

# Socioeconomic status and health inequalities in urban area: A case study of Delhi

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## Abstract

**Objective:** This study throws light on the important question, whether there are profound intergroup differences in health status and utilization of healthcare in urban areas. This study mainly focuses on economic burden on different socioeconomic groups due to healthcare expenditure in Delhi.

**Method/Statistical Analysis:** For the study purpose we have used secondary data conducted by NSSO during 71<sup>st</sup> round in 2014. The number of households, in Delhi, taken for the study is 1158, and the population is 5424. In order to attain the objectives of study, we use both exploratory and descriptive study methods. The exploratory study will be used to investigate the problems and the variables more clearly, which will help us produce ideas and thoughts about the objectives covered in the study. On the other hand, the descriptive method will determine the impact of socioeconomic status on the health status of people. To find the variance in health care expenditure done by different socioeconomic group we have used the ANNOVA model.

**Findings:** From the study, it is found that the people with low socioeconomic status experience catastrophic out of pocket expenditure on healthcare and a large proportion of the population face impoverishment because of the economic burden of out of pocket healthcare expenditure they incurred. The maximum expenditure is done on outpatient care. Correlation between reporting prevalence of diseases and standard of living exists because the poorest persons have reported the prevalence of chronic diseases more than richest persons in rest of the reference cities. Besides the socioeconomic status, the adequate quality of healthcare services is a need of all people whether the service is utilized more or less.

**Application/Improvement:** Findings of the study is can be considered as a witness that the improvement of health status is possible rapidly when we embrace comprehensive insights of socioeconomic inequalities and terminate these inequalities.

**Keywords:** Socioeconomic status, Urbanization, Out of pocket expenditure, Economic burden, Healthcare.

## 1. Introduction

The unabated process of urbanization is acme in the 21<sup>st</sup> century, especially in developing countries. Urbanization has brought a lot of accolade regarding reification of thought of improving health status. But the facts mentioned in the reports on changing environment published by WHO spell out how degradation of natural environment threatening the health of people. There is an avowed belief that urbanization reduces inequalities among the different socioeconomic groups. This study aims at assessing and describing inequalities in health status which begets differences in healthcare expenditures made by different socioeconomic groups in urban area. We have selected the major metropolitan city where health facilities provided by both public and private sources are available and are easily accessible. For the purpose of the study we have selected Delhi. It is believed that urbanization begets transformation of feudal society into modern society and it reduces the socioeconomic inequalities. But in India modern society is still contemporaneous with feudal society which is run through social distance. This social distance is driven by the people who possess high socioeconomic status to maintain their hierarchy in every sector. Because of this social distance people with low socioeconomic status remain deprived of social welfare such as opportunities for employment, education, basic amenities, healthcare, etc. History describes that social exclusion and discrimination of certain group on account of class, caste, and religion have been an unambiguous picture of the Indian society.

In [1-2] have mentioned in their collective study on social conditions and health inequalities in urban that "Social exclusion of individual and groups is a major threat to development, whether to the community social cohesion and economic prosperity or to the individual self-realization through lack of recognition and acceptance, powerless, economic vulnerability, ill health, diminished life experience, and limited life prospect. In contrast, social inclusion is seen to be vital to the material, psychological, and political aspect of empowerment that underpins social well-being and equitable health. A compendium of literature developed in the recent past has brought out the striking differences in the socioeconomic status of the people based on caste, class, and religion in urban. India's fast urbanization begets colossal opportunities for improving the quality of life of the urban population, but it also brings in formidable challenges to deal with increasing inequalities in health status resulting from socioeconomic disparities in urban [3]. Globalization has been responsible for a sudden rise in class inequality around the world, as well as the impoverishment of millions in poor countries [4]. The state-sponsored Sachar Commission Report (2006) claimed that Muslim and Dalit communities remained deprived of benefits of the market economy, including educational institutes and hospitals, due to the persisted discrimination based on socio-economic status. The social vulnerability in health caused by the unequal health care infrastructure that can be inclusionary or exclusionary in urban social structure affects the daily life of underprivileged, and socially excluded groups. Therefore, the government needs to protect the discriminated group, particularly the Dalits, from the discrimination in economic and social opportunities at present [5-6].

