

## CHAPTER II

### LITERATURE REVIEW

#### 1. Concepts and theories

Utilization of health care is one of the determinants to look at the health and disease status of people. However, utilization of health care services depends on many factors such as people's health status and need, demographic characteristics, physician availability, organizational features and financing mechanisms (Andersen, 1968 and Hulka & Wheat, 1985). Improving access to health care, availability of physicians, and expansion of infrastructure make people use health care services more (Hulka, 1985). Both health status and need for medical care play a major role in determining health care services utilization (Andersen, 1968). Among others, perception of people towards their health, type of services, and insurance support also influence their health – seeking behavior. Utilization of services also depends on the satisfaction levels of patients and quality of care. Demographic characteristics like gender and age are important independent factors influencing health care utilization as well.

Rosenstock (1966) showed that utilization depends on perceptions and beliefs of individuals regarding their health, while Andersen (1975) pointed out that the use of health services is a function of predisposing, enabling and need components, which stressed more on behavioral theories. Another model developed by Aday and Andersen (1974) considered that utilization depends on health policy and characteristics of the health delivery system.

Some studies found differences in the utilization of health care by socio-economic status and the income effect. They become important barriers to the utilization of care services. However, improving access to health infrastructure in less developed areas is found to be equity enhancing. Thus, utilization is not only determined by need, but also affected by access to services, including availability and price (Gao et al., 2002)

### *Models of Health Service Use*

Eventual choice to use health services is influenced by many factors. Perhaps the best-known conceptual framework for understanding the use of health care services has been presented by Andersen and Newman (1973) and their revised model of health services' use (1995). The model includes three major factors that may determine the use of services such as predisposing factors, enabling factors and illness or level of need.

(1) *In the predisposing factors*, there are three categories: demographic, social, and belief factors. Demographic variables include age, gender, marital status, and past illness. The social variables include education, race, and other personal characteristics. Belief variables include values, and attitude.

(2) *Enabling factors* include personal resources such as income, health insurance, and access to medical services.

