

## INTRODUCTION

Health is a mixture of three important components i.e. emotional, mental, and physical well-being as because an individual cannot have a healthy mind without healthy body or healthy emotions and vice-versa. Health plays a vital role on an individual's whole personality and its well being also depends on health. Health is the level of functional or metabolic efficiency of a living being. In humans, it is the general condition of a person's mind and body, usually meaning to be free from illness, injury, or pain (as in "*good health*" or "*healthy*") (Merriam-Webster, 2011). The World Health Organization (WHO) defined health in its broader sense as "a dynamic condition that is identifiable by a physical and mental state that allows a person to pursue his or her goals, given a set of accepted circumstances". Several other generally accepted definitions of the noun 'health' exist. Bircher defines health as "a dynamic state of well-being characterized by a physical and mental potential, which satisfies the demands of life commensurate with age, culture, and personal responsibility", while Saracchi defines health as "a condition of well being, free of disease or infirmity, and a basic and universal human right".

Individual health depends partially on the social structure of a person's life. The maintenance of strong social relationships, volunteering, and other social activities have been linked to positive health and even increase longevity of an individual. To remain healthy one should be economically sound, as an individual can maintain proper environment, diet, and life style.

Health is the bedrock upon which all human societies exist. Thus, the health status of a populace plays an imperative role in the wellbeing of people within a topology and social space. Health and its care are not only indicators of well-being but health status is also a determinant of human development (Paul Andrew Bourne, 2006).

### **Global scenario**

Cancer is the most common health problem in this era. A rapidly growing concern for millions of people throughout the world is the widespread threat of cancer. Cancer is emerging as a major problem globally; both in more developed and in less developed countries. Annually there are over 10 million new cases of cancer and more than 6 million deaths occur due to cancer (12% of all deaths) worldwide. The contribution of the developing world to this figure is more than half. Cancer is considered as the most progressive and devastating disease posing a threat of mortality to the entire world despite significant advances in medical

technology for its diagnosis and treatment. By 2020, the number of new cancer cases is expected to reach at least 15 million a year and cancer deaths 10 million a year. The most common cancers among females are cervix, breast, ovary, esophagus, and mouth. Of these, cervical cancer is the second most common cancer among women worldwide after breast cancer. (Senapathy, J. Giftson et. al. 2011). Figure 1.1 shows the share of the more developed and less developed countries, in cancer incidence in 2000 and projected incidence in 2020. The most common sites of cancer in the world are presented in Table 1.1.

### **Worldwide picture of Cancer of both sexes**

- Lung cancer is the most common cancer worldwide contributing nearly 13% of the total number of new cases diagnosed in 2008.
- Breast cancer (women only) is the second most common cancer with nearly 1.4 million new cases in 2008.
- Colorectal cancer is the third most common cancer with over 1.2 million new cases in 2008.

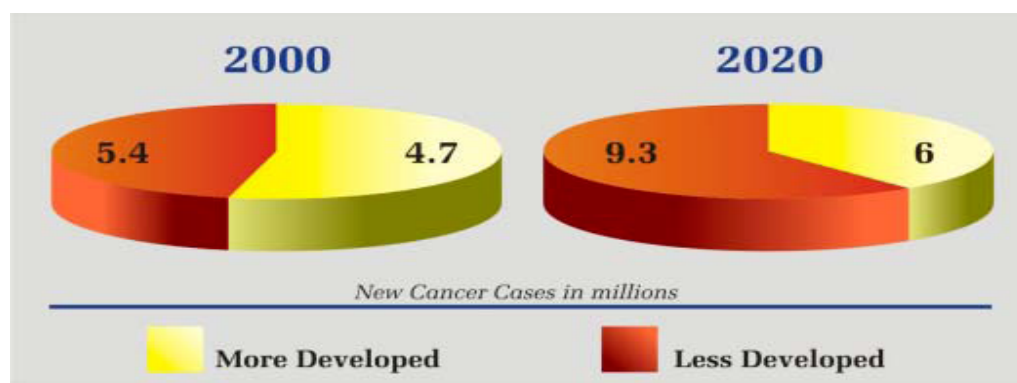
**Table1.1: The Common Sites of cancer**

<b>Rank</b>	<b>Cancer</b>	<b>New cases diagnosed in 2008 (1,000s)</b>	<b>Percent of all cancers (excl. non-melanoma skin cancer)</b>
1	Lung	1608	12.7
2	Breast	1384	10.9
3	Colorectum	1235	9.8
4	Stomach	989	7.8
5	Prostate	899	7.1
6	Liver	750	5.9
7	Cervix uteri	530	4.2
8	Oesophagus	482	3.8
9	Bladder	383	3.0
10	Non-Hodgkin lymphoma	356	2.8
11	Leukaemia	350	2.8
12	Corpus uteri (endometrium)	288	2.3
13	Pancreas	279	2.2
14	Kidney	274	2.2
15	Lip, oral cavity	263	2.1
16	Brain, nervous system	238	1.9
17	Ovary	225	1.8
18	Thyroid	213	1.7
19	Melanoma of skin	200	1.6
20	Larynx	151	1.2
21	Gallbladder	145	1.1
22	Other pharynx	137	1.1
23	Multiple myeloma	103	0.8
24	Nasopharynx	84	0.7
25	Hodgkin lymphoma	68	0.5

Rank	Cancer	New cases diagnosed in 2008 (1,000s)	Percent of all cancers (excl. non-melanoma skin cancer)
26	Testis	52	0.4

(Source: GLOBOCAN 2008 database (version 1.2) <http://globocan.iarc.fr>)

**Figure 1.1:** Share of the more developed and less developed countries, in cancer incidence in 2000 and projected incidence in 2020.



(Source- National Cancer Control Programmes – Policies and Managerial Guidelines. World Health Organization, 2nd Edition, 2002)

Of the 10 million new cancer cases seen each year worldwide, 4.7 million are in the more developed countries and nearly 5.5 million are in the less developed countries. Although the disease has often been regarded principally as a problem of the developed world, more than half of all cancers occur in the developing countries. In developed countries, cancer is the second most common cause of death, and epidemiological evidence points to the emergence of a similar trend in developing countries.

Cancer is the leading cause of death worldwide, it accounted for 7.4 million deaths (around 13% of all deaths) in 2004. About 30% of cancer deaths can be prevented if detected during the initial stages of its occurrence. In 2005, cancer killed approximately 826,000 people in India of which 519,000 were under the age of 70. Lung cancer is among the five main types of cancer leading to overall cancer mortality contributing about 1.3 million deaths per year globally. Tobacco use is the single most important risk factor for cancer. The economic cost of treating four major tobacco related diseases such as cancer, cardiovascular diseases, respiratory diseases, and tuberculosis in India is as high as US\$1.7 billion. (WHO, 2002)

### **Scenario of Cancer in India**

The population of India is approximately 1.2 billion and accounts for a significant burden of cervical cancer in the Indian subcontinent. There is an estimated annual global incidence of 500000 cancers, in that India contributes 100000 i.e., one-fifth of the world burden (Shanta, 2003). Cancer is one of the leading causes of adult deaths worldwide. In India, the International Agency for Research on Cancer estimated indirectly that about 635000 people died from cancer in 2008, representing about 8% of all estimated global cancer deaths and about 6% of all deaths in India (J. Ferlay

et. al. 2010). The absolute number of cancer deaths in India is projected to increase because of population growth and increasing life expectancy. Rates of cancer deaths are expected to rise, particularly, from increases in the age-specific cancer risks of tobacco smoking, which increase the incidence of several types of cancer (P. Jha, 2009).

India is a culturally diverse country, with huge regional and rural-to-urban variation in lifestyles and in age-specific adult death rates. (Sample Registration System, New Delhi: GOI, 2009). Although India has good advancements for diagnosis and treatment, cancer is still a big challenge to our country. Cancer is the second most common prevailing disease in India. According to 1991 Indian census data, about 609000 cancer cases had been observed. But the number of cancer cases in India has drastically increased in the last decade by reaching to the number 806,000. (Census, 1991)

The cancer mortality in India is alarmingly high as per Indian population census data which is showed in the following table.