The ministry of health and welfare also accepts that increasing out of expenditure is a growing problem in India and it is also accepted that present healthcare infrastructure and public spending on healthcare are not sufficient to overcome the problem. NHA's estimation of Healthcare expenditure highlighted high proportion of private expenditure on healthcare. Private expenditure includes expenditures by firms and households, and it has contributed average 75% of total healthcare expenditure in India. Out of this out of pocket expenditure on healthcare utilization, incurred by households, has been around 95 to 98%. The OOP payment is a barrier to access healthcare service for poor and causes significant impoverishment among those who with low income use healthcare services. People sometimes have to borrow to make payment for the use of healthcare service and sometimes they sell their assets too. A study by Berman and colleagues (2010) has found that OOP expenditure on healthcare is the main factor of impoverishment and percentage of Indians fell below the poverty line increased from approximately 5.5% in 2001 to 6.2% in 2004. Indian ministry of health in 2012 reported that the number of Indian falling below the poverty line due to OOP healthcare payment is 7% of total population. OOP payment has been the main factor of catastrophic health expenditure. 18% households incurred Catastrophic OOP expenditure on healthcare in 2012-13, as compared to 15% in 2004-05 [7]. Analysis of national sample survey has highlighted that the maximum OOP is done on purchasing drugs and least on inpatient care by poor households. Expenditure on drugs consists alone more than 70 % and 30% - 35% on inpatient and outpatient care of total healthcare expenditure made by households [8]. This study throws light on the important question, whether there are profound intergroup differences in health status and utilization of healthcare in urban areas. This study also examines the contribution of socially and economically disadvantaged groups in total out of pocket expenditure compared to their counterpart. Hence, to assess the impact of socio-economic factors on health status in urban the study goes through the following questions: a) to assess the inequalities in health profile of different socioeconomic groups. b) To assess the economic burden of out of pocket expenditure on inpatient care and outpatient care.

## 2. Literature survey

WTO says that "Health is a key component of an individual` welfare and standard of living. But going through the analysis and findings of literature reviewed we found that social well-being of citizens in terms morbidity prevalence, use of health care, and out-of-pocket expenditure made on health care, depends on the socio-economic status of citizens in every country. A compendium of the many studies regarding inequality shows that objectives constituted in policies introduced by WTO, to address the inequalities in health status and health care use, have not been achieved yet due to the persisted inequalities in socio-economic status. To bring health within reach of every citizen of the world WHO decided to launch "Health for all" program in 1981. The main social target of Health for all programs by WHO was the attainment of a level of health by all citizens of the world by 2000 that will permit them to lead a socially and economically productive life (WHO 1985).

In [9] has examined inequalities in health for the gender and ethnic groups using data from the Health Survey for England, 1993-96. Her study makes the point that health inequalities among white adults are absent and contrasts with substantial inequality in health among adult from different ethnic groups. She finds that there are profound socioeconomic differences to gender and ethnic group; high morbidity exists in minority ethnic group (other than white men and women) with socioeconomic disadvantaged and they have poorer health compared to whites of working age. She has noticed that socio-economic determinants have less impact on poor health reported by Indian men from majority ethnic group because there are more similarities than differences in socioeconomic position. However, for other minority ethnic groups, socioeconomic conditions have a large influence on the health. In [10] have given a report reviewing the studies published between 2001 and 2005 examining the association between socioeconomic status and health and health care access over the period of transition across the CEE-CIS (Central and Eastern Europe and the Commonwealth of Independent States) region. The study shows the concrete evidence that socioeconomic inequalities in health are present in the region that the poor are disadvantaged in mortality, non-communicable disease, health behaviors and access to health care, and it has been raising fast over the course of the 1990s.

