



CHAPTER II

LITRETURE REVIEW

2.1 Health Seeking Behavior Models:

2.1.1 The Health Belief Model (HBM):

This is possibly the most known model in public health, and also the oldest one from social psychology, developed in the 1950s.

Figure 1 shows the HBM as presented by Sheeran and Abraham (1995). According to this version, action in the HBM is guided by:

(1) Beliefs about the impact of illness and its consequences (threat perception) which depend on:

- Perceived susceptibility, or the beliefs about how vulnerable a person considers him- or herself in relation to a certain illness or health problem.
- Perceived severity of illness or health problems and its consequences;

(2) Health motivation or readiness to be concerned about health matters. (This factor has been included later in the HBM, in the 1970s).

(3) Beliefs about the consequences of health practices and about the possibilities and the effort to put them into practice. The behavioral evaluation depends on:

- Perceived benefits of preventive or therapeutic health practices;
- Perceived barriers, both material and psychological (for example 'will-power'), with regard to a certain health practice.

(4) Cues to action, which includes different, internal and external factors, which influence action. For example, the nature and intensity (organic and symbolic) of illness symptoms, mass media campaigns, advice from relevant other (family, friends, health staff, etc.).

(5) Beliefs and health motivation are conditioned by socio-demographic variables (class, age, gender, religion, etc.) and by the psychological characteristics of the interviewed person (personality, peer group pressure etc).

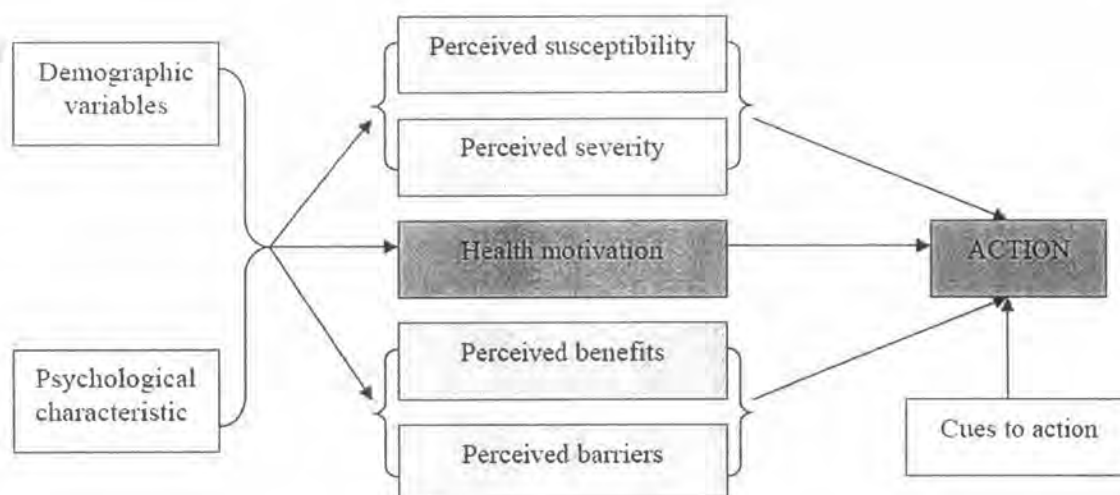


Figure 1 Health belief model

Source- Sheeran and Abraham (1995)

The socio-demographic variables, like in all other models, target groups to be established to which interventions can be directed. These interventions are mainly health promotion and centre on beliefs about disease threat and behavioral evaluation. These are the factors which are considered to be transformable through health education, in contrast to structural or cultural factors like poverty, religious norms etc.

Through the HBM interesting and highly relevant findings for health promotion can be determined. For example, for a disease like tuberculosis or AIDS which is associated with a specific group (the poor, homosexuals), persons who do not include themselves into these groups will hardly consider themselves vulnerable to the disease. This had particular implications for health messages about AIDS, which in later campaigns needed to be explicitly targeted to heterosexuals in order to create risk awareness. Studies which found that in endemic areas, malaria was not considered a severe disease (Mwenesi, 1993), or that mosquito-nets were not felt effective against malaria because 'mosquitoes bite day and night', are other examples which show the implications of perceived threat for health behavior.

