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**QUALITATIVE ANALYSIS OF HOUSEHOLD ECONOMIC BURDEN OF
ILLNESS IN MYANMAR**



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**A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Science Program in Health Economics and Health Care Management**

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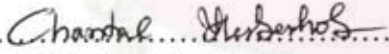
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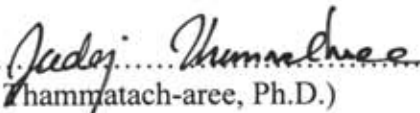

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ภาวะทางเศรษฐกิจในภาคครัวเรือนจากการเจ็บป่วยนั้นเกิดขึ้นมาในประเทศที่มีรายได้ระดับต่ำจนถึงปานกลาง ประเทศพม่าเป็นหนึ่งในประเทศที่การพัฒนาน้อย ที่ยังคงประสบกับความท้าทายในการจัดสรรงบประมาณให้กับระบบสาธารณสุขซึ่งประชากรยังคงเผชิญกับปัญหาภาวะวิกฤตทางการเงินด้านสุขภาพ (catastrophic health care payment) และประเทศนี้ยังคงขาดกลไกของระบบการชำระล่วงหน้า (prepayment mechanisms)

การศึกษานี้ถูกดำเนินการโดยเลือกชุมชน 2 แห่งของเขตย่างกุ้ง (พื้นที่ยากจนระดับต่ำ (และทางตอนเหนือของรัฐฉาน) พื้นที่ยากจนระดับสูง(ของประเทศพม่าความต่างของสองชุมชนนี้ถูกเลือกเพื่อเพิ่มความหลากหลายทางภูมิศาสตร์ วัฒนธรรมและสภาพทางสังคมเศรษฐกิจที่เป็นมีผลต่อพฤติกรรมในครัวเรือนและสถาบันทางสังคมที่ต้องรับมือกับค่าใช้จ่ายทางการแพทย์โดยตรง จากสัมภาษณ์ภาคครัวเรือนโดยการสัมภาษณ์เชิงลึก)key informant interviews (และดำเนินการสนทนากลุ่ม) focus group discussions(เพื่อทำความเข้าใจกับการภาวะทางเศรษฐกิจจากความเจ็บป่วย) economic burden of illness (ของครัวเรือนในประเทศพม่าในกรอบของความซับซ้อนและเปลี่ยนแปลงของค่าใช้จ่ายจากความเจ็บป่วย พฤติกรรมภาคครัวเรือนและผลกระทบจากความเจ็บป่วย

เนื่องจากอุปสรรคทางภาวะเศรษฐกิจในการเข้าถึงการบริการทางการแพทย์ ฉะนั้นครัวเรือนจึงมีความเสี่ยงต่อผลกระทบต่อสถานะทางเศรษฐกิจในครอบครัว และมีแนวโน้มที่จะเกิดเหตุการณ์สูญเสียรายได้ การเป็นหนี้ และสูญเสียทรัพย์สิน ประชาชนมีกลไกในการรับมือกับสถานการณ์เหล่านี้โดยการชำระด้วยแรงงานและยังผลให้เด็กวัยเรียนจำเป็นต้องเข้าสู่การใช้แรงงาน ซึ่งสิ่งเหล่านี้เป็นปัจจัยที่มีผลกระทบต่อสภาพร่างกาย สภาพทางสังคมและทรัพยากรมนุษย์ในครัวเรือนในระยะยาว

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Household level economic burden of illness prevails much of low and middle-income countries. Myanmar, one of the least developed countries, has a challenge of health care financing which is still characterized by the dominance of catastrophic health care payment and the relative lack of prepayment mechanisms.

The study was carried out in selected two rural communities of the Yangon Region (low poverty region) and the Northern Shan State (high poverty region) of Myanmar. These mixes of two extremities are purposely selected to capture the diversities of geographical, cultural and socioeconomic contexts influencing the household behavior and social institution to interact with the illness cost. Based on the household interviews, key informant interviews and focus group discussions the study attempt to explore the economic burden of illness in the context of the complex and dynamic nature of illness costs, household behaviors and illness consequences.

Because of financial barriers to access health care services, the households are at the risk of deteriorating their socioeconomic status and livelihood by a series of event such as income loss, indebtedness, and asset depletion. People use haphazard coping mechanisms such as payment in labor and putting school aged children to workforce. These are the factors weakening the physical, social and human capital of the households in the long run. Strengthening social network and institutions, promoting the household economic resilience to endure the illness shock and implementing demand-side financing schemes are the important dimensions of formulating policy to prevent households from a vicious cycle of illness and impoverishment.

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LIST OF ABBREVIATIONS

CCS	Community Cost Sharing
CSO	Central Statistical Organization
FGD	Focus group discussion
IDI	In-Depth-Interview
KII	Key Informant Interview
LDCs	Least Developed Countries
NGO	Non-Governmental Organization
MOH	Ministry of Health
OOP	Out-Of-Pocket Payment
RHC	Rural Health Centre
UNDP	United Nations Development Program
WHO	World Health Organization



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CHAPTER I

INTRODUCTION

1.1 Rationale

Household level economic burden of illness and out-of-pocket payment on health care prevails in all low and middle-income countries. Health care finance in those countries is still characterized by the dominance of out-of-pocket payments and the relative lack of prepayment mechanisms, such as tax and health insurance.

Health care financing is one the most important option on removing the financial barrier for those who cannot afford to get sick. Developing countries rely heavily on out of pocket (OOP) financing of health care. As a result, households are exposed to the risk of unforeseeable medical expenditures. Then, illness can bring different choices between diverting resources towards medical care or forgoing treatment with the risk of long term deterioration in health and earning capacity (O'Donnell, 2005).

Every year, more than 150 million individuals in 44 million households throughout the world face financial catastrophe as a direct result of having to pay for health care and about 25 million households or more than 100 million individuals are pushed into poverty by the need to pay for health services. When people have to pay fees or co-payment for health care, the amount can be so high in relation to income that it results in "Financial Catastrophe" for the individual or the household. Because of such high expenditure, people have to cut down on necessities such as food and clothing or are unable to pay for their children's education. (WHO technical brief, 2005)

Because of the impact of these out of pocket payments, many people may decide not to use services simply because they cannot afford their direct cost, such as consultation, medicine and laboratory test or the indirect costs, such as income loss, transportation cost and cost for special food. Poor households are likely to sink even further into poverty because of the adverse effects of illness on their earnings and general welfare.

Myanmar, being one of the LDCs¹ is also confronting catastrophic health care payment by the households as a huge and persisting challenge of health care financing policy. National Health Account of Myanmar 1998-2008 (WHO) reveals that share of health sector is merely 2% of GDP. Only 11% of government expenditure goes to the total health expenditure of the country and the rest 89% is accounted by the private health expenditure. People are paying 95% out of pocket as part of the private expenditure. One study of out-of-pocket health care payment in Upper Myanmar shows that poor households have to spend a large fraction of household resources on health care and because of heavy out of pocket medical expenditure most of the household income are absorbed in repeated borrowing and lending mechanisms (Htoo, 2005)

Households being lack of financial risk protection face a risk of incurring large medical care expenditures when they fall ill. This uninsured risk reduces welfare. Further, a household member fall ill, the impact inflicts not only on the sick but it goes to the deterioration of the entire household mechanism. If the healthcare expenses are large relative to the resources available to the household, this disruption to living standards may be considered catastrophic. When the catastrophic illness particularly inflicts on the poor, they are snapped to bear the economic burden of illness.

Understanding the economic burden of illness for the households can inform pro-poor health financing policy. Quantitative studies like household surveys are applicable to the right health policy questions, including the measurement of cost burden indicators. However, such quantitative approaches cannot capture the range of resources and strategies that people mobilize to access commodities and cope with the shocks such as illness. In addition, some important dimensions relevant to policy, such as social actors' responses to cost of illness and household behavior relating to cope with illness costs, cannot be reduced to quantitative indicators at all, and large-scale surveys may overlook context-specific processes operating at household level that influence people's paths in and out of poverty as a result of illness.

¹Least developed countries

The interaction between households and health care is complex and multifaceted. Poor households adapt their healthcare to avoid costs they cannot meet at the risk of deteriorating health. Financial strategies e.g. borrowing and cutting expenditure on other basic needs used to finance healthcare may jeopardize household livelihoods potentially leading to further impoverishment. Non-financial strategies such as intra-household labor substitution and self-modification might weaken household production and capital in the long run. Social resources and local infrastructure (such as transport, availability of healthcare also play a key role in enabling households to manage the consequences of ill-health.

Given the relatively small evidence based and the potentially dramatic impacts of health related costs on household livelihoods from holistic approach, this study aims in order to improve understanding of household experiences, and so provide a basis for developing policies to protect poor households from these drastic burdens.

1.2 Research Questions

1. What is the nature of direct and indirect costs of illness of the household?
2. How do households manage or cope with illness costs?
3. What are the consequences of illness and illness cost on household socioeconomic conditions?

1.3 Research Objectives

General objective

To explore economic burden of illness in the context of the complex and dynamic nature of illness costs and household behaviors

Specific objectives

1. To understand the nature of cost of illness and household health seeking behaviour related to illness cost.
2. To understand various coping mechanisms that households use to cope with the illness cost within and outside the households.
3. To understand the inter-connected factors mediating the economic consequences of ill-health on household socioeconomic conditions.

1.4 Scope of the study

The study is based on qualitative research methods to provide the insight information of how household bear the economic burden of illness. It is carried out from February to March 2011 in two rural communities of Yangon Region (low poverty region) and Northern Shan State of Myanmar (high poverty region). These mixes of two extremities are purposely selected to capture the diversities of geographical, cultural and socioeconomic contexts influencing the household behavior and social institution to interact with the illness cost. In depth interview, key informant interview and focus group discussions are basic research tools used to investigate the household behavior related to costs of illness, coping strategies and consequences of illness.

1.5 Expected benefit

The study will come up with recommendations to mitigate the economic burden of illness for the poor household and formulate the social policy regarding poverty alleviation tailored to the felt-need of the poor. It will also inform the further need of methodological innovations in researching impact of illness at the household level.

1.6 Limitations of the study

There are several limitations of the study. First, there is language barrier in conducting interview at Northern Shan State; therefore there can be bias from the researcher's interpretation of people's responses. Second, some important information can be left that people might not disclose all information because of researcher's unfamiliarity with the community. Third, as the research is conducted under time constraint, it is unable to observe the pattern of illness cost variations over seasonal change and related health seeking behaviour in detail. Fourth, the research is qualitative study alone without incorporating quantitative survey; there is weakness in the applicability of findings to take consideration into policy implication.



CHAPTER II

REVIEW OF LITERATURE

2.1 Economic indicators for the burden of illness

In conventional economics, the burden of illness for which health care simply falls into two broad categories, namely direct and indirect costs. Using this approach, the economic burden of illness can be measured using income and expenditure based concept. It conceptualizes into two related indicators. The first one is health care expenditure as a proportion of household income (direct cost burden) in which Prescott (1999) and Ranson(2002) suggest that health care payments above 10% of annual income as “catastrophic” for household, assuming that above this threshold payment is likely to cause cuts to food consumption, debt and impoverishment. A more refined approach changes the income denominator to that remaining after basic consumption needs have been met (*capacity to pay*) (WHO, 2000). Health expenditure more than 40 or 50% of minimum expenditure is assumed to be “catastrophic” for households. The second indicator of this income based approach is meant by production and income loss from illness as a proportion of normal income (indirect cost burden). Income losses as a result of illness are often more significant cause of impoverishment than direct costs, undermining household member’s command over essential goods and services.

Even so the conventional income and expenditure-based approach is widely used as research tool for out of pocket health care payment studies and poverty impact studies of illness, a number of debates arise that income over the threshold level does not really capture the actual poverty after paying health care cost. Bring to analogy that households have a range of assets portfolios, resources and strategies that have a critical role in a household to cope with the illness.

Sen (1981) states the theory of entitlement that individual’s access to goods and services, or their entitlement set, is determined not only by income but a range of

production, exchange and transfer processes including government services. Moser (1998) reiterates the idea that the asset portfolios at people's disposal, including policy derived resources and fewer tangible assets like social institutions also influence households' ability to cope or their vulnerability or resilience to shocks such as illness

Therefore, the definition of economic burden is broad and dynamic and more relevant to researching poverty impact after taking into account of vulnerability based indicators — asset portfolios, coping mechanisms and livelihood outcomes.

Sauerborn et al (1996a), McIntyre & Thiede (2003) and Russell (2004) support that the economic burden of illness becomes a complex empirical question of whether households can manage cost burdens over time, in terms of continuing work, sustaining consumption and preserving assets and self-esteem, or whether they are pushed towards risky strategies that damage asset portfolios, reduce consumption and threaten the sustainability of the household economy and its existence as a social unit.

After all, it is obvious that cost burden indicators are more easily measured and lend themselves to quantitative research but only capture the potential or likely consequences of illness. Coping and consequences indicators are harder to measure as it needs to use qualitative methods to capture actual processes leading to impact.

Therefore, economic burden is comprehensively redefined as expenditure on seeking treatment (direct cost), production and income losses (indirect cost), related coping strategies, and their consequences for the household livelihood in terms of indicators such as the number of workers and working days, asset portfolios, income and consumption levels.

2.2 Direct costs

Direct costs for medical care is defined by Begley et al., (1999) as “the cost of medical, non-medical, and patient- or family-related resources used to prevent, diagnose, treat, or rehabilitate persons with a disease”. Direct costs of health care include the costs of

health care goods and services, such as payments for consultations (whether official or unofficial), diagnostic tests and drugs. However, these are not the only costs that have to be borne by a patient and their family. The cost of transport to a health facility for the patient, and frequently for an accompanying family member, can be substantial.

Direct cost estimates vary widely across countries and according to the methodology. However, Prescott (1999) and Ranson (2002) classify the health care payments above 10% of income as “catastrophic” for households, assuming that above this threshold payments are likely to cause cuts to food consumption, debt and impoverishment. The following is medical expenditure as percentage of household income in various countries showing the varying level of direct costs as percentage of household income on average.

