

**AN ASSESSMENT OF THE HEALTH STATUS AND
RELATED PROBLEMS OF FEMALE SLUM DWELLERS:
CASE STUDY OF SELECTED SLUMS OF KMC**

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Abstract:

The health status of a population is a reflection of the socio-economic development of a country. It is shaped by a variety of factors like level of income, standard of living, housing, sanitation, water supply, education, employment, health consciousness, personal hygiene and by the coverage, availability and accessibility to health care services.

One of the most important factors of social development of an overpopulated city like Kolkata is the health status of its population who resides both in high rises and in the slums. Being the major urban centre of eastern India, the city continues to attract rural people from its hinterland and adjacent states. These immigrants come to the city in search of job opportunity and better living condition, but eventually are forced to settle in the slum areas.

The urban poor residing in the slum area of KMC are necessarily exposed to greater health risk due to certain socio-economic and environmental constraints that they fail to avoid. Among them, the health status of female population displays a comparatively more alarming situation. Thus the present study is concerned with the assessment of health condition of the female slum dwellers in selected slum areas of KMC and to investigate the prime causes behind such situation.

Keyword: woman, slum, health, maternity.

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Introduction

Kolkata holds a prime position in the urban scenario of West Bengal as it is the most populous urban centre of the state. Being the major urban centre of eastern India, the city continues to attract rural people from its hinterland and adjacent states and eventually these immigrants are forced to settle in the slum areas. Like all other metro cities in India, a large percentage of poor people of Kolkata live in the slum areas which can be defined as substandard, overcrowded, ramshackle, decaying housing occupied by poor, unemployed, unemployable and migrants throughout the city.

In India, where the only asset the poor people have is their bodies, good health is fundamental to every man, woman and child, not only for their well-being but for their basic survival. In an overpopulated city like Kolkata, one of the most important factors of development is the health status of its population. But, urban poor residing in the slum area of Kolkata Municipal Corporation (KMC) are necessarily exposed to greater health risk due to certain unavoidable circumstances; and among them, the health status of female population displays a comparatively more alarming situation. Using Demographic Health Service Data, Rutstein et al. (2005) also showed that slum dwellers are more disadvantaged in terms of maternal health services compared to households residing in non-slum urban areas. Thus the present study is concerned with the assessment of health condition of the female slum dwellers in selected slum areas of KMC and to investigate the prime causes behind such situation.

Objective and Methodology

- To study the health scenario and morbidity status of the female slum dwellers of Kolkata.
- To highlight the major causes behind the poor health condition of the concerned population.
- To provide suitable suggestive measures to combat the situation and improve the health status of female slum population.

Creation of Database

The present paper deals with both primary and secondary data. The primary data have been collected by surveying (Purposive Sampling Method) concerned population of selected slums of KMC through structured questionnaire. The secondary data have been collected from KMDA library and Institute of Social Science, Salt Lake, Census 2001. The relevant data and the information have then been organised, classified, tabulated and analysed by statistical methods.

Study Area

The focus of the study is on the health status and related problems of the female slum dwellers in Kolkata Municipal Corporation (KMC). Kolkata (22°34'11"N, 88°22'11"E) being the capital of West Bengal with a population of 44.97 lakhs (2011) is the third largest urban agglomeration and third largest city in India.

Table 1: Kolkata Municipal Corporation (KMC) at a Glance

KMC	Area (sq. km)	Total Population (lakhs)	Density (persons/sq km)	Growth Rate %	Sex Ratio
1981	104	33.0	31651	-	712
1991	187.3	43.9	23465	+6.3	819
2001	187.3	45.7	24497	+4.33	811
2011	187.3	44.97	24007	-1.67	908

Source: Census of West Bengal

What is Slum

According to Indian Slum Act (1956), slums are “*Those areas where buildings are in any respect unfit for human habitation.*” The Calcutta Municipal Council Act (1980) define slum as “*an area of land not less than 700 square metres occupied by, or for the purposes of, any collection huts or other structures used or intended to be used for human habitation.*” For the purpose of Census of India 2001, the slum areas broadly constitute of “*A compact area of at least*

300 population or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities.”