2.1.2. The Theory of Reasoned Action and the Theory of Planned Behavior:

The Theory of Planned Behavior (TPB, Ajzen) is an extension of the earlier Theory of Reasoned Action (TRA, Fishbein & Ajzen). Both have been developed and amply used in HIV/AIDS research. They centre on factors which lead to a specific intention to act, or Behavioral Intention, which the TPB situates between the attitudes and behavior (see Figure 2). The centrality of Behavioral Intention questions the classical model of Belief, Attitude, Behavior (Conner & Sparks, 1995)

In the TPB, Behavioral Intention is determined by:

- Attitudes towards behaviour, determined by the belief that a specific behaviour will have a concrete consequence and the evaluation or valorisation of this consequence.
- Subjective norms or the belief in whether other relevant persons will approve one's behavior, plus the personal motivation to fulfill with the expectations of others.
- Perceived behavioral control, determined by the belief about access to the resources needed in order to act successfully, plus the perceived success of these resources (information, abilities, skills, dependence or independence from others, barriers, opportunities etc.)
- Socio-demographic variables and personality traits which condition attitudes, subjective norms and perceived behavioral control. These are the same as in the HBM.

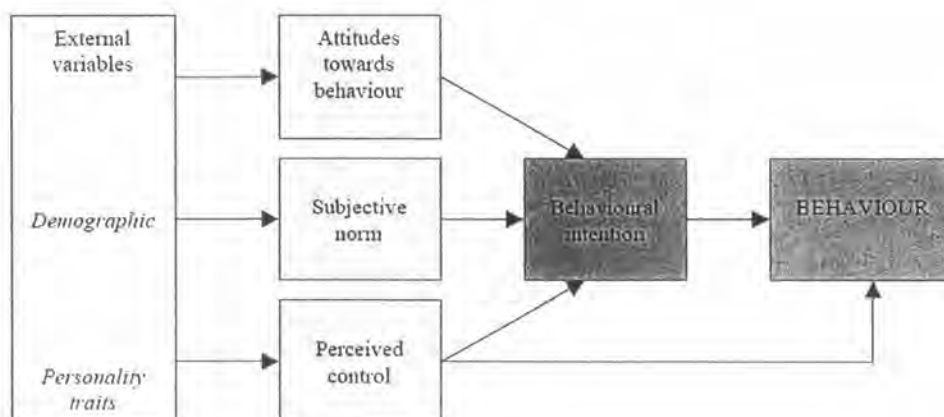


Figure 2 Theory of planned behavior

Source- Conner & Sparks (1995)

The advantages of the TPB are clearly the taking into account of motivational aspects of personal disease control and the influence of social networks and peer pressure. The limitations are a potential overemphasis on these psychological factors, while under-valuing structural factors like limited access or availability of resources.

2.1.3. The Health Care Utilization Model:

The socio-behavioral or Andersen model (Andersen & Newman, 1973) groups in a logic sequence three clusters or categories of factors (predisposing, enabling and need factors) which can influence health behavior. The model was specifically developed to investigate the use of biomedical health services. Later versions have extended the model to include other health care sectors, i.e. traditional medicine and domestic treatments (Weller et al. 1997). Figure 3 outlines the different categories. An adaptation of the model has been proposed for studying health-seeking behavior for malaria (Rauyajin, 1991).

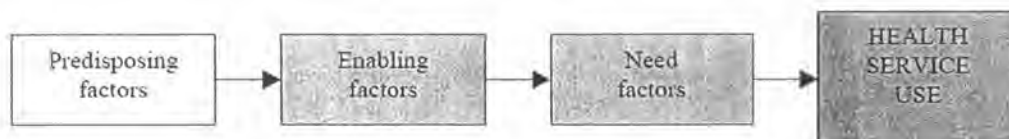


Figure 3 Health care utilization model

Source- Andersen & Newman, 1973

Examples of the factors organized in the categories of the Health Care Utilization Model (mainly following Weller et al. 1997) are:

- Predisposing factors: age, gender, religion, global health assessment, prior experiences with illness, formal education, general attitudes towards health services, knowledge about the illness etc.
- Enabling factors: availability of services, financial resources to purchase services, health insurance, social network support etc.
- Need factors: perception of severity, total number of sick days for a reported illness, total number of days in bed, days missed from work or school, help from outside for caring etc.

