

Health Care Programmes and Nutritional Status of Women and Children: A Sociological Study of Lucknow Slums

ABSTRACT OF Thesis

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Preeti Yadav

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Prof. Birendra Narain Dubey

HEAD

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(A CENTRAL UNIVERSITY)

VIDYA VIHAR, RAEBARELI ROAD, LUCKNOW-226 025
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Abstract

Health is one of the most fundamental human needs and it is aspired universally. Health is the balanced development of physical, mental and social capacities of an individual. It is a positive state of well being which is essential for the fulfilment of rich and full life. Health is thus crucial for the integrated and concurrent development of an individual and community as well as for the socio-economic prosperity of a country. WHO (Bickenbach, 2017) has defined health as “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity.” This definition suggests health is not just only the absence of diseases but it is the optimal functioning of human body and mind. Health is one of the foremost indicators for determining the quality of human life and social development in a country. Moreover, quality health care is regarded as one of the most basic human rights and it is indispensable for the preservation as well as the promotion of good health.

One of the marked features of Indian demography is rapid and unplanned urbanization. India’s urban population comprises of 31.16 per cent of the total population (Census of India, 2011). The process of urbanization is a propitious sign of transition, however unplanned and rapid urbanization leads to large scale migration of population to cities which often results in the mushrooming and agglomeration of slums characterized by the inhuman and dilapidated living conditions (Davis, 2006). Besides, urbanization is also intricately linked with the number of socio-economic problems. Some of these major problems are unemployment, poverty, overcrowding, congestion, housing shortage, inadequate civic amenities such as lack of safe drinking water, toilet facilities, sanitation, sewage, etc. These problems are directly associated with the health and the availability of quality health facilities in urban areas. However, poverty and lack of adequate housing conditions are the most basic and primary by-product of unplanned urbanization. In cities the most visible dimension of poverty is lack of proper housing and living conditions. Due to increasing employment avenues and opportunities in the cities, there is huge influx of population to the urban areas. Consequently, the people of lower economic strata in cities i.e. urban poor are forced to accommodate themselves in the substandard housing, squatter settlements and slums. Therefore, one of the integral components of urbanization in India is the development of slums.

A slum is usually considered as a habitat unit which is characterized by defective and faulty social, economic, physical, housing and living conditions. UN-Habitat Report (2003) has defined a household in slum as “a group of individuals who live under the same roof and lack one or more basic necessities such as access to safe drinking water, toilet facilities and sanitation, adequate space and housing area, and security of tenure.” The definition and concept of slums and squatter settlements vary from country to country depending on the basis of the socio-economic and environmental conditions prevalent in each society. The Government of India (Chandramouli, 2003) has highlighted some of the basic characteristics of slums and these features are dilapidated housing, inadequate lighting and poor ventilation, acute overcrowding and congestion, paucity of safe water and toilet facilities, absence of sanitation and non-availability of social services.

An in-depth analysis depicts that slum has its own social way of life with a peculiar character. It has its own set of values, norms and sanctions which are reflected in their substandard housing, health practices, insanitary conditions, poverty, social isolation, deviant behaviour and vices. Generally, a slum lacks access to basic civic services such as water supply, drainage, sewerage, roads, etc. and even if they had them, these services would be poor and inadequate resulting in poor hygiene and sanitation.

The unhygienic and insanitary living conditions in slums are considered to be highly detrimental for the physical, social, mental and moral well-being of its inhabitants. Substandard housing and lack of basic services along with poor purchasing power and low nutritional intake increases the frequency of infections which add to the episodes of morbidities with acute respiratory and diarrhoeal diseases being the most common (Gracey, 2002). Ultimately, such a scenario is bound to have an adverse impact on the health and nutritional status of the slum inhabitants particularly on the women of reproductive age and their children. Poverty, lack of resources, economic constraints and frequent episodes of diseases add to their misery. WHO (1999) has rightly stressed out that lack of infrastructure and other services in urban slums and squatter settlements makes their environment life-threatening. Even the occurrence of common infection and diseases in slums can often become catastrophic to the population inhabiting there.