The slums of Kolkata can be divided into three groups- the first one, almost 150 years old, in the heart of the city, are associated with the early urbanization of the city. Second group forms during 1940s and 1950s due to rural to urban migration. Those people located themselves around industrial sites and near infra-structural arteries. The third group came into being during the time of Independence of India due to partition and they occupied vast urban lands and areas along roads and canals.

In Kolkata city, slums are divided into two categories: **registered** and **unregistered** slums. According to KMC Bustee Department (1991), the total slum population in the city was 6.26 lakhs in 87 wards, which has increased to 14.9 lakh in 141 wards during 2001 (Population Census 2001). According to KMC report 2001, there were about 2011 registered and 3500 unregistered slum exist in all the 141 wards under KMC (except ward number 42, 45 and 87), where almost one-third of the city-population lives.

Slums of the Study Area:

It is estimated that Kolkata has a large percentage of slum-dwellers. There are 607 towns having slum in India out of total 4673 towns. Among them, the highest percentage of slum household (according to Census of India, 2011) is in Greater Mumbai (41.3%). Kolkata have 29.6% of slum household to total household and ranks second in this regard (**Table 2**).

Table 2: Proportion of Slum Household in Major Metro Cities in India, 2011

City	Delhi	Kolkata	Greater Mumbai	Chennai
% of Slum Household to Total Household	14.6	29.6	41.3	28.5

Source: Census of India (P), 2011

Women are the neglected segment of population of any developing country. High cost of treatment and lack of adequate healthcare infrastructural facilities plague the slum population and the women among them are neglected more on a regular basis. Thus the female health status has been given particular attention in this study. Due to time constraints, 5 slums within KMC area have been selected for surveying purpose. Those are- Bagbazar slum (ward number 8) and Ultadanga slum (ward number 13) are in the northern part of the city, Manoharpukur slum (ward number 85) and Kalighat slum (ward number 83) are in the southern part and Park Circus slum (ward number 64) located in the central part of KMC.

Different Aspects of Female Slum Dwellers as Observed from Primary Survey:

For the purpose of analysis, the female population residing in those selected slums was taken into consideration and their demographic profile, literacy status, economic condition, living and above all, their health status and problems were studied during primary survey.

Demographic Profile:

- It depicts predominance of female population, excepting one at Park Circus, which is dwelled totally by Muslim population. The other selected slums had a total dominance of Hindu population.
- Number of migrants was highest in Kalighat slum who came mainly from Bangladesh during the time of partition.
- The female slum dwellers of more than 60 years were very few. Thus the depended female populations were mainly aged below 15 years.

Literacy Status:

- Almost 22% of surveyed population is illiterate (mainly in Park Circus slum) whereas 16% could only sign their names.
- Majority of them are educated upto class VIII, with a very few graduates (found only in Bagbazar slum).

Economic Profile:

Measures of income and expenditure probably offer the best indicator of well-being as surplus income of a population determines access to better healthcare facilities and treatment. The economic characteristics of the surveyed slum-dwellers are shown in **Table 3**.

Table 3: Economic Condition of Surveyed Population

Monthly Family Income	Range from Rs. 2000/- to Rs. 11,000/- per month. 34% families earn Rs.5000/- to Rs. 8000/- per month
Per Capita Income	Lowest in Park Circus slum (majority earn less than Rs. 2000/- per month)
Family belongs to BPL Category	17% of surveyed families
Occupational Pattern	20% are economically active (mainly maid-servant)

Source: Primary survey, January to April, 2014

Living condition:

Living standard of a population is very important as poor housing condition lead to increase in the incidence of morbidity, physical and mental illness. The living condition of the surveyed population is shown in **table 4**:

Table 4: Living Standard of Surveyed Population

Types of Houses	Mainly semi-permanent (temporary structure in Park Circus slum)
Separate Kitchen	Found only in some houses of Bagbazar and Manoharpukur slum
Toilet Facilities	Mainly common toilet and bathroom (average 7-10 families/bathroom) and Sulabh toilet (Park Circus slum)
Water Supply	Source of water for daily purpose is farthest from dwelling places in Park Circus slum. Quality must have been poorest in Kalighat slum
Drainage System	Covered (except in Park Circus slum)

Source: Primary Survey, January to April, 2014

Nutrition and Hygiene:

Nutritional food intake and hygiene are very important parameters to determine the health status of a population. But due to their poor economical condition, the surveyed people could not afford balanced food and sufficient protein intake regularly (**Table 5**). On the hygiene part, it can be pointed out that everybody surveyed wash their hands before food intake, but approximately 9% of them use disinfectant.