**Table 1.2: Cancer mortality in India**

<b>Year</b>	<b>No. of Cancer Patients</b>
2004	819354
2005	846635
2006	863575

2007	907838
2008	846172
2009	962832
2010	979786

(Most Prevalent Cancers in India – 2010)

Cancer prevalence in India is estimated to be around 2.5 million, with over 8, 00,000 new cases and 5, 50,000 deaths occurring each year due to this disease. Lung, esophagus, stomach, oral, and pharyngeal cancers mostly affect men, where as in women, cervix and breast cancers are most common.

### **Cancer scenario in Indian Regions**

Esophageal cancers: Karnataka, Tamil Nadu, Maharashtra and Gujarat.

Stomach cancers: Highest incidence in Mizoram.

Oral cancers: Kerala (South India).

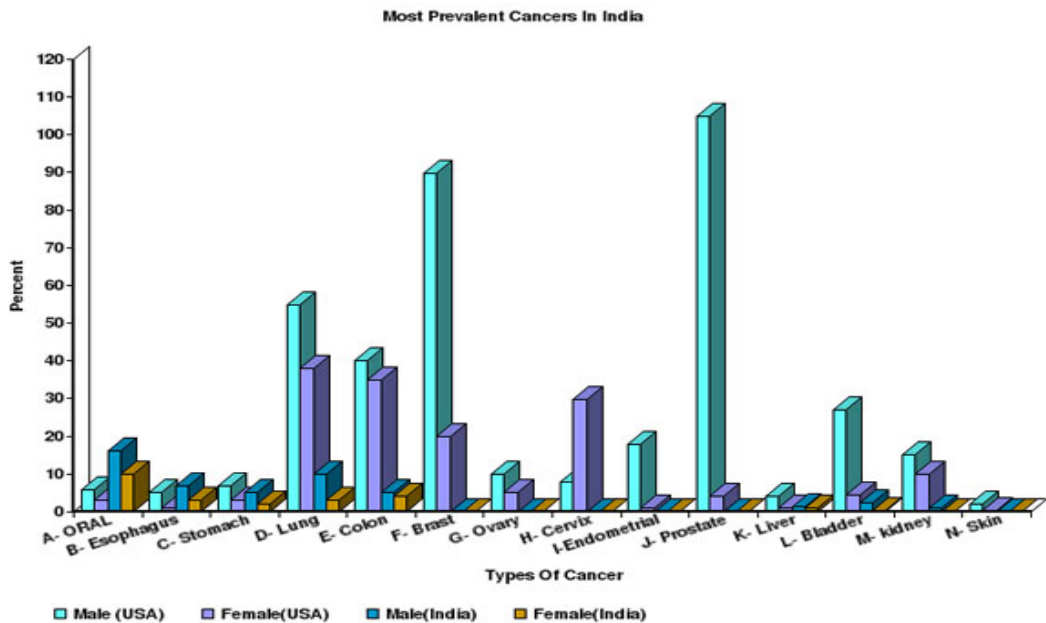
Pharyngeal cancers: Mumbai (Western India).

Thyroid cancers among women: Kerala.

Gall bladder cancer: Delhi and West Bengal (North India)



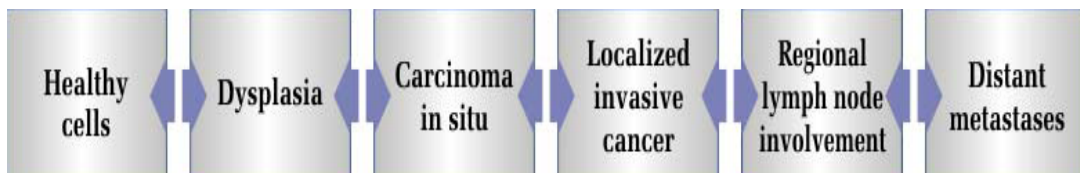
**Figure 1.2: Prevalence of Cancer in India**



*(Source: Cancer Scenario in India with Future Perspectives, Cancer Therapy Vol 8, 56-70, 2011)*

Control of communicable diseases and demographic changes have led to the emergence of cancer and other non-communicable diseases as major public health problems in India.

**Figure 1.3: Typical phases of cancer development**



*(Source - National Cancer Control Programme-Policies and Managerial Guidelines. World Health Organization.2nd Edition, 2002)*

According to PBCR, incidence of cancer is the most reliable indicator of occurrence of cancer. PBCRs also provide data on cancer survival and mortality. Prevalence (number of persons living with the disease at any given time) of cancer can be estimated using the information on cancer incidence and survival. From the data of NCRP, ICMR, it has been found that the incidence on cancer, especially the tobacco related cancer is spreading at an alarming rate in the North-East India in comparison to the other parts of the country. It means the consumption of tobacco is higher in northeast than the rest parts of the country and this leads to the high rate of cancer incidence in northeast. Cancer may be caused due to several factors which include mainly lifestyle and diet.

“Cancer can be cured if detected Early”, this is a common phenomenon and term often heard among laymen while talking about this life threatening disease. Before beginning to define the medical causes of cancer, one would define briefly cancer and its causes. The NCRP data that has accrued over the years is essentially that of selected urban centers and only one rural registry that covers part of a district. Therefore it would be difficult to provide valid estimates of the burden of cancer of the entire country with over 70% of the population of India residing in the rural areas. None the less, limited exercises (Murthy et al., 1990) have been carried out,

by scientists in the NCRP, and these figures vary from 700 - 9,00,000 new cancer cases in India every year.

It is estimated that there are approximately 2 to 2.5 million cases of cancer in India at any given point of time and that there are 7,00,000 new cancer patients diagnosed every year in India. The estimated number of cancer patients in the country in the year 2001 was around 8, 00,000. The most common cancers are Tobacco related cancers - around 3,00,000 cases each year, cancer of the Cervix Uteri - around 1,00,000 cases each year and Breast cancer - around 80,000 cases each year. ((Dinshaw K. A, Shastri S.S et. al. 2001)

The cancer toll in developing countries, especially India, is due to the fact that over 70% of cases are detected late and report for treatment in very advanced stages. Apart from the pain and misery cancer inflicts on the patient, as well his family; the economic impact of this disease is catastrophic. Simple changes in lifestyles and regular screening can bring down these deaths drastically and even have health benefits that reach beyond cancer.

Tobacco kills four million people in the world every year. By the year 2020, it is predicted that tobacco will be the leading cause of death and disability, killing 10 million people every year. The heaviest disease burden

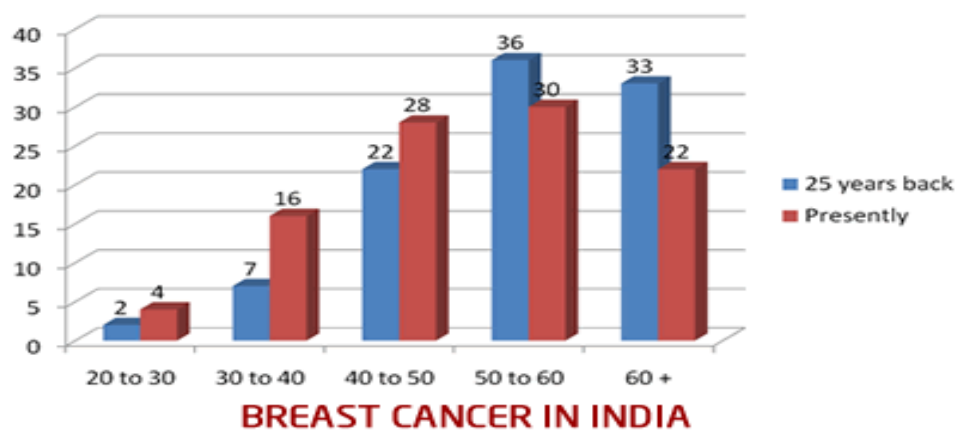
due to tobacco use will be in developing countries where 70% of the expected 10 million global deaths would occur. Tobacco use has been identified as the major preventable cause of death of humankind. (Dinshaw K.A, Shastri S.S et. al. 2001)

In 1992, 6.1% of the world's unmanufactured tobacco and 1.5% of the total manufactured cigarettes were consumed in India. Only about 15% - 20% of the total tobacco consumed in India (by weight) is in the form of cigarettes. About 55% is in the form of *beedies* and the remaining 25% - 30% is consumed as chewing tobacco, *pan masala*, *snuff*, *hookli*, *dhumti*, *gutkha*, and other tobacco mixtures including ingredients like *areca nut*. *Chuttas* and *dhumtis* are also smoked in reverse fashion, with the lit end inside the mouth.

