



CHAPTER 3

RESEARCH METHODOLOGY

In this chapter the concept of health insurance, conceptual framework and the methods used in the study are discussed.

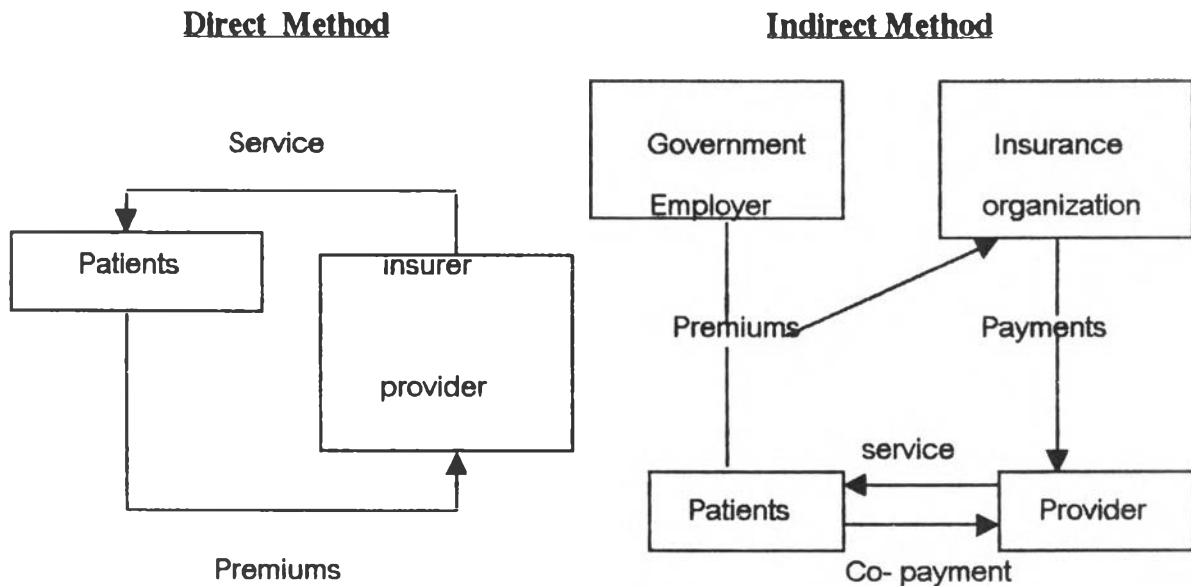
3.1 The Concept of Health Insurance

There are ample literature available which describes the principle, organization, and operation of health insurance schemes in both developed and developing countries.

Health insurance basically is the protection against the risk of loss due to health problems. It is operated through the mechanism of sharing the risk and collection of premium. The amount of premium is determined by the likelihood of illness of the individual or group of individuals and most of care for illness. Health risks and resources are pooled among a large group of people with different probabilities of requiring care. Cross subsidization is made from individuals with higher resources to those who can contribute less and from those with a lower incidence of illness to those require more frequently. The amount of health risks vary according to age, sex, occupation, income level, education, physical condition and marital status. Health insurance is a way of realizing social justice, because it is based on solidarity and cooperation between the well and the ill, the rich and the poor, and employers and employees (Abel - Smith,1986).

On the basis of delivery of health care services, the health insurance scheme may be divided into direct method and indirect method (fig 3.1). Under direct method, an insurance agency provides health services in its own institutions, usually by employing salaried personnel. On the other hand, under indirect method insurer and medical provider are separated. Patients receive health services free of charges or by a small co-payment to the provider and the insurance agency pays the provider the service rendered, namely " Third Party Payment System" (Mills,1983).

