Chapter 10

Summary and policy suggestions

‘Health is wealth’ is an ancient wisdom. While healthy lives are essential for the well-being of individuals and a productive human resource for society and country. However, ailments draw upon well-being of the individual and are burden on the family and the society. Coping with ill-health is very serious problem of people living on edge and exposed to adverse living conditions that are inherent character of urban slums in developing countries. For many of them low level of living is a constraint to access timely and quality health services, which have adverse short and long term consequences. Consequently, strategies chosen by downtrodden segment of society aggravate their problems and push them into vicious circle of poverty –ill-health. However, much empirical evidences are not available on various dimensions of ill-health and adopted coping mechanism by urban slum dwellers in India. The present study is a modest attempt to fill the gap in literature by analysing health financing, coping behaviour and socio-economic outcomes of slum population of Chandigarh. More specifically the objectives of the study are:

Objectives

The main objectives of the study are:

1. To measure the extent of economic burden of illness and treatment seeking behaviour of the slum dwellers.

2. To identify types and sequence of coping strategies employed by households to deal with cost burden of illness.

3. To study the coping behaviour of households in context of the nature and severity of various ailments.

4. To examine the economic consequences of the chosen coping strategies by the households in response to their ill-health.
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Hypotheses

Based on the objectives, the main hypotheses to be explored in the present study are:

**Treatment seeking behaviour:**

1. The choice of health providers by a household is significantly related with type and stage of the ailment, status of the patient in the family, economic status, and awareness level of household.

2. Choice of health provider is dynamic to the effectiveness of treatment, information about the disease, and health providers, and coping capacity with costs of illness.

**Economic burden of illness:**

1. Economic burden of ill-health is intimately related with type and nature of ailment, socio-economic status of the household and access to health facilities.

2. Economic burden of ill-health is likely to be catastrophic for majority of the slum dwellers.

**Types and sequences of the coping strategies:**

1. The type of chosen coping mechanism is intimately related with the socio-economic attributes of the households. Poor household tend to adopt risky strategies and better-off households among the slum dwellers tend to adopt less risky strategies.

2. The households behave rationally and sequence their coping strategies by risk to their lives and livelihood. Households only go for more risky strategies when other low risk options are exhausted.

**Coping behaviour and nature of illness:**

1. Households resort to high risk strategies for major illness and/or as the illness become more severe.
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2. The degree of risk associated with the coping strategies and magnitude of cost of illness goes together.

Coping behaviour and socio-economic outcomes:

1. Illness adversely affects the economy of the households.
2. The choices of high risk coping mechanism seriously impede the socio-economic sustainability of the household.
3. Catastrophic cost of illness push household to adopt risky coping behaviour whereas access of social network, strong safety nets enable household to avoid risky coping strategies.

Data and methodology

Data

The study is based on household level data collected during primary survey of slum dwellers of Chandigarh. The survey was undertaken in two stages. In the first stage, sample of 422 households was selected by following multistage random sampling technique from two most populace slums of Chandigarh namely; colony number 4 and colony number 5. A pre-tested structured questionnaire was canvassed to selected 422 households during April 2011 to June 2011. Information was collected on demographic, socio-economic characteristics, prevalence of ailments, treatment seeking behaviour, out-of-pocket and opportunity cost of illness and remedial measures. This information was used for cross-sectional analysis of characteristics of the slum dwellers and patients, nature and prevalence of morbidity, health seeking behaviour, and measurement of direct and indirect cost of illness.

From the information of selected 422 households, a composite vulnerability index was constructed for the 284 households affected by one or other ailment. From this sample of 284 a sub-sample of 94 households was selected by using composite vulnerability index. These 94 selected households were re-visited every fortnightly for four months from July, 2011 to November, 2011. During every visit information was collected on medical
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facilities chosen by the households, expenditure incurred, mobilization of resources to meet health expenditure, labour supply adjustments, and spending adjustments done by the households.

Methodology

There are two approaches to analyze the economic burden of illness: health expenditure approach and vulnerability approach. In health expenditure approach, the economic burden of ailments is measured in terms of catastrophic and non-catastrophic households. The economic burden is considered to be catastrophic if health expenditure exceeds 10 per cent of household income/consumption or 50 per cent of non-food consumption. In the present study, economic burden was measured using this approach. Besides the extent of catastrophic economic burden, we also examined determinants of catastrophic burden of ill-health. The information generated from 422 households, was used to analyse economic burden and catastrophic health expenditure.

