CHAPTER III

PROPOSAL

A Cross – Sectional Study to Assess the Accessibility to Primary Care for Households in the Urban Area of Danang City in Vietnam

3.1. INTRODUCTION:

Vietnam is a developing country. The endeavor of the Government, especially with the "opening policy" in the recent years, has improved the socio-economic condition that has a positive affect to the health of people. In developing country, while the socio – economic conditions are still low, the investment to develop primary health care is essential. Up to now, the development of the national health system has reached some achievements, most of all communities in Vietnam have health delivery facilities (93,24%, Ministry of Health, 1997). On average, each commune health center serves 6,762 persons. The development of universal coverage in the health system from central to community facilities has facilitated the delivery of health services to the people. Health services have been concerned to develop quality as well as quantity. Secondary and tertiary health care has been set up and improved at district, city, province and central levels. While primary health care is emphasized as

an important basis for the whole health system. It is integrally developed into communities in order to meet the basic health care demands of people.

Primary care plays an important role in the mission of the health system. It is part of primary health care and considered to be the first point where people contact with the health system (WHO, 1996). A large proportion of diagnosis belongs to primary care. It covers the most common health problems of people. So primary care has a great mean to the community health. The universal coverage of health facilities has been a condition to deliver health services to people. However, this process of delivering depends on many factors: accessibility, availability, utility, quality of health service, and policy. Among these, accessibility to primary care allows patients to contact and use health services. What happens if people can not access health services? The demands for health care of people are not satisfied. So primary care contributes an important role in the function of the health system.

In recent years, the progress in developing primary health care in Vietnam reached some achievements. Health service facilities have been built from the central level such as medical institutes, specialized hospitals and central hospitals to community level with community health centers and have a good coverage level. Community health centers cover 91% communities, in which 52% of community health centers have medical doctors, 100% of them have midwives or medical assistants (MPH, 2000). The development of the private health sector with private clinics, hospitals and policlinics has contributed to the availability of health services as well. However, the available health services should be made accessible to all people. Availability and accessibility are key points of primary health care:

> Alma – Ata Declaration (1978) stated: "Primary health care aims at providing the whole population with essential health care besides preventive and promotive services. Population coverage has often been expressed in terms of numerical ratio between services for providing health care and the population to be served. Even then, such ratios express the mere existence or availability of services and in no way show to what extent they have been used, let alone correctly used. To be used they have to be properly accessible."

In Vietnam, the accessibility to primary health services has been emphasized in the development strategy period 2001 – 2020 of the health system: "we endeavor to build a primary health care system that all people can reach primary health services, can access and use quality medical services." (Government Decision, no35, 2001).

The study to assess the accessibility to primary care is essential to describe the real situation of accessibility of people. From the result of the study, we can make some references for the authorities to consolidate and develop the health system. Before we go into the details of the study, we need to have a general look of Danang city in Vietnam where the study will be implemented.

Danang is a small city with a population of 719,621; the area is 1,279.6 km^2. GDP per capita is 400 – 500 USD. In the urban area, there are five urban districts, which have relative similar health services. It is common that people use health services in other districts. These five urban districts are then divided into 47 sub-districts (quarters). Further, there are one island district and one rural district. These two districts have a different geography, socio-economic, cultural and policy conditions. Both of them are remote and not convenient for study. Further more, they have special medical support from the government, making the health services different from those in urban area. Therefore, the study only focuses on the urban area.

The primary care facilities in Danang city:

Government sector:

Forty seven community health centers (sub - district level) are the main facilities of primary care services. All the community health centers in the urban area have medical doctor (MPH, 2001). There are fourteen general consulting rooms in each of the five district health centers, a general hospital, five special hospitals and three branch hospitals that deliver primary care. Besides, the City has one emergency center with ambulances serving 24 hours for emergent cases.

Private sector:

There are three private hospitals. All three of them have general consulting rooms. There are about 200 private clinics and policlinics (including general and special physicians). Doctors who work in the government hospitals operate them out of office time. These private clinics contribute a lot to primary care. However, private sector services are expensive; this might be a problem in terms of accessibility to health services for the low-income group.

Danang City has relative convenient socio-economic conditions compared to the average of the country. It has a positive affect on the accessibility to health care of people in the City. The City has built a universal coverage health system. In the development of the health system in Danang, there are two main directions:

1. Develop secondary and tertiary care to meet the demand of specialized care of people.

2. Develop primary health care to meet the essential basic health care of all people. The health programs have been implemented under the guidelines of the MPH or Medical Institutes.