Figure 1 : Direct and Indirect Insurance



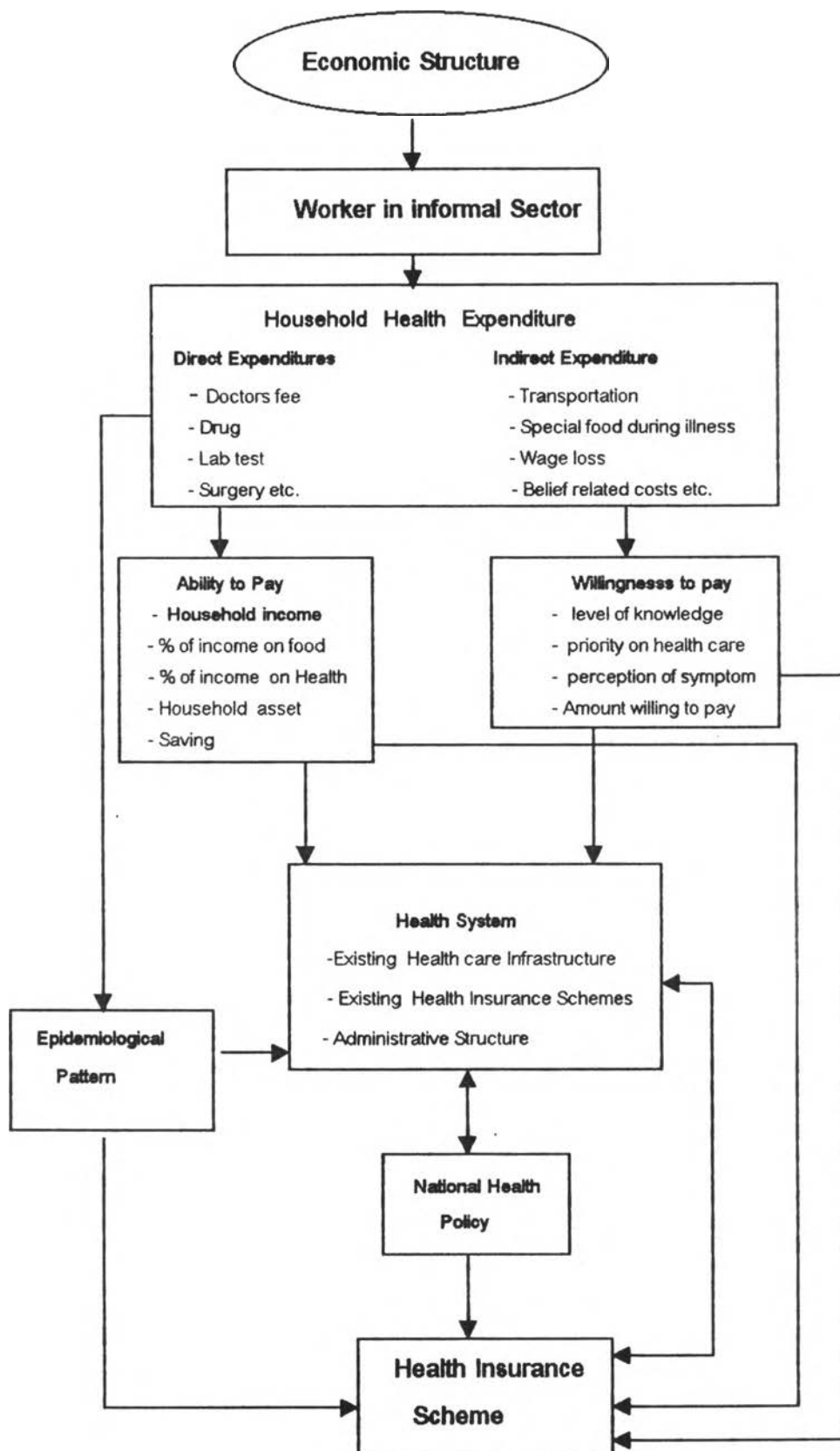
Source : Adapted from Suenobu Yumiko,1994. An Analysis of potential Health Insurance scheme for the Uninsured in Thailand. M.Sc thesis, Chulalongkorn University, Bangkok. P.10.

Health insurance schemes are implemented in many forms, but all of them fall under two types namely, compulsory and voluntary health insurance. Compulsory health insurance is a program in which legislations define the population and benefits covered, the conditions of eligibility and sources of funds of the scheme. On the other hand, voluntary health insurance scheme is a scheme in which affiliation to the scheme is not mandatory and people who are willing and able to pay premium join the scheme.

