Psychosocial Aspects of Tobacco Use among Mizo Women

By

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Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Social work,

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Declaration

I, H.Elizabeth, Ph.D scholar, Department of Social work, Mizoram University, do hereby solemnly declare that the thesis titled **'Psychosocial Aspects of Tobacco use among Mizo Women'** is done under the supervision of Prof. J. Visuvathas Jeyasingh, Department of Social Work, Mizoram University. The thesis is submitted to Mizoram University for award of the degree of Doctor of Philosophy in Social Work and I do declare that it has not been submitted to any other University, Institutes or used the same work for any other purposes elsewhere.

Dated: 15th May, 2014

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Certificate

This is to certify that the thesis entitled *"Psychosocial Aspects of Tobacco Use among Mizo Women"* submitted by H.Elizabeth, for the degree of Doctor of Philosophy in Social Work, Mizoram University: Aizawl, India, embodies the record of original investigations carried out by her under my supervision. She has been duly registered and the thesis presented is worthy of being considered for the award of Ph.D. degree. This research work has not been submitted for any degree of any other university.

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Lastly, I would like all the readers of the thesis to imbibe the learning from the thesis and to realize that they need to absorb the important massage.

No to Tobacco & Tobacco Kills.

Dated: 15th May, 2014 **(H. Elizabeth)**

Candidate

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ABBREVIATIONS

CDCP	:	Centers for Disease Control and Prevention
COTPA	:	The Cigarettes and Other Tobacco Products Act
COPD	:	Chronic Obstructive Pulmonary Disease
CRC	:	Convention on the Rights of the Child
CVD	:	Cardiovascular Diseases
EMR	:	Eastern Mediterranean Region
ETS	:	Environmental Tobacco Smoke
FCTC	:	Framework Convention on Tobacco Control
FGD	:	Focus Group Discussion
GAD	:	General Anxiety Disorders
GATS	:	Global Adult Tobacco Survey
GoI	:	Government of India
GSS	:	General Social Survey
GSPS	:	Global School Personnel Survey
HIV	:	Human Immuno Virus
ICD	:	International Classification of Diseases
IEC	:	Information Education and Communication
ISTH		Indian Society for Tobacco and Health
KII	:	Key Informant Interview
LBW	:	Low Birth Weight
LMIC	:	Low and Middle Income Countries
MHIP	:	Mizo Hmeichhe Insuihkhawm Pawl
MKHC	:	Mizoram Kohhran Hruaitu Committee
MS	:	Mainstream Smoke
MSTC	:	Mizoram Society for Tobacco Control
MUP	:	Mizoram Upa Pawl
NCHR	:	National Commission for Human Right
NCT	:	National Capital Territory
NFHS	:	National Family Health Survey
NSS	:	National Social Survey
NYP	:	National Youth Policy

PSTD	:	Post-traumatic Stress Disorder
SC	:	Scheduled Caste
SF	:	Smoked Form
SHS	:	Secondhand Smoke
SIDS	:	Sudden Infant Death Syndrome
SLF	:	Smokeless Tobacco
SLT	:	Social Learning Theory
SNA	:	Social Network Analysis
SRD	:	Substance-related Disorders
SS	:	Side Streams Smoke’
ST	:	Scheduled Tribe
TCC	:	Tobacco Cessation Clinic
TD	:	Tobacco Dependence
TRC	:	Tobacco Related Cancer
USDHHS	:	U.S. Department of Health and Human Services
WHO	:	World Health Organization
YMA	:	Young Mizo Association

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CHAPTER – I

INRODUCTION

1.1. Introduction

Population health is increasingly perceived as the integrated outcome of its ecological, social-cultural, economic and institutional determinants. Therefore, it can be seen as an important high-level integrating index that reflects the state-and, in the long term, the sustainability-of our natural and socio-economic environments. However, the identification of all possible health effects of the globalization process goes far beyond the current capacity of our mental ability to capture the dynamics of our global system; due to our ignorance and inter-determinacy of the global system that may be out of reach forever.

The use of tobacco by the general population is widely prevalent all over the world and even in India. Like some other parts of the country, it is highly responsible for many of the diseases and mortality of the north eastern states of India. The north east region is populous by the tribal communities and tobacco is heavily use in smoke form and smokeless form by men and women of Mizoram, Manipur, Sikkim and Meghalaya. Among them, the rate of smoking and chewing tobacco is highest by the women of Mizoram and it is 76.2% and 87.2% respectively (GSPS, 2001). Therefore, the present study attempts to explore the psychosocial aspects related to tobacco use by women and focuses particularly on Mizo women.

According to the World Health Organization, *tobacco is the leading cause of preventable death and disease in the world, causing more than 4.2 million premature deaths* worldwide every year. It is projected that by 2030, 8 million people will prematurely die annually from tobacco use with 80% of these deaths expected to occur in low- and middle-income countries. Systems of social stratification such as gender, age, race, ethnicity, socioeconomic status, geography and caste have been

shown to be important determinants of tobacco - related inequalities. The tobacco - related inequalities, which may also be referred to as tobacco - related health disparities, can be conceptualized as the differences in the patterns and treatment of tobacco use; the risk, incidence, morbidity, and mortality of tobacco - related illness; and the related differences in community capacity and infrastructure, access to resources and secondhand smoke exposure that exist among specific population groups.. Tobacco use inequalities occur along the entire tobacco use continuum including initiation, current use, consumption, cessation, relapse, level of dependence, and psychosocial and societal resources.

