DCWC Research Bulletin

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A. Research Abstracts on Child Development

CHILD WELFARE


**INTRODUCTION:** The child is not a miniature but an individual in his own right. The foundation of child’s social attitude and skills are laid in the home. Although the government of India has started various schemes of residential schools for providing an overall development of children apart from education but still separation anxiety is prevalent among children attending these schools. Besides this Central Government’s Defence Ministry has also opened residential schools like Sainik schools. Prevalence of anxiety disorder is very common in school going children about 10-15 percent of all school children can experience separation anxiety at some time, for variety of reasons.

**OBJECTIVES:** To assess the level of anxiety experienced by children of age group 6-10 years residing in school hostels; and; to correlate the findings with selected demographic variable such as age, gender, education, ordinal position, presence of relative nearby, frequency of parents’ visit and type of family.

**METHODOLOGY:** A quantitative non-experimental approach with exploratory survey design was adopted for the present study. The samples of the present study were hostelite school children aged 6-10 years who are residing in the selected schools of Pune city.

**RESULTS:** The findings reveals that half (50%) were female and (50%) were male taken from different schools. Majority (59.5%) of the sample were in 6-8 years of age group. More (21.5%) of the sample from the V standard, II standard (20.5%), and rest (19.5%) from I, III, IV standard contributed to the residential schools. Maximum (51%) of the children belong to nuclear family. Two-fifth (41%) of the children were having 2nd ordinal position in the family. Various reason for living in hostel were cited like family conflict (3.5%), education (77.5%), wish to join military (9.5%), poor /low economical condition (7.5%), wish to join politics (0.5%) and single parent (0.5 to 1%). According to
anxiety score as obtained by the Modified Spence Anxiety Scale it showed that a fifth (20.5%) had normal anxiety level, while more than two-third (69%) had mild level of anxiety, a few (10.5%) had moderate level of anxiety and no one was in severe type of anxiety. The findings also revealed that there was no significant difference in the anxiety level of the children according to their gender, ordinal position, type of family, or whether the relative lived near the hostel or not lived near the hostel. The anxiety level of the children was significantly increased as their parent frequently visited them. The parents however visited the children as per the school rules. Study shows the anxiety level of the children was significantly reduced as their age was increased (Z = 5.06; P value <0.0001). The level of anxiety was significantly reduce as their educational level was increased (F=11.28; P<0.0001).

CONCLUSION: The anxiety level of the children is significantly reduced as their age and educational level is increased. Hence we can say that he/she may adjust with the hostel environment physically, psychological. Loving and caring teacher as well as the caretaker in the hostel/school can go a long way in reducing anxiety among children. Also with positive behaviors children can cope in constructive way by using problem-solving approach, self-assertive behaviors that respect the rights of others and thus helps in reducing separation anxiety.

KEYWORDS: 1.CHILD WELFARE 2.RESIDENTIAL SCHOOLS 3.MODIFIED SPENCE ANXIETY SCALE 4.ANXIETY DISORDER 5.SEPARATION ANXIETY.
INTRODUCTION: The preference of a male child over a female child has been the main cause for female feticide. Female feticide is a practice of elimination of female fetus before she is born. The causes can be broadly divided under the grounds of religion, economic and social aspects. Despite India making so much of progress the child sex ratio (between 0-6yrs) has declined 927 to 918 over past 10 Years. Declining sex ratio can also cause increase in crimes such as rape and abuse against women. It is necessary to maintain the sex ratio for a balanced healthy society.

OBJECTIVES: To assess the awareness and the attitude regarding female foeticide among adolescents.

METHODOLOGY: A cross sectional study was carried in few pre-university colleges in Mangalore. Data was collected using a semi-structured questionnaire. The study included 300 adolescents as a sample size.

RESULTS: Out of the 300 study subjects 148(49%) were females and 152(51%) were males. Among the study sample majority (89.3 %) knew female foeticide as intentional killing of the female foetus, while the others (10.7%) were not clear about how female foeticide is defined. The main source of information was TV and multimedia (56.7%), while other sources were Newspapers (19%) and from colleges (15%). About (45.7%) stated that the major cause for practice of foeticide was discrimination between male and female. Followed by it is were economic factors such as poverty (20.3%), lack of education (16.7%), socio-ritual factors (17.4%). Majority (61%) were of the view that the common reason for preference of a male child over a girl remains the source of income. Regarding less preference of the girl child, it was found that practice of dowry system contributed the most (37.1%), followed girl being considered as burden (30.1%), increased crime towards girls (20.1%). On the family composition and size, majority (92.3%) believed that having one boy and one girl child is the composition of an ideal family. Majority (62%) were aware of all the diagnostic methods to determine the sex of the child and termination i.e Pre-natal sex determination, Ultrasound, Selective pregnancy and Sex selective abortion. Two-thirds (66.4%) of the study sample was of the view that the demand for sex-determination by the pregnant woman and the couples as the cause, while another (60 %) opined that lack of ethics knowledge among the doctors was the cause for the illegal practice of these diagnostics methods.
More than a third (37%) believed that enforcing strict laws could be the way to stop female foeticide, followed by making it a punishable offence (22%) to both doctor and the person in favor of it. Only 17 percent thought that extra financial needs must be provided to people with a girl child. When the doctor is held responsible, cancellation of the doctor’s license should be the punishable act according to two-fifth (40.1%) of them, followed by seal of Diagnostic labs (35%) was considered next option. Less than half (43.3%) of the students were aware about the laws enforced, which could be employed in the act of female feticide. It was found that according to a third (33%) lack of education was the main cause for failure to reduce cases of female foeticide, followed by failure to implement laws (32.7%) and still being practiced socio-ritual factors (20.7%). Conducting Camps in school and colleges (35.7%) was found to be the effective method to spread awareness. It was also observed that a few (16%) of them thought that campaigns must be held to educating the couples.

CONCLUSION: Adolescents agreed that the decline in sex ratio is the main impact of female foeticide. The students have adequate knowledge about diagnostic methods used for sex determination. They believe that strict law implementation is a promising way to stop female foeticide. However, they were not knowledgeable about the laws enforced for the control.

KEYWORDS: 1.CHILD WELFARE 2.ADOLESCENTS 3.FEMALE FETICIDE 4.GIRL CHILD 5.PRENATAL SEX DETERMINATION 6.DIAGNOSTIC METHODS 7.SELECTIVE PREGNANCY 8.SEX SELECTIVE ABORTION.
EDUCATION

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INTRODUCTION: Gender disparity in providing education remains a farce difficulty for which the Central Government of India launched a scheme known as Kasturba Gandhi Balika Vidyalaya (KGBV) in 2004. It ensures access and quality education to the girls belonging to disadvantaged groups of society by setting up residential schools at upper primary level.

OBJECTIVES: To know the present status of passed out girls from Kasturba Gandhi Balika Vidyalaya of Bijnor District (U.P.); and; to know the reason of girls not studying after 8th standard.

METHODOLOGY: A Normative Survey Method was used in the study with sample size of 150 passed out girls from KGBV of Bijnor District (U.P.).

RESULTS: Out of the 150 girls, 120 (80%) girls continued their study and were studying in different classes. But one-fifth (20%) of 150 girls did not continue their studies after 8th standard. Nearly, fifth (17.5%) girls were studying in 9th standard, and closely (16.6%) girls in 10th standard, 11th standard, and 12th standard, respectively. The girls were enrolled in different stream varying from B.A. (28.8%), B.Sc. (8.3%), to B.Com (3.3%). Total 30 girls out of 150 girls were unable to continue their education after 8th Standard. 20 girls (66.6%) out of 30 girls due to their parents poor economic status were unable to keep on their study after 8th standard. 13.3 percent girls got married after 8th standard and so discontinue their study. out of 30 girls, 6 girls (20%) were unable to keep on study after 8th standard because there were no higher secondary schools near their home.

