OCCASIONAL PAPER

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Outpatient care and expenses: Can they be ignored in health insurance programmes

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February 2020

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Outpatient care and expenses: Can they be ignored in health insurance programmes?

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Abstract

Neither RSBY nor the recently announced *Ayushman Bharat* National Health Protection Scheme offers any coverage for outpatient (OP) care. The OP expenses can have large welfare reducing effects for households with elderly and chronically ill members. A number of arguments can be offered to demonstrate that exclusion of OP care from insurance coverage may jeopardize the main purpose of financially protecting households from catastrophic medical expenses. For building up its main argument the paper also addresses two main empirical questions: (1) what is the extent of OP care need of the population in India and how expressed need varies across population depending upon different individual, household and contextual characteristics? (2) What is the extent of OP care expenditure (collected with limited recall period) and how the expenditure varies across individual, household and contextual characteristics? Though the paper primarily uses National Sample Survey (NSS) 71st round (2014) unit record data, it uses secondary estimates from other health rounds of NSS (viz. 42nd: 1986-87, 52nd: 1995-96, 60th: 2004; 71st: 2014 and recently published 75th: 2017-18).

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The expressed need, utilization, choice of institution and system of medicine for OP care are analysed through multivariate logistic regression models using 71st round NSS data. Finally, household-level expenses on OP care areanalysed by using a two-part model. The paper finds that the presence of elderly and/orchronically ill persons in the households has significant implications for OP expenses. It is also observed that having an insurance coverage does not reduce one's likelihood of incurring positive OP expenses, ruling out the possibility of substitution between OP care and inpatient care of short duration. We argue that an insurance that does not cover OP expenses may fail to protect the households from financial catastrophe, especially for households with elderly and/or chronically ill.

Keywords: outpatient care, health insurance, RSBY, Ayushman Bharat, National Sample Survey

Introduction

In the past decade, India introduced national health insurance schemes to cover inpatient care for the poor to help avoid catastrophic expenses related to hospitalization. Neither Rashtriya Swasthya Bima Yojana (RSBY) introduced in 2008 to cover those below the poverty line, nor the recently announced Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) to cover 100 million poor and vulnerable families, offers any coverage for outpatient (OP) care.[3] No specific reason was provided for excluding OP care from the ambit of insurance coverage. The implicit assumption might be that households, even the poorest ones, are somehow able to take care of their OP care needs without having any serious impoverishing effect because of relatively smaller out-of-pocket (OOP) expenses compared to inpatient care (hospitalisation) expenses (Kashyap, Singh and Sharma 2018; Gupta, ChowdhuryPrinja and Trivedi 2016). There is no doubt that the magnitude of inpatient care expenses is much higher and has a stronger potential for impoverishing a household. However, if OP expenses occur for households with higher frequency, the cumulative amount for a whole year may not be as low as to be ignored. This may be true more for households that have members who need regular outpatient visits or OP-related health care consumption than for others. In short, good quality and affordable outpatient care, which is an essential part of any health care system, has hardly been discussed systematically in the recent discourse on universal health coverage and health insurance for the poor in India. In this paper, we provide evidence using existing literature as well as our own data analysis to emphasize that OP is a crucial component of the Indian health care system. Since OP can help deliver health care to the poor efficiently, ignoring it may lead to greater financial burden, both for the poor as well as for the state.

3. Visit http://www.rsby.gov.in/ and https://www.abnhpm.gov.in/ to know more details about the schemes/programmes.

Review of existing Literature

Using existing studies, we discuss the nature and magnitude of OP utilization and expenses as well as implications of not assisting the poor in covering their OP procedures. First, studies have found that like inpatient care expenses, OP care expenses can also be catastrophic for households. Kumar, *et al* (2015) using the WHO SAGE data found that annually 8 per cent of the population in India slip below the poverty line due to high out-of-pocket (OOP) health expenditures. In addition to lower wealth status and inpatient care expenditure being significant determinants, OP care expenditure also increases the odds of falling below the poverty line. A study of low-income households in Odisha found that even among households with only OP or maternity related care, around 25% households experienced financial hardship (Binnendijk *et al* 2012). Gupta *et al* (2016) found that the economically vulnerable spent more on OP as a proportion of their per capita consumption expenditure and the main reason for high OP expenses was people's preference for private providers. Bhojani *et al* (2012) in their study on chronic illness of the urban poor in Bangalore found that overall 69.6 per cent of households made out-of-pocket payments for outpatient care spending a median of 3.2 per cent of their total income. Overall 16 per cent of households suffered financial catastrophe by spending more than 10 per cent of household income on outpatient care. Thus, households are pushed into poverty after paying for outpatient care. A study based on a vulnerable section of the population (rickshaw pullers in Delhi) finds that the average cost of OP care is as high as Rs. 505 for outpatient care and to finance such expenditures, 27.5 per cent of individuals spent from their household savings and 43 per cent borrowed funds (Kumar, Tiwari, Kumar et al 2015). The study by Dagar *et al* (2015) found that rural Indian households incur substantial cost for OP visits and most of it is for preventive health care such as immunization. Using NSS consumption survey data for the years 1999-2000, 2004-05 and 2011-12, Karan *et al* (2014) found that the burden on marginalized populations on account of OP care expenditures has increased over the years 1999-2012.

Second, the need for OP care is higher among households with certain characteristics. For example, the need for OP care is high among households with children, elderly and chronically ill and therefore such households incur higher annual OP expenses, sometimes above their affordability level. Poor households come up with their own rationing mechanism to prioritize budget allocation for health care. Borah (2006) found that price elasticity of demand for outpatient care varied with income, with low-income groups being more price sensitive than high-income groups. The same study also found that outpatient care for children was more price elastic than that for adults which reflects the socioeconomic structure of a typical household in rural India where a working adult's health is deemed more important than that of a child to preserve the household's economic and financial health. Moreover, gender based discrimination is reported across the spectrum of pediatric health care including outpatient care. Biases against young girls have been documented for immunization, seeking medical care for childhood ailments as well as percentage of health care expenditure allocated to them (Khera *et al* 2014).