Cancer prevalence in India is estimated to be around 2.5 million, with over 8, 00,000 new cases and 5, 50,000 deaths occurring each year due to this disease in the country. The common sites for cancer in India are oral cavity, lungs, esophagus, and stomach in males and cervix, breast and oral cavity among females. Over 70% of the cases report for diagnostic and treatment services in advanced stages of the disease, resulting in poor survival and high mortality. The disease is associated with a lot of fear and stigma in the country.

In India, the average age of developing a breast cancer has undergone a significant shift over last few decades. Breast cancer cases are on the rise in India. It is now the second most common cancer in women after cervical cancer, and in urban areas it has overtaken cervical cancer to be the most frequently diagnosed cancer in women. Following figure depicts the prevalence of Breast Cancer in India.

**Figure 1.4: Breast Cancer in India**



Source: <http://www.breastcancerindia.net>

25 years back, out of every 100 breast cancer patients, two percent were in the age group of 20 to 30 years, seven percent were in the age group of 30 to 40 years, and 69% of the patients were above 50 years of age. Presently, four percent are in the age group 20 to 30 years, 16% are in the age group 30 to 40 years, 28% are in the age group 40 to 50 years. So, almost 48% patients are below 50 years. The increasing numbers of patients

are in the age group of 25 to 40 years, and this is definitely a disturbing trend.

As the incidence of cancer within the Indian population rises, there is a need to gain a better understanding of the risk factors for particular cancers in this population.

Government of India developed the first statement on cancer control as early as in 1971. The NCCP for India was formulated in 1984 with four major goals:

1. Primary prevention of tobacco related cancers,
2. Early detection of cancers of easily accessible sites,
3. Augmentation of treatment facilities and
4. Establishment of equitable, pain control and palliative care network throughout the country.

21 Regional Cancer Centres have been established under this programme. Cancer care facilities are also available in a number of Medical Colleges and some private and charitable hospitals in the country. (Dinshaw K.A, Shastri S.S et. al. 2001)

### **Concept of Health Seeking Behaviour**

Health seeking behaviour in terms of illness behaviour refers to those activities undertaken by individuals in response to symptom

experience. It typically includes mental debate about the significance and seriousness of these symptoms, lay consultation, decisions about action including self-medication, and contact with health professionals.

The concept of health behaviour is a wide and is defined as “any behaviour associated with establishing and retaining a healthy state and aspects of dealing with any departure from that state”. And health seeking behaviour comes under the broad purview of health behaviour. In other words, it is the sequence of remedial actions that individuals undertake to rectify perceived ill health which is initiated from symptom definition, whereupon a strategy for treatment is devised. When an individual perceives himself as sick, he adopts distinct behavioural changes which include confining to bed or staying away from work or consulting a healer, either traditional or a health worker for counseling, diagnosis and treatment.

Health seeking behaviours of individuals are also determined by the various detriments of health which affect the individual in terms of his or her access to health care facilities available.

### **The determinants of health**

Many factors combine together to affect the health of individuals and communities. Whether people are healthy or not, is determined by their

circumstances and environment. To a large extent, factors such as where we live, the state of our environment, genetics, our income and education level, and our relationships with friends and family all have considerable impacts on health; whereas the more commonly considered factors such as access and use of health care services often have less impact.

**The determinants of health include:**

1. The social and economic environment,
2. The physical environment and
3. The person's individual characteristics and behaviours.

The way how people's lives determine their health and to blame individuals for getting poor health or to credit them for a good health is inappropriate. Individuals are not able to control directly many of the determinants of health. These determinants—or things that make people healthy or not—include the above factors, and many others:

- **Income and social status** - higher income and social status are linked to better health. The greater the gap between the richest and poorest people, the greater the differences in health.
- **Education** – low education levels are linked with poor health, more stress, and lower self-confidence.



- **Physical environment** – safe water and clean air, healthy workplaces, safe houses, communities and roads all contribute to good health.
- **Employment and working conditions** – people in employment are healthier, particularly those who have more control over their working conditions.
- **Social support networks** – greater support from families, friends, and communities is linked to better health.
- **Culture** - customs and traditions, and the beliefs of the family and community all effect health.
- **Genetics** - inheritance plays an important role in determining lifespan, healthiness, and the likelihood of developing certain illnesses. Personal behaviour and coping skills – balanced eating, keeping active, smoking, drinking, and how we deal with life's stresses and challenges all affect health.
- **Health services** - access and use of services that prevent and treat disease influences health
- **Gender** - Men and women suffer from different types of diseases at different ages.

Health seeking behaviour can be defined as any activity undertaken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy. This is based on an explanatory model that represents a coherent picture of specific cultural features that affect people's health behaviour. The explanatory model of a particular illness consists of signs and symptoms by which the illness is recognized; presumed cause of the illness and prognosis established. These are in turn interpreted by individuals and or significant others and on labeling the problem, proceed to address it appropriately through recommended therapies. This definition borrows from Kasl and Cobb's (1966) definition of 'illness behaviour'.

Health seeking behaviour should be distinguished from the broader concept health behaviour, defined by Kasl and Cobb as any activity undertaken by individuals who see themselves as healthy for the purpose of preventing disease or detecting it in an asymptomatic stage. In any cultural context, a precondition of most health seeking behaviour is recognition of symptoms. Of key significance, therefore, is the way in which symptoms are interpreted by the individuals affected and by those around them - the meaning the 'symptoms' have, the attribution of cause, and the beliefs held about appropriate and effective treatments (Mechanic and Volkart 1961;

Scambler et al. 1981; Morrell and Wade 1976; Wadsworth et al. 1971; Ingham and Millar 1979; Calnan 1987).

Health seeking behaviour is preceded by a decision making process that is further governed by individual and/or household behaviour, community norms and expectations as well as provider related characteristics and behaviour. For this reason the nature of care seeking is not homogenous depending on cognitive and non-cognitive factors that call for a contextual analysis of care seeking behaviour. Context may be a factor of cognition or awareness, socio-cultural as well as economic factors.

Hence, health seeking behaviour is an important determinant of health status of the population. The interplay of these factors are central in the final choice of a care seeking option. This interplay is such that no one option is selected and we may observe a series of options often reflecting a pattern of resort in care seeking. Typically a health care seeking model will involve recognition of symptoms, perceived nature of illness, followed initially by appropriate home care and monitoring. This may necessitate seeking care at the health facility, medication, and compliance. Treatment failure may require a return to the health facility or an alternative care provider.

Thus client based factors, provider-based factors caretaker

perceptions; social and demographic factors, cost, social networks and biological signs and symptoms work synergistically to produce a pattern of health seeking behaviour. This is a sequential behaviour pattern often drawing from redefinition of illness and a multiplicity of treatment source.

In addition to explanatory models, there are non cognitive factors such as availability and cost of health services that are drawn into the decision making process. The determinant models of health seeking behaviour include demographic aspects such as the level of education; occupation and income of the head of household, which are critical, particularly in developing countries where these have been explored. To this extent, cost and physical accessibility of services clearly play a role in influencing the observed health-seeking behaviour.

In summary it is important to note that health seeking behaviour is complex and no one-single method may be used to explain or establish any pattern. Health seeking behaviour is a reflection of the prevailing conditions, which interact synergistically to produce a pattern of care seeking but which remains fluid and therefore amenable to change. Prompt health-seeking is critical for appropriate management and for this reason, understanding the determinants of health seeking behaviour become critical in the bid to

provide client oriented services (East African Medical Journal, February 2003).

Health promotion programmes worldwide have long been premised on the idea that providing knowledge about causes of ill health and choices available will go a long way towards promoting a change in individual behaviour, towards more beneficial health seeking behaviour. However, there is growing recognition, in both developed and developing countries, that providing education and knowledge at the individual level is not sufficient in itself to promote a change in behaviour. An abundance of descriptive studies on health seeking behaviour, highlighting similar and unique factors, demonstrate the complexity of influences on an individual's behaviour at a given time and place. However, they focus almost exclusively on the individual as a purposive and decisive agent, and elsewhere there is a growing concern that factors promoting 'good' health seeking behaviours are not rooted solely in the individual, they also have a more dynamic, collective, interactive element. Academics have therefore started to explore the way in which the local dynamics of communities have an influence over the well-being of the inhabitants (Steen and Mazonde, 1999).

