouse or other family members. Women do not use contraception as they belief they do not need due to infrequent sexual relation and they were “too old”. Women also describe the inconvenience of and dislike for contraceptives available under the family planning programme. The states which were demographically backward like Rajasthan, Uttar Pradesh, Bihar, Madhya Pradesh and Orissa had higher share of unmet need. This could be due to greater emphasis being placed on the family planning programme rather than the health programme. On the other hand, states where contraceptive usage was high, for example, Himachal and Punjab, had lower share of family planning programme and a higher share of the health component. The Government of India should give priority to the task of addressing the unmet need for contraception. The Family Welfare Programme needs to emphasize the IEC component providing proper counselling and guidance to married women. Programme performance can be improved by countering the rumours about side effects; introducing spacing methods that are readily and cheaply available; and increasing contraceptive usage among Muslim women, when
opposition from religious leaders and husbands is taken care of. In Muslim populated areas, a special programme to remove these barriers needs to be introduced. Women can benefit from an expanded programme that includes men and influential persons. Women wanting more than two children should also be covered by family planning programme.


Key Words: 1. HEALTH 2. FAMILY PLANNING 3. FAMILY WELFARE 4. TARGET FREE APPROACH 5. HEALTH SERVICES 6. FAMILY PLANNING SERVICES.

Abstract: This study reviewed the process of change in the implementation of new family planning approach and its impact on the quality of health care and reproductive and child health services. In the present study, both quantitative and qualitative data were collected and analyzed from users and providers of health and family welfare services. Data was collected from two districts of Gujarat, namely Valsad and Bhavnagar. A total of 111 women from 8 Sub-Centers (SCs) participated in small focus group discussions comprising 4 to 9 women at a time. The Sample Registration System (SRS) estimated a decline in Crude Birth Rate (CBR) from 27.9 per 1000 population in 1991 to 25.4 in 1999. The Crude Death Rate also declined from 8.5 to 7.9. The total fertility rate declined from 2.99 to 2.72 in Gujarat between 1993 and 1999. All Primary Health Centres (PHCs) should have facilities like 4 to 6 bed in-patient ward, basic laboratory services, and a theatre for sterilization operations. Positions of male supervisors and block extension educators (BEE) were vacant at many PHCs. Out of 4 PHCs visited, only 1 had BEE and 2 had male supervisor in position. Average population served by several SCs in Valsad district, which is predominantly tribal, was higher than the mandated population figure of 300 per SC for a tribal area. Number of male workers was quite low compared to the mandatory ratio of one in each SC. All Family Health Workers (FHWs) had good work experience. Although SC buildings were divided at many places to provide accommodation, yet more than 50% FHWs did not stay in the SC villages. The location of SCs was inappropriate as reported by MOs. Some PHCs faced the menace of anti-social elements. SC registers were not updated regularly and they were hardly ever checked. The knowledge of terminal methods of family planning was nearly universal in Gujarat, but of spacing methods was less. Sub-Center level
facilities for diagnosis and treatment of Reproductive Tract Infection (RTIs) and STDs were almost absent; nor were health workers properly trained to provide these services. Motivational and counseling skills of grass root level health workers need to be strengthened and improved. Health care infrastructure and support system should be improved qualitatively. Demographic goal can be achieved only by increasing access to quality services. So far as implementation of the programme was concerned, the first important steps had been taken in making a paradigm shift. The programme was moving in the right direction, though proper orientation and training of health workers were required.


Key Words : 1.HEALTH 2.SEX PREFERENCE 3.CONTRACEPTIVE USE 4.SEX COMPOSITION 5.SON PREFERENCE 6.MANIPUR.

Abstract : Preference for sons is pervasive in traditional and patriarchal societies. The present study analyzed sex preference for children in Manipur under the assumption that couples satisfied with sex composition of their children resort to contraceptive practice to discontinue child bearing. Data was collected from sampled representative areas of all eight districts of Manipur of which 3 were in the valley and 5 in the hilly region. The distribution of currently married women in rural and urban areas of Manipur was 541 and 356 respectively. The study showed that the number of women who used contraceptives in rural and urban areas were 113 and 152; the prevalence rate of using contraceptives was 20.9% in rural areas and 42.4% in urban areas. It was found that in rural areas, 25.5% of the women with one boy and one girl used contraceptives, compared with 12.5% of those with two daughters. The contraceptive prevalence rates in the valley and the hill districts were 31.3% and 54.2% respectively and these figures were more for women with children of one sex only. The usage of contraceptives was 47% among literate and 24.1% among illiterate women. Contraceptive use increased by 22.1% in the case of women above 30 years of age. The contraceptive usage of women who were satisfied with the sex composition of their children was 19.9% in hill districts, 16.7% for non-working women and 15.9% for women in the valley. Contraceptive use among women who were below 30 years of age and residing either in rural or urban areas, was below 10%. The study revealed that son preference was stronger in rural and hill areas and also among illiterate women, possibly because of the nature of livelihood in these residence backgrounds. So, the study suggested that strategies must be
devised to educate illiterate women and community people about contraceptive use, gender equity and also about reproductive health.


Key Words: 1.HEALTH 2.FERTILITY 3.WOMEN'S FERTILITY BEHAVIOUR 4.FERTILITY BEHAVIOUR 5.WOMEN'S HEALTH 6.SC/ST WOMEN 7.IDEAL FAMILY SIZE 8.FAMILY SIZE 9.ORISSA.

Abstract: This paper is an attempt to study plausible casual relationship of women's physiology and behaviour components with fertility in more or less non-industrial rural populations in Orissa. A total of 600 women, 300 each from Schedule Castes (SCs) and Schedule Tribes (STs) were interviewed. The sample consisted of 12% married teenagers, 60% were in the middle age group of 20-34 years, and 27% were in the age group of 35 years and above. Around 56% women had given birth to a child less than 2 years ago. Distribution of women by age at last delivery showed that 21% women delivered during their teenage, 6% delivered below 17 years of age, 22% had their last pregnancy at 30 years, and 7% delivered at more than 36 years of age. Another risk factor was that 64% expectant mothers did not receive any antenatal care (ANC), no tetanus toxoid (TT) vaccine or iron folic acid (IFA) tablets during their last pregnancy. Family planning use was reported by 19% of all women. About 15% of all women and a higher proportion of SC women reported to have mental strain in their marital life. Around 27% of all women felt that 4 or more children were an ideal family size while 10% did not report any specific number. 28% of ST women as compared to 26% of SC women perceived 4 or more children to be ideal. 60% of the sample women perceived an interval of 2-3 years between births to be ideal. 65% SC and 55% ST women perceived an interval of more than one year between marriage and the first birth to be an ideal condition. 44% of all women perceived two sons to be the ideal composition of the family, 11% wanted more than 3 sons. Overall 40% women and more ST women desired 2 or more sons at the beginning of the family building process. 77% of all women and a higher proportion of ST women reported taking part in deciding the family size. 84% women had some knowledge about contraceptives. The verbatim and incidents presented in the paper gave an impression that on the one hand child survival was demanded and on the other, there was a need for access to controlled and intended fertility.
Patro, B. K. et al. (2005).  

**Key Words**: 1. HEALTH  2. CONTRACEPTIVE PRACTICES  3. RESETTLEMENT COLONY  4. MARRIED WOMEN  5. SOCIO-ECONOMIC STATUS  6. CONTRACEPTIVE USE  7. DELHI.

**Abstract**: India was the first country in the world to launch Family Planning in 1951, but the birth rate still continues to be high. A cross-sectional community based study was conducted in a resettlement colony of Delhi. The objective of the study was to find out the contraceptive usage among currently married women aged 15-49 years, and the factors influencing the use of such contraceptive practices. Findings revealed that about two-thirds (63.3%) of the eligible couples were using a contraceptive method, and the effective Couple Protection Rate (CPR) was 56.1%. A number of these women (37%) had undergone tubectomy. Among the users of temporary methods of contraception, condom (56%) was the most preferred method. Permanent methods of contraception were mainly availed from public sector hospitals. Decision regarding contraceptive use in the family was mostly taken jointly by the husband and wife (65.7%). Number of living children at the time of first contraceptive use was found to be more than two in 74% cases. Socio-Economic Status (SES) of the family was seen to be significantly associated with the use of contraceptive methods. The reasons for non-acceptance were either expectation of a male child (44%) or fear of side effects (29%). Despite their knowledge about different methods, one-third of the women were not using any contraception because it was not available free of cost. Findings support the contention that there is still a need to intensify IEC activities, motivate the population to practice contraception, and remove the myths and beliefs associated with their usage.

Marriage and fertility behaviour of slum dwellers of Jabalpur City.  

**Key Words**: 1. HEALTH  2. FERTILITY  3. SLUM WOMEN  4. EARLY MARRIAGE.

**Abstract**: This article focussed on the fertility behaviour and characteristics among the slum dwellers in Jabalpur city. 3 slum areas, namely Thakargram, Gohalpur and Cherital, were selected as they covered nearly 14% of the total slum population of the city. Questions were addressed to females. Results showed that
Thakargram district, where the respondents were Muslims, had on an average 4.67 children per woman among those who got married before the age of 14 years; but in Cherital village, most of the respondents were Hindus, and had an average 3.90 children per woman. It was proved that fertility performance of Muslim women was higher than Hindu women. The completed cumulative fertility in Thakargram, Gohalpur and Cherital were 7.5, 6.41 and 5.57 respectively. It showed that completed cumulative fertility in Thakargram slums was higher than Cherital slums. The average parity of all those women who got married before their fourteenth birthday, and had a marital duration of more than 20 years, was found to be 6.75 in Thakargram, 6.80 in Gohalpur and 6.50 in Cherital district. It was also revealed that average parity of mothers who married after their 20th birthday and had a marital duration of more than 20 years, was found to be 6. in Thakargram, 6.50 in Gohalpur and 5.50 in Cherital village. It was indicated that if the age at marriage of women increased, then the birth rate declined. Special population education programmes should be started to make slum dwellers aware about the problems of early marriage. Government and Municipality should adopt slum clearance schemes without any delay. Slum dwellers should be given adequate post-operative care after they undergo sterilization. Voluntary organizations and other Non-government agencies are also addressing these issues of reproductive health, population control, and awareness generation.


Key Words : 1. HEALTH 2. FERTILITY 3. FERTILITY DECLINE.

Abstract : This study conducted in Bihar by International Institute for Population Sciences, aimed at finding out the community perception towards barriers in adopting a small family and their socio-economic as well as cultural correlates; to assess the views of service providers and program managers towards problems and prospects in effective implementation of population programmes; and to analyse the ongoing IEC programme. Focus group discussions and interviews were conducted for data collection. A three stage random sampling was done, thereby Muzaffarpur, Rohtas, and Kishanganj districts were selected on the basis of family planning performance. Three PHCs were selected from each district on the basis of its performance, and a total of 27 villages were selected from the selected PHCs on the basis of health facilities available. 1 Medical Officer and 1 Para-medical staff from
each of the 9 selected PHCs, and 45 district level programme managers were
selected for the study. Data was collected through focus group discussion and
interviews. Irregular supply of contraceptives/medicines and other basic materials
required, particularly vaccines, adversely affected the contraceptive promotion and
child immunization programme in the state. Poor infrastructure, irregular power
supply, poor quality of transport and communication refrained people from utilizing
public health facilities. Staff members could not upgrade their knowledge and skills
as provisions of in-service training were limited. Lack of accountability of job
responsibilities and irregular flow of salary deteriorated effective functioning of
the RCH programme. Absence of proper planning and coordination at PHC/CHC
hindered programme implementation, and resulted in unmet needs of contraceptives,
lower immunization coverage, low level of institutional deliveries, etc. There was
hardly any effort made to screen high risk mothers in most of the PHCs/CHCs in
Bihar, which adversely affected maternal as well as child morbidity and mortality in
the state. Lack of community involvement in family welfare programmes and
systematic efforts towards mass awareness in Bihar suppressed the client-provider
interaction and collapsed IEC programme. It was recommended that a systematic
effort should be taken up to institutionalize the PHC/SC services and to enhance
the quality of services. Education and communication campaigns should be launched
to encourage the use of contraceptives or modern spacing methods, viz. condom,
IUD and oral pills instead of sterilization. A serious political commitment and a
clear agenda in terms of state level population policy documents and plan of action
can bring about overall community development in Bihar.

Impact of literacy and socio-economic status on population control.

**Key Words** : 1.HEALTH 2.POPULATION CONTROL 3.FAMILY PLANNING 4.LITERACY 5.IMPACT OF LITERACY 6.EDUCATION AND FERTILITY.

**Abstract** : The study explored the relationship between literacy and socio-economic
status and their impact on population control. A sample of 100 literate and 100
illiterate females from Shahpura district of Bhopal were taken. Field visits;
observation and interviews were used to collect data. It was found that 98.4%
respondents were Hindus and 1.5% Muslims, and 98.4% females were married. It
was revealed that 54.5% females, both literate and illiterate, desired a son, even
though, they had daughters. 65.1% females used some family planning method.
28.1% illiterates consulted local doctors for safe abortion, while 71.8% consulted Government hospitals. 22.2% illiterate women believed that the number of children in the family depended on God's grace. 2.6% literates were of the opinion that husband was solely responsible for deciding the number of children in a family, whereas 75% said that both husband and wife should be responsible for deciding the number of children. 75.5% literate respondents agreed that family planning and poverty alleviation were closely related. It was recommended that there is an urgent need to motivate and mobilize adults regarding over-population in the country. People should be motivated to adopt the 'One Family One Child' concept. It was suggested that special family planning camps for males and females should be organized at community level from time to time.
GOITRE/IODINE DEFICIENCY


Key Words: 1.HEALTH 2.GOITRE 3.SCHOOL CHILDREN.

Abstract: Iodine is a micro-nutrient which is essential for normal growth and development and its deficiency leads to physical and neurological abnormalities. The present study was conducted in Jabalpur to determined the prevalence of goitre among school going children in the age group of 6-15 years. About 1205 children (800 boys and 405 girls) from 6 different schools were enrolled for the study. Relevant family variables (socio-economic status), eating habits, type of salt used, anthropometry (weight and height) and general physical details were recorded. Thyroid gland was examined and graded as per standard techniques. Spot urinary iodine excretion (UIE) of all goitrous children (n=26) and randomly selected age and sex matched normal non-goitrous children (n=63) was determined by dry-ashing method. Thyroid hormone profile of goitrous children was assessed by radio-immuno-assay. Salt iodine content could not be analysed due to non-availability of kit. The overall goitre prevalence rate among school going children was found to be 2.4%, (3.2% among girls and 1.6% among boys). Significantly higher proportion of children belonged to pre-pubertal age group in both sexes. All goitrous children had small goitre (Grade I), around 88.76% children had spot urinary iodine excretion (UIE)>100 mcg/l. About 13.4% has spot UIE 150 mcg/l. None had spot UIE of <50 mcg/l. The observed goitre cases were of sporadic variety. As per the guidelines of WHO-UNICEF-ICCIDD, Jabalpur does not meet the criteria to be classified as endemic for iodine deficiency.
HEALTH

Health priorities for India in Twenty First Century - a delphi study. New Delhi : All India Institute of Medical Sciences, Centre for Community Medicine. 30 p.

Key Words : 1. HEALTH  2.HEALTH PRIORITIES 3.HEALTH SERVICES 4.HEALTH CARE SYSTEM 5.HEALTH REFORMS 6.PRIMARY HEALTH CARE  7.GOVERNMENT FACILITY 8.BHORE COMMITTEE REPORT 9.MEDICAL EDUCATION.

Abstract : The study, conducted during June 2000 to May 2001, assessed the opinion of various stakeholders about the emerging issues in health sector reforms in India, health priority issues, and means to achieve these issues. Information was collected through questionnaires and Delphi technique from 54 major health institutions in India, and the 66 respondents were from medical colleges, health ministries, private hospitals, and international health organizations such as WHO, UNICEF, CARE, etc. Respondents listed 15 issues grouped under 5 headings for prioritization. These were (i) restructuring the role of public sector, (ii) cost recovery, (iii) decentralization, (iv) increasing private sector’s role, and (v) linking resource allocation to performance assessment. It was found that nearly 66% respondents were in the age group of 45-54 years, 12% were females and females’ response rate was 35%. Nearly 33% participants were health administrators and the response rate was highest among the residents of southern India. The respondents’ first priority was that Government should set its house in order. 75% respondents felt that the primary concern should be to improve primary health care services. Least priority was given to increasing the role of private sector. In the second stage of data collection, only 42 respondents were covered. Of them, 95% gave priority to improving the medical education system to suit the country’s requirements, and 93% were in favour of setting up a disease surveillance system. They felt that teaching should focus on local problems using local text books rather than focusing on western text books, which were irrelevant in our context; public health should be a subject in the undergraduate curriculum; and there should be more focus on skill development of the students rather than imparting theoretical knowledge. There should be improvement in current Management Information System (MIS) for record keeping, feedback, etc. and usage of modern IT tools for storage and retrieval. There should be provision to involve local self-government in the administration, better HRD, availability of doctors in PHCs, and proper supply of
drugs and technical equipments. Experts felt that there was no consensus regarding
the role of health insurance, role of health professionals, role of Government in
tertiary level health care, and continuation of subsidy for medical education. There
was consensus among experts about improving the primary health care delivery
system, re-assessment of health manpower needs, setting up of a Technology
Assessment Commission, and setting up a channel for formal interaction with the
private health sector. The Government should initiate a debate in this regard, and
India needs to share the experiences gained from other countries.

Health situation in India : a glimpse of grim developmental realities at the
grassroots. Health for the Millions, 30(1-2) : 4-32.

Key Words: 1.HEALTH 2.HEALTH INDEX 3.FEMALE FOETICIDE 4.HEALTH SERVICES
5.HEALTH SITUATION 6.RURAL AREA 7.SEX RATIO 8.QUALITY OF LIFE 9.CHILD SEX
RATIO 10.STANDARD OF LIVING.

Abstract: Study analyzed the data generated by Census of India 2001 and the
Rapid Household Survey, 1998-99, under the Reproductive and Child Health (RCH)
programme of Government of India. District level analysis was done for States in
India in 4 sections: health indicators, sex ratio (girls per 1000 boys in the age
group of 0-6 years), electricity-road-water, and household assets. Objective of the
study was to highlight the priority indicators, which deserve immediate attention. 5
sensitive indicators of health were chosen for analysis, namely, percent of pregnant
women who did not receive full Antenatal Care (ANC), women who did not have
facility for safe delivery, couples in the reproductive age group not using any family
planning method, and female illiteracy percentage. Data showed that Purnia in Bihar;
Garhwa and Pakur in Jharkhand; and Shrawasti in Uttar Pradesh are the four worst
districts in India where more than 75% people are highly vulnerable. Himachal
Pradesh, Punjab, Maharashtra, Andhra Pradesh and Tamil Nadu had moderately
vulnerable districts. Health situation was best in Kerala. In Delhi, 5 out of 9
districts were moderately vulnerable and 4 were least vulnerable. Sharp decline in
the child sex ratio (0-6 years) was noted in the Census of India 2001. Most of the
districts of Punjab, Haryana, Himachal Pradesh, Gujarat and a few districts in other
states were badly affected. Level of poverty was measured using No Household
Assets Index (NHAI), which included radio, transistor, television, telephone,
bicycle, scooter, motor cycle, moped, car, jeep and van. Percentage of rural
households without any specified assets were found to be 53.2% in Andhra Pradesh,
51.3% in Bihar, 50.5% in Madhya Pradesh, 50.2% in Gujarat, 13.3% in Punjab and 21.4% in Uttar Pradesh. Percentage of rural households with no bank accounts, including postal bank account, were recorded as 85% in Assam, 82.3% in Tamil Nadu, 81.4% in Bihar, 42.5% in Himachal Pradesh, and 43.9% in Uttarakhand. Study showed that there was widespread impoverishment of the masses in terms of health care, education, basic needs and income security. It was recommended that politicians must work towards improving the health situation of their constituencies. Instead of distant National goals, there should be goals like generating awareness so that not even a single case of maternal mortality takes place; 100% immunization of children in the age group of 0-6 years is achieved; no child marriages and adolescent pregnancies occur which lead to high infant mortality rate; drop out rates of boys and girls from schools should be checked; community should be involved to overcome pollution of soil, water and air in rural areas; proper drainage facilities should exist; food and nutrition security is achieved through better management of Public Distribution System (PDS) and efficient implementation of ICDS scheme; introduction of new and innovative schemes for skill formation and employment generation focusing on youth; fighting corruption at all levels through people’s audit and right to information; and most important, Members of Parliament should clearly recognize the benefits of working on developmental issues, like growth, health, education, etc.

Health of the urban poor: progress and challenges. Delhi: Institute of Economic Growth. ~30 p.

**Key Words**: 1.HEALTH 2.HEALTH STATUS SLUM DWELLER 3.URBAN POOR 4.HEALTH SERVICES.

**Abstract**: The present paper analyses the secondary data on issues pertaining to health of the urban population, with special emphasis on health of the urban poor. The report brings out the similarities between slums and rural areas with respect to health, education, employment and mortality issues. The study found that Neonatal Mortality Rate (NMR) is 31/1000 for urban India while it is nearly 40/1000 for the urban poor, and constitutes 40% of under 5 mortality among urban poor in India (Urban Health Research Centre). IMR was also about 1.3 times higher for the urban poor than the national average. More than 1 million babies are born every year in urban slums, indicating serious lack of awareness about family planning practices. The re-analysis of the NFHS data (by UHRC) also indicated that about 56.8% of
children less than 3 years old (about 4.5 million) among the urban poor were malnourished. The situation is far worse in less developed states like Madhya Pradesh, where 72.4% urban poor children were reported to be malnourished. The symptoms of cold, cough, fever, and diarrhoea for children below 3 years of age in NHFS II survey was very similar for rural and urban areas. About 25.9% of children in urban Low Standard of Living Index group suffered from a diarrhoea episode in the 2 weeks preceding the survey as compared to 15.6% in urban High Standard of Living Index group. 45.7% urban and 53.9% rural women were anaemic. 32% urban and 36.1% rural women had mild anaemia. 12.2% urban and 15.8% rural women had moderate anaemia. 1.5% urban and 2% rural women had severe anaemia. 1,966 urban and 2,649 rural people per thousand were suffering from Asthma. 390 urban and 600 rural people per thousand were suffering from Tuberculosis. 307 urban and 476 rural people per thousand were dealing with medically treated tuberculosis. 1,225 urban and 1,410 rural people per thousand had Jaundice during the past 12 months. 2,156 urban and 4,254 rural people per thousand had suffered from Malaria during the past 3 months (NFHS II 1998-99). The prevalence of newer diseases like HIV and AIDS was seen more in urban areas (76%). Most HIV/ AIDS infections were seen in socio-economically vulnerable and marginalized groups who reside in the poorer areas of urban cities - antenatal clinic attendees, STD patients, female sex workers, men who have sex with men (MSM) and injecting drug users. The 60th Round of the National Sample Survey (NSS) on morbidity and health care revealed that the number of persons per 1000 reporting ailments during a period of 15 days was 88 for rural areas and 99 for urban areas, which may mean either greater morbidity or greater reporting. The NSS report on the condition of urban slums indicates that the access to a nearest health facility for both notified as well as non-notified slums is extremely poor, though there is a lot of variation across states. The 60th Round of the NSS found that in 78% rural and 81% urban areas public health providers were available for treatment of illness. 13% of the total expenditure of the Ministry of Health and Family Welfare is spent on less than 0.3% of the work force via the CGHS scheme. It was recommended that for mapping of the urban poor local bodies should be involved. To reach the benefits of ICDS to all the urban poor, it is vital to update ICDS lists through proper identification of beneficiaries and mapping all listed and unlisted slums/ urban poor clusters.
HEALTH FUNCTIONARY

Mohan, Pavitra et al. (2003).

Daily up down : why would an Auxiliary Nurse Midwife (ANM) of Rajasthan prefer to reside within her work area ?. Udaipur : ARTH, Action Research and Training for Health. 24 p.

Key Words : 1.HEALTH 2.AUXILIARY NURSE MIDWIFE 3.LOCAL RESIDENCE 4.RESIDENCE OF ANM 5.VISTAAR PROJECT.

Abstract : Rural communities in India receive primary health care from a range of formal and informal providers. The present study was done to understand the underlying factors that affect ANMs’ (Auxiliary Nurse Midwives) decision on where to reside - a decision that was critical in determining their availability to serve communities. The study was conducted in four blocks of Udaipur district, Rajasthan. Data was collected through interviews from 294 sub-centres of 4 selected blocks. Almost 231 ANMs were assessed in the study. Only 38% lived in a village of the sub-centre area, and the remaining 62% lived either in a town or a distant village. Almost all the ANMs were married and had children. A large proportion of ANMs (39%), irrespective of their place of residence, lived alone - they managed their homes without family support. In almost all sub-centre areas, at least one village was connected by a metalled road. In spite of this, it was not easy to commute to the town in times of need. Most sub-centre areas had primary schools, but less than 24% had a middle or secondary school. While 81% sub-centres had their own building, 46% lacked residential accommodation. Almost 99% sub-centre villages had electricity and 25% had piped water. Most ANMs, irrespective of residential status, referred to difficult living conditions such as poor quality of sub-centre accommodation, and non-availability of essential items and amenities. Around 67% ANMs perceived their sub-centres to be unsafe for living. Some ANMs, both resident and non-resident, reported that they themselves had been harassed or intimidated at least once during their professional life. Most ANMs reported that supervisors did not attempt to solve problems related to their working conditions or place of stay. Despite all difficulties, staying within the sub-centre area did offer the ANM some advantages. They mentioned time and money saved on travel, lower living costs in the village, and the benefit of better rapport with the community as some advantages. It was found that a network of 27 ANM training schools provided pre-service training to ANMs in Rajasthan, and their annual capacity was 1620. Any girl who had completed higher secondary school was eligible for admission. Active effort by non-government and government organizations would enable ANMs to improve their living and working conditions, as also empower communities to hold them accountable for delivering reproductive and child health care services.
HEALTH HAZARDS/ CHILD LABOUR

Relative risk and prevalence of illness related to child labour in a rural block. 
*Indian Pediatrics*, 37(12) : 1359-60.

**Key Words :** 1.HEALTH 2.HEALTH HAZARDS CHILD LABOUR 3.RURAL AREA.

**Abstract :** The study was conducted in a rural area, Dahanu Block of Thane District, Maharashtra, to determine the socio-economic factors and common childhood illnesses associated with child labour. The study covered 50 per cent of the population in 9 PHCs. Among 1679 children aged 6-14 years, 62 were working (3.8%). Information was collected from working children regarding common illnesses, i.e. diarrhoea, acute respiratory infection, malaria and worm infestation. Results revealed that common illnesses and malnutrition were higher among working children compared to non-working children. About 70.3 per cent families had low per capita income. Working children suffered from respiratory infections (31.8%) and gastrointestinal infections (33.8%). Among working children 77.4% boys and 88.5% girls were malnourished. The risk of child labour was higher when the father was an unskilled worker, had schooling less than 5 years, mother was an agricultural labourer with less schooling, and family income was less than Rs. 500/- per month. The study suggested overall development of a community to reduce the incidence of child labour.
HEALTH SYSTEM/ PROGRAMME


Key Words: 1.HEALTH 2.HEALTH FACILITIES RAJASTHAN 3.HEALTH SYSTEM 4.HEALTH PRIVATE SECTOR 5.GOVERNMENT HOSPITALS 6.UDAIPUR 7.RAJASTHAN 8.VISTAAR PROJECT.

Abstract: Udaipur is pre-dominantly a rural district of Southern Rajasthan, with a population of 26,33,312 (Census 2001). The present study was done to map the availability and distribution of all health facilities in the district and to assess the potential for participation of private providers in public health care programmes. Data was collected from the clinics and hospitals of urban and rural areas of Udaipur city. Udaipur district comprised 10 tehsils and 498 gram panchayats. In the district as a whole, 44% of the facilities were operated by Government and the rest (56%) by the private sector. However, 65% of all private facilities were concentrated in urban areas, mostly in Udaipur city, whereas 84% of government facilities were located in rural areas. In urban and peri-urban areas, there were more health facilities. In contrast, remote, interior and tribal areas like Kotra, Jhadol and Dhariyawad lacked health facilities, and the private sector was poorly developed. Around 60% of the private sector facilities provided in-patient care, and of these 81% facilities were in Udaipur city. The major medical services provided in both private and government sector were related to RCH (ANCs, delivery), child care (diarrhoea, ARI, immunization), treatment of tuberculosis, malaria, eye problems, STDs, hypertension, asthma, dental extraction, accidents and injuries. Private facilities provided a range of medical and surgical services (chemotherapy, radiotherapy, ENT surgery, caesarean section, sterilization methods, orthopedic surgery, neurology, HIV testing, leprosy treatment, etc.). In Udaipur district only 16% PHCs (Primary Health Centres) had an indoor facility. The rest offered consultations and dispensed drugs. All the CHCs (Community Health Centres) have an indoor facility. They did not have facilities for blood transfusion, since a blood bank was available only at Udaipur, and there were no formal arrangements for blood storage in CHCs. Focus should be given to improve the health facilities of both
sectors, and the district should be well connected with proper roads to rural areas and remote areas, so that people can receive timely medical aid.

Final evaluation of CARE’s Integrated Nutrition and Health Programme.
New Delhi: AIIMS. ~100 p.

Key Words: 1. HEALTH 2. INTEGRATED NUTRITION AND HEALTH PROGRAMME 3. CARE PROGRAMME 4. HEALTH PROGRAMME 5. NUTRITION PROGRAMME 6. INTEGRATED DEVELOPMENT 7. ICDS 8. ORISSA.

Abstract: CARE India’s Integrated and Nutrition Health Program (INHP), launched on October 1, 1996, is a 10 year program which strives to achieve improved coverage rates of healthy practices associated with health status, survival and mortality reduction and nutritional status of mothers with children under 2 years. This report was the final evaluation of the INHP Programme which covered 7 Indian states, namely Andhra Pradesh, Bihar, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal. The project reached over 7 million women and children in approximately 100,000 villages. Final evaluation of INHP was done on the basis of Baseline Survey and Mid-term Evaluation Quantitative Survey. The key indicators which were selected for the assessment included Antenatal Care (ANC), receipt of supplementary food from Anganwadi Centres (AWCs), immunization of children and infant feeding practices. Almost all the respondents were living in ‘kuchha’ (temporary) houses, with only 6% having electricity and 24% with access to safe drinking water. The illiteracy rate was found to be very high, that is 66% of the respondents had never been to school. The level of 3 antenatal check-ups was only 62% during baseline which increased to 82% in the final evaluation survey. The coverage by 2 or more doses of TT of pregnant woman was reported to be between 82% and 92% in all areas. Around 32% of the respondents received Iron Folic Acid (IFA) tablets during pregnancy, which increased to 67% in the final evaluation. The receipt of supplementary food from AWCs by pregnant women, which was 61% at baseline, was reported to be universalized in the final survey. The coverage of children by all immunization increased from 28% to 50% in the final survey, which was even higher than found in NFHS-2 for Orissa (44%). There was slight increase (15% to 19%) in the number of infants put on breast milk within first hour of birth. In case of breast feeding in first 8 hours, the increase was substantial, from 40% to 70% and 78% in the whole project area. Complementary feeding practices of children between the ages of 6-9 months were 56% in the whole survey. The knowledge levels of AWWs (anganwadi workers) and ANMs, and the supply of food
in AWCs was found to be quite satisfactory. Enhancing the awareness of women regarding health and nutritional status during pregnancy and safe delivery is required, the working condition of equipment in Health Centres should be checked, and provisions should be made for giving some incentives to AWWs.


Key Words: 1.HEALTH 2.BEST PRACTICES 3.MITANIN PROGRAMME 4.BEST PRACTICES HEALTH 5.HEALTH SYSTEM 6.PUBLIC HEALTH 7.QUALITY IMPROVEMENT 8.PERFORMANCE IMPROVEMENT 9.CHHATTISGARH 10.VISTAAR PROJECT.