Women not only play a crucial role in determining the health of their family members but also the health of the community as they are the health care givers as well as recipients at the same time. Therefore, the women's health must be placed at highest priority and special attention should be given in understanding the health needs of the women. There are number of factors which influence the health of the population. These factors are the socio-economic status and demographic features of the community, access and availability of health services, health practices, medical advancement and technology, quality of health care providers, knowledge concerning health and hygiene, awareness and utilization of the available health services, etc. The need to provide health care services exclusively to women has been felt at the global level. The health and nutritional status of women is inevitably associated with the socio-economic as well as cultural factors and these factors continue to affect them throughout their lives. Moreover, these consequences not only had an impact on well-being of women but also on the health of their children, allocation and distribution of resources and the functioning of the households.

Fry et. al. (2002) has pointed out that the mortality rates especially of children are significantly higher among the urban poor in comparison to the national averages. The untimely death of children in slums is a matter of serious concern. In urban slum dwellings, every year one out of ten children is likely to die before completing five years of age and one out of 15 children is not able to live up to their fifth birthday. These incidences are particularly higher in less developed states such as Uttar Pradesh, Bihar, Madhya Pradesh and Odisha. In the urban slums the infant mortality rate are 1.6 times higher than the national average and those who survive find it difficult to attain the normal growth and development (Arnold, Parasuraman, Arokiasamy and Kothari, 2009).

Various health care policies and programmes have been launched in the country to address the health problems. However these programmes are macro in nature and they fail to penetrate at the micro-level. These policies and programmes lack special provisions for the socially marginalized and deprived sections of the society. There is need to formulate target specific strategies to cater the needs of this socially excluded population. The policy makers have largely focused their attention on the rural areas and the problems of urban poor are by and large ignored. Although few interventions have been made to tackle their health problems, but more such steps

are needed to be taken. ICDS, *Janani Suraksha Yojana*, *Janani Shishu Suraksha Karyakram* are some of the schemes which have been operating for women and children in the urban areas. However, proper monitoring of these programmes is required for optimal utilization by the urban poor. Nutritional programmes focusing on urban poor should also be launched to address the problem of malnutrition. Health programmes specifically targeting the urban slum population should be formulated and implemented to improve their health scenario.

It is imperative to implement some target specific interventions and strategies in order to improve the nutritional and health profile of women and children in slums. With ever increasing population and large influx of population to cities, there is urgency to implement such an approach for tackling the increasing health issues in urban poor. For evolving feasible strategies to alleviate health and nutritional problems of slum population an essential prerequisite is baseline information. The present study conducted in slums of Lucknow would make an attempt in this direction.

The conceptual framework of the study mainly constituted of nutritional status, malnutrition, anthropometry, stunting, wasting and underweight. Nutritional status of an individual or a group of individuals is defined as their current body status, which is associated with their nourishment state (the intake and utilisation of nutrients). Furthermore, the nutritional status is determined by interaction between a complex set of internal/constitutional factors and external environmental factors. An imbalance (deficiency or excess) in an individual's intake of nutrients and/or energy is referred to as malnutrition. The term malnutrition is a broad one under which two broad groups of conditions i.e. 'undernutrition' and 'overnutrition' are covered. Anthropometry is the measurement of body weight, height and proportions. Anthropometric measurement is one of the important components of clinical examination among infants, children, pregnant and lactating women. It is used to measure both under and over-nutrition. Low height-for-age index is used for identifying the condition of past undernutrition or chronic undernutrition. Height-for-age (HAZ) is an indicator of stunting which usually results from chronic malnutrition, however, genetic factors are also associated with it. The weight-for-height (WHZ) index is an indicator for thinness or wasting. Wasting is an acute or short-term malnutrition which results from acute starvation or severe diseases, famine, etc. The

index of low weight-for-age is used for identifying the condition of being underweight, for a specific age. Underweight results either from chronic or acute under-nutrition or both. Underweight, which is based on weight-for-age index, is a composite measure of stunting and wasting and it is used as an indicator to assess and examine the changes in the magnitude of malnutrition over a period of time.

In the present study, it has been attempted to use some theoretical underpinnings such as functional and conflict theories. Poverty is not the only reason behind the poor health and nutritional status of slum dwellers, but there are several other factors such as lack of access to basic civic amenities, poor sanitation and environmental conditions, low household income, food insecurity, lack of education and health care services, etc. Thus, it can be traced that slum dwellers have to perform their role in family as well as in their community and poor health and nutritional status creates hindrance in their role playing. Therefore, dysfunctionality comes to exist in their family and community.

