REVIEW OF LITERATURE

This Chapter includes the review of those works and studies which are directly or indirectly related to the present study to develop an insight into the problem under investigation. Moreover, it assists in selecting suitable method and helpful in avoiding unintentional replication of previous studies. Information regarding various studies related to present topic has been reviewed through various secondary sources and attempt is made to relate with the present study. It is found that the study related to tobacco related cancer is done both in India and abroad. Hence, categorization has been done in reviewing the related works such as:-

1. Studies conducted in other countries.

2. Studies conducted in India.

Globally, more than one million new cases of cancer are diagnosed each year. This makes cancer one of the most common in the world. Cancer has become a major public health problem in developing countries like India. It is estimated that about nine million new cancer cases are diagnosed every year and over 4.5 million people die from cancer each year in the world. In developed countries it is the second most common cause of death, and epidemiological evidence points to the emergence of a similar trend in developing countries. The estimated number of new cancers cases in India per year is about seven lakhs and over 3.5 lakhs people die of cancer each year.

Epidemiological studies conducted on cancer have shown that 70-90% of all cancers are environmental. Lifestyle related factors are the most important and preventable among the environmental exposures. Tobacco consumptions either as chewing tobacco or smoking tobacco will account for 50% of all cancers in men. Dietary practices, reproductive and sexual practices etc will account for 20-30% of cancers. Appropriate changes in lifestyle can reduce the mortality and morbidity from a good proportion of cancer and heart diseases. (Regional Cancer Center, Tiruvananthapuram)

For the purpose of this study, this definition has been which very feasible; health seeking behaviour is defined as: 'the sequence of remedial actions, individual, or group of individuals undertakes to rectify perceived ill health or disruption' (Ward, Mertens and Thomas 1996). The researcher suggests that in the lives of cancer patients the process of treatment starts after the diagnosis of the disease and the patient starts dealing with the worst part of their lives. They undergo their lives with anxieties, challenges, and fear etc. and face the consequences.

Foster and Anderson (1980) noted that availability of services and physical access is important. It is under utilization of modern health services is rarely due to the influence of local beliefs or an aversion of western medicine but rather depends on the cost and availability of those services. An essential factor in determining whether a person seeking health care complies with treatment and maintains a relationship with the health facility and/or provider is client satisfaction. Client satisfaction may be described as the subjective assessment of quality of services received by the client. The assessment of client satisfaction is based on the verbal and non-verbal interaction that occurs between the health provider and individuals seeking information or services. Depending on the nature of the interaction environment and the provider attitude, this experience may influence the client's perspective of the quality of services and ultimately influence the subsequent health seeking behaviour.

UNICEF (1990) pointed to the paradox that while women as the main caretakers are the first in perceiving illness in their children, they often lack the means to adequately act because they depend on the men who control funds and they do not have any right to take decision even when they are not well. The study made by A. Oakley et. al. (1995) stated that Children and young people are having much knowledge about cancer, especially about lung cancer and smoking, and show considerable awareness of predominant health education messages. Despite this knowledge, many lead less than healthy lifestyles. Health is not seen as the most important goal in life by many young people.

Bertocci 1995, Zaman (1996) revealed the fact that women are affected by the culture of a particular society. The practice of *purdah* implies that a woman will rarely go outside the household. Whenever she goes out, she will wear a veil and will not expose herself to unknown males. This practice varies depending on the economic status of the households. Usually in the rural areas, the women of the rich and high status households maintain *purdah* since it is a symbol of the family's high status.

Lange (1998) found that there are certain signs to be aware of that are consistent with clinical depression such as continuous feelings of sadness, decreased interest, and pleasure, feelings of worthlessness and guilt, lack of interest in intimacy and thoughts about suicide.

T.T.M. Oanh (2000) stated in his study that, there is a huge difference in illness patterns and health seeking behaviour between females and males. Females have lower proportion of illness recognition and are more dependent on others in the selection of health services, because they are very much dependent on the male members of their family.