Abstract : The health status of a population reflects the set of prevailing social, economic and political conditions. The present study was carried out in May 2005 to evaluate the SHRC’s role in strengthening key aspects of the public health system in Chhattisgarh. The study was carried out in seven districts namely Rajnandgaon, Durg, Rajgarh, Bastar, Dantewada, Kanker and Dhamtari. Discussions were held with health personnel, NGO team members, prashikshikas and Mitanins. SHRC has been engaged in four major programme areas: 1. The Mitanin Programme, 2. Health Sector Policy Reform, 3. Response to ongoing requests from the Department for data, reports and presentations, and 4. Designing and negotiating new projects with GOI’s external donors. Mitanin programme is the flagship programme of SHRC. SHRC staff are closely involved in designing and supervision of the multi-skills training. SHRC has contributed to publishing literature in the field and has pioneered several publications. The Essential Drugs List, Drug Formulary, Standard Treatment Guidelines, etc. have reached the peripheral health facilities in Chhattisgarh and have been appropriated for use in Jharkhand. SHRC team has provided timely and professional help with preparation of project proposals and reports besides participating in discussions. The financial systems within SHRC are well established and function well. There has been an under utilized of budget and available funds. SHRC has developed its own institutional policies and procedures and sometimes adopted Action Aid Policies. SHRC has been part of the negotiation team along with GOI officials in negotiating with donors such as ECTA of the European Commission and others. Survey team found that the Mitanin Programme has covered all areas and there were Mitanins in almost all places. Supportive institutional mechanisms have been established at state level with the SHRC Advisory Committee, and at district and block level with District RCH Societies and a variety of arrangements.
The evaluation team interacted with the group of AWWs, ANMs and AWHs. 65% of them mentioned that Mitanins helped them in their work. The primary role played by Mitanins was directed towards mobilizing community members for MCH clinics and immunization. The impact of processes (such as community involvement) were side lined, and some necessary inputs (like drug kits) were awaited in most areas. There was no hard data available on actual services provided by Mitanins, either with the Mitanin or with the health system, hence it was difficult to gauge the impact of the programme. But the SHRCs Director felt that malaria deaths in the State had halved due to Mitanin Programme. They treated fever cases with chloroquin tablets. This itself was a public health gain, and breastfeeding messages had reached even paras (hamlets) in backward areas. However, this positive note was not supported by the community, and the community was not quite aware of the programme. The knowledge level of Mitanins, their home visits, provision of primary medical care, referral, cooperation with ANMs and AWWs, Panchayat connection, awareness about gender rights, etc. were presently at low levels. Their training, follow up and support systems need considerable strengthening. It was suggested that thoughtful planning should be done, potential problems considered and options should be weighed. Despite the good efforts made on some fronts like preparation of good training booklets, separate support systems for Mitanins, pictures or symbols on tablet packs, kala jathas (mobile exhibitions) to generate enthusiasm and community awareness, and ensuring a Mitanin everywhere, the programme faces serious challenges. The following initiatives need to be given attention: inclusion of preventive/ promotive health tasks, with necessary training and field support to functionaries, developing need based evolving programme content, introducing methods for assessment and performance appraisal for trainers at all levels and Mitanins, etc. Drug supply and replenishment should be through dual channels, Government and NGOs.


Key Words: 1.HEALTH 2.BEST PRACTICES 3.MITANIN PROGRAMME 4.BEST PRACTICES HEALTH 5.COMMUNITY INVOLVEMENT 6.ROLE OF VOLUNTARY ORGANIZATIONS HEALTH 7.PERFORMANCE IMPROVEMENT 8.CHHATTISGARH 9.VISTAAR PROJECT.

Abstract : Mitanin Programme is the latest in a long series of programmes using Community Health Volunteers (CHVs) to reach health services to every hamlet and
There were quite a few community health volunteer schemes started by civil society at micro level namely Jamkhed Programme, RUSHA (in Vellore), FRCH (in Maharashtra), SEWA (in Gujarat), and SEARCH (in Gadchiroli) that have played an important role in health care. The Mitanin Programme is essentially an attempt to scale up the community health worker experience to the macro scale of full state. The broad objective was to disseminate health information, provide health education, and improve public awareness of health issues. The Programme was expanded in 80 blocks in the first phase, and the last 66 blocks were taken up in the second phase. It was observed that Mitanin programme had reached its primary target of 54,000 trained Mitanins in three years since its announcement and two years since its inception in the field. 88.97% of the Mitanins selected were literate. The lowest literacy rates were for the six blocks of Bastar district - where of the 250 Mitanins 187 or 62.3% were literate, and Mahendragarh where 56.25% Mitanins were literate. Even within the six blocks of Bastar there was wide variation, with the figure being as low as 17.02% for Badekiliyapal and as high as 100% for Bastar. It was found that 1219 Mitanins were looking after approximately 55,560 households, and there were nearly 45.57 households per Mitanin (family size was assumed to be 5). The three blocks that had significantly larger number of Mitanins with low coverage (<20 houses per Mitanin) were Podiproda (88%), a tribal highly dispersed block under BGVS, and Mahendragarh, another dispersed tribal block (46%); Pithora in Mahasamund (36%); and Badekiliyapal in Bastar (32%). The rest had figures close to the total group average or less. Mitanins were to be selected by the hamlet after consultations with all stakeholders and the selection was to be approved by the Panchayat. Data revealed that 61.27% of the Mitanins had been selected after village level meetings had taken place - the single most sensitive indicator of a correct selection process. 72.33% of the surveyed Mitanins had completed up to Rounds 4 or 5 of training. 1.98% Mitanis had completed one round of training, 4.22% had completed two rounds, and 8.09% had completed three rounds. Training was on child health, women's health, malaria and gastroenteritis, drug kit, TB/leprosy, etc. 82.36% of the Mitanins reported that they had made house visits for counselling in the previous week. A majority of them (58.65%) had visited less than 10 households, while 14.77% had visited 11 to 20 households, and 8.94% had visited more than 20 households. Regarding consultation for illness in the previous week, 63.58% Mitanins had advised on illness management, and of these 23.22% had counselled for at least three different illness types, and 24.28% had counselled for two different illness types. 82.44% Mitanins maintained the Village Health Register but 17.86% did not maintained the Register. 52.17% Mitanins entered data regarding child weights, 68.09% regarding immunization, and 46.76% were regularly entering data on births.
and deaths. 66.57% Mitanins report that ANMs met them regularly during visits. 54.47% Mitanins had referred cases to ANMs' health sub-centres, and 40.53% had referred cases to PHCs. A majority of the Mitanins were in Grade A (60.13%), 25.26% were in Grade B, 13.05% were in Grade C and 1.57% were in Grade D. 75.72% of the Mitanins reported that a hamlet level committee was in existence in their hamlet, which was linked to this programme and supported it. 63.66% Mitanins had a self help group in the hamlet which functioned as the committee, or was there in addition to the health committee. It was recommended that there is need for close and tight monitoring, with an alert leadership at every level for responding and troubleshooting whenever violations of the processes take place.


Key Words: 1.HEALTH 2.BEST PRACTICES 3.AROGYA IYAKKAM 4.BEST PRACTICES HEALTH 5.COMMUNITY INVOLVEMENT 6.QUALITY IMPROVEMENT 7.TAMIL NADU 8.VISTAAR PROJECT.

Abstract : The Arogya Iyakkam Community Health Programme, in 2003, reached out to 10 lakh people in 1000 villages in 23 blocks all over Tamil Nadu. The Programme aims to improve children's and women's health, organize and empower women around their health needs, improve public health services, bring about critical policy changes, and develop mechanisms for panchayat intervention in health. Health activists of most blocks are now well trained and are fully into the programme. Some of the state level coordination issues have also been addressed, and the focus now is on better training and material support. Once the initial problems of scale management were achieved, the state team began to look at quality improvement. If the citizens of the block took keen interest in the programme, the state team could visit and help the block in terms of training, material support and implementing the programme. But organizing the block team itself and building up motivation to undertake the programme are not things the state team can take up at this stage, particularly when there are many other blocks which need help. There are a few blocks like Karyapatti which no longer need financial support. They are able to generate their own funds for training and for block trainers. Their focus was on self help groups and they had very little energy and time left for the health programme. Although the savings programme is also an important programme, there is no need for the state team to spend so much energy on it, as they know what to do and can
do it themselves. Similarly, there are blocks like Anaicut, which even after repeated efforts to reorganize and motivate have not managed to pick-up. The district team has also not played a role in strengthening the block functionaries. Therefore it was felt that project functionaries should stop working in 3 blocks, namely Karyapatti, Anaicut, and Andipatti. It meant that the systematic health training programme would stop. Regular interaction, particularly with Andipatti and Karyapatti, would continue. Their functionaries could be invited to the state review and training sessions, and hopefully they could develop future programmes with them. Three other blocks namely Periyakulam, Tirumangalam and Watrap have been put on warning. This programme has had a lot of visitors to see the working of the programme. There is need now for visitors to regularly keep in touch with the blocks, provide moral support and to regularly encourage the block teams. This is a difficult programme which requires a lot of patient work and such encouragement by outsiders would improve the enthusiasm of the block functionaries and citizens and also improve efficiency. The focus of the programme should be on more house-to-house visits, talking to community members, and measuring the impact of this work. Monitoring of the Government Health System also needs a larger focus; particularly, follow-up strategies need to be planned at the district and state levels. The focus should be on preparing more creative material, improving training and quality of the programme, and addition of new components like women's health programme.


Key Words: 1. HEALTH 2. HEALTH SYSTEM UTTAR PRADESH 3. UTTAR PRADESH 4. VISTAAR PROJECT.

Abstract: There is urgent need to invest in human capital in Uttar Pradesh if the state is to improve its ranking on Human Development Index and the country is to attain the Millennium Development Goals by 2015. This report focused on the Health Sector in Uttar Pradesh. A computation of HDI (Human Development Index) showed that Uttar Pradesh ranked 12 in 2000-01 whereas the top 3 ranking states were Kerala, Punjab and Tamil Nadu. Although Uttar Pradesh had a fairly large public sector health infrastructure comprising one Super Speciality Institution (SGPGI), 7 Government and 4 Private Medical Colleges and Hospitals, 53 District Hospitals, 13 combined hospitals, 388 Community Health Centres, 823 Block PHCs and 2187 Sub Block PHCs, apart from 20,521 sub centres, yet only 9% of the state's population actually make use of this facility for treatment of ordinary aliments, and people
mostly have to depend on private health care. The Infant Mortality Rate (IMR) was 76 in Uttar Pradesh whereas it was 60 at the all India level, Child Mortality Rate (CMR) was 98 in Uttar Pradesh and 80 in India, Maternal Mortality Rate (MMR) was 707 for Uttar Pradesh and 407 for India, and the Total Fertility Rate (TFR) in Uttar Pradesh was 3.99 while it was 2.85 for India as a whole. Infant Mortality Rate (IMR) in the rural areas of Uttar Pradesh was nearly twice as high as that in urban areas. A World Bank study of the year 2000 showed that the estimates of DALYs (Disability Adjusted Life Years) had highest loss rate at 273.2 DALY in Uttar Pradesh among all the Indian states. The overwhelming cause of premature death and disability could be attributed to communicable diseases, malnutrition and perinatal conditions - a disease pattern common among poor populations. It was found that 92% of hospitalization cases in rural areas in Uttar Pradesh fell in the infectious and parasitic diseases category, more specifically within diarrhoea and gastroenteritis. In Uttar Pradesh, public health spending had increased from 0.91% of SDP in 2002-03 to 0.98% in 2003-04. It was found that every sixth malnourished child in India lives in Uttar Pradesh and Uttar Pradesh ranked second with respect to prevalence of malnutrition among children under 3 years of age in India. The National Rural Health Mission (NRHM) was launched on 5th August 2005 in Uttar Pradesh with several health goals, but this can be achieved only if there is convergence of resources, strategy and efforts of Departments like Rural Development, Panchayati Raj; Women and Child Welfare; Health, Family Welfare and Medical Education, etc. According to an estimate, about 3.5 lakh additional nurses would be required in the country by 2015, and at least 15.20% are required in a big state like Uttar Pradesh alone. Of the 11 medical colleges in Uttar Pradesh, 7 are in the public sector and 4 are in the private sector. Based on the norm of one medical college for every 50 lakh population, there ought to be 35 medical colleges in the state. Thus there is a deficit of 24 medical colleges in the state. In Uttar Pradesh there were about 25000 registered Homeopaths and about 50000 registered Ayurveda and Unani practitioners, and all these are Registered Medical Practitioners (RMP). In general, RMPs operate from a single, rented room which serves as their clinic and they usually keep a patient's chair or bench, a stethoscope, a blood pressure gauge and syringes. Almost all RMPs have fewer resources for patients. There is urgent need to focus attention on the Health sector in the state as without qualitative improvement in this sector, it is almost impossible to improve the ranking of the state on Human Development index or achieve the Millennium Development Goals. Many provisions of the state population policy, 2000 still remain to be implemented.
HEREDITARY DISEASES

Bandyopadhyaya, Bhaswati et al. (2003).

A Comparative study on perceptions and practices among parents of thalassemic children attending two different institutions. *Indian Journal of Community Medicine, 28*(3) : 128-32.

**Key Words**: 1. HEALTH 2. THALASSEMIA 3. THALASSEMIC CHILDREN 4. BLOOD TRANSFUSION 5. SCREENING TEST 6. PREVENTIVE MEASURES THALASSEMIA 7. BLOOD DONATION.

**Abstract**: The study was undertaken to find out the difference in the level of perceptions and practices among parents of thalassemic children attending government and non-government institutions. The main objectives of the study were to assess the financial burden on the families of thalassemic patients; to compare the level of awareness among them regarding causation of the disease; the measures adopted by these parents to prevent birth of an affected child in future; and the requirement and procurement practices of blood by the parents of affected children. A total of 70 parents accompanying the thalassemia patients admitted in the pediatric ward of R. G. Kar Medical College and Hospital, Kolkata and 75 parents from the Thalassemia Society of India (TSI), Kolkata were interviewed. Study revealed that as compared to the thalassemic children attending government hospital, those attending the NGO were of higher age group, were under treatment for a longer duration, and required blood transfusions more frequently; most of their parents were literate (96% mothers attending TSI Vs 47.1% mothers attending RGKMCH); more aware about the hereditary nature of the disease (90% Vs 64.5%); donated blood more frequently (76% Vs 50%); spent more for the treatment of their children (2/3rd Vs 1/5th) and underwent screening tests of carrier state detection in more numbers (78.6% Vs 45.7%). Adoption of birth control measures by the parents in both the groups, however, showed no significant difference. It was recommended that regular awareness programmes and genetic counselling among high risk communities should be organized to inform them the salient facts about thalassemia, its hereditary nature, treatment and preventive possibilities, and also try to remove the social stigma due to which people often refrain from undergoing screening tests. Active participation of media and medical social workers, close co-operation and co-ordination between Thalassemia Society of India and Government hospitals can help in its effective control, and can also motivate people to adopt measures to prevent birth of another thalassemic child.

95
Mukherjee, Suzanne, et al. (2002).
The meaning of parental illness to children: the case of inflammatory bowel
disease. *Child: Care, Health and Development the Multidisciplinary Journal*,
28(6) : 479-85.

**Key Words :** 1.HEALTH  2.PARENTAL ILLNESS 3.CHILDREN'S VIEWS 4.INFLAMMATORY
BOWEL DISEASES

**Abstract :** The paper presents the findings from the first investigation to explore
the experiences of young people who have a parent with inflammatory bowel disease
(IBD). This qualitative study involved interviews with 23 young people, aged
between six and 20 years, who have a parent with IBD. A range of non verbal
techniques were used to facilitate interviews with young children. Data was
analysed using the framework approach. It was revealed that participants varied in
their understanding and perception of their parent’s condition and the extent to
which they discussed it with family and friends. Some reported that they were
unaffected by their parent’s illness. The main negative effects on everyday life
were restrictions on social activities, parents being unable to do housework,
children having to be well behaved and parents becoming withdrawn or irritable.
The few who reported positive effects described spending time with the parent
while ill, being allowed to be more independent and being close as a family. Relatives,
friends, neighbours, service providers and young people all played a role in helping to
manage the situation, and most participants felt that their family did not need
additional support. However, some young people valued advice and information
regarding the condition and opportunities to meet others in a similar situation. It
was concluded that IBD is a highly variable condition, with substantial differences in
the extent to which it impinges on the lives of family members. In addition to
supporting patients, health professionals have an important role to play in offering
advice and information to others affected by the illness, including children.
HIV/ AIDS


Key Words : 1.HEALTH 2.HIV/AIDS 3.SCHOOL CHILDREN 4.IEC PROGRAMME 5.KNOWLEDGE

Abstract : HIV is the most injections disease spreading all over India. The present study was conducted to find out the existing knowledge and awareness regarding HIV/AIDS among school children in East Delhi and to find out the impact of IEC on their subsequent knowledge level. The sample comprised 294 boys and 333 girls of Class XI & XII in pre - IEC group and 239 boys and 203 girls in post - IEC group. Majority of the boys (97.2%) and all the girls knew that AIDS occurs in India. Around 18% of both boys and girls were aware that there was no vaccine available for prevention of AIDS. A significantly lower proportion of girls were aware that condom could be used for prevention of this disease. However, only 46.5% boys knew that AIDS was a fatal disease, compared to girls where 96.6% of them knew about the fatality of the disease. Although majority of children were aware about general aspects of HIV/AIDS, but the IEC package of exhibition, posters, video tapes and discussions significantly generated an enhancing effect on most aspects of their awareness, both, among boys & girls. After IEC intervention the awareness of both girls and boys regarding general aspects of AIDS increased, and knowledge level was significantly higher regarding lack of vaccine for AIDS and use of condom for its prevention. AIDS being a disease that is fatal and prevention being the only strategy available, it is of utmost importance that knowledge regarding its various aspects are likely to bear the brunt of the problem in the near future. The study suggested imparting health education for dispelling misconceptions regarding AIDS.

**Key Words**: 1. HEALTH 2. HIV/AIDS 3. VITAMIN SUPPLEMENTATION 4. MOTHER TO CHILD TRANSMISSION 5. AIDS INFECTED MOTHER.

**Abstract**: The study looked into the role of maternal micronutrient status and supplementation in relation to mother-to-child transmission of Human Immunodeficiency Virus (HIV), and health outcomes in HIV infected mothers and their children. Countries that are affected the most by HIV epidemic are also facing the double burden of micronutrient deficiency. India has been identified as one of the countries having a very high number of HIV infected persons and reports put the number of HIV-infected in India at approximately 3.82 - 4.5 million in the year 2002. Currently 8 states in India have been categorized as high prevalence states based on the prevalence of more than 1% in antenatal settings. There is no large-scale programme for provision of antiretroviral drugs for prevention of mother-to-child transmission of HIV in India. A study conducted in Africa revealed that supplementation with Vitamin B, C and E to HIV infected pregnant women had important benefits for mothers and children alike. These benefits included reduced mother-to-child transmission through breast-feeding in those who were nutritionally or immunologically compromised, and a positive effect on pregnancy outcomes and morbidity in children born to HIV positive women. It was found that women who had lower level of serum Vitamin A during pregnancy had a higher risk of transmitting HIV to their babies. Vitamin Supplementation is a low-cost intervention and one that can be easily integrated into existing service delivery programmes. Vitamin Supplementation may be of particular benefit in countries where antiretroviral drugs are not affordable. It was recommended that supplementation of pregnant and lactating women with these Vitamins should be encouraged. There is a need to study the role of vitamins in immune reconstitution and health outcomes even where antiretroviral drugs are available. Further studies are needed to understand the long-term benefits of Vitamin Supplementation in the presence of HIV infection.


Key Words: 1. HEALTH 2. AIDS PREVENTION DRUG USERS 3. DRUG USERS 4. AIDS DRUG USERS 5. NACO PROGRAMMES 6. PROGRAMMES NACO.

Abstract: UNODC - ROSA (United Nations Office on Drugs and Crime, Regional Office for South Asia) facilitated a consultative workshop in November 2000 on 'HIV prevention and substance abuse' in order to enhance the reach of HIV prevention initiatives to the vulnerable drug using population in India. It included representatives from MSJE (Ministry of Social Justice and Empowerment), NACO (National AIDS Control Organization), UNAIDS, UNODCA and various NGOs. The AIDS Prevention Programme was started in July 2001. The objectives of the study were to review the training modules used by various RRTCs (Regional Resource and Training Centre) for training field workers and other members of the service team at the addiction treatment centres on HIV/AIDS issues; to review the specific HIV/AIDS related activities being carried out by the various addiction treatment centres; and to review the curricula and methodologies used by the facilitators. Data was collected from 25 randomly selected addiction treatment centres spread across 16 states in India, and included examination of secondary data, on-site interactions with the treatment centre staff, HIV field workers, clients under treatment, and community members. Interviews with SACS (State AIDS Control Societies) Project Directors/ NGO advisors revealed lower levels of awareness about the collaboration and highlighted the scope for improvement. Majority of the Project Directors/ NGO advisors of SACS were aware of the presence of injecting drug users (IDUs) in their respective states/union territories. A considerable number of addiction treatment centres also recorded admission of drug users. A module with standard curriculum to guide facilitators was not available with RRTCs for providing training to NGO staff. There was a high turnover rate among field workers employed by NGOs under this program. Almost 25% of the HIV field workers were seen to be with the respective organizations for less than a year. In some cases, non-receipt of the program specific grant was cited as the reason for staff turnover. Among the 25 sampled centres, only half had maintained 'case intake form' as prescribed in the 'Minimum Standard Care' manual (the document based on which MJSE intended to ensure delivery of quality care for substance abusers seeking treatment all over the country). Even among those who had maintained the case intake forms as prescribed under 'Minimum Standard of Care', a little over 33% had partly filled questionnaires related to risk assessment on drug use and sexual.
behaviours, while the practice of safe disposal of clinical waste was observed by almost 50% of the centres by way of burning or burying the waste, the rest treated this waste as household garbage. A clear description of terminology, activities and expectations regarding HIV/AIDS was made available to the addiction treatment centres at the earliest. Out of those who had information on HIV/AIDS from the addiction treatment centres (20/25), more than a third cited the centres as the only source from where they had obtained information. The eight injecting drug users who were interviewed could perceive the risks of HIV through sharing of injection equipments, and the other interviewees, who were alcohol dependents or heroin smokers, could also connect the vulnerability to HIV through risk taking sexual practices under the influence of alcohol and other substances. It was found that wider risk assessment, including transfusion history and assessment of effect of occupation, mobility and migration on the vulnerability of one to contracting HIV and other STIs, stood out as gaps in this regard. The programme needs to strengthen certain areas and improve quality of services before setting up some more addiction treatment centres under the scheme of 'Integration of HIV/AIDS in Drug Demand Reduction Programme'.


Key Words: 1. HEALTH 2. HIV/AIDS 3. AIDS AWARENESS 4. SEVA MANDIR PROGRAMME 5. HIGHWAY PROSTITUTION.

Abstract: Seva Mandir’s programme on AIDS prevention first started in 1992 with a large proportion of truckers and commercial sex workers (CSWs) operating on National Highway Number 8 in Udaipur. CSWs lived in and generally married into villages along the side of the highway and they were instrumental in transmitting STDs to local communities. Seva Mandir’s programme was enlarged to include AIDS Awareness Programme. A few factors that define the current mindset towards HIV are traditional attitudes towards sexuality, gender relationships, poverty, illiteracy and population size. The growing population of India makes it very difficult to find resources to make substantive changes medically, educationally or economically. Although premarital sex is not socially acceptable in rural communities, estimates range widely from 1% to more than 50-60% of the tribal people having had sex before marriage. According to Dr. Bohra, a researcher involved in the survey, most girls marry before puberty around 11-13 years, but they generally remain at home.
for 2-3 more years until after puberty. Dr. Kirti, a researcher involved in the survey, guesses that among adults extra marital sex might possibly be around 10-20%. Seva Mandir had made condom boxes available in dhabas (eating places) on the highways and in roadside villages. The situation regarding STDs was more difficult because wives did not know what husbands had been doing. When they had been working outside, the wife herself could be accused of extra-marital relations if her STD status was discovered. The total number of patients treated in STD clinics in 1999 was 4,285. In Rajasthan, the State Government conducted awareness campaigns to educate and identify individuals with STDs and a pilot HIV/STD and sex education programme was launched. Seva Mandir also began an HIV Awareness Programme. There are a wide variety of messages that doctors felt would be helpful in preventing HIV disease. They felt that the final goals of the programme should include not only HIV and STD awareness and knowledge, but also induce behaviour change in terms of condom use, if the initial awareness programme was really good. Dr. Ashok, a researcher involved in the survey, believed that in terms of impacting on prevention, it is extremely crucial to try and convince people to get tested for HIV/AIDS. It must be done carefully, otherwise one can implicate the whole male population as being immoral.


**Key Words**: 1. HEALTH 2. HIV/AIDS 3. AIDS NGOs 4. APPRAISAL OF NGOs 5. AIDS PREVENTION 6. RAJASTHAN

**Abstract**: AIDS has become a public health hazard since India had 3.68 million HIV/AIDS patients in 2000 and 5 million in 2006. No cure or vaccine is yet in sight, so the only mode of controlling it is prevention. The key to prevention lies in information, education and communication. In the present appraisal, certain aspects of 20 short listed NGOs working in 9 districts of Rajasthan were analyzed. Organizational structure, operational strategies, implementation processes, operational area, professional competence, completed and on-going projects, target groups, strengths and weaknesses were analyzed, and remedial measures suggested for overall improvement. An efficient planning, monitoring and evaluation system and documentation process was also considered as the strength of the organization, though the systematic process followed could not be explained by any NGO. It was also checked whether efforts were made by NGOs to provide sustainability to projects. The main problems faced were related to finance and paucity of devoted
workers in rural areas. Due to lack of finance and support, organizations had to restrict their campaigns and other activities. While some organizations maintained documentation and evaluation reports, it was not so with all of them. Most NGOs could not explain their planning, monitoring and evaluation system for any specific project. Moreover, it was observed that some organizations implemented programmes in their area, but rarely made moves to maintain sustainability by motivating the beneficiaries to form youth clubs, mahila mandals (women’s groups), self help groups, etc. Also, when various departments were approached, viz, collectorate, department of health, department of education and social welfare, etc., it was observed that the officials were hardly aware of the activities of NGOs. RCHOs were not even conversant with the names of most of the NGOs working in their district on health issues. For HIV/AIDS prevention strategies to be successful, information, education, communication and media has a great role to play. To combat preventable infections, people need information to inspire change in their habits and practices, and for this specific strategies are essential. Awareness programmes are an effort in this direction. The public and policy makers should be sensitive and realistic about society’s cultural roots. Follow up and an intensive monitoring system regarding working of NGOs should be given importance to maintain the tempo of activities performed by NGOs at the grass roots level.


Key Words: 1.HEALTH 2.HIV/AIDS 3.HIV INFECTED CHILDREN.

Abstract: The study was conducted at an HIV clinic at a Pediatric care centre in an urban metropolis to study the clinical profile of HIV infection among children. The sample comprised 285 HIV positive children referred to HIV clinic from August 1994 onwards. These included children born to HIV mothers who were referred from other centres, and had tested HIV positive, and those screened routinely at the center in view of transfusion dependence and found to be HIV positive. Out of 285 children studied, 48 remained asymptomatic during the study period, 39 were lost to follow up and 30 died during the period. 247 children acquired the infection perinatally, while 33 were infected through blood. Perinatally infected children become symptomatic by five years of age. Protein energy malnutrition, hepatosplenomegaly and persistent generalised lymphadenopathy were common features. Tuberculosis was the major co-infection. Chronic lung disease was also a distinguished feature. 43 children developed chronic diarrhoea. The study
recommended screening children for HIV infection who showed symptoms of malnutrition, chronic diarrhoea, respiratory tract infection or disseminated tuberculosis in order to ensure early diagnosis and management plan for not only children but for the whole family.

Mehra, Jyoti. (2000).
Imphal: Manipur State AIDS Control Society. ~70 p.

Key Words: 1.HEALTH 2.HIV/AIDS 3.AIDS AFFECTED CHILDREN 4.AIDS MANIPUR 5.MANIPUR AIDS SITUATION.

Abstract: The study was carried out for the first time to assess the situation of children affected by AIDS in Manipur in three districts: Imphal, Thoubal and Churachandpur from December, 1999 to April, 2000 (4 months). The goal of this study was to give information on the special vulnerability of children to HIV/AIDS infection and its impact on them, their families and community, and analyse the current response of the government, NGOs and the society to give them care and support. A total of 13 households were taken for in depth study, out of which 6 were rural based and 7 were urban based. Interviews with 28 key informants, focus group discussions, case studies, research studies and secondary sources were used for collection of qualitative data. It was found that the impact of HIV/AIDS was more severe on women and children. Economic deprivation/problems were faced by households due to the heavy expenses on treatment of AIDS patients. Approximately 20,000 children in Imphal and 10,000 in Thoubal were affected by HIV/AIDS. Among the three districts, the infection rate among children in Churachandpur was highest i.e. 31.7%. Affected families had discontinued sending the children to school. Older children had to drop out of school to provide economic support to their families. People living with AIDS were strongly discriminated against by society. Mothers faced the problem whether they should feed their healthy children or buy medicines for their infected child. Infected children were denied treatment at the state and district hospitals. There was shortage of drugs and medical equipments also. With the large number of children already affected in Manipur, to provide non-institutional care becomes one of the greatest challenges. There is need to expand community and home based care. It was suggested that Manipur State AIDS Control Society and Department of Social Welfare should facilitate networking among NGOs working in the field of HIV/AIDS. One of the suggested areas of networking would be the provision of day care centers for children of affected women.

**Key Words:** 1. HEALTH 2. HIV/AIDS 3. AIDS PREVENTION 4. AIDS INTERVENTION PROJECTS 5. BARRIERS AIDS CONTROL 6. EVALUATION OF AIDS INTERVENTION PROJECTS 7. FACILITATING FACTORS 8. INNOVATIVE PROJECTS AIDS 9. MAHARASHTRA.

**Abstract:** This study presents 32 intervention programs evaluated during 2002-2004 that contained substantial HIV/AIDS prevention efforts in Maharashtra. Data obtained from in-depth interviews, participant observation, structured interview schedule, field notes and other sources of information had been put together and was analyzed. Of the total 32 intervention projects evaluated across Maharashtra, 10 are truck driver/cleaner intervention projects, 7 were migrant/industrial worker projects, 5 were commercial sex worker projects and 10 were programmes with other groups of high risk populations such as men having sex with men (MSM), people living with HIV/AIDS (PLWHA), street children, eunuchs, bar girls and drug users. Analysis of data identified 12 key factors which facilitated AIDS prevention programmes and these were accessible project office, culturally appropriate and language specific IEC materials, repeated delivery of essential AIDS prevention messages through outreach workers/peers, condom promotion through depots or outreach workers, recruitment of staff from the community, capacity building of staff, promoting integration into and acceptance within the community, creating a forum for open discussion, dispelling misconceptions, requesting for participatory involvement of community residents and local celebrities, a strong clinical component including early detection of STDs through syndrome management, and strengthening referral services. The analysis suggested that almost all 12 factors were consistently identified in 60% of the sex worker projects, 40% of the trucker projects, and 10% of the migrant worker projects. Outreach to high risk populations had been identified as the primary strategy. Although the STD diagnosis and treatment strategy was implemented in only 67% of the projects, it had been found to be more effective than any other strategy in the reduction of HIV/AIDS and risk behaviour among high risk populations in Maharashtra. Besides this, there were several other factors that characterized the implementation and impact of the intervention such as health education, treatment and referral services, focus on the need for consistent use of condoms, etc. Implementation level plans should focus on improving health infrastructure of the

104
project, and training staff to achieve desired objectives. There must be recommendations to guide the development and implementation of future targeted community based AIDS prevention projects in India.


Key Words: 1. HEALTH 2. HIV/AIDS.

Abstract: This study was jointly conducted by Population Foundation of India and Population Reference Bureau, Washington D. C., to highlight the HIV/AIDS threat in India, and suggest measures that can help in preventing further spread of this disease. India has the 3rd highest infection rate in the world, with 0.8% adult population infected. Nearly 70.9% persons living with HIV/AIDS in South and South-East Asia are Indians. During 2002, the number of people infected rose to 4.58 million from 3.97 million in 2001. Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Manipur and Nagaland are considered to be high prevalence states. HIV infection was also found among pregnant women of low prevalence states like Kerala, Chhattisgarh, Mizoram, and Rajasthan. During mid 2003, Tamil Nadu reported 44.7% and Maharashtra reported 21% cases of AIDS among the infected population. Overall reported cases of males in the age group 15-44 years outnumbered females by 3:1. The presence of sexually transmitted diseases (STDs) such as gonorrhoea, or herpes, makes a person vulnerable to HIV. Nearly 85.3% cases of HIV spread due to sexual contact, 2.7% from mother-to-child transmission, 2.7% through blood transfusions, 2.4% due to needle sharing, and 6.9% due to other reasons. Tamil Nadu reported 55.8% of total AIDS cases reported, followed by Maharashtra (26.8%) and Andhra Pradesh (9.8%). HIV/AIDS first affected population groups in frequent contact with customers and clients, such as those in the hotel and transportation sector, although drivers and unemployed were among the hardest-hit segments of the population. Only 70% people living in rural areas had heard of HIV/AIDS. The high proportion of housewives infected with HIV in some states showed that illness had reached the general public, such as 28.7% in Andhra Pradesh, 12.5% in Karnataka, and 7.6% in Maharashtra. A high percentage of men and women, 98% each in Kerala and Manipur; and a low percentage of women in Gujarat (55%), Bihar (58%), and Uttar Pradesh (59%) were aware of sexual contact as a reason for infection. Low level of knowledge in rural areas in many states was a major cause of concern. Less than 30% women in rural areas of major states were aware that HIV can be contracted through blood transfusion. TV and
Radio, followed by friends and relatives, were the main sources of information for married women, and a very low proportion received information from health workers or teachers. A large number of women were unaware about mother-to-child transmission during pregnancy, labour, delivery, and breastfeeding; and that risk of mother-to-child transmission can be greatly reduced using anti-retroviral drugs. Only 32.1% Indians had ever heard of STDs such as gonorrhoea or herpes, other than HIV/AIDS. 70% men and 48% females had knowledge about protective properties of condoms, but less than 20% used it. There was an urgent need to educate people about effective measures to prevent and treat STDs and needle sharing; promote use of condoms; and need for face-to-face communication on HIV/AIDS in rural areas, especially among women. Health workers and teachers should contribute more in spreading awareness to all, as expanding awareness is the key to prevent further spread of HIV/AIDS in the country.


Key Words : 1.HEALTH 2.HIV/AIDS 3.AIDS PREVENTION 4.SEX EDUCATION 5.SCHOOL CHILDREN.