In the vulnerability approach, the coping behaviour and consequences of economic burden of illness are examined. Firstly, the household responses to illness costs were analyzed. Secondly, actual consequences of illness cost for the household economy over the period of time were studied. In this approach, the main focus was to test whether a household could manage the costs burdens over the period of time or the household was pushed to choose risky coping processes. Information collected in the second phase of survey, from 94 households was used to study the choice of strategies to cope with cost of illness. The examined types of strategies included cost prevention, resource mobilization, spending adjustments, and labour supply adjustment. In each of these categories, sub categories of strategies were also examined.

Cost prevention strategies were divided into two sub categories namely; ignoring illness or delaying treatment to avoid potential cost of illness. The categories of resource mobilization were: savings, borrowing at no rate of interest, borrowing at low rate of interest, borrowing at high rate of interest, assistance by relatives, assistance in form of donation, assistance by NGOs, and selling of assets. The sub-categories of spending adjustment strategies were; delaying payments of borrowings, buying medicine in
installments, postponing medical test, reducing expenditure on medicine, shifting for relatively cheaper treatment, reducing expenditure on social events, reducing expenditure on education, reduced food expenditure. The labour supply adjustment strategies were divided into four sub categories namely: labour supply by erstwhile non-workers, household member working for additional hours, changing the profession, shifting of children from school and putting them to work. Apart from type of coping strategies, the sequence of coping strategies was also explored using graphical and tabular analysis.

Determinants of choice of various coping strategies were also explored by employing both tabular and econometric analysis. The multinomial ordered logistic models were used on the panel data. Econometric models were further employed to study the consequences of illness both on cross-sectional and longitudinal data set separately. Cross sectional analysis was used to identify the impact of illness on consumption, assets, and labour losses. The longitudinal analysis was used to analyze the socio-economic outcomes by comparing the before and after situation of the households on account of workforce participation, earnings, consumption, asset, schooling of children, and saving and borrowing of the households.

Information collected during the second phase of survey was also utilized to analyse the perception of households regarding impact of illness on earnings, economy of the households, and role of the government in assisting the slum dwellers to cope up with ill-health. The perceptions of the households are presented in the form of pie-charts. A very brief experience of three households has also been presented as unique case-studies in their own way.

**Empirical findings**

1. **Socio-economic profile and prevalence of morbidity**

Most of the slum dwellers residing in the sampled colonies of Chandigarh hailed from backward states of India i.e. Uttar Pradesh and Bihar. Most of the slum dwellers had large families and low female sex ratio. Four-fifth of the slum dwellers are living in the pucca or semi-pucca houses whereas one-fifth of households still live in katcha dwellings. The
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Chandigarh administration provided movable/temporary public toilet facilities but about one-third of the households are still going in for open defecation. Though located near residential and industrial area, such a large proportion of population going in for open defecation poses serious health hazard, not only to the slum dwellers but to larger population living around these colonies. The slum dwellers have universal access to piped water supply through public taps but non-availability of drainage facility is proving them counterproductive. Half of the households have no drainage facility. Consequently, water flowing from public taps and disposed grey water from the houses get accumulated in streets. Same may be posing serious health hazard to slum dwellers as the clogged water in streets is a fertile ground for vector-borne diseases. Access to electricity is almost universal but dwellings of colony number 4 are found to be drawing electricity through illegal theft from nearby electricity lines/poles. Two-third population is literate but only a small proportion of them has secondary or above educated member. Most of the residents are employed as petty traders, domestic servants, and factory workers and majority of the households have single earning member. Before migration slum dwellers were employed in farming or were working as artisans in micro-enterprises. Lack of opportunity pushed them to Chandigarh to earn their livelihood. After migration because of their low human resource capital; they are employed in low rewarding activities as petty traders, domestic servants, and factory workers. Consequently, half of them are living in abject poverty. Every tenth of slum dwellers is living in chronic poverty and it may take long time for them to break the shackles of low living and poverty.