(3) *Illness level* is referred to clients' medical need

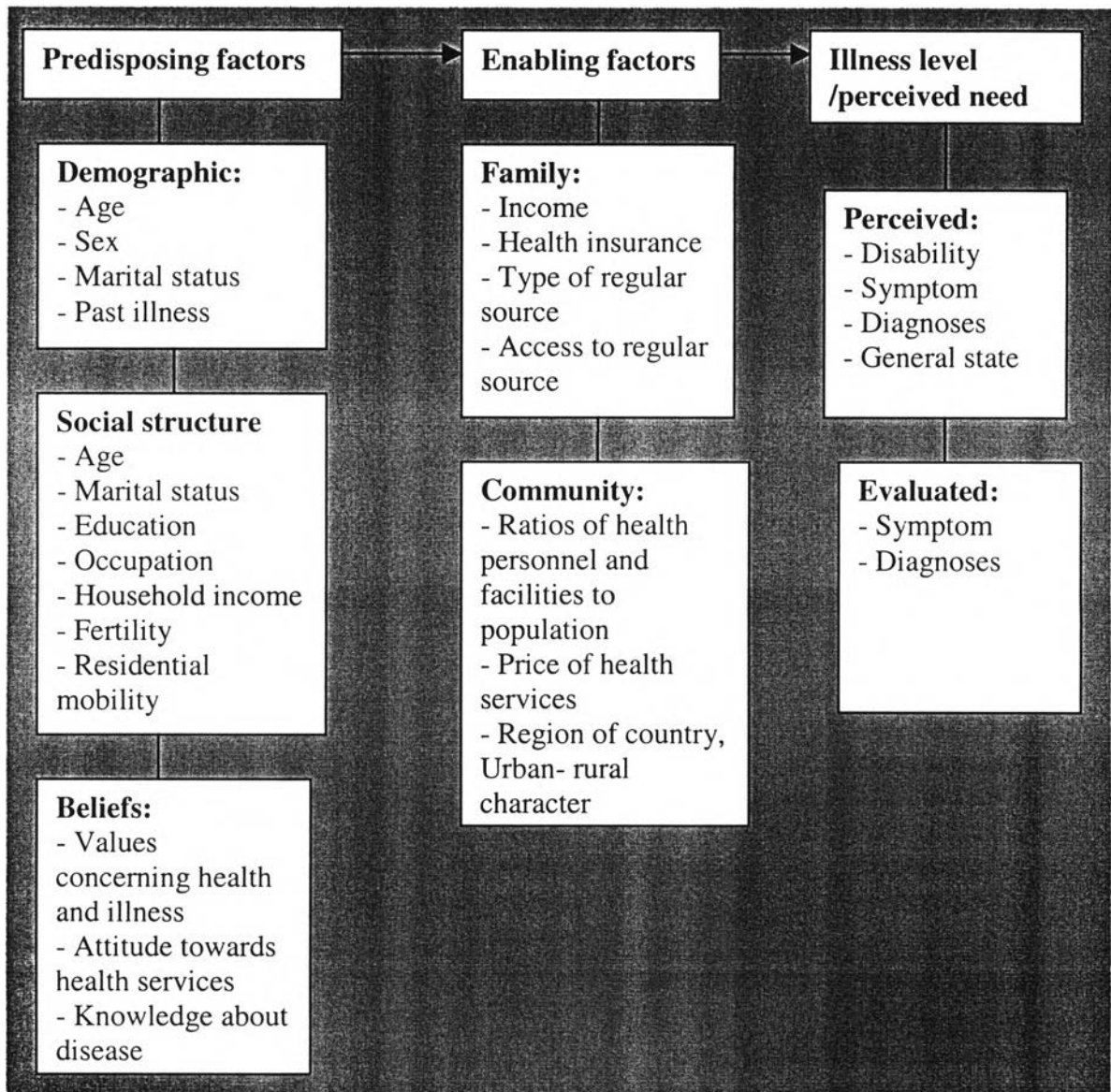


Figure 2: Individual Determinant of Health Service Utilization ( Andersen & Newman, 1973)

In 1995, Andersen revised the model of health services' use. The model of health service was initially designed to explain the use of formal personal health services rather than to focus on the important interactions that take place as people receive services or on health outcomes. The revised Andersen model includes the health system, the national health policy, the resources, and their organization in the health system as important determinants

of the population's use of services. This model also portrays the multiple influences on health services use and subsequently, on health status. It also includes feedback loops showing that outcome, in turn affects subsequent predisposing factors and perceived need for services.

