

An Assessment of Maternal Health by Residence in Uttar Pradesh

Priyansha Singh

Associate Professor, Department of Economics, Hindu College, Moradabad

I. Introduction

Inequality is one of the key hindrances to Human Development. Uttar Pradesh can be seen as one of the significant examples of persistent inequality in terms of maternal health and nutritional status. The state is one of the most populous states in the country. It comprises one-sixth of India's population amounting to 19.98 crores equivalent to approximately 3% of the world population. According to the census 2011, 15.53 crore people, which is 76 % of the state population reside in rural areas, and 4.4 crore people which is 24 % of the state population reside in urban areas.

Moreover, out of the total female population of 9.53 crore of the state, 78% which is 7.43 crore of the females reside in rural areas and only 22.1 percent that is 2.1 crores reside in urban areas according to the 2011 population census. Inequality based on the place of residence is very much persistent and dominant in Uttar Pradesh and is clearly reflected in the inequality-adjusted Human Development Index (IHDI) inclusive of nutritional and health indices. The situation needs critical analysis from the perspective of identifying the concentration risk factors associated with maternal health by the place of residence and assessing where and what level interventions should be targeted.

Human development is predominantly based on excellence in the economic, education, and health sectors. Poor health and nutrition of children are primarily a product of maternal ill health. The United Nations standing committee on nutrition in its sixth report has highlighted that the role of maternal nutrition in the intergenerational cycle of growth faltering has not been recognised. It is in the above context that the present paper analyses the inequality in maternal health and nutritional status across urban and rural areas.

The available evidence indicates that residential inequality in almost all dimensions of maternal health and nutrition is very wide in the state and this inequality appears to have persisted over time despite the improvement in the maternal health and nutrition situation in the state.

II. Aims And Objectives

The aim of the present paper is to have a comprehensive understanding of the existing maternal health and nutrition inequalities across rural and urban areas of Uttar Pradesh.

More specifically attempt has been made to analyse the existing health and nutritional inequalities in terms of the mother's age at marriage, teenage pregnancy, antenatal care coverage, institutional deliveries, postnatal care, maternal height, body mass index, the prevalence of anaemia across rural and urban areas of residence in the state and to identify the determining factors for the residential disparity in maternal health and nutrition

III. Data And Methodology

The analysis is based on the data available from the fourth round of the national family health survey carried out in the state during 2015 16. The nfhs 4, 2015 16 provides information on population, health, and nutrition for India and its every state and union territory. The Ministry of Health and Family Welfare Government of India designated the International Institute of population sciences Mumbai as the nodal agency to conduct nfhs 4. In Uttar Pradesh, the survey covered 97,661 women aged 15 to 49 years from 76,233 households out of which 26% of households are located in urban areas from 71 districts of the state.

The paper employs bivariate analysis methods to explore how different indicators related to the health and nutritional status of the mother and the child are related to the background characteristics of the mother. The study variables included antenatal care, place of delivery, postnatal care, immunisation, prevalence of anaemia, maternal height and body mass index.

On the other hand the explanatory variables used in the analysis included women's education, wealth quintiles, occupation, the birth interval for the next child, and access to government schemes. The analysis is carried out separately for rural and urban areas so as to explore how some background characteristics influence the utilization of maternal and child Health Care services in urban and rural areas of residence or have a different impact as far as the health and nutritional status of women is concerned.

IV. Analysis And Findings

Out of 97,661 women aged 15 to 49 years interviewed 71,075 women resided in rural areas and 26,586 resided in urban areas which is in proportion to the population distribution of females of the same age group by residence in the State.

Though the sex ratio of ages 0 to 6 years is better in rural areas of Uttar Pradesh at 907 than in urban areas at 888. The number of median years of schooling completed for females in urban areas is 5.5 years whereas it is only 1.8 median years of schooling in rural areas much below the state average of 4.5 median years of schooling completed. 40.3 percent of females in rural areas of Uttar Pradesh had no schooling at all as compared to 26.5% of females in the urban areas of the state.

Only 68.6 percent of the rural population had access to drinking water in the house premise whereas 84.5 percent of the urban population of the state had an access to drinking water in their house premise which is really detrimental to the health of the female population as they mostly adhered to the responsibility of fetching water to the houses from distant places.

In rural areas of UP, only 23.1 percent of households have improved and unshared facility of toilets in their houses whereas, in the urban areas, 68.3 percent of the households have access to improved and unshared toilets and Sanitation facilities which is the point of great concern in reference to the health and hygiene of the female population of the State.

In Urban areas, 77.6 % of the household use a clean source of cooking fuel whereas in. In rural areas still, only 16.1 % of household use only clean sources of cooking fuel LPG or natural gas, and the majority of the household still depend on the non-clean source of cooking fuel such as dung cakes, wood, charcoal, coal, agricultural crop waste, etc. which is really harmful to the health of the females and children.

In urban areas 8.9 % of children are living with their mothers only, their fathers are dead or have left them, this number is approximately double that is 15.4 % of children in rural areas, which is a great burden on mothers in reference to their socio-economic conditions, it poses a great challenge to them owing to their own and their children's health and nutrition.