### **Factors affecting health seeking behaviour:**

Health seeking behaviour of a person is influenced by a large

number of factors operating at the individual, family, and community level. The way in which people conceptualize the aetiology of a health problem and their perception of symptoms plays an important role in seeking health. (Keith Tones, 2004)

Majumder (2004) argued that though illness is an unexpected occurrence of a random event, it has a fair degree of predictability with respect to demographic factors like age, gender, family size, and marital status. He cited an example that, the size of a household may work positively or negatively. In a large family, per capita income may be less and therefore the ability to pay for health care will also be less; thus chances of utilizing care from a modern source may reduce. On the contrary, in larger families, interaction among the members or with the neighbours may be more intense which may increase chances of seeking health care.

A variety of factors have been identified as the leading causes of poor utilization of primary health care services: including poor socio-economic status, lack of physical accessibility, cultural beliefs, and perceptions, low literacy level of the mothers and large family size. These factors can be classified as cultural beliefs, socio-demographic status, women's autonomy, economic conditions, physical and financial accessibility, and disease

pattern and health service issues. Each group of factors is considered separately in the following and discussed below:

### ***Cultural and socio-demographic factors***

Cultural beliefs and practices often lead to self-care, home remedies, and consultation with traditional healers in rural communities. Advice of the elder women in the house is also very instrumental and cannot be ignored. These factors result in delay in treatment seeking and are more common amongst women, not only for their own health but especially for children's illnesses. Family size and parity, educational status and occupation of the head of the family are also associated with health seeking behaviour besides age, gender, and marital status. However, cultural practices and beliefs have been prevalent regardless of age, socio-economic status of the family and level of education. They also affect awareness and recognition of severity of illness, gender, availability of service and acceptability of service. Gender disparity has affected the health of the women in rural areas by putting an un-rewarded reproductive burden on them, resulting in early and excessive child-bearing. This has led to 'a normal maternity' being lumped with diseases and health problems. Throughout the life cycle, gender discrimination in child rearing, nutrition, health care seeking, education, and general care make a woman highly vulnerable and disadvantaged. At times,

religious misinterpretations have endorsed her inferior status. For her, limited access to the outer world has been culturally entrenched in the society, and for the unmarried, the situation has been even worse, even if it is a matter of consulting a physician in emergency.

### ***Women's autonomy***

Men play a paramount role in determining the health needs of a woman. Since men are decision makers and in control of all the resources, they decide when and where woman should seek health care. Women suffering from an illness report less frequently for health care seeking as compared to men. The low status of women prevents them from recognizing and voicing their concerns about health needs. Women are usually not allowed to visit a health facility or health care provider alone or to make the decision to spend money on health care. Thus women generally cannot access health care in emergency situations. This certainly has severe repercussions on health in particular and self-respect in general of the women and their children. Despite the fact that women are often the primary care givers in the family, they have been deprived of the basic health information and holistic health services. Women and children, having a subjugated position in the family, need to seek the permission of head of the household or the men in the family to go to health services Women are



socially dependent on men and lack of economic control reinforces her dependency. The community and the family as institutions have always undermined her prestige and recognition in the household care. The prevailing system of values preserves the segregation of sexes and confinement of the women to her home. Education of women can bring respect, social liberty, and decision making authority in household chores.

### ***Economic factors***

The economic polarization within the society and lack of social security system make the poor more vulnerable in terms of affordability and choice of health provider. Poverty not only excludes people from the benefits of health care system but also restricts them from participating in decisions that affect their health, resulting in greater health inequalities. Possession of household items, cattle, agricultural land, and type of residence signify not only the socio-economic status but also give a picture of livelihood of a family.

### ***Physical accessibility***

Access to a primary health care facility is projected as a basic social right. Dissatisfaction with primary care services in either sector leads many people to health care shop or to jump to higher level hospitals for primary care, leading to considerable inefficiency and loss of control over efficacy

and quality of services. The effect of distance on service use becomes stronger when combined with the dearth of transportation and with poor roads, which contributes towards increase costs of visits. Availability of the transport, physical distance of the facility and time taken to reach the facility undoubtedly influence the health seeking behaviour and health services utilization. The distance separating patients and clients from the nearest health facility has been remarked as an important barrier to use, particularly in rural areas. The long distance has even been a disincentive to seek care especially in case of women who would need somebody to accompany. As a result, the factor of distance gets strongly adhered to other factors such as availability of transport, total cost of one round trip and women's restricted mobility.

### ***Health services and disease pattern***

The under-utilization of the health services in public sector has been almost a universal phenomenon in developing countries. On the other hand, the private sector has flourished everywhere because it focuses mainly on 'public health goods' such as antenatal care, immunization, and family planning services, treatment for tuberculosis, malaria, and sexually transmitted infections. (Ahuja. S, 2010)

Health seeking behaviour is the state or quality of being recognized as the health control tools, where they exist, remain greatly under, or adequately used by different individuals. Understanding human behaviour is prerequisite to change behaviour and improve health practices by every individual. And the different approaches to deal with health seeking behaviour are as follows:

### **Various Approaches to health-seeking behaviour:**

**KAP Survey:** KAP survey, used to determine knowledge, attitude and practice of various factors like environment problems, awareness about health, KAP Survey helps in communication like mobilizing the community, awareness, encouragement and co-ordination.

The KAP is a representative survey conducted on a particular population to identify the knowledge (K), attitudes (A) and practices (P) of a population on a specific topic. In the majority of KAP studies, data are gathered orally by an interviewer who uses a structured, standardized questionnaire. These data can then be quantitatively or qualitatively analyzed according to the objectives and the ins and outs of the survey. A KAP survey can be specially designed to collect information on the issue of, but it is also possible to include general questions on practices and beliefs. In a way, this survey can highlight factors which influence “bad” behaviour,

such as the reasons behind certain attitudes and the reasons and methods behind certain practices relating to tobacco cancer. The KAP survey can also pinpoint communication networks (when or how is information received/disseminated and by whom), (Fabienne Goutille, 2009) Knowledge, attitudes, and practices (KAP) surveys are possibly the most frequently used studies in health-seeking behaviour research.

**Knowledge** is usually assessed in order to see how far community knowledge about public health concepts. Typical questions include knowledge about causes and symptoms of the illness under study. People reported knowledge which deviates from biomedical concepts is usually termed 'beliefs' (Good, 1994). This distinction between 'knowledge' and 'beliefs' markedly deviates from the use of terms in psycho-social theory where 'beliefs' have a much broader meaning and include also beliefs concerning perceptions about one.

**Attitudes** has been defined by Ribeaux and Poppleton (1978) as "a learned predisposition to think, feel and act in a particular way towards a given object or class of objects". The term attitude is usually used to refer to a person's general feelings about an issue; object, or person (Petty and Cacioppo, 1981). As such, attitudes result from a complex interaction of beliefs, feelings, and values. They are important in designing health

promotion campaigns which aim to change attitudes, e.g. attitudes towards medicine use for prevention of cancer. Attitudes may be inferred from a variety of statements and answers, but direct asking is usually problematic since people often respond in terms of what they think is the 'correct' answer. In particular attitudes towards traditional medicine might be hidden. In a survey, attitudes are therefore not easy to obtain. However, attitudes are central to understand behaviour, an element which is better obtained through knowledge are given in the models.

**Practices** in KAP survey, usually enquire about the use of preventive measures or different health care options. Normally, hypothetical questions are asked (what do you do if your child is ill?). They therefore hardly permit statements about actual practices. Rather, they yield information on people's normative behaviours or on what they know should be done (or they expect the interviewer wants to hear). In this sense, they check well on people's knowledge about practices, as heard in educational campaigns for example. However, special caution must be given to deductions from KAP survey data about explaining health-seeking behaviour (Yoder, 1997).