M. Bartal (2001) explored tobacco is still widely consumed in a variety of different ways, mainly as smokeless tobacco and cigarette smoking. Chewed or snuffed can lead mainly to inflammation of the oral cavity and oral cancers. Cigarette smoking accounts for 65-85% of global tobacco consumption. In his study he mentioned that active smoking can cause: a) respiratory disorders culminating in COPD and emphysema; b) cardiovascular hazards by way of increased vascular spasm and atherosclerosis leading to acute and chronic myocardial events, cerebral and peripheral vascular diseases; c) cancers: twelve types are caused or related to cigarette smoking. Passive smoking implicates 20-80% of the whole population. It can be nearly as harmful as active smoking depending upon risk factors, and can lead to short as well as to long-term effects. Passive smoking increases risks for higher and lower respiratory tract illness but a smoke-free environment improves all these disorders. Ischemic heart diseases and lung cancer are the main risks for non smoking adults exposed to cigarette smoke.

The study of E. O. <u>Were</u> and N. G. <u>Buziba</u> (2001) focused that, patients with cervical cancer come late for treatment. They are most likely to have discussed their illness with their female relatives and husbands and to have first visited peripheral facilities manned by trained healthcare workers. Interventions to improve health care seeking behaviour among cervical cancer patients need to include education of husbands in addition to increasing awareness of the disease among private medical practitioners and health workers at dispensary and health centre level.

Haggart (2002) in his study revealed the relationship between the health care system and the community should ideally be a symbiotic one. It is usually assumed that all community members will use the services provided by the health care system. This assumption is not always true. The health care system needs the support of the community to ensure that health services are utilized. The community members know best what their health problems are and they may even know or suggest ways to solve the problems. A community may decide not to use health care services for numerous reasons. Barriers to utilization of health care services are present in one form or another, they may be cultural or religious, economic or environmental. Moreover, inappropriate or inadequate professional health care services could make the individual turn to traditional health care based on religion or traditional beliefs and practices for their health needs.

K. Fagerstrom (2002) illustrated that smoking causes a wide range of diseases, including many types of cancer, chronic obstructive pulmonary disease, coronary heart disease, stroke, peripheral vascular disease, and peptic ulcer disease and he also mentioned that tobacco use is the single most important preventable health risk in the developed world, and an important cause of premature death worldwide. In addition, smoking during pregnancy adversely affects fetal and neonatal growth and development. Recent decades have seen a massive expansion in tobacco use in the developed world. Globally, smoking-related mortality is set to rise from 3 million annually (1995 estimate) to 10 million annually by 2030, with 70% of these deaths occurring in developing countries.

Stewart and Kleiues (2003) pointed out in The World Cancer Report that cancer rates are set to increase at an alarming rate globally. The report also reveals that cancer has emerged as a major public health problem in developing countries, matching its effect in industrialized nations. Healthy lifestyles and public health action by governments and health practitioners could stem this trend, and prevent as many as one third of cancers worldwide.

Rujirek Kunmun (2005) in Qualitative research found that the beliefs, perception, and interpretation of the disease causes, types, and severity were closely related. There are many Symptoms included unusual bleeding and metrorrhagia, swollen legs, fatigue and loss of weight and appetite. The symptoms were perceived as cervical cancer, which was interpreted as incurable and fatal. Perception on severity ranged from medium to low, depending on patients' cancer stages. In this study the factors affecting these beliefs, perception and interpretation were 1. Demographic aspects e.g. domicile, age, religion, marital status, education, career and personal income. 2. Family aspects e.g. size and income, and 3. Risk factors e.g. age at first intercourse, pregnancy and menstruation, pregnancy frequency, birth control records, smoking and number of husbands. Treatments included 'wait-and-see', self treating, seeking advice from others before seeking/receiving medical services in both traditional and modern medical centers. Factors influencing the selection included perception, severity, advice of others, refund ability, affordability, service access and service satisfaction. It is recommended that the public should be provided information on cervical cancer and smear tests through all existing media

channels. Campaigns should be more proactive and hospitals should allow patients to use a holistic approach. Furthermore, there should be strategies to boost morale and fight the disease in order to enhance patients' quality of life and happiness in the last stages of their lives.

In the study of Frierson and Anderson (2006), they mentioned that a woman's responses related to her body changes as a result of having breast cancer consist of "psychological adjustment, social adjustment, relationships with sexual partners, physical symptoms, and related concerns".

As per the study of Ministry of Health, China (2006) in the year of 2002, 35.8% of the populations over age 15 in china were smokers. In that population, 66.0% of the males were smokers, while 3.1% of the females were smokers. Based on these numbers, the study estimate is that there are 350 million smokers in china, $1/3^{rd}$ of the total number of smokers worldwide. Moreover, the smoking population in china is getting younger. Compared with the 1980s, the average starting age for smoking has dropped from 22.4 to 19.7 years old.