Table 2.1 Studies showing health care expenditure as % of household income in various countries

Country and source	Health care expenditure as % of household income
Paraguay (Makinen et al., 2000)	2.5
Thailand (Makinen et al., 2000)	3.4
Burkina Faso (Makinen et al., 2000)	4.4
South Africa (Makinen et al., 2000)	4.9
Guatemala (Makinen et al., 2000)	16.0
Burkina Faso (Sauerborn et al., 1996a)	6.2
Uganda – two rural districts (Lucas & Nuwagaba, 1999)	9.3-11
Sri Lanka (Russell, 2001)	6.5

It is useful to compare the direct cost burden of different countries. However, Makinen et al., (2000) study only include direct cost of health care goods and services while other studies contain a broad range of direct cost such as transport and extra

food. Studies in Uganda and Sri Lanka calculate health care expenditure as % of average monthly household income while others studies expressed in % of annual household income. In addition, the distribution of direct costs is highly variable according to health system of each country such as whether or not user fees are charged. It is therefore difficult to generalize results of such context-specific findings.

An empirical study in Ghana done by Asenso-Okyere and Dzator (1997) suggests that the cost of drugs often contribute a sizeable share of direct costs. For example, drugs accounted for 62% of direct costs for mild malaria and 70% for severe malaria. Similarly study by Babu et al., (2002) shows that drugs contributed 63% of the costs of treating lymphatic filariasis in India. Russell (2001) again highlights the significant of drug cost in Sri Lanka that an average of all health care direct costs, irrespective of type of illness, drugs accounted for 33% of total cost.

Some non-medical direct costs that are often not taken into account, such as costs of nutritious food for a sick family member and the costs of accommodation and food for an accompanying household member, can also be considerable. Babu et al.,(2002) affirm that these 'non-medical' direct costs were found to be as high as 18% in India for chronic lymphatic filariasis, 27% and 24% respectively for normal and caesarean section deliveries in the study of Nahar and Costello(1998)in Bangladesh and 46% for malaria treatment in by Attanayake et al., (2000) in Sri Lanka.

In summary, most of the studies based on household survey methods are well-designed to measure the illness cost indicators. However, there are a variety of substantial cost items which can be overlooked. The cost items may remain undisclosed by the respondents such as variations in illness costs, cost related to indigenous and ritual based treatments, hidden cost of food and transport and multiple cost items of treatment seeking.

2.3 Indirect costs

While direct costs only focus on financial consequences, the inclusion of indirect costs allows for a more comprehensive review of all economic consequences. Indirect costs include productive time losses to the person who is ill and to other household members. Those who are ill may incur lost productivity costs when they seek care (time travelling to and from the facility and time waiting to be examined, for a diagnostic test to be performed or for medicines to be dispensed), or when they are so ill that they cannot work. Other household members may also incur lost productivity costs when they accompany a sick person in seeking care or when they engage in home-based care-giving.

However, indirect costs are less frequently quantified in cost of illness studies than direct costs, partly due to the methodological challenges of obtaining accurate indirect cost estimates. Indirect costs differ considerably, both in absolute terms and relative to direct costs.

Chronic illnesses can impose a considerable indirect cost burden on households. A study in India, Babu et al., (2002) found that chronic lymphatic filariasis patients lose up to 19% of productive workdays per year. Lost productive time costs are not only experienced by those who are ill, but also by other household members. Another study in Zimbabwe by Hansen et al., (1998) show that the impact of illness on the household can be particularly severe in long-term terminal illness such as AIDS. Another study in Myanmar (Min Nwe Ni et al., 1998) on socioeconomic impact of AIDS on households shows that indirect cost (loss of income) per month is 2.17 times the direct cost of illness.

While other studies emphasize on indirect cost of a particular disease, Sauerborn et al., (1996a) included all illnesses and comprehensively states that the time costs of healthy household members are often as large as the time costs of those who are ill.

No empirical evidence could be found on the indirect cost of illness for those who do not seek care. This is an area that needs further research studies.

In summary, indirect costs are frequently ignored in studies because of methodological challenges to capture the estimates. However, there is considerable evidence that these costs are not insignificant. It is possible to highlight the role of indirect cost by qualitative field studies of the household illness events.

2.4 Overall cost burden of illness

When one combines the direct and indirect costs of illness, the total economic effect of illness on households is found to be above 10% of household income.

For example, Leighton and Foster (1993) calculate the total household costs of malaria per year which is as much as 18% of annual income in Kenya and 13% in Nigeria, and nearly 19% of annual income in Brazil by Sawyer(1993). Russell, (2001) take account of the costs for all forms of illness totaled 11.5% of monthly household income in Sri Lanka, and similar result is found by Onwujekwe et al., (2000) in Nigeria that about 11% of average monthly income.

There are evidences that total economic costs impose a heavier burden for the poorest households. It is proved by Ettlign et al., (1994) that the average total costs of malaria were 7.2% of annual household income in Malawi, and they were equivalent to 32% of household income in the lowest income households, even though the absolute value of these costs for the poorest households of \$25 per annum was lower than the average of \$40. It is again highlighted by Russell (2001) that the skewed distribution of illness costs exists particularly between different socio-economic groups. While total illness costs were 11.5% of monthly income on average, 65% of households faced a total cost burden of 5% of income or less, while 5% of households had an illness cost burden exceeding 40% of income. For the lowest income quartile of households, nearly a quarter had an illness cost burden exceeding 10% of income, whereas only 18% of the highest income quartile was in a similar position.

Many of the studies show that the economic burden of illness has significant impact on the household's income which might push the households below the poverty line as a result of lowered income after incurring total cost of illness. However, there is a research gap in the comprehensive assessment of overall socioeconomic conditions of household before and after the consequences of illness.

2.5 Health seeking behaviour

Health seeking behaviour is part of a wider concept, health behavior. Health behavior includes all those behaviors associated with establishing and retaining a healthy state. For the purposes of planning health programs, the health seeking behaviour, which is of interest, is more specifically the use of health facilities. Successful interventions will depend on their acceptability and accessibility, both of which relate to broader social factors than simply decisions about "going to the doctor" (GPA/WHO, 1995).

Babar T. Shaikh (2008) proposes the concept of health seeking behavior based on the understanding of how people employ the health system in their respective socio-cultural, economic and demographic circumstances. All these behaviors actually define social position of health and provide better understanding of disease process.

A study in Myanmar found the gender differences in health seeking behaviour and perception among tuberculosis patients (Han Win et al., 2005). The study shows that there is no difference in knowledge between men and women but delayed seeking care and diagnosis is significantly longer in women as they perceives having tuberculosis as a stigma.

It is therefore imperative to study the impacts of all the determinants such as ethnicity, education, gender, or economics of a community. To build a responsive health system, there is a strong need to understand health seeking behaviors on the demand side and that is the only way to expect improved health outcomes.

Role of socioeconomic characteristics in health seeking

Babar.T.Shaikh& Hatcher (2004) review studies in the health seeking behaviour and health service utilization in Pakistan and state that low socioeconomic conditions not only excludes people from the benefits of health care system but also restricts them from participating in decisions that affect their health.

Knut Lönnroth et al., (2006) studied the utilization of social franchising of TB care through private practitioners in Myanmar and found that people from the lower socioeconomic groups represented 68% of the TB patients who access care at the franchise clinics because of the low cost of care.

A research done in South Africa shows that income significantly affects the pattern of health care utilization (Swanepoel& Stuart, 2006). Once again, a study in Uganda by Lawson (2004) also states that the household resource base and availability of funds are important determinants of health seeking behavior.

A study of health seeking behavior in Kenya indicates that income significantly influenced the choice of facility, the higher the income, the higher the tendency to shift to non-public facilities (Ngugi, 2000).

In summary, socioeconomic characteristics are the influencing factors in making decision by people to seek care and choice of seeking place. However, the process of decision making is complicated and it can be predetermined by people's preference and quality of care. Therefore, this area needs further researches to explore.

Accessibility to health care service and health seeking behavior

Accessibility to health services plays an important role in determining the health seeking behaviors of individuals. Rajaruma et al., (1996) studied the health seeking behaviour, availability of health facility and knowledge on Tuberculosis in India. In this study, the availability of increased health facilities and accessibility to health

personnel contributes to the change in the people's attitude towards the disease and health seeking behavior.

Again in study of Babar T. Shaikh & Hatcher (2004) in Pakistan mentioned that the availability of transport, physical distance of facility and time taken to reach the facility undoubtedly influence the health seeking behavior and health service utilization.

Kinda et al, (2007) studied the health seeking behavior of human brucellosis cases in rural Tanzania. In this study, distances to hospital, among other factors, is significantly associated with patient delay to present to hospital.

Aung (2008) assessed on the health seeking behaviour among cross-border migrants from Myanmar in Thailand. Results indicate an interesting finding that two thirds of the migrants are unregistered to universal health coverage scheme and the lack of awareness for registration deters the accessibility to government health facility and escalates the health care costs by seeking at private clinics.

In summary, it can be seen that health seeking behaviour of the individuals relies on various social and economic factors and accessibility to health facilities as well. However, most of the studies examine the individual heterogeneous characteristics influencing the health seeking behaviour in terms of utilization or attendance at a health facility. Further researches need to explore health seeking behaviour of the households regarding health care choice, allocation of time and financial resources.

2.6 Household strategies for coping with illness

Clearly, households are confronted with a variety of direct and indirect costs of illness. The structure of health care and financing system in the specific country setting, the type and duration of the individual health problem, the socioeconomic status, and social resources of the people decide the economic burden of illness borne

by the individuals and households. An array of literature expresses this perspective in terms of how individuals cope with the social and economic costs of disease.

Coping strategies are defined in various disciplines in various ways. Mutyambizi, (2002) defines coping as responses to crises, adapted within the prevailing system of rules. Other authors including Davies (1993) and Gore (1992) define coping in another way as a short term strategy adopted within the prevailing value system to avert a negative effect on the actor. Therefore, coping does not include strategies that adapt rule systems to meet livelihood need such as theft and illegal activities.

As Goudge and Govender (2000) point out in their literature review on household ability to cope with resource demands of ill health and health care utilization, households use a range of strategies to cope with the direct and indirect costs of illness. Within the literature, a range of analytical approaches are used in an attempt to order a plethora of complex qualitative and quantitative data, and to draw out some lessons and generalizations. These approaches have different emphases, and depict different aspects of a complex situation.

Strategies to cope with direct cost

Financial coping strategies, stated by Morduch (1995), are intended to protect current consumption from an economic shock such as drawing on savings, depletion of assets, borrowing and transfers from family and relatives are types of these strategies.

Many studies show poor households are not capable to meet the financial cost of illness. Studies done by Kabir et al (2000), Sauerborn et al (1996b) and Wilkes et al., (1997) state that that only a small percentage of households are capable of meeting the financial costs of illness by using cash or savings. Mutyambizi (2002) highlight from the study in Zimbabwe that less than ten percent of households confronted with high direct costs for medical treatment use savings to cope with the economic burden, indicating a low incidence of household savings; moreover, the confrontation with treatment costs often leads to households reducing their general consumption.

One study in Myanmar by Min Nwe Ni et al., (1998) shows that households of AIDS patients are having big financial hardship from the cost of medical care. In this study, the direct cost is coped by the financial support of patient's sisters, brothers and relatives, by household savings and by selling household assets.

The sale of assets as a means of increasing household liquidity is a strategy that ranks differently in the coping strategy hierarchy between and within countries, depending on the socio-economic and cultural context. Some studies particularly highlight differences between a country's rural and urban areas. For example, a study done in Ghana reports that the value of assets sold in order to cover costs of illness was higher in urban than in rural areas; in urban areas assets sold include clothing, televisions, automobile parts, jewellery, shoes, typewriters and miscellaneous trading items, whereas in rural areas households mainly sold food items (Mock et al., 2001).

While selling assets is placed among the more common strategies in rural Burkina Faso, where livestock actually serves as an "ambulatory savings bank" stated by Sauerborn et al., (1996b), however, it is not common in rural China (Wilkes et al., 1997), and in urban Bangladesh (Kabir et al., 2000) where the sale of assets are regarded as uncommon response to the financial demand of illness.

Clearly use of this strategy depends on the availability of assets and the fact that different assets exhibit different characteristics with regard to their salability and their importance to the socio-economic stability of the household.

Russell (2005) emphasis on the most frequently used strategies are reviewed below followed by a consideration of the factors that influence household's choice between alternative coping strategies.

Table 2.2 Sequences of coping strategies in relative to risk levels

Common sequences and levels of risks	Strategy	
	Mobilize resources	Adjust spending
<p>Frequently used and convenient strategies of low cost or risk to livelihood.</p> <p style="text-align: center;">↓</p> <p>High costly strategies</p>	<p>Credit from local shop or seller for essential food and fuel items.</p> <p>Seek/accept financial gifts from close family, relatives or an employer</p> <p>Use of financial assets such as savings</p> <p>Borrow small sum at no or low interest from friends and family, work colleagues, NGO credit society.</p> <p>Borrow small sum at high interest from money lender.</p> <p>Rent out room, taking a year's rent as deposit</p> <p>Pawn jewellery</p> <p>Diversify income; spouse or oldest child seeks work.</p> <p>Borrow small sum at no or low interest from relatives or employer.</p> <p>Borrow large sum at high interest from moneylender.</p> <p>Sell any productive assets</p>	<p>Delay payments for electricity and water bills</p> <p>Delay repayment of loans</p> <p>Delay redemption of pawned jewellery.</p> <p>Cut spending on social events.</p> <p>Cut spending on school items (books) or extra tuition.</p> <p>Cut spending on expensive food items</p> <p>Cut other food consumptions, from three to one or two main meals per day</p>

Strategies to cope with the indirect cost

There is also a range of strategies employed in order to counterbalance indirect costs of illness. Tasks are re-allocated among household members (intra-household labour substitution), and in some cases external labour is hired or advantage is taken of free community labour if available. In rural settings, some households shift to less labour-

intensive crops or change the capital-labour mix of production. Again, the choices are subject to availability in the specific context.