3.2 Conceptual Framework

The conceptual framework of the study is presented in the figure.2.

Figure 2 : Conceptual Framework



3.3. Type of Study

This study applies both descriptive and methodological approach to explore the possibility of introducing a health insurance scheme for the currently uninsured urban informal sector workers through a survey on household health expenditure and other quantitative and qualitative information obtained from various sources. This study is attempted to examine the various factors from both providers and consumers point of view.

3.4 Steps Involved in the Study

The following are the various steps involved in this study :

1. A comprehensive review of health insurance schemes for informal sector in few developed and developing countries with respect to various components of the schemes such as objectives, target population, coverage, sources of finance, provider payment mechanism administration, and potential problems confronted by the schemes.
2. Estimation of household health expenditure of manual workers engaged in urban informal sector. This part explains demographic and socio-economic characteristics of the households; their illness profile, period of illness and restricted activities, health facilities used for treatment, direct and indirect health expenditures, cost per illness episode and cost per visit.
3. Analysis of factors influencing ability and willingness to pay for health care of households are made on the basis of certain assumptions followed in accordance with various study findings in ATP and WTP literature.
4. An examination of various sources of health care provision in Delhi for the population engaged in informal sector is made on the basis of available data.
5. Examination of various conditions and other requirements for introducing a health insurance scheme for workers engaged in urban informal sector in Delhi based on the experiences of existing health insurance schemes in India and other countries. This section also examines various problems involved in designing various components of the scheme.

6. Design of alternative schemes for workers in urban informal sector based on experiences gained from review of studies of existing schemes in India and abroad, by personnel knowledge and discussion with experts in the field.

The above steps are grouped into two stages as follows :

3.5. First Stage of the Study

The first stage of this study is attempted to estimate household health expenditure of manual workers engaged in urban informal sector, and to examine the factors which affect their ability and willingness to pay for health care through data collected from survey. Certain assumptions are followed in accordance with various study findings in ATP and WTP literature to determine household ability and willingness to pay for health care. In this stage sources of health care provision for urban informal sector population in Delhi is also examined.

In the following section operational definition and important variables used in the analysis are discussed. The concept of ability and willingness to pay and their measurements are discussed separately.

1. Operational Definition

i) Informal sector

In a broader sense, urban informal sector refers to enterprises and establishments in the three main economic activities namely manufacturing, trade and service sectors which employ less than 10 workers and are not covered under Industrial Act of 1948. In this study informal sector refers to those micro enterprises such as metal work, leather work, light engineering, electric repairs, wood work, printing, automobile workshops, construction workers, transport operators and others employing less than 10 workers.

ii) Manual workers

Manual work refers to any work involving sufficient physical labour but at the same time not requiring much educational background in the field of general, scientific, or other education.

2. Variables Used in the first stage

- **Household income** in this study refers to average monthly earnings/wages including bonus, received in cash and in kind, income from subsidiary occupation, income from assets and property, value of goods produced for market and for self consumption, money value of goods received and other transfer earning received by the members of the household.
- **Consumption expenditure** includes average monthly expenditure on food and non-food items by the households. Non-food item includes expenditure on clothes, transport, education, light, fuel, rent, taxes, social and cultural expenditures, medical expenditure, expenditure on consumer durable, washing charges, tobacco, alcohol and life insurance premium etc.
- **Health expenditure** is defined as the amount of money incurred by the households on meeting the health care requirements of its members.
- **Direct health expenditure** include cost of medicines, cost of diagnostic/lab test, doctors fee including charges of traditional practitioners etc.
- **Indirect health expenditure** refers to those costs which are indirectly borne by the households such as transportation costs, expenditure on special food during illness, belief related expenditure, home remedies, and work days lost or wage loss to the family due to illness.