In the study of M. R. Kazaura et. al (2007), they pointed out some suggestions in their study that interventions should be started to improve health care seeking behaviour among cancer patients, need to include health education and sensitization specifically of cancer disease, establish a strong referral mechanisms at primary health level and to start centers for monitoring and evaluation. Because during this study they found that many patients reported that they have neither heard about this disease nor they know about the signs and symptoms and but some reported that willingness to disclose and talk about the disease to some near and dear ones.

A study of WHO (2007) on 'Impact of tobacco related illnesses in Bangladesh', examines the costs of tobacco-related illnesses in Bangladesh as of 2004 by determining: (i) the prevalence of tobacco-related diseases; (ii) disabilities and deaths that are attributable to tobacco; and (iii) direct (out-of-pocket and health system) and indirect (premature deaths and disabilities) costs, for a cost benefit analysis. In this study it is given that tobacco-related diseases develop mostly after the age of 30 years, the findings of this study said that for this i.e. 30 yrs of age group mostly suffers from tobacco related cancer. Smoking prevalence was found to be 50% among men and 3% among women. In addition, 22% of men and 39% of women use smokeless tobacco in chewable form. Altogether, 62% of men and 41% of women (52% for sexes combined) either smoked or chewed tobacco products. Karolynn Siegel (2008) focused that in recent years, attention must be given to psychosocial aspects of cancer treatment, recovery, and survivorship because oncology health professionals have observed that psychological and social variables can influence the medical outcomes and increase the quality of life of cancer patients.

Susan G. Komen (2009) pointed in a report that breast cancer is the most common cancer among Latina/Hispanic women. This is attributed to the fact that they are less likely to have mammography screenings. This population is more likely to be diagnosed at a later stage of breast cancer. Some factors contributing to these statistics may include low income, lack of medical insurance, lack of getting prompt follow-up after an abnormal mammogram, lack of education, lack of cancer awareness as well as cultural and language barriers.

<u>Terry Martin (2009)</u> found that cigarette smoking causes 87% of lung cancer deaths. Lung cancer is the leading cause of cancer death in both men and women. Cigarette smoking alone is directly responsible for approximately 30% of all cancer deaths annually in the United States. Cigarette smoking also contributes to lung disease, heart disease, stroke, and the development of low birth weight babies. Quitting smoking can significantly reduce a person's risk of developing heart disease, stroke, and diseases of the lung, and can limit adverse health effects on children.

In the view of A. Lee and S. Sin. et. al. (2010), in Hong Kong, more than 85% considered a family doctor to be the first doctor they wanted to see even if it was inconvenient. In the study they mentioned the three important factors, why the patients' first choice family doctors, (a) the doctor know the physical condition very clearly (b) effective treatment and (c) doctor will be friendly and sincere attitude. When affected by flu-like symptoms, 65% would go to a private clinic, 20% to a general out-patient clinic, and 6% to a designated clinic with staff approved by their respective medical insurance/ medical benefit scheme, and 5% to a private hospital outpatient clinic. Among the latter two groups, 65% consulted the same doctor every time when they felt sick. More than 50% of those willing to have regular follow-up by a family doctor for hypertension and diabetes paid more than (HK) \$300 per month. Approximately 64% might consider having regular follow-up at a general out-patient clinic by a nurse specialist.

The study of Ronald Crystal (2010) mentioned that asthmatics were 30 percent less likely to get ovarian cancer than others were, and children with allergies to airborne substances were 40 percent less likely to develop leukemia than other youngsters.

The study of <u>D. Townsend</u> and <u>C. Accurso, Massana</u> et. al. (2010) presented a description of the patients, demographics, medical diagnoses, and psychosocial needs which was assessed by the Social Workers. The reason most frequently reported for referral to social work was assistance with psychosocial problems. For 41.3% of the sample, these problems were assessed as high severity, and almost half the patients in the sample (47.8%) were assessed as having inadequate coping ability. Patient age was the most important demographic variable. In the study it is found that seniors (63–94 years of age) were the least likely to have high-severity psychosocial problems, they were the most likely to have inadequate coping ability. In the suggested that the social worker, in addition to study the researchers dealing with the instrumental, practical needs of cancer patients, is in a unique position to respond to their emotional difficulties in coping with their illness, and that health care professionals need to pay particular attention to the coping ability of elderly patients. The study was based on a programme, where the social worker helps the patient and the patient's family to cope with the illness, to problem-solve, and to obtain needed resources.