Intra-household labour substitution is the most frequently adopted strategy for dealing with the indirect consequences of ill-health. There may be drastic social consequences of intra-household labour substitution, particularly when children are expected to take on the work activities of a sick parent. The medium- and long-term economic and social effects of taking children out of school or postponing school registration requires further research. Mutangadura et al., (1999) report that girls in sub-Saharan Africa are more likely to be taken out of school than boys, imposing a setback to the chances of young women to receive an adequate education.

However, this strategy may not be able to address the full indirect consequences of ill-health. A household survey focusing on the burden of malaria in Sri Lanka by Attanayake et al.,(2000) shows that even while about 19% of economically active patients' work was performed by other household members, a quarter of the economically active malaria patients had to hire labour to undertake their normal activities while ill.

In summary, households coping mechanism vary according to country context and nature of illness costs. It is found that there is a mix of both quantitative and qualitative methodologies in assessing the household coping strategies. Studies from small-scale qualitative studies are restricted in geographic coverage; however, it is useful to capture some important coping practices.

2.7 Coping strategies and poverty dynamics

Coping strategies seem to play a crucial role in the dynamics around the poverty line. As these strategies relate to a particular crisis, they are essentially short-term in nature and are generally not sustainable.

Davies (2003) explains that coping strategies are not based on the concept of risk-pooling among a group of individuals, such as community prepayment schemes; but involve either a direct reduction of household wealth, a reduction of food consumption or an accumulation of financial obligations, usually a combination of these outcomes. Consequently, the household's situation after coping must be compared, in terms of its economic robustness, with the situation before the onset of the disease.

The vicious cycle between poverty and illness has been reviewed by Yeo (2001). It is bolstered by limited access to education and employment, to land and shelter, to health care, healthy food and sanitation. This leads to the acceptance of hazardous working conditions, to unhygienic, overcrowded living conditions and to malnutrition. Hence, the risk of illness, accident and impairment for the poor is higher than for the non-poor. Illness then leads to further exclusion, income loss and poverty.

Very poor households find that some of the strategies of coping with costs of illness adopted by others are not accessible for them. Since they cannot provide security, the poorest often face unfavorable terms for taking up loans in order to pay for medical treatment stated by Kabir et al., (2000). It is affirmed by (Pryer, 1989) that the very poor also do not have access to social resources such as informal insurance schemes.

The risk of poverty as a result of unsustainable coping seems high. Studies describe a downward spiral that may well drive vulnerable households below the poverty line. A Tanzanian study of the economic welfare of household's confronted with costs of illness by Tibaijuka (1997) shows that coping pushed 9 out of 10 households into a lower income bracket.

It is obvious that household responses to the burden of illness shape poverty dynamics significantly. Unfortunately, poverty has hardly been conceptualized in the studies dealing with the economic burden of illness. Yet studies on the economic impact of illness on households support the hypothesis of a medical poverty trap. Future research needs to trace poverty dynamics as a result of health events over time.

CHAPTER III

BACKGROUND INFORMATION

The background information of Myanmar is separated as a chapter to elaborate country specific information about general background, health care services, health care financing, vital health statistics and selected poverty characteristics of Myanmar. General background information is gathered from the Statistical Year Book of Myanmar 2009 and health related information is taken from Health in Myanmar 2009. Poverty characteristics information is taken from Integrated Household Living Conditions Survey of Myanmar conducted in 2008.

3.1 General background of Myanmar

Location

The Republic of the Union of Myanmar is located in the mainland South East Asia with a total land area of 676,578 square kilometers (261,228 square miles). It stretches 2200 kilometers from north to south and 925 kilometers from east-west at its widest point. It is bounded in the north and north west by the People's Republic of China on the east and south east by the Lao People's Democratic Republic, and the Kingdom of Thailand, on the west and south by the Bay of Bengal and Andaman Sea, on the west by the People's Republic of Bangladesh and the Republic of India. It lies between 09° 32' N and 28° 31' N latitudes and 92° 10' E and 101° 1' E longitudes. (Statistical Year Book, 2009).

Geography

Myanmar is divided administratively into 14 States and Regions. According to statistics in the year 2008, it consists of 63 districts, 324 townships, 2689 wards, 13730 village tracts and 65003 villages. Myanmar falls into three-well-marked natural divisions, the western hills, the central belt and the Shan plateau on the east, with a continuation of this high land in the Taninthayi. Three parallel chains of mountain

ranges from north to south divide the country into three river systems, the Irrawady, the Sittaung and the Thanlwin. Myanmar is rich of natural resources but great diversity exists between the regions due to the rugged terrains in the hilly north which makes communication extremely difficult. In the southern plain and swampy marshlands there are numerous rivers and tributaries of these rivers criss-cross the land in many places. (Statistical Year Book, 2009)

People and religion

The Republic of the Union of Myanmar is one of the world ethnically diverse nations with 135 officially listed ethnic groups. These are grouped into eight national ethnic races. The major ethnic races are Kachin, Kayah, Kayin, Chin, Mon, Bamar, Rakhine and Shan. Seven states of the country belong to each ethnic race except Bamar which is the dominant inhabitants spread throughout the country.

Of the country population of 58 million, Bamars are the majority ethnic group which occupies 68% of the total population, followed by Shan (9%) the largest minority group, Karen (7%), Rakhine (3.5%), Mon (2%), Kachin (1.5%), Chin (1%) and Kayah (0.75%). Chinese and Indian can be counted as overseas minorities which constitute 2.5% and 1.25 % of the population, respectively. Sub-minorities groups including Danu, Aka, Kokant, Lahu, Naga, Palaung, Pa-O, Wa and others including unrecognized minority groups (e.g. Rohingya) contribute to the substantial part of population.

About 89% of the population embraces Buddhism (Theravada Buddhism); 4 % of the population practices Christianity; 4 % Islam; 1 % traditional animistic beliefs; and 2 % follow other religions, including Mahayana Buddhism, Hinduism, East Asian religions and others.

Demography

The population of Myanmar in 2008-2009 is estimated at 58.38 million with the growth rate of 1.52 percent. About 70 percent of the population resides in the rural areas, whereas the remaining are urban dwellers. The population density for the whole country is 86 per square kilometers and ranges from 666 per square kilometers in Yangon Region, where in lies the city of Yangon, to 15 per square kilometers in Chin State, the western part of the country. (Statistical Year Book, 2009)

Table 3.1 Estimates of population and its structure (1980-2008) in millions

Population Structure	1980-81		1990-91		2000-01		2007-08		2008-09	
	Esti mate	%	Esti mate	%	Esti mate	%	Esti mate	%	Esti mate	%
0-14 years	13.3	38.7	14.70	36.05	16.43	32.77	18.7	32.30	18.87	32.32
15-59 years	18.44	54.86	23.47	57.55	29.72	59.29	33.87	58.90	34.38	58.89
60 years and above	2.14	6.37	2.61	6.4	3.98	7.84	5.06	8.08	5.13	8.79
Total	33.61	100	40.78	100	50.13	100	57.50	100	58.38	100
Female	16.93	50.37	20.57	50.28	25.22	50.31	28.92	50.29	29.35	50.27
Male	16.68	49.63	20.21	49.72	24.91	49.69	28.58	49.71	29.03	49.73
Sex ratio (M/100F)	98.52		98.25		98.77		98.85		98.91	

Source: Ministry of National Planning and Economic Development, Myanmar

Economy

Myanmar is a country with a large land area rich in natural and human resources. Cognizant of the fact that the agricultural sector can contribute to overall economic growth of the country the government has accorded top priority to agricultural development as the base for all round development of the economy as well. Following the adoption of market oriented economy from centralized economy; the government has carried out liberal economic reforms to ensure participation of private sector in every sphere of economic activities. Encouragement for the development of the industrial sector has been provided since 1995. In order to support and to render assistance to small and medium size industries scattered all over the countries in an organized manner, the government has established 19 industrial zones in States and Regions.. (Statistical Year Book 2009)

Table 3.2. Gross domestic products (Kyats in millions)

GDP	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Current	5625254.7	7716616.2	9078928.5	122866765.4	16852747.8	23331693.2
Constant Producers' Prices	3184117.3	3624926.4	4116635.4	4675219.6	13893395.3	15551477
Growth (%)	12.0	13.8	13.6	13.6	13.1	11.9

Source: Statistical Year Book 2009, CSO

Note: Based on official exchange rate (1US\$ = 6.456 kyats), however, the market exchange rate would be around (1US\$ = 800kyats).

Social Development

Development of social sector has kept pace with economic development. Expansion of schools and institutes of higher education has been considerable especially in the States and Regions. Adult literacy rate for the year 2005 was 94.1% while school enrolment rate was 97.58%, increasing respectively from 79.7% and 67.13% in 1988. With prevalence of tranquility, law and order in the border regions, social sector development can be expanded throughout the country. Twenty four special development regions have been designated in the whole country where health and education facilities are developed or upgraded along with other development activities. Some towns or villages in these regions have also been upgraded to sub-township level with development of infrastructure to ensure proper execution of administrative, economic and social functions..(Statistical Year Book, 2009).

3.2 Health care services in Myanmar

Myanmar health care system has a pluralistic mix of public and private system both in the financing and provision. Some ministries are also providing health care, mainly curative, for their employees and their families.

In Ministry of Health, infrastructure for service delivery is based upon sub-rural health centre and rural health centre where Midwives, Lady Health Visitor and Health Assistant are assigned to provide primary health care to the rural community. Those who need special care are referred to Station Hospital, Township Hospital, and District Hospital and to Specialist Hospital successively. At the State/Regional level, the State/Divisional Health Department is responsible for State/Regional planning, coordination, training and technical support, close supervision, monitoring and evaluation of health services. At the peripheral level, i.e. the township level actual provision of health services to the community is undertaken.

The Township Health Department forms the back bone for primary and secondary health care, covering 100,000 to 200,000 people. In each township, there is a township hospital which may be 25 or 50 bedded depending on the size of population

of the township. Each township has at least one or two station hospitals and 4-7 RHCs (Rural Health Centre) to provide health services to the rural population. Urban Health Center, School Health Team and Maternal and Child Health Center are taking care for urban population, in addition to the specifically assigned functions. Each RHC has four sub-centers covered by a midwife and a public health supervisor grade 2 at the village level. In addition there are voluntary health workers (community health worker and auxiliary midwives) in outreach villages providing Primary Health Care to the community.

The private, for profit, sector is mainly providing ambulatory care though some providing institutional care has developed in Yangon, Mandalay and some large cities. They are regulated in conformity with the provisions of the law relating to Private Health Care Services. The private, for non-profit, which is another sector also providing ambulatory care though some providing institutional care has developed in large cities and some townships. Hospitals of non-profit sector mostly belong to religion and faith based organizations. Some local non-governmental organizations funded by community donations provide occasional ambulatory care to remote area where there is poor access to health care services. (Health in Myanmar 2009)

3.3 Health care financing in Myanmar

The sources of fund for health sector in Myanmar come from government tax revenue, social health insurance, community contribution, households and external resources.

Table 3.3 National health account of Myanmar (2004-2008)

Expenditure on health	2004	2005	2006	2007	2008
Total expenditure on health (THE) as % of GDP	2.3	2.1	2.1	1.9	2.1
External resources on health as % of THE	10.9	7.3	10.9	7.6	9.0
General government expenditure on health (GGHE) as % of THE	13.5	9.0	14.4	11.7	10.8
General government health expenditure (GGHE) as % of General government expenditure	1.2	0.8	1.2	0.9	0.9
Private expenditure on health as % of THE	86.5	91.0	85.6	88.3	89.2
Out-of-pocket expenditure as % of private expenditure	98.2	99.2	94.9	95.1	95.5

Source: WHO

Table 3.4: Government Health Expenditure (1988-89 to 2008-2009)

	1988-89	2006-07	2007-08	2008-09
Health Expenditure (million kyats)				
- Current	347.1	36497.3	38414.2	41490.8
- Capital	117.0	10717.6	10371.3	10184.1
Total	464.1	42149.9	48785.5	51674.9
Per Capita Health Expenditure (kyats)	11.8	835.4	848.4	885.2

Source: Health in Myanmar (2009) MOH, Myanmar

Social security system

Social security scheme was implemented in accordance with 1954 Social Security Act by the Ministry of Labour. According to the law factories, workshops and enterprises that have over five employees whether State owned, private, foreign or joint ventures, must provide the employees with social security coverage. The contribution is tripartite with 2.5% by the employer 1.5% by the employee of the designated rate while the government contribution is in the form of capital investment. Insured workers under the scheme are provided free medical treatment, cash benefits and occupational injury benefit. The insured population under social security scheme is few because of over 70% of country's population are residing in rural areas and work in informal sector, specifically the agricultural sector.

Table 3.5 Social security funds as (%) of GGHE

Expenditure on health (%)	2000	2001	2002	2003	2004	2005
Social Security Funds % of General Government Health Expenditure (GGHE)	3.1	3.3	2.5	2.2	1.5	2.1

Source: WHO

Community financing

Community Cost Sharing (CCS) approach in Myanmar has been implemented since 1989. It dictates the user fee system in which those who can afford have to pay the cost for curative health care services. According to CCS scheme the cost for laboratory, radio imaging, private room, drug, medical equipment are paid by the patient who can afford. Next to CCS is the Trust Fund from community donation. Trust funds for drugs are established in some hospitals by the donation of well

wishers. One of the main objectives of trust funds is to finance the cost for waiving poor patients who cannot pay for the costs of care at public hospital. The exact amount for community contribution has not been calculated yet in terms of monetary value because there is still a weak system for recording all community donations.

