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Original Research Paper

Understanding the Reproductive Health of Pavement Dwellers in Pune City, Maharashtra

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Abstract

This article analyses the reproductive health problems and health care seeking behaviour of women pavement dwellers in the Pune Municipal Corporation area (India). This study is based on primary information collected from 258 women of reproductive age group. The study shows that about 45 % women have used formal medical facility for deliveries, 56% lactating women were registered and received TT injections, and 34.7% women were covered complete ANC [Antenatal Care]. Many women have complained about the problems related to the reproductive tract diseases like itching, irritation on the reproductive tract and white discharge. Overall occupational and social conditions are negatively affecting their health. Unstable and invisible citizenship makes them inaccessible to public health services and basic facilities like housing, sanitation, personal hygiene and food also.

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1 INTRODUCTION

Pavement dwelling has prominent existence right from the birth of cities. It is more phenomenal in developing countries like Bangladesh, India, African countries, etc. In fact, there is no single country in the world which is free of pavement dwelling. People are living on the pavement, street, called as pavement dwellers (Swaminathan, 1995; Knudsen, 2007; Shelter Associates, 1997; Harris, 2009).

The living conditions of pavement dwellers are extremely pity and risky. Living without a roof and resources, furthermore without any infrastructural framework make them to be deprived of fundamental needs and that lead vulnerable livelihoods of pavement dwellers (Shelter Associates, 1997; Harris, 2009; Mander, 2009; Tribhuwan, 2003). This section of the society is also found to be vulnerable at public health point of view, since the people are having almost high exposure to the adverse environmental conditions along with continuous contact with polluted air, water, sounds, etc. which keep them at risk of getting their health status more worse (Jagannathan and Halder, 1988; Tribhuwan, 2003; Ajmeri, 2010). Furthermore, they have no access to potable water, sewage, safe excreta disposal and poor nutritional status. They are more susceptible to get more adverse health conditions (Shelter Associates, 1997; SPARC, 1985; Dupont and Tingal, 1997). Being neglected from health policy of the states still put question on their overall health status and access to the health services.

Pavement dwelling is prominent phenomenon in metropolitans in India like Mumbai, Calcutta, Delhi, Pune, etc. Population of pavement dwellers in Pune is increasing since people are targeting Pune to migrate from drought-prone areas of Maharashtra and other states. They are poorest people of the cities and in native places. Pavement dwellers in Pune are living in extremely miserable conditions like pavement in terms of housing, water, sanitation, toilets and health services (Harris, 2009; SPARC, 1985; Dupont and Tingal, 1997). It is considerable that urbanization and industrialization

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support to these pavement dwellings for improvement in their health status as like as other citizens (Agarwal, 2006; Gupta *et al.*, 2007). However, the health services from private sectors are not affordable and from public section not accessible. They are highly neglected people in this population for health services.

Figure 1. Unsafe girls on pavement (Chaturshrungi, Pune)

Pavement dwellers are the marginalized population and all about pushing the particular section of the population at the underprivileged edges. They are thrown out of the main streams and ultimately away from the development and health facilities. This particular highly marginalized section of the population is made visualized by some researchers to some extent with different findings, which ultimately underlines their worst health status (Duntley, 2003). Therefore, researchers should look into the matter of health status of this highly deprived section of the society with approach of public health with high priorities.

Population of pavement dwellers is heterogeneous in societal nature; however, they are belonging to the lower castes. There is a difference between situations of men and women living on the pavement. Women are more vulnerable living on the pavement for different type of harassment (especially sexual harassments) and security. Therefore, this study focused on women living on the pavement with reference to reproductive health condition.