CONCLUSION: The KGBV scheme seemed to be effective to bring the deprived group to the main stream of Education. The educational status of tribal women / girls is increasing through this scheme. It is helpful in increasing female literacy rate of disadvantaged groups (SC, ST, OBC and Minority). Through this scheme the goal of Universalization of Elementary Education through proper implementation of provision made for Educationally Backward Block’s girls can be achieved.
INTRODUCTION: Teachers are the backbone of the education system and are imperative to the reform effort. The learner has to acquire a great deal of teaching along with secondary experience, coupled with pre-conscious emotions. Of late there had been an increasing emphasis on having a primary experience of the teachers, thus initiating in a situation of practice and learning through senses. This kind of experiential learning is becoming popular in teaching practices.

OBJECTIVES: To assess the learning issues of primary schools and identify teaching practices’ issues of primary teachers.

METHODOLOGY: Survey Method was employed among 100 teachers randomly selected from all the SSC Board English medium schools of Pune city.

RESULTS: The findings reveal that a third (31%) teachers were reflectors in learning styles while a little less (24%) were theorists. Even lesser proportion (22%) of teachers possessed advanced learning styles, respectively. Majority (46%) of the teachers believed the subject knowledge is the most important factor for effective teaching practices, followed by values and beliefs (29%). Relatively, a small proportion of teachers felt that competence (17%) in teaching and attitudes (8%) also makes teaching effective. More than half (51%) teachers believed that the rate of change of students learning is rapidly changing in education system. 18 percent of teachers stated that technology driven education and traditional way of teaching are the reasons for gap between teacher’s teaching and student’s learning. However, 13 percent teachers agreed that they have struggled to keep the pace with children. Regarding self-awareness about teacher’s skills was rated as 25.5 percent and ranked first. While creative thinking, was ranked second and rated a little less (24.6%). The skill of problem solving was ranked third (18.8%), followed by decision making skills (16.8%) as fourth, and scaffolding skill (14.3%) was ranked fifth by the teachers.

CONCLUSION: The findings of the research serves as a useful reference for teacher education to help the teachers relieve and cope with their work- related problems. Since the main issue in all teaching is based on the learning process and is memory based, there is no active involvement of students, so they are
lacking in the development of life skills, which are important for their all-round development.

**KEYWORDS:** 1. EDUCATION 2. CHILD EDUCATION 3. LEARNING PRACTICES 4. EDUCATION SYSTEM 5. SELF-AWARENESS 6. EFFECTIVE TEACHING PRACTICES 7. PROBLEM SOLVING 8. CREATIVE THINKING.

5. Rajesh et al. (2016).
   G19630

**INTRODUCTION:** The term Transgender is applied in gender studies to refer to any person whose own sense of gender does not match with the gender assigned to them at birth and who may express gender in non-traditional ways. India has achieved significant growth and development and has improved on crucial human development indices such as level of literacy, education and health. There are indicators however, that not all disadvantaged groups have equally shared the benefits of the growth process.

**OBJECTIVE:** To understand the preparedness of the academic institutions/colleges in Delhi to enroll and accommodate transgender students; to suggest suitable measures for mainstreaming transgender community in Higher Educational Institutions.

**METHODOLOGY:** Semi structured interviews were conducted with the key resource persons such as academic staff, facilities and gender sensitization committees in the Universities and Higher Education Institutions in Delhi.

**RESULTS:** Since the study was a qualitative one the findings of the study were more descriptive. Major finding was that none of the colleges interviewed both on-campus and off campus reported to have a transgender student in their college. They also shared that they are not aware of any transgender student in any of the colleges of the Universities. The Higher Education Institutions had a grievance committee where all complaints related to sexual harassment were heard. However there was no separate committee to address issues related to transgender. There was an Anti – Discrimination Policy in all colleges and institutions. However the same was not refined or revised in the light of admitting transgender students or to prevent any form of harassment against them. The faculty members and staff shared that no orientation program was organized to sensitize the staff members of teachers related to transgender
issues. Except one women’s college in the North Delhi, no other college reported to have a separate counselor to counsel students when they faced any sexual harassment or gender related issue. Few faculty members and staff members in coeducational colleges were not comfortable in discussing transgender issues and withdrew from the conversation when interviewed. The college did not have any separate resources or infrastructural support for transgender students.

**CONCLUSION:** The transgender community experts also argue that there is an urgent need of addressing the concerns of the community in education sector in a holistic way-that implies giving attention to four core areas of: access, Equity, enabling environment and employment.

**KEYWORDS:** 1. EDUCATION 2. CHILD EDUCATION 3. TRANSGENDER 4. HIGHER EDUCATION 5. GENDER INCLUSIVE APPROACH 5. TRANSGENDER IN HIGHER EDUCATION 6. HIJRAS.

**INTRODUCTION:** Career guidance is very essential for students because without proper guidance a student cannot choose a proper subject for his career and he cannot secure his future. As soon as a student reaches in 10th standard, some kind of pressure of choosing a career path lingers in their mind. At this time there is a need of guidance in selection of subject, so that student can choose the subject according to their interest at secondary level in 10+2 system and can establish his own identity in this competitive world.

**OBJECTIVES:** To study the interest of students in selection of subject at secondary level; and; to study about the sources of guidance available for students.

**METHODOLOGY:** 100 students have been selected randomly from different Schools in Mandsaur, M.P.

**RESULTS:** The findings reveals that nearly half (42%) students were interested in fine Arts, 16 percent in Science, 12 percent in Humanity Arts, 10 percent in Commerce, 8 percent in Medical, 6 percent in Engineering, 4 percent in Home Science and only a few were interested in Agriculture (2%). 12 percent students took guidance from the teachers, friends, and family members and by their self-decision. 4 percent students took guidance from the principal, teachers, and family members and by their self-decision. While another 4 percent of students took guidance from the principal, parents and by their self-decision. However, 4 percent students took guidance from the principal, seniors’ students, magazines and T.V. or other Audio-visual aids. 4 percent students took guidance from the principal, teacher, senior students, family members, magazines, T.V. or other Audio-visual aids and by their self-decision. 6 percent students took guidance from the principal, teacher, parents, family members and by their self-decision 6 percent students took guidance from the teacher, parents, family members and by their self-decision. 2 percent students took guidance by their self-decision. 4 percent students took guidance from the principal, teacher, friend, parents, family members and by their self-decision.
CONCLUSION: Mostly students were interested in fine Art and science subject. On the other hand the students were confused whom should they take guidance in selecting the subject at 10+2 level. Therefore it can be said that there should be a career counselor in every school for guiding to students for selection of right career according to their interested field.

KEYWORDS: 1. EDUCATION 2. CHILD EDUCATION 3. INTEREST 4. CAREER GUIDANCE 5. SUBJECT 6. SECONDARY SCHOOL STUDENTS.
INTRODUCTION: Children with epilepsy (CWE) are considered to be at an increased risk for injuries as compared to the general population. Seizures related falls and accidental burns, and effects of anticonvulsant drugs on cognition and co-morbidities (attention deficit disorder, cognitive and motor impairments) may increase the risk of injuries in these children.