3. Scope of the Study

There is no precise definition available as to what constitutes an informal sector. According to the available definitions, the scope of this sector is vast and it ranges from a self-employed doctor to a street vendor. Various studies in India (Papola 1978, Deshpande 1978, and Meera Mehta, 1990) indicated that manual workers are at the bottom of the ladder in the informal sector and their wages are many times lower than those who are in the upper ladder, especially self-employed. As this study aims to explore the possibility of introducing a health insurance scheme for workers, it is essential to know the current

expenditure on health care, ability and willingness to pay for health care of workers, particularly of those who are in the bottom strata of informal sector. A study among manual workers is more appropriate in this context, rather than including all type of workers covering entire spectrum of informal activities.

Delhi is considered typically an urban state as 89.93 percent of the population reside in urban areas (Census of India ,1991). The population in this state has been increasing rapidly with the migration of people from neighboring states. According to 1991 Census, the population in Delhi is 9.4 million with the growth rate of 4.15 percent per annum, which is one of the highest among various states in the country. Of the total population in Delhi the working population constitutes 2.8 million and of which 0.8million are in the formal sector and the rest majority of 2.1 million are under informal sector (C.S.O, 1991).

The nature and size of informal sector is complex and it spreads to all parts of Delhi. Because of its diverse nature it becomes difficult to include all category of workers representing all areas. Moreover, with the resource and time constraints it is not feasible to cover such a large sample. Therefore it was decided to conduct this study in a cluster in South Delhi assuming that informal sector in other parts of Delhi will have similar characteristics. Khanpur area is selected for the present study.

Khanpur is located in the administrative zone of South Delhi. This is one of the areas in Delhi where large number of rural migrated labour from neighboring states like Uttar Pradesh and Bihar settled. Majority of them are characterized as low income group. The study is confined only to Khanpur division and the study findings can not be generalized. However, this work will form a base for further and more detailed study covering a large sample in the future.

4. Research Tool

An interview schedule was framed to collect primary data which contained information on family profile, income and consumption expenditure, health care profile, expenditure on health care and savings. Besides, a number of questions were included to collect details on utilization of health services and ability and willingness to pay. The illness and health expenditure of

households can considerably be affected by seasonal variation, However in this, the reference period for data on illness and health care was taken as three months prior to the survey due to time constraints.

5. Target Population

The target population in this study are manual workers in micro enterprises such as metal work, leather work, printing, woodwork, electrical repairs, light engineering, three wheeler operators, construction workers and other workers in Khanpur area. A rough estimation from the Census of Delhi (1991) shows that about 0.5million (28 percent) of the informal workforce is engaged in secondary sector and the rest majority 1.51million (68 percent) in tertiary sector. Secondary sector refers to both registered and non-registered manufacturing units. Tertiary sector mainly includes trade, commerce, transport, storage, communication, and construction activities. Of the total informal work force in Delhi about 0.84 million (40 percent) are estimated to be manual workers.

There is no authentic information available about the informal labour force in the study area nor any study has been conducted in the past. However, the number of work force in this area has been estimated from the census figures. The number of informal sector work force in south Delhi constitutes nearly 0.28 million. The work force in Khanpur forms about 9500, of which 3800 are estimated to be manual workers. Due to time and resource constraints, it was not feasible to collect a large sample from the target population. Therefore, it was decided to select 150 samples for this study, which formed nearly 4 percent of the target population in the study area.

6. Sampling Unit and Unit of Analysis

Sample unit for the primary data in this study is manual workers. Manual work refers to any work involving sufficient physical labour but at the same time not requiring much educational background in the field of general, scientific, or other education. In this study household forms the unit of analysis.

7. Sampling Procedure

Stratified random sampling technique was used for the selection of sample workers. The informal establishments in the study area was stratified according to their activities such as trade, manufacturing, and services. And then a total of 150 workers from all the 3 activities was selected at random. Number of workers in each establishment was selected in proportion to the size of manual workers. Similarly, the number of sample in each activity was decided taking into account the proportion of workers in each category in the informal sector workers in Delhi. During the selection of sample, any worker whose family had an earning member in the formal sector was excluded.

8. Factors Affecting Ability and Willingness to Pay for Health Care

Ability to pay (ATP) assumes people have enough resources to pay for the provision of basic services as measured by wealth and income. **Willingness to pay (WTP)** refers to those with enough resources are prepared to pay for their use of services. It is measured by socio-economic and health related factors.