Compared with 6.8 percent in Chandigarh as a whole, 16.5 percent of slum dwellers are suffering from one or other type of disease. Morbidity has a gender dimension among the slum dwellers, as contrary to their low proportion in population; morbidity was higher among the females as compared to males. These slums dwellers are exposed to number of acute and chronic illnesses. Besides suffering from water borne vector diseases like diarrhea, dysentery, and gastro-intestinal diseases, the slum dwellers are also suffering from so-called lifestyle related diseases like diabetes, asthma, neurological disorders, stone problems and cardio-vascular diseases. The worst part is that 4.3 percent of the slum dwellers are still suffering from Tuberculosis, which has vanished from greater part of urban India. On the whole, slum dwellers of Chandigarh are living in unhealthy and
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unhygienic conditions. They migrated from poor areas of the country to better their prospects and majority of them are employed in low-paid jobs. Contrary to the general perception that slum dwellers suffer mainly from acute diseases, the chronic and life-style diseases are also prevalent among them.

2. Treatment seeking behaviour of slum dwellers

Treatment seeking behaviour is analyzed from ‘end point’ perspective. The evidence suggests that the slum dwellers exercised their options in choice of health providers. At the time of interview, 39 percent of slum dwellers are seeking their curative medical treatment from public hospitals followed by RMPs (21.94 percent), private qualified doctor (15.83 percent), and public dispensary (8.27 percent). However, on enquiry of their past health seeking behaviour for the same ailment, it is found that majority of them started their treatment from RMPs. Upon non-recovery and/or dissatisfaction, majority of them converge towards multi-specialty public health facility. On proper diagnosis, new acquired information and their own capacity to access treatment, they exercised many other health options. And ultimately half of them ended up with public health services.

Nearness to a health facility is the most important reason for choosing a health facility in their first encounter. Effectiveness of treatment, information acquired from relatives and friends, and nature of ailments play equal important role in choice of a particular health provider by slum dwellers. Interestingly, in the modern city of Chandigarh, with one of the best medically equipped institutions (PGIMER), 8.27 percent of the outpatients are found to be having no treatment during the interviews. Lack of finances turned out to be the most important reason specifically among the poor households.

In the case of chronic illness, households preferred public hospitals and in the case of acute illnesses, households preferred RMPs and public hospitals both. Chronic poor and poor outpatients relied on RMPs for medical treatment and non-poor preferred private qualified doctors instead of RMPs. For elderly outpatients, public hospitals are the most preferred choice. For children outpatients also, public hospitals are preferred along with local RMPs and private qualified doctors. Public hospitals are the single most dominant choice of slums’ inpatients. Better-off households also preferred public hospitals with a
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minority preferring private and charitable hospitals. Few inpatients did not seek treatment from public hospitals due to dissatisfaction and long waiting time in public hospitals.

3. Economic burden of ill-health among the slum dwellers

The economic burden of illness is measured using participants and families perspectives. The monthly costs burden for outpatients and inpatients are measured separately. Despite low economic status of slum dwellers, households are estimated to be spending Rs 1328 per month for outpatients’ medical services. Monthly direct medical costs and indirect costs are two largest component of monthly costs burden of outpatients. Due to their low paying capacity, the economic burden of illness is significantly low in poor households as compared to non-poor households in case of outpatients. However, the relationship between economic burden of illness and economic status is missing among the inpatients. The economic burden of illness has interesting gender dimension both in cases of households with outpatients and inpatients. There seems to be gender discrimination against females as total direct and economic costs are significantly lower than male ones. Economic cost burden has inverse relationship with number of diseases/patients in the household indicating that either people tend to ignore treatment or go in for cheaper sources in seeking their medical treatment. Public medical services seems to be delivering to the health needs of slum dwellers as economic cost burden is turned out to be less than half as compared to private qualified doctors. RMPs, which are generally located in slums, also seem to be serving the cause of slum dwellers by providing timely and affordable medical services at their doorsteps. But the know-how and quality provided by them, has always been an issue of great concern for the stakeholders. Charitable hospitals are also serving the cause of downtrodden but to a limited number of slum dwellers.

The economic cost burden of ill-health is proving to be catastrophic for half of the outpatients’ cases and for almost all the families who have to admit their patient(s) in one or other hospital. Estimates of the econometric model suggest that the probability of a household to encounter catastrophic health expenditure increases in case of multiple diseases and accidents. However, probability of facing catastrophic burden significantly reduced in case of tuberculosis and gastro-related diseases. There seems to be trade-off
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between the risk of catastrophic burden and quality of medical services. Other things being same, probability of catastrophic health burden increases for patients accessing public hospitals and private qualified doctors compared with risk of catastrophic burden associated with services from RMPs or charitable hospitals or non-treatment as base category. The risk of catastrophic burden also goes up in case of illness of breadwinner of the family. However, it declines in case of old age patients indicating preferences to head and breadwinner of the family, whereas ignoring the old age people.