OBJECTIVES: To study the magnitude and pattern of injuries in children with epilepsy.

METHODOLOGY: A cohort study on children with epilepsy (CWE) aged 2-16 years on treatment with anti-epileptics for a minimum duration of one-month and compared them with their own siblings (controls). Participants were followed up for 12-months for occurrence of injuries.

RESULTS: 208 cases and 212 controls were analyzed. The mean (SD) age of cases was 9.4 (3.8) yrs and of controls was 9 (3.8) yrs. Among the cases, the most common seizure semiology was generalized (49%). A past history of seizure-related injury was present in 3.3 percent of cases. 21 children with epilepsy (10%) had injuries during the 12-month follow-up period. Among these 21 children, one child had 4 injuries, two had 2 injuries and the rest had a single injury (total 26 injuries). Nine (9/21, 42.9%) of them had seizure related injuries and 14 out of 26 injuries were seizure related. There were no compliance issues in the study population. 10 (4.7%) children in the control group suffered injuries (all had a single injury) in the study period. Children with epilepsy had significantly higher injury rate (RR 2.1; 95% CI 1.0 to 4.4) as compared to the controls (P=0.03). However, if we excluded the seizure-related injuries in the cases, then the injury rates were similar in the two groups (Cases 12/208, 5.8%; Controls 10/202, 4.7%; P= 0.63). Head and face was the most frequently affected site in cases (18/26; 69.2%) as well as controls (5/10; 50%). 34.6 percent (9/26) of cases and 50 percent (5/10) of controls with an injury sought medical attention. Type of epilepsy, past history of seizure-related injury, and use of ≥2 antiepileptic drugs were associated with increased risk of injury (P<0.05).
CONCLUSION: Children with epilepsy are at an increased risk of injuries and hence need supervision. There is a need to undertake measures to modify the home environment and reduce the risk of injuries.

KEYWORDS: 1. HEALTH 2. CHILD HEALTH 3. ACCIDENTS 4. SEIZURES 5. CO-MORBIDITIES 6. WOUNDS 7. INJURIES 8. CHILDREN WITH EPILEPSY (CWE) 9. ANTICONVULSANT DRUGS.
INTRODUCTION: Reduction of under-five child mortality, the target of Millennium Development Goal 4 (MDG 4), has shown remarkable progress globally since 1990, with the highest average annual reduction rate of 4 percent during 2005-2013. Sub-Saharan Africa and South Asia continue to have the highest under-five mortality burden; India had 49 under-five deaths per 1000 live births in 2013, and is lagging behind the committed target. Perinatal mortality, which includes stillbirth, has received much less global attention despite being most common in low-and middle income countries (LMIC), and has declined at lower rate than under-five mortality.

OBJECTIVE: To evaluate the relationship between maternal age at child birth, and perinatal and under-five mortality.

METHODOLOGY: A cross-sectional study, with 9169 pregnancies in the New Delhi Birth Cohort resulted in 8181 live births were undertaken. The survival status and anthropometric measurements at birth (+3 days), 3, 6, 9 and 12 months (7 days), and every 6 months thereafter until 21 years age was also obtained.

RESULTS: Offspring mortality (stillbirths – 5 years; n=328) had a U shaped association with maternal age (P<0.001). Compared to the reference group (20-24 years), younger (≤19 years) and older (≥ 35 years) maternal ages were associated with a higher risk of offspring mortality (HR: 1.68; 95% CI 1.16, 2.43 and HR 1.48; 95% CI 1.01, 2.16, respectively). In young mothers, the increased risk persisted after adjustment for socio-economic confounders (maternal education, household income and wealth; HR 1.51; 95% CI 1.03, 2.20) and further for additional behavioral (place of delivery) and biological mediators (gestation and birth weight) (HR 2.14; 95% CI 1.25, 3.64). Similar associations were documented for post-perinatal deaths but for perinatal mortality the higher risk was not statistically significant (P >0.05). In older mothers, the increased mortality risk was not statistically significant (P >0.05) after adjustment for socio-economic confounders.
CONCLUSION: Young motherhood is associated with an increased risk of post-perinatal mortality and measures to prevent early childbearing should be strengthened.

INTRODUCTION: Infants and under five children with their immature immune systems and small protein reserves, are more susceptible to malnutrition and wasting. Malnutrition has been shown to be an important co-morbid condition, as these populations are vulnerable to high prevalence of food insecurity. Information on nutritional status of HIV infected children from India is lacking and is required before taking up nutritional supplementation trials.

OBJECTIVES: To assess the growth and morbidity status of HIV infected children over a period of one year.

METHODOLOGY: An observational study carried out at two orphanages in Hyderabad, India. 77 HIV-positive children aged between 1 and half and 15 years, both on Anti Retroviral Therapy- ART (44) and not on ART (33) were included.

RESULTS: Iron and folate intakes were less than 50 percent of RDA; 46 (59.7%) children were stunted, 36 (46.8%) were underweight and 15 (19.5%) had low BMI for age. In terms of BMI for age, boys (29.7%, 11/37) appeared to be more undernourished when compared to girls (10%, 4/40) and had significantly (P<0.05) lesser percent body fat, but higher lean body mass than girls. Micronutrient deficiencies such as vitamin D (40/77; 51.9%), vitamin A (11/77; 14.3%), folate (37/77; 48.1%), iron (38/77; 49.3%) were widely prevalent. HIV viral load was higher in children not on ART and those with morbidity. Respiratory (36.6%) and dermatological illnesses (18.8%) were the commonest presentations. Mean energy intakes were less than recommended dietary allowance (RDA) in all age groups. Underweight was comparable across all three age groups. Moderate underweight was prevalent in 54.5 percent (24/44) children on ART, while it was 39.6 percent (13/33) in those not on treatment. Anaemia (Hb<11 g/dl) was prevalent in 35 of 77 children (45.5%) at baseline. Micronutrient deficiencies were widely prevalent, with vitamin D, iron and folate deficiencies being the most common. Vitamin D deficiency (< 20 ng/ml) was observed in 51.9 percent (40/77) of children with mean serum 25 (OH) vitamin D being comparable between boys and girls. Nearly 50 percent of children had low iron (38/77) and folate levels (37/77). Vitamin A deficiency was observed in 14.3 percent (11/77) children. Overall, zinc deficiency was observed in 16.9 percent (13/77) children, with the extent of zinc deficiency being higher in boys (8/37, 21.9%) compared to girls (5/40, 12.5%). Only one boy with HIV had low serum copper concentration, and serum calcium and serum albumin
Concentrations were low in 26 percent (20/77) and 36.4 percent (28/77) children respectively. Children on ART had a high proportion of stunting (65.9%, 29/44) than those not on ART (51.5%, 17/33). Severe stunting was observed in 36.4 percent (16/44) children on ART compared to 9 percent (3/33) children who were not on ART. A higher proportion of children on ART (20.5%, 9/44) had low BMI compared to children not on ART (12.1%, 4/33). Pneumonia was the commonest lower respiratory infection and was reported in 19 (24.6%) children while upper respiratory tract infection with fever was seen in 28 (36.6%) children. Pulmonary tuberculosis was the commonest opportunistic infection seen in 13 (16.8%) children. Dermatological manifestations such as scabies, dermatitis, Herpes simplex, Herpes zoster, molluscum contagiosum, mumps, etc. were seen in 14 (18.8%) children and other non-specific morbidities were reported in 27 (35%) children in the study.