The study highlights the rising levels of out-of-pocket financing for healthcare and its negative impact on the equitable distribution of health care access. The working paper on social exclusion, marginalized social groups and inclusive policies undertaken by [11] at Indian Institute of Dalit Studies reviews health conditions of the SCs, the STs, and other sections of the population using NFHS1 and NFHS2. This paper goes over nutritional status among women and Children and infers the same conclusion about the disparity that the degree of under-nutrition was higher among the SCs and STs as compared to the Non SC/STs. In the case of immunization coverage SCs catch up with the Non SC/STs but STs has lower immunization coverage as they have a locational disadvantage, and in case maternal healthcare the coverage is lower for the scheduled groups, ST women suffer more than SC women [12]. Through their combined study on inequities in access to health service in 2010 have found that the progress in advancing the health status of Indians has been slow and uneven. The study by them mainly focuses on socioeconomic parameters (caste, class, and region) of health inequities and stresses out that there is concrete evidence that inequities in health continue to persist and have even widened within the communities in both rural and urban areas. Cities having plenty of social and health services is marked by inequities in health care use among the different social groups because, traditionally, socially excluded less advantaged groups and minority religious groups have been denied by the health system resulting in access barriers to health care use by these group. For instance, women and children from SC/ST groups and minorities (Muslim) have been reported to have less access to health services (NFHS 3).

NFHS 3 also mentioned that only 36% Muslim children are fully vaccinated, a very small proportion comparing to other children belonging to any other religion. In urban areas, most of poor are affected by long last diseases such as, TB, HIV/AIDS, Malaria, etc. that prevent poor earn enough income to get out of the illness-poverty trap. Illness minimizes the income earning ability of the poor and further increases dependency [13] has contemplated at poverty and ill-health and concluded that poor people are trapped in a vicious circle i.e. poverty begets ill-health (lack of nutrition), and ill-health retains the poverty. It is clear that illness causes the loss of wage, as well as illness, increases extra expenditure. He has stated that the illness amalgamated with the loss of wage impoverishes the people and push them into the vicious cycle of poverty and ill-health. It is found more in the case of out of pocket healthcare expenditure [14,15], through their paper on Health care and equity in India, highlighted some important points regarding inequity in healthcare. First, inequalities in immunization coverage exist by caste, in 2005-06, 39.7% scheduled castes and only 31% scheduled tribes were covered comparing with other castes (53.6%), and the inequalities between these castes have burgeoned over time; second, the dissemination of awareness has ameliorated the coverage to 58% in urban compared to rural areas (39%), and this urban-rural difference has decreased over time; third, although the poor people prefer to go to public healthcare for the treatment, but the rich people occupy the share of public healthcare more than poor people, and also rich people get higher level facilities with longer inpatient stays in hospital. In [16] her study mentioned that Muslim women believe that oral vaccine, given as polio immunization drops and other vaccination, is hidden government population control policy and it makes their children sterile. Thus they don't allow vaccinators to enter their houses and give any medicine to children. NCAER` study (1995-96) on spending patterns on health care states that "During the year 1995-96, of the total estimated hospitalization days of public services consumed, the richest 20% of the population accounted for 38.6%, while the bottom 20% (poor) accounted for only 6.6%.

Besides, the bias in access to public services appears to be more noticeable for the utilization of hospital beds in the public sector rather than for consultation visits. Thus the top 20% of the population accounted for 24.2% of all treated episodes at public facilities, and the poorest 20% an estimated 15.2%." Thus the rich benefit more from government health subsidies, by higher using of hospital beds which are significantly costlier than that of out-patient consultations (Prime Minister's Council on Trade and Industry, 1997). A paper by [17] on equity in the utilization of healthcare service in India examines the need difference and influence of socioeconomic status on the utilization of curative care. She has focused on inpatient care and outpatient care. She observes that the rich people are easily able to get admitted in public hospital across rural and urban, it implies that inpatient care in public hospital is pro-rich. Her study places emphasis on the relationship between per capita spending on healthcare by the government and economic disparities in hospital admission and concludes that relationship has an inverse association and is strong in urban areas than rural areas. The study states that increase in per capita government spending on healthcare reduces the horizontal inequity in inpatient care utilization in urban. In [18] have analyzed data from the 60<sup>th</sup> round of NSSO and have found that the hospitalization is utilized more by rich, and the poor have a higher unmet need in all three states.