Conflict theory held the view that the health, disease and health care delivery system of people in the society are affected by the social, economic and political forces. The conflict theorists are concerned with the issues of the ability of every individual to obtain health care; how health and health care workers are affected by class and gender inequalities; the influence and dominance of the medical model of health care; and the role of profit in the health care system (Kendall, 2011). Looking at health from the conflict perspective, it is concerned with the relationship between health, illness and social organisation within a society and how their meanings and definitions are influenced and determined by the economic activities.

Statement of the Problem

The rapid growth in the number of slums is one of the major concerns of Lucknow city. Slums or the vulnerable sections of the population are scattered throughout the city. Rapid and unprecedented urbanization has led to the large scale migration of population to the cities for better employment opportunities. This huge influx of population finds it difficult to live in decent housing conditions due to economic constraints. Thus, they are forced to live in inhuman and insanitary conditions in substandard housing and squatter settlements. This leads to the mushrooming of slums in the urban areas. Slums are characterised by lack of basic facilities like adequate

housing and space, safe drinking water, toilet facilities, sanitation, proper ventilation and sunlight, social security, secure tenure, apathy, crime, etc. The living and environmental conditions in slums are not very conducive for the health of the inhabitants. Lack of infrastructural and other facilities make slums one of the most life-threatening environments. Unhygienic conditions coupled with low purchasing power and inadequate dietary intake results in frequent episodes of illnesses particularly among women of reproductive age and their children. Women residing in slums face the double burden of poverty and gender discrimination.

The health and nutritional status of women is directly associated with that of their children. Due to poor socio-economic conditions, women living in slums had to compromise in every dimension. Lack of appropriate pre and postnatal care stress the bodily reserves of the mothers. Inadequate and poor child rearing practices in slums is a common phenomenon. During early childhood faulty feeding practices results in malnutrition which affect the physical, mental and social development of children in slums. Malnutrition is one of the most prevalent health problems among children. Lack of awareness about health care programmes and other health facilities among slum dwellers further worsens the situation. Thus, this study proposes to address and contribute to the existing knowledge of health and nutritional status of women and children living in slums. Health and good nutrition are critically connected with each other. Strategies focusing on health invariably promote good nutrition and interventions implemented in nutrition promote good health. Therefore, it is imperative to address the health and nutritional problems of slum dwellers for multidimensional growth and development of the country.

Hence the research is titled as “Health Care Programmes and Nutritional Status of Women and Children: A Sociological Study of Lucknow Slums”.

Objectives of the Study

The specific objectives of the present study are as follows:

1. To understand the health care policies and programmes in India.
2. To analyze the socio-economic status, housing conditions and health practices of families in the slums of Lucknow.
3. To assess the nutritional status of women and their children in the slums.

4. To examine the impact of maternal factors on the nutritional and health status of children.
5. To explore the extent to which health care facilities are being utilized by the women living in slums.

Hypotheses of the Study

On the basis of above objectives following hypotheses have been formulated:

1. Health care policies and programmes in India are operationalized at macro level.
2. The socio-economic status and housing conditions of families in slums is poor.
3. The nutritional and health status of women and their children in slums is below the normal level.
4. The maternal factors are associated with the nutritional and health status of children.
5. The access and utilization of health care services is lower among women and children living in slums.

Methodology

Mixed method approach i.e. both quantitative and qualitative approach has been adopted to conduct the present study. In the present study, descriptive research design has been used. The present work required in depth investigation in order to attain the objectives of the study. The present study is aimed at assessing the health and nutritional status of women and their children residing in the slums of Lucknow city. Further, this study also endeavoured to understand the health care policies and programmes launched by the Government of India and to explore the extent to which these programmes are being utilised by the slum dwellers. For the study, socio-economic status, housing conditions and hygienic practices of families in the slums are observed and assessed. Therefore, descriptive research design has been adopted and the study is focused at grass-root level.

