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5, Siri Institutional Area, Hauz Khas
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DCWC Research Bulletin

About the Document

Documentation Centre for Women and Children(DCWC), NIPCCD collects valuable research material in the area of women and children from different sources. Abstracts of these published and unpublished studies/ articles are compiled to present the vital information in a compact, encapsulated form to facilitate its users through its publication “DCWC Research Bulletin” brought out every quarter. The digital version is posted on NIPCCD website (www.nipccd.nic.in) on the slot dedicated for Documentation Centre on Women and Children for reference of readers.

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A. Research Abstracts on Child Development

CHILD ABUSE

1. Chetna (2008)
Use or Abuse? : A Study on the Substance Abuse among Street and Working Children in Delhi. New Delhi: CHETNA
G19137

Background: The children on the streets had to drop their dreams and are forced to adopt a lifestyle due to various reasons, for their survival on streets. Majority of street children work for a living and almost half of the working street children are self-employed such as rag pickers, hawkers, magazine and other vendors across the roads and shoeshine boys. Most of the children in Delhi are exposed to dirt, smoke and other environmental hazards. While, the problem of drug abuse, remains one of the vital concerns for humans, and adversely affects the lifestyle of these children as well. With mere resources being provided to these children, the life of the children on street remains devastated.

Objectives: To understand the life style of street and working children in Delhi; to understand the causes and factors of substance abuse among children; to estimate the magnitude of substance abuse among street and working children; to understand the health aspects of the addicted children and their perception related to drug abuse.

Methodology: Exploratory study, focused only on boys in the age group 8-18 years. The sample size was 63, taken from Delhi slums. Simple random sampling method was used along with participatory observation, interview schedules focused group discussions and case study was undertaken.

Findings: The findings reveals that majority (95.24%) of the respondents were engaged in some form of work. Amongst them, majority were engaged in rag picking (38.3%), followed by selling balls and toys (16.67%), casual labours (11.67%), working in shops (6.67%), and other activities (26.67%) as beggars, shoe shining or even stealing. Shelter information about the children reveals that majority of the children were staying at their homes (60.32%), and some staying in footpaths (9.52%), night shelter (4.8%) while there were other forms of stay for some children(25.4%) as temples, railway stations etc. Most of the

children (55%) took three or more meals a day, while for some children (5%) it was difficult to get just once a meal per day. 79.4 percent of the respondents were willing to study. Major reasons for leaving homes were due to search for good job opportunities (46.03%), accompanied their parents (36.51%), or due to lack of parental care(12.7%). The study further revealed that majority of the respondents (57%) were working in Delhi for more than a year, while 73 percent were addicted to drugs. The daily income of one-fourth(25%) of the respondents were more than Rs. 150, while majority of children (61.67%) were working for 8-12 hours a day, contradictory to the Child Labour (Prohibition and Regulation Act, 1986). More than half of the drug addicted population (54%) was using correction fluid while another 47 percent of the respondents were addicted to at least three or more than three forms of substance abuse as correction fluid, ganja, cigarette, gutka or alcohol. Level of drugs usage was found to be 1-5 times a day amongst majority (50%) of the respondents, followed by more than 5 times a day (32.6%) while remaining (17.4%) used once a day. For procuring of the substance abuse, more than three-fifth (62%) spent their earnings on it, while just 13 percent supported their families with the money they earn. The psychological view point of using these substance revealed that majority (58%) of children were using drugs to reduce their tension, while according to 22 percent children there was no specific reason and opined that due to addiction they are using drugs. The medical problems such as headache, cough, fever, pain in ear, mouth, chest and stomach etc. were reported by 52.38 percent respondents. Regarding awareness about the harmfulness on drugs reveals that majority (65.22%) of the children addicted to drugs were not aware of the harmful effects of drugs. While surprisingly, 34.78 percent of respondents even after knowing the harmful effects of drugs on them were addicted to it.

CONCLUSION: The right to survival included rights to adequate food, shelter, clean water, primary health care and others, which supports the survival of the child. This right comprises of the element of formal education, leisure and recreation and full development of the child. It also encompasses their right to participate and should be allowed in the decision making process in the families. It also includes protection from all forms of child abuse, neglect, exploitation. Despite the existence of the rights, these children on the street are discriminated by the society and are forced to live in very pathetic conditions from homelessness, abuse, neglect, diseases and unequal access to education and justice systems that do not recognize their needs.

KEYWORDS: 1.CHILD ABUSE 2.SUBSTANCE ABUSE 3.CHILD PROTECTION 4.STREET CHILDREN 5.WORKING CHILDREN 6.RAG PICKER 7.CAUSES 8.CHILD HEALTH 9.DRUG ABUSE 10.STREET CHILDREN 11.DELHI

CHILD WELFARE

2. Sahoo, Swapnil et al. (2015).
Changing Social Milieu and Emotional Disorders of Childhood. *Journal of Indian Association Child Adolescent Mental Health, Vol. 11(4) : 279-305.*
G19281

BACKGROUND: The Indian society has been undergoing a visible change due to various reasons resulting in a change in social and family milieu. Children and adolescents being recipients of the changing family set up, changing relationships and the cumulative stress face numerous problems. Emotional disorders of children and adolescents are on the rise among the different psychiatric disorders of children. Parent, child and environmental factors have been implicated in the development of such disorders.

AIMS: To explore the conflicts of children with emotional disorders and to find the association of the conflicts assessed on Sentence Completion Test (SCT) and Children's Apperception Test (CAT) with the clinical variables from the case study.

METHODOLOGY: Retrospective study of 27 children and adolescents diagnosed as emotional disorders were taken and conflicts were assessed by Sentence Completion Test and Children Apperception Test, which were analyzed with clinical variables.

RESULTS: Majority of the patients (88.9%) belonged to middle and low socio-economic status and about 60 % were residents of urban set up. Dissociative disorder was found to be the most common (44.4%) diagnosis in this sample which was closely followed by depression (40.7%). The mean IQ of the sample group was 96 (SD -8.68). Majority (77.8%) of the children both males and females report having an insecure relationship with the mother and a need for affection. Around 29.6 percent of children both males and females seek support from a source outside the family. Majority (59.3%) both males and females have a fear of abandonment by the parents and report disturbed relationship with both the parents (44.4% with father and 48.1% with mother). Mostly female children (61.1%) had disturbed relationship with mother whereas most of the male children (66.6%) had disturbed relationship with father. Majority (63%) perceive themselves as weak and timid in the face of authority. Lacking in ability to express (74.1%) and poor self-confidence (70.4 %) are reported in most of these children in the study. Most of the children both males and females (55.6%) perceive studies as favorable and around 25 percent children report failure in exams as the greatest fear in their lives. In addition to all these, around 48 percent of these children report studies to be the most important part of their lives. Need for autonomy has been more associated with mother's

inconsistency (62.9%) than father's inconsistency (40%) in children both males and females. 25.9 percent children of both genders have reported oral frustration needs in terms of feeding problems. Need for affection has been found to be associated with an insecure relationship with mother in 66.6 percent children of both genders. 44.4 percent children of both genders have reported a negative attitude towards heterosexual relationships. 37 percent of the children have reported sibling rivalry. Around 63 percent of the children, both males and females reported positive attitude towards life, 85 percent children reported constructive wish and 55 percent children perceived studies to be favorable.

CONCLUSION: Poor parenting and poor inter-parental relationship have been found to be an important contributing factor in emotional disorders of children and adolescents. Results also suggest the role of inadequate peer relationships in the maintenance internalizing emotional disorders. The changing social milieu also has some underpinnings in the modern day family set up and thus probably adding onto the mediating variables responsible for emotional disorders.

KEYWORDS: 1.CHILD WELFARE 2.ADOLESCENTS, PARENTING, SOCIETY, SENTENCE COMPLETION TEST (SCT) 3.CHILDREN'S APPERCEPTION TEST (CAT) 4. EMOTIONAL DISORDERS 5.INSECURE RELATIONSHIP 6.ORAL FRUSTRATION 7.INTER- PARENTAL RELATIONSHIP.

EDUCATION

3. Moharana, Kalyani et al. (2015).
Assessment of Knowledge and Attitude of Trainee School Teachers Towards Identification and Management of Specific Learning Disabilities Children in Selected Training Institutions of Odisha. *PARIPEX: Indian Journal of Research*, Vol. 4(10): 5-7.
G19282

BACKGROUND: In any normal school one can find children with mild learning disabilities. Specific learning disability (dyslexia, dysgraphia, and dyscalculia) afflicts 5–15 percent of school-going children. Making the child aware of a disability is a great service to the child. Unless such children are identified and properly treated, they may develop secondary emotional, social, and family problems. Increased feeling of helplessness, hopelessness, low self-esteem and lack of assertiveness makes an individual rejected socially. Several studies have been conducted in India to determine the prevalence of learning disabilities in school children which has been reported to be 3-10 per cent among students population.

OBJECTIVES: To assess the socio-demographic profile of trainee school teachers; to assess the knowledge & attitude of trainee school teachers towards identification and management of specific learning disabilities children; to suggest appropriate recommendations to manage the situation.

METHODOLOGY: One district from each zones (four zones of the state of Odisha) were randomly selected, whereby the District Institution of Education and Training (DIET) located in those district was taken into consideration. Total 269 trainee school teachers undergoing training during the year 2013-14 and 2014-15 were taken as study subjects. Data was collected using a pre-tested & pre-designed questionnaire.

RESULT: Majority of the respondents (93.7%) were in the age of 18- 25 years. Most of them (59.9%) were females. Out of all 96.3 percent were unmarried. Most of the respondents (81.4%) belonged to rural areas. All the trainee school teachers (100%) had studied in general school and none of them had any exposure on specific learning disabilities child in their families. With respect to the knowledge questionnaire score, 89.60 percent subjects obtained 0-5 marks, while very little strength (0.37%) subjects obtained 16-20marks. While none of them have secured marks more than 50 percent. According to attitude scale score mostly (94.80%) scored between 63- 93 marks. This scale reveals that most of the attitudes were favourable, with a mean score above 62 marks towards specific learning disabilities children. About 44.1 percent respondents had some previous experience with LD either during their teacher training period or through some other exposure methods prior to this assessment. 26.5 percent respondents had seen people or friends with suspected LD in the past prior to this assessment and were able to recall that information.

Conclusion: Even though most trainee school teachers had poor knowledge regarding identification of SpLD in children but most of them had favorable attitude. Specific guideline or learning module may be developed to improve the knowledge and attitude of trainee school teachers. The teachers need to be taught on the topic of SpLD and identify these special children. The general public & parents to be made aware so that this problem has early diagnoses & prompt treatment can be made.