CONCLUSION: Micronutrient deficiencies were very common in paediatric HIV which should be addressed. It is known that morbidities and growth failure are rampant in HIV infected individuals, corrective measures need to be directed at micronutrient deficiencies which would compromise immunity and increase morbidity.

KEYWORDS: HEALTH; HIV; PAEDIATRIC HIV; ANTI RETROVIRAL THERAPY (ART); SERUM ALBUMIN; PULMONARY TUBERCULOSIS; MICRONUTRIENT DEFICIENCY; VITAMIN A DEFICIENCY; HIV VIRAL LOAD; ZINC DEFICIENCY
ICDS


INTRODUCTION: The Integrated Child Development Services (ICDS) has been successful in many ways, but still faces a number of implementation and operational challenges. Effective delivery of the services remains limited, especially in relation to promotion of appropriate complementary feeding. The ICDS program in the State of Telangana, India, freely provides a fortified complementary food product, Bal Amrutham, as a take-home ration to children 6±35 months of age.

OBJECTIVES: 1. To determine the coverage and utilization of the Bal Amrutham in areas of Telangana where the ICDS program was implemented, to assess the accessibility and utilization of the ICDS program, and to determine the associations between product coverage and other health and nutrition indicators. 2. To assess household coverage of iodized salt and the potential for rice fortification, the results of which are presented in another paper.

METHODOLOGY: A two-stage, stratified cross-sectional cluster survey was conducted from November to December 2014. It represented children between 0 and 35 months of age in the catchment areas of AWCs across the State of Telangana. A total of 1,157 children were randomly selected.

RESULTS: Among all the caregivers interviewed, nine were males and the rest were females. Exclusive breastfeeding among children under 6 months of age and continued breastfeeding among children 6–23 months of age was high (89.1% and 82.7%, respectively). However, complementary feeding practices were found to be poor, especially dietary diversity, which was only about 47 percent of the children 6–35 months of age. IYCF practices were not significantly different between poor and non-poor households. Only 2 percent of the children below 6 months incorrectly received the take-home rations and it was found that exclusive breastfeeding prevalence was high among these
children. Caregivers from poor households were less likely to have heard of Bal Amrutham than caregivers from non-poor households (88.6% versus 95.7%, p<0.05). Most caregivers of children under 6 months (80.8%) had already heard of Bal Amrutham, but only 2.2 percent had ever received it for the child. Regarding stock outages, 28 percent of caretakers reported that Bal Amrutham was out of stock at the AWC, and 39 percent reported that the AWC did not provide Bal Amrutham, which is potentially a proxy response for stock outages. Difference in responses related to stock outages were not significantly different by MPI (poor vs. non-poor) or residence (urban vs. rural). In only 3 percent of the respondents, the belief that the product caused diarrhea or vomiting in the child was a barrier. This may be attributable to mixing the product with unsafe water or milk (16% of the households). Poor households were less likely to have visited an AWC in the past month (85.2% for poor households versus 92.8% for non-poor households, p<0.05). The main reasons mentioned for not going to the AWC every month were: (i) the distance from the household to the center or the cost of getting to center and (ii) the husband or family not allowing the caregiver to go to the center.

CONCLUSION: The ICDS program is an important delivery channel for services to children in the State of Telangana. The supplementary food product, Bal Amrutham, distributed through the ICDS program to children between 6 and 35 months in Telangana is widely available, accepted, and consumed among the target population in the catchment areas of the AWCs. However, to maximize the potential for impact, supply chain issues, particularly ensuring continual supply at the point of distribution, should be addressed. Similarly, further education and potentially complementary strategies that would support successful targeting of the product to the intended child (6 to 36 months of age) in the home are needed.

KEYWORDS: 1.ICDS 2.AWC 3.FORTIFIED FOOD 4.IYCF PRACTICES 5.BAL AMRUTHAM 6.COMPLEMENTARY FEEDING 7.EXCLUSIVE BREASTFEEDING 8.HEALTH AND NUTRITION INDICATORS.

INTRODUCTION: The Government of India is committed to child development as a policy priority and is expanding ICDS programme with the ultimate aim of reaching every child. The Anganwadi Centre (AWC) literally known as a courtyard play centre is a focal point for the delivery of services at community level to children below six years of age, pregnant women, nursing mothers and adolescent girls under ICDS. With regard to immunization services, the Anganwadi Workers carries out the following immunization duties: list the infants and pregnant women to be immunized; motivates the family members to accept immunization; assist the health teams to perform the immunizations; and follows up as well as carries out first aid management of any minor side-effects resulting from the immunization.

OBJECTIVES: To assess the immunization status of children 1-6 years age group attending AWCs.

METHODOLOGY: A field based cross-sectional study in Berhampur, Odisha. The data was collected from 405 children registered in AWC of 1-6 year age group during the study.

RESULTS: Majority (79%) were residing in urban non slum areas and rest (21%) belonged to urban slums. Females constituted about half (48%) of the sample size. Regarding age distribution majority (65%) belonged to 1-3 year age group and rest (35%) were in 3-6 years age group. It was seen that majority (67%) AWCs had been established more than 10 years back followed by a few (23%) which were 5-10 years old and remaining (10%) AWCs were less than 5 years old. Nearly equal proportion of children belonged to the both ICDS project. Among individual vaccines, coverage was highest for OPV zero dose and in ICDS project I (89%) and II (93%) respectively. The lowest coverage was found for Hepatitis B 3rd dose (63%) as an average. The coverage of DPT3 and OPV3 were nearly same. Vaccination status gradually decreased after first dose and reached to lowest level at 3rd dose. Majority (74.5%) children were completely immunized and rest (24.5%) were partially immunized. The proportion of complete immunized children in slum areas was very low (53%) as compared to, in non-slum areas (80%). It was observed that booster immunization among study population of OPV (60%), DPT (47%) and 2nd dose of measles (8%),

respectively was unevenly provided. Majority (61%) got immunized in private clinic and while remaining (39%) got vaccinated in AWCs. The reasons for partial immunization were lack of information (47%), lack of motivation (17%), obstacles like faraway session site and inconvenient timing (36%). Lack of information included the unawareness regarding need for immunization, need to return for 2nd and 3rd dose, place & time of immunization, fear about side reactions etc. It was found that grade III AWCs has maximum immunization coverage i.e. complete (37%) and partial (13%) coverage.

**CONCLUSION:** Immunization is an important activity under ICDS, but the study findings report that the coverage was not proper. Health information and education about the importance of complete immunization needs to be stressed upon both to the AWWs and the parents and motivation should also be considered seriously. Majority of the parents were unaware about an important programme like immunization; hence propaganda of these programme is necessary.

**KEYWORDS:** 1. ICDS 2.IMMUNIZATION 3.ANGANWADI WORKER (AWW) 4.ANGANWADI CENTRE (AWC) 5.1-6 YEAR CHILDREN 6.VACCINATION 7.OPV ZERO.
NUTRITION


**INTRODUCTION:** Pneumonia has affected child mortality and has been a leading cause for the Vitamin D deficiency. According to a study, administration of 100,000 IU of vitamin D to children (1–36 months) with pneumonia made no difference to recovery but reduced the risk of repeat episode within 90 days.

**OBJECTIVE:** To evaluate the efficacy of single oral mega-dose of Vitamin D3 for treatment and prevention of pneumonia in under-five children.