In the present study, the area of universe is all slums of Lucknow. It is not feasible to conduct study in all the slums, therefore, a sampling technique is essential to have proper representation of the universe. The simple random sampling is used to select the slums for conducting the research work. The Lucknow Municipal

Corporation has 5 regions and four slums from four different regions of the Lucknow were selected using simple random sampling technique. Broadly, two old slums (Pre-1990s) i.e. Sikandarnagar slum, Chinhat bazaar slum and two new slums Rajajipuram slum and Vikasnagar slum have been selected for the study. Moreover, only those slums were kept into consideration which had slum population over 1000. Thus, the research study is conducted in four slums of Lucknow city namely Chinhat Bazaar slum, Sikander Nagar slum, Rajajipuram slum and Vikas Nagar slum. The sample size of the present study is 200 respondents and 50 respondents have been selected from each of the four slums. The sample consisted of women between 15-45 years having children between six months to five years of age. The respondents have been selected by using purposive sampling. The unit of the study is single household.

In the present study, interview schedule, non-participant observation and focused group discussion methods have been used for collection of data. The inferences drawn from the analysis of data helped in arriving at generalizations. WHO classification has been used for the analysing of anthropometric measurements and various other related variables. Frequency and percentage distributions have been implied for categorizing data in statistical manner. Appropriate graphs have also been used to establish interrelationship between various variables.

Findings and Conclusion

The findings and interpretations of the present study on the basis of various parameters and aspects conclude that women and children living in the slums of Lucknow suffer from poor health and are malnourished. Due to various interacting factors women and their children in slums are prone to health problems. There is need for community participation and community awareness so that women could be educated about the nutritional issues in particular and its implication on the general health. Door to door services and community counselling in reference to appropriate nutritional and dietary intake, child feeding practices and strengthening of government schemes and programmes could facilitate changes in the prevalent scenario. Challenges to good nutrition and health care are presented by the physical characteristics of slums. There are number of underlying social, economic and political forces that perpetuate slums and redressal of these issues would take time. However, immediate implementation of number of interventions could prove fruitful

and have life-changing effects. The approach to address health problems in slums need not to be comprehensive or exclusive but it should direct the attention of policy makers and health professionals towards the slum life which has profound effect on the health of the people living there. Moving from understanding to action could be helpful in improving the lives of slum dwellers.

The nutritional and health problems in slums are affected by interplay of number of factors including housing and environmental factors, sanitation, social and economic factors, common beliefs and customs, insufficient quantity and quality of food consumption, deficiency of nutrients, etc. The housing and environmental conditions such as overcrowding, congestion, lack of separate kitchen, open drains, inadequate sunlight and ventilation were found to be affecting the health of the slum population in the study area. Most of the households had one room space and were devoid of basic amenities. Anderson (1960) in his study opined that slums are characterised by four basic components namely appearance, economic status, overcrowding and population and he defined these components in context to slums. The poor environmental conditions accentuate the health vulnerability of the people living in slums. In the present study, these environmental factors were associated with the prevalence of respiratory diseases among the women and children.

The indicators chosen for sanitation and hygiene behaviour were access to safe drinking water, type of toilet facility, disposal of waste and garbage, disposal of infant's excreta etc. Not only the nature of housing but the availability of basic civic amenities was also lagging behind in slums. Most of the households lack the facility of running tap water at home and they were dependent on the public taps. The quality of water was also not satisfactory as most of the respondents were complaining about the purity of water. Unavailability of safe drinking water is one of the most common causal factors for water-borne diseases. Besides, majority of the households do not had toilet facility and they were using public toilets or practice open defecation. Most of them were disposing child's stool in open drains. In public toilet the supply of water was irregular and respondents were afraid to use public toilets in night. Cleanliness of toilets was also a matter of concern. This shows that the condition of sanitation in slums was appalling. K. R. Rao and M.S.A. Rao (1991) pointed out that the main physical conditions of a slum area are: informal settlement, high density of population and congestion, dilapidation, overcrowding, unhygienic conditions,

absence of basic civic amenities like safe drinking water, drainage, sewerage and disposal of garbage. Lack of adequate sanitation contributed to the burden of infections and morbidities. Thus, the slum population have to cope up with not only poor and unhygienic housing conditions but also lack of sanitation.