In Uttar Pradesh only 25.2% of women aged 15 to 49 years are employed in agricultural or non-agricultural occupations whereas the majority of them 74.8 percent are unemployed.

In rural areas of Uttar Pradesh, the percentage of teenage women 15 to 19 years of age who have had a live birth or were pregnant with the first child and who have begun childbearing is 4.4 % as compared to only 2% in urban areas.

The coverage of antenatal care service in the state also varies by the place of residence, only around 21.7 percent of the women in the rural areas of the state reported to have undergone at least 4 antenatal checkups during their last pregnancy as compared to 240 3.3 % of the men in the urban areas of the state. On the other hand, at least 26.6 percent of the women in rural areas reported that they did not have any antenatal check during their last pregnancy. This proportion was only 12.4% of women in urban areas.

Only 68.7 percent of the women in rural areas who had undergone even one antenatal checkup during their last pregnancy from a skilled service provider as a doctor, auxiliary nurse and midwife, nurse, midwife, or lady health visitor. The proportion was almost 85.5% in urban areas of the state.

The percentage of women whose last birth was protected against new natal tetanus was 86% in rural areas as compared to 88.5 percent in urban areas.

As regards the full antenatal coverage during pregnancy the situation appears to be precarious in rural areas of the state as only around 3.8 % of the women in rural areas received full antenatal care of at least four checkups, two doses or a booster dose of Tetanus toxoid, and at least 100 tablets or more of iron folic acid whereas, in urban areas of the state, the proportion was 13.5%.

According to nfhs 4, 2015-16 more than 67.8 % of the deliveries in the state were institutional deliveries. This proportion was only 66.8 % in rural areas whereas it was 71.7 % in urban areas of the state. The inequality in the utilization of the natal care service may be just from the observation that 32.8 % of the deliveries in rural areas were home deliveries compared to 28% of deliveries in the urban areas of the State.

The reasons for not going for institutional delivery varied widely across Urban and rural areas. The main reasons for not opting for institutional delivery are economic constraints 16%, lack of transport 18%, ignorance of the risks and complications of the delivery 40%, and refusal by the husband and family members 18%. In rural areas, the main reason was economic constraints and opposition from the husband and other members of the family.

Postnatal care is an essential component of maternal and child Health Care. It includes a health checkup of the mother and immunization of the child till 42 days after delivery. Postnatal care is a vulnerable period because most maternal and newborn deaths occur during this period, especially immediately after delivery. Postnatal care can prevent the majority of these deaths (Sharma et al,2014). There is evidence to suggest that proper care during pregnancy and at the time of delivery in health facilities can lead to effective postnatal care. There are also socio-economic inequalities in access to postnatal care. The coverage of essential

postnatal care is inadequate especially in women belonging to economically disadvantaged households (Singh et al, 2012). In Uttar Pradesh, a similar situation prevails. Just around 59.9% of the women residing in rural areas, covered during the survey, reported they had a postnatal check-up after delivery. By comparison, 69.3 % of women in urban areas had a postnatal check-up after the last delivery. On the other hand, only 56.7% of women in rural areas reported that they had a postnatal check-up within 2 days of the last delivery. This proportion was almost 66.7% in urban areas.

In the case of health checkup of the newborn after birth, the situation appears to be very poor irrespective of the place of residence, as 63.2% in urban areas and 72% in rural areas did not receive any health checkup during the first week of life when the probability of death is the highest. Early neonatal mortality is a serious concern, as regards the mortality and the health of children, but this concern does not appear to have received adequate attention in the State irrespective of the place of residence according to the data available through nfhs 4 2015-16.

Immunization against vaccine-preventable diseases is an important component of child health and a low-cost intervention to reduce child mortality. However, only around 50.4 percent of children in rural areas of the state were found to have received all basic vaccinations-BCG, measles, and three doses each of DPT and polio excluding Polio drop given immediately after birth. By comparison, almost 53.6 % children of in urban areas were found to have received all basic vaccinations

Child malnutrition is still a major problem in Uttar Pradesh. Despite the decrease in stunting from 57 % to 46% and underweight children from 42 % to 40% in the 10 years between nfhs 3 and nfhs 4. The wasting increased from 15% to 18%. The level of undernutrition is relatively high for children of higher birth order and those whose mothers are underweight. The percentage of children stunted in rural areas is 71.2 % whereas in urban areas it is 53.3%. Underweight children in rural areas are 53.7 percent whereas in urban areas it is 43.9 %. Irrespective of the place of residence, wasting among children in rural areas is 23.6 % whereas in urban areas it is just 24.6 percent. 62.7 percent of children in rural areas and 65% of children in urban areas are anaemic. Children with higher birth order and whose mothers are anaemic are more prone to be anaemic.

Women's nutritional status, a vital component of female health in all the life cycle stages, is a point of concern in Uttar Pradesh. In urban areas, 17.6 percent of women have a body mass index of less than 18.5 whereas in rural areas 28.9% of women have a body mass index of less than 18.5. Women in the age group of 15-29 years of age are more underweight as compared to women in 29-49 years of age. Irrespective of the place of residence more than 50% of the women are anaemic in both urban and rural areas of the State. It is 52.7 percent in urban areas and 52.3 % in rural areas.

