

Socio-Economic Determinants of Maternal Health Care Payments among Women in India

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Abstract

Background: Government of India initiatives through implementation of National Rural Health Mission (NRHM) and Janani Suraksha Yojna (JSY) programs from early 2005 has shown a considerable impact on maternal health care utilization in India. Despite the fact that these programs provide the services free of cost, utilization of maternal health care services is still considered an economic burden on some households. Keeping this into our mind, the research study analyzes the different level of payments to procure maternal health care for different socio-economic characteristics in India.

Materials and Methods: This paper has utilized the data collected by the National Sample Survey Organization (NSSO) during January -June, 2014. It is a cross sectional dataset that provides information on Social Consumption and Health scenario of the population. To carry out the research, descriptive statistics, and regression analysis has been used.

Findings and Conclusion: The research reveals that women residing at urban place of residence, higher educated, affiliated to other social group and belonging to richest wealth index pay high amount for the maternal healthcare services in India. Indian government need to extend the coverage rendering the services at affordable costs without any further differentiation on the basis of socio-economic characteristics of Indian women.

Keywords: Ante-natal care, Healthcare payments, Maternal health care, Post natal care.

Introduction

Majority of the women experience complications during their pregnancy, delivery, and post delivery that causes severe complexities and requires prompt obstetric care. Government of India initiatives through implementation of National Rural Health Mission (NRHM) and Janani Suraksha Yojana (JSY) programs from early 2005 has shown a considerable impact

on maternal health care utilization in India¹. These programs has well defined goal to provide accessible, affordable and quality healthcare to the rural population, especially the vulnerable groups. Community Health volunteers like Accredited Social Health Activists (ASHAs) and Auxiliary Nurse Midwives (ANMs) are village-level female health workers in India who are in the direct contact with the population for facilitating and providing healthcare services such as ANC care, diagnostic facilities, promoting institutional deliveries and other outpatient and inpatient care in the country².

India is one of the rapidly developing countries where health is still a challenge at the national level, although maternal and child health indicators have shown a little progress. People living with poverty,

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accessibility, and unawareness are the major reasons for poor uptake of maternal health care services in India. For example, in one the India's poorest states, Bihar, where over 80 percent of births are home births, approximately 50 percent of women reported financial hardship as the main reason for not utilizing the maternal health care³. It is despite the fact that maternal health care services are provided free-of-charge in public health facilities in India. This sluggish progress in reducing maternal and child mortality in India could be attributed to the various factors as socioeconomic and regional inequality in the availability, accessibility, and affordability of healthcare services⁴.

There are several research studies conducted that prove different factors which might influence the utilization of maternal healthcare services utilization in India. A research study from West Bengal showed that the number of episodes of illness, type of medical care, chronic illness of a household member, Medical health care costs, and hospitalization costs were important predictors of household healthcare payment⁵. So far, only a little evidence on individual and household expenditure is available and that too is very limited across India. Only few supportive evidence could be found in particularly Western and Southern India where the utilization of maternal healthcare services⁶. A research study also analyzed maternal health care expenditure using national level data of Indian households⁷. However, this study did not consider the different costs associated with maternal health care expenditures, which could be substantial especially for the poorest-poor seeking care in the public sector.

Moreover healthcare professionals and policymakers often overlook individual healthcare payments in maternal health care services. We hypothesized that although maternal health care services in India are offered free at the point of delivery, many households' bear excessive out of pocket expenditure. Our aim is to investigate deeper into the payments incurred in the utilization of maternal health care services (i.e. antenatal care and postnatal care) for different socio-economic characteristics in India. This would help us understand the economic burden of maternal health care services (i.e. antenatal care and postnatal care) on Indian households and quantify the levels of payments incurred with respect to different socio-economic characteristics.

Materials and Methods

This paper has used the data collected by the National Sample Survey Organization (NSSO) during January – June, 2014. This round provides data on Social Consumption and health. The dataset provides enough information related to the prevalence, nature of treatment, level of care and financial expenditure for different morbidity in India.

Descriptive statistics is used to provide simple summaries about the sample and also about the observations that have been made. It is used to show the prevalence of maternal health care with respect to different socio-economic characteristics. To find out the odds of maternal health care payments for different socio-economic characteristics regression analysis has been used in the study. In this study complete maternal health care comprises of women who has taken antenatal care and post-natal care.