When the health and nutritional status of women were looked into the prevalence of nutritional and health problems were evident. The anthropometric assessment showed that a significant proportion of women were having either low BMI (thinness) or higher BMI (obesity) than the normal limits. However, the incidences of thinness were higher than the occurrence of obesity among the women. The prevalence of anaemia was also quite high with more than half of the women suffering from it. These nutritional deficiencies were found to be closely associated with the educational status of the women and monthly income of the household. With the increase in the educational status and household income the incidences of malnutrition decreased. Further, the knowledge of women about anaemia and food selection ability were found to be linked with the frequency of undernutrition. Hassan and Shukla (2013) carried out a cross-sectional epidemiological study to assess and examine the nutritional status of women in urban slums of Allahabad city. They found that the prevalence of thinness and anaemia among married women in slums was very high. In the present study, the poor socio-economic conditions in the slums directly had an impact on the nutritional status of women.

Dietary assessment furnished essential information about the food and nutrient intake of women in the slums. Criteria for food selection, food frequency, 24 hour dietary recall method were used to assess the nutritional intake of the respondents. Majority of the women gave preference to seasonal food, cost of food and ease of preparation while selecting food items for the family. Nutritional quality and liking of the family members were the least preferred ones. Lack of economic resources and awareness were the common factors that had an impact on their choices. The food consumption pattern of women in slums consisted of cereals, sugar oil and salt daily in their diet. The consumption of green leafy vegetables and other vegetables, fruits, pulses and milk was mostly on the weekly basis. The women were not able to include these food items daily in their diet. The lack of diet diversity was clearly evident in their food intake. The poor financial resources and economic constraints were intricately connected with the food consumption of the slum population. Gender also

had a critical role in the distribution of food within the household. Male members were given the preference whereas the women were the last to eat in the family. Pal, Bharati, Ghosh and Vasulu (2009) provided an inclusive and in-depth analysis of issues of gender discrimination and also examined the status of women from critical viewpoint at different spheres of life. They portrayed a complex association between gender and poverty. Thus, the women have to face the double discrimination of poverty and gender.

The next issue probed was the health problems prevalent among women in the slums. The occurrence of number of health diseases among women is a grave problem. The health problems were categorised under four heads- metabolic, nutritional, reproductive and other health ailments. The incidences of metabolic illnesses were comparatively very low, however the occurrence of nutritional deficiencies such chronic energy deficiency and anaemia was sufficiently high. The prevalence of reproductive health problems and other health ailments was common. Socio-demographic variables such as age, educational status and income were found to be significantly correlated with the occurrence of health problems. The poor housing conditions coupled with lack of sanitation were also responsible for the higher incidences of ailments among the slum population.

The reproductive health indicators were also probed into which revealed that a substantial proportion of women were married before completing 18 years which is considered to be the legal age of marriage. Early marriage results in early pregnancy which adversely affects not only the health of the women but also the health of the children. In most of the cases the spacing between the two consecutive deliveries was less than two years. Women were not able to recuperate properly which had a negative impact on their bodily reserves. The cases of infant mortality and miscarriages were also reported. Inadequate prenatal care and lack of post natal care were also the contributing factors towards the poor nutritional reservoir of women. Lack of community participation, outreach and awareness towards the health programmes makes women deprived of many health facilities.

The inequitable distribution of health services makes the slum dwellers vulnerable to diseases. Poor access and utilization of health services by them pose a threat to their health. Women preferred private hospitals and clinics for treatment

instead of government hospitals. Contrary to the expectation very few women took medical aid from traditional healers. Self-medication was also a common practice in slums. In minor ailments they procured medicines from local medical stores. Most of the women visited doctors only when they were seriously ill. They had more trust on the allopathic doctors as compared to others. The women were not satisfied with the health care services that were being provided to them. Long hours of waiting, distance, poor quality of health care, affordability, rude behaviour of health personnel, etc. were some of the causes of dissatisfaction. Illness acted as a catastrophe for the families in slums. Poverty and lack of financial resources over-burden the family and out of the pocket expenditure make it difficult for them to avail quality health services. Further, lack of awareness and ignorance about the health was clearly evident in the slum dwellers. Banerjee (2012) assessed the health status of women in urban slums of Hooghly and asserted that women were not only socio-economically backward but were also the most vulnerable section of the society. This study revealed that water-borne diseases were quite rampant. The physical conditions in slums were adversely affecting the health of women, but there were several other factors that were responsible for poor health status of women. Statistical analysis revealed that factors like early age of marriage, conceiving at a younger age, less gap between successive pregnancies, poor pre and postal-natal care, poor intake of food were significantly associated with the health status of women in slums.