(source: Danang Medical Bureau Office, 2000)

Operational Definitions:

Accessibility to primary care services:

The study will assess the accessibility of households to primary care at four dimensions:

- Geographical accessibility: It includes the distance from home to the community health center, transportation means people used to get to and time spend to reach the community health center.
- Financial accessibility: includes prices of consultation, medicines, medical treatment that patients have to pay and the transportation fee to get to the community health center.
- Functional accessibility: includes time that medical services are available, waiting time of patients, registration, waiting places, perception on the quality of medical services and availability of medicines.
- Cultural accessibility: refers to the privacy in consulting rooms when patients are examined.

Household:

Household used for collecting data is identified as a registered family including parents and children. The other generation such as grandparents will be

included in the family if they share financial responsibility for living expense. In the concept of household in Vietnam, these people must have daily meals together. The households must be registered in the list of household statistic profile of sub - district people committee. The health station also has this profile.

As usual in Vietnam, the mother in the household is the person who concerns most to the health of family members, she also takes care for the family expenses. So the mother of household will be selected as respondent for interviews.

Exclusion criteria on selecting households: Households were the mother goes to work out site Danang City and mothers that are mentally disabled.

Primary care services:

Primary care services: include curative, preventive and promotive services. In this study, I limit to the primary curative services.

There are many kinds of health service facility that can deliver primary curative services such as a community health center, a general consulting room at districts health centers and hospitals. Among them community health center is the main place to deliver primary curative services, so in the study I focus only on the community health center.

3.2. RESEARCH QUESTION:

- What is the situation in terms of accessibility to primary care for households in the urban area of Danang City in Vietnam?
- What are the main factors that affect accessibility to primary care of households in Danang City?

3.3. STUDY OBJECTIVES:

3.3.1. General Objective:

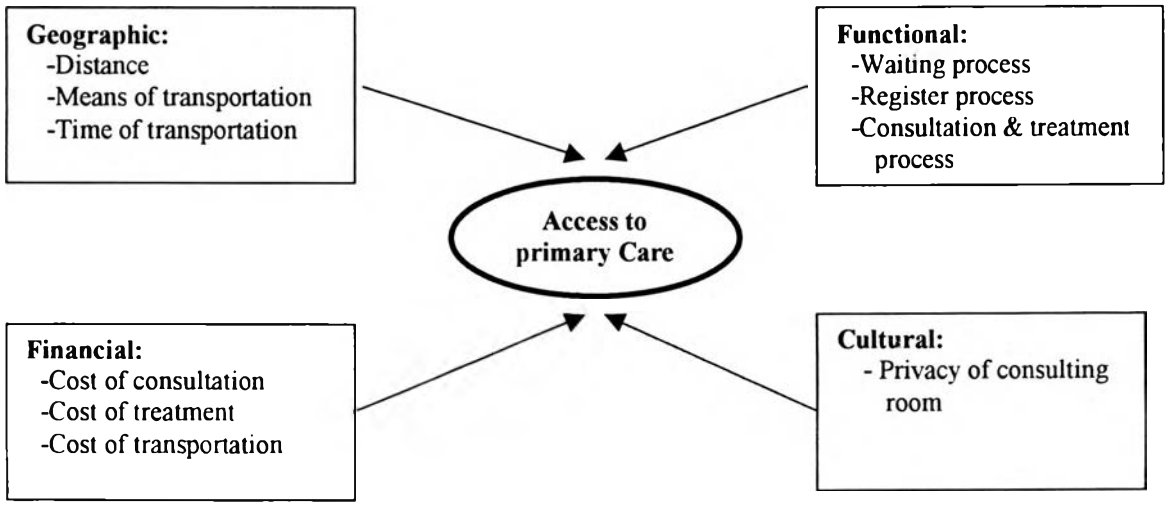
To provide evidence and recommendations for decision making on the accessibility to primary care for households in the urban area of Danang City in Vietnam.

3.3.2. Specific Objectives:

1. To describe accessibility to primary care in terms of geographic, functional, cultural and financial factors among households in Danang City in Vietnam.
2. To define the levels that factors affect accessibility (geographical, financial, cultural and functional) for households to primary care.

3.4. CONCEPTUAL FRAMEWORK:

Figure 3.1: Conceptual Framework: **Factors Affecting Accessibility to Primary Care**



Source WHO, 1981

3.5. METHODOLOGY:

3.5.1. Study design:

The study is designed as a cross – sectional descriptive study to assess the accessibility to primary care for households in the urban area of Danang City in Vietnam.

3.5.2. Study site:

The study will be implemented in the urban area of Danang City in Vietnam. The urban area includes five districts that have similar socio – economic and cultural conditions. They also have the same district level health system facilities; people in each district often use health services at other districts.