3.4 Vital Health Statistics of Myanmar

Table 3.6 Vital Health Statistics of Myanmar

Health Index	2002	2003	2004	2005	2006	2007
Crude Birth rate (per 1,000 population)						
-Urban	21.2	19.9	19.1	19.0	19.0	18.4
-Rural	24.6	22.4	22.0	21.9	21.5	21.2
Crude Death rate (per 1,000 population)						
-Urban	6.1	5.6	5.5	5.5	5.3	5.3
-Rural	7.0	6.5	6.4	6.4	6.3	5.9
Infant Mortality Rate (per 1,000 population)						
-Urban	48.4	45.3	45.2	45.1	44.9	43.4
-Rural	50.7	47.1	47.1	47.0	45.9	46.3
Maternal Mortality Ratio (per 1,000 population)						
-Urban	1.1	0.98	0.98	0.96	0.96	0.94
-Rural	1.9	1.52	1.45	1.43	1.41	1.36
Population Growth Rate	2.02	2.02	2.02	2.02	2.02	1.75
Average Life Expectancy						
-Urban	63.9	64.1	64.4	64.5	65.1	66.5
-Rural	62.5	62.7	63.1	63.4	63.9	65.1

Source: *Health in Myanmar 2009*. MOH, Myanmar

3.5 Selected poverty characteristics of Myanmar

Socioeconomic status of the household plays a critical role in assessment of the economic burden of illness. To highlight some dimension of interaction between household poverty and illness, some characteristics of the poor households of Myanmar are mentioned in this section. That information is taken from Integrated Household Living Condition Survey 2008 conducted by joint venture of Ministry of Planning and UNDP Myanmar.

Poverty profile of Myanmar

The poverty profile of Myanmaris based on the poverty line that is 162 136 kyats per adult per year in the year 2008 (based on market exchange rate, this is equivalent to202.67 US\$) per adult per year.

Table 3.7 Poverty profile of states and regions in Myanmar

States, Regions and Union	Rural		Urban		Total	
	Incidence (%)	Rank	Incidence (%)	Rank	Incidence (%)	Rank
Kayin	12	1	8	1	12	1
Yangon	17	2	14	2	15	2
Mon	21	3	23	5	22	3
Sagaing	27	4	22	4	27	4
Ayeyarwaddy	30	6	24	8	29	5
Bago (E)	30	5	35	14	31	6
Kayah	38	9	26	12	34	8
Tanintharyi	37	8	21	3	34	9
Rakhine	41	10	26	9	38	10
Mandalay	45	13	24	7	39	11
Shan(S)	44	12	26	11	40	12
Magwe	44	11	26	10	42	13
Kachin	47	14	38	16	44	14
Shan (N)	55	15	35	13	51	15
Shan (E)	56	16	37	15	52	16
Chin	81	17	46	17	73	17
Union	36		22		32	

Source: UNDP, Myanmar

Average household size

Household size is an important correlate of poverty. Average household size, i.e., average number of individuals in the household, at Union level is 5.2 with a slightly higher household size in rural areas than in urban areas (5.2 and 5.1, respectively).. Poor households are larger than non-poor households at 6.1 and 4.9 members respectively.

Economic dependency ratio

The economic dependency ratio provides information on the number of economic dependents compared to the number of economically active persons in the household. It is measured by dividing the number of non-working members in the household by the number of working members in the household. The economic dependency ratio at Union level is 0.46. It is slightly higher in rural areas (0.47) than in urban areas (0.42). The highest economic dependency ratios are found in Shan East and Shan North while the lowest ratio is found in Rakhine.

Education of head of the household

At Union level, 20.1% of household heads are illiterate. This proportion is higher in rural areas with 23.4% of household heads who are illiterate compared to 11.1% in urban areas. The level of education is higher among household heads in urban areas than in rural areas with 11.9% having attended post-secondary education compared to 1.3% in rural areas. A higher proportion of female household heads (37.6%) are illiterate than male household heads (16.1%). Education of the household head, especially literacy of the household head, is an important dimension of poverty. Illiteracy rates for poor household heads are close to double those of non-poor household heads at 28.3% and 17% respectively. Further, the percentage of poor households who have never attended school or attended only Monastic schools is 42.3%, compared to 27.7% for non-poor households.

Household business activity

Agriculture is the main industry in Myanmar, employing over 50% of the working population. It is followed by wholesale and retail trade, and repair with 11.6% of the working population, manufacturing with 7.4% and real estate, renting and business activities with 5.8% of the working population. In rural areas, agriculture employs 64.3% of the working population. There is a strong association between agriculture and poverty. The proportion of individuals from poor households working in agriculture is 59.4%, compared to 45.8% for non poor households. The highest proportion of the working population engaged in agriculture is found in Chin, Shan South, Shan North and Magwe, while the lowest proportion is found in Yangon.



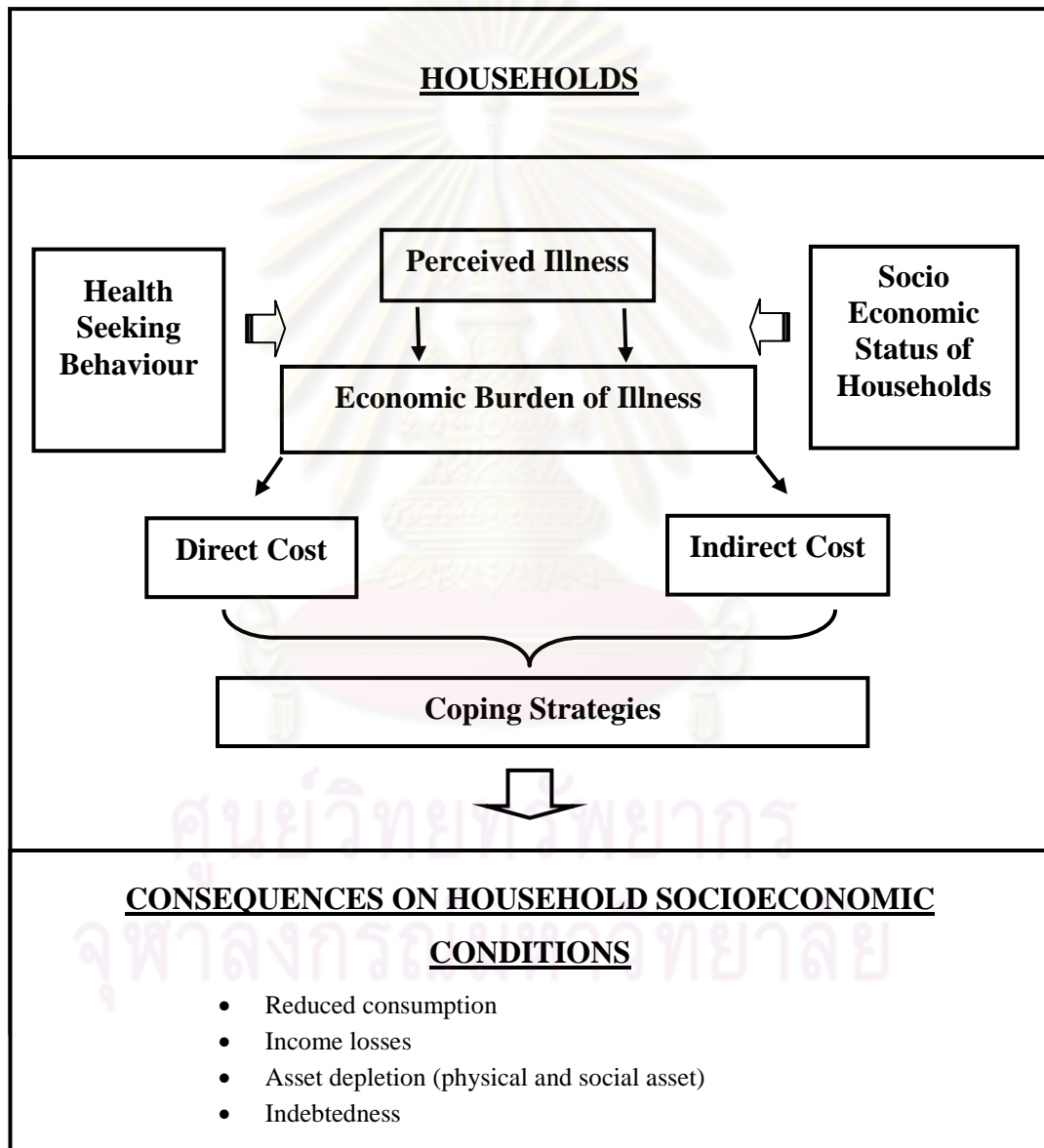
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CHAPTER IV

RESEARCH METHODOLOGY

4.1 Conceptual framework

Figure 4.1 Conceptual framework

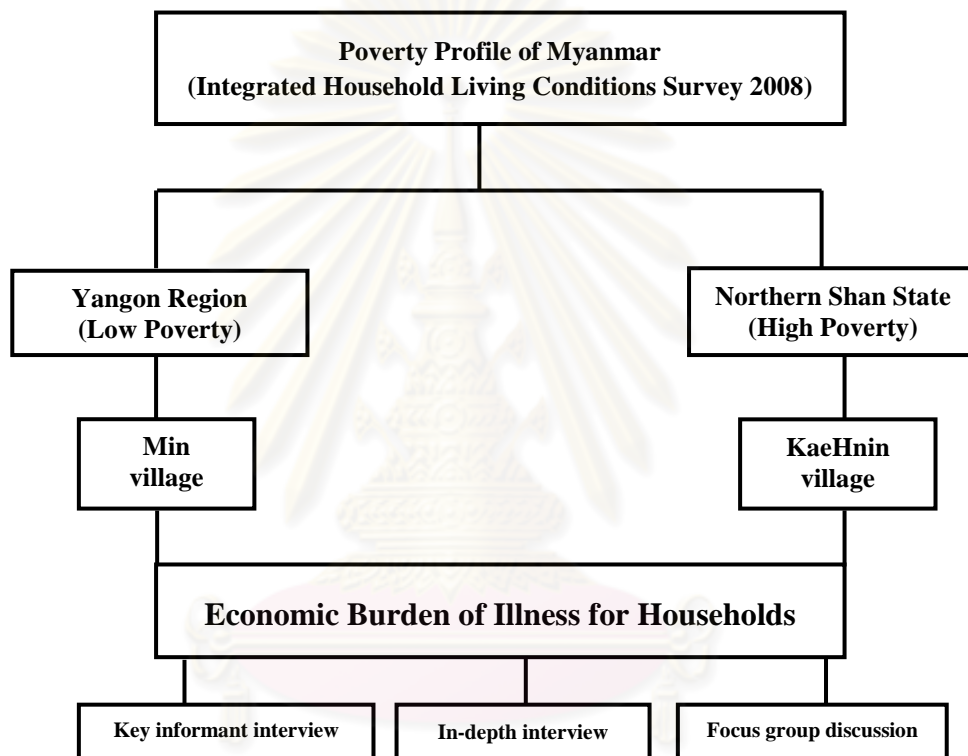


4.2 Type of study

This study is cross-sectional descriptive study.

4.3 Study design

Figure 4.2 Study design



The study is qualitative research to investigate household economic burden of illness. Qualitative design is chosen in line with the research objective. The study is aimed at understanding the complexity of household level economic burden of illness rather than measuring cost indicators. Households are selected from two villages of Yangon Region and Shan State of Myanmar. The reasons for choosing these two regions are explained below. Interactive interviewing, including in-depth interview (IDI), focus group discussion (FGD) and key informant interview (KII) are used in data collection process.

4.4 Study sites

The study is conducted in rural communities of two provinces of Myanmar.

- Min village tract (Yangon Region)
- KaeHnin village tract (Northern Shan State)

These areas are selected according to Integrated Household Living Condition Survey 2008 joint conducted by Ministry of Planning and UNDP-HDI project in Myanmar. The poverty profile of Myanmar is based on the poverty line that is 162 136 kyats (which is equivalent of 326.69 USD) per adult per year.

Yangon is the metropolitan city of Myanmar and it is one of the lowest poverty regions meanwhile Northern Shan State is the second highest poverty area of the country in which five minority ethnic races are also resided.

These mixes of two extremities are purposely selected to capture the diversities of geographical, cultural and socioeconomic contexts influencing the household behavior and social institution to interact with the illness cost.

Min village and KaeHnin villages are selected among the village tracts for two reasons. First, the rural health centre for the village tract is located and the key informant (health assistant responsible for RHC) is also resided in these villages.

4.5 Study period

The fieldwork is conducted from February 15 to March 30 2011.

4.6 Sampling frame

Table 4.1 Sampling frame of the study

		In-depth Interview	Key Informant Interview	Focus Group Discussion
Type of sampling		Purposive sampling	Purposive sampling	Dimensional sampling
No. of respondents	Min Village	Ten households	Two key informants	Two sessions of six participants
	KaeHnin Village	Ten households	Two key informants	Two sessions of six participants
Characteristics of respondents		Households of having past experience of illness within 12 months or as indicated by KII	Community leader Of the village and Health Assistant of Rural Health Centre (RHC)	Big households (more than five members) of having over half of non-productive members

4.7 Data collection

Data are collected using in-depth interview (IDI), key informant interview and focus group discussions (FGDs). Open-ended, semi-structured and unstructured questions are conducted on the basis of face to face interviews. Audio-tape recording is used in adjunct with critical note taking for focus group discussions, FGD and IDI guidelines, key structural questions and probing questions are developed.

Key-Informant interview

Key informant interviews are done on community leader or the key informant villager to capture the particular cases and familiarize the overall situation. Health assistant in the locality is interviewed to explore the household behaviors dealing with illness.

In-depth interview

In-depth interview is done on households to explore the overall picture of illness cost, coping mechanism, and experiences of illness consequences. Households are selected based on two channels. First, the households suffered illness during last 12 months or households with currently sick household member are selected. The respondents are the household heads or those who manage the households. Secondly, from the key informant interview, the particular household will be traced and conducted in depth interview. Ten households from each province, total twenty households are collected. Households that are unwilling to participate in the research are excluded.