Abstract : The study determined the change in knowledge, attitude and decision making skills of the students after undergoing training regarding sex education and AIDS awareness. The study covered 600 students, 60 peer educators, 60 nodal teachers and 30 headmasters. Interviews of principals and focus group discussion with the students and parents were undertaken during post training visits to the schools. A significant improvement was seen in the knowledge level regarding sex and AIDS, while marginal changes were observed in the attitude and decision making skills of students. The students having access to mass media had higher baseline scores (n=539) of total mean marks, as compared those who did not have access to any mass media (n=61). The study recommended that efforts for motivation of headmasters should be strengthened to improve the planning and implementation of the programme at the school level, and it should be ensured that all students should acquire knowledge in key areas like mode of transmission of STDs and HIV/AIDS and the importance of healthy sexual behaviour.

Key Words: 1.HEALTH 2.HIV/AIDS 3.IMPACT OF AIDS 4.HIGH PREVALENCE STATES 5.ECONOMIC IMPACT OF AIDS.

Abstract: India, with an estimated 5.206 million people living with HIV in 2005, accounts for nearly 69% of the HIV infections in the South and South-East Asian region. The present study was done to assess the impact of HIV and AIDS on households in six high prevalence states, namely Andhra Pradesh, Karnataka, Maharashtra, Tamil Nadu, Manipur and Nagaland. Data was collected through surveys which covered 2,068 HIV households and 6,224 non-HIV households spread over the rural and urban areas of the six HIV high prevalence states. The households covered had low income and educational levels, though the non-HIV households were better educated and also had a marginally higher average annual income. Most heads of HIV households (60%) and non-HIV households (53%) were in the age group of 20-50 years. It was found that saving in HIV households was low as compared to non-HIV households, in both rural and urban areas, due to the increased expenditure on medical treatment. The school dropout rates were also found to be higher in HIV households as compared to non-HIV households. Around 43% - 44% of the people living with HIV and AIDS (PLWHA) had reported hospitalization and the percentage was much higher for men as compared to women. Nearly 33% of the PLWHA had not disclosed their HIV positive status in the community due to the fear of stigma and discrimination. The survey showed that 74% male and 70% female HIV positive respondents reported that their families were quite supportive, however, more women were supportive of their HIV positive husbands (12.4%) than men were of their HIV positive wives (8.5%). About 12% of the female sample and 14.4% of male PLWHA reported that they had faced discrimination at health facilities. In the households surveyed, 502 cases of AIDS deaths were observed. Regarding knowledge about HIV and AIDS, everyone had heard about HIV and AIDS but not all of them had knowledge about details. The survey of general population indicated that there was a gender gap in knowledge and attitudes towards PLWHA. The most common misconceptions seemed to be that sharing razors (more than 75%) and mosquito bites (about 36%) could spread AIDS. The survey found that around 5.5% female PLWHA have been asked to leave home, compared to 1.9% of the male PLWHA. Some HIV positive samples were those of widows and their condition was worse off as compared to others, as they had to face discrimination on 3 counts, for being a woman, for being HIV positive, and
finally for being a widow. Mostly all the widows were fairly young in the age group 20 to 30 years, and their households were economically and socially worse off than other households. Urgent policy formulation and action are needed to mitigate the negative impact generated by HIV and AIDS. National poverty reduction strategies should be scaled up, and special social protection programmes are required to support people, households and communities that are hardest hit by the AIDS epidemic.


**Key Words**: 1. HEALTH 2. AIDS AND CHILDREN 3. AIDS AFFECTED CHILDREN 4. HIV/AIDS 5. VOLUNTARY ORGANISATIONS AIDS.

**Abstract**: The study found that AIDS has changed the world for children. Over 50% of the new infections occur in the age group of 10-24 years. This research was undertaken to understand the magnitude of the problem and the implications that it has for children. The study was carried out in 4 states, namely Delhi, Rajasthan, Tamil Nadu and Maharashtra to study the vulnerability of specific groups of children to HIV/AIDS; the factors that increase this in the groups of children selected; and analyze the nature of existing responses of the Government and NGOs. Information was collected through in-depth interviews, focus groups discussions and from primary and secondary sources. Findings reveal that poverty, early initiation to work and discontinuation of education, the inability of children to relate to HIV/AIDS, gender, lack of access to youth friendly health services, etc. were factors related to the increase in AIDS cases among children. The report from Delhi says that children living on the streets near New Delhi Railway Station and Shankar Market areas, and children living in the slums in Govindpuri and Sahab达尔 Dairy were at the highest risk to HIV/AIDS infection. Tamil Nadu has the second highest number of persons reported to have developed AIDS in India according to surveillance carried out by NACO. Maharashtra has the highest number of persons reported to have developed AIDS in India, and the highest percentage of women who have tested positive in antenatal clinics. Overall impact of the infection observed was that children were forced to discontinue their education due to the financial drain of medical bills. The number of families that are headed by widows is increasing along with the number of orphaned children. Where parents are ill or have died, there was increased load on the extended family, and those children who did
not have the support of an extended family were the worst hit. The mortality rate for this group of children is higher due to their frequent medical complications. The problem gets more acute when they develop AIDS. The study found that facilities for voluntary testing are still inadequate. The status of women is very low and they accord very low priority to their own health care. The study recommended that existing interventions by NGOs should facilitate community involvement and responsibility. Priority should be given to the rehabilitation of infected children with their extended family and community, and building the capacity of existing homes to take care of children infected or affected by HIV/AIDS should be encouraged rather than starting new homes, which should be a last resort. Community support for families looking after affected and infected children needs to be encouraged. HIV/AIDS counselling facilities for HIV+ women who attend antenatal clinics should be started, especially in the five states where mother to child transmission has crossed 1%. Supporting the formation of networks of people living with HIV/AIDS will help reduce the impact of the infection.


Abstract : Labour migration has long been viewed as an important concomitant of economic development. The present study was done to analyze the macro patterns of internal labour mobility; investigate the profile of migrant workers and households in the areas of social, economic, health and behavioral characteristics; and identify the general factors of vulnerability to HIV/ AIDS. Through various sources, it was found that major destination centres for a large number of migrant workers and sites of high incidence of HIV/ AIDS were the metropolitan centres in India. Therefore, Delhi including Noida (Uttar Pradesh), was chosen as a destination centre and primary survey was conducted there. Research also revealed that Bihar was one of the regions from where a large quantum of seasonal / circular migration originates so Bihar was also chosen for primary survey in terms of the originating centre. A total of 500 male migrants, and 100 female migrant workers between 15-40 years were selected from Delhi, and a total of 300 migrant households were selected from Bihar. Data was collected by interviewing migrants and through
secondary sources. 58% male migrants and 93% female migrants were married, whereas only 7% female migrants and 42% male migrants were unmarried. Around 62% male migrants were educated up to primary level, whereas 65% female migrants were illiterate. Almost all migrant workers were born in rural areas and had migrated to urban areas in search of employment. Majority of the male migrants were from Bihar (55%) and Uttar Pradesh (35.8%). Majority of the female migrants were from Uttar Pradesh (43%) and Bihar (33%). Lack of sufficient earning was the major reason for migrant workers to leave their previous place of stay. The average monthly earning of males was Rs. 1265.24/- and females was between Rs. 600-1200/-. Majority of the migrant workers worked all days in a week. One important variable related to HIV / AIDS among males was the frequent visits to their hometown. Around 50% males reported that they went home twice a year, 25.6% went annually, and 12.4% went quarterly; whereas 44% female migrants reported that they rarely visited their hometowns. About 76% male respondents consumed liquor along with their friends, and as they have no other entertainment, it also became a habit with them. The study showed that almost all females stayed with their husbands, parents or siblings. Around 8% males were affected by physical ailments such as body pain, vomiting, loose motions, fever, etc and about 18% reported that they suffered from T.B., jaundice, high blood pressure, etc, either in the past or present. Females reported that they were affected by ailments only occasionally. Less than 18% of the male respondents had contracted STDs, and the initial response of majority of the infected persons, (60.2%) was to ignore it. Among females only 5% suffered from STDs. The non-reaction to STDs treatment was due to their lack of disposable income, and also due to fear that they would be looked down upon by society. About 46% married male migrants reported that they had or continued to have sexual relations outside their wedlock. Among unmarried migrants, 45% stated that they already had sexual relations, whereas none of the female migrants had extra marital relations. About 89% male migrants were aware about condoms and their benefits, however only 57% knew how to use it. 30% female migrants knew about condoms, but only 22% knew how to use them. About 61% migrant households had information about condoms but only 33% of them knew how to use them; and 43% of them had some idea about HIV / AIDS but the rest of them had never heard of it. Around 75% male migrant labourers became aware of HIV / AIDS through T.V., radio and advertisements. Only 21% female respondents had heard about HIV / AIDS, and 19% reported that sex was the medium of HIV / AIDS transmission. Majority of male respondents (55%) knew that multiple sex partners were a cause of HIV / AIDS and condom use could eliminate the risk of infection. About 72% migrant households reported that they were economically poor, and 70% households lived below the poverty line. Around 58% were extended
families, and about 40% heads of households were illiterate. It was suggested that migrants should be provided better health facilities, and extended health education on issues such as HIV/AIDS, STDs, etc. Also, there is need for advocacy to remove stereo types and misapprehensions about migrants.


**Key Words**: 1. HEALTH 2. HIV/AIDS 3. AIDS SOUTH ASIA 4. AIDS INDIA 5. AIDS.

**Abstract**: South Asia is facing a severe HIV epidemic, large in magnitude and scope, with an estimated 5.5 million to 6 million people infected. The present report focused on the HIV epidemic in order to provide a basis for rigorous, evidence-based HIV policy and programme in India. Findings showed that about 60% of all people with HIV in Asia, lived in India. India's epidemic was concentrated in eight states with over 1% HIV prevalence in pre-natal clinics. These states were Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Goa, Manipur, Nagaland and Mizoram. These 8 states contained less than 30% of India's population but almost 70% of its HIV cases. Bangalkot was one of the high prevalence districts in Karnataka. A diverse range of structural factors that amplify HIV vulnerability and risk included widespread poverty and inequality, illiteracy, low social status of women, trafficking of women into commercial sex, a large, structured sex work industry, porous borders, widespread rural-urban, interstate and international migration, high levels of mobility, stigma and cultural impediments to sexual discussion, high rates of sexually transmitted infections (STIs) and limited condom use. A high proportion of female sex workers (SWs) in India came from other parts of India or outside the country, and the mobility of SWs could contribute to HIV transmission by connecting high risk sexual networks, and thereby increasing HIV prevalence in those sub-populations. Approximately 60-70% Indians live in rural areas and growing evidence suggests that the HIV epidemic was as advanced in some rural areas as it was in urban areas. With the rapid expansion of HIV epidemic among Injecting Drug Users (IDU) in northeastern states, a growing number of women, many of them widows of men who have died from HIV/AIDS, engage in sex work. South Asia requires a dual approach to HIV prevention. It is most important to have effective large scale programs for SWs and clients, IDUs and their sexual partners, and men having sex with men (MSM) and their sexual partners. It should also include information on HIV prevention for the general population, and community people in rural areas.
IMMUNIZATION


**Key Words**: 1.HEALTH 2.IMMUNIZATION STATUS 3.DPT VACCINES 4.UNIVERSAL IMMUNIZATION PROGRAMME.

**Abstract**: The study was conducted on a Pulse Polio Immunization (PPI) day to make a rapid assessment of the immunization status of children in Union Territory of Chandigarh. Study was conducted among 796 children in the age group of 12-23 months covering urban, rural and slum areas. A total of 40 Polio centres were randomly selected in proportion of area, i.e. 20 from urban, 16 from slums and 4 from rural areas. Staff, medical students and doctors from Government Medical College, Chandigarh, numbering about 200, was deployed in PPI campaign. Data was collected with the help of doctors and by interviewing mothers of the children in the specified age group. Children were considered fully immunized if a child was vaccinated against BCG, 3 doses of DPT and OPV and one dose of measles as recommended under Universal Immunization Programme (UIP). Evaluation study found that fully immunized children were 72.23%, partially immunized 22.99%, and unimmunized 4.64% in Chandigarh. 58.66% slum children were fully immunized. Overall coverage for different vaccines given under UIP was BCG 93.09%; DPT1/OPV1 93.97%; DPT2/OPV2 90.57%; DPT3/OPV3 85.92%; and measles 76%. Coverage was almost similar for urban and rural areas but it was less in slums. Chandigarh being a modern city, it was expected that a high level of immunization coverage would be achieved. The major reasons for lower coverage in Chandigarh were lack of monitoring; poor health infrastructure in slums; immigration from low coverage states; lack of Information, Education and Communication (IEC); etc. It was recommended that efforts must be made for routine immunization programmes to reach the underprivileged population group and areas such as slums so that Universal coverage can be achieved at National Level.

**Key Words** : 1.HEALTH 2.IMMUNIZATION PROGRAMME 3.CHILD HEALTH 4.EVALUATION 5.INFANT MORTALITY RATE.

**Abstract** : Immunisation of children against vaccine preventable diseases (VPD) has been in practice for many years, both privately and under the aegis of the state in India. The purpose of the study was to evaluate the immunization programme from a broad macro-perspective on demographic trends and child health. The study was conducted in 15 major states of India during the 1980s to 1990s. The states covered were Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Karnataka, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal, Kerala and Maharashtra. Data was collected from the Census of India 1981 and 1991, Sample Registration System (SRS), annual surveys and reports and year books of MHFW (Ministry of Health and Family Welfare). At all India level, infant mortality Rate (IMR) had declined from 110 in 1982 to 74 in 1994. Results revealed that there has been a slackening of the initial thrust (1990 - 91) of the EPI. The task of providing full coverage appears daunting, given the present performance level in the under performing states, whereas the population of infants is increasing in almost all States. Programme lacks incentive and is weak on management aspects, which is not due to shortage of funds or physical resources. This fact is also corroborated by the better performances of politically better managed states as compared to states which suffered from inept political management and instability.

Deshpande, Renu et al. (2001).

**Key Words** : 1.HEALTH 2.IMMUNIZATION 3.MEASLES 4.MISSED OPPORTUNITY.

**Abstract** : Measles, a vaccine preventable disease, continues to be an important cause of morbidity in India. The study was undertaken to assess the impact of missed opportunities on measles immunization coverage in rural areas of Gujarat and
find out the reasons for their occurrence. The study covered 4 villages and the sample comprised 300 children in the age group 9-24 months. Immunization status of each child was recorded either from the immunization card or through maternal recall. Immunization coverage for BCG was 96.33%, DPT/OPV coverage was 86.3% and coverage for measles vaccination was 78.66%. Prevalence of missed opportunity was 15.33%. Reasons for missed opportunities were lack of information with the parents regarding availability of vaccine, refusal by parents, non-availability of the vaccine, illness and refusal by the health worker. It was found that significant increase in measles immunization coverage upto 94% can be achieved, if all missed opportunities for measles vaccination are availed. Emphasis should be placed not only on BCG, DPT/OPV vaccination but also on measles vaccination. Periodic teaching of health staff at PHCs should be carried out.


**Key Words**: 1.HEALTH 2.IMMUNIZATION 3.IMMUNIZATION CHILDREN 4.CHILD IMMUNIZATION 5.IMMUNIZATION PREGNANT WOMEN 6.POST NATAL CHECK UP 7.DHUBRI DISTRICT 8.NORTH EAST INDIA 9.ASSAM.

**Abstract**: Women in the reproductive age group and children under the age of 15 years constitute two-thirds of India’s population. Their health status represents to a great extent the health of the nation. The present study examined the accuracy of records with that of immunization status of children who received last doses of different types of vaccines, mothers who got third check-up at the time of pregnancy, and also check-up after delivery. The study was conducted in 10 wards of Halakura and Golokgonj in Dhubri district of Assam and covered 31 sub-centres, 2 state dispensaries, 1 community health centre (CHC) and 1 mini Primary Health Centres (PHCs). The study surveyed 1471 households, 1096 children who received last doses of vaccines, 686 expectant mothers who received 3rd pre-natal check-up during pregnancy and only 15 mothers who received third postnatal check-up after delivery. Data was collected through interviews and field surveys. It was found that most households were dependent on agriculture; and around 34% of the families had annual income between Rs.10,000 - 20,000/-, which indicated that the households were not economically sound. Almost 19% husbands and 29% wives were illiterate.
Comparison of statistics obtained from PHC/SCs records and information obtained through personal interviews revealed that there was no discrepancy in the number of immunization cases (children who had received last dose of vaccines). Among males last dose vaccination decreased from 34% for 2nd birth order to 8% for birth order 5 and above. In the case of females also, last dose vaccination decreased from 35% for 2nd order birth to 7% for birth order of 5 and above. It was found that 77% male and 80% female children had their immunization cards at the time of interview. Most of the mothers of children who had no immunization card were illiterate and were housewives. The percentage of children not having immunization cards increased with increase of birth order. The recording of pre-natal check-up cases was accurate. About 96% mothers had registered their names after 16 weeks of their pregnancy. Only 2% pregnant mothers were not provided Iron and Folic Acid tablets. Haemoglobin test was not done for 72% pregnant mothers, and blood pressure was not checked for 46% pregnant mothers. Other examinations like foetal heart sound were not done for more than 80% pregnant mothers. Most deliveries took place at home (80%), followed by 13% deliveries in PHCs and 7% deliveries at CHCs. Home delivery were more common among illiterate mothers (50%) and those who had illiterate husbands (42%). Deliveries assisted by nurse/ midwife were found to be higher (33%) than the deliveries assisted by others. Normal deliveries were higher (92%) among those that took place at home. Around 60% mothers reported that their babies were not weighed at birth. However, majority of the mothers (87%) reported that their babies were of average size at birth. About 69% mothers reported that they came to know about post-natal care from ANMs. 42% mothers had received advice on proper breastfeeding and 36% received advice that the baby should be kept warm after birth. However, only 8% mothers received advice on "ARI" and "Diarrhoea". It was suggested that some measures may be taken by higher authorities to identify the drawbacks of the immunization programme for children, pre-natal care for pregnant mothers and post-natal care of women after delivery, and policies should be made to make the health, immunization and nutrition programme successful.
Kar, Malini et al. (2001).  

**Key Words**: 1.HEALTH 2.IMMUNIZATION COVERAGE 3.URBAN SLUM.

**Abstract**: The study was conducted in slums of New Delhi to evaluate immunization status of 166 children aged 12-23 months. Data on educational status and occupation of parents, income of the family, utilization of child health services and reasons for non-utilization was collected through interviews. Results revealed that 69.3% of the children were fully immunized with BCG, DPT, OPV and measles, 15.7% were partially immunized, and 15.1% were non-immunized. The major causes for incomplete immunization were child’s illness, mother’s lack of information about the place, schedule and eligible age of immunization lack of information, motivation and other obstacles. Sex of the child, parents' literacy and occupational status, and socio-economic status of the family did not significantly affect the immunization status of the child. Lack of appropriate information is still the main hurdle in the success of primary immunisation in slum areas. Special health education camps and community mobilization are recommended to vaccinate eligible children in these areas to achieve the goal of 100% immunization coverage.

A Study to determine the factors contributing to the low rate of immunization among children and pregnant women in Girwa and Kotra blocks served by Seva Mandir. Udaipur: Seva Mandir. ~35 p.

**Key Words**: 1.HEALTH 2.IMMUNIZATION 3.IMMUNIZATION COVERAGE 4.WOMEN AND CHILDREN 5.RAJASTHAN.

**Abstract**: Seva Mandir started working in the area of health in 1984, with the objective of providing primary health care services to the rural and tribal masses. The present study was done to determine the factors contributing to the low immunization rate among children and pregnant women in Girwa and Kotra Blocks served by Seva Mandir in Udaipur, Rajasthan. Data was collected through interviews of auxiliary nurse midwives (ANMs) and *parivaar saathis* (family welfare functionaries). In Girwa Block, scheduled immunization sessions for the months of August and September 2004 were not held in 2 of the 4 sub-centres. In Girwa
block, there were no sessions/camps held at the 2 villages under the Katia sub-centre and hence the number of children and pregnant women immunized in these areas was expected to be low. These was no report about people's unwillingness/resistance towards immunization in the villages except in Kojakgura village, where, according to the parivaar saathi who worked there, 10% households were still unaware about immunization. In Girwa block, supply of paracetamol tablets was adequate, but supply of syringes and needles was found to be inadequate. Each parivaar saathi reported that they met Government ANMs routinely for the immunization. In Kotra block, according to ANMs, scheduled immunization sessions were held in all the 4 Sub-Centres. Supply of vaccines and paracetamol tablets in almost all the sub-centres was adequate, but extra disposable syringes and needles always had to be bought from pharmacy stores. According to parivaar saathis, immunization sessions held in villages were not proper and the most affected village was Paleshar in Kotra zone. All the parivaar saathis interviewed reported that they started contacting the beneficiaries to come for immunization 2 days prior to the scheduled day of the session/camp. It was suggested that health surveys should be conducted in all the blocks to check whether immunization sessions were held or not. Also, health education programmes should be organized by the Government to make people aware about the benefits of immunization.


Key Words : 1.HEALTH. 2.IMMUNISATION COVERAGE. 3.IMMUNISATION 4.CHILD HEALTH. 5. CHILD MORTALITY.

Abstract : The study estimated the effect of demographic and socio-economic characteristics on immunization coverage, and the effect of immunization coverage on child mortality. Results showed that only 29% of the children aged 12–23 months were fully immunized, and 34% had not received any immunization at all. 13% of the children failed to reach full immunization because they missed only one vaccination. The dropout rates between first and third doses of DPT and polio vaccination were 28% and 25% respectively. The full immunization rate was almost twice as high for children who had educated mothers as against children whose mothers were illiterate. Boys had substantially higher immunization rates than girls. Among children who survived up to 12 months, the probability of dying between 12 and 48 months was 18 per 1000 for fully immunized children, and 64 per 1,000 for children
not fully immunized. The study recommended strengthening education programmes for mothers, and the need to address the problem of gender discrimination in the immunization of children.


Key Words : 1. HEALTH 2. IMMUNIZATION COVERAGE.

Abstract : The study assessed the immunization status of 19000 children in 90 districts of the country in 1999. Data on sex, literacy of parents, religion and distance of the village was collected. Results revealed that Immunization Programme touched about 90% of the target group. About 63% of the children received all the vaccines/doses (BCG, DPT, OPV, measles), 27 per cent received partial immunization, and 10 per cent did not receive any immunization. The coverage level was lower in Bihar, Rajasthan, U.P., M.P. and North Eastern states. 88 per cent received the first dose, 85 per cent the first two doses, and 81 per cent received all three doses of DPT/OPV. 86 per cent received BCG vaccine and 67 per cent measles vaccine. Illiteracy of mother, inaccessibility due to distance and tribal villages were factors responsible for lower level of immunization. Efforts should be made to educate mothers through IEC activities. Tribal, small and inaccessible villages should be given special attention to achieve universal immunization.


Key Words : 1. HEALTH. 2. IMMUNIZATION STATUS. 3. BIMARU STATES.

Abstract : The study assessed the immunization status of children in BIMARU states, i.e. Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh. WHO’s 30 cluster survey method was used to incorporate information on sex of the child, literacy of parents and distance of the village. The study covered 30 districts, 900 villages and 6300 children. Results revealed that the proportion of children fully immunized in BIMARU states, were 48% as against 63% at all India level. Within these states, results varied from 37% in Bihar to 68% in Madhya Pradesh, with Uttar Pradesh and Rajasthan having 51% and 40% children fully immunized respectively. 22% of the children did not received any immunization. About one-third of the children were
partially immunized. The coverage levels were lower for children of illiterate mothers. Information, Education and Communication (IEC) activities are recommended to educate the mothers in rural, tribal and inaccessible villages.

Measles vaccine efficiency evaluated by case reference technique. Indian Pediatrics, 39(6) : 556-59.

**Key Words:** 1.HEALTH 2.MEASLES VACCINE 3.URBAN SLUM EFFICACY 4.IMMUNISATION.

**Abstract:** This was a community based cross sectional study conducted in the slum areas of Delhi. Thirty clusters of urban slums were identified using the standard WHO-30 cluster sampling technique in the zone chosen. Seven measles vaccinated and seven unvaccinated children of the age group 12-38 months were selected from each cluster. Thus total of 420 children were included in the study. Over all attack rate in the study children was found to be 26.0%. The difference in the attack rates of the vaccinated and unvaccinated children (14.3% and 37.6%) was statistically significant. The mean age of measles attack in the vaccinated group was 17.96 months and it was 14.69 months in the unvaccinated group. The risk rates of 2.6 obtained in the present study is concordant with risk ratio obtained in other trials, which reported that an unvaccinated child was 2-3 times more prone to develop measles as compared to vaccinated child.


**Key Words:** 1.HEALTH 2.IMMUNIZATION 3.IMMUNIZATION COVERAGE 4.RAJASTHAN 5.JHARKHAND 6.IMMUNIZATION JHARKHAND 7.IMMUNIZATION RAJASTHAN.

**Abstract:** The study was carried out in Rajasthan and Jharkhand during 2002-03 to examine the demand and supply side of immunization services; and the problems faced by Government and Non-Government health personnel in implementing these programmes. From each state, 3 districts were selected; from each district 2 PHCs were taken; from each PHC 3 sub-centres (SC) were chosen; and from each sub-centre 2 villages were selected. Data was gathered through structured questionnaires, focus group discussions and in-depth interviews. Nearly all the
senior programme officials of both states did not face any problem in supply of vaccines, but there were problems of cold chain maintenance. As one Auxiliary Nurse Midwife (ANM) had to cover a sub-centre and a sub-centre covered many villages, so a male staff member should be appointed at every sub-centre with the ANM. In both the states, awareness about health programmes was negligible among people due to illiteracy and lack of mass media facilities. The grass root level staff, however, reported irregularity in the supply of vaccines. In both states, people knew only about Polio vaccination because of Pulse Polio Programme; only 5-10% had awareness about Measles and were vaccinated; 10-15% respondents had knowledge of DPT, and 25-30% respondents had knowledge of BCG. Participants were not using any 'Local Therapy' in lieu of vaccination. It was suggested that there is a need to organize some educational programmes in the local language to make the people aware of the need for immunization. The strength of staff should be increased and their salary should be paid regularly. Departmental coordination should be maintained, and anganwadi workers should be given some incentives.


**Key Words**: 1. HEALTH 2. IMMUNIZATION 3. NATIONAL IMMUNIZATION DAY 4. NUTRITIONAL STATUS 4. UNDER FIVE CHILD.

**Abstract**: National Immunization Days (NIDs) are an additional opportunity to reach a large number of children, and can be used to undertake additional activities beside immunization, such as nutrition and health education and awareness generation. The study assessed nutritional status of under five children attending immunization clinics on National Immunization Day. A total of 7,413 children selected randomly, from urban, rural and slum areas of Chandigarh attending pulse polio immunization centres were included in the study. Weight for age criteria was used to assess the nutritional status of children. Of these, 41.9% were found to be malnourished, while 22.7%, 14.5%, 4.1% and 0.7% were in Grades I, II, III and IV malnutrition respectively. The prevalence of PEM was significantly higher among females in the 1-3 years age group, or children living in slums, and children of labour class parents. The study suggested that National Immunization Days could be used to screen children for common childhood problems, to prepare normogram for a region or country, administer Vitamin A doses and to educate mothers.
INFANT MORTALITY/ INFANT HEALTH

Infant mortality variations in space and time: analysis of West Bengal data. 
*Economic and Political Weekly*, 36(36) : 3472-79.

**Key Words**: 1.HEALTH. 2.INFANT MORTALITY RATE. 3.WEST BENGAL.

**Abstract**: The paper analyses the infant and child mortality data for West Bengal in space through the district-level estimates and in time through the state level estimates, comparing these with all-India figures for 1981 and 1991. The results revealed that mortality levels are high in certain regions and among certain groups. India's IMR has been hovering around 70 infant deaths per 1000 live births in 2000 A.D., and reducing it to 30 by 2010 as a goal set by National Population Policy (NPP) poses a considerable challenge. Efforts to achieve this should focus on high mortality pockets. The West Bengal state average of under five mortality rate (U5MR) is below the all India figures. The high U5MR districts are Murshidabad, Maldah, West Dinajpur and Koch Bihar. The low U5MR districts are Calcutta, Howrah, Hooghly, Bardhaman and Purulia. Maldah, Nadia and South 24 Parganas have high U5MR for female children. SRS estimates for 1999 rank West Bengal next only to Kerala, even though the gap between the two is quite large. The gender gap in mortality in urban areas in West Bengal is a matter of concern and requires deeper study and corrective measures. It recommends that intensive efforts should be made to reduce mortality in these high mortality pockets through specific micro-planning.


**Key Words**: 1.HEALTH. 2.MORBIDITY AND MORTALITY. 3.NEONATAL CARE. 4.RURAL HEALTH SERVICE. 5.TRBAL IMR. 6.UNMET NEED. 7.IMR.

**Abstract**: The study estimates incidence of various neonatal morbidities and associated case fatality in home-cared rural neonates and proportion of neonates who need health care and actually received it. Neonates in 39 villages in Gadchiroli
district of Maharashtra were observed during one year (1995-96) by 39 trained female health workers at birth and during neonatal period by making several home visits. The study revealed that out of 1016 live births, 95% occurred at home, and 763 (75%) neonates were observed. 48.2% neonates suffered high risk morbidities (associated case fatality > 10%). Although 54.4% neonates had indications for health care, and 38 out of 40 neonatal deaths occurred in these, only 2.6% received medical attention. The neonatal mortality rate was 52.4/1000 live births. Thus, nearly half of the neonates in rural homes developed contd. high risk morbidities, and needed health care, but practically none received it. Low birth weight, breastfeeding problems and practices (not breastfed till 3 days after birth), sepsis and hypothermia (due to baby clothes not being used till a ceremony on 5th or 7th day) are frequently encountered among neonates in rural homes. There was a large unmet need for health care, and a huge burden of neonatal ill health. The study suggests that there is an urgent need for developing home-based neonatal care to reduce neonatal morbidities and mortality.


Key Words: 1. HEALTH 2. INFANT MORTALITY RATE 3. CHILD DEATH 4. NEONATAL MORTALITY.

Abstract: A study by an alliance of NGOs called Child Deaths Study and Action Group (CDASAG) examines official statistics on child mortality rates in Maharashtra. The study population was selected by stratified cluster sampling but the clusters in each strata were selected by convenient sampling. To recruit the NGO study partners, NGOs from various parts of the state were invited for meetings in Nasik, Nagpur and Chikhaldava. A contiguous area of villages or communities was chosen by each NGO as the study area. Nineteen NGOs were selected. The urban area selected for the study included four slums officially recognised by the municipal cooperation and two areas with poor housing conditions. The 13 selected study sites included 231 villages and six urban slum-like areas from 10 districts with a total population of 2,26,904. The study revealed that IMR and child mortality were underestimated and under recorded. The neonatal mortality rate, IMR and still birth rate were each underestimated by nearly 20 points in the SRS and NFHS. Four other issues which emerged in this study were: 1) High neonatal mortality, contributing nearly 75 percent of the IMR, 2) High child mortality rates in the
tribal areas and urban slums. 3) The vidarbha region revealed significantly higher IMR than the rest of the state. 4) The reversed sex ratio in 'still born babies', suggested female infanticide. The study recommended that SRS and NFHS needs in depth investigation into the possibility of under estimation and if confirmed, then into the reasons for under-recording neonatal deaths as well as still births. It further suggested the need to introduce corrective measures and the introduction of Management Information System (MIS) for monitoring the performance of health and child survival programmes.

Bang, Abhay T. et al. (2005).


Abstract : The current global estimates put the number of neonatal deaths each year at 4 million and of stillbirths at another 4 million. The present study was done to evaluate the effect on neonatal and infant mortality during 10 years (1993-2003) in the field trial of home based neonatal care (HBNC) in Gadchiroli; and also to estimate the contribution of the individual components in the intervention package on the observed effect. The study was conducted in 39 intervention area villages and 47 control area villages, and measured the still birth rate (SBR), neonatal mortality rate (NMR), prenatal mortality rate (PMR), post neonatal mortality rate (PNMR) and the infant mortality rate (IMR) of the last ten years in Gadchiroli, Maharashtra. The study found that the total number of live births in 10 years (1993-2003) were 8811 and 9990. NMR in the control area showed an increase from 58 in 1993-1995 to 64 in 2001-2003. NMR in the intervention area declined from 62 to 25; the reduction in comparison to the control area was by 44 points. Early NMR decreased by 24 points (64%) and late NMR by 20 points (80%). It was found that SBR decreased by 16 points (49%) and the PMR by 38 points (56%). The PNMR did not change, and the IMR decreased by 43 points (57%). All reductions were highly significant except for SBR. The cause specific NMR for sepsis decreased by 90%, for asphyxia by 53%, and for prematurity by 38%. The total reduction in neonatal mortality during the intervention (1996-2003) was ascribed to sepsis management
(36%), to supportive care of low birth weight (LBW) neonates (34%), asphyxia management (19%), primary prevention (7%) and management of other illnesses or unexplained (4%). There is a need for health education programmes for parents, specially for the management of asphyxia and sepsis, which, in turn, depend on supportive care, that is, breast feeding and thermal care for the survival of the treated neonates.

Claeson, Mariam et al. (2000).