Results and Discussion

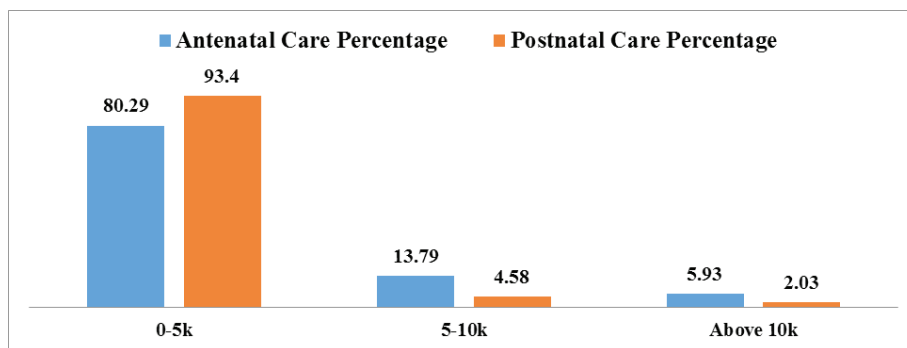


Figure 1: Percentage distribution of payments for different maternal health care services utilization.

Source: NSSO 71ST Round

The figure 1 depicts the payments incurred on women for maternal health care services utilization in India. The payments for maternal health care (i.e. antenatal care and post natal care) is categorized into different amount category that ranges from Rupees 0 to rupees 5k, from 5k to 10k, and above 10k. Eighty percent of women spent amount that ranges from rupees 0 to rupees 5k in the utilization of antenatal care services in India. Only 14 percent of women spent amount that ranges from Rupees 5 thousand to rupees 10 thousand while 6 percent women spent above 10 thousand to utilize the antenatal

care services. Majority of the women have spent the amount that ranges from Rupees 0 to rupees 5 thousand to utilize the maternal health care services. Ninety three percent women have spent the amount that ranges from rupees 0 to rupees 5 thousand while 5 percent women spent the amount that ranges from rupees 5 thousand to 10 thousand and only 2 percent women spent the amount above 10 thousand to utilize the post natal care services in India.