**METHODOLOGY:** Randomized, double blind, placebo-controlled trial. 324 children (of 980 assessed) between 6 months-5 years age (median (IQR): 12 (7, 19.8) months) with WHO-defined severe pneumonia. Of these, 126 (39%) were vitamin D deficient (serum 25(OH)D<12 ng/mL). 100,000 IU of oral cholecalciferol (n= 162) or placebo (n= 162) in single dose, administered at enrolment.

**RESULTS:** Randomized children (n=324) included 10 trial deviates (7 with rickets and 3 with heart disease) who were missed in the initial screening. The median (IQR) age of enrolled children (226 (69·8%) boys) was 12 (7, 20) months. Number of children in age categories of 6 m–1 y, 1–2 y, and >2 y were 186 (57·4%), 75 (23·2%), and 63 (19·4%), respectively. Of the 324 participants, 121 (37·3%) children had WHZ scores between –1 to –2 SD, followed by 89 (27·5%) participants in median to –1 SD. 69/324 (21·3%) participants had WHZ score between –2 to –3 SD. Similar trends, with maximum number of participants in –2 to –3 SD category, were observed for weight-for-age Z score (118/324) and length-for-age Z-score (103/324). The prevalence of anemia (Hb <11 g/dL) in the study population was 267/324 (82·4%); hypocalcemia (calcium <8·8 mg/dL) and hypophosphatemia (serum phosphorus <3·8 mg/dL) were observed in 55·9 percent (180/322) and 31·4 percent (101/322) participants, respectively. Raised serum alkaline phosphatase (>283 IU/L for 1-12 months, >345 IU/L for 13-36 months, and >309 IU/L for > 37 months age) was documented in 47 participants. Vitamin D deficiency (serum 25(OH)D <12 ng/mL) was present in 61/162 (37·6%) children in vitamin D supplemented group compared to 65/162 (40·1%) in the placebo group. Blood culture was positive in 28 (8·6%) children, of which Staphylococcus aureus was isolated in...
27 cases. Baseline chest X-ray was abnormal in 292 (90.1%) children. Consolidation or bilateral patchy opacities were observed in 14 children, while the rest had hyperinflation and/or minor infiltrates. The difference was further adjusted for age, sex, respiratory rate at enrolment (for severity of illness), weight-for-height Z-score (nutritional status), and serum 25(OH) D levels. The relative likelihood of resolution of severe pneumonia in vitamin D supplemented group remained significantly higher after adjusting for respiratory rate and the rest of covariates (adjusted hazard ratio: 1.39 (95% CI 1.11, 1.76; P=0.005). The incidence of recurrence of pneumonia for children having received vitamin D was 0.056 episodes per month; compared to 0.052 episodes per month for children in the placebo group. Number of vitamin D deficient children in the vitamin D supplemented group declined from 61/162 (37.6%) to 6/151 (4%), and 15/144 (10.4%), after 2 weeks and 3 months of follow-up, respectively. In the placebo group, the corresponding proportion of vitamin D deficiency was 40.1%, 33.3%, and 36.2%, respectively at baseline, 2 weeks, and 3 months. Only 9/324 (2.8%) children required re-dosing of the supplementation (6 in placebo group and 3 in vitamin D group). Of these, five children (four in placebo and one in vitamin D group) had a single episode of vomiting immediately after ingestion and rest of the children spilled the content. The risk of a repeat episode of pneumonia within 6 months of supplementation in vitamin D deficient children was comparable in the two groups (placebo: 14/63 (22.2%); vitamin D: 11/58 (19%); relative risk: 0.82 (95% CI 0.34 - 2.0); P= 0.82).

CONCLUSION: There is no robust evidence of a definite biological benefit, either for therapy or prevention, to suggest a routine mega dose supplement of vitamin D3 for under-five children with severe pneumonia.

KEYWORDS: 1.NUTRITION 2.CHILD NUTRITION 3.VITAMIN D 4.SEVERE PNEUMONIA 5.CHOLECALCIFEROL 6. LRTI 7. MICRONUTRIENT THERAPY 8.PREVENTION.
INTRODUCTION: Over-weight and obesity represent a rapidly growing threat to the health of population in an increasing number of countries. The number of overweight or obese infants and young children (aged 0 to 5 years) increased from 31 million globally in 1990 to 44 million in 2012.

OBJECTIVES: To assess prevalence of obesity among school going children; to find correlation of various socio-demographic factors affecting obesity in children.

METHODOLOGY: Institution based cross-sectional study was conducted among 1308 in rural schools.

RESULTS: The overall prevalence of overweight and obesity was found to be 2.5 percent and 0.99 percent respectively. The study showed prevalence of overweight was significantly high (4.1%) in children studying in middle school followed by primary school (2.2%) and least in high school (1.2%). Overweight was significantly more in children studying in private school, those with literacy levels of mother of more than SSLC and fathers occupation in category of employed or own business. Children participating in outdoor games had significantly less overweight (2.3%) as compared to those not participating in outdoor games (6.3%). The study reflected prevalence of obesity was significantly high (1.6%) in female children as compared to male children (0.4%). School children with fathers occupation in category of employed had highest (2.3%) proportion of obesity followed by own business (1.8%), in agricultural labour (0.5%) and least in coolie (0.3%). The prevalence of obesity was more (3.1%) in children not participating in outdoor games as compared to children participating in (0.8%) outdoor games, however it was not statistically significant. School children involved in sedentary activities like TV watching, mobiles for more than one hour per day had significantly more obesity (1.8%) as compared to those with sedentary activities less than one hour per day (0.4%).

CONCLUSION: Rural areas are not immune to modern diseases of lifestyle like childhood obesity. Decreased outdoor playing, increased sedentary activities like TV watching and mobile phone usage among school children are important risk factors for development of childhood obesity.
INTRODUCTION: Malnutrition especially undernutrition is a major health problem affecting the development of the children in many developing countries of the world. It continues to be the principal cause of ill-health and pre-mature mortality and morbidity among children.

OBJECTIVES: To assess the nutritional status of 6-14 year old school going children of village Ganota, district Doda; to investigate the prevalence of stunting, wasting and underweight in the village; and; to investigate the association among socioeconomic factors, living conditions and child undernutrition.

METHODOLOGY: 100 school-going children between the age group of 6-14 years were randomly selected in district Doda, Jammu & Kashmir.

RESULTS: A total of 100 school-going children (Male - 79, Female - 21) were examined. The findings of the study revealed that the Girls were slightly taller (except for age group 7) and heavier (age groups 6 and 14) than boys. Both the boys and girls were shorter (except for 7 & 8) and lighter (except for age groups 7, 8 and 9) compared to the Indian Council for Medical Research (ICMR) reference data for their ages and sex. Out of the total children screened (N=100), 36 percent were found stunted, 9 percent underweight and 2 percent observed as wasted. It was further observed that female children were at higher risk of undernutrition in terms of stunting (42.9% of the female children), whereas underweight (11.4%) and wasting (2.5%) were prevalent only in male children. But no significant association was found. Social category was also an important determinant of undernutrition, as majority of the children belonging to Schedule Caste category (57.1%) were suffering from stunting. The findings of the study revealed that all the three level of undernourishment - stunting (36.4%), underweight (18.2%) and wasting (3%) were prevalent more among the children belonging to the joint families as compared to nuclear families. It was found that the children belonging to the Below the Poverty Line (BPL) category were suffering from stunting (50%), underweight (33.3%) and wasting (8.3%). 61 percent of the children belong to low family income level, out of
which stunting, underweight and wasting were 39.3 percent, 9.8 percent and 3.3 percent respectively. At higher level of income no case of malnourishment has been found. It was found that 84 percent of the children belong to illiterate mothers, 42 percent of them were stunted, 5.9 percent underweight and 1.2 percent wasted. Significant differences (p< 0.05) were found among the mother’s education, birth order in the family, social and economic categories and the prevalence of child undernutrition. All the measures of undernutrition were more associated with the household cooking inside the bedroom (60% stunting, 22.2% underweight and 7.4% wasting) or in an open space (44.4% stunting). The households using wood as fuel for cooking the food were at higher risk of stunting (39.1%) as compared to the households used LPG. A higher number of children were suffering from the problem of stunting (60%), underweight (15%) and wasting (5%) not having toilet facility at home and face unhygienic problems. Significant differences (p<0.05) were found between the types of cooking area, fuel and toilet facility available at home and the prevalence of undernutrition.