Third, increased prevalence of non-communicable chronic diseases (NCD) has led to increased use of OP clinics. Chronic illness requires regular doctor visits, diagnostic tests and medications and may not require frequent hospitalisation if properly monitored and managed. For example, diabetes is a growing chronic disease in India and it requires regular care and follow up (Tripathy and Prasad 2018). Bennendijk *et al* (2012) in their study of Bihar and Odisha found that NCDs accounted for around 20-30 per cent of all diseases reported within the one-month recall period. The most prevalent NCDs representing the highest share in outpatient costs were musculoskeletal, digestive and cardiovascular diseases. Outpatient costs including consultations, medicines, laboratory tests and imaging related to NCDs represented a bigger share of income than communicable diseases. A study on catastrophic effects of chronic illnesses, based on World Health Survey data found that angina-affected households had significantly higher OOP health spending per

person in the four weeks preceding the survey and nearly half of the difference was accounted for by drug expenditures (Alam and Mahal 2014). One of the reasons for the rapidly increasing burden of NCDs in India is an ageing population with rising prevalence of multi-morbidities (Lee, *et al* 2015). Using WHO-SAGE data for 2007-10, the study found that in India multi-morbidity is associated with a higher likelihood of hospitalization and higher out-of-pocket expenditure for outpatient visits. Another study (Pati et *al* 2014) using WHO-SAGE data found that 28.5 per cent of the sample population had at least one NCD and 8.9 per cent had NCD multi-morbidity. The mean outpatient visit is much higher for those with NCD (6.2 per episode) compared to those without NCD (2.2 per episode). Joshi *et al* (2015) found that 36 per cent of OP cases had chronic illnesses with 13 per cent cases with single chronic illness and 23 per cent cases with more than one chronic illness. The trend of multi-morbidity is on the rise and there is a positive relationship between average out-of-pocket expenditure with increasing number of chronic disease diagnosis. Thakur *et al* (2011) found that NCDs have become a major public health problem in India accounting for 62 per cent of total burden of forgone DALYs and 53 per cent total deaths. During 1995-2004, the proportion of OP consultation for NCDs increased from 22 per cent to 35 per cent. By using NSSO 2004 data, Mahal *et al* (2013) found that cancer-affected households experienced higher levels of outpatient visits, hospital admissions and increased out-of-pocket expenditures relative to non-cancer households. Cancer affected households also had significantly higher rates of borrowing and asset sales for financing outpatient care. Agarwal *et al* (2014) found that for outpatient visits, medicines constitute 70.7 per cent of the cost, followed by provider fees. Using NSS 61st round data (2004-05) Shahrawat and Rao (2012) found that medicines constitute 82 per cent of outpatient expenditures.

Fourth, an insurance or health protection system which only covers hospitalisation is capable of overproducing hospitalisation care beyond its requirement, thereby introducing inefficiency in the system. When only hospitalisation is covered by insurance

plans, many ailments which are otherwise treatable by outpatient care alone or outpatient care-home care mix are converted into hospitalized care in order to satisfy the requirements of insurance. Sinha *et al* (2014) by analyzing the health claims of a micro insurance scheme Vimo SEWA show that a significant proportion of hospitalisation among insured adult women are for common illnesses such as fever, diarrhea and malaria. The same study found that while fever was the leading cause for hospitalisation among insured women, no uninsured women were hospitalized with fever.

Fifth, it is hard to believe that OP expenses are low and have less severe impact on households because we still lack reliable estimates of annual OP care expenses at the household level. The studies that have examined the impact of OP expenses have carried out the analysis with serious data limitations due to the short recall period used for OP care-related surveys. Whereas information on hospitalisation expenses are typically collected with a one year recall period, the recall period for collecting OP care expenses is always lower – 15 days to 30 days. The short recall period seriously limits the scope of getting an annual estimate for OP expenses. For example, a household reporting no OP expenditure during the 15 day recall period does not mean that it will have no OP expenditure for the whole year. On the other hand, a household reporting 'x' amount of expenditure for the recall period does not mean that it will incur '*x'* amount every fortnight. Use of inflation factor (365/15) to get an annual estimate may not bias the total OP expenditure or average OP expenditure for a population, but it may overestimate any catastrophic expenditure. The effect of the methods of data collection on the estimates of out-of-pocket health expenses and catastrophic health expenses is also observed by Raban *et al* (2013) who suggest that survey methods used to assess the catastrophic health expenditure need to be standardized, validated and accurately tracked.

Sixth, there is no evidence that hospitalisation coverage takes care of some of the OP care needs and expenses of the people.

Karan *et al* (2017) did not find any statistically significant effect of RSBY on the level of outpatient out-of-pocket expenditure and probability of incurring outpatient expenditure. In contrast, the likelihood of incurring any out-of-pocket spending (both inpatient and outpatient) rose due to RSBY and was statistically significant. RSBY also raised household non-medical spending by 5 per cent.

Finally, possible implications of high OOP expenses for OP care, especially for the poor, could be avoidance or delay in seeking care or seeking health care from less expensive unqualified providers. Delays or low quality care may make an illness episode more severe and force the person to seek higher levels of care or result in hospitalization, if the ailments got complicated, creating higher OOP expenses for households and higher financial burden for the government. Early and timely care can be less costly. A micro study based on health seeking behavior of male tannery workers in Kanpur city of Uttar Pradesh (Kashyap *et al* 2018) found that even though a large section of workers utilize government facilities, pharmacy/drug stores are secondary providers of outpatient care and also a large number of people seek outpatient treatment from unqualified medical practitioners. It must be noted that less expensive care does not necessarily indicate low quality care especially if OP care is utilized in government facilities. However, low cost care provided at pharmacies and by unqualified practitioners may be more dangerous than helpful. Almost one-third of the workers thus were seen to seek treatment from private health facility in spite of their poor economic conditions. Cost is also one of the reasons behind people's dependence on non-allopathic care for non-chronic ailments. Rudra *et al* (2017) found that overall 6.9 per cent of all patients seeking outpatient care have used Ayurvedic/Yoga Unani/Siddha/Homeopathy (AYUSH) without any significant differential between rural and urban India and government facilities played a key role in improving people's access to AYUSH care in the rural areas.

In spite of its importance, there are very few studies which

exclusively assess OP care needs and expenses for the Indian poor. This paper thus contributes to the existing literature by examining the following research questions: (1) What is the extent of OP care needs of the population in India and how do these needs vary across populations depending upon different individual, household and contextual characteristics? (2) What is the extent of OP care expenditure (albeit collected with limited recall period) and how do these expenditures vary across individual, household and contextual characteristics?