There are multitude of factors which can affect ATP and WTP of households. ATP is affected by personal income, household income, expenditure on food, expenditure on medical care, ownership of property, savings and change in income etc. These are the proxy variables which determine the ATP. The willingness to pay may be determined by level of knowledge, priority given to health care, maximum amount willing to pay, age, occupation, gender, education, size of family, and number of children in the family etc. However, in this study only those major factors identified by various studies which have expected impact on ATP and WTP are used.

8.1 Ability to Pay (ATP)

ATP is affected by multitude of factors. However, household income, expenditure on food and health, ownership of property, and savings are assumed to be key determinants and their subsequent valuation will tender the level of household ability to pay. Moreover, the inclusion of limited variables make ATP measurement simple, practical and meaningful.

a) Household income

In the ability to pay literature household income is considered most important factor affecting ATP. Household income rather than personal income should be considered for ATP as the family is viewed as the fundamental unit of analysis because of interaction effects and constraints within the household. Non-cash income should also be included to get the real value of household earnings. According to Akin et al (1985) it is essential to include non-cash income in the third world countries, because income from these sources may free up cash income to be spent on discretionary purchase of market goods such as medical care.

b) Expenditure on food

Households are assumed to spend a certain level of their income on food and expenditure on food that surpasses this level will be considered unaffordable. The percentage of income spent on food may be more appropriate indicator in this context. Abel Smith, B and P. Rawal (1993) and M.Weaver (1995) in their studies included expenditure on household consumption and expenditure on food as a measurement of ATP and according to them consumption of food is the better denomination of ability to pay than income because it is able to obtain more complete information about consumption, because respondents are more willing to share information about consumption than income. Expenditure on food also provides a better indicator of families longer run standard of living than measurement of income, particularly for low income households.

While considering the ability to pay, the idea used here is how much income is available for consumption of other non-food items. For instance, if a family is already spending a huge share of its income on food items, then only few amount is left to meet demand for non-food items. On the other hand, a household which spends a lower share of its income on food would be able to meet other expenditures such as education and health care. The cost of accessing health care can be affordable when utilization is not deterred for financial reasons; and when the opportunity costs incurred do not cause level of consumption and investment to go below minimum needs (Russel,1996). In this perspective certain level of health care and certain quantity of non-health care commodities and investment are considered as merit goods or basic rights

and needs defined by the society. If the family forego consumption of say, luxury goods such as alcohol and tobacco, it is judged that family is able to pay for health care, but if they forego consumption of essential goods such as food, safe water, it is considered that the family is not able to pay for health care (Gertler and der Gaag,1990). Many household consumption surveys in India have also shown that an average family spends around 60 percent of its income on food. In this study this figure is taken as cut-off point for determining ATP.

c) Expenditure on health

Many studies in developing countries have cited health expenditure : income ratio as evidence of ability to pay. A five percent health expenditure : income ratio is a common bench mark of affordability because most health expenditure surveys in developing countries show that a typical household spends between 2 – 5 percent of their income on health care (Russel,1996). Therefore, any household which spends more than 5 percent of its income on health care is considered to be unaffordable. When a household spends more than certain percent of its budget on health, the household's command over other commodities will be reduced, especially for the poor households may have to make damaging cutbacks to food consumption and other essentials. Survey data are used to estimate health expenditure : income ratios of different categories of households and number of households facing ability to pay problems. For instance, the NCAER survey in India (1995) found that while the poor spent 7.7 percent of their income on health care, the rich had to spend only 2.7 percent. However, there are cases where some low income families would spend little on health care because they have access to subsidized health services and on the other hand some families do spend more. Therefore, percent of income spend on health may also reflect ability to pay of households.

d) Ownership of property

This gives an indication of the ability as income sometimes more transient. Ability could be deduced depending on the ownership of property. Land and other productive assets are also an indication of ability to pay. Households which own all types of consumer durable goods such as television,

refrigerator and scooter etc., assumed to have some ability to pay for health care of their family members.

e) Saving of the household

Saving is a proxy variable as no one would like to reveal his / her actual saving. Saving is a form of asset and it might imply an enhanced capacity of household, to use health care services and possibility to afford higher quality services than income alone suggests (Akin et al,1985). Savings include money a family saved either in the formal financial institutions such as post offices and banks or informal institutions namely, family friend, relatives, local chit funds etc. In general it is assumed that low income group save their money in informal institutions and middle and high income groups will save in banks. (Njournemi,1995). A study conducted by D.N.Pai (1963) in rural Gujarat in India had also endorsed the same findings. There are, however, some exemptions to this rule.