- Treatment actions: home remedies (herbal, pharmaceuticals), pharmacy, over the counter drugs from shops, injectionists, traditional healers, private medical facilities, public health services etc.

Andersen's model has been modified in the International Collaborative Study on Health Care (Kroeger, 1983). In addition to the predisposing factors and enabling factors, this version includes Health Service System factors, referring to the structure of the health care system and its link to a country's social and political macro-system. This is a valuable extension as it puts emphasis on the link of health-seeking behavior with structural levels within a macro-political and economic context. However, the model omits the 'need factors' which are central for understanding health-seeking behavior (Weller et al., 1997).

A further variant of Andersen's model was elaborated by Kroeger (1983). Based on a extensive and well-elaborated literature revision, he proposed the following framework (see figure 4):

- Interrelated explanatory variables, all of which are affected by perceived morbidity.
- An individual's traits or predisposing factors: age, sex, marital status, status in the household, household size, ethnic group, degree of cultural adaptation, formal education, occupation, assets (land, livestock, cash, income), social network interactions.
- Characteristics of the disorder and their perception: chronic or acute, severe or trivial, etiological model, expected benefits or treatment (modern versus traditional), psychosomatic versus somatic disorders.
- Characteristics of the service (health service system factors and enabling factors): accessibility, appeal (opinions and attitudes towards traditional and modern healers), acceptability, quality, communication, costs.

The interaction of these factors guides the election of health care resources (dependent variables).

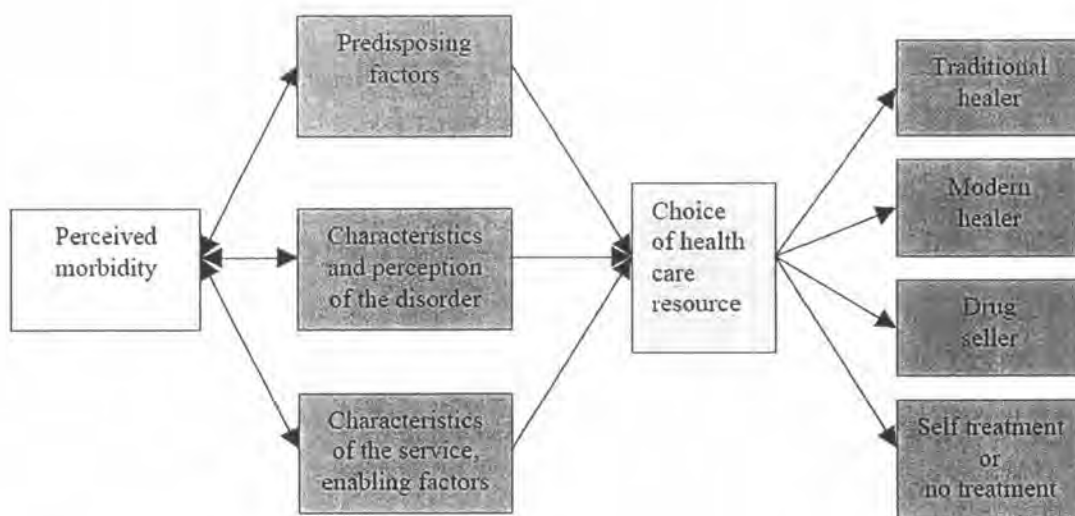


Figure 4 Health care utilization model

Source- Kroeger (1983)

The advantage of socio-behavioral models is the variety of the factors which are organized in categories, making interventions on therapeutic actions (or lack of actions) feasible. They permit the establishment of correlations with good predictability, but not specification of how and why the different factors affect therapeutic selection (Weller et al. 1997).

2.1.4. The “four A’s” :

It has become popular among researchers to use different categories which group key factors for health-seeking behavior. The best known is the grouping into the “four A’s”:

- Availability: refers to the geographic distribution of health facilities, pharmaceutical products etc.
- Accessibility: includes transport, roads, etc.
- Affordability: includes treatment costs for the individual, household or family. A distinction is made between direct, indirect and opportunity costs.

- Acceptability: relates to cultural and social distance. This mainly refers to the characteristics of the health providers – health workers’ behavior, gender aspects (non acceptance of being treated by the opposite sex, in particular women who refuse to be seen by male nurses/doctors), excessive bureaucracy etc.