Data and Methods

Our paper primarily uses National Sample Survey (NSS) 71st round unit record data. In addition, in some places for the purposes of comparison secondary data published in the form of NSS reports, Key Indicators and Sarvekshana (NSSO's official journal) based on last five NSS health rounds (viz. 42nd, 52nd, 60th,71stand 75throunds) are also used (Government of India 1992, 1998, 2006, 2016, 2019). The 42nd, 52nd, 60th, 71stand 75throunds were conducted during 'July 1986-June 1987', 'July 1995-June 1996', 'January-June 2004', 'January-June 2014' and 'July 2017-June 2018 respectively. The OP care needs of the population are assessed first by estimating the incidence of any ailment during the reference period as well as incidence of chronic ailments; and then by modeling the incidence with select individual, household and contextual characteristics. The ailment incidence and determinants are compared and contrasted with determinants of hospitalisation as hospitalisation provides a reasonably close picture of effective access to health care. We examine OP care utilisation by types of providers and system of medicines since utilisation pattern tells us not only about population's access to OP care but also cost of OP care. Finally, OP care expenditures are analysed using a two-part model, to explore the determinants of OP expenses at the individual level.

Results

Need for OP Care

Assessing the need for health care expressed by the individuals

is the first step for knowing demand OP care. All expressed need does not get translated into demand if not supported by favourable access conditions and OP care may not be enough for all kinds of health care needs. Estimates from the successive rounds of NSS data show that individuals' need for OP care (indicated by percentage of persons reporting ailment with 15 days recall period) increased over the years. The percentage of rural persons reporting ailment increased from 3.3 per cent in 1995-96 to 8.8 per cent in 2004, remained around the same level (8.9 per cent) in 2014 and decreased to 6.8 per cent in 2017-18. During the same period, percentage of urban individuals reporting ailments increased from 5.4 per cent to 9.9 per cent, further to 11.8 per centand then declined to 9.1 per cent (Government of India 1998, 2006, 2016, 2019). Table 1 presents morbidity rate of any illness and chronic illness by individual, household and other contextual characteristics based on 71st round of NSS data. Morbidity rate is defined as the percentage of individuals who reported suffering from illness (any illness or chronic illness) at the time of the survey. The same table also presents the percentage of individuals who had at least one hospitalisation (not related to childbirth) in the last one year. Information on rate of hospitalization is also important because higher hospitalization may also lead to higher need for OP visits for post-hospitalisation follow-up treatment. As expected, females have higher morbidity rate than males for any illness, irrespective of illness being acute or chronic. Among all age groups, children (0-12 years) and elderly (60 years and older) are in greater need of health care, especially the elderly who have high care needs for chronic diseases. The gender difference favouring females is also shown for hospitalisation rate (percentage of individuals who reported at least one hospitalisation in the last one year). The causal direction is not entirely clear on whether hospitalization leads to higher care need for chronic illness or vice versa. When we consider any illness, there is no significant difference in reporting across individuals with different types of insurance coverage, but when we look at chronic illnesses, people with some sort of insurance coverage have higher incidence of chronic illness than

those who are uninsured. The percentage of individuals reporting any illness and chronic illness increases with expenditure quintile class. This is usually observed in all contexts that reporting of illness improves with economic status. What is striking in the finding is reporting of chronic illness by the top expenditure quintile is well above the bottom four quintiles. Reporting of chronic illness shows a strong class gradient. The rural-urban difference persists in reporting of any illness but the difference is strikingly high for chronic illness with much higher percentage of individuals reporting chronic illness in the urban area compared to the rural area. As far as regional differences are concerned, north eastern India shows least reporting of any illness and chronic illness and south India shows the most followed by eastern India.

The results of the logistic regressions presented in Table 2 validates most of the pattern we observed in Table 1. For reporting any illness, females, children, elderly, individuals with hospitalisation show higher odds compared to their respective reference categories. Insurance coverage, social class and place of residence (rural/urban) do not make any significant difference in reporting any illness. For chronic illness too, females, mid-age group, elderly, individuals with at least one case of hospitalisation show higher odds compared to their respective reference categories. Individuals belonging to socially backward groups (ST/SC/OBC), living in rural areas and living in any parts of India other than South have lower odds of reporting chronic illness compared to their respective reference categories. Economic status matters positively in both reporting of any illness or reporting of chronic illness.

In summary, using the patterns of illness reporting, females, children, elderly, people who were hospitalised in the last year, urban, living in southern part of the country have a greater need of OP care. People with insurance coverage, in higher expenditure quintiles, living in urban areas, southern and eastern part of the country show greater need for OP care. However, unexpectedly lower reporting of any illness and chronic illness

by some population sub-groups such as scheduled tribe and people living in the north-east raises the question whether illness, especially chronic illness is underreported by these groups due to low awareness or lower access to health care.

Choice of Institutions and system of medicines

All reported episodes of illness (with 15 days recall period) either result in treatment with medical advice or treatment without medical advice. A portion of illness episodes result in hospitalisation. Estimates from the last four health rounds of NSS data show that percentage of spells of ailment treated (on medical advice) during 15 days preceding the surveys hovered around 82-83 per cent in the rural area and 89-91 percent in the urban area.[4] If we exclude those episodes which led to hospitalisation, we find that close to 85 per cent of the episodes get health care on medical advice and the remaining do not (Table 3). However, it is important to note that this is the status of receiving health care observed on the day of survey and we do not have information on health care for illness episodes which continued beyond the day of survey. As far as OP care for any kind of illness is concerned, there is no evidence that female or elderly or those without insurance are worse-off. However, mid-age, elderly, richer, socially advanced, urban class have higher percentage of episodes treated with health care than their counterparts. Three traits of an individual that show strong and systematic association with the prospect of getting OP care is economic status, caste and place of residence. Individuals from upper caste, higher economic status and living in urban areas are more likely to get OP care for their chronic illness.