Table 5: Protein Intake of Surveyed Female Population

Protein intake	Regularly	4-5days/week	1-3 days/week	Less than once/week	Not specific
Number of Surveyed Families	15	22	34	16	7

Source: Primary Survey, January to April, 2014

Health Scenario:

The health status of a population is a reflection of their socio-economic development. The health scenario of the surveyed female population shows following trends:

Morbidity Status: The major diseases that have been identified in the selected slums include vector borne (malaria), water borne (typhoid, jaundice and diarrhea), tuberculosis, skin diseases, surgery and others (fever, cold and cough, respiratory disease, cardiac disease etc.).

It can be assumed that the presence of the untreated impoverished nala (popularly known as Adi-Ganga) beside the Kalighat slum pollute underground rockbeds and water layers, and the people of that slum regularly use that low quality water for their daily chores. On the other hand, Park Circus slum suffer from lack of proper water supply, unhealthy living condition and surroundings. Because of these reasons, occurrence of water borne and vector borne diseases are very common in these two slums (**Table 6**). Patients affected by tuberculosis and skin diseases are maximum at Park Circus slum. This may be due their poor standard of living and malnutrition. High incidence of vector borne disease (malaria) was found at Manoharpukur slum.

Table 6: General Health Status of Surveyed Population

Types of Diseases	Ultaganga		Bagbazar		Manoharpukur		Kalighat		Park Circus	
	Number	Rank	Number	Rank	Number	Rank	Number	Rank	Number	Rank
Vector borne	2	5	3	4	8	2	7	3	12	1
Water borne	3	3.5	3	3.5	2	5	14	1.5	14	1.5
Tuberculosis	1	4	0	5	2	3	5	2	6	1
Skin Disease	0	4.5	0	4.5	2	3	4	2	5	1
Surgery	0	4.5	3	1	1	2.5	0	4.5	1	2.5
Others	4	4	7	2.5	10	1	0	5	7	2.5
TOTAL		25.5		20.5		16.5		18		9.5

Source: Primary Survey, January to April, 2014

Thus, the overall General Health Status of Surveyed Women shows it is best in Ultadanga slum followed by Bagbazar and Manoharpukur slum. But the health status of the women and children are poorest in Park Circus slum. Thus it can be inferred that the lower per capita income of Park Circus slum-dwellers leads to malnutrition, lack of hygiene, poor living standard that ultimately raises the rate of morbidity.

Status of Maternity Health: The status of maternity health is very important as it reflects the strength and capability for bearing and rearing healthy children and the reproductive health of a mother depends more on social phenomena that on the biological determinants. The health condition of the surveyed female population shows the following features (**Table 7**):

Table 7: Health Scenario of Surveyed Females

Average age of Marriage for Female	16-20 years (lowest in Park Circus slum)
Average Age of First Child Birth	19-20 years
Average Spacing between Two Children	3 years
Complications during and after Pregnancy	15%

Complications during and after Pregnancy	76%
Engagement in Regular Household Activities during Pregnancy	About 90%
Adequate Special Food Intake during Pregnancy	12%
Occurrence of Maternal Mortality during Childbirth and Still Birth	none
Females Taking Part in Decision Making About Number and Spacing of Children and Using Birth Control Measures	24%

Source: Primary Survey, January to April, 2014

It was noticed that majority of the surveyed females in the selected slums opt for public hospitals for delivery (61%) while only 21% deliveries occurred at home. The high treatment cost in the private healthcare institution barred them to avail modern facilities. Again, the number of female having 4 children are maximum in Park Circus slum (**Table 8a**), mainly due to lack of education among the females, lack of awareness and lesser use of contraceptives or other preventive measures. Low monthly income of the families reside in Park Circus slum also play crucial role in this regard as they often consider children as a source of income.