The effort to improve the health of the population is useless until we understand the role of the social determinant in access to health care and another social service. The dominant discussion on the provision of public health in India often ignored the issues regarding discrimination while examining the differences in health status among social groups. The study on health status and its socioeconomic determinants is rooted in the comprehensive understanding that the problems of poor health, less access to healthcare by deprived population, lack of basic amenities, etc. are not simply solved by the provision of resources or technical assistance [19]. In 2004-06 around 12% of urban households spent more than 10% of their total consumption expenditure on healthcare. In 2004-05, around 39 million (30.6 and 8.4 million in rural and urban areas, respectively) of Indians fall into poverty as a result of out-of-pocket expenditure each year. Spending 10% of total expenditure on health care might be considered catastrophic, [20-22]. WHO has decided 40% as a benchmark of catastrophic expenditure for poor when "capacity to pay" is used as a measurement. It seems that financial risk to the household may be little if it is low and is based on capacity to pay. According to [23] "the goal of National Health Policy (1983, health for all by 2000 and 2002), Bhore Committee 1946, Community Development Program 1951-55, Alma Ata Declaration 1978, national rural health mission 2005, universal health coverage report 2012, have been failed. In [24], through their study on social exclusion and RSBY in Maharashtra, claim that the overall, RSBY uptake has not been very impressive, and enrollment of BPL families varies considerably across states and district notice that the tribally dominated blocks fare very poorly in terms of RSBY enrollment, suggesting that RSBY has not been socially inclusive [25].

### 3. Data and Methodology

To gauge the inequality in health profile the study focus on people who were suffering from acute and chronic diseases. By analyzing out-of-pocket health care expenditure on inpatient care as well as outpatient care gives the idea about variation in economic burden of the expenditure on households belong to a different caste, religion, and class groups. For the study purpose we have used secondary data conducted by NSSO during 71<sup>st</sup> round in 2014. The number of households, in Delhi, taken for the study is 1158, and the population is 5424. The data is available for everyone at a pre-announced price. We have bought the data and received permission from NSSO to use for our study. NSSO gathers data on OOP health expenditure on inpatient using a 350-day recall period and on outpatient care using 15 day recall period. Similarly, NSSO collects health profile data by self-reporting. The survey data also include demographic and social-economic information on characteristics of households such as Health status, Residential place, Caste, Religion, and Class, etc. To measure the financial burden of ill-health, we have used several indicators of information on out of pocket expenditure (OOP) on healthcare incurred by households. The indicators used for the current study are: 1) total monthly spending by per person (MPCE); 2) monthly OOP healthcare expenditure per person; 3) OOP expenditure on healthcare as proportion of total monthly expenditure by per person; 4) the percentage of economic burden of catastrophic OOP expenditure incurred by per person, who has spent more than 10% of total spending. The catastrophic OOP expenditure can be measured by dividing health care spending by total spending. We have also used per ailing person as an indicator of the prevalence of ailment i.e. chronic and acute among the people. Finally, utilization of public healthcare and private healthcare.

In order to attain the objectives of study, we use both exploratory and descriptive study methods. The exploratory study will be used to investigate the problems and the variables more clearly, which will help us produce ideas and thoughts about the objectives covered in the study. The methods for conducting exploratory study are survey of concerning literature, experience survey, and analysis of insights. On the other hand, the descriptive method will determine the impact of socioeconomic status on the health status of people. To find the variance in health care expenditure done by different socioeconomic group we have used the ANNOVA model.