4. Dealing with cost of illness: choice of strategies

Evidence generated from panel of 94 households suggests that majority of the slum dwellers used cost management strategies to cope with cost of illness. However, a small proportion of households employed cost prevention strategies also. The third type of coping strategies namely; migration was exercised by only a few households. Findings validate our hypothesis that socially and economically well-off households choose lesser risky strategies whereas socially and economically worse-off households end up choosing more risky coping strategies. Disaggregation of cost management strategies bring out that about half of the household with ailing member(s) mobilized resources for medical treatment. One-third of households adopted spending adjustment strategies. Around one-sixth households adopted labour supply adjustment strategies to cover indirect cost of illness. As compared to better-off households, larger proportion of socially and economically poor households adopted cost prevention strategies. Among the households choosing cost prevention strategies, one third ignored illness and almost two-third delayed their treatment. Larger proportion of socially and economically backward households tends to ignore illness.

Among the resource mobilization strategies, savings and borrowings are predominately used strategies by the households. Buying medicines in installments, shifting towards cheaper sources of treatment, and delaying the re-payment of borrowing are most frequently used strategies by the households to adjust their spending. A larger proportion of socially and economically backward households have opted for reducing the consumption expenditure on social events, education of the children, and food. Among the labour supply adjustment strategies, intra-household labour substitution was the
preferred choice of majority to cover indirect cost of illness. In better-off households extended working hours of already working members also played crucial role. However, in socially and economically worse-off households larger proportion of households shifted their children from school into labour force to cover the indirect cost of illness. On the whole, using savings, buying medicine in installments, intra-household labour substitution, delaying treatment are the most common strategies used by slum dwellers to cope up with cost of illness.

5. Dealing with cost of illness: type and sequence of strategies

Type of strategies was intimately related across the nature of ailments categorized as major, minor, and terminal ailments. The findings support the hypotheses partially as greater proportion of households with major illness like gynecological, asthma, kidney, and neurological problems chose cost prevention strategies whereas others opted mainly for cost management strategies. In the case of terminal ailments, households rarely used cost prevention strategies. These households also rarely opted for cheaper treatment though they tend to delay the diagnostic tests to monitor the progress of treatment. Assistance from social networks of relatives and friends extended a helping hand only in the case of high cost life terminating ailments namely; cancer, cardiovascular, and neurological problems. In the case of cardiovascular, asthma, and neurological diseases households also adopted risky labour supply adjustment strategies.

To cope with costs of illness, majority of the households follow a sequence in choice of coping strategies by starting with resource mobilization to spending adjustment to labour supply adjustment strategies and ultimately to risk prone cost prevention strategy. Within each of these categories, risky options are chosen as a last resort when all the other options stand exhausted.

6. Determinants of household coping strategies with illness

Impact of various household characteristics, patient’s characteristics, and nature of ailments, safety nets and social networks on choice of various coping strategies were examined using panel data for 94 households by employing multinomial ordinal logistic
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regression technique. The econometric model was estimated by using both pooled and panel data estimation techniques for all the types of coping strategies. Initially, coping behaviour by broad categories was analyzed and then across all the categories of cost management and cost prevention strategies. Among the various households attributes, the level of income and drug addiction of household’s head consistently turns out to be significant determinant of choice of various coping strategies. Income capacitated the household to choose low risky strategy and also help it to avoid risky resource mobilization, spending adjustment and labour supply adjustment. The risk of cost prevention strategies is significantly higher among the households with drug addicted heads than other households. Among the human resource variables, only education of the head turns out to be significant in three out of five models. Increasing education level of head facilitated households to go for less risky coping strategies.