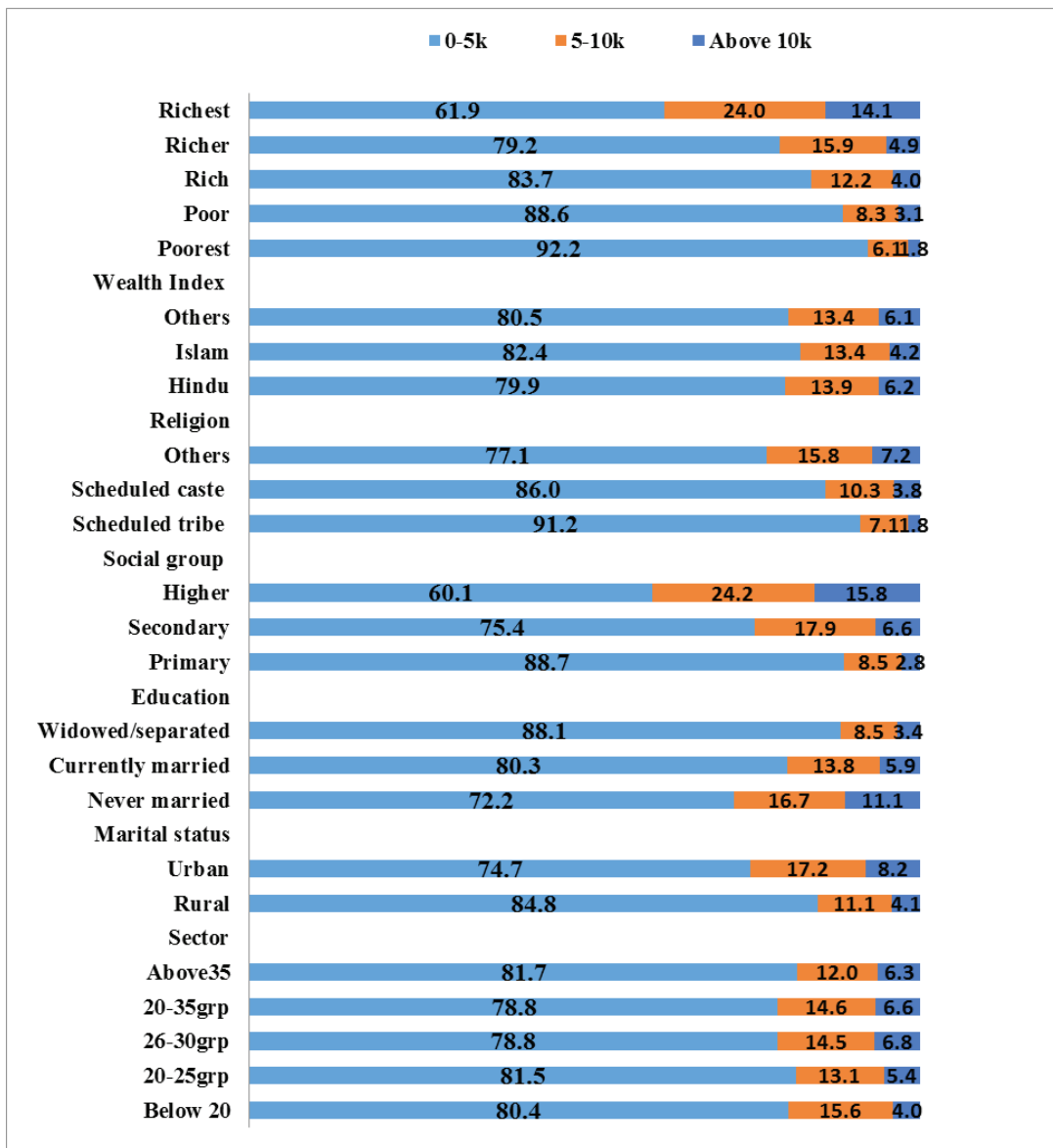


Figure 2: Percentage distribution of payment for antenatal care services for different socio-economic characteristics.

Source: NSSO 71ST Round

The figure 2 reveals the payment distribution of antenatal care services for different socio-economic characteristics. Fourteen percent women in the age group 20 – 35 years spent the amount that ranges from rupees 5 thousand to rupees 10 thousand for the utilization of antenatal care services in India. With regards to the place of residence, urban women (8 percent) spent higher amount that exceeds above rupees 10 thousand for the utilization of antenatal care services in India. Similarly, widowed/separated women (88 percent) spent the amount that ranges from rupees 0 to rupees 5 thousand than currently married and never married women. Although, never married women (11 percent) spend high amount of above rupees 10 thousand than other counterparts. With regards to education, 16 percent higher educated women spent above rupees 10 thousand to receive antenatal care services than secondary educated (6 percent) and primary educated (3 percent). Scheduled tribe women (91 percent) spent high amount that ranges from rupees 0 to rupees 5 thousand to receive antenatal care services. Women affiliated with other social group category (7 percent) spent the high amount of above rupees 10 thousand to utilize the antenatal care services than scheduled castes and scheduled tribes. Four percent women affiliated with Islam religion spend the amount of above rupees 10 thousand to utilize the antenatal care services which is lower than the women affiliated with Hindu (6 percent) and other religion (6 percent). With respect to the wealth index, 14 percent women belonging to the richest wealth index spend high amount of rupees above 10 thousand to utilize the antenatal care services followed by the richer (5 percent), rich (4 percent), poor (3 percent) and poorest (2 percent). Ninety two percent women belonging to poorest wealth index spend the amount that ranges from rupees 0 to rupees 5 thousand to receive the ante-natal care services in India.

The figure 3 represents the payment distribution of postnatal care services for different socio-economic characteristics. With the increase of age, women

payment to utilize post natal care services decreases in the range of rupees 0 to rupees 5 thousand. Older age women spend higher amount than younger aged women to receive postnatal care services in India. Four percent women above 35 years spend higher amount of rupees above 10 thousand to receive postnatal care services in India. With regards to the place of residence, urban women (3 percent) spent higher amount that exceeds above 10 thousand for the utilization of postnatal care services in India. Similarly, currently married women show distinguishing amount variation in receiving the postnatal care services in India than widowed/separated women. Six percent of never married women show high payment of above rupees 10 thousand to receive postnatal care services in India. With regards to education, 5 percent higher educated women spent above rupees 10 thousand to receive postnatal care services than secondary educated (2 percent) and primary educated (1 percent). Payment for postnatal care services increases with the increase of education standard among women in India. Scheduled tribe women (96 percent) spend high amount that ranges from rupees 0 to rupees 5 thousand to receive postnatal care services. Women affiliated with other social group category (2 percent) spend the high amount of above rupees 10 thousand to utilize the postnatal care services than scheduled castes and scheduled tribes. Three percent women affiliated with Islam religion spend the amount of above rupees 10 thousand to utilize the postnatal care services which is higher than the women affiliated with Hindu (2 percent) and other religion (2 percent). With respect to the wealth index, 4 percent women belonging to the richest wealth index spend high amount of rupees above 10 thousand to utilize the postnatal care services followed by the richer (2 percent), rich (1.6 percent), poor (1.2 percent) and poorest (1 percent). Ninety six percent women belonging to poorest wealth index spend the amount that ranges from rupees 0 to rupees 5 thousand to receive the postnatal care services in India.