KEYWORDS: 1.EDUCATION 2.LEARNING DISABILITIES 3.SPECIFIC LEARNING DISABILITY (SPLD) 4. DYSLEXIA 5.DYSGRAPHIA 6.AND DYSCALCULIA 7.DISTRICT INSTITUTION OF EDUCATION AND TRAINING (DIET) 8.LEARNING MODULE.

4. Ali, Imam and Singh, Gyan Pratap. (2015)
Influence of Gender, Parental Education and Parental Occupation on
Mathematics Achievement of Secondary School Students. *PARIPEX:
Indian Journal of Research*, Vol. 4(11): 187-190.
G19283

INTRODUCTION: Mathematics has played a decisive role in building up in human civilization. But in the present social set-up, mathematics is more important for the common man. In this age of taxes, insurance premium savings and interests and rents, a person only with good mathematical background can be reasonably sure that he is getting his due. A well-grounded understanding of math is an essential for everyday life as for higher study in the fields of science & technology. Academic achievement is a paramount importance particularly in the present social, economic and cultural context. Thus, the school tends to emphasized achievement which facilitates among other things, the process of role allocation for the social system.

OBJECTIVE: To compare the mathematics achievement of secondary school students on gender basis; to study the influence of parental education on math achievement of students; to study the impact of parental occupation on math achievement of students.

METHODOLOGY: Descriptive Survey Method was used in the study. The sample consisted of 1127 secondary school students, selected from 14 schools of central U.P. of India, in which 793 (70.36%) were male and 334 (34.96%) were female students.

RESULTS: The results of the analysis of data shows that the parental education and father's occupation had significant effect on math achievement scores on gender and working mother's. It showed a significant difference between achievement in mathematics of males and females(df=1125, t=0.26).For studying relationship between parents education and their children's achievement in math the data was categorized into three groups, i.e., illiterate, education up to class 12th, and degree levels & above, on the basis of their parents education. The mean math scores of their children of these groups were 16.04, 17.55 and 27.11 respectively. Analysis of variance of the mean scores of the three groups gives F value as 8.86, which is significant at 0.01 level, with df 2,1124. This implied that there was a significant overall difference in the means of these three groups. The mean achievement scores of children of illiterate fathers was 16.04, SD=6.99 and in case of children of up to class 12th fathers education the mean achievements cores was 17.55, SD=7.99 and in case of children of degree level and above fathers education was 27.11, SD=9.40.The math achievement scores of children's of these groups with their mothers are 15.87,19.55 and 27.12 respectively. Analysis of variance of the scores of the three groups yielded significant F value as101.60 which is significant at 0.01 level in the df=2, 1124.Out of 60 scores, the mean achievement scores in math of male student is20.24 and SD=8.94. In case of female students, the mean

math achievement score is 20.42 and SD=10.70. The statistically calculated t-value is 0.26 which is not significant at 0.05 level with 1125 df. It has been found that father's occupation was related to academic achievement in math. The nature of father's occupation was important for their children's math achievement. Children of professional groups (Engineer, doctor, businessman, administrator, educationists etc.) where in fathers have got highest math score than all the professional groups. Children of business man groups' fathers have got more math achievement than other two groups but less than the children of professional groups. The children of others group (Peon, Cooli, daily wagers etc.) have got more achievement than the children of agriculturist. Children of businessman group have got more math achievement than other two groups but less than the professional group.

CONCLUSION: The purpose of the present research was to determine the effects of gender, parental education and parental occupation on achievement in math. In this study parental education is found to be an important factor of children's achievement in math in the study. There were no significant differences in math achievement scores between boys and girls in the present study. Children from highly educated parents are likely to have significantly higher math achievement scores as compared to the children of less educated parents.

KEYWORDS: 1.EDUCATION 2.MATHEMATICS ACHIEVEMENT 3.GENDER BASIS PARENTAL EDUCATION 4.PARENTAL OCCUPATION.

5. Umadevi, L. and Kavitha Kiran, V. (2015).
Profile of Out of School Children in Telangana. *International Journal of Humanities and Social Science Invention*. Vol. 4(10): 25-29.
G19289

BACKGROUND: A strong education system is the cornerstone of any country's growth and prosperity. Over the last decade, India has made great strides in strengthening its primary education system and education in India has improved dramatically over the last three decades. According to the UIS and the Education for All Global Monitoring Report, around 43 percent of those out of school – or 15 million girls and 10 million boys – will probably never set foot in a classroom if current trends continue. Given the large size of the population in India, despite high enrolment, even small percentages of never-enrolled, along with dropouts, translate into an estimated 8.15 million children out of school in the 6-13 age group in the year 2009. While the enrolment is near universal in the younger age group, with only 3.7 per cent being out of school, the share of those out of school is slightly higher at 5.2 per cent for the older age group.

OBJECTIVES: To study the profile of out of school children at primary level.

METHODOLOGY: Two districts Mahabubnagar and Adilabad of Telanagana state were purposively selected for the present study as these districts were found to have low illiteracy levels. The sample size was 153 out of school children.

RESULTS: Majority of out of school children (74.5%) were in the age group of 8-10 years. The remaining of sample (25.4%) belonged to 5-8 years age group. 54.9 percent were girls and 45.6 percent of them were boys. Another interesting finding of the study was that 53.6 percent of sample was never enrolled in school and the remaining 45.6 percent were enrolled but not attending the school. The study reveals that 16.3 percent of the sample were working and helping at home while 12 percent of them have to work and also take care of siblings. It was interesting to note that 18.9 percent of sample were helping at home and taking care of siblings. Only 7 percent of sample was loitering without doing any work and not going to school. The study further reveals that 21.5 percent of sample children after dropping out of school were going to work and 11 percent of them were helping at home and the remaining 11 percent were taking care of siblings. It is interesting to note that major reason for dropping out found to be migration (24%), taking care of siblings (22.2%) and child labour (21.5%). Surprisingly none from the sample selected were dropouts due to the

health issue. The study revealed that majority of the mothers (94.2%) and fathers (83%) of out of children were illiterate. The result further revealed that majority of mothers (42.8%) and fathers (39.8%) were agricultural labourers while unemployed mothers (29.4%) and fathers (20.3%) formed the least. More than three fourth (76.5%) sample have family income less than Rs. 5000 per month while only 5.8 percent sample have family income of Rs. 7000 per month or less.

CONCLUSION: It is evident that the economic condition of the families becomes the major contributing factors of barrier to school inclusiveness. The intensity of poverty is another important factor responsible for out of school children. Lack of local earning opportunities for adults affect the children schooling through migration. To tackle this problem immediate measure should be taken by the government.

KEYWORDS: 1.EDUCATION 2.OUT OF SCHOOL CHILDREN 3.EDUCATION FOR ALL 4.DROP OUT 5.FAMILY INCOME 6.AGRICULTURE LABOUR 7. SCHOOL INCLUSIVENESS 8. CHILD LABOUR.

HEALTH

6. D'Costa, F.S.D. et al. (2015)
An Exploratory Study in Child Mental Health Amongst School Going Children. *PARIPEX: Indian Journal of Research*, Vol. 4(10): 34-38.
G19284

INTRODUCTION: Child mental health is the capacity to achieve and maintain optimal psychological and social functioning and wellbeing. Child Mental health includes sense of identity and self-worth, sound family and peer relationships, ability to be productive and learn, and a capacity to use developmental challenges and cultural resources to maximize development. Mental health is an essential part of children's overall health and has complex interactive relationship with their physical health and ability to succeed in school, at work and in society. Mental health hurdles are as common as some physical health problems such as asthma. Good Mental health in childhood is a prerequisite for optimal psychological development, productive social relationships, effective learning, good physical health, and an ability to care for self.

OBJECTIVES: To assess the mental health of school going children; to identify factors affecting mental health of school going children; to study the relationship between the factors (Physiological, Psychological, Social, Academic achievement and economic) and the Mental health of school going children.

METHODOLOGY: The sample consisted of 300 school going children aged 11-15 years from 7th to 9th standards (100 in each standard). Tools used in the study included semi-structured questionnaires and the General Health Questionnaire (GHQ-12) a measure of current mental health, developed by David. P. Goldberg. This questionnaire shall be used as a screening instrument to detect those likely to have or be at a risk of developing psychiatric disorders in community settings and non-psychiatric clinical settings.

RESULTS: The demographic characteristics of the sample population, it was observed that there were equal number of boys and girls, maximum were of 13 years(33.6%) and stayed in joint family (56.3%). 62.6 percent had only father as working member. According to GHQ score, 26 (8.6%) children had score > 20 and thereby they were classified under high risk category while rest 274 (91.3%) were under normal mental health category. Among those 26 children, 50 percent were boys and 50 percent were girls, this clearly indicates both male and female children were at an equal risk of developing mental health problems. The psychological factors include child's acceptance of body as it is, feeling confident and respecting oneself and others, love and affection received at home, relationship with parents and sibling and safety and security at home. 13 percent of the study population had disturbed sleep with study tension being the main reason for it. 55 percent of them were not involved in physical exercise

regularly and studies, tuitions & homework were cited as main reasons for it. 20 percent of them were not regular with their eating habits and again main reason was tuitions and classes for this negligence. Interesting fact observed was only 12 percent of them were eating fast food as their main content of meal while majority were on homemade food.

CONCLUSION: The mental health of children was affected and 8.66 percent of children fell into the high risk group. As far as factors affecting mental health were concerned, the various factors, (Physiological, Psychological, Social, Academic achievement and Economic) affected the mental health of the school going child and showed a significant relationship with the GHQ scores, which was statistically proven. Thus the study emphasize the importance of recognizing mental health problems in children and that the school health personnel must take necessary steps in improving the mental health of the school children.

KEYWORDS: 1.HEALTH 2.MENTAL HEALTH 3.OPTIMAL PSYCHOLOGICAL DEVELOPMENT 4.GENERAL HEALTH QUESTIONNAIRE (GHQ) 5.GHQ SCORE 6.PSYCHIATRIC DISORDERS 7.EFFECTIVE LEARNING.