**Key Words**: 1. HEALTH 2. INFANT MORTALITY 3. CHILD MORTALITY 4. NUTRITION.

**Abstract**: The study documents the slowing decline in infant mortality rates in different states of India from 1980-1998. It also reviewed causes of childhood mortality. According to SRS and NFHS data, infant mortality declined by 35% over the past 15 years and under five mortality by 25%. Some of the associated factors related to the decline were medical (improved maternal and child care, immunisation, home based treatment of diarrhoea, care seeking for ARI), maternal factors like age, parity and birth interval; improved breastfeeding practices; timely introduction of supplementary foods; socio-economic factors like water, sanitation, housing; non-income factors; programme interventions for micronutrient deficiency, etc. However, as infant and child mortality rates fall, further gains become more difficult to achieve. The decline may be slowing because current child survival interventions are more effective at reducing high under 5 mortality rate when there is a larger proportion of post neonatal mortality, than when post neonatal mortality is already low and when neonatal mortality is relatively higher. Also, the coverage rate of preventive and curative child health services may be declining or levelling off. The study recommended strengthening of the health care system, specially child health and nutrition services in states with high under 5 mortality/infant mortality rates. It also emphasised adoption of improved referral services, promotion of early childhood development programmes, reduction in malnutrition and low birth weight incidence, and implementation of effective strategies for reducing perinatal/neonatal mortality in states which already have lower levels of under 5 mortality/infant mortality rates.

Key Words: 1. HEALTH 2. INFANT MORTALITY RATE 3. STALLING OF IMR 4. LEVEL OF IMR 5. NEONATAL MORTALITY 6. POST-NEONATAL MORTALITY 7. RCH SERVICES 8. MCH SERVICES 9. CAUSES OF IMR.

Abstract: The level of infant mortality rate (IMR) of India was around 225 at the time of Independence which declined to 175 by 1961 and 80 by 1990-1992. But the pace of decline slowed down after that and reduced to about 74 during 1993-95 and 68 during 1999-2001, but after 1996 the IMR was stagnant in most states of India. The study attempted to examine the accessibility, effectiveness, and utilization of the Mother and Child Health (MCH) care services in states like Orissa, Uttar Pradesh, Madhya Pradesh, Rajasthan and Bihar which were more or less stagnating with high IMR and account for more than 60% of the infant deaths. Data was also collected by the National Family Health Survey which was based on two rounds. More than 60% of the infant mortality occurs in the neonatal stage in almost all the states, and this proportion was as much as 85% for low infant mortality states and as high as 72-73% for moderately high IMR states. Results indicated that in the states with low and moderate level of infant mortality, post-neonatal mortality had been largely controlled and hence neonatal mortality was increasingly becoming a significant component of infant mortality rate. Most of the immediate causes of neonatal deaths were biological in nature. Several socio-economic factors such as per capita income, households with electricity, women's exposure to mass media and place of residence had a significant effect on infant mortality rate. Maternal and child nutrition was the strongest determinant of IMR. Women's education was also strongly associated with IMR. Findings suggested that the policy of strengthening MCH and reproductive health component under the family welfare programme is a right step towards reducing infant and child mortality. Addressing the component of mother and child nutrition through supplementation and IEC should get priority under the programme. Finally, establishment of links between health and developmental programmes, particularly those which seek to promote female education and literacy, cannot be overlooked in sustaining the reduction of IMR in the country.

**Key Words:** 1.HEALTH 2.INFANT MORTALITY 3.CHILD SURVIVAL

**Abstract:** The present study tries to see the impact of some of the covariates like child’s year of birth, child’s sex, mother age at child birth, residence, mother’s literacy, religion-caste/tribe membership, mother’s exposure to mass media, availability of toilet facility, type of cooking fuel and ownership of goods on infant mortality in Gujarat and Maharashtra. The main focus of the study was to examine the relationship between the antecedents and consequent variables. For the purpose of the study, Gujarat was divided into three divisions. One district was selected randomly from each of these divisions, out of the total number of districts in the respective division. Similarly Maharashtra was divided into 4 divisions. Here again each division was selected randomly. The study revealed that neonatal and post neonatal mortality in Gujarat was 45.0 and 22.3 per thousand live births while the corresponding values in Maharashtra were 32.7 and 13.2 respectively. This in other words means that neonatal mortality rate in Maharashtra is about 27 per cent lower than that in Gujarat. The infant mortality follows a U shaped pattern when the IMR is high, as in the case of Gujarat and follows a reverse J-shape when the infant mortality is low as in case of Maharashtra. Infant mortality was found to be high when (i) the marriage age of the mother was below 18 years; (ii) interval between last two live births was below 18 months and (iii) when the mother was illiterate. The study also obtained data on causes of infant deaths by using prospective data. The major cause of infant deaths was reported to be ‘certain conditions originating in the perinatal period’ (42% in Gujarat and 49% in Maharashtra). Prematurity under this group was the major underlying causes both in Gujarat (25%) and Maharashtra (33%) followed by Hypoxia and Asphyxia (10% each in Gujarat and Maharashtra). Diseases of respiratory system especially brocho-pneumonia or pneumonia were the major killer of infants. The third main cause of infant deaths was reported to be infective and parasitic diseases especially septicemia and gastroenteritis.

Key Words : 1.HEALTH. 2.NEONATAL MORTALITY. 3.LOW BIRTH WEIGHT BABY.

Abstract : In India 30% of the neonates are intrauterine growth retarded (IUGR). The present study was done to evaluate early predictors of mortality among very low birth weight neonates in Indian setting. Data was recorded of all infants at births and during the first 24 hrs of admission to the NICU (Neonatal Intensive Care Unit). A total of 115 infants were enrolled in the study of whom 47 died, 36 (76.5%) in the early neonatal period and the rest (23.5%) in the late neonatal period. The causes of early neonatal period mortality included septicemia (30.6%), hyaline membrane diseases (30.6%), intra ventricular haemorrhage (22.2%), pulmonary haemorrhage (8.3%), extreme prematurity (5.5%), and birth asphyxia (2.8%). The causes of late neonatal mortality included sepsis (8 deaths), milk aspiration (2 deaths) and congenital malformations (1 death). The risk factors significantly associated with early neonatal mortality included birth weight, gestation, low APGAR scores, need for assisted ventilation at birth, need for supplemental oxygen and mechanical ventilation in the first 24 hours, presence of shock, hypoxia and acidosis. The risk factors significantly associated with late neonatal mortality were birth weight and gestation only. The major recommendation suggested was that NICUs caring for large number of VLBW infants must maintain high standards of neonatal care, with continuous audit of the care provided, in order to salvage more of these VLBW infants. Very low birth weight neonates, with disturbed cardio pulmonary physiology during the first 24 hours of life, are at increased risk of neonatal mortality.


Key Words : 1.HEALTH. 2.CHILD SURVIVAL. 3.NEONATAL MORTALITY. 4.NEWBORN. 5.CARE OF NEWBORN. 6.CHILD HEALTH.

Abstract : The new born health challenge faced by India is bigger than that experienced by any other country. Each year, 20% of the world's infants are born in this vast and diverse country. The current neonatal mortality rate (NMR) of 44 per 1,000 live births accounts for nearly two-thirds of all infant mortality and half of
under-five child mortality. Infections (52%), birth asphyxia (20%), and prematurity (15%) are the leading causes of neonatal deaths. The highest burden of neonatal deaths occurs in Uttar Pradesh (26.1%), Madhya Pradesh (13.0%), and Bihar (11.8%). The SRS country estimates of still birth rate (SBR) and perinatal mortality rate (PMR), 2000 were 8 and 40 per 1,000 births. Over 80% of Low Birth Weight (LBW) neonates weigh between 2,000 and 2,499 gm. Maternal malnutrition and ill health, high fertility rate, teenage pregnancy, and maternal infections are the possible major risk factors. The LBW rate was 34% in control and 22.8% in intervention villages. Free hospital care and transportation were made available for infants aged 0-2 months in two urban slums of Delhi. In India, it was estimated that about 7,000 voluntary agencies were involved in health related activities. Training and education to improve the effectiveness of nursing care in various medical specialties, including neonatology, have not been given the importance they deserve. In Madhya Pradesh, the NMR for the urban poor was 69.7 per 1000 live births compared to the urban average of 44. The National Neonatology Forum (NNF) has a program of accrediting newborns units in India. It has developed technical guidelines on neonatal monitoring, equipment, ventilation, and nursing, among others. The activities supported by WHO, India with respect to maternal mortality were developing "Life Saving Anaesthetic Skills for Emergency Obstetric Care"; expanding safe abortion services; and developing community level skilled birth attendants (CLSBAs). UNFPA supports quality reproductive health services on the basis of individual choice. DFID recognizes the critical importance of improving neonatal health in order to achieve the child mortality Millennium Development Goals (MDG). The Integrated Nutrition and Health Project - II (INHP II) is the second phase of a ten-year project (1996-2006) being implemented by CARE India with the goal of achieving "sustainable improvement in the nutrition and health status of women and children". Population Council aims to improve the well being and reproductive health of current and future generations around the world. WHO estimates showed that India tops the list of nations burdened by Neonatal Tetanus disease, with 48,600 neonatal deaths annually due to this preventable disease. Kangaroo Mother Care (KMC) is an evidence based modality for care of LBW neonates in resource poor settings. The vision for newborn health in India is ambitious yet achievable. It is time to orchestrate a national effort to accomplish the Newborn Health Mission. This Mission will be equity-driven, will strive to remove gender disparity in perinatal-neonatal care, and by 2015 AD this Mission will help place India in the category of proud nations with low newborn and child mortality.

**Key Words**: 1. HEALTH 2. NEONATAL MORTALITY 3. INFANT MORTALITY 4. MATERNAL MORTALITY.

**Abstract**: The objective of the study was to develop a framework within which to understand the determinants of neonatal mortality in India. To collect the data National Family Health Survey (NFHS) 1998-99 was analysed. The study was conducted in all the major states of India. Variables used in the survey were demographic (age of the mother at birth, birth order, birth interval), nutrition (body mass index), mother's education level, work status of women, standard of living, place of residence, health behaviour, genetic factors, hospital care and injury (prenatal and postnatal complications). Among the demographic variables, birth interval was found to be significant. Children with previous birth interval less than 18-24 months had significantly lower chances of survival as compared to children with more than 24 months birth interval. Mothers giving birth in the age group 25-30 and birth order 3-6 had lower neonatal deaths than those giving birth during 18-24 years. Nutritional status of mother assessed through Body Mass Index was found to be insignificant. Neonatal Mortality was less among highly educated mothers compared to mothers with low education. The incidence of neonatal mortality was higher among working mothers compared to non-working mothers. High neonatal mortality among children of working mothers confirmed that it was merely the poverty factor and not the lack of sufficient attention paid to the child due to work. Standard of living and urban residence were not significantly associated with neonatal mortality. Genetic factors measured in terms of previous experience of still birth or spontaneous abortion was found to be highly significant in explaining neonatal mortality. The health behavior of mother in terms of smoking, drinking alcohol and chewing tobacco, and injury variables was found to be insignificant. Health seeking behaviour of the mother was significantly associated with neonatal mortality, as also a proper medical check-up and immunization which showed positive relationship with neonatal mortality. The available trends and patterns on infant mortality in India suggest that effective reduction in IMR will depend primarily on controlling neonatal deaths. However, delivery under medical supervision showed a positive significant relationship with neonatal mortality. The study indicated an urgent need to provide standard hospital care to save the lives of neonates.

Key Words: 1. HEALTH 2. NEWBORN CARE 3. INFANT MORTALITY REDUCTION 4. ANKUR PROJECT 5. CASE STUDY 6. CHILD HEALTH 7. GADCHIROLI 8. MAHARASHTRA 9. VISTAAR PROJECT.

Abstract: The global burden of neonatal deaths is estimated to be 4 million of which about 3 million occur during the first week of life. About 99% of neonatal deaths occur in developing countries and of these 50% occur at home. Global estimates show that 23% of neonatal deaths are due to complications of asphyxia; 36% due to infections (including 26% due to sepsis/ pneumonia); and of the remaining 41% neonatal deaths, 27% were preterm babies and 7% had congenital abnormalities. India contributes about 1 million neonatal deaths to the global burden, and its neonatal mortality rate (NMR) is 43/1000 live births. 67% of deliveries in India take place at home. Due to the high mortality rate, Society for Education Action and Research (SEARCH) initiated a Home Based Newborn Care (HBNC) project in Gadchiroli district of Maharashtra, due to which NMR was brought down to 62% in intervention areas, and there was 30% reduction in neonatal morbidity. The endeavour to replicate HBNC project in other districts of Maharashtra led to the inception of Ankur project. This involved 7 NGOs, 7 districts and covered a total population of 87,827 persons in tribal, rural and urban areas. The project was managed by project coordinators, Auxiliary Nurse Midwife (ANM) or Ayurvedic doctor as Neonatal Care Supervisor (NCS), and Vital Statistics Supervisor (VSS). Community consent was obtained from village panchayats and local governing bodies. Traditional Birth Attendants (TBAs) were also included and trained in HBNC. The entire Ankur project was divided in 3 phases: i. Intervention, which included registration of pregnant women, ii. Training, which included newborn assessment with other care support, and iii. Follow up, which was done in the postnatal period and comprised history, examination and other vital assessments of newborn. The training guidelines had 17 modules, and they were made highly practical due to the low literacy level of Village Health Workers (VHWs). Training included 3-5 days of residential training segments. The coverage of HBNC increased from 70% to 90% by the end of the third year. Each worker was given basic instruments such as a weighing scale, ambubag (for giving artificial respiration to babies), disposable
syringes and needles, drugs and medicines with kit bags, and a trunk to keep equipments and record books. The project had 2 levels of supervision, NCS and VSS. Due to health education and follow up in the post natal period, the practice of exclusive breastfeeding increased from 30-40% to 90% in 3 years. The main aim of the project was to reduce NMR by 30%, it actually reduced it by 51%. Other significant reductions were seen in Crude Birth Rate (CBR) 4%; Still Birth Rate (SBR) 38%; Early Neonatal Mortality Rate (ENMR) 44%; Peri Natal Mortality Rate (PNMR) 41%; Late Neonatal Mortality Rate (LNMR) 72%; Neonatal Mortality Rate (NMR) 51%; Post Natal Mortality Rate (PNMR) 38%; Infant Mortality Rate (IMR) 47%; 1-4 Mortality Rate (1-4 MR) 56%; and Child Mortality Rate (CMR) 49%. The policy suggestions to the Government for HBNC were scaling up efforts in other states via National Rural Health Mission (NRHM) and Ankur could be taken up as pilot projects; technical support from SEARCH can be used to facilitate RCH; lessons from this project can be used to improve basic newborn care; Government should also develop a plan like Ankur to ensure 100% registration of neonatal, infant and maternal deaths; and the new ASHA volunteer could be used to try out HBNC in selected pilot areas.


Key Words: 1.HEALTH 2.NEWBORN CARE 3.INFANT MORTALITY REDUCTION 4.ANKUR PROJECT 5.TRAINING FIELD FUNCTIONARIES 6.VISTAAR PROJECT.

Abstract: Child health is an important area, which cannot be neglected. Society for Education, Action and Research in Community Health (SEARCH) started a project on Home Based Newborn Care (HBNC) with an aim to reduce IMR. HBNC thus conducted a 5 year phased study between April 1993 to March 1998 in Gadchiroli district of Maharashtra, which later on led to the inception of Ankur project in Maharashtra to reduce child mortality and morbidity. In the first year, which was the intervention phase, data collection and identification of pregnant ladies was done by Village Health Workers (VHWs); in the second year VHWs were trained for HBNC - illness and neonatal sepsis; in the 3rd year VHWs gave health education to pregnant and other women. The study at Gadchiroli district revealed that 48% neonates suffered from high health risks, 93% received HBNC, Neonatal Mortality Rate (NMR) decreased from 62 to 25.5 in the intervention area, Neonatal sepsis...
also decreased from 16.6% to 2.8%. On the basis of these facts and study, SEARCH initiated Ankur project - a study of child mortality with 13 NGOs which covered a population of 226, 904 in 231 villages and 6 slums in Maharashtra. Ankur’s study confirmed that NMR is still 75% of the Infant Mortality Rate (IMR). This process documentation study aimed at documenting the process of HBNC and Ankur’s development. The study was done by Amhi Amachya Arigyasathi (AAA) for tribal areas, Indian Social Service Unit of Education (ISSUE) for urban areas and Sahyog Nirmitee (SN) for rural areas. Hence transferring HBNC expertise to Ankur’s NGOs involved planning, project manual, micro planning, training material, curriculum, method, pattern and evaluation. In the implementation of Ankur project, delivery of HBNC was very important. It included health education, involvement of trained Traditional Birth Attendants (TBAs), VHWs, Project Coordinators and monitoring villagers to increase their participation in HBNC. The VHWs of HBNC were divided into 3 categories - medical, non-medical and communicators (persons with good interpersonal skills). Ankur covered 98.2% of total population taken. The VHWs performed following activities in relation to Mother and Neonatal care: a) preparation of list of eligible women, b) registration of these women; c) attending and recording deliveries; d) examining babies in 30 seconds/ 5 minutes/ within 6 hours; e) making home visits; f) recording still births, births and deaths within the neonatal period; g) giving injections of Vitamin K to newborns; and h) treatment of fever, aches and pains in community members. The impact was seen on Maternal and Child Health (MCH) after the project started. It recorded and highlighted the best Antenatal care (ANC) practices, diet and postnatal care, which could be replicated elsewhere. 64% deliveries took place in hospitals in areas where ISSUE worked. VHWs were trained in neonatal care, cord care, eye care, best practices and breast feeding. HBNC also introduced management of pneumonia in children. It also dealt with myths and facts related to this disease. Other clinical conditions which HBNC catered to were - neonatal sepsis, hypothermia and high risk babies. It was recommended that HBNC can be extended to poor, tribal, rural and urban communities; HBNC can be included in public health systems; VHWs can be equipped with medical skills’ at primary level; and community participation in HBNC can be strengthened.

Key Words: 1. HEALTH  2.INFANT MORTALITY  3.CHILD MORTALITY  4.NEONATAL MORTALITY.

Abstract: The National Population Policy has emphasized the need to reduce Infant Mortality Rate (IMR) and minimize the risk of death of mother and child. The present study examined the level of Neonatal, Post-neonatal, and Infant Mortality Rate in the context of high-risk birth, along with various causative factors and variations that exist across states. Field surveys and interviews were conducted, and information/data collected through National Family Health Survey 1998-99 (NFHS) was analysed. The survey covered 99% of India's population living in all 26 states. Birth records of all those children (of eligible women) who were ever exposed to the risk of death, and were between 1-12 months of age during the ten year period preceding the reference date were analysed. Maternal factors such as age, birth orders, birth intervals, socio-economic variables (place of residence, mother's education, caste, mother's exposure to mass media, standard of living index, and sex of child) were investigated. Antenatal care (ANC), health check-ups, number of tetanus injections received by mother and consumption of iron folic acid tablets or syrups were the health factors considered. Neonatal, post-neonatal and infant mortality was found to be much higher in rural areas compared to urban areas in all the major states of India. Higher educational level of mothers was associated with lower level of neonatal and post neonatal mortality in all the states of India. Neonatal Mortality was higher among children of Schedule Caste and Schedule Tribe mothers compared to OBC mothers. Mass media had a positive effect on reducing neonatal mortality. It was found that children belonging to low standard of living were more likely to have higher neonatal, post-neonatal and infant mortality in almost all states of India. The neonatal mortality was higher among males than females for some states except Haryana, Punjab, Andhra Pradesh and Tamil Nadu, whereas female mortality was found to be higher in post-neonatal stage in the states of Haryana, Punjab, Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar and Orissa. Mothers below 20 years and above 35 years have experienced higher neonatal mortality than those giving birth at age 20-34 years. Higher neonatal mortality was found when the birth interval was less than 24 months in almost all states. Average sized babies at birth tend to have lower neonatal mortality than babies with smaller or larger size. Mothers who had undergone three and above
antenatal check-ups had lowest neonatal mortality, which was found to be lower in all the states except Haryana, Maharashtra and Punjab. Place of delivery did not seem to have an impact on neonatal mortality as was seen in states like Rajasthan, Madhya Pradesh, Uttar Pradesh, Bihar, Haryana, Tamil Nadu and Karnataka. Results indicated that strategies need to be built into IEC system to create awareness among mothers about child care and child survival.

Paranjpe, Priya et al. (2006).

Key Words: 1.HEALTH 2.NEWWORN CARE 3.INFANT MORTALITY REDUCTION 4.INFANT MORTALITY 5.ANKUR PROJECT 6.TRAINING ANKUR PROJECT 7.GADCHIROLI 8.MAHARASHTRA 9.VISTAAR PROJECT.

Abstract: The Newborn Mortality Rate (NMR) of India has not shown significant drop. Home Based Newborn Care (HBNC) is an effective approach developed by SEARCH (Society for Education, Action and Research in Community Health) Gadhiroli, which included 39 villages of Gadhiroli district, Maharashtra, that brought down MMR by 70% and IMR by 57% from 1995-2003. The research design included 39 intervention villages and 47 control villages. The 3 year study was divided in 3 phases; 1st phase - registration phase, 2nd phase - training phase, 3rd phase - implementation phase. The successful implementation of this project led to the inception of ANKUR project with collaboration of 7 NGOs in Maharashtra, and ICMR is also replicating the HBNC approach in 5 Indian states - Rajasthan, Uttar Pradesh, Bihar, Maharashtra and Orissa. SEARCH master trainers trained the ICMR trainers, who in turn trained Traditional Birth Attendants (TBAs), 251 Shishu Rakshaks (new recruits) and 266 AWWs; a total of 517 health workers are now providing services to mothers and newborns. Training was based on practical experience and with standardized methods like newborn checklists, newborn illnesses, giving injections, etc. Community Health Worker (CHW) played an important role in networking, and 101 CHWs were recruited. The job of trainers was to develop curriculum, flip charts and health education film 'Tahula' in Marathi and 'Nanhi si Jaan' in Hindi. Training was for a 12 month period, covering 17 learning modules. The total duration of training was 31 days spread over a period of 1 year. Under Ankur project, Neonatal Care Supervisor (NCS), a health professional, and a Vital Statistics Supervisor (VSS) were responsible for hiring trainers. Another
important aspect of the HBNC training method was Training Of Trainers (TOT), preparing competent trainers, and introducing them to the concepts of supervision, use of data, etc. To check the competency level, Ankur’s training evaluation (early 2003) was conducted with a written exam, basic skill tests, quality of work, and field evaluation. 84 out of 92 CHWs who were evaluated were found to be competent, the average NCS score was 85% and VSS score was 68%. Major findings on CHW performance highlighted that CHWs performed at very high levels, 77.4% successfully evaluated antenatal delivery, and 77.5% were successful in post delivery evaluations. To maintain the sustained high level of knowledge and skills continued/ refresher training was given, the entire training so far has gone through 3 cycles, and it was tested at 12 different sites. HBNC programme also improved the self esteem of TBAs, and CHWs which also helped in women’s empowerment. However, they were not confident about performing skilled tasks like giving injections and carrying out neonatal assessments. The entire HBNC Project was designed such that site specific innovations could be incorporated as and when required. The model developed by SEARCH can be replicated to bring down IMR and MMR in other regions as well.

Ram, Usha. (1999).
Household amenities and regional variations in infant and childhood mortality in Maharashtra Demography India, 28(2) : 239-56.

**Key Words**: 1.HEALTH 2.INFANT MORTALITY 3.CHILD MORTALITY 4.HOUSEHOLD AMENITIES.

**Abstract**: Most of the countries in the world have experienced drastic improvement in the general health status of their population. The study examined the relationship between availability of basic household amenities, household environment and infant and child mortality at district level of Maharashtra. Data was taken from 1991 Census, of Maharashtra. The levels of infant and childhood mortality in Maharashtra were found to be lower compared to those at the national level. Results showed that in rural areas indicators of household amenities and sanitation did not emerge as important determinant factors of child survival, while in urban areas these factors had a direct effect on child survival. The availability of safe drinking water, electricity, toilet facility, pucca house and modern cooking methods had strong association with the IMR and CMR level. It was recommended that there should be provision of better basic amenities to ensure household hygiene, and suitable health education programme enlisting community participation to bring down infant and child mortality.
Sharma, Suresh. (2008).  

**Key Words**: 1. HEALTH  2. CHILD MORTALITY  3. CHILD HEALTH  4. INFANT MORTALITY  5. U5MR  6. UNDER FIVE MORTALITY RATE.

**Abstract**: Childhood is a significant stage of life and deprivation during this period can have a long term adverse impact on the well-being of children. The present study was done to examine the determinants of childhood mortality and child health in India, and the factors explaining the differential performance of child immunization and treatment of childhood diseases. Data was taken from 3 rounds of the National Family Health Survey of India (NFHS) conducted in 1992-93, 1998-99 and 2005-06. Analysis revealed that on account of interventions for children, the infant mortality rate in India had gone down from 114 in 1980 to 58 in 2005. Data from NFHS indicated that under-five child mortality (U5MR) rate was 109.3 per 1000 live births in 1992-93, declined to 94.9 per 1000 live births in 1998-99, and 74.3 per 1000 live births in 2005-06. The neonatal mortality rate was 48.6 per 1000 live births in 1992-93, which decreases to 39 in the year 2005-06. It was found that mortality in India was lower for females (37) than for males (41). As children get older, females had higher mortality than males. The study found that females had 36% higher mortality than males in the post neonatal period, but a 61% higher mortality than males at age 1-4 years. It was found that infant mortality rate was lowest when mother's age was 20-29 years (50), and was substantially higher when mother's age was less than 20 years (77), and 40-49 years (72). Similar age differentials were found in neonatal mortality, post neonatal mortality and child mortality (at age 1-4 years). In India, it was found that STs have the highest infant mortality, followed by SCs. The situation regarding child immunization was not as clear. Only a small improvement was found in full vaccination coverage. Only 44% of the children aged 12-23 months were fully immunized in 2005-06, which was a slight improvement from 42% in 1998-99 and 36% in 1992-93. It is estimated that undernutrition and anaemia were contributory factors in over 50% of under-5 deaths in the country. The other major causes of infant mortality were premature births and low birth weight, poor intra-partum and newborn care, diarrhoea diseases, acute respiratory infections, and other infections. There is need to strengthen the health system, prioritize essential elements of child health and nutrition services, and develop and expand community participation for the prevention and treatment of childhood illness. Also, a multi-sectoral approach should be adopted which would include female education and nutrition, increasing the use of health services during pregnancy and delivery, eliminating gender gap in child health services, and improving nutrition throughout the life cycle.
Tirunelveli Medical College, Dept of Community Medicine, Tirunelveli. (2004).

Watching television 2 to 3 hours at night by pregnant women causes sleep disturbance of newborns. Tirunelveli : Dept. of Preventive and Social Medicine. 4 p.

Key Words : 1. HEALTH 2.TELEVISION AND NEWBORN 3.INFANT 4.NEWBORN 5.TELEVISION VIEWING 6.TELEVISION VIEWING BY PREGNANT WOMEN 7.IMPACT ON NEWBORN 8.SLEEP DISTURBANCE 9.PREGNANT WOMEN.

Abstract : A cohort study was conducted in Dindigul district to find out whether there is any association between cry of newborns and watching television programs for 2 to 3 hours by their mothers while they were pregnant. A sample of 550 pregnant women from 37th week of pregnancy and their newborns were selected for the study. The study group consisted of pregnant women who are regular TV viewers at night between 7 p.m. to 10 p.m. (average duration 2 to 3 hours) and go to sleep after 10 p.m. The control group consisted of two groups A and B. Group A were non TV viewers or occasional TV viewers (less than 1 hour) but go to bed before 8 p.m. Group B were non TV viewers but go to bed after 10 p.m. Duration of TV watched by pregnant women and the number of cries of newborns from day 1 to 7 of both study and control groups were recorded. It was found that babies born to pregnant women (study group) who had watched TV serials 2 to 3 hours at night cried frequently, 15-21 times, whereas, in the control group they cried only 5-6 times. During day time, the frequency was equal in both groups. Even though there was no significant difference in birth weight of newborns in both the groups, the average weight gain of newborns in the control group was significantly higher. The study revealed that the foetus in the uterus has the sense of listening to the outer environment. They are disturbed by the habit of watching TV at nights by pregnant women. After birth the newborns are expected to have sound sleep, but this pattern was disturbed by the pre-recorded influence in their nervous system, while they were in the uterus. So pregnant women were advised complete rest, especially at nights, and also advised not to watch Television programmes late into the night.
INJURY

Gupta, Renu et al. (2000).
Evaluation of the WHO/ UNICEF algorithm for integrated management of childhood illness between the ages of one week to two months. *Indian Pediatrics*, 37(4) : 383-96.

**Key Words**: 1.HEALTH 2.CHILD HEALTH 3.CHILDHOOD ILLNESS 4.INFANT MORTALITY 5.INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS.

**Abstract**: Infant mortality remains unacceptably high in developing countries, with about 8 million deaths of occurring annually of infants, 5 million during the neonatal period. Overall, for India, infant mortality comprises nearly 70% of the under five mortality. The study evaluated the utility of the WHO/UNICEF algorithm for integrated management of childhood illness between the age group 1 week to 2 months in 129 infants. Results showed that 75 percent children had two or more co-existent morbidities as per the `gold standard' diagnoses. In comparison to the `gold standard', the IMCI module documented a slightly lower number of co-existent morbidities. Majority of the recorded diagnoses were partially or totally covered by the IMCI algorithms. The authors recommended adoption of IMCI approach in young infants, as co-existence of morbidities was frequent, and severe illnesses were assessed with good sensitivity. The algorithm needed refinement for upper respiratory tract infection (URTIs).


**Key Words**: 1.HEALTH 2.INJURIES 3.ACCIDENTS 4.INJURIES INDIA 5.ROAD ACCIDENTS 6.DOMESTIC VIOLENCE 7.INJURY PREVENTION.

**Abstract**: The rapid and unprecedented motorization in India combined with the lack of a safety environment has been a noticeable feature contributing to accidents and injuries. The number of vehicles had grown from a mere 306,000 in 1951 to
58,863,000 by 2002 (Ministry of Road Transport and Highways). Due to this large number of vehicles and lack of safety concerns, accidents and injuries take place every year which contribute to a significant number of deaths, hospitalizations, emergency care, disabilities (physical, social and psychological), amputations, disfigurement, pain, suffering and agony. According to National Crime Records Bureau (NCRB) Report 2001, 2,710,019 accidental deaths, 108,506 suicidal deaths and 44,394 violence related deaths were reported in India. The injury mortality rate was 40 per 100,000 population during 2000. The number of deaths due to accidents increased by 47% during the period 1990-2000; 93% were due to unnatural causes and 7% (17,366) were due to natural causes. The study showed that nearly two-third deaths occurred among those 16-44 years of age, and the highest rate was among 30-44 year olds (35%). The 10 states recording the highest number of deaths caused by road accidents were Tamil Nadu (15.18%), Maharashtra (12.4%), Kerala (11.5%), Karnataka (10.1%), Andhra Pradesh (7.9%), Gujarat (7.2%), M.P. (7.1%), Rajasthan (6.5%), Tripura (4.3%), and U.P. (3.4%). Among cities, the highest number of deaths occurred in Delhi (1736), Mumbai (1362), Chennai (761), and Bangalore (659). It was found that the 23 metropolitan cities have an RTI (Road Traffic Injury) mortality rate of 1000 ±200/1,00,000 population which was higher than the national average of 800/lakh. Studies showed that the economic impact of RTIs was estimated to be Rs. 55,000 crore, nearly 3% of the GDP (Gross Domestic Product), which was much higher than the 2% in high income countries. The disability rate due to injuries in India was 1.9% of its population in 1991, which increased to 2.1% in 2001 (Census 2001). As per the NSSO Report (2003), the prevalence of mental retardation, mental illness, visual, hearing, speech and locomotor disabilities was 4%, 7%, 11%, 10%, 5%, and 53% respectively among the various types of disabilities. Data indicated that excessive speed, non-usage of helmets, driving under the influence of alcohol, poor road design and infrastructure related factors, poor visibility and crashworthiness of vehicles were some major risk factors for the increasing number of RTIs. Deficient emergency care, non-availability of physical and medical resources and lack of skilled staff lead to sub-standard care and unnecessary referrals which results in an increase in secondary injuries. There is need to develop a national policy and strategies for injury prevention and control with a major thrust on reduction of RTIs, suicides, burn injuries, work-related injuries and violence, which would be integrated, co-ordinated, cost effective and sustainable. Also, there is need to develop a comprehensive national policy on building an effective trauma care system, and to urgently facilitate mechanisms for capacity building, strengthening the knowledge base and promoting research across all related sectors.

**Key Words**: 1. HEALTH 2. INJURY 3. UNDERFIVE CHILDREN.

**Abstract**: Injuries are a world wide health problem in terms of high morbidity and mortality. The study was conducted to estimate the prevalence and pattern of minor injuries among underfive children of Dadu Majra Colony, Chandigarh in 1997. Based on random sampling, 220 houses were covered as the sampling unit. Mothers of the children were interviewed and a brief physical examination was done. Results revealed 67% prevalence rate for minor injuries among underfives. Overall maximum injuries took place at home (62.6%), and majority of the injuries were self sustained (60%) and while playing inflicted. Head, trunk and fingers were documented as the most common site of injury. The injury rate was higher among children of working mothers and illiterate mothers. In a majority of the cases no treatment (22%) or home treatment (69%) was taken. Findings indicated the need for a health education programme, along with training on first aid for the women of child bearing age in this area.
LEPROSY

Eliminating leprosy: so near...yet so far. New Delhi: Centre for Media Studies. 17 p.