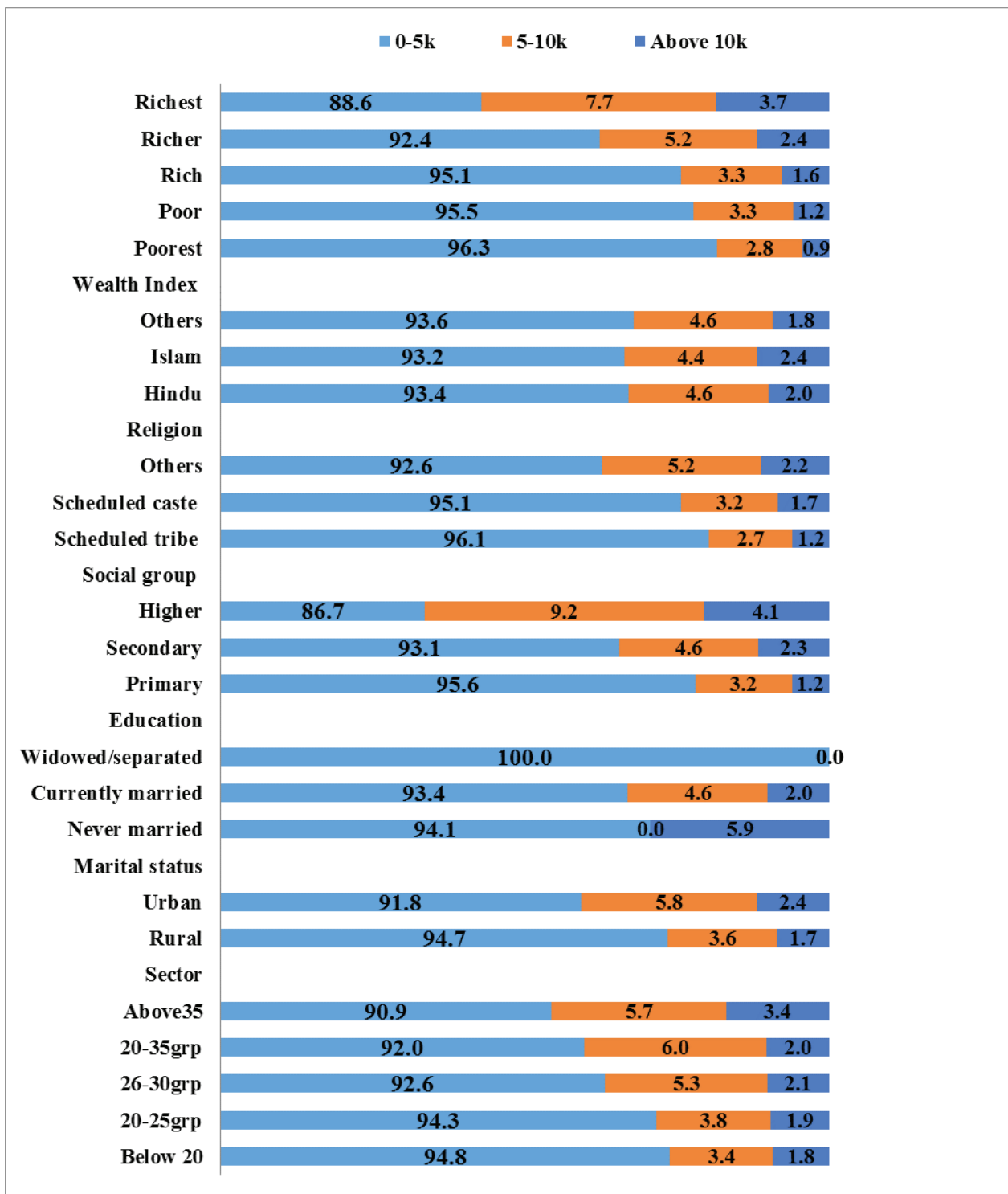


Figure 3: Percentage distribution of payment for postnatal care services for different socio-economic characteristics.