7. Narang, M., D Shah and H Akhtar. (2015).
Efficacy and Safety of Drotaverine Hydrochloride in Children with
Recurrent Abdominal Pain: A Randomized Placebo Controlled Trial.
Indian Pediatrics, Vol. 52 (10): 847-851.
G19285

BACKGROUND: Recurrent abdominal pain (RAP) is one of the most common chronic pain conditions of childhood. About 4 percent to 25 percent of school-age children complain of RAP of sufficient severity to interfere with daily activities. Most common cause of recurrent abdominal pain in children is functional abdominal pain (FAP) which may be caused by alterations of homeostatic reflexes in gut-brain axis that is involved in control of gastrointestinal functions. This can be associated with dysregulations in intestinal secretions, motility, blood flow and afferent sensitivity. Good quality data about its efficacy in children are lacking.

OBJECTIVES: To evaluate the efficacy and safety of Drotaverine hydrochloride in children with recurrent abdominal pain.

METHODOLOGY: Double-blind, randomized placebo-controlled trial was conducted at Pediatric Gastroenterology and Hepatology Clinic of a tertiary care hospital in Northern India catering mainly to urban poor population. The study was conducted over 12 months. 204 participants with recurrent abdominal pain (RAP) were screened for inclusion in the study.

RESULTS: There was a significant reduction in episodes of abdominal pain in children receiving drotaverine in comparison to those receiving placebo. Reduction in number of episodes of abdominal pain [mean (SD) number of episodes 10.3 (14) vs 21.6 (32.4); $P=0.01$] and lesser school absence [mean (SD) number of school days missed 0.25 (0.85) vs 0.71 (1.59); $P=0.05$] was noticed in children receiving drotaverine in comparison to those who received placebo. The number of pain-free days, were comparable in two groups [17.4 (8.2) vs 15.6 (8.7); $P=0.23$]. Significant improvement in parental satisfaction score was noticed on Likert scale by estimation of mood, activity, alertness, comfort and fluid intake. Frequency of adverse events during follow-up period was comparable between children receiving drotaverine or placebo (46.9% vs 46.7%; $P=0.98$).

CONCLUSION: Drotaverine hydrochloride is an effective and safe pharmaceutical agent in the management of recurrent abdominal pain in children. Further studies of its efficacy in organic abdominal pain conditions of childhood are desirable. Future studies should address the issue of its efficacy when given on as-and-when required basis, along with biochemical monitoring of any adverse effects.

KEYWORDS: 1.HEALTH 2.ABDOMINAL PAIN 3.RECURRENT ABDOMINAL PAIN (RAP)
4.FUNCTIONAL ABDOMINAL PAIN (FAP) 5.PARENTAL SATISFACTION 6.GUTBRAIN AXIS
7.COGNITIVE BEHAVIOURAL THERAPY.

8. Nath, L. et al. (2015).
Evaluation of the Universal Immunization Program and Challenges in Coverage of Migrant Children in Haridwar, Uttarakhand, India. *Indian Journal of Community Medicine, Vol. 40(4): 246-251.*
G19286

BACKGROUND: Globally, 19.3 million infants did not receive diphtheria, pertussis, and tetanus (DPT)3 vaccine in 2010. Nearly 70 percent of these children live in 10 developing countries of Africa and Asia including India. The dropout rates are higher among migrants who have poor service utilization. Studies on determinants of immunization have shown that nearly one in three migrant children are unable to complete their course of vaccination.

OBJECTIVE: To evaluate the Universal Immunization Programme (UIP) to review the infrastructure, human resources, and service delivery among migrant population in two blocks in Haridwar District of Uttarakhand State.

METHODOLOGY: A cross-sectional survey of 180 children were done and proportions for various indicators were estimated. Factors associated with not taking vaccination using multivariate analysis were determined.

RESULTS: In the health facilities, 94 percent of the sanctioned medical officers, 90 percent of lady health visitors (LHVs), and 100 percent of ANMs were in position. 11 cold chain centers, 25 sub centers, 14 sessions, and 180 mothers were interviewed. All cold chains had functional ice-lined refrigerators (ILRs) and deep freezers, but there were no separate stabilizers for each equipment. Dropouts were supposed to be tracked using vaccination card counterfoils and tracking registers. The dropout rate from BCG to DPT3 was 30 percent. Lack of knowledge (adjusted odds ratio (AOR) 6.6, 95 percent confidence interval (CI) 2.6-16.7), mother not being decision maker (AOR 4.0, 95% CI 1.7-9.2), lack of contact by Accredited Social Health Activist (ASHA; AOR 3.0, 95% CI 1.1-7.7), not being given four post-vaccination messages (AOR 7.7, 95% CI 2.9-20.2), and longer duration of stay in Haridwar (AOR 3.0 95% 1.9-7.6) were risk factors for non-immunization. The reasons stated by mothers included lack of awareness of session site location (67%) and belief that child should only be vaccinated in their resident district (43%).

CONCLUSION: There was low immunization coverage among migrants within adequate supervision, poor cold chain maintenance, and improper tracking of dropouts. Mobile immunization teams, prelisting of migrant children, and change in incentives of ASHAs for child tracking were needed. A monitoring plan for sessions and cold chain needed enforcement.

Keywords:: 1.HEALTH 2.DROPOUTS AND LEFTOUTS 3.IMMUNIZATION COVERAGE 4.UNIVERSAL IMMUNIZATION PROGRAMME 5.LADY HEALTH VISITORS(LHVs) 6.ICE-LINED REFRIGERATORS (ILRs) 7. ADJUSTED ODDS RATIO (AOR).

ICDS

9. NIPCCD, Central Monitoring Unit. (2014).
Concurrent Independent Evaluation of ICDS in 100 Blocks of High Burden Districts. Central Monitoring Unit of ICDS.

G18650

BACKGROUND: Integrated Child Development Services (ICDS) was restructured during 12th Five Year Plan, and has been implemented in the Mission Mode. Under this, the components of the Anganwadi Centre (AWC) is reformed as a “Vibrant Early Childhood Development (ECD) Centre” to become the first village outpost for health, nutrition and early learning. With a view to address the menace of malnutrition in High Burden Districts where it is prevalent the most, Nutrition Counselor-Cum-Additional Worker (per AWC) is provided. After rolling out of this restructured ICDS, a need was felt by the Task force of Result Framework Document (RFD) of MWCD to conduct a concurrent independent evaluation of ICDS in these high burden districts.

OBJECTIVES: To assess the status of implementation of ICDS in terms of coverage, outreach, coordination and convergence; to assess the service delivery status particularly of supplementary nutrition, growth monitoring and use of new WHO Child Growth Standards in ICDS; to identify the gaps and problems and constraints in the implementation of ICDS program in high burden districts and to recommend suitable mechanism/ strategies for effective implementation of service delivery in ICDS.

METHODOLOGY: Data were collected from 117 ICDS Projects and 585 AWCs located in 108 High Burden Districts of the 19 State/ UTs where these 200 high burden districts are located. Interview Schedule was used as tools for data collection.

RESULTS: It was found that more than four-fifth (88.5%) of AWCs were located in pucca building, while less than one-fifth (15.4%) of AWCs were running from rented buildings. Toilet facility was available in less than half (44.27%) of AWCs and only 9 percent of AWCs were having provision of separate toilet facility for boys and girls. 84 percent of AWWs, (87.7%) of ICDS Supervisors and 80.85 percent of CDPOs have received job training under restructuring of ICDS. The distribution of hot cooked meal was found in majority (92.7%) of AWCs. The result also indicates that the New WHO Child Growth Standards Chart was found in 72.7 percent of AWCs. Weighing of children (0-6 months) as per New WHO Child Growth Standards was found to be followed in 92.5 percent of children, according to the New WHO Child Growth Standards. The status of

organizing of Counseling Sessions with mothers based on Growth Monitoring shows that altogether only half (50.7%) of AWWs organized these sessions. Majority (84.9%) of AWCs conducted NHEd sessions in last three months. A significant number of ICDS projects were found celebrating breastfeeding week and nutrition week. About 64.7 percent of ICDS projects were organizing village health and nutrition day. Less than one-third (32.9%) of ICDS Project organized the Nutrition Exhibition. Health check-up on monthly basis were conducted in less than half (46%) of AWCs. The maintenance and timely updation of Mother and Child Protection (MCP) Card was reported in sizeable number (84.3%) of AWCs. 71 percent of children (3-6 years) of the total population were enrolled for pre-school. For monitoring and supervision of AWCs, little more than half (56.4%) of CDPOs were found using checklist as a monitoring methods. Only little more than half (57.5%) were found to be aware of five-tier monitoring system of ICDS. Regarding MIS Guidelines, little more than half (58%) of ICDS projects have received revised MIS guidelines and formats and less than half (44%) of the ICDS projects have received revised records and registers. The study also reveal that 72.7 percent of ICDS projects were conducting IEC activities and the involvement of community was found less than half (43.5%) of the AWCs located across the country.

CONCLUSION: It is evident from the findings of the study that substantial numbers of ICDS functionaries have received job training; however there is a need to focus more on refresher training. Though the status of supplementary nutrition was quite satisfactory, despite of interruption, however, in the absence of proper delivery of IEC interventions for Behaviour Change, it is difficult to improve the nutritional indicators in High Burden Districts. While strengthening the health check-up, it is recommended that it may be strengthened in convergence with Rashtriya Bal Swasthya Karyakram, 2013 aimed at identification of Birth defects, diseases, deficiencies and development delay including disabilities and can also include referral services to be organized in convergence with RBSK. Though substantial number (more than 90%) of children were being weighted according to New WHO Child Growth Standards, however there is a need to impart specialized sensitization and practical training on use of New WHO Growth Charts to ICDS functionaries.

KEYWORDS: 1.ICDS 2.EVALUATION OF ICDS 3.ANGANWADI CENTRES 4.IMPLEMENTATION OF ICDS 5.SERVICE DELIVERY OF ICDS 6.SUPPLEMENTARY NUTRITION 7.GROWTH MONITORING 8.WHO CHILD GROWTH STANDARDS 9.BURDEN DISTRICTS 10.INFRASTRUCTURE OF AWC 11.ICDS FUNCTIONARIES 12.INFORMATION EDUCATION COMMUNICATION 13.COMMUNITY MOBILIZATION 14.MONITORING OF AWCs 15.RESTRUCTURING 16.AWWS 17.HIGH BURDEN DISTRICTS.

NUTRITION

10. Deena, T. et al.(2015)
Determinants of Nutritional Anemia in Adolescents. *Indian Pediatrics*,
Vol. 52(10): 867-869.
G19288

BACKGROUND: Adolescence is a vulnerable period in the human life cycle for the development of nutritional anemia. Anemia has a negative effect on cognitive performance in adolescents. In a study on severely anemic adolescents admitted in a tertiary care hospital, megaloblastic anemia was most common type of anemia (42.5%) and iron-deficiency accounted for 15 percent cases. Compared to the vast amount of work done in pregnant mothers and young children, there are relatively few published studies in India evaluating deficiencies of Iron, Vitamin B12 and Folate in adolescents having nutritional anemia and its association with severity of anemia.