Jennifer Mellace (2010) in her recent survey conducted by the AOSW explored that more than one half of cancer patients indicate the cost of cancer negatively impacts their focus on recovery. And those who are with these patients know the stressors firsthand and understand the negative impact they can have on family, caregivers, and most importantly the patients. The survey was done to the enhancement of psychosocial services for people with cancer and their families to help them cope with the practical, financial, emotional, and social concerns of living with cancer. According to the survey, 66% of patients are having major financial challenges for which they are suffering from depression or anxiety, 29% delay filling prescriptions due to financial pressures, and 22% skip doses of their medications. Additionally, 40% of patients reported depleting their savings, almost 30% reported dealing with bill collectors, and 54% of those handling a major financial burden said it had become more difficult in the future years to afford for this treatment.

According to Carrie Kingsley (2010), racial and ethnic minorities and medically underserved groups are more likely to develop cancer and die from it than the general population. He also reveal that a researcher should be aware of some of the cultural values of the community where they want to study and then explore the pertinent themes as they relate to provide health care for individuals patients great diversity within the community. Patients who comes from different places have the expectation about medical professional and services based on experiences which they receives from their own places, which may affect health seeking behaviour.

In Mexico, the poor people have limited access to health care, so the patients have to move from their own places or country and receive medical care from other countries. Some time medical care becomes interesting for the patients and some times it becomes confusing because of the system of the institute. In Mexico Cancer incidence depends upon number of factors including behavioral, regional, genetic differences, socio-economic status.

In the study of James Klosky (2011), it is seen that breastfeeding is known to reduce the incidence of obesity. Survivors of childhood cancers are also in increased risk of getting cancer later in life, and it is also noticed that women are having greater risk than men, because of breast cancer. The study said that it was clear that breastfeeding was a good option for childhood cancer survivors, but at the same time it was said that primary care and cancer treatment should be given. It was also said that if any young women who suffered from breast cancer and have cancer treatment, either surgery or radiation, are also at risk of being unable to lactate later in life.

In the article of Mohammed A. Hassali et. al. (2011), it is seen that maximum respondents related the cause of their cancer to be Gods' will. The respondents perceived conventional therapies than methods. A fear of side effects was main reason for delay in seeking treatment. But, after receiving treatment which reduce the risk of side effects and for which perceptions also changes.

The study done by A. Jemal et. al. (2011) conveyed the fact that global burden of cancer continues to increase largely because of the aging and growth of the world population alongside an increasing adoption of cancer-causing behaviors, particularly smoking, in economically developing countries. Based on the GLOBOCAN 2008 estimates, about 12.7 million cancer cases and 7.6 million cancer deaths are estimated to have occurred in 2008; of these, 56% of the cases and 64% of the deaths occurred in the economically developing world. Breast cancer is the most frequently diagnosed cancer and the leading cause of cancer death among females, accounting for 23% of the total cancer cases and 14% of the cancer deaths. Lung cancer is the leading cancer site in males, comprising 17% of the total new cancer cases and 23% of the total cancer deaths. Breast cancer is now also the leading cause of cancer death among females in economically developing countries, a shift from the previous decade during which the most common cause of cancer death was cervical cancer. Further, the mortality burden for lung cancer among females in developing countries is as high as the burden for cervical cancer, with each accounting for 11% of the total female cancer deaths. Although overall cancer incidence rates in the developing world are half those seen in the developed world in both sexes, the overall cancer mortality rates are generally similar. Cancer survival tends to be poorer in developing countries, most likely because of a combination of a late stage at diagnosis and limited access to timely and standard treatment.

In contrast to breast cancer, cervical cancer are traditionally low among Latinos but now a days increasing (U.S. Cancer Statistics, 2009) Cancer Society (2009) American Cancer facts & figures for Hispanics/Latinos 2009-2011. Atlanta. There is much less information available about Latinos and ovarian cancer, in part due to the rarity of the disease. Prostate cancer among Latinos is lower and they are more likely to diagnose at a later stage. Even when diagnosed at the later stage and age the Latinos are more likely to die. Potential reasons for this isles access to care, less understanding of the treatment options, less trust in traditional medicines, concern over side effects, denial of illness or vulnerability, and inadequate monitoring by health care professionals. The death rate from prostate cancer among Latinos decreased 3.2% per year from 1994-2004 (cancer facts & figure 2006). The barriers which the cancer patients face are

financial, transportation and immigration; there are other issues such as language, health literacy, and lack of experience with preventive care.