The awareness about *Janani Suraksha Yojana*, *Janani Shishu Suraksha Karyakram*, ICDS and Urban ASHA scheme were probed and it came into light most of the women were not aware about these health programmes and the utilization rate was even lower. Two AWCs and one community health centre were functional in the three selected slums and in one slum there was no such centre. The awareness and utilization of various health care programmes was comparatively better in those slums where AWCs were available. ASHAs were acting as a bridge in imparting awareness about various health services among slums dwellers. Still the level of awareness and utilization was far from satisfactory. More concrete and focused interventions are needed for the adequate implementation, monitoring and utilization of the health care services.

Now we look into the nutritional and health status of children aged between six months to five years in slums. The anthropometric measurements of children were

taken to assess the magnitude and characteristics of nutritional deficiencies among children in slums. The incidences of underweight, stunting and wasting were prevalent among children. This shows that children were suffering from acute as well chronic from of malnutrition. One of the alarming situations is the occurrence of more than one form of malnutrition in a child. Malnutrition was found to be significantly associated with the age and gender. The incidences of malnutrition were higher in girls as compared to boys. However, the prevalence of MUAC based malnutrition was low as compared to stunting and wasting. Slum-wise analysis showed that the problem of malnutrition was high in all the four slums although the frequency of incidences varied. All forms of malnutrition were found to be closely correlated with the mother's educational and working status. Aggarwal and Srivastava (2017) conducted a study to assess the prevalence of malnutrition and explore the breastfeeding and weaning practices, immunisation coverage and illnesses among under-five children in urban slums of Lucknow. This study showed that children were found to be stunted, underweight and wasted. This study revealed that undernutrition, poor feeding practices and low immunisation coverage resulted in the prevalence of several morbidities among children.

Anaemia of varying degree was prevalent among the children of slums. Maternal factors like mother's age at marriage, mother's educational, occupational and anaemia status were affecting the anaemia status of the children. Mother's knowledge about food selection and anaemia was also having an impact on the haemoglobin level of the under-five children. The frequency of anaemia was more or less similar in all the four selected slums of Lucknow. The high prevalence of anaemia indicates lack of dietary intake of iron and protein. Haemoglobin among children is not only essential for supply of oxygen within the body, but it helps in the cognitive and behavioural development also. Its deficiency may lead to the impairment of the mental development in the children.

Dietary assessment of children was done as diet is an important determinant of nutritional status in children. Inappropriate infant and faulty complementary feeding practices would continue to affect the children throughout their life. Although the children were avoided being given non-vegetarian food due to belief that they should be given such food after attaining certain age, some were given non-vegetarian food items. One of the notable features is that most of the children were fed home cooked

food. The assessment of food habits showed that most of the children were fed two times a day which is inadequate. Children who are not fed appropriately have low resistance towards the infections and higher chances of getting sick.

To have a better insight into the dietary pattern of children IYCF practices were also probed. IYCF practices were found to be faulty and inadequate. Most of the children were not breastfed within 1 hour of delivery. Exclusive breastfeeding was not practiced by all mothers. Moreover, a significant number of mothers discarded colostrum and gave prelacteal feed to their children. These faulty feeding practices have an adverse affect on the nutritional reserve of the children and make them vulnerable to diseases. Weaning practices were also inappropriate with majority of children given complementary food before or after prescribed period. Mothers received knowledge about child feeding practices mainly from elders or peers followed by health personnel. Lack of proper IYCF practices is bound to affect the nutritional intake which in the long run may result in malnourished child. The literacy level of mother is positively correlated with the IYCF practices. Literate women were more informed about the correct feeding practices. Children who were fed adequately and correctly were at lower risk of stunting, wasting and underweight. Mitra (2007) conducted a study in urban slums of Kolkata to assess the dietary intake and nutritional status of children. This study indicated that poor dietary intake in slums which resulted in high prevalence of malnutrition among children.