OBJECTIVES: To associate the severity of nutritional anemia with serum levels of ferritin, vitamin B12 and folate; and to determine demographic, socio-economic and nutritional correlates for nutritional anemia in adolescents.

METHODOLOGY: Cross-sectional hospital-based study among 200 adolescents (10-18 years) with anemia. Dietary intake (24-hr recall), and serum levels of folate, vitamin B12 and ferritin were estimated.

RESULTS: Two-thirds (69.5%) of participants belonged to early adolescence age (10-13.9 years). Almost half (54%) of the adolescents had normal BMI (+1 to -2 SD), 27.5 percent were very underweight (<-3 SD), 17.5 percent were underweight (-2 to -3 SD), and only 1 percent were overweight (+1 to +2 SD). Dietary evaluation revealed that energy intake was deficient in 94.5 percent of adolescents, iron intake was deficient in 99.5 percent, vitamin B12 intake was deficient in 14.5 percent, and folate intake was deficient in 62.5 percent of anemic adolescents. Mean (SD) hemoglobin was 9.4 (2.5) g/dL with 50.5 percent having mild anemia, 29 having moderate anemia while 20.5 percent having severe anemia; 55 percent had normocytic anemia, 27.5 percent had microcytic, 8.5 percent had macrocytic, and 9 percent had dimorphic anemia. Iron deficiency was present in 30.5 percent subjects, vitamin B12 deficiency in 50 percent of subjects and folate deficiency was present in 79.5 percent of subjects. Isolated iron, vitamin B12 and folate deficiency was seen in 5 percent, 4 percent and 25 percent, respectively while combined folate and vitamin B12 deficiency was seen in 32 percent. Deficiency of all the three micronutrients was documented in 12 percent while 9 percent had no deficiency. Severe anemia

was significantly associated with history of worm infestation, attainment of menarche, vegetarian diet and low serum B12 levels. Low intake of iron, vitamin B12 and folate were also significantly associated with severe anemia.

CONCLUSION: Low intake of iron folate and vitamin B12 is a significant determinant towards causing nutritional anemia in adolescents. Supplementation with not only iron and folic acid but also vitamin B12, besides deworming, is required through national programs

KEYWORDS: 1.NUTRITION 2.ANEMIA 3.NUTRITIONAL ANEMIA 4.HEMOGLOBIN 5.FERRITIN 6.FOLIC ACID 7.IRON-DEFICIENCY 8.VITAMIN B12 DEFICIENCY 9.FOLATE DEFICIENCY 10.NORMOCYTIC ANEMIA.

11. Nomita, C. et al. (2015).

Changes in Exclusive Breastfeeding Practices and its Determinants in India, 1992–2006: Analysis of National Survey Data. *International Breastfeeding Journal*. Vol. 10(34): 1-13.

G19287

BACKGROUND: The World Health Organization (WHO) recommends exclusive breastfeeding (EBF) to six months of age. During this six month period, no other liquid, semi solid / solid food or breastfeeding substitute should be given to the infants except for medicine and /or oral rehydration solution. EBF is beneficial to the health and wellbeing of infants and mothers. Children who are not breastfed exclusively for six months have a higher risk of gastrointestinal infections, respiratory illness, morbidity and death, as well as atopic eczema, allergy, asthma, type II diabetes, leukemia and obesity in later life than EBF infants. EBF is estimated to prevent approximately one-tenth of child deaths and could play an important role in meeting India's Millennium Development Goal 4 of reducing child mortality.

OBJECTIVES: To examine changes in EBF between the two large scale surveys and the effect of predictor variables in the context of the WHO and Government of India feeding guidelines and recommendations.

METHODOLOGY: A total of 83,511 and 102,572 eligible women from 19 bigger states (18 states and the National Capital region of Delhi) excluding the six north-eastern states from NFHS-1 and NFHS-3 were interviewed. The analysis refers approximately to a period 1990-1993 for NFHS-1 and 2003-2006 for NFHS -3. The data on children who were aged 0–35 months at the time of survey were included.

RESULTS: In the sample of NFHS-1, there were 51 percent male and 49 percent female children against 52 percent male and 48 percent female children in NFHS-3. In both the surveys, majority of children belonged to rural areas and were born to mothers in the prime reproductive age group of 20–34 years. Two-third (66.7%) of children in NFHS-1 and half (49.7%) in NFHS-3 were from mothers who had not received any formal education. Analysis of NFHS-1 data indicated that the proportion of infants exclusively breastfed was significantly greater in rural areas (58%) than those from urban place of residence (50%). In states with high post neonatal mortality rate (PNMR), one month infants (52%), four months (25%) and children at six months (14%) received exclusive breastfeeding in NFHS-1. The corresponding estimates for NFHS-3 were greater for children beyond one month (65%) and beyond four months (30%) were exclusively breastfed. At six months, this estimate was the same at 14 percent in both the surveys. In the NFHS-1, 27.7 percent children were first order births, 18.3 percent were born with birth spacing of <2 years and more than half

(59.9 %) were to mothers who had accessed antenatal/natal care. In the NFHS-3, a nearly equal proportion (30.4%) were first order births, 26.9 percent were with birth spacing < 2 years and around three-quarters (71.6%) of children were born to mothers who had received antenatal/natal care. NFHS -3 data as compared to NFHS-1 findings reveal that children of mothers living in rural areas (63%) were more likely to exclusively breastfed than those of mothers residing in urban areas (57%) in the high PNMR states. In NFHS – 3, medium / low PNMR states, only 3 percent infants of older mothers (age ≥ 35 years) were exclusively breastfed as compared to 35 per cent infants with mothers in the age group of 20- 34years.

CONCLUSION: The rate of EBF in India continues to be sub-optimal with no appreciable gains in the last 13 years. The study indicated that determinants of EBF change over time. The factors identified with non-compliance of EBF were living in urban areas, shorter birth intervals and belonging to higher wealth index.

KEYWORDS: 1.NUTRITION 2.WORLD HEALTH ORGANIZATION (WHO) 3.NFHS-3 4.NFHS-1 5.EXCLUSIVE BREASTFEEDING (EBF) 6.POST NEONATAL MORTALITY RATE (PNMR) 7.BIRTH SPACING 8.ANTENATAL CARE.

SOCIAL WELFARE

12. Varghese, A. V., and Martina, A. Turin (2015)
Quality of Life in Children with Cochlear Implants: Effect of Implant Age on Social Relationships. *PARIPEX-Indian Journal of Research*. Vol. 4(12): 1-3.
G19280

BACKGROUND: Hearing is inevitable for the development of good and effective communication skills through which social relations are formed and strengthened. If the hearing sensitivity is damaged or absent, individuals are denied the opportunity to sample important features of their surroundings, the sounds emitted by the nature and by themselves and in short, it affects the quality of life significantly. The rehabilitation process includes the fitting of a hearing aid and speech and language therapy. When hearing aids are incapable of serving these purpose cochlear implants are introduced. With immediately and adequate language intervention given, the child can acquire normal or near normal speech and language skills and thus the quality of life can be improved.

AIM: To study the effect of implant age on social relationships in children with cochlear implants.

METHODOLOGY: The respondents included in the current study were parents of 60 Malayalam speaking children within the age range of 0-10 years who underwent cochlear implantation. The subjects were selected based on their implant age and was divided into 2 groups Group A: 0-2 years (n=30), Group B: 2 years and above (n=30).

RESULTS: The overall comparison performance between the group A and group B, shows that the mean value for group A ($x = 18.23$) was less than the mean value of group B ($x = 20$) which implies that the children with implant age less than 2 years performed poorer when compared to that of children with implant age greater than 2 years. With same p value, ($x = 2.0$) there exist no significant difference between the groups in skills like interaction with grandparents and siblings, sociability within the family, making friends easily and being happy to play with the peer group. While, there was a significant difference between the means of the group A ($x = 1.8$) and group B ($x = 2.0$) with p value less than 0.05. That is Group B when compared to Group A was found to be better in the activities of interaction with others, interest to engage in conversation, being talkative, and greeting others.

CONCLUSION: The social relationship scores were better in children whose implant age is greater than 2 years when compared to the children with implant age less than 2 years. The present study provides information on how the social relationship related quality of life of children with cochlear implants undergo change as the age and duration of implantation increases.

KEYWORDS: 1.SOCIAL WELFARE 2.QUALITY OF LIFE 3.CHILDREN 4.HEARING AIDS 5.SOCIAL RELATIONSHIP 6.COCHLEAR IMPLANTS 7.ENGAGE IN CONVERSATION.

B. Research Abstracts on Child Protection

CHILD LABOUR

13. Bhullar, H. S., Avinash and Sabharwal, Neha. (2015).
The Hidden Workforce: A Study on Child Labour in the Garment Industry in Delhi: Save the Children.
G19426

BACKGROUND: Child labour in the garment industry is one of the rapidly growing unorganised workforces in cities such as the National Capital Territory of Delhi (NCTD), also known as the hub of garment export industry in India.

OBJECTIVES: To estimate the number of children working in the garment industry in Delhi; Understand the working and living conditions of children in the garment industry in Delhi; Understand the nature of garment industry and its supply chain in Delhi and also to analyse the reasons of child labour perpetuating in the supply chain of the industry; Suggest a remedial model for withdrawing children from labour in garment industry.

METHODOLOGY: Mixed method approach involving both quantitative and qualitative methods of data collection was adopted in the study. Tools used in the study were quantitative household survey, focused group discussions, interviews and participant observations. Sample size consists of 170 child labourers across 14 locations in 5 districts of Delhi.

RESULTS: A significantly higher number of children seem to be engaged in household level work with 87 percent children working in households while 13 percent working in *Addas*. 64 percent children stated to have lived in the city since birth. However, their families were noted to have earlier migrated to Delhi from states of Uttar Pradesh, Bihar, Jharkhand and West Bengal. 36 percent children reported to have migrated from these four states. 92 percent of children, who worked in their families, were presently enrolled in formal and/or non-formal education; and 45 percent of those working in small units had attended school at some point in their lives. Within the household level, 69 percent children working with their family members were girls. 61 percent of children were working at home and half of those working at *Addas* stated economic factors as supplementing the household income as major reason of their working as child labour. Half of those working at *Addas* and 22 percent of those working at home reported working due to lack of interest in education; 82 percent said that given an opportunity, they would not like to attend school, showing an extremely low interest in education. Working conditions revealed that very few reported issues of abuse; just 11 percent of the respondents said that they 'rarely' faced verbal or physical abuse. 36 percent of those working at home were not paid at all. Of the 64 percent who were paid, 36 percent were

paid less than Rs. 100 a month. For those working at *Addas*, the monthly income varied from Rs.1000 to 5000. Four-fifth of the respondents reported that they themselves decided to undertake work, given the poor economic conditions of the family. In contrast, 92 percent respondents reported that they were 'happy' about the work they were doing. Awareness on issues of child labour and Right to Education (RTE) was high among all respondents; with more than three fourth (78%) respondents being aware of the Right to Education and that it is illegal for children below the age of 14 years to be employed.