Apart from all, KAP survey yield highly descriptive data, without providing an explanation for why people do what they do. Unfortunately, many investigators who use KAP survey studies do use them, implicitly or

explicitly, to explain health-seeking behaviour. Their studies are based on the underlying assumption that there is a direct relationship between knowledge and action. They assume that by changing knowledge, behaviour is automatically changed as well. To give an example, one might expect that if people recognize the signs and symptoms of let's say tuberculosis and if they know that TB can be treated by antibiotic drug regimens, they will act accordingly and attend a health facility. That this is overtly over-simplistic becomes clear if one considers that there are many other factors which influence health-seeking behaviour. Although knowledge about an illness may be high, illness recognition during an actual episode is much less clear. In the example of TB, the typical symptom of incessant coughing leaves open a variety of other, less serious illness interpretations. Also not considered are motivational factors and stigma which may influence health-seeking behaviour. Neglected are other factors like treatment expectations, satisfaction with health care services, decision-making for health care and external barriers (e.g. financial constraints, accessibility of health services). All this makes clear that knowledge is just one element in a broad array of factors which determine health-seeking behaviour. (Susanna Hausmann et. al., 2003)

As discussed above the limitations of KAP, it must be understand that

there are advantages. On the whole, KAP are very useful for assessing distribution of community knowledge in large-scale projects, e.g. national surveys, and for evaluating changes in knowledge after education and media campaigns. They permit rapid assessments, yielding quantitative data, and are therefore a cheap way to gain quick insights into main knowledge data. Moreover, they are relatively easy to carry out, and with some basic training in interview techniques, any public health specialist can design a questionnaire and undertake a KAP survey. However, the superficial and very knowledge oriented data they provide can clearly make them useful only as a part of an overall research strategy for studying health-seeking behaviour (Lane, 1997).

**Focused ethnographic studies (FES) and rapid assessments:** On reply of the limitations of KAP studies and their misuse for explaining health behaviour, anthropologists plead for the use of ethnographic studies. Traditional ethnographies carried out by anthropologists had, however, one big limitation is time. To describe culture, anthropologists usually spent years in the field, learning the language of the study communities, and living with them for long periods of time. Furthermore, their sophisticated language and their aim to contribute to advances in anthropological theory hardly matched with the expectations of public health specialists and

epidemiologists. Already in the 1980s, Foster (1987) noted that one of the problems in behavioural research was the failure “to keep research simple”, and criticized the tendency of many social science researchers to be so “keen on conveying an impression of research sophistication that they overlook entirely the need to address the question of the ends for which the research is carried out”.

Health care system features (e.g. poor performance of health services, lack of drugs etc.), economic factors, and decision-making power for health care within households have been identified through FES and rapid assessment studies as obstacles for adequate health-seeking behaviours explaining treatment delays.

The strength of FES and rapid assessment studies lies in the identification of illness categories, and impressively complex local illness classifications have received attention in project interventions. Unfortunately, with the main emphasis on identifying knowledge gaps in local illness understanding, these studies go barely beyond cognitive aspects, and the importance of contextualizing the findings in people’s real life situations is greatly undervalued.

**From illness categories to logics:** This category has one major limitation in that it blends out the complex interactions of different



knowledge sources in shaping local illness understanding. Categorizing illnesses assumes an 'either-or' situation. Janzen, in his famous work 'The Quest for Therapy in Lower Zaire' (1978), brilliantly showed how in people's illness narratives, viruses, and bacteria interact with witchcraft. One of his informants explained how a healthy body would let pass contaminated food without provoking negative effects, whereas in a bewitched body, the ill-causing agents of the same food would be retained and eventually penetrate into the blood. The melting of different concepts is also made explicit in the local understanding of malaria in south-eastern Tanzania.

**Knowledge into practice: some limitations:** One of the major unresolved questions in health-seeking behaviour studies is how far knowledge actually determines practice. It is most common to assume, implicitly or explicitly, that changing knowledge entails behaviour change. Hence, the vast body of literature that concludes with recommending the education of people about causes, symptoms, and treatments of illnesses as the key factor for success in behavioral change. It is, however, also widely recognized that improving knowledge, for example with well designed IEC (information, education, and communication) campaigns. IEC campaigns combine strategies, approaches, and methods that enable individuals,

families, groups, organizations and communities to play active roles in achieving, protecting, and sustaining their own health, but it will not automatically lead to improved health behaviour.

Obviously, this is because apart from knowledge, there are a range of other factors relevant for health-seeking behaviour: unavailability of health facilities, lack of drugs, lack of money to pay for preventive, or treatment costs etc., as we will see in the sections below. But there are two interesting points to consider in the relationship between knowledge and practice which are scarcely treated in the literature: the uncertainties of illness and non-reasoned behaviour.

**Health seeking behaviour models:** Health- and treatment-seeking behaviour models from social psychology, medical sociology, and medical anthropology allow for considerable extension of the determinant factors for behaviour of KAP and FES studies.

In public health, probably the most utilized models from social psychology are the Health Belief Model, the Theory of Reasoned Action and its later development to the Theory of Planned Behaviour. Most known from medical sociology and medical anthropology are, respectively, the Health Care Utilization or Socio-Behavioural Model by Andersen and its diverse posterior variations, and the Decision Making Model. All models

contain associations of variables which are considered relevant for explaining or predicting health-seeking behaviours.

On the whole, health-seeking behaviour models as applied to public health mostly serve as catalogues of relevant variables that need to be considered in research design, rather than as behavioural models themselves. The principal objective is to identify problematic areas in order to intervene with specific health system strategies.

Health seeking behaviour is initiated with symptom definition, whereupon a strategy for treatment action is devised. The choice of this strategy involves a complex interplay of a number of factors including historical patterns of use, illness type and severity, pre-existing lay beliefs about illness causation, the range and accessibility of therapeutic options and their perceived efficacy, convenience, opportunity costs, quality of service, staff attitudes as well as the age, gender and social circumstances of the sick individual (Ahmed S.M.2003).

Various models of health seeking behaviour have been put forth in the fields of social psychology, medical sociology, and anthropology for the sake of convenience. Using these models a large number of factors associated with health seeking behaviour can be explained. These models help us in identifying problematic areas among the determinant

factors and thereby help in devising intervention strategies. Five relevant models of health seeking behaviour have been listed and discussed individually as below:

### **1. Health Belief Model (HBM)**

This model is one of the earliest theoretical models developed for understanding health behaviours. And it was developed to explain why people do not engage themselves in behaviours to prevent or detect disease early. This is possibly the most known model in public health, and also the oldest one from social psychology, developed in the 1950s. In this model of health-seeking behaviour derived from social psychology, it is postulated that actions of a sick individual are guided by the following factors:

**a) Threat perception:** The beliefs of the person about the impact of illness and its consequences, which in turn depends on the perceived susceptibility or the beliefs about how vulnerable a person considers himself or herself in relation to a certain illness or health problem and perceived severity of the illness or health problems and its consequences

**b) Health motivation:** The readiness of the person to be concerned about health matters. (This factor has been included later in the HBM, in the 1970s).

**c) Behavioural evaluation:** The beliefs of the person about the consequences of health practices, about the possibilities and the effort to put them into practice. The Behavioural 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.

**d) Cues to action:** which include different various 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 others (family, friends, health staff, etc.).

**e) Socio-demographic:** 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).

All these factors are considered to be transformable through health education in contrast to structural or cultural factors like poverty, religious norms etc. and health promotion and centre around beliefs about disease threat and behavioural evaluation. There are further extensions of the health belief model like the theory of planned behaviour and the theory of reasoned action, which include a few more factors and have been used as

research models in cancer research.

## **2. The Theory of Reasoned Action and the Theory of Planned Behaviour**

This theory was proposed to predict an individual's intention to engage in behaviour at a specific time and place. The theory was intended to explain virtually all behaviours over which people have the ability to exert self-control. The Theory of Planned Behaviour (TPB, Ajzen) is an extension of the earlier Theory of Reasoned Action (TRA, Fishbein & Ajzen). They centre on factors which lead to a specific intention to act, or Behavioural Intention, which the TPB situates between the attitudes and behaviour. In the TPB, Behavioural Intention is determined by:

- Attitudes towards behaviour, determined by the belief that a specific behaviour will have a concrete consequence and the evaluation of this consequence.
- Subjective norms, or the belief in whether other relevant persons will approve one's behaviour, plus the personal motivation to fulfill with the expectations of others.
- Perceived behavioural 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 behavioural control. These are the same as in the HBM.

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.

### **3. The “Four As” Model**

This model is very popular among researchers to use different categories which group key factors for health-seeking behaviour. In this model, the key factors are grouped under the following four headings starting with the alphabet ‘A’

**i. *Availability*:** includes factors like geographical location of the health facilities, medical stores, pharmaceutical products etc. and distance of these facilities from the individual.

**ii. *Accessibility*:** includes factors such as transport facilities and condition of the roads.

**iii. *Affordability*:** includes factors like direct and indirect costs incurred by the patient and their family for seeking health care. A

distinction is made between direct, indirect and opportunity costs.