Focus-group discussion

Focus group discussions are conducted with the aim of stating the norms and practices of coping strategies and engagement of social institutions in mitigating the illness costs. Household head or representatives of household are organized into focus groups at the village monastery. There are six participants in one FGD and two sessions are done in each study site. Respondents for FGD are chosen by dependency ratio of household and FGDs are done accordingly. Big households (more than five members)

of over half of non-productive members are specified as target group. Time taken for one FGD is maximum two hours to prevent distraction.

4.8 Ethical consideration

Permission is taken from the administrative authority for data collection in the community. Informed consent from the participants is taken in both written and verbal format. Participants are clearly informed that the conversation will be recorded in audiotape and noted. For the sake of confidentiality, tape records are destroyed once they have been transcribed.

4.9 Data analysis

Interviews are transcribed into textual form from verbal records. The set of transcripts are identified by the main themes. The data are coded according to particular themes and categorized accordingly. Ideas and patterns will be inferred from the respondent's specific responses. Narrative analysis and theme content analysis are used for data interpretation.

4.10 Method of data analysis

1. Summarizing and packaging the data

Firstly, the tape records are transcribed as written notes. Synopsis of the interviews is then constructed from the transcribed data to create the set of textual form data set to work on. Given the raw data set, it is reviewed and re-read. Data are then coded. Coding is the identification and categorization of data into particular themes to find out linkages to various frameworks of interpretation.

2. Repacking and aggregating

The coded data are searched for interrelationships between the themes. Analytical notes, memos and impression are written at each theme to find out the emphases and gaps in the data.

3. Developing to construct an explanatory framework

The data are cross-checked for tentative findings. It is the iterative process of going back and forth between steps for coding new themes and verification of tentative findings. Methodological triangulation was undertaken by using different data collection methods. Finally, the data are integrated to synthesize the explanatory framework.



CHAPTER V

ANALYSIS, RESULTS AND DISCUSSIONS

Analysis is based on the primary data collected from interviews with households, community leaders and health care personnel of Min village and KaeHnin village and observations. The results will be described in four sections: description of sample characteristics, socioeconomic status of the households, health seeking behavior, cost of illness, coping strategies and household mechanisms, consequences of illness on household socioeconomic conditions.

5.1 Description of sample characteristics

Table 5.1 Characteristics of sample households in Min village

General characteristics	Number
Annual Household income (in kyats)	
-1,00,000-3,00,000	1
-3,00,000-5,00,000	8
->5,00,000	1
Household Asset	
-Radio, cassette, television	0
-Jewellery	1
-Livestock	6
-No asset	3
Occupation of household head	
-Brick baking worker	8
-Farmer	2
-Others	0
Educational status of household head	
-Illiterate	0
-Just read and write	0
-Primary school	10
Dependency ratio	
0.1-0.5	2
0.6-1.0	8

Table 5.2 Characteristics of FGD participants in Min village

General Characteristics	Number
Age Group (years)	
20-30	3
31-40	7
41-50	2
Gender	
Male	12
Female	0
Education	
-Illiterate	2
-Just read and write	2
-Primary school	8

Table 5.3 Characteristics of sample households in KaeHnin village

General characteristics	Number
Annual Household income(in kyats)	
-1,00,000-3,00,000	9
-3,00,000-5,00,000	1
->5,00,000	0
Household Asset	
-Radio, cassette, television	0
-Jewellery	0
-Livestock	8
-No asset	2
Occupation of household head	
-Farmer	10
-Others	0
Educational status of household head	
-Illiterate	6
-Just read and write	3
-Primary school	1
Dependency ratio	
0.1-0.5	3
0.6-1.0	7

Table 5.4 Characteristics of FGD participants in KaeHnin village

General Characteristics	Number
Age Group(in years)	
21-30	5
31-40	3
41-50	4
Gender	
Male	10
Female	2
Education	
-Illiterate	7
-Just read and write	3
-Primary school	2

5.2 Socioeconomic status of the households

Socioeconomic conditions of a household play a critical role in determining the ability of the household to withstand the illness event. Income, asset, occupation of the household head, educational level of household health and dependency ratio of households are asked to cross check the validity of answers and relate with the findings. That information is gathered through individual household interviews. In addition to interviews with the community leader of the village, through observation the overview of the socioeconomic conditions of the people living in the community has been assessed.

Socioeconomic status of households in Min Village in Yangon (Y)

Overview

This village is located at the centre of village tracts in this region. It is about 20 miles far from the urban area. Total population is 400 people living in 100 households. Most of the people living in this village are *Lat-lot-lat-sar* (in Myanmar language,

“*from-hand-to-mouth*” meaning that poor people they survive just for daily meals). Most people earn their livelihood by doing brick baking. Some cultivate rice and crops and a few do fishing during monsoon. Majority of village people finish their primary education level only. Almost all residents are Buddhist. For health, they have to rely on rural health centre for any illness as they cannot afford transportation fee to go to nearest township hospital. People usually have no saving for any non-food expenditure. When they get sick, they cannot pay medical cost and put in debt.

Income

The average household income (including informal income) earned for the whole year is asked. Informal income means money comes from gambling, tips, lottery and presents in money term. But no informal income earned is found. Average incomes of the households are 1,000,000 kyats per year, however, ranging from 420000 to 200,000 kyats. People earn their income from two sources according to seasonal pattern. In summer, they work in brick baking industry paid in 40000 kyats on ten-day-basic. When rain comes, they grow rice and other crops throughout the season and sell out after harvesting which earns average of 200000 kyats.

Household assets

Most households have no physical asset except to house they live in, some agricultural tools, and backyard poultry. Only three households in the village own television set at their home.

Household living conditions

Household living conditions are assessed through the participatory observation during the stay at the villages. People usually own their housing but most are small, crowded and poor ventilated. The material for roof and wall are commonly corrugated metal and rudimentary wood planks. They have access to safe drinking water as provided by government facility.

Education

At the village setting, there is one post-primary public school in the middle of Min village. Primary education is given free to all eligible aged children. From household interviews and key informant interviews, all school aged children are sent to school by their parents. Average educational level of household head is primary education. Most people can read and write basically.

Dependency ratio

Almost all adult members of the household are workers except to elderly and children. Generally, people work until 60 years of age and children usually do not enter to labor force until they finish primary education. Average household size is 5 members per household. The economic dependency ratio is roughly about 0.6 for this village.

Socioeconomic status of the households in KaeHnin Village in Northern Shan State (S)

Overview

KaeHnin village is located in Northern Shan State at the border area between Myanmar and China. “*Shan*” is one of the ethnic national races of Myanmar in which there are about five subminority-races, namely, Pa-O, Palaung, Danu, Taungyo, and Ko Kant. People speak their local dialect and only some literate can speak mainland language. KaeHnin is 14 miles far from Lashio, the city of Northern Shan State. Total population is 481 people living in 80 households. Majority of people grow corn and black sesame. Rice is grown only for household own rations. Some cultivate crops and do animal husbandry. Most of villagers are illiterate in terms of formal education. People learn informal education like monastic schooling and their local literacy “*Shan-sar*”. Almost all residents are Buddhist. However, there is strong belief and norms related to spiritual medium. Rural health centre is the main seeking place for health care. Living standard and conditions of the household in this area is low. They have no saving and asset except keeping goat and sheep. They have money

only for food expenditure and no extra for saving. When they are inflicted by health shock, they have no way out of indebtedness.

Income

Average income of the households in the village is 4,000,00 kyats per year, ranging from 1,000,00 to 200,000 kyats. People earn their income only from selling corn, sesame and other crops.

Household Assets

Households have no special asset except to house they live in, some agricultural tools, and breeding backyard animals such as sheep and goat. People do not possess material resources such as radio, television, etc.

Household living conditions

Household living conditions are assessed through the observation during the stay at the village. People usually own their housing but most are small, crowded and poor ventilated. The material for roof and wall are commonly thatched leaves and bamboo. There is no access to safe drinking water and sanitation.

Education

People living in KaeHnin village are illiterate. There are very few household heads which attain formal educational achievement. Most people learn basic education through monastic schooling. At monastery, they are taught basic literacy by mainly Shan language reading and writing. There is one primary school in KaeHnin village. Primary education is given free. However, from household interviews and key informant interviews, parents usually don't want to send their children. Children have to enter work place at their early teen age.

Dependency ratio

Almost all adult members of the household enter labor force. People work until 70 years of age and children have to help the household chores and some agriculture work since 10 years of age. Average household size is 8 members per household. The economic dependency ratio is roughly about 0.8 for this village.

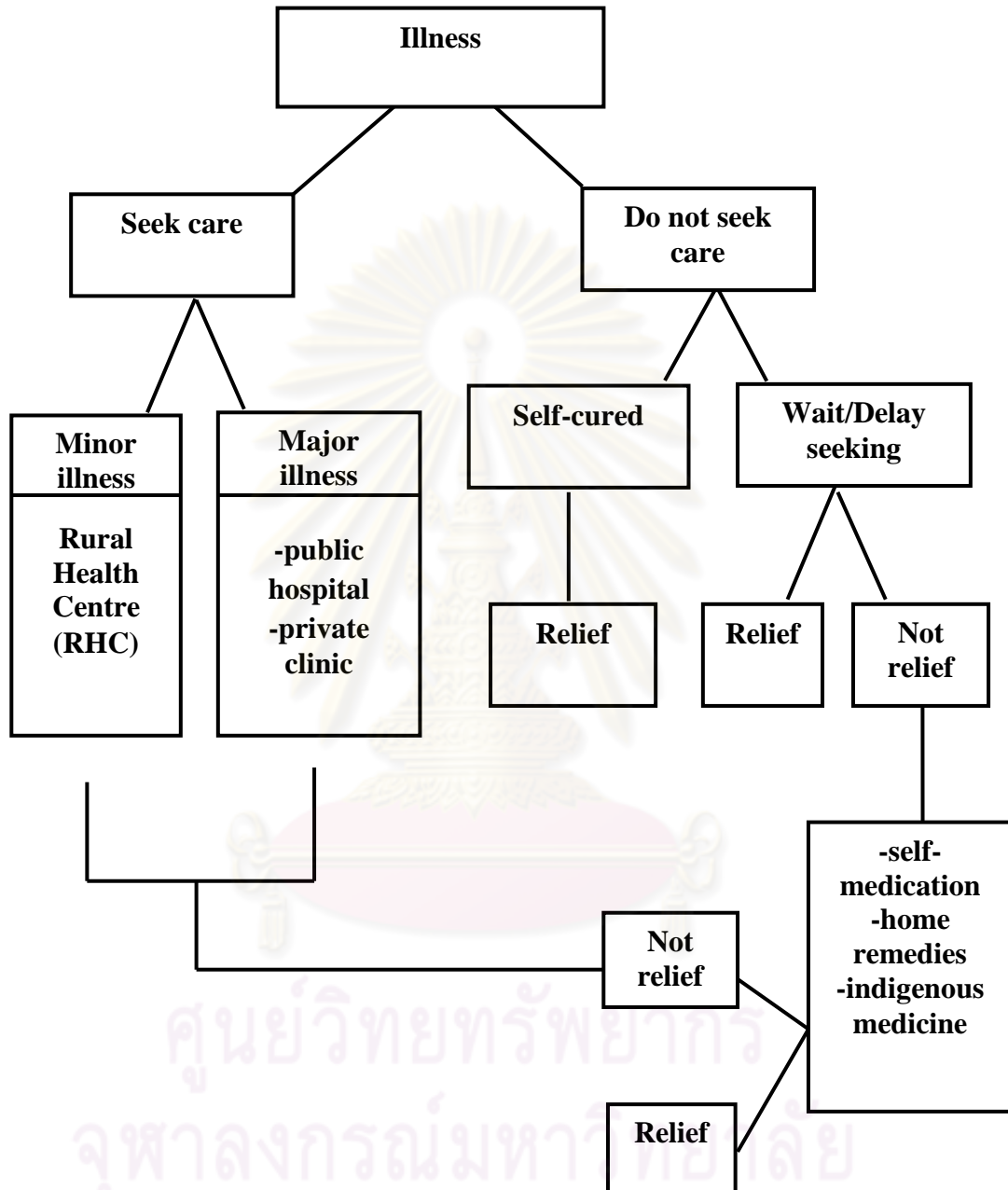
Discussion

It is found that the socio-economic conditions at the rural area put much of the households in poverty. Income insecurity, lack of saving and asset, poor living conditions like housing and access to water and sanitation, poor educational achievement are the critical poverty characteristics which make the households vulnerable to illness. In the meantime, when illness comes across in poor households, households are likely to be impoverished if there is no risk protection mechanism for illness related costs. Selling of assets, indebtedness and weakening of household resources are the potential consequences of illness.

5.2 Health seeking behavior

Health seeking behaviour is a broad concept. In this study, all dimensions of health seeking behaviour cannot be assessed. Attention is given to health seeking choice of the households related to cost of illness. Varying on the mode of health seeking, the cost items are different. All household interviews indicate that health seeking behaviour of the people is influenced by cost factor at the level of minor illness. But for major illness, the severity of illness is the major factor influencing household to make choices. Interestingly, from interviews from households of KaeHnin village, cultural factor also play an important role in determining health seeking behaviour of the households. The following is the framework showing the pattern of health seeking behavior among the households.

Figure 5.1 Pattern of health seeking behaviour among the households



The common health seeking place is the rural health centre. However, health assistant at rural health centre can only provide basic health care and health education. When people encounter major illness have to seek for either public hospital or private care at the city area. People usually do not want to seek for further treatment centres because of transportation cost and high consultation fee. One interesting finding is that some

people do not seek care not because of incurring direct cost for illness, they are afraid of income loss and time cost from seeking care.

There are four key themes on health seeking choice of households emerged from the analysis of household interview; *public, private, indigenous and spiritual*.