CONCLUSION: The process of in-formalization of the garment making had enables outsourcing while helping to reduce costs, leads to the engagement of children in garment production. And in order to ensure that the ends can be met, while adults with low income, children are pushed into labour at the household level. Child labour (Prohibition and Regulation) Act, 1986 of Government of India does not consider home based work as child labour.

KEYWORDS: 1.CHILD LABOUR 2.CHILD PROTECTION 3.RIGHT TO EDUCATION (RTE) 4.GARMENT EXPORT 5.ADDAS 6.NON-FORMAL EDUCATION 7.GARMENT INDUSTRY 8.WORK AT HOME

HEALTH

14. Sheth, J. and Mistri. (2015).
Lysosomal Storage Disorders in Indian Children with Neuroregression
Attending a Genetic Center. *Indian Pediatrics*. Vol. 52(12): 1029-1033.
G19290

BACKGROUND: Neuro-regression in childhood could either be genetic with neurometabolic origin or non-genetic causes such as infections and toxins. It has been observed that more than two-third of the diagnosed cases of progressive neurological decline are due to metabolic disorders. Approximately 4.5 percent of the cases have mitochondrial disease and several are found to have basic metabolic abnormalities like vitamin B12 deficiency and thyroid disorders. Lysosomal storage disorders (LSDs) are the heritable group of nearly 40 heterogeneous disorders occurring due to genetic defect in one or more specific lysosomal enzymes, activator protein or membrane protein resulting in deficient enzyme activity.

OBJECTIVE: To study the etiology of neuroregression in children having deficiency of the lysosomal enzymes.

METHODOLOGY: Plasma chitotriosidase, quantitative and qualitative glycosaminoglycans, and mucopolipidosis-II/III screening followed by confirmatory enzyme study using specific substrate was carried out; 432 children aged 3 months-18 years having regression in a learned skill, selected from 1453 patients referred for diagnostic workup of various Lysosomal storage disorders (LSDs).

Results: Total 309 children (71.5%) were diagnosed with different lysosomal storage disorders as the underlying cause of neuroregression. Plasma chitotriosidase was raised in 82 of 135; 64 (78%) of these had various LSDs. 69 out of 90 cases showed high excretion of glycoaminoglycans, and 67 (97.1%) of these were confirmed to have enzyme deficiency for various mucopolysaccharide disorders. While 3/90 children with positive I-cell screening had confirmed mucopolipidosis-II/III disease. Among all, glycolipid storage disorders were the most common (50.2%) followed by mucopolysaccharidosis (MPS) (21.7%) and sulphatide degradation defect (17.5%). Neuronal ceroid lipofuscinosis-1 & 2 (7.4%), mucopolipidosis-II/III (1%), Sialic acid storage disorder (1%), Niemann-Pick disease type-C (1%) and Fucosidosis (0.3%) were observed with less frequency. Most common phenotypes in all subjects were cherry red spot (18.5%), hepatosplenomegaly (17.9%), coarse facies (15%), seizures (13.1%) and skeletal abnormalities (12.1%).

Conclusion: Lysosomal storage disorders are considered to be one of the common causes in children with regression in learned skill, dysmorphic features and cherry red spot. Among these, glycolipid storage disorders are the most common, followed by mucopolysaccharidosis.

KEYWORDS: 1.HEALTH 2.LYSOSOMAL STORAGE DISORDERS 3.DEVELOPMENTAL DELAY 4.GLYCOLIPID STORAGE DISORDERS 5.METABOLIC DISORDERS 6.MUCOPOLYSACCHARIDOSIS (MPS).

ICDS

15. Gopalkrishnan, S. (2014).
Evaluation of Usage of Mother and Child Protection Card by ICDS and Health Functionaries. New Delhi: NIPCCD.
G18726

BACKGROUND: The Government of India introduced WHO-Child Growth Standards for growth monitoring of children less than five years, in both ICDS and NRHM. The initiative was complemented by universally introducing a common mother-held, Mother and Child Protection Card (MCP), for strengthening the continuum of care from pregnancy till the child is three years old. The MCP Card is reflected as an entitlement card and a counseling tool and replaces the earlier Jaccha Bacchha Card and the earlier ICDS mother child card. This card increases the outreach to the population, and enables the large network of ASHAs, AWWs and ANMs to converge their efforts and utilize the critical contact opportunities more effectively.

OBJECTIVES: To assess the knowledge and skills of AWWs, ANMs and ASHAs on appropriate usage of MCP Card; study the awareness of women (pregnant, lactating and mothers with children below 3 years) about the MCP card and its importance in maternal and child care; study the role perception of ICDS and Health functionaries with respect to MCP Card for better outreach of health and nutrition services; study the service utilization by the pregnant women and mothers with children below three years through the MCP Card; examine the existing interface between the ANMs, AWWs and ASHAs with regard to the usage of MCP Card; and identify the problems and bottlenecks in effective utilization of MCP Card.

METHODOLOGY: The data was collected through multi-stage stratified random sampling method, randomly selecting a district from six states, one each from East, West, North, South, Central and North-Eastern zones, respectively.

RESULTS: The ICDS functionaries including the AWWs (21.9%), Supervisors (16.7%) and CDPOs (58.3%) had received some form of orientation training on the MCP Card. While, amongst the health functionaries ANMs (40.9%), LHVs (58.3%), MOs (9.1%) and ASHAs (20.7%) had received orientation training on MCP Card. About 95.8 percent of AWWs, Supervisors (87.5%), ANMs (95.5%), LHVs (66.7%) and ASHAs (90.5%) confirmed on the usage of the MCP Card. Recording of the chronic illnesses, such as tuberculosis, diabetes, asthma, etc. in the MCP Card was known to only 63.6 percent of ANMs. Against 96 percent of pregnant women registered at AWCs, only 24 percent had all the requisite recommended four antenatal check-ups done. The awareness level regarding

the danger signs during pregnancy indicated in the 'Red colour box' was known to about one-fifth (22.5%) pregnant women and 43.3 percent of family members. More than half (58.8%) pregnant women were aware of the recording of the antenatal check-up in the MCP Card. Over two-thirds of AWWs were aware about filling-in of the date and time of the delivery, weight, sex, place, and type of delivery of the delivered baby. Only 56.6 percent mothers with children below 6 months and 67.2 percent mothers with children between 6 months and 3 years were aware that the child under six months needs to be weighed monthly. The counseling on the growth chart immediately after weighing was conducted with only one-fourth (25%) of mothers with children below 6 months and 40 percent mothers with children between 6 months and 3 years.

CONCLUSION: The various ways in which the MCP Card has facilitates in supervision include better monitoring of AWWs/ ANMs; in better coordination among health and ICDS for functionaries; in establishing a functional linkage among the workers; in recording of vital events; in serving as a reminder for delivery of services; in developing a functional referral system; by enhancing credibility in the community; by serving as discussion tool during supervisory visits; and in liaison with other departments. However, the introduction of a common MCP for both ICDS and NRHM functionaries, warrants that a column be specified in the MCP Card for ASHAs and to record the care given by them to women and children. There is also a greater need to ensure that the distinct roles and responsibilities are clearly communicated between ASHA, ANM, and AWW, to avoid overlap and increase efficiency.

KEYWORDS: 1.ICDS 2.MOTHER AND CHILD PROTECTION CARD 3.EVALUATION OF MCP CARD 4.HEALTH FUNCTIONARIES 5.ICDS BENEFICIARIES 6.MALNUTRITION 7.AWARENESS 8.KNOWLEDGE OF AWW 9.ANM 10.ASHA 11.MCP CARD 12.AWARENESS OF WOMEN 13.PREGNANT WOMEN 14.UTILISATION OF MCP CARD 15.BOTTLENECKS.

C. Women and Gender Issues

HEALTH

16. Mettu, K. and Reshma, C.R (2015)

Study of Intraoperative Difficulties in Repeat Caesarean Sections.
PARIPEX: Indian Journal of Research, Vol.4 (11): 124-126.

G19291

INTRODUCTION: Caesarean section is the most significant operative intervention in obstetrics. Proportion of caesarean sections to the total births is considered as one of the important indicators of emergency obstetric care (World Health Organization, 2009). The rate of cesarean deliveries substantially increased worldwide, including India. In a study done by ICMR, on rates of caesarean sections in teaching hospital in India, rate was increased from (21.8%) in 1993-94 to (25.4%) in 1998-99. The risk of major complications increase with the cesarean delivery rates. Especially scarring and adhesion formation is known to cause increase in the major complication rates from 4.3 to 12.5 percent depending upon the number of previous cesarean section (Nisebblat et al., 2006). Intra peritoneal adhesions have an incidence varying from 5.5 to 42.5 percent (Myers & Bennet, 2005).

OBJECTIVE: To observe the intra operative difficulties encountered in repeat caesarean sections.

METHODOLOGY: Hospital based prospective observational based study conducted during the period of April 2014 to March 2015 (one year) in the department of Obstetrics and Gynaecology, Government General Hospital, Kurnool. The sample size was 1281. Inclusion criteria was all women who have undergone one or more C-section irrespective of age and parity. Exclusion criteria was all women who have undergone other abdominal surgeries. Cases were categorized into 3 groups.

RESULTS: Total number of deliveries during the study period were 13,267. Caesarean sections were 2953 (22.2%). Primary sections constituted 12.6 percent and repeat caesarean sections constituted 9.6 percent of total deliveries. Complications rates were higher in emergency caesarean sections in group-I (45.5%) than in elective sections of group-I (22.2%). Complications were higher in elective sections of group-II (10.09%) than emergency sections of group-II (6.9%). Complications were higher among elective sections of group-III (18.6%) than in emergency sections of group-III (0.2%). Overall most of the intra operative complications were noted in emergency caesarean sections (52.8%) than in elective caesarean sections (32.5%).