In India, private providers account for nearly three-fourth of OP care. Estimates from different rounds of NSS data show that percentage of treated ailments receiving non-hospitalised

4. The spells of ailment treated during 15 days preceding the surveys in rural India in percentage were 82, 83, 82 and 82.5 in 1986-87, 1995-96, 2004 and 2014 respectively. The corresponding figures for urban India are 89, 91, 89 and 89.3 per cent (ref).

treatment from government sources increased from 21 per cent in 1986-87 to 28.3 per cent in 2014 in rural India. During the same period, the corresponding figure decreased from 24 per cent to 21.2 per cent in urban India. The most recent NSS estimates show that the percentage of ailments treated in government facility is 30.1 (32.5 in rural India and 26.2 in urban India)[5]. Private care is highly heterogeneous in India ranging from unqualified quacks operating clinics in rural areas or slums to very qualified doctor practicing in super-specialty hospitals. When we consider all types of episodes together, males, mid-age and elderly groups show slightly higher dependence on private care. Dependence on private OP care is higher for individuals belonging to richer classes and upper castes and in urban areas. Compared to other regions, dependence on private OP care is very low in north-eastern India. Class, economic status and place of residence matter more for private OP visits in case of chronic illnesses. Compared to all other regions, dependence on private care for chronic health needs is the lowest in the north-east of India.

The multivariate analysis presented in Table 4 supports many of the observations of Table 3. Gender does not matter but economic status does in utilization, choice of institution and system of medicine for OP care. Children (0-12 years age group), individual with chronic illness, living in richer houses have higher likelihood of utilizing OP care in the face of an illness in comparison to their respective reference groups. But the likelihood of OP care is lower for ST, rural population and people living in eastern, north eastern and western India compared to the respective reference groups. It is worth noticing that it is not the insurance coverage but better economic status that increases the likelihood of OP care. As far as choice of private OP care is concerned, mid-age, elderly, individuals with government

5. The percentages of treated ailments receiving non-hospitalised treatment from government sources in rural India were 21, 19, 22, 28.3 and 32.5 per cent in 1986-87, 1995-96, 2004, 2014 and 2017-18 respectively. The corresponding figures for urban India were 24, 20, 19, 21.2 and 26.2 per cent.

supported insurance coverage, ST, SC, OBC and people living in north-eastern India have lower odds favouring private OP care compared to their respective reference categories. Allopathy is the dominant system of medicine for OP visits. The most recent NSS estimates (75th round: 2017-18) show that 95.4 per cent of ailments with 15 days recall period were treated in Allopathic system of medicine and this is a clear increase when we compare the similar figures with earlier estimates (71st round: 2014)[6]. Most of the individual, household and contextual variables do not show any relation with odds favouring allopathic OP care but it is worth noticing that elderly and ST have higher odds while economic status has lower odds favouring allopathic OP care. These findings question the popular belief that elderly and ST have higher preference for non-allopathic system of medicines.

Costs of OP Care

A comparison between 60th, 71st and 75th rounds of NSS data shows that the average cost of a typical hospitalisation increased from Rs. 7118 in 2004 to Rs. 17074 in 2014 to further Rs 20135 in 2017-18, registering a 7.7 per cent annual compound growth in nominal cost in 14 years. During the same period, the average cost of an OP care service increased from Rs. 409 in 2004 to Rs. 696 in 2014 but declined to 636 in 2017-18 depicting a much lower compound annual growth (3.2 per cent) in nominal cost. It is worth noticing that whereas 47.5 per cent of the individuals did not incur any OP expenses in 2004, in 2014 only 8.5 per cent of the individuals got their OP care without incurring any cost[7].

6. In 2014 the percentages of ailments (with 15 days recall period) treated by allopathic system of medicines were 90.6 and 88.7 for the rural males and rural females respectively. The corresponding figures for the urban males and urban females were 90.4 and 91.0 respectively. In 2017-18, the percentage of ailments (15 days recall period) treated under allopathic system of medicine increased to 95.4 per cent both in rural and urban India.

7. The average costs of hospitalisation and OP care were 10.59 times and 60.86 per cent of average per capita consumption expenditure in 2004. In 2014, they became 9.23 times and 37.66 per cent respectively.

Table 5 provides estimates of OP care components for which individuals had to pay (columns 1) and in case they paid the mean and median values (columns 4 & 5). The table also provides the mean and median values of different components of OP care considering no expenditure as zero expenditure (columns 2 and 3). Since people need to spend for more than 90 percent of all OP care, the mean OP expenses, no matter any expenditure was incurred or not, is not much lower than when only positive expenditure is considered.

For little more than 40 per cent of the cases, people need to pay the doctor and if they pay, the average fee turns out to be Rs. 182 (median Rs. 100). In more than 80 per cent of the cases, people have to pay for medicines and when paid, the average cost of medicines turned out to be Rs. 468 (median Rs. 250). Like medicine, diagnostic test is another component of OP care where people incur higher costs (average Rs.453 and median Rs. 220) but only 13.8 per cent of the individuals incur expenditure on diagnostic tests. Only 7.6 per cent of the individuals incur medical expenses other than doctor's fee, medicines and diagnostic tests, but when they incur, it can go as high as Rs. 287 on average. Other than medical expenses, people also need to pay for non-medical costs for OP care such as for travel. Almost 50 per cent of the individuals incurred non-medical expenses for OP care and when incurred they spend on an average Rs. 165 (median Rs. 60).

Considering all the individuals, irrespective of the fact that they incurred expenses on different components of OP care, we can estimate the average (and median) absolute amounts and relative shares of different components of OP care cost from individual's point of view. Those who utilised OP care spent on an average Rs.637. The major portion of total OP expenses is medical expenses (almost 87 per cent) and the rest is non-medical expenses including transport. Medicines account for a majority of the OP expenses (61.7 per cent), followed by doctor's fee (12.2 per cent) and diagnostic tests (9.7 per cent). When we express the OP expenses in terms of per capita consumption

expenditure, the average and median do not come very low. The average values of the per capita OP expenses as a percentage of per capita consumption expenditure can vary between 44 to 48 per cent (the median varies between 17 and 20 per cent). The prevalence of ailments (per lakh population) that require at least OP care, and the average cost of treatment per person for each ailment is presented in Appendix Table A1. The same table also presents ailment-wise rate of hospitalization (per lakh population) and average cost of hospitalization for a comparison. The table clearly shows that many of the ailments with high frequency which need OP care fall in the category of chronic ailments such as cataract and vision related ailments, diabetes, hypertension etc.

We estimate a two-part model to explore the determinants of OP expense at the individual level. Not all individuals incur OP expenses due to the following reasons. Since the information collected for OP care is with 15 days recall period, a large number of the sample individuals do not report any illness and OP care for obvious reason. Second, for 8.5 per cent of the individuals who sought OP care on medical advice no expenditure was incurred. To estimate the determinants of who experiences these non-zero expenditures, an appropriate econometric model is a two-part model. The two-part model is based on a statistical decomposition of the density of the outcome into a process that generates zeros and a process that generates positive values. We used a logit to estimate the parameters that determine the threshold between zero and nonzero values of the OP expenditure which is our outcome variable. For the second part, we used a generalized linear model to estimate the parameters that determine positive values. Generalized linear models accommodate skewness and provide a better fit for health care expenditures (Blough *et al* 1999; Deb and Norton 2018).