**Key Words**: 1. HEALTH 2. LEPROSY 3. LEPROSY ELIMINATION.

**Abstract**: Centre for Media Studies (CMS) conducted a survey on a cross-sectional population of Delhi in March 2005, to understand people's perception and opinion on various issues related to leprosy. Delhi was selected for two reasons, firstly being the capital, it is the hub of all awareness activities, and secondly for its cosmopolitan profile. A day long consultation on leprosy with print and electronic media professionals was also conducted by CMS in association with International Leprosy Union (ILU) to build a network of media people so that they could play an important role towards leprosy elimination. Study was conducted with a sample of 200 males and females. Around 60% of the respondents were in the age group 21 to 40 years, 58% were graduates, and 10% were less than secondary school (Class 10) qualified. Most males and females were employed. Among males, 30% were traders or shopkeepers and around 25% of the females were students or housewives. 60% of the sample was married. All of them were familiar with leprosy and most of them knew that 2005 had been declared the Year for Eliminating Leprosy. Regarding awareness about the symptoms of leprosy, 90% males and 84% females associated 'white patches' with leprosy. Only 33% males and 14% females could recall correctly 'pale patches without sensation' as a symptom. Deformation of body parts like fingers, nose, ears and eyes seems to be a more recognized symptom. Eight out of ten respondents were aware that 'anyone' could get infected and 30% agreed that bacillus of leprosy is present in every individual's body. About 90% males and females were aware that leprosy is curable. But most of them disagreed with doctor's views that 95% cases are not infectious. Majority were of the opinion that if detected and treated early, a person could lead a normal life. Good diet and hygiene can prevent its occurrence. Non-acceptance of a leprosy infected person in society could be the reason behind such people not revealing their disease. Most people were of the opinion that beggary was the main source by which leprosy patients earned their livelihood. It was recommended that timely action by various organizations and Government to sensitize the community to have a more positive attitude towards leprosy patients only would lead to elimination of this disease.
LOW BIRTH WEIGHT

A study of factors affecting LBW. Indian Journal of Community Medicine.
25(2) : 57-62

Key Words : 1.HEALTH 2.LOW BIRTH WEIGHT 3.ANTENATAL CARE 4.SOCIO-ECONOMIC FACTOR 5.MATERNAL FACTOR.

Abstract : The study was conducted in Maharashtra to find out the socio-economic and maternal factors responsible for Low Birth Weight (LBW) babies. The sample comprised 128 pregnant mothers coming to MCH clinic for antenatal care and 128 pregnant mothers, who came directly for their delivery and never visited any medical centre for antenatal care. The overall mean birth weight of all the newborns was 2.58 ± 0.42 kg. The number of Low Birth Weight babies were 30 (23.4%) in the case of registered mothers, and 64 (50%) in the case of mothers who had not registered prior to delivery. 67.8 per cent LBW babies belonged to mothers who were labourers by occupation. The factors which were significant for low birth weight were antenatal care during pregnancy, maternal education, occupation, per capita income, parity, bad obstetric history, pre-delivery weight and haemoglobin concentration. However, maternal age and weight gain during pregnancy were not found to be statistically significant factors.

Indira Gandhi Medical College, Department of Preventive and Social Medicine, Nagpur. (1998).

Key Words : 1.HEALTH 2.LOW BIRTH WEIGHT 3.MATERNAL FACTORS.

Abstract : The high purpose of investment in obstetrics is to ensure that every newborn is physically sound in mind and body. Low birth is one of the most serious challenges facing maternal and child health programme planners in both developed and developing countries. More than 25 million low birth weight (LBW) babies are born every year throughout the world of which 19 million were born in developing
countries. This study was carried out at Indira Gandhi Medical College and Hospital, Nagpur, Maharashtra. The aims and objectives were to study the association of low birth weight with maternal constitutional, socio-economic and obstetric factors; to study the association of low birth weight with maternal morbidity and environment factors; and to suggest suitable recommendations based on study findings. About 60% birth weight variations can be attributed to the environment in which the foetus grows. The pilot study was carried out using a pre-designed proforma on a sample of 40 cases with equal number of controls. The sample size was estimated to be 251 cases with equal number of controls, which was confirmed from epi-info statistical software. Mothers were interviewed within 24 hours of delivery. It was observed that mothers in 22 cases and 21 controls were illiterate. 19.1% cases and 14.7% controls were educated up to middle standard. 5.6% cases and 2.4% controls had height less than or equal to 140 cm; 29.5% controls had height 146-150 cm; 26.7% cases and 42.2% controls had height 151-155 cm. Percentage of LBW was highest (56.1%) when birth interval was 12 -< 24 months and it decreased to 25.2% when birth interval was 24 -< 36 months. About 8.0% cases and 4.0% controls had urinary tract infections (UTI) during antenatal period. Mothers with weight < 40 kg had 2.92 times higher risk of delivering LBW babies. Risk of delivering LBW babies is 4.43 times higher among mothers who have anaemia (Hb < 10 gm %) than mothers who do not have anaemia (Hb > 10 gm %). It was observed that 54.6% case mothers were exposed to biomass fuel during antenatal period, while 31.9% control mothers were exposed to biomass fuel during antenatal period. There were more cases i.e. 4.4% who were engaged in laborious work during pregnancy. The risk of delivering LBW babies was 3 times higher in mothers who had the habit of chewing tobacco than mothers who did not chew tobacco. The utility of ANC visits in delivery of a healthy baby is of utmost importance. Therefore, health check up of mother during antenatal period is a must and should be followed scrupulously. Laborious work should not be undertaken by pregnant mothers. The methods of birth spacing must be stressed during the antenatal advice given to mothers, especially in the age group of 20-30 years.

Key Words : 1. HEALTH 2. LOW BIRTH WEIGHT.

Abstract : Low birth weight (LBW) is one of the important causes high infant mortality rate (IMR) in developing countries. The present study was done to assess the magnitude of LBW in rural Haryana and also examine the feasibility of involving multi-purpose health workers (MPHW) in measurement of birth weight as a part of their routine activity. Data was collected through field visits from two sub-center villages and two non-sub-center villages under PHCs (Primary Health Centers) at Dayalpur, district Ballabgarh. Data was collected for 2 years from January 1991 to December 1992. As per the records as well as field verification, the antenatal registration in the study area was around 95%. During the study period of 2 years, there were 660 births in the 4 villages, Measurements were available for 614 newborns (93.0%). The main reason for not being able to measure the birth weight was because the mother had gone outside the village for delivery to her parents' home, which was a common social practice. Only 8.8% infants had low birth weight, and only 2 (0.3%) newborns had birth weight below 1800 gms. There was a clustering of birth weight around 2500 gms. The study found a total of 38 (6.2%) preterm deliveries. Two of them were before 28 weeks of gestation and one before 32 weeks. All the newborns with a gestational period between 32 to 36 weeks had birth weight above 2500 gms. IEC activities should be emphasized and intensified under Child Survival and Safe Motherhood (CSSM) programme, and awareness in the community increased regarding low birth weight and child survival.

Radhakrishnan, T. et al. (2000).
Socio-economic and demographic factors associated with birth weight : a community based study in Kerala. Indian Pediatrics, 37(8) : 872-76.

Key Words : 1.HEALTH 2.BIRTH WEIGHT 3.SOCIO-ECONOMIC FACTOR 4.DEMOGRAPHIC FACTOR 5.ICDS.

Abstract : Kerala state is noted for its high health achievements at low cost. The study was conducted in 1997 to determine the proportion of Low Birth Weight (LBW) infants in Kadakampally Panchayath village of Kerala, and to evaluate potential socio-economic and demographic factors associated with LBW. The study covered
400 live births. Results revealed that low maternal socio-economic status was the main determinant of LBW. In spite of very high frequency of ante-natal examinations and prenatal ultrasound examinations, a high incidence of LBW babies was observed. No association was observed between LBW and age at delivery, birth order, frequency of antenatal check ups, height of the mother, sex of the baby and the religion of parents. It was suggested that the quality of ICDS programme and antenatal care should be improved and supplementary feeding to pregnant women of low socio-economic status should be as per their needs.


**Key Words**: 1.HEALTH 2.BIRTH WEIGHT 3.TANGSA TRIBE 4.TRIBAL INFANT.

**Abstract**: The data on birth weight of 524 (287 male; 237 female) live born singleton babies of Changlang district of Arunachal Pradesh was collected and analysed in relation to sex, mean birth weight and low birth weight. Three population categories - Tangsa Tribe, Tribes excluding Tangsa, namely Singpho, Tutsa, Nocte, Wangcho, Adi and Apatani and Other Groups (O.G.) namely Assamese, Bengali, Bihari, Nepali, Keralite, Punjabi, Marwari were selected for comparison. Results revealed that tribal babies of Changlang were found to be heavier than babies of Other Groups. It was also observed that incidence of LBW among tribal babies of Changlang was less than that of Bengali babies of Calcutta and Marathi babies of Pune district, and tribal babies were healthier than other babies of North East India. The incidence of low birth weight was 17.5%, 18.85% and 33.47% among Tangsa Tribe, Other Tribes and Other Groups (O.G.) respectively.


**Key Words**: 1.HEALTH 2.LOW BIRTH WEIGHT 3.MATERNAL DETERMINANT 4.SOCIO-DEMOGRAPHIC FACTOR.

**Abstract**: Weight of the newborn is a universal undisputed predictor of health in infancy and childhood. The present study was conducted in the rural areas of Udupi taluk, Karnataka to identify the socio-demographic, maternal and obstetric determinants of low birth weight babies. All single live births, numbering 2919
occurring during October 1991 - September 1992 were included in the study. Data was collected on social, demographic, and economic condition of the families; and maternal factors such as age, antenatal care, obstetric history and parity by interviewing mothers and family members, and verifying the available medical records through field investigators. Of the 2919 newborn's, 423 (14.5%) were of low birth weight. During the follow up period, IMR was found to be 30 per 1000 live births. IMR was found to be 5.6 times higher among low birth weight babies. Results indicated that lack of good antenatal care, late conception age, family customs, socio-economic status, and environmental sanitation were the significant determinants of low birth weight babies. The study recommended qualitative change in the attitude of health care providers, routine antenatal checkups and continued training for all health functionaries. It also suggested that every birth certificate should mention the birth weight of the new born.

Tandon, Anita et al. (2000).


Keywords: 1.HEALTH 2.LOW BIRTH WEIGHT 3.COGNITIVE DEVELOPMENT 4.PSYCHO-EDUCATIONAL STATUS 5.FUNCTIONAL STATUS.

Abstract: The objectives of the study were to determine the intellectual, psycho-educational and functional status of Low Birth Weight Survivors (birth weight < 2000 gms) beyond 5 years of age and to compare their status with that of normal birth weight counterparts. Different tests were conducted on 59 LBW and 57 control children to assess cognition, academic achievement, motor functions and social maturity. Anthropometric measurements consisted of height, weight and head circumference obtained by standard techniques. Family information of the children included birth order, family size, maternal education, socio-economic status and school difficulties. Though LBW children were performing in the normal range on various measures, comparison with the control group showed that they were clearly disadvantaged on nearly every measure tested. These children tend to have poor school performance and had learning difficulties, for which they need to be referred for special education. With early detection and modification of the home environment, these children can continue in normal schools and achieve better grades.
MENTAL HEALTH/ PSYCHOLOGICAL DISORDERS

Anita et al. (2003).
Prevalence of psychiatric morbidity among 6 to 14 years old children.

Key Words: 1.HEALTH 2.PSYCHIATRIC MORBIDITY 3.PSYCHIATRIC DISORDER 4.MENTAL DISORDER 5.MENTAL HEALTH 6.EMOTION 7.CONDUCT DISORDER 8.ATTITUDE 9.MENTAL HEALTH CHILDREN.

Abstract: The study was undertaken during 2001-02 to understand the prevalence and pattern of psychiatric disorders in children aged 6–14 years in rural and urban areas, and also the associated socio-demographic variables. A sample of 400 children each from urban and rural field practice areas of Department of Social and Preventive Medicine (SPM), PGIMS, Rohtak was selected using systematic random sampling technique. The study was carried out in two phases. In the first phase, all the children were subjected to a screening for psychiatric symptoms using Childhood Psychopathology Measurement Schedule (CPMS). The children screened positive for psychiatric morbidity were subjected to diagnostic assessment using Diagnostic Interview Schedule for Children (DISC) in the second phase. Study revealed that prevalence of psychiatric disorders in children was found to be 16.5%. Conduct disorder was the most common psychiatric disorder observed (4.5%), followed by mental retardation (3.25%). Prevalence was more in male children (18.37%) than in female children (14.44%), more common among schedule caste children (18.4%), and also in children belonging to nuclear families (17.35%). In view of the given observations, it was recommended that such studies should cover children from early childhood, and should be carried out longitudinally so that appropriate programmes can be developed for providing preventive, promotive and curative services in the community.


Abstract: The study was undertaken to identify providers of medical support to students in higher education with Attention Deficit Hyperactivity Disorder (ADHD). A questionnaire pack was sent to 50 undergraduate student health centers attached to higher education colleges/universities selected at random from UCAS handbook. The questionnaire included questions on: list size, proportion of students on list, number of students with ADHD, prescription of psycho-stimulant medication, liaison with other medical colleagues or course tutors, contribution to employment, medicals, careers advice given and recent courses attended. It was found that 82 per cent of health centres returned questionnaires. 49 per cent had undergraduate students with ADHD, of those 76% were on methylphenidate, 52% saw only their general practitioner (GP) for follow up and rest were jointly managed by GP with psychiatrist, paediatrist, psychologist or physicians. Eighty seven per cent of GPs had not attended a recent course or training on ADHD. It was concluded that those caring for undergraduate student with ADHD are still largely unfamiliar with the condition. Guidelines need to be drawn up to establish handover from paediatric to adult care.


Abstract: Urban health is likely to be one of the momentous challenges of the 21st Century. The present study assessed the distribution, availability of tertiary mental health services and human resources in specialist mental health facilities, average service load, mental health service gap, and perception of the users and service providers. Data was collected from 3 cities namely Chennai, Delhi and Lucknow through survey and interview. The results indicate uneven availability of mental
health services, human resource deficit specially for non-medical mental health professionals, and mental health service gap ranging between 82% to 96%. The service load carried by the private sector ranges from 46% in Lucknow and 47% in Chennai to 62% in Delhi. The Relative Mental Health Service Gap was large in each of the three cities, 96% in Chennai, 92% in Delhi and 82% in Lucknow. Around 33% to 50% of the patients that reached the treatment centres in Delhi and Lucknow had Common Mental Disorders (CMD). The major barriers regarding mental health services were financial problems, transport related problems, stigma and lack of awareness in all the 3 cities. The average mental health service load in the primary care general health services was largely carried by the private sector, with significant contribution from the non-formal service providers. It was suggested that there should be assistance, facilitation and reorientation of the National Mental Health Services/ Programme in different sectors in urban areas, and also active policy planning and implementation for building human resources for specialist mental health services, mainly of non-medical mental health professionals.

A Study of the relative efficacy : self controlled procedures on improving mental health and performance of high school children. Delhi : Delhi University, Department of Psychology. 85 p.


Abstract : Mental health professionals are interested in the mental health of adolescents and youth, as these individuals are in a tremendously stressful and competitive society. In the present study, the aim was on improving the performance of the school students in relation to examination anxiety. Examinations are stressful for most students and test anxiety is a pervasive problem on college and school campuses. The primary purpose of the present investigation was to study the effectiveness of three therapeutic techniques in reducing test anxiety and improving the mental health of high school students who had poor study habits. The objectives of the study were to investigate the nature of study habits of high test anxious students as compared to their low test anxious counterparts: study relative efficacy of systematic restructuring, relaxation and study skill counselling in the reduction of worry state rather than the emotionality state of high test anxious.
students as compared to their low anxious counterparts. A sample of about 300 high school girls from Grade IX onwards had been taken from 5 selected government schools of Delhi. It was important to establish that all the 3 treatment conditions helped the subjects to improve their mental health. Worry and emotionality did not differ significantly, showing that relaxation therapy has influenced both the components equally. The high score indicates poor study habits and poor attitudes towards study habits. In cognitive therapy group, many subjects said “they were worrying less”. Further, for cognitive therapy and study skill training, homework assignments should be followed up. High test anxious students have generally poor study habits as compared to their low test anxiety counterparts who also have poor study habits. High test anxious students perform more poorly than low test anxious students in a variety of contests. All the therapeutic techniques resulted in similar amount of anxiety reduction. Both, emotionality and worry components were equally influenced by relaxation therapy and study skills counselling. This study will be a pioneering attempt in India to initiate research efforts in this area.


Key Words : 1.HEALTH 2.MENTAL HEALTH 3.RUNAWAY ADOLESCENTS 4.DEPRESSION 5.HOMELESS CHILDREN 6.STREET CHILDREN.

Abstract : This cross-sectional study was conducted to assess the psychological problems amongst the runaway adolescent boys; and to determine the associated risk factors. 150 runaway adolescents aged 10-16 years staying at the Child Observation Home (COH), Delhi were taken for the sample. The duration of this study was one month i.e. from June to July 2001. Identification data, Hopelessness Scale for Children by Kazdin, Beck Depression Inventory, Psychological survey and Rutter – B2 technique was used for data analysis. According to Voluntary Health Association of India (VHAI), there are 47.22 million homeless and runaway adolescents roaming on the streets of our country, of whom 1,00,000 are in Delhi alone. Results showed that nearly 50% of the sample runaway children were from Bihar and U.P., 18.7% from Delhi, and rest were from other states of the country. 71.3% children lived with both parents, 15.3% had single parent family and 6.66% were with their stepparents, before running away from home. Physical abuse had been experienced by 38% children and sexual abuse by 14.6%. 42.9% children were abused by unknown people, 28.5% by family members, and a similar number by the
relatives. 55.3% children reported substance abuse. 49.6% children reported tobacco intake, 0.67% reported ganja intake, and 2.66% reported glue sniffing. High degree of hopelessness was seen among 20.7% cases, 12.9% reported having suicidal thoughts, 12.9% had planned suicide at any point of time, and 3.2% children reported attempting suicide. Depression was seen among 8% children. Out of these depressed children, 25% had a history of suicidal thoughts, 16.6% planned suicide, and 8.3% had attempted suicide. Suicidal behaviours were present in 8% children. 4.7% children gave history of ever planning suicide; and 2% reported suicidal thoughts and attempts of suicide. 81% respondents exhibited anti-social behaviour, 7.8% were neurotic, and 10.5% remained undifferentiated. Among children living with both parents, behaviour problems were observed in 71% cases, while 63.3% children belonging to single parent families, and 60% children belonging to families with stepparents, had behavioural problems respectively. Among non-abused children, 68.8% had behavioural problems; while among abused children 70.2% had behaviour problems. 22.8% abused children reported feelings of hopelessness, whereas among non-abused children only 19.4% had feelings of hopelessness. 8.8% abused children and 7.5% non-abused children felt depression, respectively. Suicidal behaviour was reported in 7.01% cases in the abused group as compared to 14.03% in the non-abused group. It was suggested that there is a need for broad based psychosocial intervention programmes to deal with runaway adolescents; and to improve the accessibility and availability of community mental health services for homeless children.


Key Words : 1.HEALTH 2.SUICIDE 3.ADOLESCENT HEALTH 4.PSYCHOLOGICAL PROBLEMS 5.MENTAL HEALTH 6.ADOLESCENT PROBLEMS 7.PROBLEMS OF ADOLESCENTS.

Abstract: This article analyzed the incidence of suicidal deaths and various psychological factors related to suicide cases among children and adolescents in South Delhi. A sample of 222 cases of suicidal deaths, aged 10-18 years, were taken and their postmortem was done by All India Institute of Medical Sciences (AIIMS), New Delhi during Jan 1991 to Dec 2000. Of the cases reported, 55.4% were of girls and 44.6% were boys. 80.7% boys and 76% girls who committed suicide were in the age group 15-18 years. Nearly 16.2% suicide cases were reported in July, and 56.4%
cases were recorded between March to July, because of psychological problems related to studies, performance in examinations and declaration of results, which were precipitating factors during these months. About 57% girls and 49% boys committed suicide by hanging themselves; and 37% girls and 49% boys took poison. The most common poison was Aluminium Phosphide (20% cases), followed by Organophosphorous (5% cases). Nearly 80% victims committed suicide at their residence. It was suggested that an effective prevention strategy should be prepared, started and followed up to identify the population at risk, and identify risk factors that led individuals to take their lives. Legislation should be made to restrict easy availability of dangerous poisons.

Clinical characteristics and outcome of children and adolescent with conversion disorder. Indian Pediatrics, 39(8) : 747-52.

Key Words : 1.HEALTH 2.CONVERSION DISORDER 3.ADOLESCENT WITH CONVERSION DISORDER.

Abstract : The present study was undertaken to describe the clinical characteristics and outcome in children with conversion disorder. All children with a clinical diagnosis of conversion disorder referred to the psychology services of the Department of Pediatrics at Post Graduate Institute of Medical Education and Research, Chandigarh during a the year period (May 2000 to April 2001) were recruited for the study. Appropriate investigations including ECG, CT scans were performed to rule out any underlying organic etiology. Sixteen children meeting the diagnosis of conversion disorder as per the Diagnostic and Statistics Manual of Mental Disorders (DSM IV) were recruited for the study. It was revealed that mean age of presentation was 11 years with a range of 8.2 to 14.6 years. The female and male ratio was 1:1.6. Most children were from urban areas (62.5%) and were living in nuclear families. Pseudo-seizures were the most common presenting symptom present in 10 of the 16 children. A role model in the child’s social milieu was identified in only one-third of the cases studied. A striking feature of the results of the study was the rapidity with which the symptoms resolved once the diagnosis was made. Majority of the patients recovered within one to three months of the initiation of therapy. The study highlights the importance of team approach between pediatricians and psychologists in the diagnosis and successful management of children with conversion disorder.

Key Words: 1. HEALTH  2. MENTAL HEALTH  3. PSYCHOLOGICAL PROBLEM  4. BEHAVIOUR PROBLEM.

Abstract: The study assessed the psychological problems in children attending a pediatric outpatient department. 100 children in the age group 5-14 years attending OPD of the Indira Gandhi Institute of Child Health, Chennai, comprised the sample for the study. The child’s age, sex, education, parent’s age, occupation and education were recorded. The Pediatric Symptom Checklist (PSC) and the Developmental Psychopathology Checklist (DPCL) were the tools used to assess the children. The child was also interviewed to assess his perception of psycho-social problems. Results indicated the prevalence of psychological problems in children attending clinics, though children did not report any problems. Majority of the children scored high on hysteria (69), hyperkinesis (30), and emotional disorder (29). Fewer children had conduct (11) and learning disorders (10). Higher incidence of hyperkinesis and conduct disorders were found in boys as compared to girls. Rural children scored higher on hysteria than urban children. There was significant positive correlation between PSC and DPCL scores. The study recommended that pediatricians should be adequately trained to recognize emerging and existing mental health problems and their appropriate management. Parents needed to be alerted to children’s behaviour and emotional problems and recognise that help is available.
MORTALITY/MATERNAL MORTALITY

Ahmad, Omar B., et al. (2000).

Key Words: 1.HEALTH 2.CHILD MORTALITY 3.INFANT MORTALITY TREND 4.CAUSE OF DEATH.

Abstract: The present paper examines country specific trends in under-five mortality rates. It identified countries and WHO regions where sustained improvement has occurred and those where setbacks are evident. It shows chronological and historical trends of estimates of under-five mortality rate during the period 1950-2000 for both developed and developing countries. It is estimated that 10.5 million children aged 0-4 years died in 1999 which was 17.5% less than a decade earlier. On an average about 15% of newborn children are expected to die before reaching their fifth birthday in Africa. During the 1990s decline in child mortality decelerated in all the WHO regions except the Western Pacific. At the country level, there are exceptions in Southern Africa, where the prevalence of HIV is extremely high, and in Asia, where a few countries are beset by economic difficulties. Europe had the lowest under-five mortality rate (19.1), followed by the Americas (37.9) and the Western Pacific (48.5), the Eastern Mediterranean (70.7), South East Asia (90.2) and Africa (152.2). Sustained public health programmes can lead to further decline in child mortality. Research and surveillance systems can help improve knowledge about the causes of decline in child mortality.

Chaudhari, Sudha et al. (2000).
Mortality and morbidity in high risk infants during a six year follow-up. Indian Pediatrics, 37(12): 1314-20.

Key Words: 1.HEALTH 2.MORTALITY 3.MORBIDITY 4.HIGH RISK INFANT.

Abstract: The objective of this research was to study the mortality and morbidity in high risk infants after discharge from a Neonatal Special Care Unit in Pune. 404 high risk infants and 86 controls were enrolled for the study. Out of 40 deaths which occurred during the study period, 38 occurred in the first year of life, 60% occurring in the first 3 months. Mortality was significantly higher in the very low
birth weight group. Out of the 22 hospital deaths, 72.7% were due to infection. There was a significant difference in the mortality rate between the group which attended the High Risk Clinic (HRC) regularly (6.4%) as compared to that of defaulters (27.6%). Among the 286 children who were assessed at 6 years, the incidence of borderline intelligence was 14.6% as compared to 5.6% in the control group. Mortality and re-hospitalization rate was high in high risk infants, after discharge from the hospital. Children who appear to have normal development in their third year, may show a high incidence (14.6%) of borderline intelligence at six years. The study recommended close monitoring of very low birth weight infants, especially those in the lower socio-economic class, and a longer follow-up of these high risk newborns.


**Key Words**: 1.HEALTH 2.MATERNAL MORTALITY 3.MATERNAL DEATH 4.CAUSES OF MATERNAL DEATH 5.CAUSE OF DEATH.

**Abstract**: The study was conducted to find out the factors influencing high maternal mortality, and also suggest measures to reduce it. Madurai, a RCH district and Virudhu Nagar, a non-RCH district, were selected for the study. Blockwise listing of maternal deaths for a period of five years from 1998 to 2003 was prepared; and out of 565 maternal deaths, 320 (56.6%) were in Madurai and 245 (43.4%) were in Virudhu Nagar. A pre-tested questionnaire was used to collect data and the respondents were mostly either the husbands or the mothers of the deceased women. 78.5% of maternal deaths occurred in the 21-30 years age group. 8.3% women who died were less than 20 years of age. 13.2% maternal deaths were in the age group 31 years and above. 83.5% maternal deaths occurred in above 2nd gravida women. Literacy status of females was an important factor influencing maternal mortality. 45.5% maternal deaths were in the illiterate group. Maternal death were low in the higher educational groups. Husband’s literacy status was also a factor influencing maternal deaths. Poverty was the major socio-economic factor causing maternal deaths. 89% deaths were in the below poverty line group. In both districts, 67% of deaths were among SC/ST women. 72% maternal deaths were in the postnatal period, 17% in the antenatal period, and 11% during delivery. It was found that 4% had not received any antenatal services, 18% had received partial
antenatal services, and 72% availed full antenatal services. 62.5% deaths were in hospitals, 22.3% deaths in houses, and 15.2% in transit. 80% deliveries were conducted by qualified staff. 10% were conducted by untrained dais, and this was even higher in Virudhu Nagar district (14.2%). It was found that postpartum haemorrhage was the single major cause of death, which accounted for 38.6% deaths. Other major causes were pregnancy induced hypertension (PIH) (11%) and anaemia complicating pregnancy (11%). 7% deaths were due to puerperal sepsis. 51.9% husbands of the deceased women had not yet married and they did not want to remarry. However 48.1% had remarried. It was recommended, besides socio-economic development like female literacy and poverty alleviation programmes, etc., antenatal care, strengthening of First Referral Units (FRUs), dedicated staff at FRUs, availability of Emergency transporting System, the availability of Primary Essential and Emergency Obstetrics Care, and health workers in the villages should also be available. Health education focusing on the danger signs of pregnancy, admission at least 12 hours before EDD, saving money for pregnancy and delivery through Self Help Groups (SGHs) are some of the ways and means suggested to prevent this human tragedy.


Key Words: 1. HEALTH 2. MATERNAL MORTALITY.

Abstract: The study estimated maternal mortality in 188 countries during the year 1995. For most of the countries data was based on directly relevant country-specific information. Global estimate of 515,000 maternal deaths with a worldwide Maternal Mortality Ratio (MMR) of 397 per 100,000 live births was recorded in 1995. The differences, by region, were very great, with over half (273,000) maternal deaths occurring in Africa (MM Ratio: > 1,000 per 100,000 live births), compared with a total of only 2000 maternal deaths in Europe (MM Ratio: 28 per 100,000 live births). On the basis of lower and upper uncertainly bounds, global MM Ratio was recorded which was unlikely to be less than 234 or more than 635 per 100,000 live births. Although it is hard to measure MM Ratio precisely over a period of time, the exercise however, confirmed that maternal mortality is a major problem in many countries. Greater effort should be directed to developing indicators that can be monitored regularly and compared over a period of time.
Report on reduce maternal and child mortality and morbidity rate in Assam.

Key Words : 1.HEALTH 2.CHILD MORTALITY 3.MATERNAL MORTALITY 4.REDUCTION IN MORTALITY 5.COMMUNITY INVOLVEMENT 6.MOBILISING COMMUNITY.

Abstract : The project was undertaken by ICCW (Assam) in 3 villages in 4 districts (Kamrup, Darrang, Nagaon and Jorhat) to reduce maternal and child mortality in Assam. The maternal mortality in Assam was 500 per 100,000 births. The study covered a population of 15,972, and children below 5 years numbered 1073. Maternal welfare committees (Matri Sewa Committees) were formed of 12-15 members in each village, which created awareness about care of pregnant women, utilization of referral services, family planning and care of adolescent girls. A Revolving Fund was set up to transport poor pregnant women to hospital, pregnant women were registered and monitored, TBA training was organised, workshops were organised to raise awareness about diseases, pregnancy related complications, PHCs facilities, nutrition for pregnant women and adolescent girls, etc. Health workers were also included in these activities. Data were collected from the Hospital Record Book of District Civil Hospitals. In Kamrup District, in 1997; 1998 and 1999, 1415; 2145; and 1521 women died during delivery. In 1997 and 1999, 1535 and 2278 infants were referred to hospitals, and among them 287 and 279 died respectively. In Jorhat District, in 1997; 1998 and 1999; 31; 51; and 48 pregnant women died respectively. In 1997; 1998 and 1999, 182; 179 and 192 children were referred to hospital, and of them 82; 76; and 67 died respectively. In Darrang District, 51; 42 and 45 pregnant women died in 1997, 1998 and 1999 respectively. Children referred to hospital were 142; 122 and 149 in 1997; 1998 and 1999, and of these 20; 18 and 22 died respectively. In Nagaon District, 60; 50; and 55 pregnant women died; and the number of children referred to hospital were 125; 132 and 115, of whom 26; 22; and 19 died in 1997; 1998 and 1999 respectively. Maternal deaths were mainly due to eclampsia, sepsis, haemorrhage, anaemia, prolonged delivery, and lack of knowledge regarding antenatal and post natal care. In Jorhat district maternal deaths were mainly due to anaemia, while in Darrang and Kamrup districts they were due to eclampsia, and in Nagaon district due to anaemia and eclampsia. The main causes of
child mortality were diarrhoea, pneumonia, dysentry, antenatal tetanus, frure and K.T.I in all four districts. Success of the programme was evident from the active interest and eager participation of women.

Kumar, G. et al. (2000).
Scale for identification of "at risk" families for under five deaths.

Key Words : 1.HEALTH 2.UNDER FIVE MORTALITY RATE 3.MORTALITY 4.RISK FACTOR 5.HIGH RISK FAMILY.

Abstract : India currently has an infant mortality rate (IMR) of 73 and aims to reach 60 per 1000 live birth by 2000 A.D. The main objective of the study was to identify socio-demographic "risk factors" at family level for under five deaths, and assess the validity and efficiency of a risk index scale for this purpose. All the under five deaths in the study area in Haryana during 1991-95 comprising 849 cases, were compared with age and sex matched controls on socio-demographic variables. Demographic variables included parental age, number of children and type of family. The socio-economic variables were caste, parental education and occupation. The health factors included history of sibling death, receipt of measles vaccination, spacing of child birth and use of family planning methods. The variables which were significantly associated with risk of under five deaths were: not received measles vaccine, history of sibling death, maternal illiteracy, not adopted use of family planning method, and having more than 4 children. About 40% of the families were identified as high risk families. The sensitivity and specificity of the index developed were around 60%. The authors recommended the inclusion of risk approach in community trials to see the effectiveness and efficiency of the three alternative approaches for delivery of health services in rural areas: domiciliary visit based, fixed site based, and a combination of the two approaches using the `at risk` approach.

**Key Words**: 1. HEALTH 2. CHILD MORTALITY 3. FERTILITY 4. UNDER FIVE MORTALITY.

**Abstract**: The study analysed fertility and child mortality in India based on secondary data available at district level collected from Census of India 1991 for 384 districts. Data was collected on female literacy, female age at marriage, family planning, availability of health services, urbanization, economic structure and other related socio-economic variables. Results revealed that majority of the districts (93%) had under five mortality rate above 60 per 1000 live births. One third of the districts had female adult literacy rate above 50%. Only 4 out of 384 districts had below or near replacement level of fertility. Female age at marriage was below 18 years in 65% of the districts. The study recommended that particular attention should be given to female literacy, female labour force participation and urbanization to accelerate fertility decline. The under five mortality rate can be reduced by focusing special attention on variables such as female age at marriage, family planning and urbanization.

Save the Children, Westport, USA. (2008).