Among the patient’s characteristics, gender of the patient turns out to be most significant variable and chances of households opting for cost prevention strategies are significantly higher among the female patient vis-à-vis male patient. Nature of ailments played significant role in choice of various coping strategies. With the increase in number of diseases, the households were forced to go for risky strategies. In case of major ailments like asthma, accidents, cardiovascular diseases, cancer, gynecological, neurological, and stone problems slum dwellers adopted risky coping strategies with few exceptions. The result supports our hypothesis that for minor illness households adopt less risky coping behaviour. Catastrophic cost burden of illness push people to opt for risky coping behaviour in general and in resource mobilization and spending adjustment strategies in particular. Strong social networks enabled households to avoid more risky strategies in general and also risky cost prevention, spending adjustment, labour supply adjustments strategies. Strong social networks also capacitated households in their efforts in resource mobilization to cope with costs of illness.

7. Economic consequences of illness

The consequences of ill-health were explored at household level using output based approach and focus of the analysis was on market consequences. The consequences were examined by using four approaches namely cross-sectional analysis, longitudinal...
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analysis, perceptional analysis, and three case studies. The regression analysis was undertaken in cross-sectional and panel data analysis separately. The findings of the cross-sectional analysis suggest that skin ailments, tuberculosis, skin, cardiovascular diseases and multiple diseases episodes, hospitalization of patient adversely affected the consumption level of household and may be ultimately pushed the people into vicious circle of malnutrition and ill-health. The consequences of many diseases namely; cardiovascular ailments, cancer, asthma, joint/bones problems, accidents, and hospitalization of any member compelled households to sell their productive and unproductive assets to mobilize resources for medical treatment. The hospitalization of patient and those suffering from diseases namely; neurological, kidney, cardiovascular problems, cancer, diarrhea, and for households encountering catastrophic cost of illness tend to curtail the productive capacity of working members of the household and hence lead to significant income losses.

In the longitudinal analysis, findings suggest that human resource and endowments significantly reduce the vulnerability of household to adverse socio-economic outcomes. However, high costs of treatment, ailment of the breadwinner, and multiple illness episodes significantly increase the exposure to high vulnerability to adverse socio-economic outcomes. Vulnerability to adverse socio-economic outcome tends to go up by 222 percent for households with drug addicted or alcoholic heads. Social networks played significant role in mitigating the adverse consequences of illness. Choice of more risky resource mobilization and spending adjustment strategies pushed households to adverse socio-economic outcomes whereas choice of risky labour supply adjustment enable the household to contain the adverse socio-economic outcomes.

In perceptual analysis, an absolute majority of the slum dwellers feel that the type of illness they are encountering tends to have serious socio-economic repercussions for them. Though government is extending number of health benefits in the form of RSBY, free medical treatment for BPL and access to highly subsidized public health services, they are not satisfied with the role of government in helping them to cope up with ill-health. It seems that many of them are not aware of free facilities/services and only few of them are aware and benefiting from such policies. The in depth analysis of case studies
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support our earlier conclusion in the cross-sectional and longitudinal analysis. In the case of Sehal it was basically strong social networks with her brother’s family enabled her to access various health facilities by getting financial assistance from brother and role of care provider rendered by sister-in-law as accompanying person. Her brother not only helped to cope with cost of illness but contributed to livelihood for them by managing a job for her husband. In second case study, the illness of Ram, the breadwinner of family, lead to catastrophic outcomes for the family as well as family health. Even at the last visit, still he was unable to find the way out to mobilize resources or assistance from government or NGO to deal with his serious health problem. His case corroborates our earlier finding that illness of breadwinner has serious repercussions for the households. The third case study of Narendra is a success story of coping with multiple ailments in the family. The family was issued RSBY card and head of the family was aware of its worth, consequently, he was successful in getting operated his son from multispeciality hospital sector-16 for gall bladder problem. He was successful in getting state-of-art medical treatment from PGIMER, sector-12 to deal with neurological problems of her daughter. The case of Narendra can be role model for many others like Ram as how to utilizing the available health policies and programs to cope with cost of illness.

