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Original article

A study of maternal and child health issues among migratory construction workers

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Abstract

Background - According to recent census 2011, the total population of India is 1.21 billion. In 2001, 309 million persons were migrants based on place of last residence, which constitute about 30% of the population. The female and children are considered associated migrant in India. They are more vulnerable to health and social issues. The present study was conducted to assess the various aspects of Maternl and child healrh (MCH) issues among migratory families.

Study method - It was a cross sectional study and conducted in the Sumandeep Vidypeeth Campus, Piparia, district Vadodara . There were 52 families working in campus and all were interviewed for study.

Results- Almost 73% of women were illiterate with mean age of menarche 13 years and mean age for marriage 17 years and mean age for first birth 19years. All were from tribal community. Only one child was fully immunized out of 11 children between 12-23 months. Two maternal deaths and death of two children of less than five years were reported among 52 families in last two years.

Conclusion - The study reflects that the group is more vulnerable and there is need to focus on this group to achieve goals of MCH.

Key words – construction site worker, migrant, MCH indicators, maternal deaths, contraceptive usage

Introduction:

Globalization and industrialization are emerging trends in India. The unavoidable side effect of industrialization is the construction of large industries, road, government offices, corporate offices, township and many more. For all such constructions, there is need of the large number of construction workers on site. In last one decade the large numbers of small and big construction projects are going on all over India. Construction workers are migrating from one place to other for better opportunity. Migration is a rational decision made by an individual to move from a less advantageous situation, to a more advantageous one after weighing risks and benefits.

Rapid urbanization and industrialization of the areas have generated more employment opportunities and also created better infrastructure. People migrate to such regions perceiving them as greener pastures. According to census 2001, the total population of India is 1028 million. In 2001, 309 million persons were migrants based on place of last residence, which constitute about 30% of the total population of the country[1]. The provisional data of 2011 census reported that the country population reached to 1210 million[2] and thus it is assumed that the migratory population will be more than 2001 census.

Construction workers are one of such migratory group. They may not be pure migratory workers but they have maximum mobility because of the nature of their work. They have to move from one construction site to other as per the directions of the contractors. The important aspect of such workers is that they form the second largest unorganized sector in India after agriculture workers[3]. Several factors make them vulnerable like employment which is permanently temporary, the employer-employee relationship is very fragile and most of the time short lived and the work has inherent risk of life and limb due to lack of safety, health and welfare facilities[4].

In the construction field migratory pattern within India, women and children have always featured as "associated" migrants with the main decision to migrate being taken by the male of the household. As an associated migrant, women are more vulnerable due to reduced economic choices and lack of social support in the new area of destination[5].

Migrants have always been conceptualized as *problematic and Vulnerable in* the context of policies including public health issues. They are disadvantaged compared to the native population and they often have low socio-economic status with no access to either healthcare or social services. They suffer from

mental and emotional vulnerability and low self-esteem, lack of provision of social goods, education and health. The integration of migrants into the local population is often impeded. There is no scope for special care for such vulnerable population in India, at present. Women and children being "Associated Migrants" suffer more.

The current study was conducted with following objectives

Objectives :

To find out the demographic and health profile of female Migrant workers.

To know the immunization status, morbidity and mortality pattern of their children less than 5 years of age.

To find out the reproductive health practices of the women of 15 to 45 years of age.

To compare major indicators with National and State general population

Methods

The study was a cross sectional study. It was conducted in Sumandeep Vidypeeth Campus, Piparia, district Vadodara, Gujarat, India which is situated in central Gujarat and 15 KM from the city Vadodara. The study participants were selected from construction sites of campus. All families who were working in campus were selected as study participants. The criteria for study population were the female in reproductive age group and living with her husband. Thus, total 52 families living in the campus for construction work formed the study population.

It was decided to take interview of all women at work site who are with children. The study was conducted between months of Feb 2010 to April 2010. After getting ethical clearance for project, all women were interviewed, with informed consent. The pre-tested questionnaire was used by investigator for interview. There were multiple visits made for contacting all women in campus. The basic information like age, religion, education, income etc were collected. The specific information like age at marriage, age at menarche, age at first child, menstrual history, RTI/STI, birth control measure, treatment taken, number of children, vaccination status of children etc were collected.

Thus collected information was compiled in Microsoft excel and analyzed with the help of Epi Info software.