#### 4. Analysis

The present study is mandated with the premise to check the impact of socioeconomic status on health profile and health care expenditure burden with more focus on marginalized sections in terms of caste, class and religious groups. The incidence of disease has been classified into Acute and chronic. The Muslims were found to report higher chronic disease as against their counterpart while as Hindus were found to report more acute problems. The others group is club of all categories for all the religions except Hindus and Muslims. Approximately, 5.46% of overall all sample size reported to suffer from acute diseases. 199 people that are 3.64% of total sample size are reported to suffering from chronic diseases (Table 1). In terms of severity of disease among different economic classes, the rich section of the society shows the highest both acute and chronic diseases incidence. This higher reporting among rich may be attributed to several factors like education, awareness etc. NSSO also says that self-reporting increases with increase in standard of living. The rich section is followed by poor in terms of both acute and chronic incidence as against middle class who occupy the bottom slab of the sample. However, the reporting of rich is higher than the over-all average as against the middle class who display the below average performance. The consistent under-reporting behavior of the middle class may be attributed to their averse and uncomfortable attitude towards revealing their true state and type of diseases (Table 2).

*Table 1. Showing population besides severity of disease among religion groups*

Religion	Total Population	Acute	Chronic
Hindu	4489	236 (5.52)	135 (3.00)
Muslim	648	32 (4.93)	48 (7.40)
Others	287	30 (10.45)	16 (5.57)
Overall	5424	298 (5.46)	199 (3.64)

Note: Figures in the parenthesis are Percentage of people

Source: NSSO, 2014

*Table 2. Showing the incidence of disease among classes*

MPCE Class	Total Population	Acute	Chronic
Poor	820	44 (5.36)	32 (3.90)
Middle Income	2938	143 (4.86)	89 (3.02)
Rich	1666	111 (6.66)	78 (4.68)
Overall	5424	298 (5.45)	199 (3.64)

Note: Figures in the parenthesis are Percentage of people

Source: NSSO, 2014

*Table 3. Highlighting the incidence of diseases among different caste groups*

Caste Group	Total persons	Acute	Chronic
ST	1065	54 (5.07)	33 (3.09)
SC	123	8 (6.50)	9 (7.31)
Others	4236	236 (5.57)	157 (3.70)
Overall	5424	298 (5.37)	199 (3.64)

Note: Figures in the parenthesis are Percentage of people

Source: NSSO, 2014

The next in line is the incidence of diseases among different social groups of the sample. Here we have three groups divided between SC, ST and Others besides an over-all figure. The SC population is found to be the most vulnerable group among all the groups. On the other hand the social Tribes show comparatively better health profile with a lower incidence than the over-all. The other groups also perform badly as compared to social tribal (Table 3).

### 1. Expenditure

The incidence of diseases among different groups of the study gives us an overall picture in terms of aggravation of masses. To better capture the economic and affordability consequences the study has been extended to analyze the out of pocket expenditure of different classes for health care. In terms of the financial burden the monthly out of pocket mean expenditure of Hindu household in contrast to Muslim household is less. This may be because of the fact that the Muslim population was found to suffer more due to chronic diseases as compared to their counterpart Hindu group. On the other hand, the out of pocket healthcare expenditure for other religious household has been lowest compared to Hindu and Muslim Households (Table 4).

Table 4. Showing mean house hold expenditure

Religion	Inpatient Exp.	Outpatient Exp.	Total Exp.
	Mean Exp.	Mean Exp.	Mean Exp.
Hindu	775.88	1477.33	2253.21
Muslims	827.77	1837.75	2665.52
Others	621.70	1235.86	1857.56

Source: NSSO, 2014

Moreover the mean inpatient expenditure in all the categories is lower than the mean out-patient. This implies that the patients either did not prefer to stay in hospital for treatment during their sickness or they might not be getting the facilities for the same. To capture the class wise expenditure of health care in Delhi the bifurcated analysis in Poor, Rich and Middle class families has been sketched (Table 5). It is clearly visible that, in Delhi, the total Out of Pocket expenditures on healthcare made by all households (poor, middle and rich) households is almost equal i.e. the gap between mean expenditure is much lower and does not show significant difference. However there are substantial variations in terms of disaggregated mean Inpatient and Out-patient expenditures with poor spending the highest inpatient expenditure followed by Middle and Rich. On the other hand the Rich spend highest out-patient expenditure than the other two groups and may well be in consonance with their financial strength.