DETERMINANTS OF MATERNAL AND CHILD HEALTH

The fundamental causes of health disparities are socio-economic inequality traditionally defined by education, income, occupation, and access to the use of and quality of healthcare services (Adler et al 2002). The present analysis shows that mothers and children residing in rural areas of the state are comparatively at a disadvantage in terms of access to health services in Uttar Pradesh. Similar patterns can be seen in terms of wealth quintiles, education, occupation, etc. The analysis shows that the gap in the living conditions by place of residence in urban and rural areas is quite distinct in the state. This gap has implications for health and nutritional outcomes, especially, health and nutritional outcomes related to mothers and children in the rural areas of the state is clearly reflected in the form of teenage pregnancy, number of live births, coverage of antenatal care services, institutional deliveries, postnatal care, immunisation of children, BMI index and anaemia.

Parity, birth order, and birth interval are crucial factors that have a major influence on the health of women. Repeated births with short birth intervals are detrimental to the health of women and also their ability to take care of their children. The data available from NFHS 4 2015-16 suggest that the proportion of women having four and higher-order births is more in rural areas as compared to urban areas.

The government has an important role in reducing the residential disparities in health and nutrition especially for women and children by reaching the unreached. Various programs and interventions have been launched for the purpose including Janani Suraksha Yojana, Integrated Child Development Scheme, Janani Shishu Suraksha Karyakram, etc. The Janani Suraksha Yojana provides financial assistance for delivering at an institution and not at home. There is a remarkable improvement in institutional deliveries in the state but residential gaps exist. The coverage of Health insurance is very low and still, there is a difference in the population covered under the Health insurance scheme in rural and urban areas of the state. Residential disparities also exist in terms of mother and child protection cards under the Integrated child development scheme and in terms of the distribution of supplementary food, growth monitoring, child immunization, health check-up, preschool education, etc.

The coverage of different components of the Integrated Child Development Scheme is relatively better in urban areas of the state as compared to rural areas.

V. Conclusion

It can be concluded from the present analysis that in rural areas of the state women and children are more vulnerable in terms of Health and nutritional well-being. In order to address the prevailing situation a targeted approach is required. There is a need to undertake community needs assessment exercises separately for rural and urban areas to identify their specific health and nutrition care needs. It is important that any such exercise should treat mother and child as one unit for the delivery of health and nutritional care services and for other interventions. It is well known that any effort to improve children's health must begin with improving the health and nutritional status of the mother.

References

- [1]. Adler NE, Newman K (2002) Socioeconomic disparities in health: pathways and policies *Health Affairs* 21.
- [2]. Ali B, Dhillon P, Mohanty SK (2019) Inequalities in the utilization of maternal health care in the pre- and post-National Health Mission periods in India. *Journal of Biosocial Science* 1-15.
- [3]. Chaurasia AR (2010) Spatial and social class variations in child deprivation in Madhya Pradesh, India. *Indian Journal of Human Development* 4(2): 369-390.
- [4]. Chaurasia AR (2013) Social class and residence disparities in human development in Madhya Pradesh, India. *Indian Journal of Human Development* 7(2): 275-299. International Institute for Population Sciences, ICF (2017)
- [5]. National Family Health Survey (NFHS-4), India, 2015-16: Uttar Pradesh. Mumbai, International Institute for Population Sciences.
- [6]. Jat T (2014) Maternal health and health care in Madhya Pradesh state of India: an exploration using a human rights lens. Department of Public Health and Clinical Medicine, Epidemiology and Global Health.
- [7]. Joe W, Mishra US, Navaneetham K (2008) Health inequality in India: evidence from NFHS 3. *Economic and Political Weekly* 43(31): 41-47.
- [8]. Kumar AK (2007). Why are levels of child malnutrition not improving? *Economic and Political weekly* 42(15):1337-1345
- [9]. Pollock W, King J (2009) Inequalities in maternal health. *British Medical Journal* 338(7696): 670-671.
- [10]. Radhakrishna R, Ravi C (2004). Malnutrition in India: trends and determinants. *Economic and Political Weekly* 39(7): 671-676.
- [11]. Thomsen S, Hoa D, Mälqvist M, Sanneving L, Saxena D, Tana S, . . . Byass P (2011) Promoting equity to achieve maternal and child health. *Reproductive Health Matters* 19(38): 176-182.
- [12]. Saxena D, Vangani R, Mavalankar D, Thomsen S (2013) Inequity in maternal health care service utilization in Gujarat: analyses of district-level health survey data. *Global Health Action*.
- [13]. Suryanarayana M, Agarwal A, Prabhu SK (2016) Inequality-adjusted Human Development Index: states in India. *Indian Journal of Human Development* 10(2):157-175.
- [14]. United Nations (no date) Progress in Nutrition. 6th Report on World Nutrition Situation.
- [15]. Geneva, United Nations System, United Nations Standing Committee on nutrition