Some policy suggestions

Forgoing findings on widespread prevalence of morbidity, catastrophic cost of illness, risky coping behaviour adopted, and adverse socio-economic outcomes of ill-health experienced by slum dwellers of Chandigarh, raised four basic questions for all the stakeholders concerned with their well-being. These are as follows:

1) How to reduce high prevalence of morbidity among the slum dwellers?
2) What need to be done for deepening and strengthening of the existing health facilities that serve the cause of slum dwellers?
3) How to reduce economic burden of ill-health and capacitate the slum dwellers to cope with ill-health by avoiding risky coping behaviour?
4) How to improve the coping capacity of the slum dwellers enabling them to ward-off the adverse consequences of illness?
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Although there may be some overlapping and inter-linkages among these issues and hence in desirable remedial initiatives, the desirable policies initiatives can be grouped into three broad categories: preventive, curative, and capacity building measures. Some of the suggestions for each of these initiatives are as under:

Preventive measures

The widely accepted old wisdom is ‘Prevention is better than the cure’. Following this principle, appropriate preventive measures may go a long way in mitigating morbidity and mortality and also in reducing economic burden of ill-health. Such measures are generally undertaken at macro level and involve huge externalities and highly justifiable from societal perspective. The main initiative in this arc:

1) Targeting basic civic amenities of slum dwellers: First and foremost for slum dwellers are the drastic need of improvement in basic civic amenities, which include safe disposal of grey water and sanitation facilities. Development of drainage and provisioning of toilet facilities without user charges is the topmost requirement of the slum dwellers. Open defecation needs to be banned after provisioning of adequate quality public toilets free of cost. Infectious diseases among the slum dwellers have large negative externality for city population. Substantial number of slum dwellers can become disease carrier when they provide various domestic services to the city population and are mixing with healthy people on routine day to day activities.

2) Health literacy program: Most of the slum dwellers because of their low level of living and low formal literacy level have poor knowledge of various diseases and good hygienic practises. The health department of Chandigarh may initiate a health literacy program for slum dwellers so as to acquaint them with basic information about various ailments and benefits of desirable knowledge of suitable attitude and good hygienic health practises. Many of their consumption behaviour like smoking, alcoholism, and drug addiction are adversely impacting their health and livelihoods. Therefore by creating awareness regarding these evils can be beneficial for slum dwellers. Involvement of Philanthropic NGOs can be very crucial in creating awareness regarding these evils. The successful model of
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Awareness campaigns of HIV/AIDS can be replicated for drug menace and its problems. Awareness regarding cleanliness and healthy life style can also prove beneficial in mitigating the morbidity. Awareness regarding the equality of the females can also assist in mitigating the gender discrimination against females prevalent among the slums in medical treatment.

3) Periodic surveillance: A multi disciplinary team under the aegis of health department of Chandigarh need to be created for surveillance and monitoring of healthy environment and functioning of basic civic amenities in the slums. A special budgetary provision may be made for this purpose.

Curative measures

1) Accessibility: Despite the presence of many multi-speciality government hospitals, the first encounter of majority of slum dwellers was nearby RMPs. The RMPs were preferred due to less waiting hours and were located nearby. The role of RMPs can be substituted by dispensaries. The dispensaries of slums are make-shift dispensaries functioning for two days of week for few hours. By providing all week day’s dispensary, and also for extended working hours, the role of RMPs can be reduced drastically. This can reduce the overall economic burden of illness and late complication of disease as well.

2) Quality of public health facilities: Despite of the fact that the public health facilities of Chandigarh are considered better than health facilities in other parts of our country, many slum dwellers do not access them due to long waiting hours, non-availability of drugs, lack of information regarding diagnostic tests and fees etc. Due to long waiting hours the indirect costs was very high and therefore by reducing the waiting hours, the indirect cost of illness can decrease. Filling up of vacant posts, reorientation of medical and paramedical staff and need based drug supply are some of the initiative needed for quality improvement of health facilities. Moreover, most of the slum dwellers being illiterate or less educated, waste a lot of time in seeking information regarding the facilities and procedures of the hospitals. A guidance cell; which facilitates the completion of paperwork
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and other formalities, and to guide them regarding all the procedures of the hospitals, can reduce the time cost of the slum dwellers.

3) Drug stores: It was observed during the surveys that medicines are the biggest components of direct medical costs. By introducing the quality generic medicine drug store near or in the slums, the costs burden of illness can be reduced. The model of generic medicine drug store (also called Jan Aushadhi Stores) is running successfully in few states of India like Rajasthan. The same model can be adopted for slum dwellers all over the India. Moreover, drugs of life threatening diseases like cancer are often costly and out of the reach of slum dwellers. The successful model of tuberculosis can be adopted for life threatening illnesses like cancer.

4) Rehabilitation centre: The provision of economical and quality rehabilitation centres for drug addicts and alcoholics can also facilitate the slum dwellers to fight against these evils. The slum dwellers are also not aware of the existing rehabilitation centres in the city. Awareness campaigns regarding rehabilitation can assist in checking the drug addiction problem among the slum dwellers.