Table 6 presents results from the two part model. The logit model results indicate that females, children, elderly, those with chronic illnesses and hospitalization are likely to report outpatient

expenditure. Conditional on reporting outpatient expenditures, females spend significantly less than males. Those with chronic illness end up spending 31 per cent more than those who do not have chronic illnesses, and those with hospitalization spend 50 per cent more on OP compared to those who do not experience hospitalization. These results confirm our belief that OP care is important to support those with chronic illnesses and provide critical support to those who have just undergone hospitalization and need continuity of care. OP care also disproportionately benefits women. Further, those supported by government insurance spends 17 per cent less than those without insurance which means that if government insurance does not cover OP expenditures, those disproportionately using OP care would face greater financial burden.

The reimbursement for OP care expenses is almost negligible. If we focus on the bottom 4 deciles, most of the individuals (almost 95 per cent) meet their OP expenses from current incomes and savings but 5 per cent rely on means such as borrowing, selling assets, taking help from friends and relatives for meeting the expenses. Poor may still face difficulty when they pay for OP care from their current income and savings. Hence OOP expense for OP care is not a trivial amount for most people, definitely for the poor.

Discussion and conclusion

Currently available cross-sectional survey data do not allow us to estimate the true extent of OP expenses incurred by Indian households for a full year because of its short recall period. However, the incidence and prevalence of ailments which required OP care suggest that they are not insignificant. Though OP expenses may not have as much of an impoverishing effect on households as hospitalisation expenses, the cumulative expenses over an entire year can be substantial, especially for households with elderly, chronically ill members or which experienced hospitalisation. Our analysis finds that individual OP expenses, as a proportion of per capita consumption expenditure may be high enough to impact well-being of individuals as well

as households. Further, the need for OP care is found to be higher for some, more than others. Children, women and elderly have higher needs for OP care. Women and elderly are also in greater need for OP care due to their chronic illnesses. The recent NSS data shows that about 17.2 per cent of the households have at least one chronically ill person and 26.9 per cent of households have at least one elderly member.

The need for OP care seems to increase with economic status and this pattern is stronger for those with chronic illnesses. However, the ST community shows a lower need for OP care, especially for chronic illnesses as well as in utilisation of OP and hospitalisation care. There is no other evidence to believe why need for OP care or hospitalisation should be lower for ST population and we are left to wonder if it is a case of under-reporting. Like the ST community, north-eastern India also shows very low need for OP care as well as utilisation of inpatient care. These patterns could be an indication of lower awareness and access to health care for these communities and regions. Further, hospitalisation seems to increase the need for OP care for an individual. This has serious implications for the poor since government supported insurance scheme such as RSBY provides financial protection for hospitalisation but not OP care.

Not all need for OP care is satisfied. In the event of an illness, whether an individual gets OP care or not is found to depend on her economic status and social identity. In fact, the positive association of economic status and social identity with utilisation of OP care is stronger for chronic illnesses. In other words, richer and individuals belonging to upper castes have higher likelihood of getting OP care when they fall sick and this pattern is stronger for chronic ailments. The huge rich-poor difference found in household spending on chronic ailments such as diabetes (Tripathy and Prasad 2018) could be an indication that chronic ailments are under-detected and under-treated among the poor. For chronic illnesses, medicines account for a large share of outpatient care expenditure. Other than economic status and social identity, other factors that matter to an individual's

realized access to OP care are place (rural/urban) and region of residence. The individuals staying in rural India and staying in north-eastern part of the country seem to have lower realized access to OP care. Since it is found in other studies that utilisation of health care by women and children in poor households are more sensitive to price, a strong association of OP care utilisation with economic status observed in our analysis has worrying implications. It implies that by not covering OP expenses under any health expenditure protection mechanism we are not addressing an opportunity to reduce the gender and age-group based discrimination in health care utilisation.

People mostly depend on private facilities for OP care. In fact, people's dependence on private facilities is higher for OP care than hospitalised care. Utilisation of private OP care is higher for richer and socially advanced castes and individuals living in urban areas. The better perceived quality of OP care provided by private providers as compared to the government facilities are observed in many studies. For example, Bhatia and Cleland (2004) find that private facilities provide longer length of consultation time, higher likelihood of physical examination and offer explanation of diagnosis and prognosis, better privacy, higher probability of administering injection compared to public facilities. These are the indicators which are important to people in the formation of their perceived quality of the provider or facility. As private OP care in India is very heterogeneous in quality ranging from services provided by unqualified practitioners or quacks to very qualified doctors practicing in multi-specialty hospital, choice of private care may not always indicate better quality of OP care. A higher variation of cost of OP care is also observed in the private sector – a pattern not observed for inpatient care (Peasah *et al* 2015).

People predominantly depend on allopathic system of medicines for OP care. Though people's dependence on non-allopathic system of medicine is little higher for chronic ailments, it does not show any systematic variation with any of the individual or household characteristics. Since existence of public facilities

is found to play an important role in promoting non-allopathic system of medicines especially in the rural areas (Rudra*et al* 2017), one can question if such a policy is backed by evidence of people's preference for non-allopathic AYUSH OP care or scientific evidence of its effectiveness over allopathic system of medicine (Mukherjee *et al* 2013). In spite of higher supply of AYUSH practitioners in many Indian states (Government of India 2018), not a large number are seen to prefer non-allopathic system of medicines. In fact, the use of AYUSH practitioners is observed to decrease for those at a higher socio-economic status. Hence lower cost and highly heterogenous AYUSH care may not be the answer for OP needs of the poor.