Table 5.5 Health seeking choice of the households

Key themes	Support comment	Code no.
Public care	“My family goes to RHC when we have problem about health. It is easy, available and cost can be postponed until the harvest season.	Hld-Y-1, 2,3,4,5,
	“It is about five miles from the village to township hospital, if the illness is not serious, we go and get medicine from “ <i>sa-ya-ma-lay</i> ”(meaning “ <i>Dr</i> ” local people use this title for health assistant)	Hld-Y- 6,7,10
	“We like RHC because if we cannot go to RHC, health assistant visit home and give treatment. he is very kind”	Hld-S- 3,5,6,7,8,9
Private care	“I used private care last year when my mom got stomach problem and was hospitalized. It is costly and after that we end up with a big debt from the money lender”	Hld-Y-7
	“My father is 60 years old and has diabetes. He used to take regular visit to physician at private clinic in the city. Transportation cost is very high. That’s why, after two visits, I buy medicine myself according to doctor’s prescription”.	Hld-S-2

Indigenous medicine	“Every household use this medicine “ <i>Kyawt-che-say</i> ” or “ <i>Maha-phay-say</i> ”. It is cheap and good. For minor illness like headache and fever, get immediate relief after taking this”	Hld-S- 1,2,3,4,5 6,7,8
Seek for spiritual protection of health	“We believe spirits (<i>Yo-yar</i>). If they angry, they can make us sick. We usually go to spiritual leader and worship with a set of coconut and banana every month. It is costly but I must do for my family’s health and welfare”	Hld-S1,2, 4,5,6,7

It can be seen that people’s choice of health seeking places varies on the severity of illness. People choose RHC for common and minor illnesses. Private care is sought in cases of chronic illnesses or major illnesses needing hospitalization. From interview with Hld-Y-8, as a result of high transportation cost, the household decide to take medication without doctor’s consultation. This abusive use of drug is harmful and it leads to the serious disease complications and adverse drug effect. Households of KaeHnin village use indigenous medicine as a common practice for minor illnesses which is not found in the Min village community. Another interesting finding is seeking for spiritual protection of health in KaeHnin village. It shows that health seeking is also influenced by culture and norms of the community.

5.3 Cost of illness

The cost of illness borne by the household falls into two categories; direct cost and indirect cost. From the findings, drug cost and transportation costs are the major part of direct cost.

Direct cost

People payment for direct cost of medical care differs between two regions. It is common that people cannot pay health care cost at the point of delivery. Deferred payment is the most common which is followed by payment in labour and in KaeHin, payment in kind. The following is the table showing description of sample on paying direct costs.

Table 5.6 Health care payment in two villages

	Prompt Payment	Deferred payment	Payment in labour	Payment in kind	Total
Min	0	6	4	0	10
KaeHnin	0	7	2	1	10
Working status of household head	-	Farmers, general workers	Farmers, brick baking workers	Female-headed households	-

Deferred payment

People usually cannot afford to pay in cash by the time they get treatment; they defer the cost until they sell all the crops. It is highlighted from key informant interview with health assistant of KaeHnin village.

Box 1. Experience of the health assistant of KaeHnin village

“All people want to defer payment for medical cost after visit. Some people pay me half of the cost and pay the rest after they sell out the crops. I have to make a list and at the end of harvesting season, they come and give me payment. However, sometimes people cannot pay at all”.

Health care payment in labour

Household businesses in KaeHnin village are mainly based on agriculture. It means that the household income vary to the seasonal pattern. So, when illness comes suddenly, households being lack of saving, asset and material resources end up in debt. People pay their debt by doing as farm worker at the health assistant farm without salary or do household chores.

Box 1. Excerpt of household interview showing payment in labour

“I cannot afford medical cost after one visit to RHC. I make an agreement with health assistant to pay back the debt. I can work as a farmer at his own land. It is good for me as I don't want to bear the debt over time”. (Hld-S-5)

In Min village, the household business is based on brick baking industry. Even though, it is found that there is also practice of health care payment in labour. The following is the example of one household pay for health care in labour.

“Health assistant of this village is my boss. She own brick baking business and I am her employee. My two children took treatment from her and I cannot pay money for that. Then I decide to pay back the debt by cutting my wage off” (Hld-Y-1)

Health care payment in kind

This practice in KaeHnin village, which is not seen in Min village at all, is that some people pay their medical cost in kind rather than cash such as a basket of corn, a pile of wood, a pack of charcoal etc.

Box 2. Excerpt of Key Informant Interview showing payment in kind

“One widow in my village, she, had a debt on me about 1500 kyats during my home visit to her stomach ache three months ago. She requested me to payback money in terms of a basket of vegetables. I agreed and set the value of one basket 500kyats and after giving me three baskets, she already paid in full”

These two kinds of payment are used for direct cost of minor illnesses. For major illness which means illness persist more than two weeks and severe conditions, the household seek for further options and experience the consequences of high medical expense. It will be described detailed in preceding coping strategies section.

Interestingly, sometimes the cost of medical care is dispersed because of multiple cost items. The following is one case that shows complex treatment sequences and multiple cost items.

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Box. 3. A narrative account of complex treatment consequences and multiple cost items from knee injury

“Six months ago, I slipped and fell on the way to my house and badly injured my knee. The injury was complicated by the fact that I finally knows I have a blood disease of healing impairment, which meant the injury took a long time to heal. On the day of injury, I went to the Emergency Department at Government Hospital. They took an X-ray, put the leg in plaster and admitted to accident ward, but there were no beds available due to overcrowding so I discharged myself and returned home. The following day, the leg was swollen and painful and a friend recommended a private traditional medicine practitioner who is good at bones. (Continue to next page)

Over the next 3 days, I visited three times, paying for consultation, medicine and transportation. The leg did not improve and I moved to a Chinese bone clinic I went three visits, paying for consultation, medicine and transportation again. A week after that, I was very ill and short of breath, my wife brought me to Government Hospital again. Finally, I recovered after two weeks. Totally, I cost 70000 kyats at the end, which was borrowed from my uncle.” (Hld-Y-9)

Indirect Cost

Whether the household seek for health care or not there is still the indirect cost. Income loss from the absent days is the major concern for poor households. Nonetheless, there are households which are willing to seek care when they get sick. They give the reason that if they do not seek care for treatment, it might result in absenteeism from work and the resultant income loss outweighs the medical cost.

In one interview with a household from KaeHnin village, the household is composed of husband, wife, grandmother and two children. The elder one is teenage and the young only one year. The effect of indirect cost on the household mainly impact on

the derangement of household mechanism and household suffer some social burden which can be accounted as psychological cost of the illness.

Box 4. Significance of indirect cost

“My husband got pneumonia and cannot work for some days. It is a big hardship for me. I have to go and fetch water at the village well which is 3km far from my home. After I come back from the well, I got a muscle pain. I ask my elder daughter not to go school to help me some household chores and take care father and grand mom when I go out and seek for money. That’s why I am very worrisome to get anyone in my family sick” (Hld-S-2)

“Last month my mother got stroke and paralyzed. Before, I help my husband some chores at his paddy field. After my mom’s stroke, she become handicapped and need someone to look after her. I cannot go to the farm and stay at home to take care mom. I am very tired taking care of mom, doing household chores and care my kids as well.”(Hld-Y-8)

In the above case, as an indirect cost, the housewife has to bear some household activities that the head usually perform. It is a big hardship for her and the elder daughter of the household have to forego the schooling days. Therefore, the indirect costs are difficult to measure in terms of numbers, but it implicates the social or psychological dimension of the household wellbeing.

5.5 Household coping strategies and social institutions

It is found that some households try to prevent cost by not seeking health care. However, those practice cost-preventing strategies ends up in impact in terms of indirect cost and the deterioration of health and the household mechanism is

disordered. The following is the some excerpts from household interviews with some cost prevention strategies.

Box.5 Use of cost prevention as a strategy

“Last three months ago, I had a back pain. I took only some home remedy as I don’t have enough money. After that, it was getting worse and I can’t go work three days. Later I went to the township hospital” (Hld-S-2)

Coping strategies for illness cost can be specified further into two groups: *strategies used to cope with the direct cost*, in this session, for high cost medical expenses and *strategies used to cope with the indirect cost*.

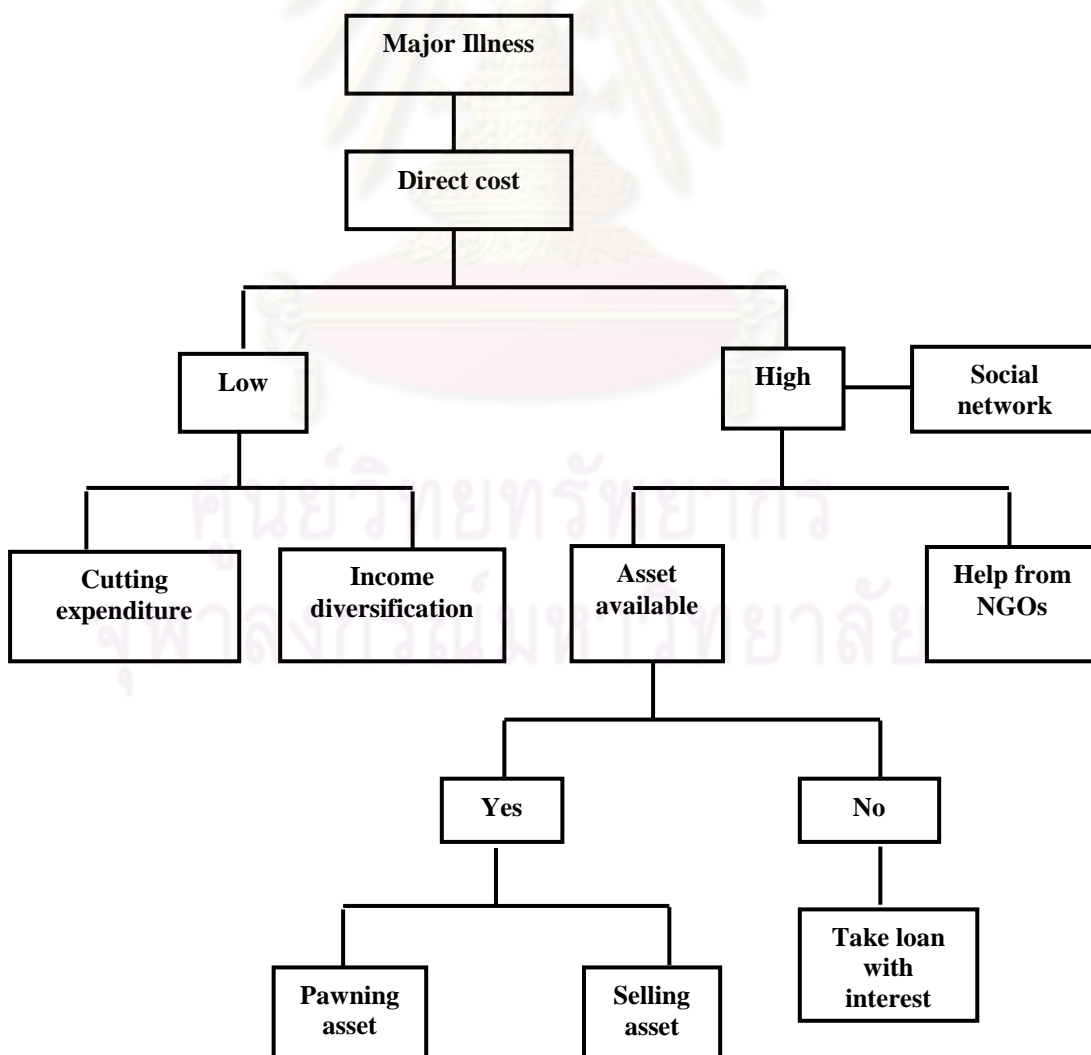
Figure 5.2 Summary of household coping strategies



Strategies used to cope with the direct cost

All the households' interview and focus group discussion show that household coping strategies are mainly determined by two factors. First, the amount of financial hardship they encounter and, second, the availability of coping strategies. In previous section, it is mentioned that people defer payment or payment in labor and kind for minor illnesses of low medical cost. Coping strategies, in this sense, is defined as strategies used to cope with the illnesses incurring high medical expenses. The following chart shows the sequences of household coping strategies for direct cost of illness.

Fig. 5.3 Pattern of household coping strategies for direct cost of illness



From the in depth interview and focus group discussion, five main themes of coping the illness cost are emerged; *cutting household expenditure, income diversification, selling of assets, pawning, taking loan with interest*.The following is the table showing Common practices of household coping strategies.

Table 5.7 Common practices of household coping strategies

Key theme	Support comments	Code no.
Cutting household expenditure	<p>“My daughter went to dental clinic three times within one month. It was costly and I cut some expenditure like buying clothes and postpone re-roofing home”</p> <p>“I try to quit smoking but I can’t. But I need to daily cigarettes consumptions because I need to pay money back that I loan from money lender when my son was hospitalized”</p>	<p>Hld-S-4</p> <p>FGD-Y-2</p>
Income diversification	<p>“Next month, my wife will deliver third baby. I will cost around 50000 kyats. I need to work more on extra hours by weaving mat to be able to cope with the cost”.</p>	<p>Hld-Y-6</p>

Selling of assets	<p>“I got a knee injury about a year ago, I spent a lots of money in seek care both public and private. After that I sold my sheep and pig to pay the debt.”</p> <p>“My mom is 70 years old. She has hypertension, diabetes and heart problem as well. She needs to see physician every month. Drugs are very expensive. That’s why I decide to sell my cow”</p>	Hld-Y-9 FGD-S-2
Pawning	<p>“My wife has a tiny gold earring. My son is diagnosed TB and doctor recommend to give nutritious food. I ask for my wife to pawn the earring and will redeem after harvesting this year crops. She finally agreed”</p>	FGD-Y-2
Taking loan with interest from money lender	<p>“I have no asset to sell, but my son was hospitalized for hepatitis A, I need some money for drug and transportation cost. I loan from money lender with 10% interest.</p>	FGD-Y-2

As seen in the above mentioned table, there are five kinds of coping strategies. These coping strategies are used by households to cope for major illnesses which incur high expense of medical care.