Table 5. Class specific financial spending on health care

MPCE Class	Inpatient exp.	Outpatient Exp.	Total Exp.
	Mean	Mean	Mean
Poor	930.76	1312.30	2243.05
Middle	824.93	1451.92	2276.85
Rich	541.08	1790.46	2331.54

Source: NSSO, 2014

In order to have more insights into the variation and versatility among different socially disadvantaged groups the study has been extended to include the spending profile of SC's and ST's. In Table 6, the SC household incurs Rs. 2489 out of pocket healthcare expenditure which is highest compared to its counterparts (ST & Others). From the column outpatient expenditure, we notice that SC household spends Rs.1793 on outpatient care highest in the caste group followed by others (Rs 1457). The first column in the table, shows that ST household is worse off on account of out of pocket expenditure on inpatient care in caste group, whereas SC household is better off compared to its counterparts. In order to validate the above analysis of house hold spending and highlight econometrically the extent of variation we have performed analysis of variance test (ANOVA). The results of the model are texted in the Table 7. The results of the study are texted in the table above. From the table, we can see that the results are insignificant for all the three categories. That can be mean to imply that there is no significant variation in the expenditure pattern among class, caste and religion.

The possible explanation for such a result can be that since the health expenditure is a necessity so there cannot be much variability among and between different sections. Moreover, the accessibility and availability of government medical facilities in the concerned cities is quite high. This can yet be another explanation for the insignificant variation in expenditure patterns among the different classes and groups.

Table 6. Showing caste wise mean healthcare expenditure

Caste	Inpatient Exp.	Outpatient Exp.	Total Exp.
	Mean	Mean	Mean
ST	840.22	939.56	1779.77
SC	696.39	1793.27	2489.66
Others	791.38	1457.14	2248.52

Source: NSSO, 2014

Table 7. Showing the analysis of variation

Between	ANOVA Test for Total Healthcare Expenditure				
	Source of Variation	Degree of Freedom	Mean source of Variation	f-statistic	Prob.
Class	37883582	2	18941790	0.57	0.566
Religion	873568.6	2	436784.3	0.01	0.987
Caste	36117140	2	18058570	0.54	0.581

Source: Author Compilation

## 2. MPCE classes and Economic burden of healthcare expenditure

In order to further measure the impact and strength of financial strain of health care on the total spending the relative proportion of medical spending has been estimated. In terms of financial burden as a proportion of total monthly house hold expenditure, the Muslim household incurs the 21.7% out of pocket expenditure which implies highest economic burden (11.7%) of catastrophic healthcare expenditure for Muslim households. In contrast to it the Hindu Household incurs the economic burden of out of pocket expenditure to the tune of 12.30%. On the other hand, other household does incur the economic burden of out of pocket expenditure on healthcare but does not cross the catastrophic mark i.e. 10% (Table 8). The total spending scenario is in line with both inpatient and out-patient scenarios where Muslim households are seen to spend highest proportion of their total expenditure on health care.

Table 8. Religion wise proportion of total expenditure spend on healthcare

Religion	Inpatient Exp.(%)	Outpatient Exp.(%)	Total Exp.(%)
Hindu	4.20	8.10	12.30
Muslim	6.70	15.00	21.70
Others	3.10	6.20	9.30

Source: NSSO, 2014

The next division pertains to the classes based on Rich, Poor and Middle. From the table IX, it can be noticed that the economic burden of catastrophic out of pocket healthcare expenditure on poor class household is very high spending 38.9% of total monthly spending on healthcare. It means poor household incurs the economic burden of healthcare expenditure even 28.9% more than the catastrophic out of pocket expenditure on healthcare. Out of 38.9%, the household spends 22.7% and 16.2% of its total monthly spending on inpatient care and outpatient care respectively.