*iv. Acceptability:* relates to cultural and social distance. This mainly refers to the characteristics of the health providers – health workers' behaviour, 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. this group include all factors which relate to the socio- behavioural barriers in the patient for seeking health care.

This model has been extensively or widely used by medical researchers' medical geographers, anthropologists, and epidemiologists mainly because of the easy identification of key potential barriers for adequate treatment.

#### **4. The Pathways Model**

The pathways model is a model, where paths taken from symptom recognition to the use of various health services are followed. The role of relatives and friends in the decision making process is given importance. This decision making process is an important aspect in health seeking behaviour of the cancer patients because of their dependency on others. 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). Usually, in this model



the path to the first contact with a health facility is traced.

### **5. Anderson's Health Care Utilization Model (Socio-behavioural model)**

The Socio-behavioural model of health seeking behaviour grouped like predisposing factors there are age, gender, ethnicity, education, occupation, social capital, knowledge, prior experience about illness and after predisposing factors, enabling factors comes where it is given that availability of services, affordability, health insurance and social network supports, and this is followed by need factors where perceptions of the severity of the illness, perception of the health facility and days lost due to the illness, at the end health services comes in this model and all factors are in logical sequence of categories which also lead to health service use. This model centers specifically on treatment selection. This model has been further modified in various settings. 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). An adaptation of the model has been proposed for studying health-seeking behaviour.

### **6. Kroeger's Model of Health Seeking Behaviour**

Kroeger proposed a modification of Anderson's model in which

the factors are grouped into three groups of interrelated explanatory variables, all of which are affected by perceived morbidity. An interaction of these factors guides the selection of health care resources.

**a. Predisposing factors:** Age, sex, marital status, status in the household, education, assets and source of income, all of which form the traits of an individual.

**b. Characteristics of the disorder and their perception:**  
Whether the disease is acute or chronic, minor or major and so on.

**c. Characteristics of the health service:** such as accessibility, acceptability, communication, and costs.

The advantage of the socio-behavioural models (Anderson's and Kroeger's models) is the variety of the factors which can be studied and organized into categories, making interventions feasible.

## **Causes and risk factors of Cancer**

### **Causes Cancer**

There is no one single cause for cancer. Scientists believe that it is the interaction of many factors together that produces cancer. The factors involved may be genetic, environmental, or constitutional characteristics of the individual.

Diagnosis, treatment, and prognosis for childhood cancers are different than for adult cancers. The main differences are the survival rate and the cause of the cancer. The survival rate for childhood cancer is about 75 percent, while in adult cancers the survival rate is 60 percent. This difference is thought to be because childhood cancer is more responsive to therapy, and a child can tolerate more aggressive therapy.

Childhood cancers often occur or begin in the stem cells, which are simple cells capable of producing other types of specialized cells that the body needs. A sporadic (occurs by chance) cell change or mutation is usually what causes childhood cancer. In adults, the type of cell that becomes cancerous is usually an “epithelial” cell, which is one of the cells that line the body cavity — including the surfaces of organs, glands or body structures — and cover the body surface. Cancer in adults usually occurs from environmental exposures to these cells over time. Adult cancers are sometimes referred to as “acquired” for this reason.

### **Risk Factors of Cancer**

As mentioned, some cancers, particularly in adults, have been associated with certain risk factors. A risk factor is anything that may increase a person’s chance of developing a disease. A risk factor does not necessarily cause the disease, but it may make the body less resistant to it.

People who have an increased risk of developing cancer can help to protect themselves by scheduling regular screenings and check-ups with their physician and by avoiding certain risk factors. Cancer treatment has been proven to be more effective when the cancer is detected early. The following risk factors and mechanisms have been proposed as contributing to the development of cancer.

**Lifestyle factors** – Lifestyle and environmental factors such as smoking, high-fat diet, exposure to ultraviolet (UV radiation from the sun) or exposure to chemicals (cancer-causing substances) in the work place over long periods of time may be risk factors for some adult cancers. Most children with cancer, however, are too young to have been exposed to these lifestyle factors for any extended time.

**Genetic factors** – Family history, inheritance, and genetics may play an important role in some adult and childhood cancers. It is possible for cancer of varying forms to be present more than once in a family. Some gene alterations are inherited. However, this does not necessarily mean that the person will develop cancer. It indicates that the chance of developing cancer increases. It is unknown in these circumstances if the disease is caused by a genetic mutation, other factors, or simply coincidence.

**Virus exposure** – Exposure to certain viruses, such as the human papillomavirus and human immunodeficiency virus (HIV; the virus that causes acquired immune deficiency, or AIDS), have been linked to an increased risk of developing certain types of cancers. Possibly, the virus alters a cell in some way. That cell then reproduces an altered cell and, eventually, these alterations become a cancer cell that reproduces more cancer cells. Cancer is not contagious and a person cannot contract cancer from another person who has the disease.

**Environmental exposures** – Environmental exposures such as pesticides, fertilizers, and power lines have been researched for a direct link to childhood cancers. There has been evidence of cancer occurring among non related children in certain neighborhoods and/or cities. Whether prenatal or infant exposure to these agents causes cancer, or whether it is a coincidence, is unknown. (<http://www.masseym.vcu.edu/cancer-causes-and-risk-factors.htm>)

### **Tobacco and Cancer**

Tobacco is the most important identified cause of cancer and is responsible for about 50% of cancers in men and about 20% of cancers in women. Tobacco is responsible for a large number of diseases in the human

body and cancers in different organs are a significant outcome of tobacco use.

Tobacco smoking is the main known cause of human cancer-related deaths worldwide. The development of cancer in particular organs depends upon the sites that come into contact with the chemical constituents of tobacco and tobacco smoke. The lungs are the principal targets when tobacco smoke is inhaled, when tobacco is chewed or kept in the mouth, the cheek, tongue and other parts of the oral cavity are affected. Increased risk at other sites is probably a result of carcinogens being absorbed into the bloodstream from the lungs and transported to the relevant organ.

There is sufficient evidence in humans that tobacco smoking can cause cancer of the lung, oral cavity, nasopharynx, oropharynx and hypopharynx, nasal cavity and Para nasal sinuses, larynx, esophagus, stomach, pancreas, liver, kidney (body and pelvis), ureter, urinary bladder, uterine cervix and bone marrow (myeloid leukemia).

In India, it is observed that there is a wide spectrum of tobacco habits. Chewing tobacco with lime or betel quid and inhaling snuff are some that use smokeless tobacco. Cigarettes, *bidis*, *chuttas*, *chillums*, *hookahs*, and *hookli* are the smoking habits.

In India bidi is most popular, which is also consumed in large quantities throughout south-east Asia in Bangladesh, Malaysia, Nepal, Nepal, Pakistan, Singapore and Sri Lanka. A *beedi* is a country made cigarette, comprising a small amount of tobacco hand wrapped in a dried *temburni* or *tendu* leaf and tied with string. India accounts for more than 85% of the world's beedi production.

### **Health consequences of tobacco consumption in India**

Approximately 1.5% of total deaths in India were tobacco-related, in 1990, and the nation amassed over 1.7 million DALYs due to disease and injury attributable to tobacco use. Tobacco-related cancers account for approximately half of all cancers among men and one-fourth among women, and it is estimated that 8.3 million cases of coronary artery disease and chronic obstructive airway diseases are also attributable to tobacco each year. These three tobacco-related diseases cost approximately US\$ 6.5 billion in 1999. Smokeless tobacco is a most important etiological factor in cancers of the mouth, lip, tongue, and pharynx. It is not surprising; therefore, that India has one of the highest rates of oral cancer in the world. These rates are steadily increasing and oral cancers are occurring more frequently among younger individuals. Around 2000 deaths each day in India and 5 million per year globally are courtesy of tobacco. Four out of

every ten cancers in India are due to tobacco. In India, where more than 70% of the population resides in the villages where chewing tobacco , smoking a bidi or hookah are common ways of ‘entertainment’ or passing free time, it really is no surprise that tobacco causes 3 lacs new cases of Oral cancer each year in India alone. Every 6 seconds someone on the Earth dies due to tobacco.

Tobacco is consumed in various forms in different countries right from being used to massage gums in a country like India, to smoking in bidis and cigarettes to being chewed by itself or along with betel leaves. While the forms are different, the effect is the same – Oral Cancer. Cancer of the gums, lips, cheeks, palate, and tongue are the various disguises it assumes in the process of causing permanent damage to the consumer. Slow and steady yet not stealthily, it gives multiple signs on its way to death to stop using it. Nevertheless, these are more often than not, ignored by people. Most often these signs come so late that stopping tobacco consumption will not affect the outcome in anyway. The damage has been done. Thus, the stress on preventing people from getting addicted to it and give it up before onset of tell-tale signs.