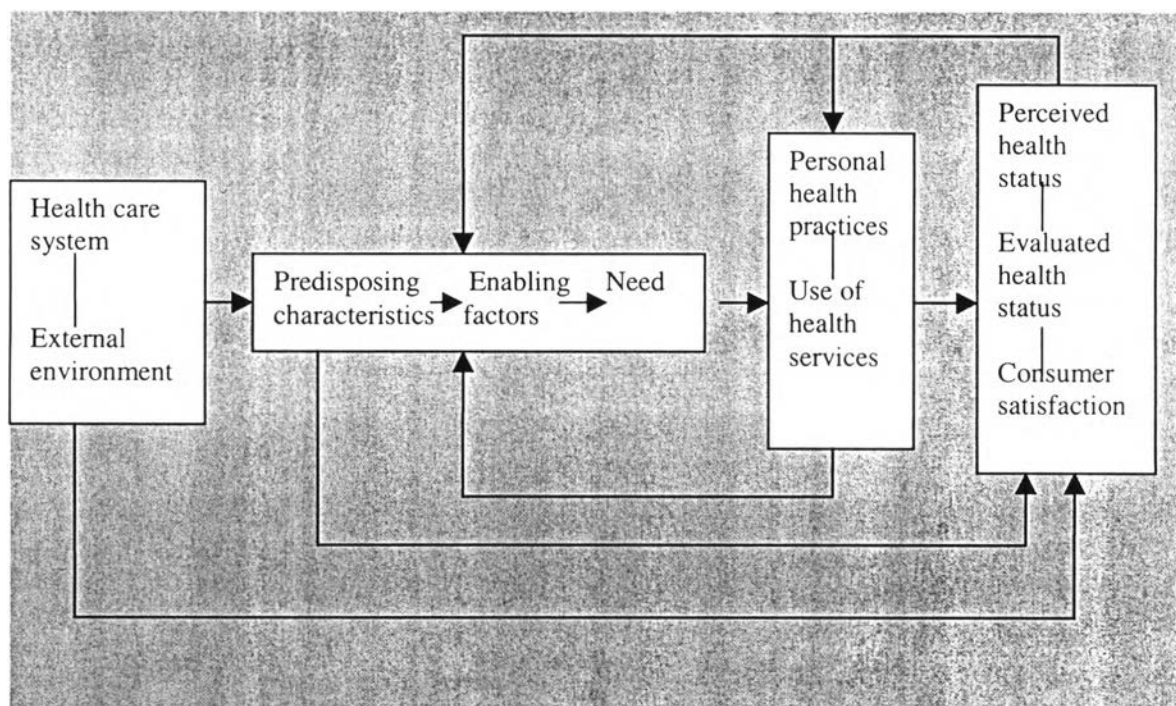


Figure 3: Revised Model of Health Service Use of Andersen, 1995

## 2. Research related to the utilization of health care services and utilization of family planning services:

There are many studies conducted to describe the health services utilization as well as utilization of family planning services. The findings show that there are many factors influencing the utilization of health services.

(1) Baris et al (2000) conducted study: "A population- based survey in three cities of Latin America". The health service utilization model of Andersen (1973) was applied to describe the utilization of health services among population in three cities in Argentina, Brazil and

Mexico of Latin America. The predisposing factors include age, sex, level of education attainment, family income and attitudes and beliefs regarding health services. The enabling factors include social support, entitlement to health coverage (health or social insurance), having regular sources of services, and out- pocket payment. Need for health services are expressed as perceived need. The issue of utilization implies the possibility of accessing health services, sporadically or on regular basis and the satisfaction of the users with the attention, they received.

In Rosario, Argentina, the finding showed that in the hypertensive group, entitlement to health coverage was positively correlated with level of education. There was also strong correlation between attitudes and health services. For prenatal care, the level of education has an important positive correlation both with family income and with entitlement to health coverage.

In Rio de Janeiro, Brazil, enabling variables, especially having a regular source of services and health coverage, proved to be the main variables influencing service use. However, perceived need had no bearing on service use during pregnancy. The effect of predisposing factors was negligible, except for the age of the child in case of diarrhea, and the level of education in seeking and using prenatal care.

In Mexico City, Mexico, in the hypertension group, there were positive correlations between schooling and socio support, and that attitudes correlated positively with both direct out-pocket payment and perceived need. Service use was positively correlated, albeit to a lesser extent, with income, attitudes, entitlement, and having a regular source of care. In the case of prenatal care, the variable with the highest correlation with service use were schooling, income, social support, and perceived need.

In all three countries, for different tracer conditions (hypertension, pregnancy and diarrhea), the result showed that some enabling variables that have a direct and significant influence on health services utilization. Utilization of health services was influenced by enabling variables, not by perceived need for care. The predisposing variables education, strongly differentiated according to the income level also influenced the utilization of services. Similarly, attitudes, in close relation with variations in income and education, affected the utilization of services.

(2) According to WHO, access to maternal health services means that maternal health care is within reach of women who need it: they can get to it easily and are not deterred from using the services available, either because of cost or poor treatment by staff. There are barriers that limit women's access to care such as distance, cost, and multiple demands on women time, poverty, and lack of decision-making power.

- *Distance and lack of transport*: In most rural areas, one in three women lives more than five kilometers from nearest health facilities. The scarcity of vehicles, especially in remote areas and poor road condition can make it extremely difficult for women to reach even relatively nearby facilities. In rural Tanzania, 84% of women who gave birth at home intended to delivery at a health facility, but did not because of distance and the lack of transportation.