8.2 Willingness to Pay / Contribute

WTP is determined by many variables as mentioned earlier, but the following are considered as its key determinants.

a) Level of Knowledge/ education

The level of knowledge is related with educational background. Knowledge and belief about sickness, good health habits, living conditions etc. are major determinants of the demand for health care services (Akin et al,1985). The knowledge as seen from the utility theory is what makes a consumer to judge the benefit or utility gains associated with consumption of a commodity and it is one of the basis that the sovereign consumer chooses whether to consume or not. Various studies in India such as by Sivram (1970), Dutta (1970) and Khandaker (1974) showed that among lower income group, the more educated utilized health care services more than others in the same group.

b) Priority on health care

Theories of Hicks and Samuelson assume that the consumers are able to order all available combinations of goods according to his /her preferences. By drawing this scale of preferences for health care services, a household obviously will choose to satisfy their wants and needs top on the scale first due to scarcity of resources. However, people value their health differently and especially in the case of preventive care. Feldstein (1988) observed that willingness to pay the subscription premium of risk sharing program is considerably influenced by priority on health care and ability to pay for it.

c) Perception of symptom and disease

Willingness to pay on health care may be affected by how individuals perceive a symptom and disease. The symptom may not be equally recognized by all. Feldstein (1988), G.M. Mwabu (1986) and Yesudian (1989) observed that pattern of utilization of health care is highly sensitive to the households perception of symptom and disease. Stanley Yoder and Robert Hornik (1996) examined the association between symptom, judgement of severity and treatment given for episodes of childhood diarrhea. The study found that mothers perception of severity of illnesses linked closely to the symptom such as vomiting, fever, and lassitude and these perception/symptom were greatly influenced the treatment decision by the household.

d) Amount willing to pay

It is the most objective measure of households willingness to pay and is also the most sensitive issue to be explored. Therefore, a number of questions to be asked to measure this variable. How much people are willing to pay for a good or service can be assessed in two ways. First method is by observing and modeling past health care utilization, expenditure and responsiveness to prices as done by Gertler and van der Gagg (1988). The authors used data on illness and medical care utilization to construct demand function and to predict elasticity of demand for health care and the impact on user fees accompanied by quality/accessibility change would have on utilization, revenue and welfare.

The second method is by asking people directly how much they would be willing to pay for a specified health care service or product. In the Indian

context, the former method may not be suited as health care has been provided free by the government. Moreover, the money spent by the people in the past may not reflect the maximum amount they are willing to pay. Furthermore, willingness to pay for a service is related to many non-price factors, such as type of providers, distance to the facility etc. According to Russel et al (1995) many of these problems are overcome by asking people about their willingness to pay. Many studies conducted in developing countries followed the second method to measure WTP. These studies used different techniques such as open ended questions, closed questions, bidding games etc. to assess maximum WTP or utility from hypothetical data. These methods, however, relies on the respondents making rational and knowledgeable trade-offs and choices before quoting an amount, and these decisions are based on the information they have about health services.

Measurement of ATP

There is no single guideline for the measurement of ATP and WTP or the amount that people able and willing to pay for health care. In the absence of an objective guideline, many measures have been proposed. The variables which are considerably affecting ATP and WTP have already been discussed. Among all variables those which are identified by studies in other countries have been taken into consideration. Household income, percent of income spend on food, percent of income spend on health care, ownership of property and saving are considered for ATP. Interval scale is used for measuring these variables. Four measures namely 1,2,3 and 4 is used. For each variable 1 and 2 reflects no ability, 3 and 4 denotes ability to pay. Households are allocated scores for each variable and ATP of each household was estimated by a summation of scores obtained in all variables.