**CONCLUSION:** Undernutrition among children is increasingly recognized as a major prevalent and important public health problem in many developing countries including India, which has a long-term consequences for the human and economic development. There is a great need to focus the attention of the leaders and policy-makers for intervening in such areas, as nutritional status of children is a main indicator of development and a pre-condition for the society to progress.

**KEYWORDS:** 1. NUTRITION 2. CHILD NUTRITION 3. UNDERNUTRITION 4. STUNTING 5. WASTING 6. UNDERWEIGHT 7. SOCIOECONOMIC FACTORS 8. LIVING CONDITIONS.
B. Research Abstracts on Child Protection

CHILD LABOUR


INTRODUCTION: Child labour is a big problem. Studies have indicated several problems of child labour. However, few studies have indicated the characteristics of child labour in rural India.

OBJECTIVES: To explore the characteristics of child labour and their families in the rural community of eastern India and also identify their health problems.

METHODOLOGY: A cross-sectional study was designed to explore their characteristics in purposively selected areas in rural Howrah, India. A total number of 127 children were undertaken as study sample.

RESULTS: The study identified that majority (72%) of the respondents were boys while remaining (28%) girls as child labour. Majority of the children (67.9%) were labour because they wanted to help their parents. In a few (8.9%) cases, they were forced to work by their parents. In some cases (5.4%), they were orphans. Majority (80.4%) of the families had faced difficulties to earn money for minimum level of survival, which eventually pushed the children to become child labour. The study also revealed that in nearly three-fourth (71.4%) cases, they had a social problem in the neighborhood that forced them to become child labour. It had also found that in majority of the cases (75.9%) the money earned by the children was used by their parents. Majority of the children were not satisfied (78.6%) with their job place and job status. Most (71%, n = 80) of the children reported health problems. Stress and depression was found highest among other health problems (21.3%). A large number of the children suffered from back pain (16.3%), whereas injuries like burn, cut, eye and machine injury were common. However, around a fifth (19%) of them had others different type of health problems like fever, discomforts, muscle crump, sprain, common cold, fever etc.
CONCLUSION: Child labourers were found to be dissatisfied with their job. Their money was used in family. Lack of effective education system and availability of functional schools are both causes and consequences of child labour. Due to illiteracy, working conditions for these children get worse as they are not even aware of the occupational benefits.

KEYWORDS: 1.CHILD LABOUR 2.CHILD PROTECTION 3.PARENTS 4.ILLITERACY 5.RURAL 6.orphans 7.HEALTH PROBLEMS 8.STRESS.
INTRODUCTION: Child labour in unorganized sector is unsecured and backward physically, socio-economically, educationally and in other aspects. It hampers the normal physical, intellectual, emotional and moral development of a child. Occupational diseases are mainly caused due to improper management of the occupational health of the workers. Children who are in the growing process can permanently distort or disable their bodies when they carry heavy loads or are forced to adopt unnatural positions at work for long hours.

OBJECTIVES: 1. To study the family structure of child labour 2. To examine the educational status of child labour 3. To analyze the working and economic conditions of child labour 4. To investigate the causes and problems of child labour.

METHODOLOGY: A sample size of 1000 child labour households were selected by using stratified random sampling procedure. Data was collected through the questionnaire based interviews in different wards of Aligarh city.

RESULTS: Out of total child labourers, majority (67.7%) was illiterate and remaining (32.3%) were literate. Nearly a third (30.2%) child labourers had a nuclear family, followed by extended nuclear family (28.4%), whereas a little less had joint family (24%) and about 11.4 percent child labourers had extended joint family, however, a few child labourers had single parent (6%) family structure. Majority (44.6%) child labourers were in 12-14 years age-group, nearly 35.8 percent child labourers in 9-11 years age-group, while a fifth (19.6%) child labourers were in the 5-7 years age group. Working on the heavy machines could lead for any casualty for most of the respondents who were risking their lives but were still continuing for their livings. About, 18 percent children work on power press, which was very hazardous and dangerous to handle for these small children, while 14.1 percent children work on hand press, which also poses insecurity for these children because any carelessness during the work on hand press can lead to accidents with fingers. Findings reveals that 12.1 percent children were working with spray printing on the parts of locks and inhaling dangerous chemicals. About 14.5 percent children work on assembling of lock parts to make a complete lock and 15.5 per cent children work packaging of locks. Most (49.4%) worked for 10 to 12 hours per day, followed by child labourers working for 7 to 9 hours (20.7%), about a tenth (10%) worked more than 12 hours, while a few (6.7%) child labour worked less than 4 hours. Nearly two-fifth (42.4%) child labour received more than 1400 rupees per month, less than a fifth (17.3%) child labour received 1101-1400 rupees per month, and a few (5%) child labourers received less than 500 rupees per month. Further, exploring the health conditions of the respondents reveals that the average percentage of fever and malaria by which, child labour suffer was 32.5
percent. The average percentage of weakness and tiredness by which, child labour was suffering was found 29.9 percent, the percentage of back pain and head pain by which, child labour was suffering was found to be 15.6 percent, the percentage of allergy by which, child labour was suffering was found to be 3.5 percent, the percentage of cold and cough by which, child labour was suffering was found to be 15.5 percent and the percentage of eye irritation by which, child labour was suffering was found to be 3 percent.

**CONCLUSION:** In spite of stringent laws prevailing on India for the prevention of Child Labour, the findings reveal that the problem of child labour was deeply rooted in the society. The Child Labours were not only insecure in employment but were also discriminated in wage payments. Also, they were neither entitled for any medical benefits nor were covered under any social security.

**KEYWORDS:** 1. CHILD LABOUR  2. LOCK INDUSTRY  3. OCCUPATIONAL DISEASES  4. HAND PRESS  5. SPRAY PRINTING  6. WORKING HOURS  7. WAGES
HEALTH


**INTRODUCTION:** The Accredited Social Health Activist (ASHA) represents the pivotal part in the NRHM, where the principal program of the government is to achieve the health related MDG such as infant mortality rate, maternal mortality rate; and improvement of nutrition status of children and mothers.

**OBJECTIVES:** To assess the knowledge and practices of ASHA regarding Home Based Newborn Care (HBNC).

**METHODOLOGY:** A descriptive cross sectional study was conducted to assess the awareness and practices of ASHA workers regarding child health in north east district of Delhi among 55 ASHA workers.