CONCLUSION: Caesarean section has more adverse effects on the mother if it is a primary or a repeat section. If once a woman had caesarean section, she is at risk of repeat caesarean section. Hence primary caesarean section rates has to be reduced whenever possible. Women with previous caesarean delivery needs to be counseled regarding the risk of repeat caesarean delivery well before she plans her next pregnancy. She has to be educated regarding the need of improving her nutrition, usage of contraception to maintain an inter delivery interval of at least 24 months.

KEYWORDS: 1.HEALTH 2.PRIMARY CAESAREAN 3.REPEATED CAESAREAN 4.C-SECTION 5. INTRAOPERATIVE 6.ADHESION FORMATION.

17. Patnaik, R (2012).

Improvement in Knowledge and Practices of Adolescent Girls Regarding Reproductive Health with Special Emphasis on Hygiene during Menstruation in Five Years. New Delhi: NIPCCD.

G18846

BACKGROUND: To address the issue of understanding practices of adolescent girls regarding reproductive health and how adolescent girls maintain hygiene during menstruation a study was carried out by National Institute of Public Cooperation and Child Development in 2007. In order to find the improvement in knowledge and practices of adolescent girls regarding reproductive health, a comparative study was undertaken after a gap of five years.

OBJECTIVES: To assess present knowledge and ascertain practices adopted by adolescent girls regarding reproductive health with special emphasis on hygiene during menstruation and comparison with 2007 data; to find out the socio-cultural, health, nutrition, sanitation, education, education-related practices that are considered essential for menarche and during menstruation by the community at present and differences if any as compared to 2007 data; to study the source of information and health seeking behavior of adolescents and effects of media with special emphasis on hygiene during menstruation and compare it with 2007 data; and; to find out the effect of Menstrual Hygiene Programme under NRHM on practices of adolescent girls.

METHODOLOGY: A Cross-Sectional study design for which the data was collected from adolescent girls (AGs) and mothers of AGs in 50 villages of 10 blocks from five selected districts namely, Kamrup (Assam), South West Delhi (Delhi), Mysore (Karnataka), Dhar (Madhya Pradesh) and Barabanki (Uttar Pradesh) from the same ICDS projects (rural) with the same sample size. The respondents were different but were from similar age group as envisaged in the previous study (2007). Research tools used for the study were Interview Schedules.

RESULTS: The school going status of adolescent girls (AGs) revealed that majority of adolescent girls were literate both in 2007 (93.6%) and 2012 (96.4%) study. Nearly 67 percent of AGs were in school and 33 percent out of school (2012) as compared to 49.2 percent and 51 percent in 2007, respectively. The percentage of girls going to co-educational schools has significantly increased ($p < 0.05$) in 2012 (90%) as compared to 2007 (85.8%). There was a significant decrease ($p < 0.01$) in the number of married AGs in 2012 (2%) as compared to 2007 (8.2%). The living conditions of the respondents reveals a significant increase ($p < 0.01$) was observed in toilet facility available in households of AGs

from 2007 (59%) to 2012 (67%). Awareness regarding onset of menstruation among AGs was seen relatively higher in AGs of 2012 (72.6%) as compared to 2007 (29.4%). With regards to socio-cultural practices, it was found that 75 percent of AGs in 2012 reported not visiting any place of worship during menses as compared to 77.4 percent in 2007. About 69 percent mothers were always worried about safety of their AGs and this had significantly decreased ($p < 0.05$) as compared to 91 percent in 2007. While 54.8 percent mothers in 2012 prepared their daughters about onset of menarche as compared to only 27.6 percent mothers in 2007 data. There was a significant increase in menstrual hygiene practices in the use of sanitary napkins amongst (74%) AGs and (56%) mothers of AGs (2012) as that in (23.8%) AGs and (7.8%) mothers of AGs (2007). Use of clean cloth amongst (14%) AGs and (25.4%) in mothers of AGs (2012) had significantly decreased as compared to (84%) AGs and (92.2%) mothers of AGs (2007). Use of indigenous pad made of cotton and gauze amongst (12%) AGs and (18.4%) in mothers of AGs (2012) had significantly increased as compared to (1.6%) AGs and (3.2%) mothers of AGs (2007). The awareness regarding puberty changes has significantly increased with regards to gain in height from 2007 (69.6%) to 2012 (96.6%), and weight (66.8%) from 2007 to that of (94.6%) 2012. However, knowledge on RTI / STI was poor both in 2007 and 2012. AGs seeking guidance and consultation of AWW (65.1%) and ANM (52%) in 2012 has increased significantly from 2007 (3.7% with AWW) and (21.7% with ANM). Only 60.4 percent AGs (2012) were aware that the use of sanitary napkins could reduce the incidence of RTI, 77.6 percent used sanitary napkins in order to maintain hygiene, 72 percent AGs felt confident and 70 percent reported that sanitary napkin was the best option in order to get rid of cloth. Women health functionaries, both from ICDS and health, were aware of SABLA (71.6%), about Kishori Shakti Yojana (84%), about ARSH (71%) and about Menstrual Hygiene Programme (49%) as well.

CONCLUSION: The study highlighted the need of the adolescent girls to have accurate and adequate information about menstruation and on how to manage menstruation and body hygiene with confidence. It is recommended that information about menarche be introduced and reproductive health should be strongly reinforced into the school curriculum from the 5th grade onwards along with the involvement of parents particularly mothers. It is also essential for the teachers, who may not have necessary skills to impart reproductive health education including menstrual hygiene to their student, to be given requisite skills through training and workshops.

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

18. Sinha, R (2015).
Prevalence of Dysmenorrhea and its Impact on Quality of Life of University Female Students. *PARIPEX: Indian Journal of Research*, Vol. 4(10): 8-9.
G19292

INTRODUCTION: Dysmenorrhea is one of most frequent of gynecological complaints of females. Dysmenorrhea literally means painful menstruation. Dysmenorrhea can be “primary “when there is no definitive lesion or pelvic pathology and “secondary” when there is associated pelvic pathology. Dysmenorrhea is the leading cause of recurrent short term school absenteeism in adolescent girls in United States.

OBJECTIVES: To determine the prevalence of dysmenorrhea female students in BHU, Varanasi and to analyze the effect of dysmenorrhea on the quality of life of university female students.

METHODOLOGY: A cross sectional study was conducted on the female students attending the University. The data were collected from January 2014 to December 2014. The study group consists of 198 female university students of BHU.

RESULTS: The overall prevalence of dysmenorrhea was 63.6 percent (126/198). The mean age of dysmenorrhic and non-dysmenorrhic females were 21.9 ± 2.71 and 21.4 ± 2.94 yrs respectively. The weight and height of the two groups were also not statistically different. The Body Mass Index was 20.3 ± 2.47 kg/m² in dysmenorrhic group and 20.3 ± 1.66 kg/m² in non dysmenorrhic group. The difference was not statistically significant ($p > 0.05$). The menstrual cycle length was significantly shorter in dysmenorrhea group ($p < 0.05$) as compared non dysmenorrhea group. 33 percent university students had moderate/severe dysmenorrhea. The duration of blood flow during period was 3.92 days in dysmenorrhea group and was 3.36 days in non-dysmenorrhea group. Sickness absenteeism was significantly observed (51.6%) more common among dysmenorrhic female students than non dysmenorrhic females during menstrual period. The university female students used medications for severe dysmenorrhea. Most commonly used medicine was antispasmodics (Meftal spas).

Conclusion: Dysmenorrhea common problem among university female students. It adversely affects their studies and quality of life. Awareness and proper management is important to reduce the effect of dysmenorrhea on physical, social and mental health of young girls. Awareness and proper management is important to reduce the effect of dysmenorrhea on physical, social and mental health of young girls.

KEYWORDS: 1.HEALTH 2.ADOLESCENT GIRLS 3.DYSMENORRHEA 4.SICKNESS ABSENTEEISM 5.ANTISPASMODICS.

19. Mondal, Janmenjoy et al. (2015).
Does Janani Shishu Suraksha Karyakram Ensure Cost-Free Institutional Delivery? A Cross-Sectional Study in Rural Bankura of West Bengal, India. *Indian Journal of Public Health, October-December, 59(4):279-285.*
G19293

BACKGROUND: In 2011, the Government of India started Janani Shishu Suraksha Karyakram (JSSK) to ensure free-of-cost care for all childbirth and neonatal care at public health facilities. In 2013, about 50,000 women in India died due to pregnancy-related complications. With a maternal mortality ratio of 117 per 100,000, West Bengal ranks fifth in the country, with the national figure being 178. Most of those deaths could be prevented through universalizing skilled care at birth and round-the-clock emergency obstetric care (EmOC) through the public health system.

OBJECTIVES: To assess the awareness of recently delivered women regarding JSSK; and; to estimate the cost of institutional delivery in government and private health facilities and their differentials.

METHODOLOGY: A community-based, cross-sectional study was conducted in a rural community in Bankura, West Bengal, India in 2013, among 210 women who delivered babies in the last 12 months. A questionnaire in local vernacular (Bengali) was prepared for collection of relevant information.

RESULTS: All components of JSSK were known to 12.9 percent women; According to the norms, 48.1 percent were eligible for Janani Suraksha Yojana; 59.4 percent of them received INR 1,000 and another 4 percent received INR 500 as cash benefits. Majority (77.1%) were aware about provision of free admission and staying but only one-third (34.8%) knew about free drugs and consumables and more than half (58.6%) knew about free stay at public health institutions. In the study population, based on the criteria for age, caste, and possession of BPL card as well as precondition of three ANCs, 48.1 percent were eligible for Janani Suraksha Yojana (JSY) benefits. One-sixth of JSY eligible women who delivered in a PHC and 39.3 percent who delivered in a medical college did not receive JSY benefits. In the present situation, the direct cost for institutional delivery in a Government facility of only 53.5 percent of JSY eligible women was covered by the cash incentives from JSY. Median additional direct cost of rest of the JSY eligible women over the cash benefits received under JSY (INR 500.0) was INR 780.0 (\pm 1300.0). Out of 205 pregnant women who sought institutional care for childbirth, 23.4 percent availed the both way cost-free transport to and from the health facility. Another 17.1 percent availed the vehicle for the one-way journey either to or from the health facility. More than half (53.2%) of the women/ their families had to pay for motorized vehicle and the rest who availed hired slow-moving vehicle.

CONCLUSION: Gaps existed in the awareness of beneficiaries regarding entitlement under JSSK. Drugs and transport were two major causes of out-of-pocket (OOP) expenditure in public health facilities.