Starting from May 31, 2009 the World No Tobacco Day, all tobacco products in India will carry graphic pictorial warnings. Given the horrifying



big picture, health authorities are hoping that newly introduced pictorial warnings like skull and cross bones, scorpion and diseased lungs on cigarette packets and other tobacco products in India, will prove effective as a deterrent especially when it comes to young people. The law to ban smoking in public places in the India introduced last year (2008). A ban on smoking in public places came into force in October 2008 in an effort to curb high levels of tobacco addiction. (Ghosal.A, 2009)

Health promotion programmes worldwide have long been premised on the idea that providing knowledge about causes of ill health and choices available will go a long way towards promoting a change in individual behaviour, towards more beneficial health seeking behaviour. However, there is growing recognition, in both developed and developing countries, that providing education and knowledge at the individual level is not sufficient in itself to promote a change in behaviour. Health seeking behaviour is not just a one off isolated event .It is part and parcel of a person's, a family's or a community's identity, which is the result of an evolving mix of social, personal, cultural and experiential factors. The process of responding to illness or seeking care involves multiple steps (Uzma et.al,1999) and can rarely be translated into a simple one off choice or act or be explained by a single model of health seeking behaviour.

Rahman (2000) demonstrates that a women's decision to attend a particular health care facility is the composite result of personal need , social forces, the action of health care providers, the location of services, the unofficial practices of doctors, and in some contexts has very little to do with physical facilities at a particular service point. The product of both the environment in which we live and the social fabric of various cultures. While the initial impact of a disease can be mediated, i.e. participating in disease prevention behaviour – eating the right foods, exercising, and controlling stress, ill health is influenced by social factors in which individuals and cultures seek health care; cultures vary in the way they treat a sick person. An abundance of descriptive studies on health seeking behaviour, highlighting similar and unique factors, demonstrate the complexity of influences on an individual's behaviour at a given time and place. However, they focus almost exclusively on the individual as a purposive and decisive agent, and elsewhere there is a growing concern that factors promoting 'good' health seeking behaviour are not rooted solely in the individual, they also have a more dynamic, collective, interactive element. Academics have therefore started to explore the way in which the local dynamics of communities have an influence over the well-being of the inhabitants.

This reflects a growing interest across the social sciences in the contested concept of social capital. Attempts are now being made to develop this, yet under-utilized idea, to incorporate knowledge about health seeking behaviour into health service delivery strategies in a way, which is sensitive to the local dynamics of the community. This may be an extremely positive development. The whole area of knowledge around health seeking behaviour is rendered of little value if not incorporated into management and system developments. The fact that health seeking behaviour is ‘not even mentioned’ in widely used medical textbooks (Steen and Mazonde, 1999), perhaps reflects that many health seeking behaviour studies are presented in a manner which delivers no effective route forward. This results in an unfortunate loss for medical practice and health systems development programmes, as proper understanding of health seeking behaviour could reduce delay to diagnosis, improve treatment compliance, and improve health promotion strategies in a variety of contexts. This study suggests what may usefully be learnt from studies to date, and begins to explore how we might make studies of health seeking behaviour more useful from a health systems development perspective. As part of this, it begins to explore some of the growing body of literature around local social development, participation, and citizenship. This is usually divorced from

the sort of one-on-one understanding of actual acts of health seeking behaviour, but the study highlights a few key studies that begin to make more explicit the importance of the links between the health seeking behaviour of the individual and wider theoretical models of the local dynamics of health systems and social and economic participation. In this study, the researcher worked towards an understanding, or to get an idea of the prospective and prescriptive health seeking behaviour of men and women, that can be developed in a practical way through this research programme. The researcher begin by outlining the current picture, firstly drawing from the literature around health seeking behaviour in general and secondly by highlighting some key issues relevant to the problem such as tobacco related cancer.

Tipping and Segall (1995) in their study divided, health seeking behaviours in two parts-firstly there are studies which emphasize the 'end point' (utilization of the formal system, or health care seeking behaviour); secondly, there are those which emphasize the 'process' (illness response, or health seeking behaviour).

### **Health care seeking behaviour: Utilization of the system**

There is often a tendency for studies to focus specifically on the act of seeking 'health care' as defined officially in a particular context. Although data

are also gathered on self-care, visits to more traditional healers and unofficial medical channels, these are often seen largely as something, which should be prevented, with the emphasis on encouraging people to opt first for the official channels (Ahmed et. al, 2000). These studies demonstrate that the decision to engage with a particular medical channel is influenced by a variety of socio-economic variables, sex, age, the social status of women, the type of illness, access to services and perceived quality of the service (Tipping and Segall, 1995). In mapping out the factors behind such patterns, there are two broad trends. Firstly there are studies which categories the types of barriers or determinants which lie between patients and services. In this approach, there are as many categorizations and variations in terminology as there are studies, but they tend to fall under the divisions of geographical, social, economic, cultural, and organizational factors. Rahman (2000) made a study in rural Bangladesh, where he found that 86% of women received health care from non-qualified health care providers.

Despite the ongoing evidence that people do choose traditional and folk medicine or providers in a variety of contexts which have potentially profound impacts on health, few studies recommend ways to build bridges to enable individual preferences to be incorporated into a more responsive health care system. For example, in Bangladesh there is a large and growing sector of non-

qualified allopathic providers engaged in the traffic of modern pharmaceuticals. They provide an accessible means of reaching Western medicines to a wider range of the population, yet lack of formal medical training. Incorporating these unqualified providers into more formal training may therefore be beneficial (Ahmed et. al, 2000). In acknowledgement of the fact that untrained non-Western practitioners remain a strong favorite, Outwater et. al (2001) interviewed traditional healers about their knowledge and relationship with 'modern' medicine, and explored in far more depth the preferences of women who attended traditional healers and unofficial sources of health care. Similarly, Rahman (2000) found that different facilities would be frequented for different needs, according to a complex interplay of factors, sometimes regardless of the intended purpose of those facilities. . However, Ahmed et al concede that whilst extending training to such providers may enhance their services, training in itself will not change practice. For this, managerial and regulatory intervention is needed. Thus, the provision of medical services alone in efforts to reduce health inequalities is inadequate (Ahmed et.al, 2000). Clearly any research interest in health care seeking behaviour, focusing on end point utilizations, needs to address the complex nature of the process involved, cognizant of the fact that the particular 'end

point' uncovered may be multi-faceted and not correspond to the preferred end points of service providers.

### **Health seeking behaviours: The process of illness response**

The second body of work, rooted especially in social work, looks at health seeking behaviours more generally; drawing out the factors which enable or prevent people from making 'healthy choices', in either their lifestyle behaviours or their use of medical care and treatment. . A number of 'social cognition models' (Conner and Norman, 1996) have been developed in this tradition, to predict possible behaviour patterns. These are based on a mixture of demographic, social, emotional, and cognitive factors, perceived symptoms, access to care, and personality (Conner and Norman, 1996). Sheeran and Abraham (1996) categories the range of behaviours that have been examined using health belief models into three broad areas: preventive health behaviours, sick role behaviours, and clinic use. In this type of model, individual beliefs offer the link between socialization and behaviour. Health belief models focus on two elements: 'threat perception' and 'behavioural evaluation' (Sheeran and Abraham, 1996). Threat perception depends upon perceived susceptibility to illness and anticipated severity; behavioural evaluation consists of beliefs concerning the benefits of a particular behaviour and the barriers to it. 'Cues to action' and general 'health motivation' have

also been included (Becker et al, 1977). The health belief model has been criticized for portraying individuals as asocial economic decision makers, and its application to major contemporary health Issues, such as sexual behaviour, have failed to offer any insights (Sheeran and Abraham, 1996).

A very high incidence of cancers of all sites in general and tobacco and pesticide related cancers in particular has been reported in North-East region of India. However, the available data on tobacco usage and pesticide exposure alone is not sufficient to explain the high incidence. North-East region of India has different customs, food habits, life-style, diverse ethnic groups, and type and pattern of tobacco use in as compared to the rest of the country.