Capacity building measures

Unlike the preventive and curative measures, the capacity building measures are undertaken at household level. The identified determinants of coping strategies and consequences of ill-health establish that household capacity and capability play big role to subside the adverse impact of ill-health. Based on the findings, knowledge and experiences gained during the visits to slums, we recommend the following solutions:

1) Income and employment: Evidences from literature and the present study support the argument that economically better households face little problem in coping with cost of illness. Therefore, enhancing the capacity and capability of poor households, definitely minimize the adverse consequences of illness and households can be in better position to cope with cost of illness. Most of the working members of urban poor households are either engaged in low skilled and low paid petty trades or unemployed. Generation of employment opportunities, imparting technical training are expected to increase the income of the households. The discussions with the unemployed youth bring out the fact that the
unemployed never get any information regarding the job opportunities/openings. The NGOs working in Metro cities like Delhi and Mumbai have succeeded in filling up this gap by informing the unemployed urban poor regarding the job opportunities. Such initiative may be win-win situation for all. The same model can be replicated in the second-rung metro cities like Chandigarh.

2) **Women empowerment:** It is evident from the findings of the present study that the discrimination against women in health choices is prevalent among the slum dwellers. The number of working women is also low among the slum dwellers. The steps like self-help groups for women can increase women’s access to credit for consumption and production. Consequently, it may assist in economic empowerment of women in slums. By providing training for skill enhancements can also assist in generating income or can increase their access to employment.

3) **Innovative financing measures:** The findings of the study suggest that households at the time of need tend to borrow, sell assets, or seek assistance for money. By implementing affirmative actions like Self Employed Women’s Association (SEWA) in slums can enable the households in coping with cost of illness. One philanthropic NGO was providing finance to few slum dwellers at the time of need at no interest rate, but their presence and awareness was limited to small area of the slum. Strengthening this kind of NGO and creating awareness regarding these NGO can facilitate the slum dwellers in getting timely assistance and loans. Self-help groups- bank linkages program, as prevalent in rural areas for microfinance, can be replicated for slums as well.

4) **Expansion of Insurance:** Strengthening the affirmative actions like universal free health coverage, Rashtriya Swasthya Bima Yojana (RSBY) can also enable the households in coping with cost of illness. First and foremost task is to create awareness regarding RSBY in slums. The scope of programs like RSBY can be extended not to cover only the cost of hospitalization but also to cover the cost of major illness like cardio-vascular, neurological, and cancer diseases.

5) **Sickness benefits:** One of the big components of economic burden is indirect cost of illness. The findings suggest that to cover the indirect cost of illness, households sometimes force children to drop from school and put them to work.
Moreover, due to breadwinner’s illness, households were vulnerable to adverse socio-economic outcomes. There is no protection mechanism for illness-related income loss. By providing insurance against income losses, the negative impacts of illness shocks can be mitigated. For households with workers engaged in formal sector, apart from ESIC health benefits, the provision of sickness benefits can also beneficial to cope with indirect cost of illness. For households engaged in informal sector, the conditional cash transfers can also be viable option for mitigating the impact of indirect cost of illness.

6) Strengthening social capital: The findings suggest that strong social networks enable coping and households choose less risky strategies. Therefore, building social capital can increase the resilience of the households to encounter adverse impact of illness. The following measures can be taken to build and strengthen the social capital: a) the integration of social capital into public policies can also be done by assessing whether new policies and programs build social capital or not. The social capital considerations should also be included in policy evaluations conducted by government or its agencies. b) the active and willing participation of stakeholders within the community by encouraging community organising, creation of support groups, women’s networks and co-operatives can strengthen social capital (Onyx and Bullen 2000). The local governments are better placed to build social capital through these community based interventions (Warner 1999). c) education and awareness not only capacitate people to fight the communicable diseases but also assist in generation of social capital as there are strong co-relation among the social capital and education level (Putnam 2000). Consequently, pro-poor education policy may assist in strengthening of social capital.

7) Lastly, access to quality basic civic amenities and medical care must be declared fundamental right of the citizens. Government of India proposed National Health Bill, 2009 to declare the medical care as fundamental right of the citizens. However, this crucial bill still need to see light of the day as it require nod of our parliament.