The ‘model’ of the “four A’s” has been widely used by medical geographers, anthropologists and epidemiologists who mainly emphasized distance (both social and geographical) and economic aspects as key factors for access to treatment (e.g. Good, 1987).

The advantage of the “four A’s” is the easy identification of key potential ‘barriers’ for adequate treatment.

2.1.5. Pathway Models:

Starting with recognition of symptoms, they centre on the path that people follow until they use different health services (home treatment, traditional healer, biomedical facility).

Figure 5 shows an example of a pathway model (Good 1987), which stresses the importance of ‘significant others’ and the decision-making process. This idea challenges the strong emphasis on the individual and stresses the pivotal role of extended groups of relatives and friends in illness negotiation and management. In the course of the illness episode, the involvement of support groups in illness management can successively change. Pathway models acknowledge these dynamics of illness and decision-making.

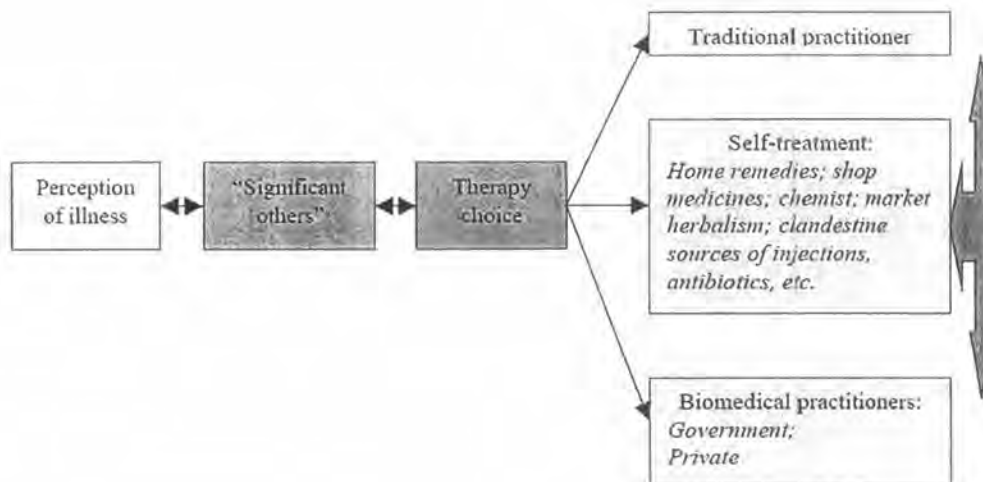


Figure 5 Pathway model

Source- Good (1987)

Most of the studies which use pathway models investigate the path until the first contact with a health facility. The strength of pathway models is that they depict health seeking as a dynamic process. Factors are sequentially organized, according to the different key steps (i.e. recognition of symptoms, decision making, medical encounter, evaluation of outcomes, and re-interpretation of illness) which determine the course of the therapy path.

2.2. Utilization of Health Services:

Regarding with the utilization of services or goods, Wanmali(1985) mentioned that the economic status of households influences the pattern of use of services and access to them. How does the pattern of use change? Simply put higher economic status might mean that household uses more services, is willing to travel long distances, and tend to travel less frequently. The last implies trips combining several purposes. These hypotheses were confirmed. Poorer households use fewer services, richer household use more. Some goods and services were required by the households in the study more often than others. And some were used more regularly than others. Similarly, it was also seen that the goods and services used more frequently and more regularly were also available closer to the households. Given this pattern of both

services use and provision, both distance and income can influence the frequency of use of services. Income alone does not explain access to the services.

It has been explained that many patients decided not to attend their nearest service point, and the major single reason for not attending it was inconvenience of travel. There are four important conclusions with their available results. Firstly inconvenience of travel is the primary determinant of patients behavior in seeking attention at a service point which is not the nearest to their home. The second one is when travel is not an obstacle it appear that quality of service and confidence in the services become more important. The third one is in relation to these two factors travelling cost is not a major determinant. And lastly if the average total cost incurred by patients in a zone is to be reduced, both the quality of services and the siting of services should be improved.