R. Byakodi et. al. (2012) discussed in their study that oral cancer ranks number one in terms of incidence among men and third among women and oral cancer is one of the most fatal health problems faced by the mankind today. In India, because of cultural, ethnic, geographic factors and the popularity of addictive habits, the frequency of oral cancer is high. The study reveals a high prevalence of Oral Cancer and a rampant misuse of variety of addictive substances in the community. Close follow up and systematic evaluation is required in this population. Education about ill effects of tobacco and alcohol consumption is necessary at a broader scale. The study also suggested that, there is an urgent need for awareness programs involving the community health workers and other medical staff.

Reviews of Indian studies

The study of Khan, M. A & Sehgal. A et. al. (2000) was undertaken to evaluate the psychological effect among women who underwent mastectomy for breast cancer. Psycho-social problems following mastectomy are related to anxiety, fear, social withdrawal, changes in body image, sexual problems of perceived acceptance and rejection. And this study also tells that for many women, mastectomy for breast cancer not only carries the threat of death due to the disease, but also disfigurement which shakes the very core of her feminine orientation. The importance of psychosocial support and effective counseling during rehabilitation is stressed.

Dikshit P Rajesh and Kanhere Shiela (2000) mentioned that a significant risk of *bidi* and cigarette smoking with a dose-response relationship was observed for lung and oropharyngeal cancer. Tobacco quid chewing showed no risk for lung, marginally increased risk for oropharyngeal and about a six fold increased risk for oral cavity cancer. Population-attributable risk per cent (PARP) was observed to be 82.7% and 71.6% for smokers for the development of lung and oropharyngeal cancer, while the same was found to be 66.1% for tobacco chewers for the development of oral cavity cancer.

Pandey & Thomas (2001) described in their study that there is development in cancer treatment, for which more and more patients are surviving with this disease. However, very little emphasis is being placed to rehabilitate these cancer survivors. Ignorance, social structure, stigma attached in seeking psychological help, and poor communication skills of oncology staff all contribute to poor rehabilitation of cancer patients.

A. Bhagyalaxmi, V. S. Raval (2002-03) made a study on "Psychosocial issues in Oral and Oropharyngeal Cancer" which communicated that cancer affects an individual from their all dimensions e.g. physically, economically, emotionally, socially and psychologically which makes their lives more difficult. Therefore, understanding and alleviating the emotional and social impact of cancer on patient and their families needs a broader approach. In order to elucidate these aspects, a case control study was carried out at Gujarat Cancer and Research Institute, Ahmedabad, for which an Interview Schedule was completed for assessing various areas of burden experienced in the family. The study results revealed that oral and oropharyngeal cases were affected by anxiety (12%) and depression (25%) and another (4%) were having both the psychiatric morbidities.

NCRP of ICMR, New Delhi (2003) reports that TRC out of all cancers for the year 2003 on an average was 42 per cent for males and 15 per cent for females. A report is released for Population Based Cancer Registries (PBCR) of North Eastern (NE) region of India for the year 2003-2004. This region had a high proportion of TRC to all cancers, which was 60 per cent in Kamrup district of Assam, followed by 55 per cent in Dibrugarh and 46.3 per cent in Silchar among males. Among females, the proportion of TRC to all cancers was 30.4 per cent in Silchar, 27.9 per cent in Kamrup and 25 per cent in Dibrugarh.

Prakash Gupta et. al. (2003) found in their study that nearly 50% of rural children, boys more than girls, experiment with tobacco, mostly as snuff (nashyna, chhinkni) even by 10 years of age; snuff use decreases, while smoking and chewing increase with age; smoking is better known as a health hazard than chewing or snuff use; tobacco use by elders influences children; a larger study with objectively validated answers from 6 to 20 years olds, in and out of school is needed.