Results

All 52 female were Hindu and migrant labour. They came from District Panchmahal which is about 50 Kilometer form Vadodara district, for labour work in campus. The mean age of study population women was 26 years (range: 17-37). All were married and came with family. Almost 73% women were illiterate and 27% were literate maximum up to primary education.

The mean age at marriage was 17 years (range 14 - 21 years) in the study population. Almost 63% got married before legal age of marriage which India is 18 years for female.

First child was born at the mean age of 19 years (16 to 22 years) but almost 20% of females had first child at age less than 18 years.

Almost 50% (n=26) females had children less than three years of age. Of these, 58% females had institutional delivery of last child and remaining had home delivery.

Table -1 Key Indicators of Reproductive and Child Health compared with NFHS:

Key indicators	Present study	NHFS – III India[8]	NHFS –III Gujarat[8]
Female illiteracy	73%	41%	32%
Mean age at menarche	13 (9-14 yrs)	N/A	N/A
Mean age of marriage	17 (14-21 yrs)	N/A	N/A
% Women married by 18	36.5%	44.5%	33.5
Mean age at first birth	19 (16-22 yrs)	19.8	20.6
Current use of any method of family planning (%)	46%	56%	66%
Institutional birth*	58%	48.3%	54.6%
Children 12-23 months fully immunized (BCG, measles, and 3 doses each of polio/DPT) (%)	9%	43.5	45.2
Children 12-23 months who have received BCG (%)	72%	78%	86%

* Based on the last 2 births in the 3 years before the survey

11 children were between 12 to 23 months age. Only two had Mamta card (vaccination card) with records and only one child (9%) was fully vaccinated with BCG, 3 DPT and Polio and one measles and Vit-A supplementation. Nearly (8/11) 78% children had BCG vaccination scar. All other vaccinations were incomplete. Only

one child had received vitamin A dose in last six months.

Almost 27% (14/52) women were using birth control measures at the time of interview; 11 women had undergone tubal ligation and three were using copper-T for spacing. The mean age of women who did tubal ligation was 30 years (22 to 37 years). Almost 58% (30/52) of study population was aware about birth control measures.

About 77% females had regular menstruation cycle. Almost 35% (18/52) had no complaints related to reproductive tract infection or STD. Nearly 30% (16) women had complaints of backache, 8% (4) had lower abdominal pain, 13% (7) had lower abdominal pain and backache, 11% (6) had complaints of vaginal discharge and 10% (5) had vaginal discharge with other symptoms.

Nearly 17% (9/52) females had some morbidity in the previous one month and asked for treatment. Out of morbid women, 6 women took treatment directly from chemist and had not visited a doctor. Remaining women had tried home remedies.

Of 52 families, two had history of death of children (less than five years) and two families had history of maternal death (death of woman during & after delivery) in last two years.

Discussion

This was a small observational study. The study was initiated to know the status of maternal and child health of construction site families. The results are really eye opening and gives serious indications to think about health & social issues of construction site workers particularly associated migratory workers. Indian labour statistics reported that 30% of Indian population is migratory as per last census[1]. Almost 63% of females in this study married before the legal age of marriage. This proportion is very high compared to National figure. UNFPA has reported in its fact sheet that 50% of Indian women get married before legal age in 2002[6]. The mean age of first child was 19 years. This showed that the teen age pregnancy was very common in this group. The risk of early primipara makes them vulnerable for maternal mortality. Early marriage and early pregnancy adds to the vulnerability, mortality and morbidity along with high number of pregnancies. There were two child deaths and two maternal deaths in the previous 2 years. As the study sample was very small, the MMR and Child death rate were not calculated but they are likely to be very high..

Table- 1 compares key reproductive and child indicators of study with National Family Health Survey III, Indian scenario and Gujarat Scenario. The table reflects the serious situation of health status of construction site female workers and their children in Gujarat state. The majority of indicators were poor for this group of workers (mother and children). The illiteracy, mean age of marriage, current use of contraception and children vaccination were poor in this group of society. The deaths in children and female are also reported high in this group. Thus, this strata of society is vulnerable. A study from Punjab[7] by Amrit Abro et al also reported similar findings.

There is urgent and definite need to do large scale studies for verification of various RCH indicators in this critical group.

Government of India is spending lots of money for improving maternal and child health under RCH programme and National Rural Health Mission and thus wants to achieve Millennium Development Goal (MDG). But the results are not very encouraging. One of the reasons may be the plight of migrant population, particularly construction site workers. The programme needs to focus on such vulnerable population.

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