The proportion of population utilizing OP care without incurring any OOP expenses has reduced over the years. The average cost of OP care per person is in fact, a significant amount when compared with average per capita consumption expenditure. Medicines, which is the largest component of every OP care, accounts for a huge share in total OP expenses. The huge share of medicine cost in total OP expenses has been observed in many studies. Diagnostic tests, though not as common as medicine, can also cost as much as medicines when prescribed. The experience of some states shows that there are achievable ways to reduce the costs of medicines. For example, the centralized procurement system of medicines in Tamil Nadu made it possible to purchase medicines at least possible costs (Chokshy *et al* 2015). In 2012 West Bengal introduced a public-private partnership scheme called Fair Price Medicine Shops (FPMS) within government hospitals which reduced the costs of drugs by bringing the generic drugs into the system (Dutta and Bandyopadhyay 2018). Though generic drugs are not the favourite of the private doctors, users of the generic drugs do not show any aversion towards it compared to branded drugs. A study by Das *et al* (2017) observed that higher proportion of generic drug users (93 per cent) believed in the effectiveness of their drugs in controlling their ailments compared to branded drug users (87 per cent). No significant difference was observed in reported adverse effects between generic and branded drug users.

The existing insurance, which mostly covers hospitalisation expenditures, does not seem to take care of OP expenses at the individual level. For example, compared to those who do not have insurance, individuals with insurance do not show any less likelihood of incurring OP expenses. This is consistent with findings of Karan *et al* (2017). However, our analysis shows that once an individual incurs positive OP expenses, having a government provided insurance reduces the amount of the OP expenses. This finding may have implication for the poor since majority of the government supported insurance coverage has targeted the poor population. It is unclear whether the reduction of OP expenses occurs because the poor with insurance are referred to covered inpatient care. This is another reason to cover OP expenses as just covering inpatient expenses might result in overuse of inpatient care, raising expenses for the individual as well as the state.

We have tried to argue that the poor especially need to be covered for their OP expenses. An important policy dilemma in this context would be should government finance their OP expenses through the insurance route or should the government directly provide OP care to them through public facilities. Financing the poor's OP care needs through the insurance system may offer more freedom to the poor in choosing their care providers but it may also be an expensive option for the government. There is evidence that OP care is much cheaper in public facilities. A study estimating cost for different types of health care services (such as outpatient visit, inpatient stay, surgery etc) in different categories of hospitals (government, private, charitable etc) found that outpatient visit ranged from Rs 94 in district hospital to Rs 2213 in private hospital.

Prior studies with exclusive focus on OP care also concluded that improving the availability of medicines and diagnostics for chronic conditions as well as strengthening the referral system of government facilities can enhance financial protection of the poor (Bhojani, *et al* 2012; Gupta *et al* 2016). Some of these studies tend to conclude that by improving the quality and accessibility

of public facilities, OP expenses by the poor can be reduced if it leads to higher utilisation of public facilities by the poor.

Whether direct public provision or insurance-based financing for health care is a better system to protect the health of the poor for a country like India is still debatable. If for the sake of argument one accepts the merits of an insurance-based system, one is not convinced in the effectiveness of an insurance system that does not cover OP care. OP expenses can be significant given people's higher dependence on private providers on grounds of better perceived quality and lower indirect costs. Further, increasing burden of chronic non-communicable ailments, which requires regular OP care, monitoring and medicines, can also significantly increase OP expenses. A broader coverage of benefits that includes medicines and outpatient care for the poor and near poor (those just above the poverty line), especially for chronic illness, is necessary to achieve significant protection from impoverishment.

In conclusion, two important points need to be emphasized. First, we need to work towards having reliable estimates of annual OP expenses for the country possibly based on a longitudinal survey. Second, the identification of the poor and vulnerable – a criterion used for entitling a household with insurance benefits – should be dynamic as individual status as poor and non-poor changes and often, high out-of-pocket health expenditure is a significant contributor.

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Table 1: Percentage of individuals reported any illness (15 days recall period), having chronic ailments and had hospitalisation (in last one year) by different individual, household and contextual characteristics

	Reporting any illness in last 15 days (%)	Reporting having chronic illness (%)	Hospitalisation (excluding child birth) in last one year (%)
Sex			
Male	4.67	4.18	2.90
Female	5.70	5.53	3.21
Age group			
0-12 years	6.83	0.64	1.85
13-39 years	3.81	1.83	2.31
40-59 years	5.34	9.46	4.30
60 years & above	7.75	23.72	7.98
Chronic illness			
Without chronic illness	5.21	--	2.52
With chronic illness	4.40	--	13.63
Hospitalisation (excluding childbirth) in last one year			
Yes	9.97	21.60	--
No	5.02	4.31	--
Insurance Coverage			
Government supported	5.75	9.72	4.23
Employer provided	6.62	7.67	4.12
Household arranged	5.11	10.61	4.02
Others	10.57	8.31	11.86
No insurance	5.05	3.98	2.84
Expenditure Quintiles			
Poorest	4.66	2.15	1.77
2nd	4.99	3.07	2.32
Middle	4.92	4.04	2.93
4th	5.64	5.87	3.55
Richest	5.74	9.46	4.80
Social class			
Scheduled Tribe	4.91	2.00	2.14
Schedule Caste	5.42	3.99	3.06
Other Backward Class	5.19	4.84	3.08
Others	5.05	6.36	3.31
Place of residence			
Rural	5.07	4.04	2.85
Urban	5.38	6.71	3.53
Region			
North Central	4.51	2.70	2.39
Eastern	5.85	6.61	2.55
North Eastern	2.74	0.67	1.62
Western	4.71	3.87	3.45
Southern	6.34	10.23	4.76
Total	5.17	4.84	3.05

Source: Estimated from NSS 71st unit record data.

Table 2: Results of the logistic regressions

	Dep variable: Any illness	Dep variable: Chronic illness	Dep variable: Hospitalisation (excluding childbirth)
Sex (Ref: *Male*)			
Female	1.24**	1.34**	1.06**
Age group (Ref: *13-39 years*)			
0-12 years	1.93**	0.40**	0.88**
40-59 years	1.42**	5.09**	1.53**
60 years & above	2.10**	14.69**	2.26**
Chronic illness (Ref: *No*)			
Yes	0.55**	--	3.47**
Any hospitalisation (excluding childbirth) (Ref: *No*)			
Yes	1.98**	3.57**	--
Insurance (Ref: *No insurance*)			
Govt. supported	1.06	1.61**	1.08*
Employer provided	1.16	1.14	1.02
Household arranged	0.84	1.08	0.73**
Others	1.74	0.70	3.08**
Log (PCCE)	1.25**	1.55**	1.47**
Caste (Ref: *Others/General*)			
ST	1.12	0.52**	0.95
SC	1.13*	0.82**	1.20**
OBC	1.03	0.79**	1.04
Place of residence (Ref: *Urban*)			
Rural	1.01	0.86**	1.13**
Region (Ref: *Southern*)			
North Central	0.73**	0.36**	0.71**
Eastern	1.00	0.68**	0.75**
North Eastern	0.44**	0.09**	0.53**
Western	0.73**	0.39**	0.93*
Time of survey (Ref: *Jan-March*)		--	--
April-June	0.72**	--	--

Notes: Any illness = 1 if an individual reported any illness 15 days preceding the survey; = 0 otherwise. Chronic illness = 1 if an individual reported to have chronic illness; = 0 otherwise. Hospitalisation = 1 if individual had hospitalisation (excluding childbirth) in last one year; = 0 otherwise. * and ** stand 5% and 1% level of significance respectively.