KEYWORDS: 1.HEALTH 2.JANANI SISHU SURAKSHA KARYAKRAM (JSSK) 3.MATERNAL MORTALITY RATIO 4.EMERGENCY OBSTETRIC CARE (EMOC) 5.BENEFICIARIES 6.PREGNANT WOMEN 7.BPL CARD 8.JANANI SURAKSHA YOJANA (JSY) 9.INSTITUTIONAL CARE 10.COST- FREE TRANSPORT.

20. Kumari, Madhu and et al. (2015).
Screening of Pregnant Women for Hypothyroidism. *PARIPEX: Indian Journal of Research, Vol.4 (10): 1-3.*
G19294

INTRODUCTION: Thyroid disorder is a common endocrine disorder in pregnancy and if not detected in early pregnancy it can have adverse antenatal and postnatal outcome. The most pathetic condition is that a child can develop cretinism. But all these complications can be prevented by a simple screening of thyroid hormones during pregnancy.

OBJECTIVES: To know the incidence of hypothyroidism in pregnant women; to study the response of medical treatment; to study the foetal and maternal outcome in patients with subclinical and overt hypothyroidism.

METHODOLOGY: The study was carried out in Obs & Gynae Department of Patna Medical College and Hospital (PMCH), Patna during October 2011 to September 2013. Pregnant patients attending the department of Obs & Gynae in PMCH irrespective of risk factors were screened for hypothyroidism by estimation of serum TSH at first antenatal visit.

RESULTS: Incidence of overt & subclinical hypothyroid patients was 0.8 percent and 2.2 percent respectively. The incidence of hypothyroidism in age group between 20-29 years were 79.3 percent. The incidence of pre-term labour (16%) was observed in hypothyroid patients. 34.2 percent of the patients affected with hypothyroidism had given birth to low birth infants, while (20.3%) has more chances of preterm labour, (7.6%) pre-eclampsia, (3.8%) placental abruption and anaemia (2.5%). The perinatal outcome of hypothyroid cases shows prematurity (20.3%), IUGR (13.9%), Respiratory distress syndrome (10.1%), still birth (2.5%) and IUD (2.5%). However, it was noticed that supplementation of L-Thyroxine reduces adverse pregnancy and perinatal outcome.

CONCLUSION: Pregnancy has profound effects on the regulation of thyroid function. There is increase requirement of thyroid hormones during pregnancy. If there is hypothyroidism during pregnancy there is adverse antenatal and perinatal outcome. Offsprings of untreated women have low IQ as compared to euthyroid patients. Fetus can also develop cretinism which is very big burden for parents and society. So considering all these adverse outcome because of hypothyroidism during pregnancy screening of all women is recommended.

KEYWORDS: 1.HEALTH 2.HYPOTHYROIDISM 3.TSH 4.SCREENING 5.PREGNANCY 6.PRE-ECLAMPSIA 7.RESPIRATORY DISTRESS SYNDROME 8.STILL BIRTH 9.IUD 10.THYROXINE.

NUTRITION

21. Ashraf, G. M. et al.

Maternal Overt Hypothyroidism and Neurobehavioral Outcome of Neonates: A Cohort Study from an Iodine-deficient Area of Northern India. *Indian Pediatrics*, Vol. 52 (10): 867-869.

G19295

BACKGROUND: Hypothyroidism is a relatively common condition among pregnant women. During pregnancy, thyroid gland is subjected to stress and undergoes adaptation to maintain sufficient output of thyroid hormones for both the mother and the fetus. In iodine-deficient areas like sub-Himalayan belt, predominant cause of hypothyroidism among pregnant women is iodine deficiency. Studies have established the link between maternal hypothyroidism and adverse neurobehavioral outcome of the affected child. Most of such studies were conducted in iodine sufficient areas where autoimmune thyroiditis is a predominant cause of hypothyroidism.

OBJECTIVES: To study the relation between maternal overt hypothyroidism and neurodevelopmental outcome of neonates in iodine-deficient region of Northern India (Kashmir Valley).

METHODOLOGY: 82 hypothyroid pregnant women were enrolled and followed up till delivery. They were categorized into following subgroups: Group A (n=43) – known hypothyroid women on treatment but uncontrolled at presentation and women first time diagnosed with hypothyroidism during first trimester of pregnancy; Group B (n=39) – known hypothyroid women on treatment having good control; and Controls (n=51) – euthyroid women without any treatment. Neonates: 132 neonates born to case (81) and control (51) group mothers were included in this study. There was one still birth in the case group.

RESULTS: This hospital-based study comprised of 82 mothers with hypothyroidism and 51 control mothers. The mean (SD) age of cases and controls was 29.4 (3.5) and 29.9 (3.4) years, respectively. The mean TSH in group A was higher in 1st trimester than Group B and controls but the difference was statistically insignificant in 2nd and 3rd trimester. First trimester FT4 levels were lower in group A as compared to group B pregnant women and controls. In all three groups, mean urinary iodine excretion in all trimesters was less than 150 µg/dL. Total T4 was significantly higher in group A and Group B Neonates than control neonates. The mean (SD) NABS score in group A [19.6 (2.15)] was significantly lower than group B [21.3 (3.72)] (P.0.037) and group C [24.0 (3.20)] (P <0.001). Moreover, the NABS score in group B was also significantly lower than controls (P<0.001).

CONCLUSION: Overt maternal hypothyroidism in iodine-deficient area constitutes a risk factor for an abnormal neurobehavioral development of affected child. The study suggests an important link between early maternal hypothyroidism and neurobehavioral outcome of affected offsprings. Early identification of hypothyroidism in pregnant women, especially in endemic areas and their optimal treatment to improve developmental outcome of their children is recommended.

KEYWORDS: 1.NUTRITION 2.INFANT 3.IODINE DEFICIENCY 4.NEURODEVELOPMENT 5.PREGNANCY 6.PROGNOSIS 7.HYPERTHYROID 8.NEO-NATES 9.NEURO-BEHAVIOUR.

22. Rao, S.G. and Puttaraj, S. (2015).
Determinants of Nutrition and Risk of Developing Non-Communicable Diseases in Adult Women. *Indian Journal of Nutrition*; Vol. 2(2):116-127.
G19296

INTRODUCTION: With increase in the population life expectancy and chronic Non Communicable Diseases (NCDs), globally are experiencing epidemiologic transitions such as obesity, diabetes, cardiovascular diseases, osteoporosis, arthritis etc. that emerge as a leading cause of morbidity and mortality. NCDs account for most of the global burden of disease as a consequence of past and cumulative risks. Hence, the future burden would be determined by current population exposure to risk factors.

OBJECTIVE: To assess the determinants of nutrition and to analyze the risk for developing NCD in women.

METHODOLOGY: The study was conducted at Vikram hospital and clinic located in Mysore city. The target group of the study comprised of 250 women having a normal BMI and also 250 women affected with NCDs, in the age group of 20-60 years. The groups were further divided into Normal women -Executives (EX), Non- Executives (NEX) and women not gainfully employed (NE).

RESULTS: Socio economic characteristics reveals that majority of the women (92%) in the study group belonged to 'Hindu' religion. Educational status of the women in EX was found to be better and higher than the NEX with women in NE (63%) having only graduation. It was found that 89 percent of women in EX were post graduates as compared only to 47 percent in case of NEX. However, 53 percent of NEX was found to be graduates. Most (94%) of the women in the Disease group, belong to Hindu by religion with low educational status comprising of Non literates (34%) and studied up to primary level (42%). Marital status of women in the Disease group showed that 87 percent to be married. While age at menarche was found to be in the normally acceptable range, age of menopause was found to occur early($x= 44.7$ years). Women experiencing irregular menstrual cycle were found to be in greater percentage in OB (48%) followed by cluster group (34%). Regression concepts for women in the disease group showed that age was the most significant variable determining the energy, protein and fat intake, energy expenditure, LBMI-negatively, and BMI, TSF, body fat percent positively among which the first two variables were highly significant and others significant at 5 percent level.

CONCLUSION: The determinants of the nutrition for both groups appeared to be age, energy, protein intake, fat intake, physical activity and educational levels being influenced by stress and age at marriage to a greater extent. The negative influence of these independent variables would certainly increase the risk of NCD among the selected women. On a practical level, improving the nutrition and growth of a girl child, avoiding obesity in children and adults and controlling environmental factors including pollution levels need to be given high priority.

KEYWORDS: 1.NUTRITION 2.NON-COMMUNICABLE DISEASES 3. SOMATIC STATUS 4.FOOD INTAKE 5.ADULT WOMEN 6.MORBIDITY 7.MORTALITY.

23. Rao, S.G. and Puttaraj, S. (2015).
A Study on Nutrient Intake and Energy Balance of Women- Home Makers, Gainfully Employed Non-Executives and Executives. *Indian Journal of Nutrition*. Vol. 2(1):114–126.
G19297

BACKGROUND: Women play a central role in child care and food processing even when their economic roles require extensive time and physical energy. Poor health has repercussions not only for women but also their families. Affluence, progressive aging of the population, upward socioeconomic conditions and changed lifestyles lead to an increase in Non-communicable diseases. It has been projected that while the infectious diseases would decline from 56 percent in 1999 to 25 percent in 2020, non-communicable diseases would increase from 29 percent in 1990 to over 57 percent in 2020.

OBJECTIVE: To determine the nutrient intake and energy balance of women.

METHODOLOGY: Random Sampling procedure was selected under the study. 250 Normal women in the age group of 20-60 years with BMI above 19 and below 25 were randomly selected from different areas of Mysore city. Women-both working outside (n=150) and confined to household work only (n=100) were included. The gainfully employed group of women was subdivided into Non-executives and Executives comprising of 75 subjects for each of the category.

RESULTS: Majority of the study group (80%) belonged to nuclear type of family. The age distribution was highly skewed with more than 60 percent being adults in the age group of 20-60 years. Majority of women (95%) were found to be married. The Age of menarche (12.9 ± 1.5) and menopause (22.0 ± 4.2) was found to be acceptable as per the Indian perspective. The consumption of green leafy vegetables was found to be low in all the three groups with nil intakes in case of EX women in the age brackets of 31-40 years and 51-60 years. The cereal pulse ratio was found to be 6:1 in NE and NEX groups which are similar to the ratio as recommended by the ICMR where as in case of EX women it was 8:1 which was much below the recommendations. Time spent in the physical exercise by the women in three groups over the age range of 20-60 years was found to be low ranging from 20-45 min, with younger women (20-30 years) spending more time in exercising. The time spent by the employed women in office work including commutation ranged from 440 min (7hrs) to 600 min (10 hrs) highest time being spent by EX women in the younger age group 20-30, 31-40 years. The total energy expended per day over the age brackets of 20-60 y ranged from 1805 kcal to 1940 kcal with the energy expended showing a decrease in the older women (51-60 y). The total energy expended daily by the three groups of women were found to be 1895 (NE), 1900 (NEX), 1865 (EX) kcal/day. The daily activity pattern was found to be 'sedentary' in case of all the three groups of women. Food behaviour as these are generally associated with

prosperity may lead to dietary imbalances and at risk for developing NCD – hypertension, DM, CVD etc.