**Key Words**: 1. HEALTH 2. MATERNAL MORTALITY 3. INFANT MORTALITY 4. CHILD MORTALITY 5. CHILD SURVIVAL 6. MATERNAL AND CHILD HEALTH 7. SAFE MOTHERHOOD 8. CHILD HEALTH 9. HEALTH SERVICES 10. NEW BORN CARE.

**Abstract**: More than 200 million children in the world under 5 years do not get the basic health care they require, and the poorest children are the most vulnerable. This report covered 173 countries reaching children with basic health care, and outlined the best low cost health care practices adopted. In India 67,127,000 (53%) children do not get basic health care, and a poor child is three times more likely to die than a rich child because of greater exposure to unsafe water, poor sanitation, indoor pollution and inadequate housing conditions. They are more likely to be born with low birth weight, and become malnourished. The study also found that the poor parents often lack of knowledge of healthy practices and life saving services available. Also, staffing pattern, supervision and supply logistics are more difficult...
to reach in remote, impoverished and hilly areas. It was observed that national average of under 5 mortality rate per thousand live births was 76 in India in 2006, and the annual number of births was 27,195,000 in 2006. It was also observed that even with better infrastructure, disadvantaged ethnic groups sometimes faced unsympathetic or hostile providers, which in turn deters them from seeking prompt health care. The biggest killers of children worldwide are complications among newborns, pneumonia, diarrhoea and malaria. Child survival is one of the most long standing challenges facing the world, but "Child Survival Revolution" prompted the use of low cost basic health care interventions to prevent the major causes of infant and child mortality, and the number of child deaths are steadily declining. Now it is below 10 million for the first time. The study reported that India has the world's largest child survival gaps between boys and girls. 61% of the children who die between the ages of 1 and 5 years are girls, which means that for every 5 boys who die, 8 girls die. While India has cut its overall child mortality rate by 34% since 1990, the survival gap between girls and boys has widened. The study also found progress in child survival and reduction in female mortality, but this was counterbalanced by female infanticide and sex-selective abortions. It was estimated that 500,000 girls are missing each year in India due to selective abortions and infanticide. It was observed that 60 million mothers in the developing world gave birth at home with no professional care, and only some of the mothers and babies in high mortality settings receive postnatal care in the first few hours, days and weeks. In India, community health workers have been trained to treat infections, resuscitate asphyxiated newborns and care for low birth weight babies. As a result, newborn mortality rates in targeted areas declined by 50-60 percent. The Government of India now plans to replicate home-based newborn care throughout the country. It was suggested that health outreach strategies and funding allocations must target the hardest to reach mothers and children who are most in need. More funding is needed for staffing, transport, equipment, medicines and health workers training. More health workers should be trained and equipped to deliver basic health care services.
MULTI INDICATOR CLUSTER SURVEY


Key Words : 1.HEALTH. 2.MULTI INDICATOR CLUSTER SURVEY. 3.AIDS AWARENESS NUTRITIONAL STATUS. 4.BREAST FEEDING. 5.IMMUNISATION STATUS.

Abstract : The multi-indicator survey sponsored by UNICEF was conducted in a sample of 15 clusters in twenty-one districts of Tamilnadu. Twenty children in the age group of 2-23 months from each cluster were surveyed to assess the availability and utilization of health care services, nutritional status, prevalence of diarrhoea and level of school enrollment. A total of 42,742 households were visited to survey 6,300 children and it revealed that 89% of the households had access to clean drinking water. Only two fifths of the households were using sanitary latrines and only one-fourth were using iodized salt. 17% children had suffered from diarrhoea. Nutritional status of children measured using weight for age, height for age and weight for height showed that a considerable proportion of children were undernourished in Tamilnadu. 93% of the children were fully immunized by the first year. The dropout rates from DPT first to third dose and polio first to third dose were only 1.6% and 1.5% respectively. Breast feeding was nearly universal in Tamilnadu. Only 24% of the children were initiated to supplementary foods in the 4th month. 98% of children in the 6-11 years age group were enrolled in school. Only 2% of the children had never enrolled in a school. Eighty five per cent of the mothers had 3 or more antenatal care visits during pregnancy. 92% of the mothers had availed complete doses of TT vaccine, and iron and folic acid tablets. Institutional deliveries constituted 86% of the total deliveries in Tamilnadu. The mean age at marriage of women was 19.7 years and the mean birth interval was reported to be 23 months. Only 57% of the respondents were aware of AIDS. The study recommended area specific special intervention programmes to improve the availability and utilization of health care services all over Tamilnadu. The study suggested improvement in availability of sanitary toilets, use of iodized salt, availability of ORS, AIDS awareness, ORT use rate and nutritional status of children.
Summary of findings of multi indicator cluster surveys in India 1995-1997:

Key Words: 1.HEALTH 2.MULTI INDICATOR CLUSTER SURVEY 3.MONITORING
4.CHILD DEVELOPMENT INDICATOR

Abstract: This draft report is an outcome of district and state level Multiple
Indicator Cluster Surveys (MICS) carried out from 1995 onwards. The data
gathered in the report are consolidated from 171 MICS, representing over 94% of
the population in India. The report helps to build sustainable national capacity for
monitoring and evaluation of child development initiatives. State level results are
provided for the most important indicators, that is water and sanitation, diarrhoea
management, immunization coverage, breast feeding, child health, nutrition and
education, reproductive health and availability of services, etc. ORS was available in
69% of the clusters surveyed, and its use during diarrhoea was found to be 40%.
The proportion of children fully immunised was 57% by one year and 63% by two
years. By one year, the number of fully immunized children varied from 93% in
Himachal to 24% in Bihar. Uttar Pradesh had the highest dropout rates for
immunization and Punjab had the lowest (less than 1%). About 52% of the Indian
population was consuming iodized salt (Karnataka 13%; Haryana, Delhi and West
Bengal above 96%). Nearly 61% newborns were breastfed exclusively and only 30% received
complementary food between 4-6 months. Gender differentials were not
visible in child health and nutrition, though they may exist at district level and
below. About 85% children aged 5-10 years were enrolled in primary school, but only
77% attended in the three days prior to the survey. Enrolment and retention was
below 80% in Madhya Pradesh, Uttar Pradesh and West Bengal, and Bihar which had
no data on enrolment, had low attendance (54%). About 7% children discontinued
school, and this was highest in Bihar (34%). In Himachal Pradesh 44% children
dropped out due to distance of school from home. In Rajasthan and Gujarat more
boys than girls enrolled and attended school. Only 33% mothers had knowledge
about the danger signs of acute respiratory infection. The study recommended that
breastfeeding practices required improvement. It also recommended standardization at national and sub-national level and continuous revision of
indicators so as to provide useful data.
NATIONAL FAMILY HEALTH SURVEY


Key Words: 1.HEALTH 2.NATIONAL FAMILY HEALTH SURVEY-2 3.NUTRITION 4.REPRODUCTIVE HEALTH 5.FERTILITY 6.MORTALITY 7.SOCIO-ECONOMIC INDICATOR 8.ANAEMIA 9.DOMESTIC VIOLENCE.

Abstract: The NFHS-2 Survey funded by the United States Agency for International Development (USAID) through ORC Macro, USA and UNICEF is the collaborative effort of many organizations, IIPS being the nodal agency designated by the Ministry of Health and Family Welfare. The NFHS-2 Survey was carried out in two phases and covered more than 90,000 women and their children below 3 years (32,393) in 26 states. The survey provided state level estimates of demographic and health parameters and data on various socio-economic and programmatic factors. The survey revealed that almost half of the children in India were underweight, although the percentage of underweight children declined from 52% to 47% since the time of NFHS-1 (1992-93). Nearly three-fourths of Indian children were anaemic. 1 in 15 children still died before age one. Infant mortality rates vary substantially among major states, ranging from 16 in Kerala to 86 or more in UP and MP. Infant Mortality Rate was 110 for closely spaced births compared to 39 for spaced births. Fertility rate in India is still high especially in adolescents (less than 20 years) which accounted for 19% of the total fertility. Half of the young women were married below the age of 18 years. Only one out of every five mothers received all the recommended components of antenatal care and only 40% of deliveries were attended by a health professional. About 50% of the women were not involved at all in decisions about seeking health care for themselves. 52% women in India had some degree of Anaemia. Awareness regarding oral rehydration salt or AIDS was low as 4 out of 10 mothers did not know about ORS and 60% had never heard about AIDS. Domestic violence against women was especially prevalent (27-29%) among women working for cash, poor women, scheduled caste women, widowed, divorced, or deserted women. Concerted efforts are needed to achieve the goals set by the National Population Policy.
Abstract: The National Family Health Survey (NFHS), initiated in the early 1990s, has emerged as a nationally important source of data on population, health and nutrition for India and its states. The National Family Health Survey – 3 (NFHS-3) was designed to provide estimates of important indicators on family welfare, maternal and child health and nutrition. NFHS-3 also provides information on several new and emerging issues, including family life education, perinatal mortality, adolescent reproductive health, high risk sexual behaviour, tuberculosis and malaria, and domestic violence. NFHS-3 collected information from a nationally representative sample of 109,041 households, 124,385 women aged 15-49 years, and 74,369 men aged 15-54 years. The NFHS-3 sample covered 99% of India’s population living in all 29 states. From among all the women and men interviewed nationwide, 102,946 were tested for HIV. It was found around 35% of the population was below 15 years of age (37% in rural areas and 30% in urban areas), 56% were between 15-59 years, and 9% of the population was above the age of 59 years. Only 55% women in the age group 15-49 years were literate, whereas 78% men were found to be literate. More than 50% women were married before the legal minimum age of 18 years and 58% men were married by the age of 25 years. Around 70% of urban total fertility and 63% of rural total fertility was concentrated in the prime childbearing age of 20-29 years. Around 98% women and 99% men (15-49 years) knew one or more methods of contraception. Over 94% women and men knew about female sterilization whereas male sterilization was known to only 79% women and 97% men. Knowledge of contraception was widespread among adolescents (96%). Contraception prevalence rate varied from 73% in Himachal Pradesh and 71% in West Bengal, to 30% in Nagaland and 24% in Meghalaya. NFHS-3 estimated that infant mortality was 57 deaths per 1000 live births. In 2001-05, the infant mortality rate was 50% higher in rural areas (62 deaths per 1000 births) compared
to urban areas (42 deaths per 1000 births). Infant mortality was highest in U.P. (73%) and lowest in Goa (15%). The perinatal mortality rate, which included still births and very early infant deaths, was estimated at 49 deaths per 1000 pregnancies that lasted 7 months or more for the 2001-05 period. The perinatal mortality rate was highest in rural mothers due to less education and also mothers in the lowest wealth quintile. Only 44% pregnant women started antenatal care during the first trimester of pregnancy; 22% had their first visited during the 4th and 5th month of pregnancy; and just over half of mothers (52%) had 3 or more antenatal care visits. Fewer mothers received IFA (Iron Folic Acid) tablets in rural areas (61%) compared to urban areas (76%). Tetanus Toxoid coverage increased with the educational level of women, and was considerably higher in urban areas (86%) compared to rural areas (73%). Around 39% births in the 5 years preceding the survey took place in health facilities, more than 50% took place in the woman's home, and 9% took place in their parents' home. Urban residence, education and wealth were all strongly and positively associated with the likelihood of an institutional delivery. Several states from North Region (U.P.), Central Region (Chhattisgarh, M.P., and Rajasthan), East Region (Bihar and Jharkhand) and Northeast Region (Arunachal, Assam, Meghalaya and Nagaland) performed poorly on safe motherhood indicators. By contrast, Mizoram performed above the national average on delivery care indicator and postnatal care indicator, but poorly on the antenatal care indicator. Nationally, 72% of the NFHS-3 sample enumeration areas were found to be covered by an AWC and 62% were covered by an AWC that had, by the time of the survey, existed for at least 5 years. It was found that only 28% of the children had received any service from an AWC in the year preceding the survey. Around one in five mothers received any service from an AWC during pregnancy and lactating period. Only 25% of last born children who were ever breastfed started breastfeeding within one day of birth and almost 45% did not started breastfeeding within one day of birth. Almost 69% children under 2 months of age were exclusively breastfed. NFHS-3 found that only 25% of children aged 12-35 months received vitamin A supplements in the 6 months before the survey. Almost 48% children under 5 years of age were stunted and 43% were underweight. Around 24% under fives were severely underweight. The prevalence of anemia was considerably higher in rural areas, among children of women with no education, among scheduled castes (SCs) and scheduled tribes (STs), and among children in households in the lower wealth quintiles. Almost 7 in 10 children aged 6-59 months were anemic, included 40% who were moderately anemic and 3% who were severely anemic. Only 44% children aged 12-23 months were fully vaccinated, (BCG, DPT and Polio) and 5% had not received any vaccinations. Nationally, 36% women and 34% men in the 15-49 years age group had BMI (Body Mass Index) below 18.5 which
indicated chronic nutritional deficiency. Regarding knowledge of HIV / AIDS it was found that overall, approximately 4 in 10 women and 7 in 10 men knew each of the 3 ABC methods of prevention - abstinence, being faithful, and using condoms. Nationwide, the HIV prevalence rate for population aged 15-49 years was 0.28%. Women's participation in decision making was highest in all the Northeastern states except Tripura, as well as in Delhi, Tamil Nadu, Kerala and Goa. Overall, 35% women aged 15-49 years in India experienced physical and sexual violence. The study will provide policy makers and programme managers with up to date estimates of indicators that can be used for effective management of health and family welfare programmes with an emphasis on both, the reproductive and nutritional health aspects.
OBESITY


Key Words: 1. HEALTH 2. ADOLESCENT HEALTH 3. ADOLESCENT GIRLS 4. UNMARRIED GIRLS 5. RURAL POOR.

Abstract: The incidence of childhood obesity among schoolgoing children is on the rise. Diseases normally seen in adults because of obesity are now being seen with increasing frequency in children, particularly Type 2 diabetes. Sedentary activities like watching television, computer games and eating junk food are considered to be the main cause of increasing prevalence of obesity in children. The main objective of the study was to determine the seriousness of the problem of obesity in schoolgoing children. Over 3800 school children were contacted through this research. Children over 85th percentile as per BMI charts were considered overweight. Questionnaires were given to children to assess their lifestyle habits. Analysis of the data collected revealed that over 17% children were found to be overweight. Some even had high blood pressure and a family history of diabetes. At least 11% children preferred eating lunch from the school canteen; and over 81% children claimed that they went out to a fast food joint at least once a week. 62% children liked eating junk food like burgers, pizzas, etc; and 47% children took at least 1 cold drink daily. 26% children reported either their mother or father being overweight and 10% children had a mother or father with diabetes. 26% children did not exercise at school, and 13% children do not play outdoors at home. 35% children spend more time watching TV and playing on computer. Immediate intervention is suggested to prevent the epidemic of obesity impacting more and more children. Overweight children have 70% chance of becoming overweight or obese adults. Recommendations to schools and parents are to encourage physical activity on daily basis; work on incentive based plans to encourage children to indulge in sports and other physical activities in school; and discourage eating at fast food joints, and give children a healthy nutritive diet that limits calorie and fat intake.
Obesity


Abstract: Childhood obesity is related to adult levels of lipids, lipoproteins, blood pressure, insulin and to morbidity from coronary heart disease. Overweight children are twice as likely as normal children to be obese adults. The present study was undertaken to assess the prevalence of obesity and overweight in adolescent girls between 10-15 years of age among affluent families of Chennai - two studies were compared using body mass index (BMI) as a parameter. The first study done in the year 1981 (Group I) was compared with the second study in 1998 (Group II). Group I had 707 and group II had 610 girls. Overweight and obesity was denoted by BMI above the 85th or 95th percentile respectively. In Group I, overweight prevalence varied from 7.4% to 10.42% with two peaks at 11.5 and 12.5 years of age whereas in group II the prevalence range has been from 8.0% to 10.81% with 3 peaks at 10, 12.5 and 13.0 years. Obesity in Group I ranged from 5.10% to 8.33% and peaked in 10.13 and 15 years and in Group II range of obesity has been from 5.26% to 9.52% with peaks at 12 and 14.5 years. Overall, a greater proportion of overweight and obese adolescent girls were observed in the 12-14 years age group. It was also observed that the BMI for the same age in the two study periods showed an increase from 1981 to 1998. BMI approximated the international reference values for BMI at age 13 years in the year 1998. The limitations of the study were that it was not a community based study, and the number of children in some age groups was small. But the prevalence of obesity was evident.
POLIO

Poliomyelitis surveillance - the model used in India for polio eradication.

Key Words: 1.HEALTH 2.POLIOMYELITIS 3.POLIO ERADICATION 4.EPIDEMIOLOGICAL SURVEILLANCE 5.SURVEILLANCE.

Abstract: In order to improve the polio eradication program, the National Polio Surveillance Project was established in 1996. 59 specially trained surveillance Medical Officers were deployed throughout the country to establish acute flaccid paralysis (AFP) surveillance. 11533 units were created to report weekly AFP cases at the district, state and national levels. Timely case investigation and collection of stool specimens from AFP cases was undertaken, and linkages were made to support the polio laboratory network. An extensive training programme of the Government counterparts of Surveillance Medical Officers was conducted. Data at the national level was analysed. The number of polio cases associated with the isolation of wild polio virus decreased from 211 in the first quarter of 1998 to 77 in first quarter of 1999. Widespread transmission of wild polio virus types 1 and 3 persists throughout the country, while type 2 occurs only in Bihar and U.P. In order to achieve polio eradication in India during 2000, extra national immunization days and house-to-house mopping up rounds should be organized.

Bhagwat, Sadhana et al. (1999).

Key Words: 1.HEALTH 2.PULSE POLIO IMMUNIZATION 3.IMMUNIZATION COVERAGE 4.EVALUATION.

Abstract: India has been carrying out pulse polio immunization campaigns since 1995-96. The study was conducted in Talegaon urban area to assess the coverage of Pulse Polio Immunization among underfives, and to assess routine immunization against vaccine preventable diseases, common sources of information, and knowledge level of guardians regarding Pulse Polio Immunization. Data was collected through a house to house survey with the help of medicos, social workers and students. Information was
gathered regarding age, sex, education of informants; age and sex of under-fives, and their immunization status. The survey covered a total population of 5,839 which included 778 under-fives (13.32%). Information was gathered from 526 informants, 403 females (77%) and 123 males (23%). Majority of these informants 272 (51%) were in the age group of 20-30 years. 365 respondents were mothers of under-fives, 105 were fathers and 38 were other relatives. Two hundred forty two (46%) of these under-fives were from slums and 284 (54%) were from economically better households (non-slum dwellers). Results revealed that slum dwellers (24%) did not have any knowledge regarding Pulse Polio Immunization, while all non-slum dwellers (22.2%) had complete knowledge. 83% of the eligible under-fives were completely immunized. Knowledge regarding routine immunization among the sample respondents was low. The various sources of information or people regarding Pulse Polio Immunization were mass media, followed by nurses, ANMS, doctors and others. The children who missed the dose were those of illiterate mothers. Slums dwellers were identified as a high risk group. It was recommended that media campaigns should focus more on slum areas to achieve cent per cent success in this endeavour.


Key Words: 1.HEALTH 2.PULSE POLIO IMMUNIZATION 3.IMMUNIZATION 4.RURAL AREA 5.MAHARASHTRA.

Abstract: An evaluation survey on Pulse Polio Immunization was carried out in January 2000 in rural areas of Talegaon Dabhade of Maharashtra to assess the immunization coverage, knowledge regarding pulse polio and the routine immunizations schedule. Parents of 778 children were interviewed to collect information through house to house surveys. Results revealed that knowledge about pulse polio had a direct relationship with literacy. Knowledge regarding routine immunization and polio disease was not up to the mark. Excellent coverage of Pulse Polio Immunization (98%) was found because of organized and extensive campaigns, use of mass media like T.V and radio, location of polio booth in close proximity and home visits of peripheral health staff. The time period required for getting vaccinated after arrival at the polio booth was less than 5 minutes. Excellent coverage of Pulse Polio Immunisation reveals the picture that polio is on the verge of being eradicated from India, if it is followed by effective surveillance.

**Key Words**: 1. HEALTH 2. POLIOMYELITIS VACCINE 3. HEALTH SURVEILLANCE 4. SURVEILLANCE PROGRAMME.

**Abstract**: Paralytic poliomyelitis is caused by polio virus. A case of acute flaccid paralysis (AFP) is labeled as a case of paralytic poliomyelitis if onset of asymmetric paralysis follows on episode of fever and other causes of AFP have been ruled out. The present study had been undertaken to assess the impact of polio eradication programme on the incidence of paralytic poliomyelitis in Rajasthan. Line list of AFP is prepared by the surveillance Medical Officers (SMOs) appointed by the National Polio Surveillance Project, New Delhi (NPSP). Data was collected from all systems of medicine, all clinics and hospitals in their respective areas. According to NPSP there were 15 polio cases in Rajasthan during 2000. Close scrutiny of line list of AFP cases shows that there were at least 58 polio cases, many cases had been wrongly classified. Cases of vaccine associated paralytic poliomyelitis (VAPP) and vaccine failure had been missed. The existence of Polio Eradication Committee showed that IAP has legitimate and serious concern for polio eradication from our country.

Rajesh Kumar et al. (2001).

**Key Words**: 1. HEALTH 2. PULSE POLIO IMMUNISATION 3. IMMUNISATION COVERAGE 4. EVALUATION.

**Abstract**: The study assessed the coverage of Pulse Polio Immunization in Haryana during 1997-98. 30 clusters from rural and urban areas constituted the sample for the study. Data was analysed by residence, age, sex, religion, caste and literacy of parents. Out of 620 children eligible to receive oral polio vaccine in January 1998, 96.3% had received it. On 7th December 1997, 95.9% of the children received the dose of OPV. During the second round in 1996-97, 96.4% and 96.7% children, had
received OPV in January 1997 and December 1996 respectively. The Coverage of PPI improved after the first round in 1995-96 and the tempo was sustained thereafter. PPI coverage with both the doses was significantly higher among Hindus (98%) than Muslims (64.5%). Coverage among children of illiterate mothers was 93.6% as compared to 97.9% among children of literate mothers. Television (31.7%) and Anganwadi Workers (39.2%) were the main sources who created awareness about PPI. The study recommended that attention should be paid towards the muslim community and children of illiterate mothers and improvement is required in IEC messages which emphasize that the vaccine is available at transit points for those who are on the move.


**Key Words:** 1.HEALTH 2.PULSE POLIO IMMUNIZATION 3.PARENT PERCEPTION.

**Abstract:** The present study was carried out in Delhi to assess the knowledge and perception of parents regarding Pulse Polio and other immunization. A total of 2050 respondents from 205 centres were interviewed, of these 52.7% were mothers of the children, followed by fathers (25%) and the rest included close relatives. The study revealed that children of all age groups participated in the immunization programme, although the coverage was low in the 37-60 months age group. In all, 30.5% children came for the first time to the PPI Centre as they could not get OPV the previous year. 59.5% of the respondents were not getting their children immunized against other diseases. 73.2% of the respondents had knowledge of pulse polio. Predominant source of information about Pulse Polio was electronic media (55.8%), followed by health workers (20.9%). The literacy status of parents had direct association with knowledge regarding Pulse Polio. The study suggested that efforts should be made to promote the role of electronic media in spreading the message about Pulse Polio.

**Key Words**: 1. HEALTH 2. PULSE POLIO IMMUNIZATION 3. IMMUNIZATION 4. EVALUATION.

**Abstract**: Ministry of Health and Family Welfare, Govt. of India launched the Pulse Polio Immunization (PPI) on a country wide basis in 1995 for eradication of poliomyelitis. The study was conducted in urban, rural and slum areas of Chandigarh to assess the Pulse Polio Immunization (PPI) coverage. A total of 614 children below five years of age were covered, of whom 56% were male and 44% were female children. The overall PPI coverage was 92.3% for both doses, being 93.5% for the first dose and 96.4% for the second dose during 1997-98. Immunization coverage was higher for males (93%) as compared to females (91.5%). Coverage was higher (98.4%) in rural areas as compared to urban (89.8%) and slum (93%) areas. The main reasons given for non-immunization were time and place were not convenient (46.7%) and having no faith in immunization (20%), which were quite different from other reasons given in the national evaluation such as nobody was available to take the child to PPI booths and not aware of the need for immunization. The need for PPI should be emphasized to mothers during routine immunization of children, by involving opinion leaders and using all other available means. The study recommended sustained efforts to achieve universal coverage of PPI in Chandigarh.


**Key Words**: 1. HEALTH 2. POLIO ERADICATION 3. POLIO UTTAR PRADESH 4. IMMUNIZATION 5. INNOVATIVE STRATEGY 6. UTTAR PRADESH.

**Abstract**: After several rounds of National and Sub-National Immunization Days (NID/SNID) nearly every child under 5 years of age is now protected with the vaccine, OPV or locally known as polio drops. The scale of the campaign has multiplied along with India's swelling child population, from 93 million children when it started in 1995 to 167 million in 2003. Over 80% of the children struck by polio in 2002 were below age two, predominantly boys, and predominantly Muslims. The majority of cases (80%) were traceable to Uttar Pradesh in northern India. Rationale of the
repeated rounds of NID and SNID, with eradication as the goal, were not readily understood by many, especially the illiterate. The impression has been created that polio drops are used to control population growth. The association is particularly strong among underserved Muslims and scheduled caste Hindus who, known for having offspring above the national average of three, have been a high target for birth control. In underserved populations, the strategy must engage opinion makers, professionals and influential figures to rectify popular misconceptions about polio, tackle resistance and assuage fears to ensure not a single vulnerable child is missed in every round of NID/ SNID leading to the global deadline of 2005. That is the date by which the number of polio cases should be slashed to zero, and sustained for three consecutive years to achieve Polio-free certification in 2008. The network which combines forces with the CORE group of international NGOs operates in synchrony with the Government of India - WHO National Polio Surveillance Project (NPSP) at state, district and block levels. High risk and high resistant communities are identified through active tracking of polio infection cases in villages or urban neighbourhoods. Even though Muslims constitute only about 20% of the population in Uttar Pradesh, more than half of the polio infection cases in 2002 (68%) occurred among Muslim children. UNICEF signed a partnership agreement with Jamia Millia Islamia to tap into its network to broaden its reach to poor families in western Uttar Pradesh. The Government and other partners brought about a radical reduction of immunity gap among Muslim and Hindu children in western Uttar Pradesh. The number of Muslim children insufficiently vaccinated had gone down from 29% in 2002 to 5% in 2004, and among Hindu children from 14% to 2% over the same period. Muslim children who had not received polio drops - the zero-dose case - came down from 5% to 0% between 2002 and 2004, and for Hindu children from 1% to 0%. Further, communication and social mobilization alone cannot ensure the success of every round if other elements, including vaccine supplies, data provided by the district or block officers, and the feedback mechanism on extra resistant (XR) houses do not function fully, facilitating door to door persuasion with detailed micro planning, and thorough mapping of families in neighbourhoods that are often a hybrid of ethnic groups. This is groundwork that represents no easy path. But it is these type of actions that must be taken in order to achieve change. The return of a people’s movement to the polio immunization programme, now albeit on a smaller scale, and involving mostly the Muslim community, is currently felt. But the goodwill and support garnered should not be taken for granted, for the minority has demonstrated, through the epidemic outcome, that they play a vital role in fulfilling a goal of national and global interest. Their needs must be heeded, their voices heard, and their contributions recognized.
REPRODUCTIVE AND CHILD HEALTH


Abstract: The Reproductive and Child Health, Nutrition and HIV/ AIDS Programme (RACHNA) is CARE India’s umbrella programme that consists of two projects. The first, the Integrated Nutrition and Health Project (INHP II) targets pregnant and lactating women and children less than 2 years to improve child survival and nutritional status. It works in 94,593 catchment areas in 747 blocks in 789 districts of 9 states namely Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal. The second project is Chayan, a reproductive health and HIV/ AIDS prevention project. The rural component of Chayan also worked with ICDS and RCH to promote family planning for birth spacing, and prevention and management of Reproductive Tract Infections (RTIs) and Sexually Transmitted Infections (STIs) in 36,300 communities in 300 blocks in 29 districts. The INHP II project was in operation for five years from October 2001 to September 2006, and Chayan started nearly an year later and was in operation from July 2002 to October 2006. Data was collected with the help of CARE district staff from ICDS projects, Reproductive and Child Health Programme (RCH), National AIDS Control Programme (NACP) and National AIDS Control Organization (NACO). It was found that weight-for-age malnutrition reduced significantly from 61% to 53% across INHP-II programme areas. This reduction was nearly twice that seen in the all India rural figures. Impressive increases were found in the use of RCH services, including measles immunization, which nearly doubled, and tetanus toxoid immunization, micronutrient supplementation with Vitamin A, iron and folic acid, and contacts and home visits by Auxiliary Nurse Midwives (ANMs). Impact on increasing antenatal check-ups was mixed. The use of ICDS nutrition services also increased, including supplementary feeding for
pregnant and lactating women and children 6-23 months, and contacts and home visits by AWWs. Most notable achievements were improved newborn care practices, including use of "5 cleans" at delivery, initiating breastfeeding within the first hour after birth and giving no prelacteal feeds, and drying and wrapping the baby. The percentage of mothers who gave at least half the recommended quantity of semi-solid foods to children 12-23 months showed no significant improvement. Under Rural Chayan Project, major improvement was observed in access to oral contraceptives and condoms in programme villages with 68% AWCs having a supply of free contraceptives. Women's awareness of RTI/STI symptoms increased significantly, but referral and treatment networks remained weak. There is a need to strengthen the key state level systems, initiate policy dialogue at State and Central Government levels, and enhance the nutritional focus of ICDS. The programme can be further strengthened by improving contraceptive counselling skills of AWWs, ANMs, RHCAs (Reproductive Health Change Agents), and CAs (Change Agents) by making optimal use of training material (flipcharts) about advantages and side effects of contraceptive methods, so that informed choice can be made, and by involving men.


Key Words: 1.HEALTH 2.REPRODUCTIVE HEALTH 3.ABORTION 4.HEALTH BEHAVIOUR 5.UDAIPUR 6.RAJASTHAN 7.VISTAAR PROJECT.

Abstract: The present survey was conducted to record baseline data about socio-demographic profile of 10 project villages of Kumbhalgarh Tehsil. Further, the availability of Trained Birth Attendants (TBAs), Anganwadi Workers, literacy volunteers, women's groups, and health providers in project villages were also mapped. The study covered 1058 women aged 15-49 years, and included ever married women with 1 to 2 living children, adolescent girls aged 15 to 19 years, childless women (married women with no living children), and women who had delivered within the past 2 years. The sex ratio in the area was 927 females per 1000 males. More than half the population was in the reproductive age group. About 66% adolescent boys aged 13-19 years were currently married, and the median age of marriage of husbands of recently delivered women was 16 years. More than 90% respondents were married before the age of 21 years. The median interval between...
Reproductive and Child Health

marriage and cohabitation (gauna) was 2 years. Approximately 14% women and 16.2% men had gone through customary marriage (nata). Women of the area had high fertility. Findings revealed that 38% women had unmet need for family planning. These include 25% women who did not want any more children and 13% who wanted to have the next child after 2 or more years, or were uncertain about whether or when to have the next child. Only 2.5% women used contraception before at least one living child had been born. 55% adolescent girls were not aware of any reversible contraceptive method. Knowledge of sterilization was universal. Contraceptive pills were not readily available in villages. Some respondents also felt that using pills might adversely affect subsequent childbearing. The Maternal Mortality Ratio in Rajasthan was 670/1000 live births (Sample Registration System (SRS) 1998). More than 40% of the women suffered at least one problem during pregnancy. About 25% women had breathlessness, and 11% women had night-blindness, which is indicative of Vitamin A deficiency. Pre-eclampsia was found in nearly 5% women. Convulsions were reported by 4% women. 21% did not consider any kind of work as being heavy. 38.1% men had borrowed money for their wife's last delivery. The median amount borrowed in such cases was Rs. 1500 (range Rs. 200-12000). Money was borrowed from village moneylender (43%), friends or neighbours (16%), and family members. About 40% women reported having had at least one problem (burning urination, abdominal pain, vaginal discharge, and pelvic infection). In 2000, 15.7% and 2.4% currently married women said that they had heard of STDs and AIDS respectively. 24% women resorted to faith healing, while 27% made use of medical services. The median cost of treatment among women who could remember the cost was Rs. 500. 12.4% women felt that gynecological problems were not serious. 30.1% women felt that they would recover on their own, 16.3% didn't have enough money, 17.6% felt shy, 2% felt problems were due to spiritual forces, 7.8% did not understand them, and 5.2% were afraid of treatment. The study found that 53% of the childless respondents were suffering from primary infertility and 47% with secondary infertility. The mean duration of childlessness was 8.1 years. It was suggested that there should be regular availability of good quality and confidential reproductive health services, which could rapidly change this situation. An outreach programme must approach both men and women. There is need to promote long term reversible methods of family planning if unmet need for limiting family size is to be met. A differential approach to deliver health services within heterogeneous communities, with greater focus on underserved groups, is required.
Abstract: The present study was undertaken to understand community values related to teenage sexuality and teenage motherhood; and to develop a communication strategy for preventing teenage motherhood. 15 villages, belonging to 4 panchayats of Udaipur and Rajsamand districts of Rajasthan, were selected for the study. 16 in-depth interviews were conducted with young mothers (16-22 years) who had experienced adolescent pregnancy, and married males (between 18-25 years) who had at least one child. 80 respondents, 40 women and 40 men, comprised the sample. Child marriage is very common in rural communities. There is no fixed age for engagement of boys and girls. Sometimes the child is barely 2-3 years old when engagements take place. Engagements are carried out in cradles also. It is believed that after a certain age it is hard to find a suitable match and this fear acts as one of the motivating factors for marrying off their children at an early age. Sometimes, even after a boy or girl attains maturity, marriage is not possible due to financial problems. In such cases, people practice ‘Aata - Satta’ which means that they marry their daughter into one family and get their daughter-in-law from the same family. Marriages of adolescent boys and girls take place on the basis of accurate estimates of age made by their parents. In tribal castes people with low socio-economic backgrounds marry their girls at an early age (around 14-16 years). Boys are also married off early, between 13-20 years. These facts were affirmed on the basis of in-depth interviews conducted with 16 young men and women who confirmed that their own marriage was at 17.1 years (for men) and 12.4 years (for women). Parents try to marry off their daughters early so that their periods start only in their husband's home. They fear that if a girls' menstrual period starts in her parent's home, questions might be raised about her virginity and sexual morality. This belief therefore encourages the practice of early marriage and cohabitation. During Focus Group Discussions (FGDs) it was found that if there were 2 to 3 girls of varying ages in a close range, they were all married off at one time to save expenses on marriages. Among all communities, newly wed couples are expected to produce a child within two to three years after the ‘Aana’ ceremony/ living together. 45% participants said that it was an occasion of joy for their family if a
17 year old girl conceived. Most young men did not know anything about the process of pregnancy. Most of the adolescent boys, during FGDs, admitted to having some knowledge of family planning methods, but most females were completely ignorant of the subject. 50% women, during in-depth interviews, admitted to have some knowledge of contraceptive methods. It was found that the older generation had their own inhibitions regarding the use of contraceptives. They believed that family planning methods harmed the body and retarded the chances of future conception and should be kept at bay. Copper T and Mala D pills were the favourite contraceptives. It was suggested that adolescent girls need to be made aware of the various physical changes accompanying maturity such as the onset of menstrual cycle, etc. They should be informed about the process of conception; pregnancy and childbirth; family planning methods, their benefits and limitations, side affects; information regarding health services available in the region; and the importance of pre-natal, post-natal and delivery care.