Source: Estimated from NSS 71st unit record data.

Table 3: Percentage of non-hospitalised ailment episodes with OP care sought, treated by private providers and treated with Allopathic system of medicines

	OP care (%)		OP care from private providers (%)		OP care with allopathic System (%)	
	All episodes	Chronic episodes	All episodes	Chronic episodes	All episodes	Chronic episodes
Sex						
Male	83.8	90.16	76.31	74.14	94.84	93.38
Female	84.5	90.93	73.80	74.01	93.80	92.56
Age group						
0-12 years	81.32	88.50	79.09	70.32	96.11	90.35
13-39 years	79.59	86.71	76.81	78.01	93.59	89.16
40-59 years	85.82	90.84	72.92	73.5	93.73	93.13
60 years & above	88.69	92.03	72.94	73.4	94.29	94.26
Insurance						
Govt. supported	83.88	88.88	69.22	69.47	94.41	94.37
Employer provided	76.02	92.81	72.49	72.46	91.54	89.45
Household arranged	91.78	97.57	95.63	95.87	96.29	95.27
Others	79.27	82.67	73.06	64.1	100	100
No insurance	84.25	90.97	75.94	74.97	94.21	92.31
PCCE quintiles						
Poorest	75.69	81.38	67.45	59.42	95.69	92.19
2nd	77.63	84.42	68.87	62.4	94.40	90.28
Middle	83.06	88.75	73.73	71.25	95.18	93.64
4th	85.35	90.14	76.50	76.13	94.48	93.67
Richest	91.16	95.44	80.01	79.97	93.02	93.07
Caste						
ST	70.74	78.83	51.96	56.81	97.88	97.34
SC	81.89	83.14	70.45	61.88	95.46	94.27
OBC	85.35	91.84	74.47	77.11	93.73	92.51
Others	86.43	93.24	81.48	83.25	94.29	92.54
Place of residence						
Rural	81.45	88.58	72.08	70.87	94.73	92.66
Urban	88.81	93.24	79.34	78.06	93.50	93.23
Region						
North Central	85.39	90.90	78.40	74.6	90.08	91.92
Eastern	74.33	85.56	72.95	76.88	90.44	87.81
North Eastern	69.71	85.34	23.95	42.28	96.84	98.13
Western	84.83	87.51	81.69	84.14	97.53	96.85
Southern	89.77	93.35	73.05	71.1	94.72	94.53
Total	84.18	90.60	74.92	74.07	94.27	92.91

Source: Estimated from NSS 71st unit record data.

Table 4: Results of the logistic regressions

	Dep variable: OP care	Dep variable: Private OP care	Dep variable: Allopathic OP care
Sex (Ref: *Male*)			
Female	1.04	0.89	0.86
Age group (Ref: *13-39 years*)			
0-12 years	1.49**	1.24*	1.26
40-59 years	1.11	0.74**	1.25
60 years & above	1.24	0.74**	1.43*
Chronic illness (Ref: *No*)			
Yes	2.47**	0.94	0.58
Insurance (Ref: *No insurance*)			
Govt. supported	0.69**	0.79**	1.10
Employer provided	0.35**	0.64	0.89
Household arranged	0.92	4.09**	2.47*
Others	0.46	0.89	--
Log (PCCE)	1.49**	1.43**	0.75**
Caste (Ref: *Others/ General*)			
ST	0.63**	0.27**	2.11**
SC	0.91	0.60**	1.22
OBC	0.94	0.72**	0.88
Place of residence (Ref: *Urban*)			
Rural	0.85*	.89	1.10
Region (Ref: *Southern*)			
North Central	0.88	1.33**	0.88
Eastern	0.42**	1.03	0.42**
North Eastern	0.43**	0.12**	1.08
Western	0.74*	1.61**	1.75*

Notes: OP care = 1 if an ill individual reported OP care on medical advice; = 0 otherwise. Pvt. OP care = 1 if an ill individual reported OP care from a private facility ; = 0 otherwise. Allopathic OP care = 1 if an ill individual reported allopathic OP care; = 0 otherwise. * and ** stand for 5% and 1% level of significance respectively.

Source: Estimated from NSS 71st unit record data.

Table 5: Mean and median costs of OP care (component wise and total in rupees) per person

Component-wise expenses per person	Positive cost (%) *Col 1*	All persons		Persons who incurred some costs	
		Mean *Col 2*	Median *Col 3*	Mean *Col 4*	Median *Col 5*
Doctor's fee	42.7	78	0	182	100
Medicines	84.0	393	200	468	250
Diagnostic tests	13.8	62	0	453	220
Other medical expenses	92.4	22	0	287	100
Total medical expenses	86.7	556	250	641	300
Transport	44.8	48	0	106	50
Other non-medical	23.8	34	0	141	60
Total non-medical expenses	49.2	81	0	165	60
Total OP expenses	91.5	637	280	696	314
Total OP expenses as % of PCCE	--	44	17	48	20

Source: Estimated from NSS 71st unit record data.