Table 8a: Status of Maternity Health

Slum	Total Female Population	Married Population	Number Of Child per Woman				Total	ANC	PNC	Institutional Delivery
			1	2	3	4				
Ultadanga	54	32	8	11	2	1	22	15	9	16
Bagbajar	34	20	3	9	2	0	14	10	7	11
Manoharpukur	48	26	5	13	2	0	20	20	12	20
Kalighat	56	32	5	18	3	1	27	15	9	18
Park Circus	46	32	2	4	8	11	25	10	6	10

Source: Compiled by the Author

The indicators of status of maternity health of the surveyed population are ante-natal (ANC) and post-natal (PNC) care of the mother and number of institutional deliveries. **Table 8b** clearly shows that, except Manoharpukur slum, all the other selected slums are lagging behind the desired result in institutional delivery, mainly due to low income and high treatment cost

associated with it. Beside this, in all the selected slums, the ante-natal care is greater than post-natal care. On average, only 67% and 42% of surveyed mothers received ante-natal and post-natal care respectively.

Table 8b: Status of Maternity Health

Slum	% of ANC	% of PNC	% of Ins. Delivery	Unit Free Score			Total
	(x ₁)	(x ₂)	(x ₃)	x ₁	x ₂	x ₃	
Ultadanga	68.18	40.9	72.73	1.02	0.98	1.02	3.02
Bagbazar	71.43	50	78.57	1.07	1.2	1.1	3.37
Manoharpukur	100	60	100	1.49	1.44	1.4	4.33
Kalighat	55.56	33.33	66.67	0.83	0.8	0.93	2.56
Park Circus	40	24	40	0.6	0.58	0.56	1.74

Source: Compiled by Author

The combined impact of ante-natal, post-natal care and institutional delivery has been reflected on Maternity Health (**Table 8b**), and it shows that Manoharpukur slum occupies the top most position among the selected slums in terms of Status of Maternity health followed by Bagbazar and Ultadanga slum. On the other hand, Park Circus slum has been identified as the most vulnerable slum in terms of health status of reproductive mothers.

Infant Health:

- Diseases like nephritis, diphtheria occur mainly among infants reside in Park Circus and Kalighat slum.
- Incidence of infant mortality in last 5 years can be found in 4 families (3 in Park Circus slum and 1 in Kalighat slum).
- Malnourishment of mother during pregnancy and wrong treatment of infants are the main cause of infant mortality in the selected slums. High dependency of superstitious ways of treatment is another reason.

- Incidence of health complications/ deformities of child birth among infants were found among two families.
- Almost 100% of the infants of surveyed population availed vaccination from nearby health centres.

Access to Healthcare services: Though private healthcare institutions are booming in Kolkata, huge treatment costs in those private hospitals make them almost inaccessible for the urban poor. For that reason, the poor people of the city do not have any choice but to opt for public hospitals, though their treatment facilities are not up to the mark.

Table 9: Places of Treatment (Hospitalised Cases)

Types	Public Hospital	Semi-Government Hospital	Private Hospital	Both Private and Government Hospital	Other
% of Surveyed Population	66	22	2	8	2

Source: Primary Survey, January to April, 2014

Table 9 clearly shows that, the surveyed population of the selected slums mainly prefers to avail healthcare facilities from public hospitals (66%). The preferred government and semi-government hospitals of the surveyed population are- R. G. Kar Medical College and Hospital (Bagbazar and Ultadanga slum), S. N. Pandit Hospital (Kalighat slum) and Sishumangol Hospital (Manoharpukur slum). According to them, the infrastructural and healthcare facilities provided by these government hospitals are quite satisfactory. Due to huge cost differentials between public and private sector, very negligible portion of the surveyed population are able to go to the private hospital for treatment.

It was observed that majority of the surveyed population do not take minor illness lightly in fear that it might turn out to be a major problem in long run. **Table 10** shows that in most of the cases doctors are consulted (both of charitable centres and of the private type). A charitable religious organization provided healthcare service at a very nominal rate in case of minor health problem in Park Circus slum and majority of the people of the aforesaid slum opted for it.