India participated in MDGs and SDGs programmes related to child and maternal health. However, disparity in the reproductive health status of women was observed across the sections of the society (Ramanathan, 1998; Raj and Raj, 2004; Mahapatro, 2009). Women of pavement dwellers have worse health. Scholars like Mahapatro (2009); Ray, *et al.* (2001) have studied health conditions of this poorest section, pavement dwellers. Study conducted in Dhaka (Bangladesh) gives important evidence of the lower reproductive health of pavement dwellers (Uddin *et al.* 2009; Shoma, 2011). There are some studies illuminating the facts of the high burden of malnutrition (Ray *et al.*, 1999; Goyle *et al.*, 2005). These people have poor access to health services and less awareness about the health care. However, studies related reproductive health of women from pavement dwellers are observed sparse in India (Ray *et al.*, 2001). Therefore, the present study focused on analysis of reproductive health status of women from pavement dwellers in Pune city. This study analyse the prevalence of institutional delivery, ANC coverage, reproductive health problems, knowledge, attitude and practices of women pavement dwellers of Pune city

2 MATERIALS AND METHODS

A cross sectional study was carried out over a period of 6 months by identifying pavement dwellers pockets in the Pune Municipal Corporation Area (India). All respondents were informed about the purpose of the study in their mother tongue (Marathi) with their consent and confidence. All participants were well informed about related topics. Their queries were solved.

Pune Municipal Corporation Area (India) is growing centre for different industrial sectors like automobile, IT hubs, etc. It attracts migrants from different part of the Maharashtra and other states for employment. These migrants increase slums and pavement dwelling in the Pune city.

Pune Mahila Milan has been conducted survey on Pavement Dwellers in the Pune city in 1997. Therefore, census was conducted for three months in the year of 2012 (August to October) throughout the Pune city to understand the present status of Pavement Dwelling. Eighteen pockets have been identified in the city: corporation area, Pune station, Swargate, Katraj, Shivajinagar, Z bridge, Sangam bridge, Rangehills, Vishrantwadi, Dattawadi, Kondhawa, Malwadi, Geeta Udyog (Hadapser), Undiubavni Kendra (Pune- Mumbai road) etc. 2339 pavement dwellers have been recorded in the census with 1173 females. About 258 women were recorded from the reproductive age group (14-49 years). These women from reproductive group were considered for participation in this study. Cross sectional (prevalence) study was carried out by from all

Figure 2. Pavement dwellers in developed area (Vishrantwadi, Pune)

258 women from the reproductive age group. Out of them, 152 women were non-pregnant and non-lactating, 75 women were lactating (having a child less than one year of age) and 31 were pregnant. The women of the reproductive age group, but living alone, separated, divorced were excluded from the study. Information about occupation, income, native place of migrants, etc. also collected during the census. Frequency analysis for collected data was performed using the 'SPSS 16' software.

3 RESULTS

3.1 Socio Demographic Characteristics

2339 persons (1166 males and 1173 females) of pavement dwellers was recorded in identified 466 households distributed across the Pune city. Most of them are engaged in low income generating activities like balloon seller, toy sellers, labour, maid, rag pickers, vegetable vendors, drivers, etc. Most of them were living in Pune city since more than 5 years. Some of them are from last 2-3 generations on pavements. Almost all the pavements are migrated from area like Solapur (Barshi), Kamshet, Kedgoan, Nagar, Beed, Latur, Bhimakoregoan, Indapur, Baramati, etc. in Maharashtra State and Karnataka (Gulbarga), Rajasthan, Delhi, etc.

About 25.2 % of 258 respondents have migrated in the last year during the cultural activities in Pune city (during festivals) and eviction by the municipal corporation authorities. About 95% women are illiterate, 4.2% learned up to 1st to 10th standards and 0.8% were educated up to graduation.

3.2 Age at Marriage

Generally, in Indian culture reproductive life starts after the marriage. Legal age for the marriage for girls is 18 years and boys 21 years. However, the study reveals that majority of people (82.5%) participated in the study are married before the legal age. About 8.5% of respondent are married even before 14 years of age (Table 1) and only 16.3% women married at the age of 18 or beyond.

Table 1. Age at marriage

Age of the respondents at marriage	Frequency	Percentage
<14	22	8.5
14-17	191	74
18-21	40	15.5
22-25	2	0.8
Don't know	3	1.2

Early marriage is the common practice among the pavement dwellers. About 85.2% respondents reported as it is community practice (Table 2). Some of them (6.3%) think that it is better to marry early and 3.2 % women felt insecurity without marriage for girls. The pavement girls are more prone to get abused.