3.5.3. Study population:

All registered households in the five urban districts in Danang City in Vietnam are included in the study population.

3.5.4. Sample size:

There was no study to assess accessibility to health care before in Danang City. There were 113,454 households in the urban area in Danang City (City Statistics Office, 1999). The formula to calculate sample size will be identified as follow:

The first step, I use this formula:

$$n = Z^2_{1-\alpha/2} \cdot \frac{P_x (1 - P_x)}{d^2}$$

$$= (1.96)^2 \frac{(0.5)(0.5)}{(0.05)^2} = 332$$

The Sample size/ Study population rate = 332/ 113,454 = 0.003 < 0. 05

Therefore the formula will be adjusted to:

$$n = \frac{N \times Z^2_{1-\alpha/2} \times P_x (1 - P_x)}{d^2 \times (N-1) + Z^2_{1-\alpha/2} \times P_x (1 - P_x)}$$

$$= \frac{113{,}454 \times (1.96)^2 \times 0.5 \times 0.5}{0.05^2 \times (113{,}454 - 1) + (1.96)^2 \times 0.5 \times 0.5} = 383$$

Total sample = **383 + 10% x 383 = 422**

(Plus 10 % for estimated loss of sample)

n = estimated sample size

Z = standard normal score at significance level at 0.05 = 1.96

p = expect proportion of households can easily access to primary care. In this case there was no previous study so I set p = 0.5

d = absolute precision of study = 0.05

3.5.5. Sampling technique:

The multistage sampling technique will be applied.

Stage 1: calculate the number of sample of districts proportionate to household number in each district:

N = Total registered households in five urban districts.

N_i = Number of registered households in each district, respectively.

$i = 1 \rightarrow 5$

n_i = proportionate samples (households) in each districts, respectively:

$$n_i = n \sum_{i=1}^{5} \frac{Ni}{N}$$

Stage 2:

When we find the number of sample in each district, we continue to use proportionate sampling technique to calculate the number of households in each sub-district (applying the same formula as above).

Stage 3:

When the number of sample in a sub – district (quarter) is defined, because this number is low (average number of households in each sub - district = 366/ 47 = 8); so I use simple random sampling technique to select sample in sub - districts.

3.5.6. Instrument:

Quantitative method will be applied with a household survey by a questionnaire. The questionnaire is based on the four dimensions of accessibility to primary care: geographic, functional, financial and cultural.

The questionnaire is developed to describe the present situation on accessibility to primary care at community health center for households via the perception of the mother. The questionnaire includes five parts:

Part 1: is used to collect demographic information such as: age, number of family members, duration of residence and property.

The next four parts (2, 3, 4, 5) will be used to collect data on the four dimensions of accessibility to primary care at community health center.

Part 2: data about geographical accessibility.

Part 3: data about functional accessibility.

Part 4: data about financial accessibility.

Part 5: data about cultural accessibility.

The Likert scale is used to assess people's perception on aspects of accessibility. A four point scale is used, for example: strongly satisfied = 4, satisfied = 3, dissatisfied = 2, strongly dissatisfied = 1.

Because all community health centers in the urban area of Danang City have medical doctor, therefore questions will be designed to ask about activities and attitude of doctor instead of nurse, medical assistants or other health workers.

Qualitative data will be collected through in - depth interview technique, focusing on four dimensions of accessibility - geographical, functional, financial and cultural. The purpose is to explore more in – depth understanding on reasons why people do not go to community health center when they get ill, what are the main barriers for those who use medical services and what cause them to be the barriers.

Establish quality tool:

1. Create validity tool based on literature review and suggestions from experts and experienced researchers in order to specify pattern and contents of the questionnaire.
2. Ensure a cultural sensitive instrument that uses culture, language, custom and habit characters of study population should be an appropriate vocabulary and tune of questions.
3. Testing the questionnaire for reliability with a population having similar conditions and characteristics.

3.5.7. Method of data collection:

The study will be done under the agreement and funding of the city authorities. Community leaders and health officers in sub-district health stations (commune health center) and members of the city Woman Union will be invited for cooperation.

The questionnaire for quantitative data and guidelines for in - depth interview of the study are prepared in both English and Vietnamese. Members of the Woman Union will be invited for cooperation as interviewers. They will be trained with an orientation on basic knowledge for interview, how to interview and how to fill in the questionnaire and take field notes. The technique to contact and conduct the interview in households will be included in the training.

For quantitative data collection:

- The interviewers will ask the respondents and fill in the questionnaire.