Table 9. Showing class wise spending on health care

	Inpatient Exp. (%)	Outpatient Exp.(%)	Total Exp. (%)
Poor	16.20	22.70	38.90
Middle	5.80	10.20	16.00
Rich	1.60	5.30	6.90

Source: NSSO, 2014

The Middle class household also incurs the economic burden of total out of pocket healthcare expenditure of 6%. Whereas, Rich class household does not incur the economic burden of out of pocket healthcare expenditure. The next in line pertains the division along the lines of social hierarchy into socially disadvantageous groups of SC's and ST's. The Table 9 highlights the fact that, among caste groups, the others household is better off as it incurred less economic burden of catastrophic out of pocket healthcare expenditures in contrast to SC Household and ST households. The SC household incurs 19.5% catastrophic out of pocket healthcare expenditures of its total monthly spending, which means the SC household incurs economic burden of 9.5%. On the other hand, economic burden of catastrophic out of pocket healthcare expenditure on ST households ranges between economic burdens of SC household and others household.

Table 10. Showing social groups wise health care expenditure

Caste group	Inpatient Exp. (%)	Outpatient Exp. (%)	Total Exp. (%)
ST	6.90	7.80	14.70
SC	5.30	14.20	19.50
Others	4.20	7.80	12.00

Source: NSSO, 2014

### 3. Healthcare utilization

The section represents the utilization of healthcare services and shows the differences in utilization of private healthcare services and public healthcare services. Public healthcare services include HSC, ANM, ASHA, AWW, PHC, Dispensary, CHC, mobile medical unit, and Public hospital. On the other hand, Private healthcare services include private doctor clinic and private hospital. From the Table 10-11; it can be seen that all the socioeconomic groups have utilized public healthcare services more than private healthcare services in Delhi. However there are interclass and inter group variation in the relative use of public and private health care. The poor class Household visits the public healthcare providers more than the rich class Household and Middle class household. This is well in line with the expected economic behavior of individuals having more income prefer to have better health care facilities. Among the caste groups, 46% of SCs utilize public healthcare services followed by Non SCs/STs (44.4%) and STs (38.2%). Muslim populace uses healthcare services provided both publicly and by private sector slightly more than Hindu counterpart. This is also in line with the already cited scenario of chronic diseases prevalent among Muslim households.

Table 11. Showing utilization of public and private health care

S. No	Social group	Public (%)	Private (%)
A	MPCE Class		
	Poor	53.4	23.5
	Middle	51.2	26.4
	Rich	44.8	18.6
B	Caste		
	SC	46.1	21.6
	ST	38.2	28.4
	Others	44.4	22.4
C	Religion		
	Hindu	43.7	20.9
	Muslim	44.3	33.5
	Others	47.4	36

Source: NSSO, 2014

### 5. Conclusion

The figures in our analysis for health profiles and economic burden of out of pocket expenditures suggest that socio-economic status plays a significant role in determining the health status of the people in urban. Low spending on healthcare by government results in poor functioning of the public healthcare system. Correlation between reporting prevalence of diseases and standard of living exists because the poorest persons have reported the prevalence of chronic diseases more than richest persons in rest of the reference cities.



Besides the socioeconomic status, the adequate quality of healthcare services is a need of all people whether the service is utilized more or less. Though the healthcare services in government institutions are less costly but the long waiting and unsatisfied behavior, especially towards the people with low socioeconomic status, compel the people to go for alternative private healthcare institutions even though the cost of treatment is much higher than public institutions. Hence it is important to improve the quality of healthcare services offered by the government institutions.