The immunization coverage was reported to be low in the study area. Incomplete immunization and drop-out is a cause of worry. The immunization coverage was found to be more among boys than girls. It made children susceptible to number of vaccine-preventable diseases such as chicken pox, whooping cough, diphtheria, mumps, etc. Other childhood diseases were also observed like cold, cough, fever and diarrhoea. Acute respiratory and diarrhoeal infections were the most commonly occurring diseases among the children in slums. The incidences of illnesses may be due to the unsafe drinking water, low dietary intake of nutrients, poor personal hygiene and sanitation. This suggests that physical characteristics of slums are also responsible for the frequent illnesses.

Poor coverage and quality of ICDS services were reported in the selected slums. AWCs were lacking in terms of resources with inadequate space, lighting and

ventilation, improper seating arrangement and non-availability of separate kitchen and crèche facility. AWWs were under-paid, overburdened and lacked skills. The enrolment of children was low and fewer women received nutrition and health education. The beneficiaries were not satisfied with the quality and quantity of supplementary nutrition. The poor health education service along with absence of referral service indicates the dysfunctional relationship between AWCs and the health centres. The inadequate utilization of pre-school education service is a matter of concern and it has been found to be associated with lack of awareness and parental involvement. The child health services and immunization coverage were unsatisfactory and non-availability of equipments such as weighing machine, height measurement tapes further discouraged the beneficiaries. The community participation and outreach was poor which affected the utilization of ICDS services. Meena, Verma and Kumar (2017) performed a descriptive case study in an urban slum of Delhi to evaluate the implementation of ICDS programme and this study reported the mean coverage of all ICDS services was only 58.3 per cent with maximum coverage of supplementary nutrition and minimum coverage of child and maternal health. The present study revealed inadequate infrastructure facilities, poor coverage of services and dissatisfaction of slum dwellers towards the ICDS.

A single factor cannot be considered to be solely responsible for the nutritional and health status of women and their children in slums, in fact it is determined by web of factors. It is probably affected by interplay between several variables which collectively contribute to their nutritional profile. Therefore, a comprehensive, multifaceted and multipronged approach is required to effectively and successfully address, control and prevent the nutritional and health problems of women as well as of children living in slums.

Testing of Hypothesis

Hypothesis 1: Health care policies and programmes in India are operationalized at macro level.

Government has launched various health care policies and programmes to improve the health care services. These policies and programmes are implemented and operationalized at the macro level. These programmes lack special provisions for the socially backward and marginalized sections of the society. The absence of target

specific interventions hinders the effective implementation of various health schemes. Inadequate access and inequitable distribution of health services deprive the socially marginalized and vulnerable segments from availing these services. Lack of multifaceted and multipronged approach is a major shortcoming of the health programmes. Hence, the hypothesis health care policies and programmes in India are operationalized at macro level is true.

Hypothesis 2: The socio-economic status and housing conditions of families in slums is poor.

The study of slums in Lucknow revealed that most of the slum inhabitants belonged to socially backward castes. The educational status of women was low and the illiteracy rate was extremely high. Women were engaged in low paid and unskilled occupation. Most of the women were working as domestic servant followed by unskilled menial jobs. The monthly income of the families was extremely low and they find it difficult to fulfil their basic necessities. The women and their children in slums were living in overcrowded and congested houses and most of them were either *kaccha* or *semi-pucca*. Majority of the houses were devoid of basic civic amenities with lack of safe drinking water, toilet facilities and garbage disposal. Insanitary living conditions pose a serious threat to the health of the slum dwellers. Mother's educational status, income of the household and housing conditions were found to be determinants of mother's as well as child's health and nutritional status. Thus, the hypothesis socio-economic status and housing conditions of families in slums is poor is completely true.

Hypothesis 3: The nutritional and health status of women and their children in slums is below the normal level.

In the study of Lucknow slums it was found that the nutritional and health status of women and their children was poor and below the normal level. Most of the women had lower BMI level and they were suffering from chronic energy deficiency. The prevalence of anaemia was also quite high with more than half of the women being anaemic. The frequency of diseases such as reproductive health problems, metabolic problems and other health ailments like gastric and abdominal problems, jaundice, body pain, etc. was found to be high. The dietary intake was inappropriate and the food lacked diversity. The consumption of nutritionally rich food was inadequate and this adversely affected the nutritional status of women.