ICMR has set up Cancer Registries in the North-East under the NCRP. These centers have good working relationship with the populations harboring the cases of cancers and have earlier provided data showing the high prevalence of certain types of cancers in these regions. Multicentric studies have been initiated by ICMR to find out the genetic factors, in addition to common environmental exposures, tobacco smoking, alcohol consumption, pesticide exposure, and dietary habits which could possibly explain the high prevalence of certain cancers in North-East India which forms the basis of the current studies.



Cancer incidence data, generated from six hospital-based Cancer Registries under (NCRP), has revealed that in India, Assam has the highest incidence of esophageal cancer. In Assam, aggregation of esophageal cancer in families is a long-observed and well documented phenomenon. Epidemiological studies indicate that tobacco smoking and alcohol consumption are two major factors contributing to development of esophageal cancer. However, the role of genetic factors for familial aggregation has not yet been elucidated. (Chakraborty, S. Sharma et. al. 2004)

The burden of tobacco related cancer is increasing alarmingly throughout the world. Tobacco is the second most major cause of death in the world. Nearly 5 million people die due to tobacco use every year and this figure will increase to 10 million by the end of 2020. It is not only cause of lung cancer; but it also increases the risk of other cancers like esophageal, oral cavity, hypo pharynx, larynx, urinary bladder, colon, rectum, pancreas, and cervix. In North-East region very high incidence of all sites of cancers in general and tobacco related cancers in particular have been reported. Both Mizoram and Assam states have reported very high incidence of esophageal cancer in both sexes. The proportion of tobacco-related cancers relative to all sites is highest in Assam and Meghalaya. These proportions are relatively

higher than those reported elsewhere in the country. Pattern of tobacco use is different in North-East region where bidis and cigarettes available locally are different from main land. (Chakraborty. S, Sharma et. al. 2004)

There is an extensive use of pesticides in tea gardens in North-East which can lead to widespread occupational and environmental exposures. According to the study conducted by IARC, 50% of the pesticide found to possess carcinogenic potential. High incidence of certain cancers like cancer of breast with higher serum DDE levels have been reported from Northeast districts by ICMR. The incidence of breast cancer in Aizawl district was 36.2/100,000 which is higher than that reported by any of the population based cancer registry of NCRP. (Chakraborty. S, Sharma et. al. 2004)

### **Scenario of Cancer in Cachar**

Cachar is one of the 24 districts in Assam to occupy the third slot in cancer incidence in the past five years. Cachar is cancer prone area. According to doctors a marked increase in cancer cases in the esophagus, larynx, hypo pharynx, lung, and tongue. According to Debashish Dutta, the co-investigator in the PBCR in Silchar, the cause is mostly tobacco. The incidence of tobacco-related cancer in Cachar is estimated at 46.3 per cent among men and 30.4 per cent among women. The following are the sites related to tobacco cancer, according to NCRP, ICMR (2011). These are:

Esophagus, Hypo pharynx, Lung, Larynx, Tongue, Mouth, Stomach, Tonsil, Bladder, Salivary Gland, Oropharynx, Pharynx unspecified, Lip, and Nasopharynx. Among the Tobacco Related Cancer sites, esophagus is the commonest site among both sexes accounting about 16.56% (Male) and 28.21% (Female) of all tobacco related cancer. Below is the table which highlights the tobacco related cancer sites of Cachar Districts.

**Table 1.3: Tobacco Related Cancer sites of Cachar District.**

Male			Female		
Site of cancer	Number (#)	Proportion (%)	Site of cancer	Number (#)	Proportion (%)
Oesophagus	127	16.56	Oesophagus	90	28.21
Hypo pharynx	110	14.34	Lung	35	10.98
Lungs	108	14.08	Mouth	32	10.03
Larynx	84	10.95	Tongue	31	9.72
Tongue	79	10.3	Stomach	31	9.72
Mouth	52	6.8	Hypo pharynx	27	8.46
Stomach	50	6.52	Salivary Gland	19	5.96
Tonsil	39	5.08	Tonsil	10	3.13
Bladder	33	4.3	Larynx	14	4.39
Salivary Gland	27	3.5	Pharynx unspecified	9	2.82
Oropharynx	19	2.48	Lip	8	2.51
Pharynx unspecified	16	2.09	Oropharynx	5	1.57
Lip	14	1.83	Nasopharynx	4	1.25
Nasopharynx	19	1.17	Bladder	4	1.25
Total (TRCs)	767	100	Total (TRCs)	319	100

*Biennial Report of 'PBCR-Cachar' of 2009-10*

In order to improve sustained uptake of cancer services, it is important to understand the patterns and determinants of general health-seeking behaviour in Cachar. While the issues of healthcare access are broad, these data's from the recent ICMR reports and others reports from different sources to analyze general health-seeking behaviour and preventive health-seeking behaviour in both men and women in Cachar District and draw inferences. The tendency to seek healthcare is especially low for uneducated women. This suggests an overall weak health-seeking behaviour culture and low uptake of health services, which may be reflected in the under-utilization of cancer related services which are available in the district. Among those people who sought health services, client preference for private providers did not significantly differ by socioeconomic factors such as education, age, residence (urban/rural), marital status, or overall standard of living. This must be qualified with regard to the types of private sector service providers, which range from the local healer to specialized clinics. Socioeconomic factors and place of residence play a role in determining the category of private providers that are accessed by different groups.

Poor literacy and lack of awareness about services, schemes and entitlements, low status of women and lack of family support for women

reinforcing low self worth, abject poverty that pushes health to a low priority, and prevalence of culturally influenced practices that may in certain situations be detrimental to health are among the crucial factors that determine the health-seeking behaviour in this District.

The internal barriers relate to self worth and perception of the seriousness of the ailment as well as the extent of suffering and its economic repercussions. For example, if the disease causes loss of daily wages or if it afflicts the boy child, then chances of seeking healthcare are higher. On the contrary, if it does not impact day-today life and productivity or affects the woman, then there is less likelihood of accessing health services. Prevention and wellness are not common concepts, especially among the poor. In the case of cancer this assumes greater significance as the symptoms become evident only at an advanced stage. Thus, the majority of people are likely to seek health services only at a later stage. The patients have to wait for long time, absent doctors/auxiliary nurse midwives (ANMs), and insensitive staffs are factors that deter people from returning to the health facility. It must be noted that the state has a significant shortage in the number of healthcare units and staff needed. External challenges are influenced by the overall approach of the government toward health in the state. It also depends on availability of trained doctors, nurses, and other health

personnel. There is an acute shortage of doctors who are willing to serve. At another level, the external barriers relate to larger issues of human development, gender and caste stereotyping, economic growth and equity, poverty and systems of governance and corruption, which, in turn, reinforce certain internal barriers. Together these factors affect the health-seeking behaviour of both men and women. (Health policy initiative, 2009)

There is a growing literature on health seeking behaviours and the determinants of health services utilization especially in the context of developing countries. This study presented an extensive literature review of the situation in developing countries and relates the similar factors responsible for shaping up of a health seeking behaviour and health service utilization. Policy makers need to understand the drivers of health seeking behaviour of the population in an increasingly pluralistic health care system. Also a more concerted effort is required for designing behavioural health promotion campaigns through inter-sectoral collaboration focusing more on disadvantaged segments of the population.

### **The Researcher's Motivation for the research**

This study was influenced by a particular factor from work experience. When the researcher was working as Medical Social Worker in the ICMR project entitled, "Cancer in North-East India: Understanding the

role of Tobacco”, there the researcher interacted with various cancer patients, their relatives, friends etc. for collection of information.

During the five years of professional life as a medical social worker, the researcher have observed the problems and sufferings of cancer patients, such as loss of body parts, mental stress, death etc. due to this disease. Throughout this duration, the researcher has never stopped asking herself: What holds people back from seeking health care at a health centers when they fall sick? Is it from ignorance? Is it due to lack of motivation? Is it the result of lack of awareness and knowledge about available health services? Is it due to socio-economic problems? What role do the family members and the social workers should play? How to influence the people to seek health care? Etc.

From these above questions, the researcher was encouraged and motivated to explore health seeking behaviour of tobacco related cancer patients of this region. The study is intended to describe the health seeking behaviour of Tobacco Related Cancer patients in the context of Cachar. The focus of study is on finding out the factors leading to Tobacco Related Cancer and perspectives and prospective behaviour of cancer patients registered under Cachar Cancer Hospital and Silchar Medical College and Hospital.