Availability of coping strategies to direct cost of illness is linked to some dimension of socioeconomic conditions of the households. Households having assets (animal or jewellery) can sell or pawn their asset to cope while others might take loan with the interest. Households without having assets can further classify into two: those who

have livelihood skill diversify their income from secondary income sources, e.g. weaving mat (Hld-Y-6). Those lacking such skill opt to cut their consumption expenditures such as food and clothing and cigarettes in one case (FGD-Y-2).

The frequency distribution of the coping mechanisms that people adopt to manage with the direct cost and household mechanisms to adapt the indirect cost can be summarized in following table.

Table 5.8 Household coping mechanisms for direct cost in two villages

	Cost prevention	Cutting expenditure	Income diversification	Selling Assets	Pawning	Loan with interest	Loan without interest	Total
Min	1	1	1	2	2	3	0	10
KaeHnin	1	3	0	2	0	0	4	10
Asset portfolio of households	Households being lack of asset		Households having livelihood asset	Households having material asset		Households having social asset	Households having no social asset	

It can be seen that households of two communities are different in methods of coping with the direct cost of illness.

However, interestingly, in KaeHin village, they have access to loan without interest (which will be mentioned in preceding session of role of social network in coping). There is no use of income diversification method in KaeHnin village which is not seen through observation as well.

Intra-household mechanism to cope with illness cost

Two focus groups discussion were done to capture how household manage with the illness intrinsically. Intra-household labor substitution is a strategy in which there is the transfer of labour from the sick member to the non-sick member of the households.

Box 6. Excerpts from FGDs about intra-household transfer of labour

“Yes, when I got sick and cannot work. My wife went outside and sold vegetables at the local market. (FGD-S-1)

“My son is 14 years old studying elementary school. I am *Kya-Ban* worker (general worker in Myanmar language). When I was injured by an accident, I have no way out to withdraw my son from schooling to help me”. (FGD-Y-1)

The impact of this strategy is determined by who fall ill in the household. Particularly, children often require to enter the workforce to help meet the household consumption needs and treatment cost. School absenteeism and being removed from school following contributes to poverty being transmitted across generation, affecting the long term productivity and earning potential of children.

Role of social network and institutions

Social relation and network plays an important role in coping with the illness. In fact, it is not the strategy households are able to adopt. It is a kind of asset the household possess outside the household. Help from the neighbors, families and community support is a secure strategy and it sometimes relief a great share of burden resulted from the illness.

From the observation, the poor community is more institutionalized in terms of social network. In KaeHnin village, the community and neighbors are like families and

when some household is in trouble of medical expense, the better-off neighbors lend money without interest.

But in Min village, the social institutions are not as strong as the former one. People help the sick household in terms of kind such as food and labour but not in terms of financial support. However, in Min village, they have an advantage of accessibility to NGOs (Non-Governmental Organization) which reduce their financial burden of illness. From the focus group discussions in Min village, there are two cases which were given some support by community organizations.

Box 7. A case of household gets help from a NGO

“My family is poor. My husband is a hard labour. He has income of daily wage 2000 kyats. I am just a housewife stayed at home. My son has Thalassemia, a severe form of blood disease which need frequent transfusion and need critical care. I just know last three years ago, he got fainting attack and sent to hospital. The doctors said he needs regular visit to hospital and need transfusion whenever necessary. I was so desperate because we have no money for such costs. Then a volunteer of World Vision International, contact me. Later the organization supports all the expenses and provides food as well until now. Without this help, I also don’t know what to do next”. (FGD-Y-1)

Box 8. A case of household gets help from a community organization

“I divorced my husband three years ago. I make my earning by selling snacks at market, getting income of 1500 kyats per day. Last month, I had a pain at the abdomen and go to RHC. Then I was referred to hospital. After doing some investigations, I need an operation. I have no money at all. Then a friend recommends me to go to “*Thu-kha*”, a community organization that opens free clinic for the poor. But they have only OPD and no in-patient ward. However, they agree to help me half of my medical cost 60000 kyats after I brought the letter from community leader for the evidence of poor.” (FGD-Y-2)

People in the area of Min village tracts are accessible to some discretionary benefits offered by some community organization and NGOs. However, in KaeHnin village, there is no such kind of organization. In the failure of supply-based financing to reach the poor, the advantage of community organization and discretionary based benefits are targeted to finance the demand side for those who need health care the most, in a context of limited resources. However, the accessibility and the number of such program are relatively low in comparison with the population in need.

5.6 Consequences of illness on household socioeconomic conditions

Illness can end up the household with a series of economic and social consequences which are highlighted in households' interviews in previous sections. The consequences can be classified into consequences from direct cost and consequences from indirect cost.

Direct cost consequences

Cutting expenditure and reduced consumption

Cutting household expenditure is mentioned in previous section as a coping strategy for direct cost. However, it can be the result of coping strategies as well. As the long term effect, households after coping have to cut their expenditure particularly food and clothing to keep money for paying interest and buying the livestock again.

Box 9. Cutting expenditure and reduced consumption

“To pay interest to money lender every month, we cut food expenditure. Instead of buying meat, we only eat vegetables which are grown at the backyard of my house.” (FGD-S-1)

This month, I cannot buy new clothing for my son because I have to save money for monthly interest rate that I have borrowed from last year because of my wife uterus surgery. (FGD-Y-2)

People have to sell their livestock such as sheep, goat and cow to cope with medical costs. It has a big impact on household living conditions because having animals can provide food stuffs which are helpful for household diet and nutrition.

Box 10. Loss of household livestock asset

“After knee injury, because of a lots medical cost, I sold my sheep and pig. After that, it is difficult for my family. Having these animals, we don’t need to worry about milk and meat that we can get easily. Now we lost it”. (Refer to Hld-Y-9 in Box.3)

Indebtedness

Debt is a common consequence of illness in which taking loan form money lender is adopted as coping strategy. Households have to take lend money with interest rate to solve the immediate payment for health care. Because of the high interest rate, households are absorbed in indebtedness which further leads to worsen the socio economic conditions.

Box 11.Indebtedness as sequences of after coping

“I used private care last year when my mom got stomach problem and was hospitalized. It is costly and after that we end up with a big debt from the money lender” (Refer to Hld-Y-7 in Table 5.1)

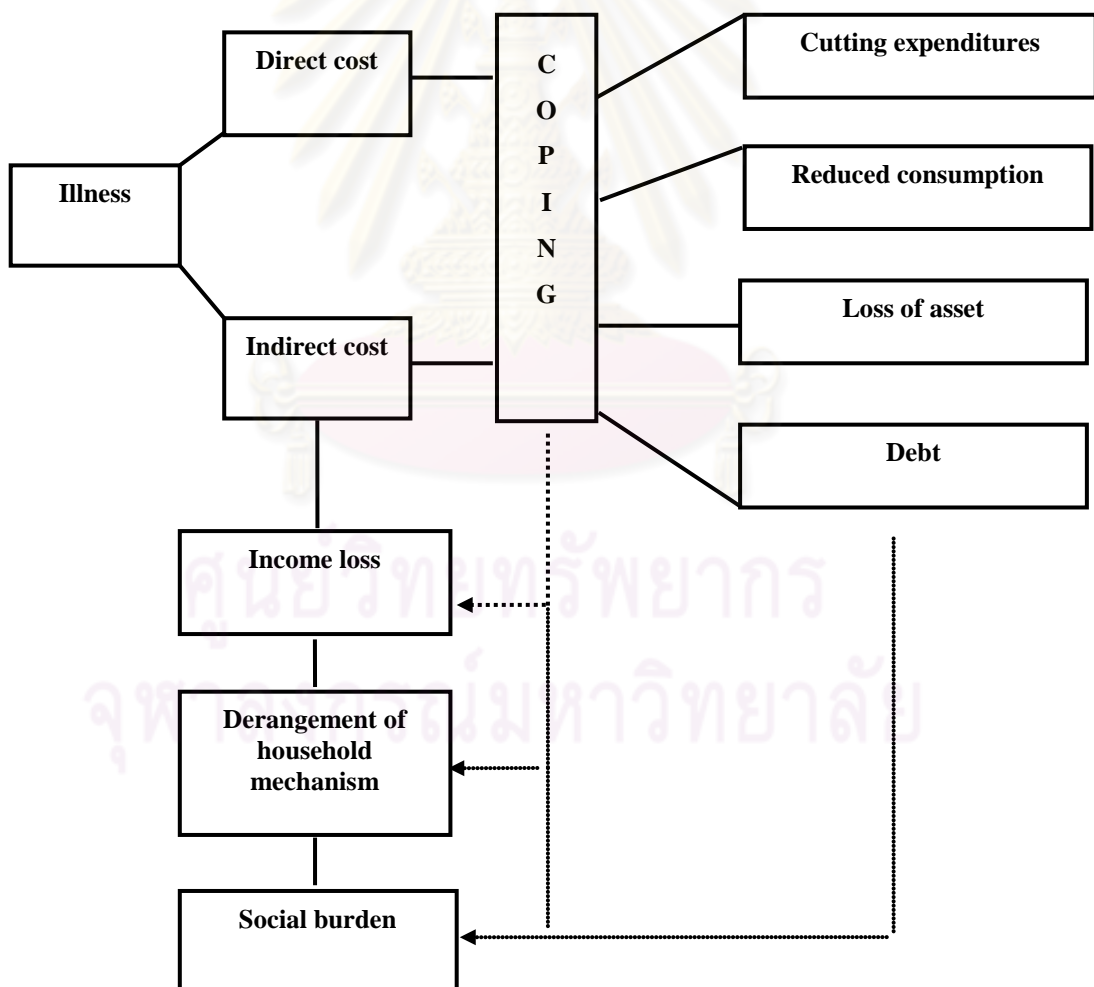
Indirect cost consequences

In terms of indirect cost, households cannot avoid the incurring income loss and productivity loss. Sometimes, it can be in the form of derangement of household mechanism such as reduced labor supply. As a serious impact of indirect cost, the drop out of children from schooling and school absenteeism are sometimes sought by the households for intra-household labor substitution. (Refer to FGD-Y-1 in Box.6)

Social burden borne by the households cannot be expressed in numbers but feeling, suffering and worries during illness by the sick individual and by the rest of household members are taken into the psychosocial cost of the illness. (Refer to Hld-S-2 and Hld-Y-8 in Box.4)

In this study, no case of breakdown of household is found out as a result of illness. Combining all the findings from previous sections, the consequence of illness on the household can be summarized as follows.

Fig 5.2 Summary of consequences of illness on households



CHAPTER VI

CONCLUSION, POLICY IMPLICATIONS AND RECOMMENDATIONS

6.1 CONCLUSION

The equity of access and financial risk protection are the major goals of health care system in all developing countries. People, being lack of universal coverage scheme, face a financial barrier in accessing health care when they come across illness. When illness inflicts particularly on the poor, the illness brings household impoverishment through income loss and medical expenses that trigger a spiral of asset depletion, indebtedness and breakdown of households from social and economic entity. Policy aimed at mitigating the economic burden of illness needs to answer two policy questions. First, it needs to highlight “*how big is the problem*” which can be answered by using household socioeconomic and living standard surveys. Second question is followed by “*how to solve it*”. It is about how people deal with poverty according to social, economic and cultural contexts and circumstances.

This study attempts to answer the second policy question providing with a framework of the complexity of the economic burden at the household level. It is explored in two rural communities of Myanmar, Min village tract of Yangon province (low poverty) and KaeHnin village tract of Northern Shan province (high poverty) by using qualitative research techniques including key informant interview, in-depth interview and focus group discussion. Socioeconomic status of the households, health seeking behavior, cost of illness, coping strategies and consequences of illness on household are the key dimensions of the study. Attention is focused on how the causes and impacts of ill-health can be tackled through a more comprehensive understanding of the dynamic relationship between the cost of illness, household behaviors and strategies the poor households adopt.

Poverty characteristics related to the health are addressed to relate with other variables determining the degree of illness burden for the household. Income, household assets, household living conditions, education of the household head and dependency ratio of the household are linked to the nature of medical costs, the way people cope with the illness complications. Among two village tracts, both are in poor segment of the population, however socioeconomic conditions of Min village in Yangon province are better-off than KaeHnin village. Different socioeconomic status between two regions, bring differences in dimensions of household health seeking behaviors and other external factors.

The health care cost and payment is very context-specific to the nature of household socioeconomic and working condition. Labour is the only physical asset the poor household possesses. When the illness cost goes beyond the affordable range, people use their labor to cope with the illness. Health care payment in terms of labour is obviously seen in both villages. Asset depletion in terms of labour is widely adopted as a coping mechanism among the households. Overuse of labour might deteriorate the healthy status and can be trapped again into illness. In contrast, female headed households in KaeHin village, as they are being lack of physical ability look for the health care payment in terms of kinds such as vegetables and household staff.

Health seeking behaviors of the household are not only influenced by economic factor but also by the cultural factor. It can be seen in in KaeHnin village where people seek for spiritual protection of health even if it incurs cost for buying worship items. Nonetheless, rural health center is still the common seeking place in the rural community as they are accessible and payment is deferrable. It is found that people still try to seek care even though they know that they cannot afford the medical costs. Although people are unwilling to seek for private care because of the high expenses such as transportation costs, drug cost and consultation fees. However, they are inevitable to financial risk in case of encountering major illnesses. In some context, multiple costs are accounted because of seeking health care more than one option.

To provide information about how a policy can mitigate the economic burden of illness, it needs to know the vulnerability of illness by the household. It can be traced by asking the existing coping mechanisms household adopt.

In the study, coping with the illness by the households is influenced by the amount of financial hardship and availability of strategies. There are five coping strategies in two villages, cutting household expenditure, income diversifications, selling of asset, pawning and taking loan with interest from money lender. Interesting, there is no use of saving as a strategies in both communities. Use of saving can protect the depletion of asset; therefore, household saving should be encouraged. Income diversification and social networks are the sustainable strategies with the least damage to the household livelihood. Self-modifications such as cutting expenses and reduced consumption, pawning, taking loan with interest disable the household economic activeness, weaken the physical strength and incapacitate livelihood in long term. Withdrawing children from school and putting in work force is a threat of a household and is seriously taken into consideration as it deplete the human capital of the household and leads to intergenerational poverty. Having access to social network and discretionary benefit provided by NGOs are the factors relieving households from economic burden of illness. Understanding the success and failure of coping strategies provide the poverty alleviation program to emphasis on creating the opportunities that enable the household ability to cope with external shocks including illness.