Table 10: Sources of Medicine during Non-Hospitalised Illness

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	Bagbazar	Ultadanga	Manoharpukur	Kalighat	Park Circus
Chemist Shop	3	2	6	8	1
Charitable	-	-	-	-	10
Domestic Remedy	-	-	-	2	2
Faith Healer	-	-	-	3	3
Govt. Health Centre	2	2	2	3	2
Private Doctor	3	3	10	2	3
Corporation Hospital	-	-	-	10	-

Source: Primary Survey, January to April, 2014

Healthcare Expenditure: As none of the surveyed people of the selected slums have any health insurance coverage, they cannot afford to spend more money in treatment. It cuts into their budget in 2 ways- firstly they have to spend more money in treatment which eats up large portion of their income and secondly, they have to forego any income during the time of illness. In the selected slums where per capita income is low, treatment expenditure are often met through selling assets and borrowing money from neighbours (**Table 11**). A typical feature of Park Circus slum was noted that, a common fund was raised by few families on a pre-decided basis which was spent for emergency healthcare services for anyone of the families engaged in the saving process.

Table 11: Source of Healthcare Expenditure (% of occurrence)

	Bagbazar	Ultadanga	Manoharpukur	Kalighat	Park Circus
Personal Savings	50	75	36.4	58.8	14.3
Selling of Assets	16.7	8.3	22.7	17.6	33.3
Collected Fund	11.1	8.3	22.7	11.8	33.3
Daily Earning	22.2	8.3	18.2	11.8	19.1

Source: Primary Survey, January to April, 2014

Healthcare Policies Adopted:

Different schemes adopted or the betterment of healthcare treatment by government in the slum areas of KMC and those are:

- **Calcutta Slum Improvement Project (CSIP):** It was launched by CMDA and CMC jointly in 1991. About 3,00,000 bustee dwellers who had not received any kind of developmental benefit from any sources were registered as target beneficiaries of CSIP. The objectives of this programme are to achieve economic self-dependence, reducing illiteracy, create awareness among female and children in particular to develop their mental faculty and improve their cultural standard.
- **Calcutta Urban Development Programme (CUDP) III:** provide primary healthcare services to many of the slums located within the city area.
- **Environment Improvement Programme (EIUS), 1972:** improving living environ of the slum dwellers by providing basic civic amenities (excluding social services).

Observations:

- As a metropolitan city, Kolkata holds the highest slum population within West Bengal and this chunk of impoverished slum dwellers of the city create a heavy demand for health care services.
- The basic facilities provided by the authority to the unregistered slum dwellers are almost negligible, their living condition is much worse in comparison to the other registered slums.
- High incidence of poverty, lack of basic facilities and deteriorating physical and social environment around the slums are responsible for many diseases.
- The female slum dwellers are mainly staying at the slum areas throughout the day and thus are affected most by the polluted environment.
- Lower per capita income leads to malnutrition, lack of hygiene and poor standard of living that increase morbidity rates of slum dwellers.

- Though the female slum dwellers sometime neglect their illness, but majority of them do not, in fear that it might turn out to severe health problems for which they might not afford to buy the healthcare services later.
- The main healthcare services provided to the slum dwellers in the city are those run by the government institutions inspite of the fact that the private institutions are experiencing a boom in the city now a days.
- High cost differential in treatment between private and a public hospital prohibits the slum dwellers to opt for treatment in private hospitals.
- The slum dwellers of the city do not possess any health insurance coverage and this also limits their freedom to spend much money in healthcare treatment.

Proposed Steps for Improvement of the Situation:

- Improvement in the living condition of the slum dwellers (inhabiting both in registered and unregistered slums) by providing the basic facilities like improved sanitation system, water supply etc.
- Increasing literacy level among the female slum dwellers so that they can be self-sufficient by finding a suitable job for themselves to support their family economically.
- Spreading awareness among the females about birth control measures, sexually transmitted diseases, different environmental diseases and how to combat them.
- Establish evenly distributed health care centres and frequent healthcare camps at or near the slum areas.

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