CONCLUSION: From the results, it could be stated that these women were still under homeostatic control of vital processes as the biological risk factors - hypertension, dyslipidemia, IGT were still not apparent but still, these women could be at risk for developing NCD due to the fact that they had increased fat attributable to unhealthy dietary patterns and physical activity. The findings suggest that it is necessary to initiate a program combining physical activity measures with dietary modification- adequate protein, low fat and high fibre, increased green leafy vegetables and pulses for the retention of lean body mass particularly at the entry of menopausal stage.

KEYWORDS: 1.NUTRITION 2.ENERGY BALANCE 3.DIETARY PATTERN 4.MENARCHE
5.DIETARY IMBALANCES 6.MENOPAUSAL STAGE 7.PHYSICAL EXERCISE
8.HYPERTENSION 9.DYSLIPIDEMIA.

SOCIAL WELFARE

24. Kaur, J. (2015).

A Study of Environment Ethics among Women. *PARIPEX: Indian Journal of Research*, Vol. 4(11): 194-195.

G19298

INTRODUCTION: Development of particular skills related to life should be facilitated by action to promote awareness, comprising civic and political education, which helps women to know their rights and to become conscious of their capacity to have an effective participation in political life and other aspects also. It is necessary to develop self-esteem and self-confidence among women so that they can participate in every phase of development in a society and become efficient leaders to guide themselves and other members of the society. Women can ignite the social, environmental, political and economic areas and they can handle different responsibilities properly.

OBJECTIVES: To study environmental ethics among women in relation to their locale; and; to study environmental ethics among working and non-working women.

METHODOLOGY: Descriptive Survey Method was used in the study. Hundred women from Moga district of Punjab were selected in the sample. The sample comprised of 50 rural (25 working and 25 non-working) and 50 urban (25 working and 25 non-working) women from Moga district. The Environmental Ethics Scale by Haseen Taj was used as a tool in the study.

RESULTS: The mean score of urban women on environmental ethics scale was 87 with SD of 15.2 while the mean scores of rural women on environmental ethics scale was 71 with SD 13.8 and their t-value is 5.52 which was significant at (.01) level of significance. The mean score of urban women is more than the mean score of rural women on environmental ethics scale. Thus it reflects that urban women are well aware of environmental problems and have been provided environmental education, while, on the other hand rural women are lacking such knowledge or awareness. The mean score of working women on environmental ethics scale was 83 with SD of 14.8 and mean scores of non-working women towards environmental ethics was 71 with SD 12.4 and their t-value was 4.40 which was significant at .01 level. The mean score of working women was more as compared to the mean score of non-working women. Since working women are more exposed to environmental problems and have been provided environmental education. On other hand non-working women may not face problems related to environment. So, awareness towards environmental issues among working women may lead their actions for solutions. As working women are exposed to number of situations outside the home, so, they are much aware about environmental issues than the non-working women. Right direction and mass communication do play an important role in enhancing and focusing the attention of its clientele on the importance and the need to protect environment.

CONCLUSION: Education is playing an important role in spreading environment awareness and ethics. The result of the study points out that there is a difference in the level of environment ethics among women with respect to their place of living and economic activities performed by them. Thus the program of environmental education needs to be modified in rural areas. They should be given extra knowledge regarding environment so that they may also come to know about the problems of environment which must help them to develop high environmental ethics. The environmental education should be promoted by using mass media such as newspapers, radio, televisions and popular films shows. Government and private authorities should take keen Interest in solving environmental problems. There should be some areas which should be kept reserved for national park and frequent trips of women should be arranged to these areas so that they lead actions towards prosperity.

KEYWORDS: 1.SOCIAL WELFARE 2.AWARENESS 3.ASSETS 4.ENVIRONMENTAL ETHICS 5.SURVEY.

WOMEN WELFARE

25. Mehta, G.S. (~2008).

Empowerment of Women through Participation in Panchayati Raj Institution. Giri Institute of Development Studies.
G19101

BACKGROUND: Empowerment is a process aimed at changing the nature and direction of systematic forces which marginalize women and disadvantaged. The term has been popular in the field of development especially in reference to women since the midst of 1980s. With an attempt to ensure maximum women participation, Panchayati Raj Institutions along with various other government scheme and programmes are designed so as to strengthen them with social, economic, and political empowerment. It is also assumed that women participation in different Panchayat activities, especially in decision making processes for the implementation of certain development programmes would prove a successful measure for minimizing the traditionally accepted gender bias against women in the social system.

OBJECTIVES: To examine the extent to which the women have been benefitted after getting the opportunity to represent the Village Panchayats. To assess the changes in economic empowerment of women in their personal incomes and work participation; to assess changes in social empowerment with their participation pattern in different social activities; to assess the change they had experience in getting social status in the community; to examine the alternative approaches initiated to overcome the adversely affecting factors in their socio-economic empowerment.

METHODOLOGY: A field study was conducted in one districts each i.e. Saharanpur and Gorakhpur of western and eastern region of Uttar Pradesh state were identified. Sample consisted of 93 women-headed village panchayats and women Pradhans and 404 women members. Interview schedules were used to collect the information.

FINDINGS: The work participation rate of Pradhan's has increased from 5.38 percent to 9.68 percent and for members it has increased from 15.69 percent to 19.07 percent after joining the panchayats. Occupation structure of Pradhan's and members revealed that prior to representing village panchayats, an overwhelming majority of both pradhans (94.62%) as well as members (84.40%) were earlier engaged in household related non-economic activities as housewives while least women pradhans (3.23 %) and members (6.19%) were engaged on their family farms. The average monthly income of Pradhans in

Saharanpur (71.5%) has increased at much higher level than in Gorakhpur (36.90%), in contrast to the average monthly income of the members (54.3%) of Saharanpur which was lower than Gorakhpur (71.43%). The social status of the Pradhans (50.5%) had improved considerably through participation in social ceremonies, followed by participation in the local functions (48.4%). Interestingly, some (7.5%) were also involved in solving the matters related to disputes and conflicts. Majority (78.5%) of both the Pradhans as well as members (90.6%) reported of not experiencing any kind of changes in performing household duties after electing the representatives of concerned PRI's. Factors limiting improvements, comprising 27.9 percent Pradhans and 19.3 percent members lacked knowledge about their rights, functions and duties as provided under the 73rd Constitutional Amendment Act. Around 17 percent from Saharanpur and 18.3 percent from Gorakhpur, were of the view that the introduction of various women related development programmes and maximizing the women participation at different stages in PRIs as an important measure for women.

CONCLUSION: The deep rooted social evils and culture backwardness in rural areas provided to women representatives of PRIs by their family members in availing the opportunities to participate in certain social cultural political and economic activities are still lacking. A very low level of change has occurred in the involvement of women in looking after their children, old family members, animals and others household work due to illiteracy, lack of motivation and freedom for participating in various activities.

KEYWORDS: 1.WOMEN WELFARE 2.WOMEN EMPOWERMENT 3.PANCHAYATI RAJ INSTITUTIONS 4.PARTICIPATION PANCHAYATI RAJ 5.WOMEN ECONOMIC EMPOWERMENT 6.SOCIAL EMPOWERMENT.

26. Balu, A. and Muthumani, K. (2015). Perception of House Wives on the Importance of Savings with Special Reference to Sirkazhi Town. *PARIPEX: Indian Journal of Research*, Vol. 4(10): 34-38.
G19299

INTRODUCTION: Savings require current sacrifice, the sacrifice precedes the reward. On the other hand, savings offers flexibility and while borrowers pay interest, savers earn interest. Savings allow people to take advantage of unexpected investment opportunities. Women need to become savvy investors and money managers. Although women outlive men by an average of five to seven years, they usually earn less and save less, drop in and out of the labor force, and suffer more financial divorce. When it comes to finance, women may be less confident of their ability to invest wisely and to plan for the future.

OBJECTIVES: To know the importance of savings and the behaviour of housewives towards the same in Sirkazhi town; to exhibits the relationship between some of the demographic variables and the variable related to saving; and; to find out the factors influencing the investment decision of housewives.

METHODS: Random Sampling technique for selecting a total sample size of 100 housewives from the semi urban Sirkazhi town of Nagai district in Odisha.

RESULTS: There is no significance association between the number of family members and the prime objective of their investment. Among the low income group, a majority of respondents (44.4%) and (25.9%) stated that their savings are below (10%) and 10 to 20 percent respectively. Among the middle income group (36.4%), (31.8%) and (20.5%) accepted their savings percentage as 10 to 20 percent, 20 to 30 percent and below 10 percent respectively. From the high income group a majority of one third agreed that their savings works out to 20 to 30 percent. When the income increases, it is positively reflected on their savings. Thus excess income over expenses leads to savings since people from Sirkazhi town are conservative and traditional. Among the below 25 years category, a majority (43.8%) housewives stated that they save less than 10 percentage of their income; whereas 37.5 percentage revealed that it is 10 to 20 percent. Among the second category, a majority of (41%) respondents stated that the savings are estimated to 10 to 20 percent. About 34.5 percent of respondents revealed that they could save only less than (10%) from the third category. Among the senior group (above 45 years) a majority of (31.2%) have given the same opinion as similar to the previous category. The researcher identified that as the age passes by the responsibilities and family expenses increases due to children education and changing lifestyle. As a result the percentage of savings on income going down is clearly evident.

CONCLUSION: Savings is a very important aspect for individuals, family, organizations, nation etc. Therefore normally everyone would be giving positive nod for savings and there would not be any second thought. The study makes an attempt to know the level of importance of savings among the semi urban crowd and how effectively the savings can be done. Thus, it can be concluded that level of importance of saving is low. This can be improved only by series of awareness programmes in various media about savings and investments, implementation of attractive interest rate, establishment of new industries and business, reduction in cost and increase in profitability of industries and business.

KEYWORDS: 1.WOMEN WELFARE 2.SAVING BEHAVIOUR 3.INVESTMENT DECISION 4.MONEY MANAGERS 5.INVESTMENT AVENUES.

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