In the view of Sanjoy Kr. Pal and Ballraj Mittal (2004), in developing country such as India, there has been a steady increase in the Crude Incidence Rate (CIR) of all cancers affecting both men and women over the last 15 years. The increase reported by the cancer registries is nearly 12 per cent from 1985 to 2001, representing a 57 per cent rise in India's cancer burden. The pattern of cancers has changed over the years, with a disturbing increase in cases that are linked to the use of tobacco. In 2003, there were 3.85 lakhs of cases coming under this category in comparison with 1.94 lakhs cases two decades ago. Lung cancer is now the second most common cancer among men. Earlier, it was in fifth place. Among women in urban areas, cancer of the uterine cervix had the highest incidence 15 years ago, but it has now been overtaken by breast cancer. In rural areas, cervical cancer remains the most common form of the disease.

In the study of Dr. Jagadish Mahanta (2004), it was noticed that, the incidence of stomach cancer in India is lower than that of any other country around the world. However, in Mizoram, one of the north-eastern states of India, a very high age-adjusted incidence of stomach cancer is recorded. A hospital-based case-control study was carried out to identify the influence of tobacco use on the risk of developing stomach cancer in Mizoram. Among the cases, the risk of stomach cancer was significantly elevated among current smokers, but not among ex-smokers. Higher risks were seen for *meiziol* (a local cigarette) smokers. Mizoram was seemed to increase the risk of stomach cancer among current users. Tobacco use in any form [smoking and smokeless (*tuibur* and chewing)] increased the risk of stomach cancer in Mizoram independently.

D. Behera (2004) explains that with increasing prevalence of smoking, lung cancer has reached epidemic proportions in India. It has surpassed the earlier commonest form of cancer, which is oropharynx and now is the commonest malignancy in males. In addition to smoking, occupational exposure to carcinogens, indoor air pollution and dietary factors have recently been implicated in the causation of lung cancer.

K. S. Latha, S. M. Bhat, (2005) tried to examine the prevalence of suicidal ideation among terminally ill cancer patients from the palliative

care stage were evaluated on various rating scales for depression, hopelessness and suicidal ideation, and the correlation of suicidal ideation with medical symptoms such as pain, as well as awareness of the diagnosis and understanding of the illness. The study revealed the fact that most patients (79.7%) denied having suicidal thoughts or wishing for an early death; only 9.2% had severe suicidal ideation. Two patients (3.8%) with severe suicidal ideation had a past history of major depression. Factors such as the presence of pain, awareness of the diagnosis and understanding of the illness contributed to depressive mood states. In addition, poor pain control, and awareness of the diagnosis may also contribute to suicidal ideation.

According to the study of Mohan Indira et. al. (2005), the breast cancer is one of the most common cancers among women. The women undergoing adjuvant treatment suffer from anxiety, depression, adjustment problems, sleep loss, and various cognitive changes like confusion, loss of concentration, social, emotional, and psychological distress as a result of cancer diagnosis and treatment. As survivorship become more prevalent, appropriate consideration of quality of life is increasingly important. In addition it adversely impacts on capacity to cope with disease burden. The financial burden is tremendous for tobacco related cancer patients compounding the whole situation. Psychosocial interventions have proven efficacious for helping patients and families confront the many issues that arise during this difficult time. Evidence is accumulating that psychological therapies improve emotional adjustment and social functioning, and reduce both treatment and disease-related distress in patients with cancer.

In a survey done by WHO in India (2007), included that more than 200000 patients with histopathologically confirmed cancers. It indicates that the age adjusted incidence of gall bladder cancer in women in New Delhi is 10.6 per 100000 of the population, the world's highest rate for women for this cancer; northeast India had the world's highest incidence of cancers associated with tobacco, which is chewed as well as smoked in India. Aizawl district in the northeastern state of Mizoram has the world's highest incidence of cancers in men of the lower pharynx (11.5 per 100000 people) and tongue (7.6 per 100 000 people). The district also has the country's highest rate of stomach cancer among men. The incidence of mouth cancer among men in Pondicherry was 8.9 per 100 000, one of the highest rates in the world for men. Rates of stomach cancer were high among men in Bangalore and Chennai.

In the study of L. Stayanarayan et. al. (2008), it was mentioned that smoking is known to be a major cause of cancer. Cancers caused due to tobacco smoking are lung, urinary bladder, oral cavity (mouth and tongue), Sino-nasal cavity, nasopharynx, oro-pharynx and hypo pharynx, larynx, pancreas, esophagus, stomach, liver, uterine cervix and myeloid leukemia. Use of smokeless tobacco is also known to cause cancers of oral cavity, oro-pharynx, and esophagus.