Overall, the people with low socioeconomic status experience catastrophic out of pocket expenditure on healthcare and a large proportion of the population face impoverishment because of the economic burden of out of pocket healthcare expenditure they incurred. The maximum expenditure is done on outpatient care. According to National Health Account, within the out of pocket expenditures on outpatient care, people spend more than half on buying the common drugs from private chemist or institutions. The government should put intensive effort to produce the common drugs and make them available at the cheapest prices in the market. It requires the replacement of production of the fancy and costly goods by the mass production of common drugs demanded by the common person. Also, the government needs to implement an effective mechanism which can protect the population that is prone to incur the economic burden of medical expenditures. In this context, the government has already introduced many health schemes like RSBY to support the population financially but these all schemes have been failed to reach the targeted population. The health schemes policy should more emphasize the services provided to these presently excluded groups, because health status also depends upon socio-economic status, such as, caste, religion, and standard of living which has been a most reasonable factor for health status. The enrolment number is very low even less than 10 per cent all over India. Therefore, social exclusion of some groups based on the identity begets formidable challenges and these challenges are a barrier to the utilization of healthcare for those disadvantaged groups. The ceaseless efforts to improve the health status of people, without improving the socioeconomic status, are useless. The improvement of health status is possible rapidly when we embrace comprehensive insights of socioeconomic inequalities and terminate these inequalities.

## 6. Further research

Our study shows the correlation between socioeconomic status and health status. The research has not made account of the separate contribution of social and economic factors, and the study does not tell which social factors affect most the health status of different social groups. Further research is needed to find the separate contribution of social and economic factors. On the other hand, there is little doubt we have observed in the study i.e. the relationship between standards of living and self-reporting of ailment prevalence is not found in social groups (caste and religion). Further investigation is needed to find the correlation between standard of living and self-reporting of ailment prevalence by the social groups.

## 7. Appendix

Table A (1) presents religious profile of the NSSO sample household of Delhi. 1158 household are covered in the survey. Out of that 957 are Hindu, 142 Muslims and 59 belong to other religions. Household size shows the average members in the household of different religions. It is calculated through product of Number of household and household size. Hindu is majoritarian religion in Delhi due to that 4489 out of 5424 selected sample are Hindu. Table A (2) depicts classification of sample households according to MPCE classes. Samples are divided into 3 broad classes: poor, middle class and rich. Interestingly MPCE positively varies with household size.

*Table A (1). Religion character of sample household*

Religion	Number of Households	Household size	Total Person
Hindu	957	4.69	4489
Muslim	142	4.56	648
Others	59	4.86	287
Overall	1158	4.68	5424

*Source: NSSO, 2014*

It shows causal relationship between household size and MPCE. It is clearly evident that increases in household size will lead to increase in household expenditure. NSSO covered 257 poor, 599 middle class and 302 rich households based on their MPCE. The Standard of Living or economic position based on monthly per capita expenditure classifies classes of the households. National Sample Survey Organization (NSSO) uses the consumption expenditure as a measure of standard of living. Friedman (1957) also said that consumption expenditure is preferred over income as it is a reflection of the long-term economic status of the household, particularly in low-income countries. So for the study purpose, we have chosen the poorest class and richest class. The economic class distribution has been taken from the report of NSSO i.e. "social consumption on health in Delhi." In the report, the economic class has been distributed in seven categories, and we have chosen two richest and two poorest categories to represent poorest and richest class respectively, in the study.

Table A (2). Class character of sample household

MPCE Class	Number of Household	Household size	Total Persons
Poor	257	3.19	820
Middle	599	4.90	2938
Rich	302	5.51	1666
Overall	1158	4.68	5424

Source: NSSO, 2014

Table A (3) illustrates caste profiles of the Delhi's sample household. Schedule castes and Schedule tribes are most vulnerable social groups due to historical and social institutions. Due to that for this analysis SC and ST and other three social groups are taken for comparative analysis of impacts of caste or social identity of peoples on their health care spending. NSSO has covered 221 SC household, 27 ST household and 910 others household. Average household size of SC population is slightly higher than other categories.

Table A (3). Caste character of sample households

Castes	Number of Household	Household size	Total Persons
SC	221	4.819005	1065
ST	27	4.555556	123
Others	910	4.6554	4236
Overall	1158	4.683938	5424

Source: NSSO, 2014

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