**RESULTS:** The findings reveals that the majority (48.5%) of respondents fell in the age-group of 31-40 years while the 21-30 years contributed to about 40.5 percent of the total strength. The education qualification of the respondents reveals that about two-third (43.2%) of the samples were high school educated followed by Intermediates (40.5%). The experience of the ASHA workers highlighted that majority (59.5%) of the respondents had an experience between 5-10 years and others (40.5%) had an experience of less than 5 years. Majority (92.3%) of the respondents were from their native places. Most (94.6%) of the respondents had completed the ASHA training programme, while knowledge about Home Based Newborn Care (HBNC) was known to 86.5 percent of ASHA workers. In this study, mean practice score of the ASHA for the area of preparation of HBNC was 4.67±1.33, for the area of Breast Feeding initiative was 7.51±1.750.55 and for the area of high risk Newborn was 2.40±1.21. The majority (72.9%) of ASHA had I level of practice score.

**CONCLUSION:** ASHAs do provide constellation of service and plays a potential role in maternal and child health care, but they need to improve the knowledge and practice regarding home based newborn care and put into the practices while providing the care and advice to negotiate health care for poor newborn from rural area.
C. Women and Gender Issues

HEALTH


INTRODUCTION: Since a terrifying pattern has emerged in HIV and women face higher risks of being infected by HIV as well as increasingly bearing the brunt of its impact. Almost half of the adults living with HIV & AIDS today are women. In relation to empowerment and transmission of HIV, women must legitimately have the ability and should make informed decisions about their own bodies and behaviours to reduce their risk of infection with HIV.

OBJECTIVES: To determine socio-demographic profile, health status and gender, empowerment issues among HIV positive female patients.

METHODOLOGY: A cross sectional study was done among 200 HIV positive women attending ART centre for a period of 6 months.

RESULTS: Majority (46%) of subjects were in the age group 20 to 30 years. Mostly (88%) of them belonged to Hindu religion, while more than a third (38%) were illiterates and half (50%) were house wife. Majority (68%) belonged to Lower socio-economic status, and mostly (77%) were HIV positive for more than 10 years, majority of them were widow (59%) with <2 children (71%) and in majority (59%) HIV status was not detected during ANC. More than a third (38%) of them had Genito urinary problems, a few (14%) had dermatological problems and some (28%) had no symptoms. Issues pertaining to infection was assessed and it was observed that some (28%) of family were non supportive, while a third (34%) had bad family relationships, less than a fourth (22%) were abused physically. More than half (52%) faced discrimination, and three-fifth (61%) were isolated in social gatherings and more than a fourth (27%) of them were socially marginalized. Empowerment issues pertaining to the subjects were that majority (78%) of them were not practicing barrier contraception, half (49%) were not contributing financially, and some (44%) were not supporting or leading the family and in majority (72%) of the subject’s opinion was not considered by family members.
CONCLUSION: Literacy status and health education programmes of women must be increased to make them aware regarding contraceptives, health facilities, human rights, empowerment issues and to remove misconceptions of HIV.

KEYWORDS: 1.HEALTH 2.WOMEN HEALTH 3.GENDER 4.EMPOWERMENT 5.HIV POSITIVE FEMALES 6.HEALTH EDUCATION PROGRAMME 7.ART CENTRE 8.GENITO URINARY PROBLEMS.

INTRODUCTION: Maternal deaths indicate a disparity and inequity in access to nutrition and health care services, particularly during pregnancy and childbirth and question our health infrastructure as well as social and literacy levels of females in any society. Maternal death is an important parameter of maternal and child health. India’s Sample Registration System (SRS) reports a decline in maternal mortality ratio in India from 212 per 100,000 live births in 2007-09 to 178 in 2010-12 to 167 in 2011-13. This implies an estimated 44,000 maternal deaths every year in India.

OBJECTIVES: To analyze the risk factors and causes associated with maternal mortality with a motive to guide measures to lower maternal mortality ratio and improve maternal and fetal outcomes.

METHODOLOGY: 108 cases of maternal deaths over a period of 3 years from 1st April 2012 to 31st March 2015 were analyzed retrospectively.

RESULTS: Out of the 108 maternal deaths reported over 3 years, 72.2 percent were attributed to direct causes and 27.8% to indirect causes. Parity distribution data highlights Multigravida (54.6%), followed by Primigravida (35.2%) and Grand multigravida (10.2%). The findings reveals that the maximum cases (70.4%) were from rural while rest were urban cases (29.6%). Most (44.4%) of the cases were registered amongst the age-group 21-25 yrs. Obstetric haemorrhage (37.9%) was the leading direct cause followed by hypertensive disorders of pregnancy/ eclampsia (15.7%) and sepsis (10.2%). Under the category of indirect causes, Anaemia (7.4%) scored the highest prevalence amongst the cases registered under the study, followed by cardiovascular diseases (5.6%) and Hepatitis (2.8%), respectively.

CONCLUSION: Many maternal deaths were preventable. High maternal mortality is an indicator of low socio-economic status, low standard of living and inadequacy of health services in a community. It reflects lack of essential and emergency obstetric care. Underutilization of available services is also a contributory factor.

NUTRITION


INTRODUCTION: Primigravida (PG), is defined as a woman who conceives for the first time, is in a high-risk group. PGs are at significantly higher risk for prolonged first and second stage of labor, increased chances of fetal distress during labor and need for intensive monitoring as compared to the multigravidas. PGs are also at significantly increased risk for operative vaginal delivery and emergency cesarean section. The chances of primary postpartum hemorrhage in PGs are found to be more, and perinatal morbidity is also increased in the group.

OBJECTIVES: The study was conducted to assess impact of anemia on course and outcome of pregnancy in anemic (Hemoglobin 8–10.9 gm%) and non-anemic PGs.

METHODOLOGY: A longitudinal study was conducted amongst PGs 20–30 years age, in a gestation age 16–18 weeks, hemoglobin (>8 gm%). A total of 377 PGs were enrolled and obstetric outcomes studied in 179 (Group 1) and 149 (Group 2) excluding women who did not complete study.

RESULTS: At 28–30 weeks of gestation, in spite of iron supplementation higher percentage (64.4%) (P < 0.05) of anemic patients remained anemic. Preterm (<37 weeks) delivery among Group 1 and Group two patients were 12.8 percent and 11.4 percent respectively (P = 0.69). The induced preterm deliveries in the Groups 1 and 2 were 2/23 (8.7%) 2/17 (11.7%) respectively (P > 0.05). Spontaneous vaginal delivery in Group 1 and Group 2 was 89.9 percent and 87.3 percent respectively (P > 0.05). There was a significant (P = 0.036) variation in the mode of delivery among the two groups of women. The postpartum period was uneventful in 303 PGs (92.4%). In Group 1, 3.9 percent (7/179) women had morbidity compared to 12.1 percent (18/149) in Group 2 (P = 0.005). At 6 weeks post-delivery, 15.6 percent and 24.2 percent were anemic in Group 1 and 2, respectively (P > 0.05). The adverse postpartum events (7.6%) were seen more in anemic compared to non-anemic pregnant women (P < 0.05).
CONCLUSIONS: The detection of anemia and its effective treatment early in pregnancy available and affordable in most health care settings is a very cost-effective health care intervention to avoid maternal and perinatal morbidity. Cautious approach required in postpartum period of anemic women though antenatal period is similar as non-anemic pregnant women.

KEYWORDS: 1. NUTRITION 2. WOMEN NUTRITION 3. ANEMIA 4. OBSTETRIC OUTCOME 5. NEONATAL OUTCOME 6. PRIMIGRAVIDA (PG) 7. GESTATIONAL AGE 8. MODE OF DELIVERY 9. VAGINAL DELIVERY.
INTRODUCTION: Poor health has multiple dimensions. Malnutrition or undernutrition is one of the dimensions of women’s poor health. Malnutrition is a serious public-health problem that has been linked to a substantial increase in the risk of mortality and morbidity, maternal malnutrition is a serious public health problem. It does not only affect mothers’ health but also severely affects the future generations.