Women married at 18 years or after are aware about the legal age for the marriage.

Table 2. Reasons of early marriage

Reasons of early marriage	Frequency	Percentage
Better to marry early	6	6.3
Community practice	81	85.2
Physical development	5	5.3
Insecurity about the future	3	3.2

3.3 Institutional Deliveries

The study reveals that about 54.7% of deliveries of pavement women were conducted at home (Table 3), 40% were in public hospital and 5.3% in private hospital. Therefore, majority of pavement women are not reached to medical facilities for deliveries.

Table 3. Place of delivery

Place of delivery	Frequency	Percentage
Government hospital	30 women	40
Private hospital	4 women	5.3
Home	41 women	54.7

In case of home deliveries, about 56.1% have used a new blade to cut the umbilical cord. However, they had also used other instruments such as glass bangle, stone from River, unsterile knife, unsterile blade, etc. This is very unsecure for health of these mothers. Further, only 52% of the lactating women fed colostrum to the baby and in other cases mother extracted colostrum and discarded.

3.4 Registration for ANCs

Only 56 % of 75 lactating mothers had registered in the hospital and 44 % not registered at all for any health facilities. Majority of them registered in public hospitals. Unregistering women were unaware about the registration and place of registration, lack of health care seeking behaviour and family constraints, etc. Registered women got IFA tablets and immunized with TT injection. Some of them (about 20%) have availed partial TT injection (1 instead of 2). Thus, about 34.5% of lactating mothers have received complete antenatal care.

Table 4. Reproductive tract infection

Reproductive Tract Infection	Presence of symptoms reported (% women)
Itching or burning at reproductive tract	8.5
Foul smelling or curd like white discharge	20.2
Uterine prolapsed	1.2

Women have reported common complaints or symptoms related to reproductive tract infections (Table 4) like itching or burning at reproductive tract, foul smelling or curd like white discharge, uterine prolapsed, etc. However, about 73 % women were neglected and did not seek medical treatment for free from these diseases.

3.5 Knowledge, Attitude and Practices of Reproductive Health by Pavement Dwellers

Information about awareness about the menarche, age at marriage, contraceptives, attitudes towards the place of delivery, abortion, pregnancy, ANC, intra-natal care, health care services, knowledge about colostrum, immunization, RTI etc. has been collected from all women from reproductive age.

Average number of children for each respondent women was 3 with 34 % women have 4 or more. About 56.2 % respondent had their first child before the age of 18 and 26 % women were not aware about the ANC. The majority of women had reported that one should prefer home delivery until no complications. About half of the participants were not aware of the time of initiation of breastfeeding. Majority of them were not aware about the colostrum and its benefits to the child. About 8 % of women were felt nothing wrong in giving extra food to baby less than 6 months of age. Therefore, women from reproductive group of pavement dwellers are not known and well aware about reproductive health care and facilities.

Table 5. Knowledge about contraceptives

Knowledge about	Frequency	Percentage
Space between two children	6	2.3
Limit the family	176	68.2
Both	49	19.0
Don't know	27	10.5

Further, only 2.3% women are aware about the purpose of keeping space between two children (Table 5) and 68.2% are thinking about limited family size. The surprising fact is that none of the women responded were aware about to postpone the first child and use of contraceptives. Furthermore, women perceived the reasons of using contraceptives restricted only to postpone next pregnancy, or to limit the family size. 10.5 % of the respondents were not aware of the use of contraceptives and very few women (15.9 %) know about legal abortions to avoid the unwanted pregnancy (Table 6). Generally, women don't prefer abortions because they think it's against the wish of God.