For qualitative data collection:

- Qualitative data will be collected after analyzing the results of the quantitative data. Ten percent of questionnaire respondents who use and ten percent of who do not use community health centers will be selected for an in - depth interview.
- Data collection is based on field notes. The field note includes:
    + Mental notes: Interviewer uses shorthand technique to record ideas of respondents when interviewing.
    + Jotted notes: After each interview, the interviewer will review the mental notes and summary the information.
    + Full report: A full report will be prepared based on the jotted notes using content analysis.

3.5.8. Data analysis:

3.5.8.1. Method of data analysis:

The SPSS program will be used to facilitate analysis.

For the descriptive data, frequencies, means and standard deviations will be calculated. The evaluation of whether the relation between independent and dependent variables is significant or not, will be analyzed by Chi-square test. The strength of relations will be identified with Pearson correlation test.

Qualitative data will be divided into two groups. The first group is of respondents who do not attend medical services at community health center. The second group is of whom using medical services at community health center. Content

analysis will be applied in order to find out the main reasons why people do not attend primary care at community health center and the main difficulties of those who use medical service and the relations among the reasons, difficulties in terms of cause – effect.

3.5.8.2. Process of data analysis:

Quantitative data analysis:

- Apply double entree process: two persons will enter data separately then compare the results. If the results are the same, data is entered correctly.
- Overviews all collected data and eliminate wrong data (validity and reliability concern).
- Classify and code the answers: Collected questionnaires will be divided into two groups: the group of respondents who use medical service at community health center and the group of respondents who do not use.
- Analyze quantitative data by using the SPSS program: frequencies, means, standard deviations and percentages will be calculated. The relations between independent and dependent variable is significant or not will be analyzed with Chi – square test. The strength of relations will be identified with Pearson correlation test.

Qualitative data analysis:

- Information collected by the in - depth interviews with the field

- notes will be summarized and classified the reasons, difficulties and the relations in groups based on four dimensions of accessibility (geographic, functional, financial and cultural).
- Data collected from two groups of respondents those who use medical service at CHC and those who do not use will be analyzed separately.
- Content analysis will be applied for interview reports
- The full report will be written based on field notes.

3.6. EXPECTED OUTCOME:

The result of this study will facilitate authorities to refer in policy making.

3.7. ETHICAL CONSIDERATION:

Before starting the survey, all the research assistants will be informed on the approval of the authorities, the purpose and meaning of the study. The process of study, confidentiality of data obtained will be introduced clearly to the assistants

All household interviews will be held only with the permission of the participants, who are informed that they do have right not to answer the questions or participate in the study. All information obtained will be used solely for this research and the privacy of the participants will be fully respected.

3.8. LIMITATIONS:

The study will focus the accessibility to primary care at community health center. In fact general - consulting rooms in district health centers hospitals and private clinics can be the first places that patients go to when they get ill. So the study

will only show the situation of accessibility to primary care at community health centers.

Primary care includes curative, preventive and promotive service. The proposal is designed to study accessibility to primary curative only.

3.9. ACTIVITY PLAN:

The summary of activities is described in the table below:

Table 3.1: Activity Plan

Activity	Months								
	*	1st	2nd	3rd	4th	5th	6th	7th	8th
Approval of city Medical Bureau	X								
Literature review		X	X						
Submit proposal			X						
Staff meeting to introduce the study to authorities				X					
Formation of the action committee, introduce problem, objectives, resources				X					
Training of research assistants				X					
Data collection - Interview questionnaire - In-depth interview - secondary data					X	X X			
Data analysis						X	X		
Report writing							X	X	
Conclusion and recommendation									X

Note: *: Time is dependent on authorities.

3.8. BUDGET:

The budget required for the proposed study may be allocated from the research and development of the City Medical Bureau or from a Non Government Organization who is involved in the development strategy of health system.

Table 3.2: Estimated Expenditure for Study Activities

Budget Category	Unit Price (USD)	Number of Units	Total Amount (USD)
1. Personnel			
1.1. Researcher, coordinator	230	12	**2,760**
1.2. Assistant, facilitator	50	8	**400**
1.3. Participants	1	422	**422**
2. Meeting expense	150	2	**300**
3. Transport			
3.1. Fuel	0.5	300	**150**
3.2. Taxi, motorcycle rent	Forfeit	——	**50**
4. **Stationery**	Forfeit	——	**100**
5. Dissemination of results			
5.1. Meeting to disseminate result	150	1	**150**
5.2. Photocopies	50p/1USD	50	**50**
6. Miscellaneous			
6.1. Other supplies (food, drink...)	Forfeit	——	**100**
6.2. Miscellaneous	Forfeit	——	**50**
Total budget:			**USD 4,532**

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