Putting all the information together, the economic burden of illness of the household is determined by a wide variety of variables which are multidimensional and dynamic in nature. This dynamism brings challenges to health policy, intervention and research in reaching the poor who cannot enjoy the welfare. In the light of household responses on illness and its economic consequences, the human side issues and local complexities bring to the analogy that there are overlooked issues, uncovered hindrances, value-based complications and disordered mechanisms which are not countable in numbers but identifiable and amendable if it is looked by holistically and humanistically.

6.2 Policy implications

Health sector policy implication

The study indicates that households are facing a series of socioeconomic consequences from illness because of the lack of financial risk protection mechanisms for the health care. In the mean time, households are coping with illness costs at the risk of deteriorating socioeconomic conditions and livelihood. In addition to supply side mechanisms, policy makers should also take consideration of demand side financing schemes using context-specific information to reduce the financial barrier of the poor households in accessing health care services.

Multi-sectorial policy implication

Social and economic infrastructures are important for accessibility of health care services. In the study, in the rural areas, people are having low socioeconomic conditions; such as poor housing, poor access to water and sanitation, income insecurity and poor development of modern economic sector. These factors are potential causes of ill health conditions. Policy targeting at uplifting the living standard of people can promote the health of the population as well. Furthermore, any practice of saving among the households is found in the study. Household without saving are vulnerable to shocks including illness and end up in depletion of household assets. Therefore, policy should have emphasis on encouraging saving such as micro-banking or saving groups. Implementing projects for income generation and livelihood development can improve the socioeconomic status of the households, which in turn, contribute in reducing household economic burden of illness. Having social network and resources is the enabling factor for resilience of illness shock. Policies should strengthen social capital and the ability of communities to engage in mutually beneficially actions are also important in maintaining the viability of households.

6.3 Recommendation for further studies

This study is the poverty related health research. There are many methodological challenges to be overcome in understanding the economic burden of illness. Research in this area entails the development of a range of innovative methodologies, combining quantitative and qualitative data.

- 1) This study use qualitative techniques to investigate the context specific information of economic burden of illness at the household level. However, to answer the evidence-based policy questions, further studies needs to combine with quantitative surveys.
- 2) In this study, due to the shortage of time, the data are collected on cross-sectional basis. Cost diary for the particular households cannot be applied in the study design to capture the cost pattern over seasonal variations and illnesses. Therefore, further longitudinal studies are needed to observe the data over period of time.
- 3) Participatory methods have been increasingly used in poverty based research. These methods allow for an understanding of social, cultural, economic and political arenas of the study context. In this study, due to budget and time constraint, it is not feasible to stay for a long period of time. Participant observation should be complemented to qualitative interviews to add up some hidden problems and robust information in the community.

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APPENDICES

ศูนย์วิทยทรัพยากร
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APPENDIX A
IN-DEPTH-INTERVIEW GUIDELINES

Before beginning the interview, interviewer has to be introduced oneself and about the objectives of project. Warm-up questions will be instituted to break barrier in communication. The purpose of the interview is clearly explained in simple language and comprehensive manner. The participants are explained why their cooperation is important and what will happen with the collected information and how the community will be benefited from the study. The respondents are asked for any query about the interview. Informed Consent must be taken both in written and verbal format.

Rather than using a questionnaire, in-depth interviews use a set of semi-structured open-ended questions – a list of themes or issues around a topic that are aimed to cover during the interview. For the sake of clarity when going into an interview, it can be useful to write a list of questions or in terms of “*probes*” under each issue as a guide or prompt. Whenever necessary, additional appropriate questions have to be asked to clarify the responses and to explore the unexpected and relevant topic the respondents emerge within the flow of conversation. Such as:

- Please tell me (more) about that...
- Could you explain what you mean by...
- Can you tell me something else about...

Household Socio-Economic Characteristics

- Average annual income
- Household Assets
- Occupation of household head
- Education of household head
- Economic dependency ratio

Key structural questions will be covered:

A. Cost of illness

Direct Cost

- *When was your last time spending for medical care?*
- *What type of treatment you seek for?*
 - *Public/Private/Religious/others(specify)*
- *Does the cost of medical care exceed over the bearable range?*
- *What type of medical expense did you encounter burden?*
 - *Drugs / doctor fees /transportation/ search cost or any else*
- *Have you ever defaulted from treatment because of financial difficulties?*
- *Have you taken more than one type of seeking modes at one time during sickness?*
- *Have you experienced any particular illness event that cost more than you can afford?*
- *Could you tell me about any high costly illness episodes you have encountered?*
- *Do you have any memorial experience or event regarding this issue? Could you tell me more?*

Indirect Cost

- *What are your financial difficulties from income loss in time of illness?*
- *Are there any effects on routine activities of others household member who take care the sick one?*
- *Are there any other impacts on the dependent household members when those breadwinners fall ill?*
- *Do you have any memorial experience or event regarding this issue? Could you tell me more?*

B. Coping strategies, social resources and consequences of illness

- *What changes have you made or happened with respect to the illness?*
- *How do you solve your financial cost of illness?*
 - *Consumption adjustment, savings, sale of assets, borrowing, loans*
- *How do you compensate the household activities that are usually done by the sick member?*
- *Have your families, relatives, neighbors or community supported you with the high expense medical expenditure?*
- *What kind of support have you had from them?*
- *Do you have any memorial experience or event regarding this issue? Could you tell me more?*

C. Consequences of illness on household socioeconomic conditions

- *Have you had any consequences on household economic conditions after serious illness?*
- *Have you ever had any significant changes in household economic conditions before and after the illness event?*
- *Do you have any memorial experience or event regarding this issue? Could you tell me more?*

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จุฬาลงกรณ์มหาวิทยาลัย

APPENDIX B**INFORMED CONSENT FORM FOR IN-DEPTH INTERVIEW AND KEY
INFORMANT INTERVIEW****INFORMED CONSENT FORM**

Date of consent/...../.....

Place.....
.....
.....

(Mr./ Mrs. /Ms)Code.....

I have voluntarily participated as a respondent under the study “**QUALITATIVE ANALYSIS OF HOUSEHOLD ECONOMIC BURDEN OF ILLNESS**”. I have already known the information of the purpose of interview from the Principal Investigator. I also have been given an explanation on the objectives and methodology of the study. I understand that my answers will be kept confidential. I am clearly informed that my answers will be used for the academic purpose only. The result of the study may be published and/or presented at any conference without naming me as a subject. I understand that I shall be given a copy of the sign consent to keep on my own.

I have right to withdraw from the project at any time without any adverse effects upon myself.

Signature of Respondent Date.....
.....Signature of Witness Date.....
.....Signature of
Principal Investigator Date.....
.....

APPENDIX C**INFORMED CONSENT FORM FOR FOCUS GROUP DISCUSSION****INFORMED CONSENT FORM**

Date of consent/...../.....

Place.....
.....
.....

(Mr. / Mrs /Ms) Code.....

I have voluntarily participated as a respondent under the study “**QUALITATIVE ANALYSIS OF HOUSEHOLD ECONOMIC BURDEN OF ILLNESS**”. The purpose of the group discussion and the nature of the questions have been explained to me. I also consent to be tape-recorded during this focus group discussion. I have already known the information of the purpose of this session from the Principal Investigator. I also have been given an explanation on the objectives and procedures of this discussion to be done. I understand that my answers will be kept confidential. I am clearly informed that my answers will be used for the academic purpose only. The result of the study may be published and/or presented at any conference without naming me as a subject. I understand that I shall be given a copy of the sign consent to keep on my own.

I have right to withdraw from the group at any time without any adverse effects upon myself.

Signature of Respondent Date.....

.....

Signature of Witness Date.....

.....

Signature of
Principal Investigator Date.....

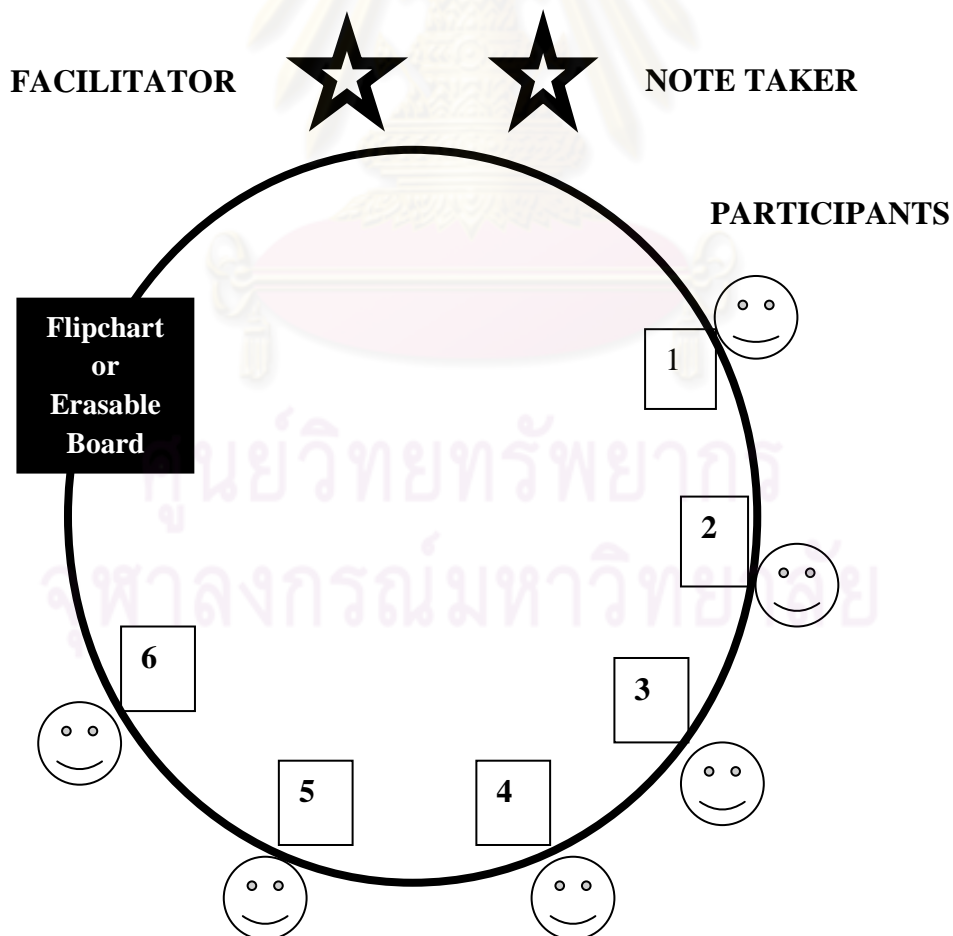
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APPENDIX D
FOCUS GROUP DISCUSSION GUIDELINES

The focus group guide provides a framework for the facilitator to explore, probe, and ask questions. It is helpful to follow the focus group guide as much as possible when facilitating a focus group, to increase the credibility of the research results. Conducting focus groups requires a small team, comprised of:

1. **Facilitator** to guide the discussion, and
2. **Note taker** who will make hand-written notes and observations during the discussion, and record the emotional response of participant as well.

The sitting plan of FGD is as shown in the figure:



At the beginning of a focus group, the facilitator starts with self-introduction and introduces the name of participants. It is important to appreciate the participant for their contribution to build up the rapport. Then, it needs to let everyone know about some ways to make the group proceed smoothly and respectfully for all participants.

The following are “ground rules” that help establish the group norms:

- Only one person talks at a time.
- Confidentiality is assured.
- It is important to hear everyone’s ideas and opinions. There is no right or wrong answers to questions – just ideas, experiences and opinions.
- It is important to hear all sides of an issue – both the positive and the negative aspects.
- It is important for women’s and men’s ideas to be equally represented and respected.

These ground rules may be presented to the group, and displayed throughout the discussion, on a flip chart page that is taped or hung on a wall in a clearly visible location. In addition to these ground rules, which have been established prior to the focus group, it is important to invite participants to establish their own ground rules or guiding principles for the discussion. Once the above ground rules have been presented, it will be important to ask participants if they have anything to add to the list.

The objective of FGD is

- To understand the norms and practices the household use to cope with both the direct and indirect cost of illness
- To explore the varying levels of coping mechanisms within and outside the household

- To gather the information about the role of social network resources in smoothening the burden of illness
- To capture the shared experiences on the impact of detrimental coping strategies when serious illness is inflicted.

Norms and practices of coping strategies

- *How do people manage with the cost of illness?*
- *What are the practices of coping in the community?*
- *How do they pursue such coping strategies?*
- *How people use strategies with the varying degree illness?*

Intra household coping mechanisms

- *What changes occur within the household with respect to that illness?*
- *Are there any shuffles or reordering of household activities among members?*
- *Are there any phenomenon like schoolchildren absenteeism of when the parents fall sick*
- *How do household manage to substitute the function of sick member?*

Experience of coping mechanism that impact the household socioeconomic conditions

- *Share your experiences about any effect on household conditions after coping with the illness cost?*
- *Is there any event like breakdown of household or impoverishment after the coping process?*

Use probes: If participants give incomplete or irrelevant answers, the facilitator can probe for fuller, clearer responses. A few suggested techniques are:

- *Repeat the question* – repetition gives more time to think.
- *Pause for the answer* – a thoughtful nod or expectant look can convey that you want a fuller answer.
- *Repeat the reply* – hearing it again sometimes stimulates conversation
- *Ask when, what, where, which, and how questions* – they provoke more detailed information
- *Use neutral comments* – “Anything else?”

At the end, all the participants are acknowledged and given token of appreciation for their participation.



ศูนย์วิทยทรัพยากร
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BIOGRAPHY

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