As per the study made by J. <u>Kishore</u> & I. <u>Ahmad_et.</u> al. (2008), the beliefs influence the health seeking behaviour of patients and may lead to delay in seeking medical care and prevalence of beliefs and myths amongst cancer patients is a reflection of the level of knowledge in the community regarding cancer. The perception regarding causation of cancer among cancer patients varied from curses, evil eye and spirits to past sins. The study also revealed that myths and misconceptions are widely prevalent among cancer patients in India. Only one third of the patients believed that cancer can be detected in its early stages and that it can be cured. The average time taken by patients to report to a doctor after suspecting their disease was 2 years. The majority of patients held fatalistic views about the outcome of cancer. Most (60%) were being discriminated against by their family and society.

According to a report by Ganz (2008), when a woman is diagnosed with cancer, she suffers from anxiety and high level of depression and a woman to understand the difference between what can be managed by coping on her own and what requires professional help.

Alex Broom et. al. (2009) mentioned in his study that a majority of Indian cancer patients are often presented with incurable diseases at the latest phase of disease progression. And in their study they have found that 34.3% of cancer patients had used TCAM. The results also demonstrated a statistically significant relationship between the use of TCAM and reported delay in seeking help from clinical medicine. On the other hand, 35.2% of TCAM users reported seeking help immediately after onset of symptoms, whereas 50% of non-users immediately sought help from conventional medicine. Furthermore, 11.5% of TCAM users reported waiting for six months or more after noticing cancer-related symptoms, while only 2.1% of non-users waited this long.

S. Ahuja et. al. (2010) conveyed that the awareness about breast cancer among women is 95% who claimed that they have heard about the disease; only 12% had received information about breast cancer from health professionals while a 60% stated that, their source of information is family and friends. The breast cancer knowledge was significantly associated with age (younger women are more aware than older), income (women belonging to higher income group found to be more aware than those who were

economically deprived), literacy (graduates and post-graduates are more knowledgeable), occupation (teachers are more aware than farmers).

The study of Vikram and Abraham (2010) explained that alcohol and tobacco use are the most important and risk known factors for cancer of the oral cavity. In India 57% of all men and 11% of women between 15-49 years of age use some form of tobacco. Oral cancer is a heterogeneous group of cancers arising from different parts of the oral cavity, with different predisposing factors, prevalence, and treatment outcomes. It is the sixth most common cancer reported globally with an annual incidence of over 300,000 cases, of which 62% arise in developing countries. But at the same time they also said that oral cancer can be prevented in early detection.

Dr. R. Ali (2011) found in his study that cancer is increasing very rapidly in India. The study brought out significant findings that it is increasing from a low level because of India's size, if it reaches levels seen in the West, many millions of people will be affected. In addition he also said that 'if we can understand the causes of cancer in India better, we can hope to take steps to change some of these factors and prevent an epidemic of cancer.' Cancer incidence in India is expected to increase by more than two thirds over the next two decades to approximately 1.7 million new cases per year. Mortality rates for cancer are much higher in India than in the West because the cost of treatment, social stigmas and lack of awareness of the signs and symptoms of cancer, cancer prevent many people from coming forward for treatment.

The study also investigated that lifestyle, diet, and genetic factors associated with the most common cancers in India like breast, bowel, lymphoma, lung, stomach, gallbladder, and esophageal cervical, and head and neck cancers.

According to the study of Dr. Vishal Rao (2011), it was well acknowledged about fact that tobacco consumption in any form is very harmful. It is estimated that by 2030, it would account for the death of about 10 million people per year; half of them aged 35–69. This is a matter of very serious concern for the developing countries, where more than 82% of the world smokers reside according to a World Bank study conducted in 1999. India, where nearly 17% of the smokers in the world reside, is no exception to this tobacco menace. The tobacco problem is India is more complex because of the diverse patterns of tobacco consumption and a large consequential burden of tobacco related disease and death. The Government of India has enacted various legislations to curb tobacco use in recent times, but despite such measures, the use of tobacco is still widespread in India. P. Yadav, D. P. Jaroli (2011) suggested in their article that support from every angle like physician; family members and society people play a very important role to encourage the patients to fight against this deadly disease. Such kind of awareness is of great significance for decreasing the morbidity rate and better quality of life of patients.