Anthony K. (2005) studied about the role of social factors, health status, and psychiatric disorders on mental health services use. They used utilization model developed by Andersen (1968) includes three overarching factors and their relationship with health utilization patterns. They hypothesized that (1) social factors will influence the use of mental health services; (2) these relationships will exist independently of need or mental health status; (3) determinants will differ by use of treatment sector; and (4) the existence of dual diagnoses ("co morbidity") will influence use and sector selection. They found differences by type of treatment sector utilized for mental health care. Unemployed, disabled, or residents of poor communities with a disorder, were less likely to utilize services. Sex, marital status, education and employment had statistically significant interaction effects with psychiatric morbidity. Among those visiting any health or mental health service sector, women, whites, students, and unmarried persons had a greater likelihood of seeking help. Persons from poverty income households, residing in a county with poor health services, or living in a city outside a metropolitan area were less likely to utilize services. The interaction of age with one or more mental disorders was also significant. The most highly educated or wealthy were more likely to utilize psychiatrists, even without a diagnosis. This finding for education, income, and

community level resources is quite striking in its demonstration of social inequity in the allocation of health resources.

Mccombie S.C. (1996) studied about treatment seeking behavior and utilization for malaria. He found that urban and rural differences are the most important. Where the disease is common and people are familiar with the symptoms and treatment, they are more prone to self-treatment with antimalarial drugs. Cost is another important consideration in the choice of treatment, and economic factors can be related to delays in seeking treatment. Even when treatment in a health center is free, individuals may incur costs for transportation. This will lead to delay in seeking care in poor community, results delayed attention to medical care when the condition is severed. Access, severity of illness, and cost are the major factors that determine use of health facilities.

2.3. Previous Researches Related with Health Seeking Behavior in Sri Lanka:

In 1998 Somanathan has done his research in public hospital and private hospital, found differences in the utilization the bed day occupied. Differences are small when utilization rates are high, but significant differences are evident when utilization rates are low as in the case of public basic facilities.

In 1992 de Silva and Attanayake had done research about cost per outpatient visit in three different levels of health care facilities. They found that the higher costs at locations with low utilization result directly from the underutilization of resources, though the authors warn against assuming that low costs necessarily reflect efficiency. Low utilization rates in turn are often linked to lack of resources, particularly the lack of drugs.

In 1994, Attanayake has done his research in public hospital out patient department, to determine the pattern of household cost in anti Malaria treatment. He has found, the cost born by households the highest proportion, 37.1% was for special food, 31.3% was for treatment and travel cost for patient and accompanying persons

accounted for 11.5% and 10.3% respectively. Of the treatment costs only 5.8% was for informal treatment, of which 11.9% was on ritual treatment.

In 1993, Jayawardene has done his research about malaria in 142 households in Block C of the Mahaweli Resettlement Scheme. Approximately 34% of all family members had more than two episodes during the first year of resettlement. Days of activity lost to malaria were calculated. Average number of household head days lost was 8.36 over 10 months for their own illness and 5.33 days on average lost due to illness among other family members, resulting in a total of 13.69 days lost in the 10 months period, which when converted into an annual basis gives 16.42 days per household days affected. Given the average days wages of Rs.40, this results in a loss of Rs656.80 per annum. The study pointed out that further indirect costs are imposed by indebtedness cause by the burden of illness and the penalties imposed on the new settlers by the Resettlement Organization that took the form of cutting rations when work was not completed on houses, latrines and homestead gardens by the stipulated date.

In 1997 Konradsen et al has done his research about household expenditure for 178 malaria episodes in five villages in the Anuradhapura district. All patients had western type health care. In 9% of cases more than formal treatment source had been accessed. Families with higher income made more use of private facilities. The expenditure varies for transportation Rs.0-300, blood examination Rs.0-95, Treatment Rs.0-530, and meal at health facility Rs.0-600, special diet at home Rs.0-350 and other including hiring labor Rs.0-625 with total Rs.0-1092. The average annual net household income was Rs.12 900 for these households. The daily wage rate in the area was Rs.50 for children, Rs.75 for female and Rs.100 for male. The authors weight the wages by labor demand (weighting ratio calculated as number of hours worked in that week divided by maximum number of hours worked per week during the entire period) to gain the adjusted wage figures of Rs.15 to 50 for children, Rs.23-75 for female and Rs.31-100 for male. The average annual cost per household due to malaria was US\$15.56 and for other diseases US\$47.46. The average loss due to malaria as a percentage of net income was 6%.