AIM: To examine status of malnutrition among women in Indian cities (Mega, Large and Small); and; to examine the differentials in malnutrition among women socio economic factors.

METHODOLOGY: The study has utilized the data from the National Family Health Survey-3(2005-06). Cross tabulation and a binary logistic regression was used to analyze the data.

RESULTS: The study revealed that overall, 23.2 percent women in Indian cities (Mega, large and small) were undernourished having BMI<18.5. Higher proportion of undernourished women was in small cities (25.6%) and that of the lowest in mega cities (18.7%). Overall, (48.8%) women were anemic for taking cities as one unit. Separately, the highest proportion of anemic women were observed in small cities (50.4%) followed by large cities (48%) and the least in mega cities (46.4%). Higher proportion of women from STs Category (56.6%) was anemic followed by SCs (53.7%) and the least from other category (46.5%). Similar results were observed in mega and small cities while in large cities higher proportion of anemic women from SCs (52.8%) followed by OBCs (49%) and the least among STs Category (45.5%). Higher proportion of poor women (63.2%) were anemic and that of the lowest among rich women (47.4%). The results were similar for large and small cities. But in mega cities, the highest proportion of anemic women (48.7%) was from Middle wealth index. Women from middle (p<0.01) and rich (p<0.001) group were less likely to be anemic. Higher proportion of anemic women (61.6%) was observed among women of low standard of living followed by women of medium standard of living (54.3%).
CONCLUSION: A Substantial proportion of women suffered from malnutrition in Indian cities. Widespread socioeconomic differentials were observed in maternal malnutrition. Maternal malnutrition is a very serious public health problem. It has lasting ill effects on maternal and child health. This problem should be addressed on priority basis due to its implications for public health.

KEYWORDS: 1. NUTRITION 2. WOMEN NUTRITION 3. MATERNAL MALNUTRITION 4. PUBLIC HEALTH 5. BODY MASS INDEX 6. ANEMIC 7. INDIAN CITIES.
INTRODUCTION: India is going through a phase of demographic transition leading to population aging and feminization of aging resulting in increased proportion of elderly women than men. Problems faced by the elderly women are more critical than men due to family and social conditions prevailing in India.

OBJECTIVES: To assess the quality of life (QOL) using the World Health Organization QOL (WHOQOL-BREF) scale and sociodemographic factors affecting QOL of elderly women residing in a community setting in South Kerala.

METHODOLOGY: A community-based, cross-sectional study to assess the QOL of elderly women using WHOQOL-BREF questionnaire. Data were collected from 160 elderly women.

RESULTS: The mean score for QOL was found to be 177.42 (SD = 69.7). While grading the QOL, only 2.5 percent (95% confidence interval [CI]: 0.07–4.84) of the study participants were found to have “very good” QOL, 38.8% (95% CI: 31.2–46.4) had “moderately good” QOL, another 43.1 percent (95% CI: 35.4–50.8) had “moderately poor” QOL whereas 15.6 percent (95% CI: 9.98–21.22) of study participants were suffering with “very poor” QOL. While doing domain-wise analysis, QOL score was least in the psychological domain (mean was 36.7, SD = 20) where more than one-fourth of the elderly women (28%) had “very poor” QOL and more than half (50.6%) had moderately poor QOL. Highest mean score was for physical- and health-related QOL (mean = 49.5, SD = 22) followed by environmental domain (mean = 47.38, SD = 17) and then social domain (mean = 43.7, SD = 18) where the proportion of elderly women falling under “very poor” QOL were 16.2 percent, 16.2 percent, and 14.4 percent, respectively. Case-control comparison revealed that the significant risk factors were age above 70 years with crude OR of 4.33 (95% CI: 2.21–8.48), absence of visit by friends and relatives with crude OR 6.1 (95% CI: 1.69–21), neglecting attitude by family members with crude OR of 4.99 (2.44–10.19), and not having any role in family decisions with crude OR of 4.2 (95% CI: 1.83–9.56). Educational qualification of 10th and below, current unemployment, previous unemployment, monthly income below 500 rupees, monthly family income below 1500 rupees were also found as risk factors whereas living in an urban area was a protective factor.
CONCLUSION: This study suggests that majority of elderly women were having poor QOL, and it was most affected for those residing in the rural areas. There are multiple factors such as financial support, family support, and education which determine the good quality of life for elderly.

KEYWORDS: 1. SOCIAL WELFARE 2. DEMOGRAPHIC TRANSITION 3. ELDERLY WOMEN 4. FEMINIZATION OF AGING 5. QUALITY OF LIFE 6. WORLD HEALTH ORGANIZATION
INTRODUCTION: The handloom industry in India over the past years reveals that the changes in production technology are few but the changes in the market are substantial. While handlooms have been losing the low end market to the power looms, it has been gaining new ground in the high and mid-range markets with it creation of new niches. At the centre of these higher-end market transactions are entrepreneurs, in this case, the master weavers. In Manipur, especially in the field of handloom and handicraft, raw materials and craftsperson used to be aplenty. This prolificacy in fact ensued from the customary practice, among almost all the ethnic communities residing in the state, of young girls to learn the fine arts of weaving from their mothers- a tradition which is fast falling out of practice. There are major differences in the gender composition of the adult handloom work force between the North-Eastern states and other parts of India.

OBJECTIVES: To study the entrepreneurial functioning of the handloom entrepreneurs and understand how they sell in the same markets where the cooperatives are unable to sell.

METHODOLOGY: Fifty women handloom master weavers of Imphal East district in Manipal were randomly selected.

RESULTS: Nearly one-fourth of the enterprises were run by widows and divorcees. Regarding the nature of organisation, single ownership accounts for 60 percent whereas 40 percent of the enterprises were running as partnerships. The data shows that more than 50 percent of the entrepreneurs could earn a monthly income of Rs. 7,500 and above. It was observed that 80 percent of the entrepreneurs invested Rs. 10,000 to 50,000 initially for the establishment of the enterprise. 70 percent of the enterprises have received financial assistance from cooperative bank, Department of Industry and Commerce, Prime Minister Rozgar Yojana, Nationalised bank, Post-office, or private finance agencies. However, 30 percent of them did not received financial assistance from any sources. All the enterprises employed some weavers on permanent basis. Moreover, 74 percent of them were employing both contract and permanent weavers. Regarding the payment of wages, 64 percent of the enterprises paid their weavers on a monthly basis. However, 26 percent of them paid on the basis of piece-rate. Three-fourth (74%) of the enterprises sold their products by
cash, 64 percent by credit and 26 percent by installment. It was also observed that 38 percent of the enterprises sold their products through their own showrooms. The enterprises also used retail stores, agents, exhibition-cum-sales and door to door vendor for selling their products. 18 percent expressed that they were both economically and politically empowered. Others (24%) felt that they are also socially empowered. They opined that their family members and others started respecting and encouraging their enterprise.

CONCLUSION: Women entrepreneurship in the handloom industry in Manipuris associated with the changing social and political structures and the expansion of market on the supply side and the attributes of culture of weaving on the demand side. The study indicates that younger women are more zealous about entrepreneurship.

KEYWORDS: 1. WOMEN WELFARE 2. WOMEN ENTREPRENEUR 3. HANDLOOM INDUSTRY 4. WEAVING 5. COOPERATIVE BANK.
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