Abstract: Slums are basic shelters for migrants that have insufficient living facilities. This study was carried out on the basis of the previous pilot project of CARE (1995-1998). The present study was a joint venture of CARE and ASRHA (Action for Slum Dwellers Reproductive Health in Allahabad), which was operational during 1999-2004. The project targeted 30,000 women and men in the reproductive age group (15-44 years) and 40,000 adolescents in 143 slums of Allahabad. The study was carried out to mobilize women, men and adolescent groups around reproductive health, to sensitize service providers to ensure accessibility, availability and affordability of quality services; and thereby improve the reproductive health of slum dwellers. It was found that 59% women had more than 2 children. 6.7% women had correct knowledge about menstruation. 54.2% women reported that spouses could also be responsible for infertility. 19.6% women knew that males are responsible for the birth of a male or female child. Only 2.9% of the women had complete and correct knowledge about functioning of the reproductive system. In 49% cases, husbands helped pregnant women with household chores and
reminded them to take medicine. During the baseline survey, 81% of the women knew that the child should be weighed within 2 hours of birth. 38% women knew that the child should be put to the breast within two hours of birth. 88% women had knowledge of 2 TT doses. 92% women knew about the number of antenatal check-ups (ANC) required. 78% women knew that delivery should be conducted at an institution. 73% women knew that 3+ ANC visits should be made during pregnancy, but only 31% had undergone them. 66% of the women knew about the check-up required during the first trimester, but only 39% had the check-up. At the time of final survey, 41% of the women knew that 2 TT shots were required during pregnancy, and an equal percentage of them had taken them. 12% of the women knew of IFA tablets and the quantity to be consumed, but only 5% of them did so. 72% of them knew of institutional deliveries yet only 33% of them availed this facility. 81% women who delivered during the final survey period said that the child should be weighed within two days of birth, but only 24% actually got their child weighed within the stipulated time. 35% knew that the child should be put to the breast within 2 hours of birth, but only 15% practiced it. ASRHA also organized vocational training for adolescent girls on the art of applying henna, beautician, tailoring, stitching, embroidery, making soft toys, painting, typing and computers. A minimal fee was charged for each course. It was found that girls had innumerable restrictions imposed on them and they spent most of their time doing all the household chores. 25.2% of the girls were dropouts from school, the major reasons being financial constraints and household chores. 36.4% of the girls did not discuss their problems with anybody. 8% of the girls had complete knowledge about reproduction. Only 2% AGs had complete knowledge about the reproductive function. Most of the boys spent time loitering with friends and watching T.V. Tobacco in the form of cigarettes, beedis, gurkha, betel leaf and liquor were the most common addictives among adolescent boys. 29% of the boys had discontinued education; monetary problem and a dislike for studies being the major reasons attributed to the cause. Only 9% of the boys had complete knowledge about reproduction. Only 3% had complete knowledge about reproductive function of the body. ASRHA arranged typing and computer education training for boys. The study also found that there were 13 ARCs (Adolescent Resource Centres) in the study area. It was suggested that there should be an increase in the number of ARCs, and interesting games should be made available at ARCs to sustain the interest of adolescent boys so that they visit ARCs regularly. Some income generation programmes should be initiated in collaboration with other agencies for skill development of adolescents, which would also sustain the interest of adolescents.
A Study on reproductive and child health care of women aged between 18 to 35 years in different strata of society. Bhopal : Sarojini Nadu Govt. Girls Post Graduate College, Centre for Women's Studies. 30 p.

Key Words : 1.HEALTH 2.REPRODUCTIVE AND CHILD HEALTH 3.RCH SERVICES.

Abstract : The health of mothers has been a subject of national interest in India since Independence. According to WHO's definition, "health is defined as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity". It also includes reproductive health, and functions and systems at all stages of life. In India, the life time risk of a woman dying from pregnancy or child birth is about 1 in 37, and any risk more than 1 in 100 is considered high risk. The study was based on a health survey of 240 married women aged 18-35 years of Bhopal municipal area and covered all socio-economic classes. In Madhya Pradesh, 88% women were involved in decision making; and 37% were involved in making decisions about their own health care. The socio-cultural norms and practices associated with menstruation in India have made it an unwelcome and often disgusting experience for women. Majority of respondents in lower strata were illiterate. A good percentage of the lower class was taking green vegetables, milk and milk products because of its easy availability at lower price, while intake of junk food was high in higher class. Awareness and maintenance of general hygiene was there in almost all classes, but awareness regarding safe drinking water was found to be low in lower class. In lower class and middle class, females used indigenous signs like stoppage of menstrual cycle and nausea as indicators of pregnancy, but high class women confirmed this by undergoing urine test. About 63% females of lower strata went for ante-natal visit. Majority of high class and middle class women took calcium and iron supplements and vaccination against tetanus during pregnancy. Deliveries were normal mostly in all strata. In lower strata girls were married off before 18 years; in medium income group girls were married between 18-25 years, and age at marriage rose to 25 years in higher income section. In lower class, early age at marriage of respondents and early child bearing, within the first year of marriage, was common. Majority of women in higher and middle class had knowledge about family planning, but only a few females in the lower class were aware about it because of lack of education about contraceptive methods. To end unwanted pregnancies, abortion was found to be the easiest method to get rid of the foetus. Abortion is on the rise due to unsafe sex practices. Media was a prominent source in providing awareness about family planning practices for women.
Reproductive and Child Health

in all 3 strata. Among the 3 strata of society, tubectomy was preferred as a method of family planning. Government, Family Planning Organizations and NGOs were actively participating in strengthening the safe motherhood programme. Non-availability of counselling services by Government and NGOs pertaining to nutritional intake, and family life education hampers the reproductive health of women. Delay in age of marriage should be encouraged. More awareness should be created regarding nutritional requirements of women. Government should organize health camps for detecting and taking corrective action for malnourished and anaemic girls and women right from the adolescent age.

Garg, Sunneela et al. (2000).


**Key Words**: 1. HEALTH 2. REPRODUCTIVE HEALTH 3. AIDS 4. REPRODUCTIVE MORBIDITY 5. SEXUALLY TRANSMITTED DISEASES 6. IMPACT OF RTIS 7. SLUM WOMEN.

**Abstracts**: Health sector priorities review has highlighted that reproductive tract infections (RTIs) and sexually transmitted infections (STIs) have ranked among the 10 most important problems in terms of healthy years lost. The present study was a socio-epidemiological study on (RTIs) and (STIs) carried out among women of an urban slum in Delhi. A total of 446 respondents were selected out of whom 380 were non-pregnant and 66 were pregnant eligible women. Data was collected through interviews. Majority of the women (88%) reported one or the other symptom of reproductive morbidity. Regarding the prevalence of major RTIs, there was high prevalence of bacterial vaginosis (41.5%), Chlamydia (28.7%), candidiasis (18.6%), trichomoniasis (4.3%), syphilis (4.2%), hepatitis B (5.8%) and hepatitis C (1.8%). Among 301 women screened for four infections (bacterial vaginosis, candidiasis, trichomoniasis and gonorrhoea), 56% were found infected. It was found that 251 (87.8%) women were symptomatic, whereas 35 (12.2%) women were asymptomatic. Higher prevalence of reproductive tract infection was observed in asymptomatic women. Important risk factor which contributed to overall load of reproductive morbidity were either of the partners frequently staying away from home. Poor personal hygiene, poor hygiene during menstruation or post partum period, and poor obstetric care were also associated with high prevalence of RTIs. A higher prevalence of reproductive morbidity was observed among users of
intrauterine devices (IUD). This could be due to insertion of intrauterine device under unhygienic conditions or lack of proper screening before insertion of IUDs. There is need to strengthen services and initiate information dissemination about reproductive health care issues among the community for their future betterment.


Key Words: 1.HEALTH 2.REPRODUCTIVE AND CHILD HEALTH 3.RCH SERVICES 4.DISTRICT WISE ANALYSIS.

Abstract: The objective of the study was to analyse the reproductive and child health status (RCH) in India. The survey was conducted in 504 districts of India, which were covered under RHS-RCH project sponsored by Ministry of Health and Family Welfare. Data collected by the 1991 Census of India was used for analysis. RCH indicators and 12 socio-economic and demographic variables were selected. 97 out of 504 districts depicted low status of RCH, and 81 of these 97 districts were in Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan, while the remaining 16 districts were from North-Eastern region i.e. Assam, Meghalaya, Nagaland and Arunachal Pradesh. Furthermore, within the 4 states Bihar was found to be (39/43) lagging far behind in terms of RCH utilization and demographic backwardness, where 39 out of 43 districts had low RCH status. Next most backward was Uttar Pradesh (29/68) with low RCH status. High RCH status was found in four southern states namely Andhra Pradesh (10/23), Karnataka (10/20), Kerala (13/14) and Tamil Nadu (21/22), and among the smaller states Himachal Pradesh showed good performance (8/12) and came under high RCH status. Leh in Jammu and Kashmir was one of the best performing district in India. Women's empowerment and enabling factors like female literacy and female employment were found to be an important determinant of RCH status and demographic development at district level. Infrastructure variables like number of ANMs, and road connectivity of villages showed a significant and positive impact on the RCH status of the districts. Furthermore, extent of urbanization and economic development also depicted a significant and promotive impact on RCH status. Muslim dominated districts were associated with a significant and negative impact on RCH status. The study suggested that special measures should be adopted for the districts falling in lower categories of RCH status. Provision of quality health care services, improved health infrastructure, and trained health personnel were essential for fertility control and population stabilization.

**Key Words**: 1. HEALTH 2. REPRODUCTIVE AND CHILD HEALTH 3. FERTILITY 4. UTTARANCHAL 5. UTTAR PRADESH.

**Abstract**: The study attempted to highlight the linkages between fertility and other crucial Reproductive and Child Health (RCH) components viz. antenatal care, safe deliveries and children's immunization; and other socio-economic demographic indicators at the district level in Uttar Pradesh (UP) and Uttaranchal. Data was collected from district level surveys conducted under RCH programme during 1998 and 1999, Censuses, Planning Commission documents, and Center for Monitoring Indian Economy (CMIE). Demographic Factors and Reproductive Health Care was found to be good in most of the hill districts of Uttaranchal compared to the districts of Uttar Pradesh. Dehradun was placed at the top with RCH status (2.4%) compared to the other districts. Districts which were found to be demographically backward with low status of RCH were Firozabad, Bareilly, Moradabad, Allahabad, Aligarh and Mirzapur in Uttar Pradesh. Fertility levels were found to be much lower in hill districts compared to districts in the plains of Uttar Pradesh. Western Uttar Pradesh had higher levels of fertility compared to eastern UP. However, the districts of Ballia (55.57%) and Mirzapur (55.7%) of eastern parts showed high levels of fertility. Safe deliveries and children's immunization were associated with significant and inhibitive impact on fertility. Women's empowerment and enabling factors like female education and work participation also depicted a significant and inhibitive impact on fertility. Muslim dominated districts showed higher levels of fertility compared with other districts. Results suggested that there was a need for proper implementation of health and family welfare programme and focusing attention on Muslim dominated districts, so that there is better utilization of RCH care to control fertility.
Gulati, S.C and Sharma, Suresh. (2003).
Women's reproductive tract infections in Uttar Pradesh and Uttaranchal.
New Delhi : Institute of Economic Growth, Population Research Centre. 11 p.

Key Words: 1.HEALTH 2.REPRODUCTIVE TRACT INFECTIONS (RTIs) 3.REPRODUCTIVE HEALTH 4.UTTAR PRADESH 5.UTTARANCHAL.

Abstract: Population policy document for Uttar Pradesh (2000) envisages substantial reduction in the proportion of women having RTI (Reproductive Tract Infection) and STI (Sexually Transmitted Infection) symptoms from 32% in 1997 to 10% in 2011 and 5% in 2016. A similar vision was set for the state of Uttaranchal. The present study purports to highlight the crucial factors influencing the incidence of RTIs/STIs and other inter-linkages between the incidence of RTIs/ STIs and other RCH (Reproductive and Child Health) components viz. utilization of antenatal and delivery care, children's immunization, contraceptive usage, socio-economic and cultural factors, and infrastructure variables through factorial investigations. The study also intends to prioritize the implications that facilitate control of the incidence of RTIs/STIs in Uttar Pradesh and Uttaranchal. District-wise database for RTIs/STIs amongst women in these states has been drawn from the Rapid Household Survey under the RCH Project conducted during 1998-99. The district level survey elicited information from selected currently married women aged 15-44 and men aged 20-54 years about reproductive health. Some specific information was also collected 3 months preceding the survey to classify men and women suffering from RTI/STI. The study revealed interstate variations in the incidence of RTIs/STIs among males which was found to be 3% in Himachal Pradesh and 21% in Uttar Pradesh. In general, the incidence was much higher in the Western districts of Uttar Pradesh and some hilly districts like Tehri-Garhwal (56.5%) of Uttaranchal. The eastern parts of Uttar Pradesh except Barabanki (52%) have evinced lower levels of the incidence as compared to the Western parts. Muslim dominated districts in Western Uttar Pradesh like Rampur (59%), Moradabad (58%), Pilibhit (56%), Shahjahanpur (48%), etc. depict relatively much higher incidence of women's RTIs. It was found that in most of the districts the prevalence rate was higher for females as compared to males, which could be due to frequent child bearing making women more vulnerable to RTIs. The incidence rates have been classified into three categories viz. low, medium and high, and women's incidence rate of RTIs/STDs ranges between 19-31%, 32-39% and 40-59% respectively. The factorial analysis highlighted strong and inverse linkages between incidence of women's RTIs/STIs
and utilization of RCH care. The important socio-economic characteristics depicting strong linkages with the incidence of RTIs turned out to be infrastructural characteristics like housing conditions, including pucca (permanent) to kaccha (temporary) house ratio, proportion of houses with basic amenities like toilet, kitchen and safe drinking water. The sectoral aspects of economic development like agricultural, industrial and overall urbanization level depicted strong linkages with the incidence of RTIs/STIs. Institutional deliveries depicted significant and inhibitive effect on the incidence of RTIs/STIs, and so did women's empowerment indices like women's literacy and participation. Districts with predominance of Muslim population depicted higher incidence of RTIs/STIs. The study also found that higher fertility was associated with higher incidence of RTIs/STIs. Hence, it is suggested that proper focus on components like RTI and infertility control would generate more credibility of the package of RCH services amongst people. The positive paradigm shift towards the RCH care package now is most appropriate and desirable towards control of RTI/STDs and thereby fertility too.


**Abstract**: The need for reproductive health programmes is now well accepted all over the world. Reproductive and child health interventions being implemented by Government of India are expected to provide quality services and achieve multiple objectives. The main focus of the district level household survey (DLHS) was coverage of antenatal care (ANC) and immunization services, assess the proportion of safe deliveries, contraceptive prevalence rates, and awareness about RTI/STI and HIV/AIDS. The sample size for DLHS-RCH survey was fixed at 1000 households from each selected Primary Sampling Unit (PSU). Data was collected through questionnaires. It was observed that around 95% of currently married women were Hindus, 2.7% were Muslims, and 1.5% were Christians. Approximately 15.2% of the women had suffered from at least one complication during pregnancy, which were swelling of hands and feet, paleness, visual disturbances, and weak or no
movement of foetus. Most of the deliveries in the district were normal; the number of normal deliveries was higher in rural areas compared to urban areas. Overall only 21.6% women reported delivery complications. Of the women who reported at least one complication post delivery, 51.1% of them sought treatment for their problem. The proportion of women who sought treatment was higher in urban areas (73.3%) than in rural areas (38.9%). About 100% of the younger women below 20 years of age and 83.2% women in the age group of 20-34 years had availed of ANC services. This indicated that services are reaching the target population. About 68.8% women kept their newborn children exclusively on breast milk for four months. Immediately after birth, the baby was given one drop of oral polio zero drop. Out of 180 children, around 29.4% had received polio zero drop. Percentage of children protected against six killer diseases shows that 87% were given BCG, 81.8% all the three doses of DPT, 78.9% all the three doses of polio drops, and 71.5% measles - overall, 67.8% of the children were fully immunized. The fully vaccinated status of children among SC/ST group was 57.7%, of illiterate mothers was 46.6%, and economically poor families was 56.4%. About 75% women were aware of what to do if a child got diarrhoea. About 63.3% women were aware of the danger signs of pneumonia, which is a major killer disease among infants. About 2.3% of the children had suffered from pneumonia within two weeks prior to the survey, and all mothers had sought treatment for their children, both in rural and urban areas. The ever use of contraceptives was 52.1%, highest (81.9%) in the age group 35-39 years, in the 40-44 years group it was about 80.5%, while it was least in the age group 15-19 years. The total unmet need for family planning in Pauri Garhwal was 17%. About 17% women did not want any more children, or wanted more children but after two or more years and were not preferring any method of contraception. In rural areas, health workers are deputed to visit each household in their work area to provide health care services to the community. About 52.6% currently married women (CMW) had visited government health facilities during the last three months before the study. About 25.7% of them visited private hospitals and 15.7% visited private dispensaries. Around 11.8% CMW and 4.4% men had suffered in the past from at least one symptom of RTI/STI. 86% women who reported abnormal vaginal discharge problem had not sought treatment, and among men who reported symptoms of RTI/STI, 63.3% had not sought treatment. Majority of males (74.6%) and majority of females (78.7%) mentioned uni-partner sex as one of the preventive measures against HIV/AIDS, and 12% males and 18% females were ignorant about HIV/AIDS prevention.


**Abstract**: Reproductive health programmes are now well accepted as a need all over the world. Government of India has launched Reproductive and Child Health (RCH) Programme to ensure that men and women have access to adequate information and services for reproductive health care. The main focus of the District Level Household Survey (DLHS) was to assess the coverage of antenatal care (ANC) and immunization services; proportion of safe deliveries; contraceptive prevalence rates; unmet need for family planning; awareness about RTI/STI and HIV/AIDS; and utilization of health services. The sample size for DLHS-RCH was fixed at 1000 households, i.e., 25 households from each selected primary sampling unit (PSU). Data was collected through interviews, questionnaires and observation. It was observed that the average number of annual births per women were lower at the extreme ages of women, peaked in the twenties, and thereafter declined with increasing age of women. About 22.9% of the women had undergone all the three check-ups during their pregnancy, and this figure was higher among urban women (46.5%) than rural women (16.3%). Most of the deliveries in the district were normal. The number of normal deliveries were higher in rural areas compared to urban areas, and higher among illiterate women compared to women with higher education. Caesarean deliveries were more in urban areas compared to rural areas. Overall, 23.9% women reported delivery complications. Government hospitals were utilized more by women in urban areas (50.3%), by illiterate women (100%), and by those belonging to low standard of living households (56.4%). Extent of full vaccination, i.e. BCG, three doses of DPT, three doses of polio and measles had been reported for only 59.0% children aged 12-23 months and 67.6% among children in the age group of 24-35 months. Complete immunization in the age group 12-23 months was higher in urban areas compared to rural areas, and in 24-35 months age group it was higher in rural areas compared to urban areas. The ever use of contraceptives was 52.1%, highest (81.9%) in the age group 35-39 years; in the 40-44 age group it was 80.5%, while it was least in the age group 15-19 years (12.1%). The percentage of ever users in case
of no surviving sons was 10.1%, which was lower than that of couples with no surviving daughters (12.9%). The total unmet need for family planning in Tehri Garhwal was 17%. About 17% women did not want any more children, or wanted more children but after two or more years, and were not practicing any method of contraception. Around 9.9% couples depicted unmet need for contraception. Only 22.9% of women who needed to visit a health facility have actually visited it. About 53% of currently married women (CMW) had visited Government health facilities during the last three months before the study. 21.2% of them visited private hospitals and 22.2% visited private dispensaries. About 30.1% CMW and 4.4% men had suffered in the past from at least one symptom of RTI/STI. Among women who reported abnormal vaginal discharge problems, 86% had not sought treatment, and among men who reported symptoms of RTI/STI, 63.3% had not sought treatment. Majority of males (74.6%) and females (78.7%) mentioned uni-partner sex as one of the preventive measures against HIV/AIDS. 12% males and 18% females were ignorant about HIV/AIDS prevention.


Abstract: The Reproductive and Child Health (RCH) interventions that are being implemented by Government of India (GOI) are expected to provide quality services and achieve multiple objectives. Decentralization of the program at the district level necessitated its evaluation at the district level. For this purpose, the GOI launched District Level Household Survey (DLHS) to evaluate the Reproductive and Household Package being launched under the program. Field work for the district of Etawah in Uttar Pradesh covered 1120 households. The total population enumerated in the contacted households was 5895, with 3101 males and 2794 females, reflecting a sex ratio of 901 females per 1000 males in Etawah district. Out of the 1053 households contacted, information was elicited from 805 eligible women. In India, 297 districts were covered in Phase 1 and the remaining 296 districts were taken up in Phase 2 of the DLHS - RCH Survey. In total, 14 districts were covered in North-West Uttar Pradesh in Phase 1 in 2002, and the remaining 12 districts were taken up
in Phase 2 of the DLHS - RCH Survey. The study found that housing, sanitation and hygiene conditions in Etawah seemed to be fairly good as only 17.8% of the contacted households were living in *kaccha* (temporary) houses, made of mud walls and thatched roofs, and 51.2% of the households had safe drinking water supply from taps. Literacy among women was 58.4% as 41.6% of the interviewed women were reported to be non-literate. The mean age at marriage for boys, who got married during three years prior to the survey, was 22.7 years. The crude birth rate in Etawah district is 20.498, and the crude death rate was 9.6 for 1000 live births. Infant mortality rate was found to be 66.42. Knowledge about family planning methods was almost universal in Etawah, and 98.5% women reported knowledge of any modern child spacing method. However, almost 73.3% women reported complete knowledge of all the modern methods of contraception. Female sterilization was reported by 13.9% of the couples and around 11.1% were using condoms. However, 2.8% women reported use of pills and 1.4% used IUDs. Around 22% couples used traditional methods. The usage of maternal health care services did not seem to be good, as no antenatal (ANC) check up was done for the last live/still birth in 31.6% cases. About 27.1% women who had live/still births received three or more ANC check ups. However, two or more tetanus-toxoid (TT) injections were received by 59.9% women. 8% women had 100 or more IFA tablets during their pregnancy. ANC services were utilized fully only by 3.1% women who had live/still births. Institutional delivery was reported only by 16.8% women, with only 6.5% women utilizing the government health facility. The percentage of women who started breastfeeding within 2 hours of child birth was only 6.2%. Around 83% women had live child births during the reference period, while the rest had still births. Immunization coverage among children was low, with 68.5%, 42.9%, 41.9% and 37.7% coverage for BCG, 3 doses of DPT, 3 doses of polio and measles respectively. Percentage of children aged 12-36 months who were given complete courses of all the four vaccines viz. BCG, DPT, polio and measles was only 31.3%. 57.5% women were aware of diarrhoea management, and 63.1% women had knowledge about pneumonia. 19.1% of the women mentioned that their newborn child had suffered from diarrhoea during two months prior to the survey, and 24.6% reported that their child suffered from pneumonia during the same period. Only 41.9% women were aware of Reproductive Tract Infections and Sexually Transmitted Infections (RTI / STI). 36.7% women were aware of HIV/AIDS, while 70.4% husbands had knowledge of HIV/AIDS. Reproductive morbidity was quite high - 27% women had pregnancy complications, 37.5% had delivery complications, and 27.7% women who had live/still births had post-delivery complications. Menstruation related problems were reported by 16.7% women. Around 37.2% women reported incidence of RTI/STI, whereas the incidence of RTI/STI was reported by 10.3% husbands.
Abstract: The Reproductive and Child Health (RCH) interventions that are being implemented by Government of India (GOI) are expected to provide quality services and achieve multiple objectives. The present study was done in Meerut district of Uttar Pradesh, which was covered in the second year of RCH, 2003. The District Level Household Survey (DLHS - RCH) focused on immunization services, coverage of antenatal care (ANC), proportion of safe deliveries, contraceptive prevalence rate, and awareness level about family planning methods, HIV/AIDS and RTI/STI (Reproductive Tract Infection / Sexually Transmitted Infection). Data was collected from 1063 households, of whom 543 were rural and 520 were urban. It was found that housing, sanitation and hygiene conditions in Meerut seemed be very good as only 5.3% of the contacted households were found to be living in kaccha (temporary) houses. Around 19.5% of the households had safe drinking water supply from taps. Literacy among women was 44.7% as 55.3% of the interviewed women were reported to be non-literate, and only 17.9% of the interviewed women had 10 or more years of schooling. Nearly 12.2% of the girls in rural areas and 6.3% in urban areas were married before the age of 18 years, the minimum legal age at marriage, while 26.8% of the boys in rural areas and 18.3% in urban areas got married before the legal age at marriage (21 years). The Crude Birth Rate (CBR) in Meerut district was 24.54 and crude death rate was 8.2 for 1000 live births. Infant mortality rate was estimated to be 68.13 per 1000 live births. Knowledge of family planning methods was universal as 100% of the interviewed women reported knowledge of any modern method of contraception, and 98.6% women reported knowledge of any modern spacing method. However, only 71.3% women reported knowledge of all modern methods of contraception. Around 58.5% of the husbands...
interviewed reported knowledge of no scalpel vasectomy (NSV). Current use of contraception was reported by only 45% couples. Female sterilization was reported by 18.2% couples, and around 13.4% were using condoms. However 3.3% women used pills and 2.4% used IUDs. Around 7.2% couples used traditional methods. The extent of usage of maternal health care seems to be good as only 22.1% women had no ANC check up for the last live/still birth. 69.8% women had received two or more tetanus-toxoid (TT) injections. 11.4% women received 100 or more IFA tablets during their pregnancy. Extent of safe delivery, attended by trained medical professional, either at home or in health institutions, was reported to be only 39.9%. Only 5% women started breastfeeding their infants within 2 hours of child birth. Immunization coverage among children in Meerut was low with 57.8%, 32.3%, 30.4% and 31.1% children receiving BCG, 3 doses of DPT, 3 doses of polio and measles vaccine respectively. Around 25.5% children aged 12-36 months were given complete courses of all the four vaccines. Immunization coverage for all the vaccines was lower for female children compared to male children. The predominant reasons for not vaccinating children were reported to be unaware of the need for vaccination (40%), place / time of vaccination not known (15.6%), ANM absent (11.6%), and fear of side effects (11.2%). Awareness of diarrhoea management was reported only by 78.2% of the interviewed women, and knowledge of any one of the danger signs of pneumonia was known to 91.4% women. Around 22.2% children born after 1st January 2001 had suffered from diarrhoea during two months prior to the survey. The awareness of RTI / STI seemed to be higher among husbands (54.1%) compared to women (40%), and knowledge about HIV / AIDS was also higher among husbands (85.6%) as compared to females (50.6%). 28.3% women who had live/still births since 01.01.2001 had pregnancy complications, 19.6% had delivery complications, and 22.7% had post-delivery complications. The side effects due to usage of contraception, namely female sterilization, IUD and pills were reported by 35.4% women. Menstruation related problems were reported by 20.7% women, and around 48.6% women suffered from RTI / STI. Around 88.8% women, who reported home visits by health workers, were satisfied with regard to the time spent by them. Utilization of Government health facilities for ANC was reported by 29.9% women. Only 7.9% women reported consumption of iodized salt, whereas 36.4% households used salt which was not iodized. The study suggested that there is a need to educate community people, ANMs, women, AWWs, adolescent girls, etc. about reproductive and child health care through campaigns, educational programs, counselling people, and using IEC material such as charts, posters, etc. so that their awareness level increases and their future becomes safe.
Self-reported symptoms of reproductive health problems of women in India. 
_Demography India_, 33(2) : 231-248.

**Key Words**: 1.HEALTH 2.REPRODUCTIVE HEALTH 3.MATERNAL HEALTH.

**Abstract**: Reproductive health has been till recently a neglected area in the public health domain of several developing countries including India. This study focused on some aspects related to prevalence rate of Reproductive Tract Infections (RTIs) among married woman aged 15-49 and factors associated with RTIs in urban and rural India. Data was collected through National Family Health Survey-2 (1998-99) on some common symptoms of RTIs namely, abnormal vaginal discharge, urinary tract infections and intercourse related pains. Demographic, social, behavioural and economic factors were considered. The prevalence rate of RTIs in urban areas was 37% and in rural areas 40%. Abnormal vaginal discharge and severe abdominal pain was found to be 45% in urban and 49% in rural areas. 42% reported pain or burning while urinating and 31% mentioned pain during intercourse in urban areas. On an average, women reported more than two symptoms of RTIs which were 2.32% in urban and 2.50% in rural areas. Highest prevalence rate of RTI symptoms were noted in the north-eastern states and Jammu and Kashmir. Northeastern states show prevalence rates within the range of 67% for Meghalaya and 42% for Arunachal Pradesh, whereas 61% women reported at least one symptom of RTI in Jammu and Kashmir. It was observed that woman having no children had the highest prevalence rate of RTIs (42% in urban and 43% in rural areas). Muslim women reported the highest RTI prevalence. Illiterate women reported high prevalence rate of RTIs as compared to literate women. Among the iatrogenic factors, induced abortions, spontaneous abortions and sterilizations were significantly associated with RTI prevalence in both areas. One important factor associated with RTI symptoms was the place of delivery. Home delivery was the greatest risk factor associated with RTI symptoms, and delivery in private hospitals had minimum risk. Highest RTI prevalence rate was observed for women who married at age 15 years and lowest for women married at 19 years or above. Those who were exposed to mass media reported fewer symptoms of RTI. Women who had experienced beating were more likely to have RTI symptoms than those who had not. It was found that women having a high standard of living had fewer symptoms of RTIs than those with a low standard of living. It was suggested that there is urgent need for improving
the implementation of reproductive health programmes and strengthening health education for mothers.

Reproductive and child health RCH 2: State programme implementation plan.

Key Words: 1. HEALTH 2. REPRODUCTIVE AND CHILD HEALTH (RCH) 2 MP 3. MATERNAL AND CHILD HEALTH 4. TRAINING HEALTH FUNCTIONARIES 5. MADHYA PRADESH 6. VISTAAR PROJECT.