Source: NSSO 71ST Round

Table1: Odds ratio of maternal health care payments for different socio-economic characteristics.

	Antenatal care payments		Postnatal care payments	
	O.R	Confidence Interval	O.R	Confidence Interval
Age group				
Below 20®				
20-25grp	0.81	** (0.74-0.89)	0.97	(0.88-1.07)
26-30grp	0.80	*** (0.74-0.88)	1.23	** (0.93-1.14)
31-35grp	0.81	** (0.73-0.89)	1.06	(0.95-1.18)
Above35	0.72	* (0.64-0.82)	1.06	(0.92-1.21)
Sector				
Rural ®				
Urban	1.26	*** (1.01-1.10)	0.99	(0.95-1.03)
Marital status				
Not married ®				
currently married	0.66	* (0.38-1.12)	0.87	* (0.51-1.48)
widowed/separated	0.56	(0.31-1.03)	0.94	(0.51-1.73)
Education				
Primary®				
Secondary	1.35	** (1.29-1.41)	1.29	*** (1.23-1.35)
Higher	1.80	** (1.69-1.90)	1.60	*** (1.50-1.70)
Social group				
Scheduled tribe ®				
Scheduled caste	1.32	(1.23-1.42)	1.20	*** (1.11-1.29)
others	1.56	** (1.46-1.66)	1.33	*** (1.24-1.42)
Religion				
Hindu®				
Islam	1.02	(0.96-1.07)	1.06	(1.00-1.12)
Others	1.04	(0.97-1.12)	1.07	(0.99-1.15)
Wealth Index				
Poorest®				
Poor	1.22	** (1.15-1.30)	1.10	** (1.03-1.18)
Middle	1.43	** (1.35-1.52)	1.18	** (1.11-1.25)
Richer	1.62	** (1.52-1.72)	1.31	** (1.23-1.40)
Richest	2.20	*** (2.06-2.35)	1.50	*** (1.40-1.60)
_cons	987.5	(887.05-1245.85)	747.3	(546.07-1021.87)

*sig. at 10% level; **sig. at 5% level; ***sig. at 1% level; ® Reference category

(Source: NSSO 71st Round).

The table 1 represents the odds ratio of maternal health care payments for different socio-economic characteristics. Women in the age group 26-30 years are 80 percent more likely to have antenatal payment than women below 20 years of age. Women in the urban sector are 1.2 times more likely to pay for antenatal care than women residing in rural areas. Currently married women are 66 percent more likely to go for antenatal care than not married and widowed/separated women. Secondary and higher educated women are 1.3 and 1.8 times more likely to have antenatal care treatment than women belonging to primary educated women. Similarly, women affiliated to other social group category are 1.5 times more likely to go for antenatal care expenditure than women belonging to scheduled tribe. Women belonging to richest wealth index are 2.2 times more likely to have antenatal care payment followed by richer (1.6 times), middle (1.4 times), poor (1.2 times) than the poorest wealth index.

It also reveals that women in the 26-30 age group is 1.2 times more likely to go for postnatal care than women belonging to the age group of below 20 years. Currently married women are 87 percent more likely to receive postnatal care services than not married women. Secondary and higher educated women are 1.3 and 1.6 times more likely to pay for postnatal care services than primary educated women. Women affiliated with scheduled castes and other social groups are 1.2 and 1.3 times more likely to pay for postnatal care services than women belonging to scheduled tribe. With regards to wealth index, richest wealth index is 1.5 times more likely to pay for post natal care services followed by richer (1.3 times), middle (1.2 times) and poor (1.1 times) than the poorest wealth index.

Conclusion

Despite the government efforts to provide free delivery of maternal health care services in India, the reception of maternal health care services is still a burden on Indian households. The research reveals that women residing at urban places affiliated to other social group, above 20 age group, higher educated and belong

to richest wealth index pay higher for the utilization of maternal health care services in India. Majority of the women pay for the utilization of antenatal care services but do not utilize the postnatal care. Indian government need to extend the coverage rendering the services at affordable costs without any further differentiation on the basis of socio-economic characteristics.

Conflict of Interest – None

Source of Funding – None

Ethical Clearance – Secondary dataset, Available in public domain.

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