The incidences of stunting, wasting and underweight were significantly high among the children in slums. Children were found to be suffering from more than one form of malnutrition. MUAC based malnutrition was also prevalent among children, however, its frequency was low. Anaemia of varying degree was found to be prevalent among children. These nutritional deficiencies coupled with poverty resulted in frequent episodes of infections and morbidities in children. Children were suffering from various childhood diseases and vaccine preventable diseases. The immunization coverage was low which invariably enhanced the probability of illnesses. The child feeding practices were faulty and children were fed insufficient number of times. The practices of exclusive breastfeeding and colostrum feed were inadequate. The food given to children lacked dietary diversity and mothers had inadequate knowledge about child rearing and bearing practices. Hence, the hypothesis nutritional and health status of women and their children in slums is below the normal level is found to be true.

Hypothesis 4: The maternal factors are associated with the nutritional and health status of children.

The present study conducted in the slums of Lucknow observed that the maternal factors are significantly associated with the health and nutritional status of children. The educational status of mothers was affecting the prevalence of malnutrition among children. The children of the illiterate mothers were found to be more prone to malnutrition than those whose mothers were literate. Child feeding practices were comparatively better in literate mothers as compared to the illiterate ones. The practice of exclusive breastfeeding and colostrum feed was more in literate women. Mother's working status was also correlated with the child's nutritional status. The nutritional and health status was better of those children whose mothers were not working as they were able to take care of their children whereas working women had to spend hours outside which deprive their children from necessary care. The mother's age of marriage and first pregnancy were also affecting the nutritional status of children. Mothers who were married at a young age and consequently conceived early had poor nutritional status and it adverse effects were also visible on the children. Their children were reported to have high prevalence of nutritional disorders than those who were married after completion of 18 years of age. Hence the

hypothesis maternal factors are associated with the nutritional and health status of children is true.

Hypothesis 5: The access and utilization of health care services is lower among women and children living in slums.

The women living in slums of Lucknow were not satisfied with the health care services available in government hospitals and they preferred private hospitals and clinics. They complained about the long waiting hours, quality of health care services, inconvenient consultation timing, distance and rude behaviour of staff. The penetration of less qualified private practitioners at the local level is a matter of concern. For minor ailments they practiced self-medication and procure medicines from local medical stores without any medical prescription. The level of awareness and utilization of various health programmes like *Janani Suraksha Yojana*, *Janani Shishu Suraksha Karyakram* and Urban ASHA scheme was found to be low.

The coverage of ICDS was poor in the slums of Lucknow city. In the study area only two slums out of four had AWCs. The AWCs were lacking the infrastructural and other necessary resources. The number of beneficiaries in the AWCs was extremely low with few children receiving non-formal pre-school education. The quality and quantity of supplement nutrition provided from AWCs was dissatisfactory. Most of the women were not getting any nutrition and health education from AWCs. Hence, the hypothesis access and utilization of health care services is lower among women and children living in slums stands to be true.

The present study is an attempt to assess the health and nutritional status of women and their children living in the urban slums of Lucknow city. With ever increasing population and large scale migration to the cities for better living and employment opportunities, the mushrooming of slums has become a common urban phenomenon. Lucknow being the capital of Uttar Pradesh attracts people from the adjacent districts and states and thus the city experiences a large influx of people. Due to lack of resources and poor socio-economic condition this expanding population is forced to live in substandard housing. The poor living and housing conditions, lack of basic civic amenities and sanitation, unhygienic and faulty food habits coupled with poverty and deprivation makes the slum dwellers particularly, women and children highly vulnerable to malnutrition and subsequently to number of morbidities.

Nutritional deficiencies and frequent episodes of illnesses act as a barrier in leading a healthy normal life.

The present study highlights that women and children living in slums suffer from poor nutritional and health status due to number of factors. Inadequate housing and environmental conditions, lack of basic civic facilities and faulty lifestyle along with deprivation and discrimination are considered to be the probable reasons behind the health and nutritional problems among slum inhabitants. The physical characteristics of slums make its inhabitants, particularly women and children vulnerable to health problems. Nutritional deficiencies result in frequent episodes of illnesses which worsens the situation further. Malnutrition is the most common phenomenon among women and children in slums due to their poor living conditions and faulty and inappropriate dietary habits.