Here four interval values were used simply because it would help avoid the arbitrary decision of giving scores 0 or 1 against each variable. Therefore each interval scale was divided equally to make a total of four interval scale. Moreover, the combined summation of scores obtained in all variables by a household may provide more reliable result than using two interval scale.

The rationale for adopting this simple scale is to have uniform measure for all the variable so that ATP can be calculated easily. Here equal weight is given to all variables mainly due to the fact that no consensus evolved so far

regarding which variable would command more weight. Economists suggest a Delphi technique or nominal group technique by convening a board of experts. The measurement of ATP variables is illustrated in the table 3.1.

Table 3.1 : Interval Scale and Measurement of ATP Variables

Variable	Interval Scale and Scores	
a) Household Income (assuming Rs.2500 will meet basic requirements-based on the results of available studies)	Less than Rs.1250	-- 1
	Rs.1250 - 2500	-- 2
	Rs.2501 - 3750	-- 3
	Rs. 3751and above	-- 4
b) Expenditure on food (assuming an average household spends 60 % of its income on food – based on available studies)	More than 80 %	-- 1
	Between 80 % - 60 %	-- 2
	Between 60% - 40 %	-- 3
	Below 40 %	-- 4
c) Expenditure on health care (assuming that an average household spends 6 % of its monthly income on health care – based on the average figure of available studies)	More than 10 %	-- 1
	Between 10 % - 6 %	-- 2
	Between 6 % - 3 %	-- 3
	Below 3 %	-- 4
d) Ownership of property	Owns no property	-- 1
	Own only home	-- 2
	Plus consumer durable (refrigerator, scooter etc.)	-- 3
	Plus land	-- 4
e) Saving	No saving	-- 1
	Saving in Informal institution	-- 2
	Saving with post office	-- 3
	Plus banks	-- 4

Measurement of WTP

The technique of WTP is based on the premise that the maximum amount of money an individual is willing to pay for a commodity is an indicator of utility or satisfaction to him/her of that commodity. The most obvious market where WTP behavior is revealed is through auctions. Here individuals are pushed to consider the maximum amount of money they are willing to pay for a given commodity with given attributes. The maximum amount a person willing to pay depends on the satisfaction or utility he/she derives from the good.

One of the most important problems in the consumer theory is measuring the subjective views of consumers. According to Sher and Pinola (1986) realistic approach employs an ordering method rather than absolute scale for measuring utility and valuing different goods because such an absolute scale has more restrictive assumptions (quoted in Obinna,1995). Therefore, in this context interval scale can be used in the measurement of WTP. The interval scale can be used in measuring utility when one seeks to do more than just indicate order of preference and when in particular one wants to say something about the rate of increase or decrease of utility.

Samuelson's theory of revealed preference also assumes that choices or preferences can be ranked. There is no additive cardinal system has been developed to measure individual preferences. Using observed behavioral and health status factors and the amount of money people are willing to spend as determinants of a broader measure of WTP, one will have a more objective indication of whether an individual or household is really prepared to contribute. However, there are controversies arise as attaching weights to variables carries some subjective bias.

In this study interval scale is used in the measurement of WTP. The scale is numerical between 1 to 4 and the numerical difference between two numbers is a measure of difference in the underlying property. The rationale for using four interval scale is that it may help to avoid arbitrary decision of giving scores 0 or 1 against each variable. Moreover, it may not be reliable to use two extreme scores to measure the willingness to pay. Therefore it was decided to use two interval scales giving scores 1 and 2 for no willingness to pay and scores 3 and 4 for willingness to pay. Here uniform weights are given to all variables, so that WTP may be calculated easily.

After allocating the scores to each variable, WTP for each household is estimated by a summation of scores for the variables. The method of measurement of WTP variables is illustrated in table 3.2.