Table 6: Results of the two part regression models

Sex (Ref: *Male*)	Part 1 (Logit Model): dependent variable: individual reported any OP expenses (1) or not (0)		Part 2 (OLS Regression): Dependent variable: log(OP expenses)	
	Odd ratio	Robust SE	Coefficient	Robust SE
Female	1.22***	(0.0437)	-0.0719*	(0.0358)
Age group (Ref: *13-39 years*)				
0-12 years	2.01***	(0.0884)	-0.0623	(0.0552)
40-59 years	1.41***	(0.0703)	-0.0429	(0.0516)
60 years & above	2.17***	(0.1419)	-0.0356	(0.0555)
Chronic illness (Ref: *no*)				
Yes	160.56***	(10.2412)	0.3096***	(0.0443)
Any hospitalisation (Ref: *No*)				
Yes	1.44***	(0.0673)	0.5007***	(0.0345)
Insurance (Ref: *no insurance*)				
Govt. supported	0.91	(0.0535)	-0.1706***	(0.0473)
Employer provided	1.07	(0.1825)	-0.0272	(0.1432)
Household arranged	0.92	(0.1435)	-0.2255	(0.1752)
Others	1.73	(0.6150)	-0.1465	(0.2672)
Log(PCCE)	1.27***	(0.0457)	0.2434***	(0.0333)
Caste (Ref: *Others/General*)				
ST	0.84*	(0.0654)	-0.0343	(0.0772)
SC	1.04	(0.0588)	-0.1850***	(0.0519)
OBC	1.01	(0.0445)	-0.0576	(0.0438)
Place of residence (Ref: *urban*)				
Rural	0.99	(0.0386)	0.0484	(0.0378)
Region (Ref: *Southern*)				
North Central	0.78***	(0.0376)	0.4381***	(0.0462)
Eastern	1.03	(0.0592)	0.2924***	(0.0555)
North Eastern	0.49***	(0.0536)	0.6438***	(0.1142)
Western	0.68***	(0.0431)	0.2075***	(0.0573)
Time of survey (Ref:*Jan-March*)				
April-June	0.74***	(0.0270)	-0.1218***	(0.0359)

Source: Estimated from NSS 71st unit record data.

Note: *** p<0.001, ** p<0.01, * p<0.05

Appendix Table

Table A1: Rate of prevalence and average cost of treatment of OP and hospitalisaton care

ailments	Reported ailments with 15 days recall period		Hospitalistion (1 year recall period)		
				Average cost of treatment (Rs)	
	Rate of ailments per lakh population	Average cost of OP treatment per person (Rs)	Rate of hospitalisation per lakh population	Govt. hospitals	Pvt. Hospitals
Fever with loss of consciousness or altered consciousness	189	475	62	3076	12440
Fever with rash or eruptive lesions	93	448	25	7881	9546
Fever due to diphtheria , whooping cough	229	430	35	3843	8665
All other fever	1864	500	574	2971	12162
Tuberculosis	59	573	53	6680	24177
Filariasis	18	430	4	7368	31130
Tetanus	5	241	3	14368	77033
HIV/AIDS	9	524	9	4158	9412
Other sexually transmitted diseases	0	513	2	14049	27789
Jaundice	23	1080	77	12926	21901
Diarrheas/ dysentery/ increased frequency of stools	245	435	134	2207	9759
Worms infestation	15	1556	10	6123	16310
CANCERS (known or suspected by a physician) and occurrence of any growing painless lump in the body	21	2557	64	29070	84325
Anaemia (any cause)	69	1262	57	6549	19276

Bleeding disorders	11	1681	23	5898	19753
DIABETES	1009	663	71	5771	20404
Under-nutrition	7	503	8	5207	13248
Goitre and other diseases of the thyroid	169	713	20	7660	25970
Others (including obesity)	13	937	4	10652	24143
Mental retardation	13	1965	12	10929	29191
Mental disorders	57	1037	33	19403	32787
Headache	222	346	37	3995	11439
Seizures or known epilepsy	37	719	31	6799	20749
Weakness in limb muscles and difficulty in movements	114	831	51	6516	28927
Stroke/ hemiplegia/ sudden onset weakness or loss of speech in half of body	36	1091	64	8426	60799
Others including memory loss, confusion	11	869	14	23132	41298
Any difficulty or abnormality in urination	61	668	15	3567	15382
Pain the pelvic region/ reproductive tract infection/ Pain in male genital area	25	386	147	2151	14276
Change/ irregularity in menstrual cycle or excessive bleeding/ pain during menstru-ation and any other gynaecological and andrological disorders incl. male/female infertility	12	1103	13	2421	14143

Pregnancy with complications before or during labour (abortion, ectopic pregnancy, abortion, hypertension, complications during labour)	30	1266	11	5062	19960
Complications in mother after birth of child	12	1078	16	5559	20707
Illness in the newborn/ sick newborn	49	1180	17	7507	20970
Discomfort/ pain in the eye with redness or swellings/ boils	17	950	5	12484	21723
Cataract	1010	468	116	4159	21353
GLAUCOMA	279	1191	212	17961	57923
Decreased vision (chronic) NOT including where decreased vision is corrected with glasses	820	254	48	6240	16856
Others (including disorders of eye movements – strabismus, nystagmus, ptosis and adnexa)	272	425	36	10091	17861
Earache with discharge/ bleeding from ear/ infections	366	980	113	5114	23199
Decreased hearing or loss of hearing	80	603	11	2500	25779
HYPER-TENSION	490	731	293	6276	24947
Heart disease: Chest pain, breathlessness	39	1854	95	8028	30234

Acute upper respiratory infections (cold, runny nose, sore throat with cough, allergic colds included)	28	1024	30	12400	22364
Cough with sputum with or without fever and NOT diagnosed as TB	249	529	39	4463	16560
Bronchial asthma/ recurrent episode of wheezing and breathlessness with or without cough over long periods or known asthma)	814	625	150	10863	33572
Diseases of mouth/teeth/gums	326	639	46	6361	23415
Pain in abdomen: Gastric and peptic ulcers/ acid reflux/ acute abdomen	79	1353	128	14017	34369
Lump or fluid in abdomen or scrotum	26	1024	51	13189	36165
Gastrointestinal bleeding	58	1047	87	7083	26499
Skin infection (boil, abscess, itching) and other skin disease	14	1462	161	3553	15622
Joint or bone disease/ pain or swelling in any of the joints, or swelling or pus from the bones	3	2479	25	4785	63911
Back or body aches	6	547	35	4656	22951
Accidental injury, road traffic accidents and falls	116	1486	354	9185	39483
Accidental drowning and submersion	3	1543	4	4586	52620

Burns and corrosions	5	2024	21	13687	91047
Poisoning	1	1474	20	9581	20750
Intentional self-harm	0	382	7	7044	13418
Assault	2	2708	9	8351	25292
Contact with venomous/harm-causing animals and plants	8	2608	27	3964	10193
Symptom not fitting into any of above categories	219	646	108	17023	38878
Could not even state the main symptom	10	523	9	5263	22999

Source: Estimated from National Sample Survey 71st round unit record data

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