Abstract: The Reproductive and Child Health Programme (RCH II) in Madhya Pradesh seeks to improve the health status of all women and children through improved access and quality Reproductive and Child Health Services with focused attention to the most vulnerable sections of society. The goals of RCH II are to reduce Maternal Mortality Rate (MMR) from 350 in 2007 to 220 by 2010, Infant Mortality Rate (IMR) from 75 (2007) to 60 by 2010 and Total Fertility Rate (TFR) from 3.2 (2007) to 2.1 by 2010. The achievement that took place during the year 2005-06 on Maternal Health were the appointment of 48 Post Graduate Medical Officers (Obs., Gyanae. Paed. & Anesth.) in Comprehensive Emergency in Obstetric Neonatal Care [CEmONC] and 125 Medical Officers appointed in Basic Comprehensive Obstetric Neonatal Care [BEmONC] facilities on a contractual basis; Incentive scheme for motivating health worker; Janani Kalyan Insurance Scheme; promotion of institutional deliveries, and Deen Dayal Mobile Health Clinics were opened in 11 tribal blocks through NGOs. Standard treatment protocols were set for managing different Obstetric emergencies and new born care; minimum equipment requirements for EmONC and BEmONC facilities were decided; and to facilitate the process of labour provision of a birth companion had also been made. The State Government had planned to enhance availability of facilities for institutional deliveries; for emergency obstetric care; hiring of service providers; infrastructure strengthening; and training of Medical Officers, health officers, staff nurses, lab technicians, etc. The other implementation plans of the State Government regarding maternal health in Madhya Pradesh were strengthening Antenatal and Postnatal services, increased access for safe abortion services, involvement of NGOs and promotion of Public-Private Partnership, and prevention and management of RTI/STI. The achievements that had taken place in the year 2005-06 regarding Child Health were IMNCF (Integrated Management of Neonatal and Childhood...
Illness) was implemented in 8 districts of Madhya Pradesh namely Bhind, Morena, Datia, Sehore, Bhopal, Vidhisha, Shivpuri and Gauna; 23 state core trainers and 193 mid level trainers were trained; there was reduction in the number of severely malnourished children from 5.5% to 1.2% and reduction of malnourished children by 50% through Bal Sanjeevni Campaigns; State Task Force and State Core Group have been constituted and regular meetings were being convened for monitoring routine immunization activities, for transportation of vaccines and supervision of immunization sessions; and alternate vaccine delivery system had been started in all the districts. Population Stabilization was an other area of focus and the achievements that were found during 2005-06 were Quality Assurance Committee had been constituted at the State level, public-private partnership (PPP) for providing family welfare services to BPL families had been started; training of ANMs in IUD-CUT 380 A had been started; sterilization wards were being developed in all districts hospitals; hiring of counsellors for family welfare services at all CEmONC facilities was in process; 40 surgeons had been trained for NSV operations; and 28,417 cases have been attended to in 2005-06. The State Government had also planned strategies for Adolescent Health, general concerns in RCH/Sex ratio, Health Management Information System, behavioural change communication, urban health, tribal health, and strengthening of health programmes and infrastructure. There is a need for the Health Departments to become the repository of institutional leadership and support for the health system in the State, capable of rendering decentralized, pro-active and user friendly health care services - preventive, promotive and curative to the people of the State, pursuing excellence in operation, expanding access to services and increasing the demand for services.


Key Words : 1.HEALTH 2.REPRODUCTIVE HEALTH 3.DOMESTIC VIOLENCE 4.MARRIED YOUNG WOMEN 5.YOUNG WOMEN 6.DECISION MAKING 7.MARRIAGE 8.MOTHERHOOD 9.EARLY MARRIAGE.

Abstract : In India, sexual activity and child bearing among young women takes place overwhelmingly within the context of marriage. Despite the high prevalence of early marriage, little is known about the lives of married young women including the
nature of the early years of marriage or the pressures they face. The objectives of the baseline survey were to examine married young women's knowledge of key reproductive health issues; understanding their reproductive health behaviour and practices. The survey was conducted in two rural settings in India - Vadodara Block in Vadodara district, Gujarat and Diamond Harbour Block in South 24 Parganas district, West Bengal. Respondents included young women who were newly married, first time pregnant or first time mothers, regardless of age. In Vadodara, out of 1,711 eligible women, 1,079 respondents were interviewed. In Diamond Harbour, out of 1,395 eligible women, 1,036 respondents were interviewed. In Vadodara, 99% respondents were Hindus and in Diamond Harbour, 55% were Muslims. Work participation among women declined after marriage, particularly in Diamond Harbour from 39% to 17%, and in Vadodara from 27% to 5%. Over 80% women in Vadodara and 48% in Diamond Harbour, handed over all their earnings to family members. In both sites, majority of the young married women did not have a say in decisions related to the purchase of various household items. In both sites, married women's mobility was extremely limited. Only 30% women reported that they could go alone to visit a friend or relative. Majority of married women in both sites maintained regular connection with members of their natal family. Only 31% women in Vadodara and 13% in Diamond Harbour felt that wife beating was not justified for any reason. In Vadodara (7.4%) and in Diamond Harbour (12.3%) married young women experienced physical harm in the year prior to the survey. 92% women in Vadodara and 86% women in Diamond Harbour were abused by their husbands. The median age at marriage for all respondents was 19 years in both sites. Majority of women (49% in Vadodara and 62% in Diamond Harbour) were aware about the concept of fertile period, while 12% and 13% could accurately identify a woman's fertile period. 15% women in Vadodara and 8% in Diamond Harbour did not have any knowledge about STDs. In both sites, Vadodara (22%) and Diamond Harbour (31%) women had heard about HIV/AIDS. In Vadodara, (14.6%) practised 'safe period' method or condoms (13.2%), while in Diamond Harbour oral contraceptive pills (31.8%) were frequently used. Joint decision-making of the first pregnancy was twice as high in Vadodara as in Diamond Harbour (56% versus 24%). Majority of deliveries (83% in Vadodara and 67% in Diamond Harbour) were attended by trained traditional birth attendants. It was customary in both study sites, to keep a woman in 'isolation' after the delivery in her natal home. Only 35% mothers in Vadodara and 53% in Diamond Harbour reported feeding colostrum to their babies. In Vadodara (27.6%) and Diamond Harbour (42.6%), immediate breastfeeding after delivery was prevalent. 85% mothers in Vadodara and 89% in Diamond Harbour reported some immunization of their babies. In Vadodara and Diamond Harbour, pregnant women received help in doing household chores (83% and 78%) respectively; and in accessing health services
(85% and 91%), as well as getting emotional support (97% and 92%) during pregnancy. Programmes need to constructively prevent misinformation and harmful practices, and address the considerable gaps that remain in maternal and child care and prevention of infection. It is critical to directly address and ameliorate women's social and economic disadvantage and isolation, as well as engage husbands, mothers and mothers-in-law in programmes for married young women.

Need for dialogue on reproductive and sexual health. New Delhi : Swaasthya. 4 p.

**Key Words** : 1.HEALTH 2.SEXUALITY 3.REPRODUCTIVE HEALTH 4.SEXUAL ISSUES 5.COMMUNICATION 6.FAMILY SIZE.

**Abstract** : This article collated baseline information, and aimed to sensitize couples towards reproductive health issues, and develop a module on gender sensitization. The study was divided into 2 parts - research and intervention. A sample of 51 males and 50 females were taken and information was collected through questionnaires. It was found that 19 women and 16 men in the sample never communicated with their spouses on entertainment issues; and 43 males and 35 females talked to each other about social visits. 100% men realized that vaccination of the child and size of the family were important issues for communication. The joint decisions of couples were low in deciding about the latest pregnancy, because it can be accidental. Four intervention sessions were conducted to help participants recognize health as a joint responsibility, the importance of communication, and to know the perception of men and women regarding women's morbidities. This session brought to light that both males and females had incomplete knowledge about women's health morbidities, men needed more information on common health problems and sexual issues; and men had a poor understanding about causes of ill health like anaemia, Post Menstrual Syndrome (PMS), etc. The positive outcome of intervention sessions was that, both men and women, expressed the need to enhance their communication skills. Two sets of home follow-ups were done after the second and fourth intervention sessions respectively. First home follow-up was done only with the wives of male participants and it was found that husbands started to communicate on reproductive health issues. The second home follow-up was done with the spouses of both, male and female participants. Nearly 73% (11 out of 15 males) males knew about their wives' association with Swaasthya and the work it performs. Approximately 47% males did not have knowledge about PMS and
anaemia, only 13% read about it in newspapers, but none of their wives had told them about these diseases. 60% (6 out of 10) females reported that their husbands talked to them about anaemia and 40% agreed that their husbands talked to them about PMS. It was recommended that men are more effective carriers of information to partners, and the myths regarding women’s health should also be addressed.


**Key Words :** 1.HEALTH 2.REPRODUCTIVE AND CHILD HEALTH.

**Abstract :** The present study was conducted to collect data on infant, child and maternal mortality, fertility, nutritional status of under-fives, common morbidities, organisations and delivery of MCH services, etc to know the current status and trends in RCH in Delhi. Data was collected from Census of India 1991, Registrar of Births and Deaths, Bureau of Economics and Statistics, Directorate of Health Services, Directorate of Family Welfare and from reports and surveys. Delhi faces very high population growth and one third of its population resides in slums, which have poor MCH service coverage. IMR, child mortality rate, maternal mortality rate and child birth rate are still very high. IMR in 1997 was 26 per 1000 live births, and the decline was only in post-neonatal mortality, not in neonatal mortality. Causes of infant mortality (institutional) were prematurity (36.43%), respiratory conditions (6.34%), septicemia (5.75%), pneumonia (5.15%), meningitis (3.92%), other causes in perinatal period (10.20%) and others (18.25%). Neonatal tetanus declined substantially. In 1998, only 75.3% children aged 12-23 months were fully immunised, excluding slum clusters, where only 44.6% were fully immunised. Among adolescents in a slum area, 55.45% were anaemic, 28.3% had goitre, and 37.2% had dental caries. About 41.6% women had their first pregnancy before 20 years of age. Health services need to be population based, and abortion and delivery services need to be augmented. Priority areas and special strategies for health services and IEC efforts are required for the slum population. Health centres need to be linked with defined areas and population. Family planning efforts focussed on spacing methods need to be promoted. A reliable health and vital statistics information system needs to be developed.

**Key Words**: 1. HEALTH  2. MATERNAL HEALTH  3. BEST PRACTICES MATERNAL HEALTH  4. CARE OF MOTHER  5. SEWA PROGRAMME.

**Abstract**: The Self Employed Women’s Association (SEWA) in Ahmedabad, Gujarat state of India is a union of informal women workers, and is engaged primarily in organizing women in income generation activities and providing them banking services through women’s bank. The present study was carried out to understand whether the training provided to health workers in antenatal care, delivery care and postnatal care can improve maternal care outcomes. It also aimed to identify the practices that can be taken to scale in the existing government health system. SEWA has selected one PHC area from each of the three blocks for its health inputs and intervention. 12 treatment and 12 control villages were selected for the study, covering 480 women, 22 TBAs and 11 female health workers (FHWs) from 24 villages. It was found that between 52% and 55% women in both the areas were literate, but only around 15% to 18% of them had studied beyond Class 8. The age of marriage of girls in this region continues to be low, and the average age of marriage ranged between 16.5 and 17.1 years. Between 53% and 63% of the girls were married before the legal minimum age of 18 years. In spite of widespread use of media to encourage parents not to marry their daughter before the age of 18 years, the practice of early marriage continues. Nearly 25% of the women become pregnant within one year of marriage, and an additional 30% between one and two years of marriage. This was found in both experimental and control villages. Women living in villages where the ‘Swasthya Sarthi’ programme has been implemented with the TBAs having been trained and Health Supervisors providing support to them (treatment area) were compared with those living villages where TBAs had not been trained (control area). Television has made an inroad in the villages of Gujarat, and one in two households owns a TV set. In the four experimental villages, 10% of the women reported that they had become members of SEWA Union. However, this
percentage was much smaller (3.5%) in the case of control villages. Between the two regions, this was the major difference. Women reporting a visit by TBA during their last pregnancy was significantly more in the experimental villages compared to the control villages. About 33% women reported that the TBA enquired about the status of their pregnancy in the villages where they had received training from SEWA, whereas in the control villages only about 13% of the women reported that TBAs visited them during the antenatal period. Also 92% of the women in the experimental villages registered their pregnancy as opposed to 77% of them in control villages. Taking two tetanus toxoid injections was quite common and accepted as a part of routine pregnancy care among pregnant women in both experimental and control villages, but taking iron and folic acid tablets to reduce anaemia during pregnancy was still a problem. Of the 100 tablets routinely given to pregnant women, only 33% them reported consuming more than 50 of them as per their own admission, in both the experimental and control villages. It was suggested that there is need to provide TBAs more comprehensive training and support in a way that they are able to take on a broader health promotive role, and not merely be trained to conduct aseptic deliveries. The public sector, in collaboration with NGOs, should take up a similar task of training the existing cadre of TBAs to serve the remote and backward areas within each state.
SCHOOL HEALTH


**Key Words**: 1.HEALTH 2.SCHOOL HEALTH SCHEME 3.DELHI.

**Abstract**: Considering the magnitude of work and administrative structure, the task of providing school health services to all pupils of Delhi state with uniform standards appears to be a difficult proposition. The present study was done to illustrate the structural and organizational features of various school health schemes in Delhi. Besides the three major agencies involved, i.e. Govt. of Delhi, MCD and NDMC, private and other agencies were also contributing significantly in covering approximately 3700 schools with around 19 lakh children. Organizational and structural features of school health services varied according to the providing agency. Government of Delhi owned 975 schools with ground 9,60,000 pupils, but its school health scheme could actually cover only around 531 (54.46%) schools. MCD divided its catchment area into 12 zones, and each zone a central school health clinic and a number of school health teams. A total of 12 central clinics and 66 teams worked under MCD. Each of these 66 teams had a doctor and a public health nurse, and had a weekly programme of visits. In each MCD school there was provision for a Medicine Bank. Every central clinic had facilities for routine investigations. NDMC schools were divided into 8 zones. Each zone had 10-15 schools and a main clinic. The main clinic had a 1 medical officer, 1 Pharmist, 1 Staff Nurse and 2 Class IV employees. The main thrust of all the three agencies was on health appraisals. There was provision for free spectacles and hearing aids for school children, if required. DT and TT vaccines were given to children at school by these agencies as per the recommended schedule. Results showed that MCD school health scheme was better organized than the schemes of other agencies. The study suggested that integration between various school health schemes in Delhi should be followed. It also recommended strengthening manpower and providing transport facility to minimized commuting time. It also suggested that every child should be examined at least four times before passing 12th standard.
Assessment of availability and working components of school health services in Delhi. Indian Journal of Pediatrics, 67(3) : 179-84.

Key Words : 1.HEALTH 2.SCHOOL HEALTH 3.WORKING COMPONENT 4.DELHI.

Abstract : The aim of the study was to generate data regarding availability and working components of school health services in Delhi. A total of 204 schools from various geographical zones in Delhi were surveyed. Data was collected through interviews with Principals of school. School health services were non existent in 27.45% of the total schools, and in another 27% schools, the visits made by school health team were only three or less during one academic year. The situation was much better in NDMC and MCD schools as compared to Government of Delhi schools, where 40 of the 82 schools did not have any health services. Among the 148 schools that had some form of school health services, 56 (37.83%) of them had only 3 or less visits, another 29.5% had 4-10 visits. The picture was better in MCD schools. Health education activity was conducted by school health teams in 106 (71.62%) schools, while 21.62% schools responded that no such activity had taken place during the last one year. Group talk was the commonest method used (73.88%), followed by display of charts/posters, etc. Over 60% of the total school had some provision for referral to a hospital or a special clinic. It was suggested that various school health schemes in Delhi should be integrated, and a uniform system and standards should be adopted. Removal of manpower problems and logistic deficiencies to improve the school health services was also suggested.

Proxy information of health problems in school children from parents using questionnaire and interview technique. Indian Journal of Community Medicine, 26(1) : 39-43.

Key Words : 1.HEALTH 2.SCHOOL CHILDREN 3.PROXY INFORMATION.

Abstract : The study was conducted in a convent school in Pune to identify and compare information obtained using the questionnaire, interview and clinical examination method to assess the health problem of school children. Information was sought regarding relevant past history, operations in the past, any major handicap and present health complaints of the school children. On comparing the information gathered from 361 subjects, it was found that there was a significant
discordance in the overall information obtained from the questionnaire and interview techniques. However, a concordance was observed between information on major health problems and history of operation. Majority of the general health problems, dental problems and malnutrition were detected only on clinical examination. Parents tended to mention skin and behaviour problems only during interviews. Teachers can be trained to observe and identify specific problems likely to be missed by both techniques. Interaction between parents and teachers would complement the school health check-up programme and make it more successful.


Key Words: 1.HEALTH  2.SCHOOL CHILDREN  3.HEALTH STATUS  4.NUTRITIONAL STATUS  5.ANAEMIA.

Abstract: The study was conducted in Ludhiana to assess the health and nutritional status of school children in the age group 5-16 years and to study their morbidity pattern. 776 students were examined to assess various variables, namely height, weight, medical history and general physical examination was done. The health and nutritional standards of the school children under study were found to be low, more so among girls, and malnutrition was prevalent in nearly all ages, both among boys and girls. The expected height for age as per ICMR standards was less in both boys and girls of all ages except the 15 and 16 year olds. The prevalence of wasting and stunting among these children was high (52.2% wasted and 26.3% stunted). 72.4% children were found to be suffering from some sickness at the time of examination. 26% had anaemia, with girls being more affected than boys. The study revealed the poor nutritional and health status of children and highlighted the need for increased concerted efforts towards improvement of nutritional and health status of school children.
TOYS TOXICITY


Toying with toxics : an investigation of lead and cadmium in soft toys in three cities in India. New Delhi : TL. 6 p.

Key Words: 1. RECREATION 2. TOYS TOXICITY 3. TOYS.

Abstract: India now produces and imports a wide range of toys namely plastic toys, soft toys, mechanical toys, educational games, etc. The present study was undertaken in the three metropolitan cities of Delhi, Chennai and Mumbai to investigate the total content of lead and cadmium in the sampled toys and the potential risk involved. All the toys samples were brought to a laboratory NABL (National Accreditation Board for Testing and Calibration Laboratories) in Delhi. Of 111 toy samples tested, 77 were found to be made of PVC materials and 34 toy samples were non-PVC plastic materials. 43 out of 60 toys samples purchased from Delhi tested positive for PVC, while all 30 toy samples purchased from Mumbai tested positive for PVC, but Chennai sample had only 4 out of 21 toy samples that tested positive. It was found that Pb (Lead) and Cd (Cadmium) was present in all the tested samples in varying concentration. Lead concentration was found to be very high in Mumbai samples (278.73 ppm) as compared other sampled toys of Delhi (27.8 ppm) and Chennai (20.67 ppm), and was also found to be higher than the national average (112.51 ppm). The average range of Cadmium was found to be higher in the toys from Delhi (26.53 ppm) as compared to Mumbai (2.61 ppm) and Chennai (3.10 ppm). Lead and Cadmium were also found in non-PVC plastic toys as well. Lead concentration in non-PVC materials ranged from 22.4 ppm to 56.2 ppm in Delhi toys, while it varied from 11.4 ppm to 32.4 ppm in Chennai toys. Similarly total Cadmium concentration varied from 8.74 to 16.35 ppm in Delhi, and 0.21 ppm to 14.5 ppm in Chennai toys. Presence of such heavy metals like Pb and Cd poses potential risk to children's health and equally damages and is a threat to the environment as such metals ultimately end up being locked in the soil and in the air. India as a state must provide safe environment to children so that they are not exposed to toxic chemicals. It can be achieved by implementing a robust regulatory mechanism and adopting a preventive approach. Also attempts must be made to replace materials having toxic potential by safer materials without heavy metals or other leachable chemicals.
TRIBAL HEALTH


Abstract : The present study was carried out to perform a rapid appraisal of the health problems affecting rural communities, especially women and children in Kotra tehsil of Udaipur district in Rajasthan. Through in-depth interviews, information was gathered from women and men of the community, primary health care providers, anganwadi workers, panchayat members, and representatives of NGOs that operated in Kotra. It was observed that median maternal height was 149 cms in Kotra. The occurrence of any illness in the last 2 weeks among children 0-35 months was 46%, 23.1% children had fever, 17% were wasted, 75% were stunted and 73% were underweight. Health care was provided by government physicians (9), male paramedics (26), ayurvedic doctors (8), ANMs (64), private unqualified providers (23) and NGO workers (21). Fully immunized children in rural Rajasthan were 13%. The community considers about 4 children as the ideal number of children for a couple to have. Most women and their families appeared to be against tubectomies for limiting their families. Many women felt that they would not be able to perform heavy work for several days after the operation. Discussions with women revealed that they were familiar with common methods of contraception, i.e. tubectomy; oral pills, condoms and copper - T. Panchayat members felt that ANMs were responsible for poor use of non-terminal methods of contraception. 1.6% deliveries took place at health centres. Most deliveries were conducted at home by traditional birth attendants. Alcoholism was common among men. Purdah (veiling) was not followed among the tribals in Kotra. Kotra is the only block in the state that has sex ratio favourable to women. A few NGOs have been working in Kotra for several years, notable ones among them being Seva Mandir, Aastha and Vanvasi Kalyan Parishad. Seva Mandir provides health education to families. Aastha has been organizing communities and also strengthening Panchayati Raj Institutions (PRIs). Vanvasi Kalyan Parishad was undertaking the Tuberculosis Control Programme in the area. Well trained and well supported paramedics can provide primary curative care in
rural areas. ANMs are expected to provide some basic management for childhood illnesses, treat malaria, etc., but are not officially allowed to do much else as far as curative care is concerned. They can be trained to perform tasks related to integrated management of childhood illnesses, and provide treatment for several gynecological conditions. There is need for a flexible and quick special management structure to implement the recommendations so that rural communities can have better health care.

HNB Garhwal University, Departement of Anthropology, Srinagar, Uttarakhand. (2006).


**Abstract**: Tribal and remote communities are more susceptible to health and nutrition related problems largely due to ignorance, poor socio-economic conditions, inaccessibility to modern health facilities and deep-rooted traditional beliefs and taboos. This study was designed to investigate the nutritional profile of neonates, pregnant and lactating women and traditional child care practices. The study was conducted in the tribal inhabited blocks located in Dehradun, Chamoli and Udham Singh Nagar districts of Uttrakhand state of India, and the three major tribes selected were the Jaunsaris, Bhotias and Tharus. Data was collected through a house to house survey and a sample of 137 infants, including 53 neonates and 84 suckling infants, and 187 women including 53 pregnant and 81 lactating mothers were selected. The mean age of marriage was found to be highest among Bhotias (21.45 years) compared to Tharus (18.69 years) and Jaunsari women (16.03 years). Highest illiteracy was among Jaunsari women (67.7%), followed by Tharu women (42.3%), whereas in the Bhotia tribe around 41.15% women had attained above 10+2 level of education. The mean age at first delivery among Bhotia, Tharu and Jaunsari women was 23.16, 20.52, and 18.86 years respectively. A vast majority of women among all tribal groups were housewives. Regarding sucking pattern of infants, Tharu neonates showed the highest sucking episodes (7-9 per day); among the Bhotias majority of them (58.8%) had between 4-6 sucking episodes per day, and the rest
(41.2%) had 7–9 episodes. In the case of Jaunsaris, majority of neonates (61.1%) suckled between 7–9 times a day, followed by 33.3% of them who suckled 4–6 times a day. The study showed that Jaunsari lactating mothers of infants were shortest, lightest but fattest of the 3 groups, whereas pregnant women of Tharu were the leanest among all the groups. The mothers of new born babies in Jaunsari and Bhotia tribes were taller as compared to pregnant women, whereas the Tharu women with nursing infants were shortest. The study found that the intake of various nutrients (Protein, Fats, Energy, Carbohydrates, Calcium and Iron) by pregnant, neonate’s mothers and lactating mothers of Jaunsari, Bhotia and Tharu tribal women was much below the level recommended by ICMR, 2002 (Indian Council of Medical Research). The daily calorie intake of the sampled infants of all the tribes was less than the level recommended by ICMR, and ranged between 43 kcal/day to 280 kcal/day. Due to this, the majority of infants had slightly low weight-for-age and low weight-for-stature (height). The percentage of stunted neonates in all three tribes was very high, as revealed by height or length for age; the percentage of short infants was less among suckling infants compared to neonates. Majority of all the three tribes were only mildly malnourished as per their weight-for-age indicator. It was suggested that Public Awareness Programmes should be launched in tribal areas to inform about the benefits of a balanced diet, and to dispel doubts about food items. Public health authorities of the state should get together and explore various health aspects of the tribal population. A state level policy, with proper monitoring system for tribal welfare, would help in integrating the ongoing development activities with special emphasis on women and child development.

Kumari, P. Vasantha. and Obulesv, M.C. (2003).
Knowledge and practices of reproductive health among tribal adolescents.

Key Words : 1.HEALTH  2.REPRODUCTIVE HEALTH  3.TRIBAL ADOLESCENTS
4.ADOLESCENT 5.HEALTH.

Abstract : The present study was undertaken to identify the level of knowledge and practices of reproductive health issues among tribal adolescents, and to find out the influence of sex, age and education on knowledge and practices of reproductive health issues among tribal adolescents. Duribili and Nereduvalasa in Kurupam Mandal and Kesarigutta of G.L Puram Mandal of Paravathipuram revenue division, Vizianagaram district were selected as area of the study. 'T' test and ANOVA were employed to find out the significance level. From the three hamlets, 50 male
and 50 female Savara tribe adolescents were taken randomly as sample of the study. It was revealed that knowledge of males is higher than females. Even in practices they were in leading position indicating that males have more knowledge and better practices about reproductive health. They were more cautious and cared for themselves. It was further found that age has more influence on knowledge and practices of reproductive health among the tribal adolescents. They possessed higher knowledge and had better practices with increasing age. Adolescents who have completed their secondary education level possessed higher knowledge and have better practices regarding their reproductive health.


Abstract : The study was carried out to examine the health problems of Juang aborigine tribes of Keonjhar district of Orissa. A sample of 21,971 Juangs living in 147 villages with low literacy rate was taken, where male ratio was 14% and female ratio was 2% only. The main causes for their health problems were lack of cleanliness, unhygienic preparation of food, inadequate food habits, etc. It was found that their food pattern was never systematic and standardized. The meal and amount of food they eat depended on availability of food materials in different seasons. Their food consisted of green roots and tubers collected, besides honey, edible insects, flowers, fruits and eggs, jackfruit, mango and kendu, etc. Almost all the Juangs were below the poverty line, and the Government machinery had failed to improve their status. The houses were situated in a scattered manner on valley slopes. From July to April, the weather was severely cold, which affected them badly because they lived in thatched huts and had no woollen clothing. They suffered from cold for 6 months in a year. Males went hunting collectively during the non-agricultural period. While grazing goats, cows, etc. in the forest, there was uncertainty of food and drink that affected their health. After delivery, mothers never fed the baby on time but only when the baby cried. Women did not take regular baths, which was very unhygienic. At the time of cooking, sleeping, moving around, Taila preparation, etc. they had to remain in smoke, which caused throat and chest problems. Juangs used to take 'Pika' which was made out of 'Saal leaf' and 'Tobacco', which was harmful to their health. In home deliveries without technical
guidance, both mothers and children faced long-term health problems. Due to poverty, they preferred taking herbs available in the jungle and avoided taking medicines in most of the diseases. There were many blind beliefs prevailing in their society, which caused health problems. Juang habitations were far from Primary Health Centres, Community Health Centres and Hospitals so they could not avail the facility of free medicines and health check ups. Fever, Malaria, Tuberculosis, Bronchitis, Skin diseases and Stomach problems were common in their society. Once they got a disease, it lingered on for 2 to 3 months. It was suggested that special and specific health projects should be started to improve the health status of Juangs. The Gyana-Mandir system should be reintroduced to improve the health and educational status of Juangs, and promote healthy habits.


Key Words: 1.HEALTH 2.REPRODUCTIVE HEALTH 3.CONTRACEPTIVES 4.ABORTION.

Abstract: This article analyzed the contraceptive use pattern and abortion seeking behaviour of people in Jharkhand and Chhattisgarh State. All the districts of these two states were categorized into 3 - districts were proportions of scheduled tribes were less than 30%, 30-50%, and 51% and above. One district was selected from each district category in both states; Primary Health Centers (PHC) were grouped into two, and one PHC was taken from each group of PHCs. A total of 24 sub-centers from each state, 48 villages with 10 households in each village, which included 940 currently married women, were taken. Information was gathered through questionnaires and interviews. In Jharkhand and Chhattisgarh, the percentage of scheduled tribes was 61% and 22% respectively. In Jharkhand, 41% women had 3-4 children. Among married women aged 15-44, 98% in Jharkhand and 100% in Chhattisgarh recognised at least one method of contraception. Female sterilization was the most common method in both the states. Only 25% women in Jharkhand and 42% in Chhattisgarh knew about condom. In Jharkhand, currently married women aged 35 and above were 3.7 times more likely to use any method of contraception, while in Chhattisgarh, the ratio was 2.8 times. In both states, almost 50% of those sterilized received follow-up care after sterilization. About 66% married women in Jharkhand and 52% in Chhattisgarh did not give any choice regarding contraceptive method. By using contraceptives, health problems were
faced by 17% and 35% women in the two states, respectively. Nearly 81% women in Jharkhand and 94% in Chhattisgarh reported that cleaning (dilation and duration), in other words abortion could be done by doctors; and 58% and 69% suggested medicine as a method of abortion, respectively. In both states, 75% married women were aware of the place and person who could perform abortions, and older women were more aware about abortion services provided in Government hospitals. Abortion prevalence rate in Jharkhand was 9.6% compared to 7% in Chhattisgarh. The most common abortion morbidity was high fever, excessive bleeding, pain in lower abdomen, giddiness and headache. It was suggested that in order to avoid abortion, women should use one or the other method of family planning, which is available at their doorsteps, in consultation with ANMs and Anganwadi workers. The myths and misconceptions regarding contraceptives should be removed for better and effective use of these methods.


**Key Words**: 1. HEALTH 2. FERTILITY 3. FERTILITY TRIBALS 4. TRIBAL FERTILITY 5. AO NAGA TRIBES 6. TRIBE AO NAGAS.

**Abstract**: The study was undertaken to investigate how a few biological and socio-cultural features like birth order, family type, mother's education, etc. are related to fertility and mortality among the Ao Nagas of Nagaland. A sample of 150 ever-married women was taken from Mokokchung district, Nagaland. In-depth interviews and other secondary sources were taken to collect data. Only those women were interviewed whose husbands were alive, and who had at least one child. Results showed that mean conception and abortion was high among those women who experienced menarche at a young age. 58% women got married at 21 years of age. It was observed that those women who were married before 26 years, experienced high incidence of pregnancies and live births in comparison to those mothers who married at the age of 26 years or later. Miscarriage was high, 18.1% among women in the age group 44-48 years. In the age group 19-23 years, only 1.25% women reported the incidence of still birth, and in the age group 24-28 years, 1.44% women reported the same. Usually the incidence of stillbirth was found only in earlier pregnancies. The frequency of miscarriage was relatively higher from 4th birth order onwards, and in the 8th birth order, the frequency was as high as 26.92%. Respondents who lived in joint families reported higher incidence of
embryonic wastage in comparison to those mothers who lived in nuclear families. Incidence of still birth was seen in women from nuclear families only. It was found that fertility level declines steadily with an increase in the educational level of the mothers. Among illiterate mothers, abortion rate was 2.33% and in the literate category the abortion rate was 7.02%. Approximately, 7.02% mothers were educated up to primary level, 9.83% were educated up to middle school, and 4.31% were educated up to high school level. So it can be concluded that age at menarche, mother’s age at childbirth, and birth order played a major role in determining the fertility rate among the Ao Naga women.
VITAMIN A DEFICIENCY

Sircar, B.K. et al. (2001).
Impact of vitamin A supplementation to rural children on morbidity due to diarrhoea. *Indian Journal of Medical Research, 113*: 53-59.

**Key Words**: 1. HEALTH. 2. DIARRHOEA. 3. MORBDIDITY. 4. VITAMIN A SUPPLEMENTATION.

**Abstract**: This study was undertaken to evaluate the effectiveness of vitamin A supplementation to 404 rural children below 4 years in reducing the incidence of diarrhoea. Results show that there was no significant difference in the incidence of diarrhoea among rural children supplemented with vitamin A with a dose of 200,000 I.U. as compared to a smaller dose of 50,000 I.U. during a one year follow up period. This study recommended that for control of morbidity due to diarrhoea, supplementation of vitamin A with a dose of 50,000 I.U. is sufficient. This would be cost effective as well suitable for younger children.


**Key Words**: 1. HEALTH. 2. IMMUNIZATION. 3. VITAMIN A DEFICIENCY. 4. NATIONAL IMMUNIZATION DAY.

**Abstract**: The study was undertaken to use National Immunisation Days to screen and assess the vitamin A status of under five children and to deliver vitamin A solution to them in slums of Chandigarh. The assessment of vitamin A deficiency (VAD) was done in a random sample of 1,304 children during the third round of Pulse Polio Immunization, and delivery of Vitamin A solution was done during the fourth round of Pulse Polio Immunization in 1999-2000 covering 27,642 children. The prevalence rate of VAD was 24.6%. No case of side effects or toxicity due to vitamin A administration was reported. Five parents refused vitamin A solution. The strategy to assess and deliver vitamin A during National Immunization Day was found to be feasible and successful and could be a basis for launching similar programmes in other areas of India, where VAD is a public health problem.

**Key Words**: 1. HEALTH 2. NATIONAL IMMUNIZATION DAY 3. XEROPHTHALMIA 4. SUPPLEMENTATION.

**Abstract**: The objective of the study was to assess the feasibility of linking Vitamin A delivery with National Immunization Days (NIDs) and to see the impact on xerophthalmia. An intervention study of mass distribution of Vitamin A solution was undertaken to control widespread xerophthalmia prevalent in children living in about 26 slums of Chandigarh in the year 2000. Two rounds of mass distribution of Vitamin A solution covering 27642 and 31762 children in 1-5 years of age in first and second rounds, respectively were undertaken. It was found that the program achieved a vitamin A coverage rate of 99% in first round and 88% in second round. Only two parents refused Vitamin A solutions. No side effects or cases of toxicity due to Vitamin A were reported by health institutions in the area or in a stratified random sample of 101 children. There was a significant decline (13.4%) in xerophthalmia after the two rounds of mass distribution. The strategy to deliver Vitamin A was successfully integrated into NIDs and appeared to achieve a significant decline in xerophthalmia.