Table 3.2 : Interval Scale and Measurement of WTP Variables

Variable	Interval Scale and Scores
a) Level of education (years of schooling)	illiterate -- 1
	Below 5 years -- 2
	5 - 10 years -- 3
	Above 10 years -- 4
b) Priority on health care	No priority -- 1
	Low priority -- 2
	Medium priority -- 3
	High priority -- 4
c) Perception of symptom about major diseases	No knowledge -- 1
	Low knowledge -- 2
	Medium knowledge -- 3
	High knowledge -- 4
d) Amount willing to pay (assuming a family spends Rs. 750/ annum on health care – based on available studies)	Less than 375 -- 1
	Between 376 -750 -- 2
	Between 751 -1125 -- 3
	Above 1125 -- 4

9. Secondary Data

The secondary data for this study is collected from the following sources:

1. Data on health infrastructure and Govt. Health expenditure are collected from the report on "Health Information" published by the ministry of H & FW
2. Annual Reports of the Employees State Insurance Corporation of India, and Central Govt. Health Scheme.

3. Related information on expenditures and utilization of health care by the urban population from existing studies
4. National Sample Survey Organization, Report on Morbidity and Utilization of Medical Services, NSSO 42nd Roud.
5. National Council for Applied Economics Research, Household Survey of Medical Care, 1992.
6. National Family Health Survey, Delhi, 1993.

10. Data Processing : Computer Software Used

The software program SPSS is used to analyze data on demographic and socio-economic characteristics of households and data on household health expenditures and other related information.

ATP and WTP may be used as dummy dependent variable in the analysis. We may consider, for example ATP is a dummy dependent variable with the values 1 (positive) and 0 (otherwise) and monthly income of the household as independent one. In the regression model, the purpose is to find a relationship between ATP and the probability to have a certain level of monthly income. The choice model, can be written in a form which is both useful for prediction purposes and are easily estimated.

Linear Probability Model (LPM), logit model and probit model are generally used to estimate the probability of occurring or not occurring of a dependent variable. The LPM is the simplest model to use but has several limitations such as non-linearity of error terms, heteroscedasticity and the possibility of the estimated probability lying outside the 0-1 bounds. Both logit and probit models is associated with cumulative distribution function and they guarantee that the estimated probabilities lie in the 0-1 range and they are non-linearly related to explanatory variables. The choice between the two is one of mathematical convenience. On this scores, the logit model is generally used in preference to probit model.

Logit analysis presents a unique complement to multiple regression in its ability to utilize a binary dependent variable. Logit model does not predict just whether an event occurred or not (0 or 1), but instead it predict the

probability of an event to happen. The probability of an event occurring such as ATP and WTP can be estimated from the model. In the case of multiple independent variables, the model can be written as

$$\text{Prob (ATP)} = \frac{1}{1 + e^{-Z}}$$

where z is the linear combination

$$Z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

The probability of an event non occurring is estimated as

$$\text{Prob (no ATP)} = 1 - \text{Prob (ATP)}$$

$$\text{Prob (no WTP)} = 1 - \text{Prob (WTP)}$$

In the above equation X_i are independent variables such as household income, expenditure on food, education, savings, ownership of property and so on. Interpretation of the output of logit function is similar to interpretation of regression output, but the analysis of the magnitudes of the coefficient is to be made with logit functional form in mind. Since the dependent variable is a binary indicator the expected values of the dependent variable equal to probabilities given in the model.

3.6. Second Stage of the Study

The second stage of this study is a methodological approach which explores various conditions and other information required for planning and designing a health insurance scheme for workers engaged in urban informal sector in Delhi. It also examine various elements which are to be evaluated for introducing an health insurance scheme based on the experiences of developing countries. The elements include the following:

- Source of contribution
- Basis for premium
- Ownership and type of insurance
- Population coverage

- Type of services covered
- Nature of subsidy
- Type of payment and mechanism of payment
- Type of provider etc.

In the last part of this section, two alternative insurance schemes are designed one voluntary and the other compulsory in nature. These schemes and their various components are designed on the basis of the experiences gained from India and other countries. Moreover, the personnel experience of the author and opinion of thesis advisor, thesis committee members and other experts in the field are applied. A proposal for a provider net work is also illustrated in the final part.