- *Cost*: Fees reduce women's use of maternal health services or from seeking care even when complications arise. Even when formal fees are low or non-existent, there may be "informal" fees that pose significant barriers to women's use of services.

- *Interactions with providers*: Many women describe providers in the formal health care system as unkind, rude, unsympathetic, and uncaring. In Tanzania, a study found that 21%

of women delivered at home because of the rudeness of health staffs even they thought delivering in a health facility was safer.

*-The gender dimension/Socio-cultural factors:* Women must balance the time they spend on their own health with their multiple responsibilities for children care, cooking, cleaning, and growing food or other activities. In many parts of the world, women's decision-making power is limited, particularly in matters of reproduction and sexuality (WHO, 1998).

(3) Education of women is also a factor influencing the use of maternal health care services. A study "Utilization of maternal health care services in Peru: the role of women's education" conducted by Elo (1992) to explore the hypothesis that formal education of women influences the use of maternal health care services in Peru.

The study's model of maternal health services use was based on the conceptual framework of health-seeking behavior developed by Kroegeer (1983). There are the following factors:

- *Predisposing factors* including age, sex, household composition and size, ethnic group affiliation and education
- *Characteristics of illness*, expected benefits from treatment and beliefs about disease causation
- *Characteristics of the health care system*, including cost and quality of care. According to this framework, education is only one of many factors influencing decisions concerning the utilization of health services.

The findings showed that the bivariate effects of females schooling show a strong positive association between education and the use of maternal health services. Women with no education had received prenatal care only for 22.1 per cent of last births within five years of the survey while women with secondary education had received care for 87.1 per cent. There were also others factors that influenced the use of health care services. Women who grew up in the countryside were less likely to seek modern health care services during pregnancy and delivery than women who grew up in the cities. Old women seemed more likely to seek care services than younger women did. Husbands education has a net effect similar to, but weaker than mother's education.

(4) Another study examined factors affecting the choice of maternal and child health services in a rural area in Saudi Arabia. A house- to- house survey of 329 women in Al-Oyaynal village, north-west of Riyadh city, was carried out to determine the maternal factors associated with the choice. The examined variables were age, duration of marriage, education, occupation, income, and husband's education. The analysis showed that distance from the health service, education of the mother and her age were the strongest determinants of the choice of maternal child health service used. About 8% of the subjects used private clinics and 25% used the maternal child health services located in primary health care center; the majority utilized maternal child health services in a hospital setting. A high proportion (58%) of those who utilized the private clinics were 35 years old or above, compared to 13% and 16% who used government primary health care and maternal child health services in government hospitals.(Al-Nahedh, 1995).



(5) In Vietnam, Nguyen and Vu conducted a study in 2001 to determine factors that promote the use of oral contraceptives in Vietnam. The study showed that education had a certain influence on how much a woman knows about using the pill. The more highly educated women were, the more they understand about how to use oral contraceptives correctly. There was also difference in knowing how to use oral contraceptives between women who did not want to have more children and those who did want more. The study also showed that the rates of ever and current was higher among those who had access to information about pill and who had been exposed to advertisements for oral contraceptives than those who had not. Price was an important factor affecting the use of contraceptives. Vietnam's family planning program currently advocates providing free oral contraceptives, including the German made "Ideal" brand, which, although it is for sale, can be found in the market for 1,000-2,000 Vietnamese Dong ( US\$ 1= about D 15,000). Other types of oral contraceptives are sold at different prices, for example, 2,000 Dong for a package of "New Choice", and 40,000 Dong for a package of "Marvelon". The diversity and complexity of the distribution system influences both the attitude and the practice of using the pill. People do not want to pay high prices for oral contraceptives, but they think that oral contraceptives sold at low price are of poor quality. The study showed that only a quarter of the users said that they would be able to buy the pills if they are priced at 2,500 Dong or higher. The number rises to about half when the prices of pills are 2,000 Dong or lower.