Table 6. Awareness about the MTP Act

Awareness	Frequency	Percentage
Yes	41	15.9
No	217	84.1

4 DISCUSSION

Increasing mobility and migration is helping for increasing the population of pavement dwellers in case of Pune city. It has doubled in 15 years. Shelter Associates and Pune Mahila Milan had identified 274 families with 1092 people in 1997 while this study reports 466 families with 2339 persons. This population is highly heterogeneous in terms of area of origin, culture, practices and occupation.

Furthermore, there is instability, lack of elementary markers of citizenship, poor housing conditions, low economic status, unemployment and very poor sanitary conditions, etc. which all together leads poor health status. Poor education and lack of exposure to advanced communication technologies prevents them from awareness and knowledge of health care and medical facilities. Instability make them inaccessible to the medical services (especially at the time of evictions by Municipal authority) including ANC check-ups, registration, immunization incomplete. It is very serious problem for the public health.

Early age of marriage soon after or before menarche is still practiced in the society which is perpetuating the vicious cycle of teenage pregnancy, high parity and poor maternal health, eventually poor child health. Cultural practices, economic and social insecurity are reported caused of early marriage. Only few women (15.9%) are aware about family planning programme and large parts of the population are not known with contraceptives. Reported birth rate (2.7 children) is very close to estimations by NFHS-III TFR (2.8 children) for urban poor. However, 34.5 % women showed higher order of birth compare to the estimation of NFHS-III (28.6%) for urban poor. One of the participants genuinely responded that "I was thinking why we poor people are having more children and rich are having one or two". About 3.3 % women were not aware about the places where they can get the contraceptives.

Figure 3. Unhygienic livelihood of pavement dwellers (Kondhwa, Pune)

The maternal health of this group shows strong needs to take action to reduce their home delivery preference. Focus should be on elimination of the reasons of the home delivery like, resistance to change,

lack of below poverty, low economic conditions, poor treatment by health care personal, and no access to the medical services. One respondent with her husband have reported about not immunizing the child that *"amhi kadhi nhi lashi ghetlya, tri amhi jivant ahot, lasi denya mage sarkarche kahitri karsthan ahe nhi dilya tri amchi por jivant ahet"*. They have faith on without any vaccine and government is doing something wrong against them. They also have faith that colostrum is harmful for baby which lead that they are discarding and not feeding to the baby up to nine months. Thus, many barriers have been reported to access the health facilities to female pavement dwellers. Unawareness, lack of knowledge and strong resistance to change are the main barriers identified from pavement dwellers. This underlined the need of sensitive and affordable health care system for this section of society.

5 CONCLUSION

This article analyses the reproductive health problems and health care seeking behaviour of women pavement dwellers in the Pune Municipal Corporation area (India). This study is based on primary information collected from 258 women of reproductive age group. Reproductive health status of female pavement dwellers of Pune is poor. The study shows that about 45% women have used formal medical facility for deliveries, 56% lactating women were registered and received TT injections, and 34.7% women were covered complete ANC [Antenatal Care]. Many women have complained about the problems related to the reproductive tract diseases like itching, irritation on the reproductive tract and white discharge. Overall occupational and social conditions are negatively affecting their health. Pavement dweller are most of the times victims of eviction so they are changing their places and not able to access the health services. Moreover, markers of the citizenship are also playing important role in taking the benefits of public services like health and food subsidies etc. which are meant for poor people. Unstable and invisible citizenship makes them inaccessible to public health services and basic facilities like housing, sanitation, personal hygiene and even food.

Therefore**,** it is imperative need to improve the health status of mothers from Pavement dwellers and their children by looking their variations in terms of their societal structure, mobility, cultural practices. Government policies should be sensitive and accessible to this poor section of the society. This negligence and poor health status of women from Pavement dweller is important for overall national status.

CONFLICT OF INTEREST

The authors confirm that the content in this article has no conflicts of interest.

ABBREVIATIONS

ANC: Antenatal Care; **IT**: Information technology; **MDGs**: Millennium Development Goals; **MTP**: Medical Termination of Pregnancy; **NFHS**: National Family Health Survey; **RTIs**: Reproductive Tract Infections; **SDGs**: sustainable Development Goals; **TT**: Tetanus Toxoid.

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