G. S. Mudur (2011) discussed that smoking is very harmful. Smoking may cause genetic damage within minutes of the smoke reaching the lungs, not after months or years of puffing away as some smokers might like to believe. Immediate physiological effects of smoking on the brain are there, respiratory system and cardiovascular system.

Smoking accounts for the vast majority of lung cancer deaths, causing 90 percent of all lung cancer deaths in men and about 80 percent in women. In 2000, a Surgeon General report revealed that tobacco smoke contains more than 4,000 chemical compounds, with 43 being known carcinogens. Some of the 4,000 compounds result from chemicals added in processing to improve taste, increase burning times, and prolong shelf life. According to the U.S. Centers for Disease Control and Prevention, cigarette smoking is the single most preventable cause of premature death in the United States, resulting in more than 400,000 deaths per year or about 1 in 5 U.S. deaths overall. (T. Goldkom, 2008) Dr R. A. Badwe, director of Tata Memorial Centre (2011) mentioned that "Over, 65% of cancer in India is contributed by tobacco related, breast and cervical cancer. 30% of cancers arise in head and neck region is caused due to non-smoking tobacco used in India and this is amenable to prevention as well as early detection."

The comprehensive study over 10 years, by The Asian Age (2012) tabulating 122,429 deaths in 1.1 million homes in 6,671 areas, found nearly six lakhs Indians die of cancer every year, with 70 per cent of these deaths taking place in the 30-69 age group. This study found that India has only 24 cancer registry sites. The findings of this study is also that oral, stomach and lung cancers are important causes of death for Indian men; while cervical, stomach and breast cancers cause most deaths among women. Cancer deaths account for six per cent of deaths across all ages; but in the 30-69 age group it rises to eight per cent.

R. M. Beining, (2012) viewed in his study which is conducted in Tamil Nadu he tried to find out the awareness level of cervical cancer and knowledge at the same time, because improper awareness and knowledge is the major barriers to participation of women in cervical cancer screening, if women are provided with proper information about cervical cancer then there may be change in attitudes of women.

Conclusion

From the above literature reviews, it is clear that after detection of cancer, the life of tobacco related cancer patients becomes very complicated. The patients after diagnosis start facing many complex situations which disturbs his/her whole life. They suffer from physical, mental, financial, and psychological disorders. Financially they get disturbed because this illness is cost much for which their family financial condition gets disturbed and due to this they are also mentally disturbed, physically they become very weak, in regards to female who are suffering from breast cancer sometime they have to undergo operation for which physical changes occurs and it makes them mentally disturbed and psychologically the cancer patients remain disturbed which is very natural because this disease and its treatment is very tough and costly.

Some others literatures also stated that due to smoking or chewing tobacco, lung cancer can occur. But healthy life style may prevent from many diseases which includes proper diet etc. In one of the study it is found that 30 years of age group mostly suffers from tobacco related cancer. The rural children both boys and girls starts taking tobacco by experimental basis which turns to habit. Chewed or snuffed can lead mainly to inflammation of the oral cavity. Cigarette smoking accounts for 65-85% of global tobacco consumption. In China it is seen that there are 350 million smokers.

The cancer patients who are suffering from cervical cancer need to include education of their husbands. Breast cancer is very common among females, and women face many barriers to participate in cancer screening.

It is found that due to lack of awareness and social stigma of the signs and symptoms of cancer, which prevents many patients to come forward for treatment. The incidence of stomach cancer is lower than that of any other countries around the world, but, in Mizoram, one of the North Eastern states of India where the incidence of stomach cancer is higher. The most common sites where cancer can cause due to tobacco smoking in lung urinary bladder, oral cavity, esophagus, nasopharynx, liver, stomach, pharynx, larynx. The health care system needs the support of the community to ensure that health services are utilized.

Now-a-days, there is development in cancer treatments for which more and more patients are surviving with this disease.

Relevance of the study:

Keeping in consideration the importance of tobacco related cancer in Cachar Districts, it is seen that developing countries like India are in the urgent need of assessing the treatment of cancer, while the literature shows that in such countries a very huge number of surveys and studies have been made in this regard. The similar situation is being observed in India as well as in Cachar District also. But, in this study, the poor socio-economic condition of the cancer patients of the district along with the problems in accessing treatment should be observed properly.