Public health has become a major concern worldwide towards promotion of well being of an individual. It also navigates life expectancy, quality of living; prevalence of health related diseases and infections both pandemic and epidemic and else reflected the extensiveness of health education, dissemination of IEC materials on health, accessibility of health care facilities and others. The various determinants of health of a mass outline by Martens.H and Hilderink, 2000 are:

a. Institutional determinants (governance) health policy and health programmes and schemes, health care services.

b. Economic determinants (economic infrastructure) - socio economic development inclusive of trade on health (appliances, instruments, technologies).

c. Socio-cultural determinants – culture, population, social infrastructure, knowledge, social interaction, social environment and lifestyles.

d. Environmental determinants (ecological settings) - ecosystem goods and services, physical environment food and water.

The central mechanism that links personal affiliations to health is 'social support,' the transfer from one person to another of instrumental, emotional and informational assistance. Social networks and social integration are closely related to social support and, as a result, globalization- induced changes in social cohesion, integration and interaction can influence the degree of social support in a population (Instant, Reeves, discussed that social interactions through the Internet influenced the coping ability of HIV-positive individuals through promoting empowerment, augmenting social support and facilitating helping others. Alternatively, social exclusion is negatively associated with social support).

Due to the widespread flow of people, information and ideas, lifestyles also spread throughout the world. It is already widely acknowledged and demonstrated that several modern behavioral factors such as an unhealthy diet, physical inactivity, smoking, alcohol misuse and the use of illicit drugs are having a profound impact on human health. Individuals respond to the range of healthy as well as unhealthy lifestyle options and choices available in a community.

Like other forms of drug abuse, the patterns of cigarette use (which is containing nicotine) have varied significantly. Men began smoking intensively during World War I and women during World War II. Men's cancer death rates began to rise in the 1930s and women's in the 1960s. In 1985, for the first time, lung cancer surpassed breast cancer as the leading cause of cancer deaths among women. Smoking also poses a special risk of coronary heart disease for women. In the past 10 years, its incidence has nearly tripled among young women and more than doubled among older women.

In the year I998 an approximate of 1.25 billion people smoked worldwide and, it is projected that the number will increase to 1.7 billion by 2020. This smoking epidemic currently results in an estimated 4 million deaths annually, projected to rise to 10 million by 2030 and seventy percent of those deaths will occur in developing countries. The smoking epidemic has spread from its initial focus, men in high-income countries, to women in high-income countries, and more recently to men in low-income countries. It is now recognized that it has also threatens women in the developing world.

Tobacco has been the leading preventable cause of death and disease in India and is one of the major causes of health damage worldwide. According to the report of the World Health Organization (WHO) tobacco is the second major cause of death in the world. It is currently responsible for the death of one in ten adults' worldwide (about 5 million deaths each year) and if current smoking patterns continue, it will cause some 10 million deaths each year by 2020. Thus, tobacco is the fourth most common risk factor for disease worldwide and it is deadly in any form or disguise (GoI, 2004).

Tobacco in itself and in any form has contained a large variety of chemicals. Nearly 3000 chemicals constituents have been identified in 'smokeless' and 4000 are said to be present in 'smoke tobacco'. These include nicotine, nornicotine, cotinine, anatabin, etc. besides wide range of toxic metals including mercury, lead, cadmium, chromium and other trace elements have been found in Indian tobacco.

The most recent statistics on worldwide prevalence of tobacco use has been shown by the Global Adult Tobacco Survey (GATS) India , 2009-2010 report, indicating that more than one-third (35%) or 274.9 million of the adults in India use

tobacco in some form or the other and among them one fourth of the adults (21% - 163.7 million) use only smokeless tobacco, 9 percent (68.9 million) only smoke and another 5 percents (42.3million) are dual forms of users that they smoke as well as use smokeless tobacco. The prevalence of overall tobacco use among males constituted nearly half (48%) and that among females is 20 percent. Nearly two in five (38%) adults in rural areas and one in four (25%) adults in urban areas use tobacco in one or the other forms. The prevalence of smoking among males is 24 percent whereas the prevalence among females is 3 percent. The extent of use of smokeless tobacco products among males (33%) is higher than among females (18%). Inspite of the fact that the following states of India Pondicherry, Tamil Nadu, Meghalaya, Tripura and Mizoram shows a higher smokeless tobacco use among females than males.

More than 75 percent of tobacco users are both smokers as well as users of smokeless tobacco, called the dual users of tobacco. In India, *khaini* or tobacco-lime mixture is the most commonly used smokeless tobacco product and used by 12 % , followed by *gutkha,* a mixture of tobacco, lime and areca nut mixture (8%), using of betel quid with tobacco (6%) and applying tobacco as dentifrice constituted another 5%. The prevalence of each of the smokeless tobacco products, except dentifrice, is higher among males than females. While, in smoking tobacco products, *bidi* (9%) is the most commonly smoked forms of tobacco use followed by the cigarette (6%) and *the hookah* (1%).

The urban - rural variations on tobacco use in India shows that smoking cigarette is higher in urban areas but the prevalence of all other smoking products is higher in rural areas for both males and females. On the other hand, the prevalence of

each of the smokeless tobacco product is higher in rural areas than urban areas; and only *gutkha* product is almost equally prevalent in both urban and rural areas.

The Medical Anthropology Quarterly has demonstrated that tobacco use is one of the most significant health-compromising behaviors practiced by adolescents. It is estimated that every day in the United States over 6,000 teenagers try their first cigarette and that over 3,000 adolescents become new regular smokers (National Cancer Institute 2000; USDHHS 2001). Nationwide, 34.5 percent of high school students use some form of tobacco (USDHHS 2001). It is also noticed that many of these adolescent smokers likely to join the ranks of those adult smokers, currently estimated to be around 90 percent, who began smoking in their youth (USDHHS 1994:5). The magnitude of tobacco use clearly indicated that an existing burden of mortality and morbidity will likely to increase numerous health complications which are clearly linked to smoking, including various cancers, heart disease, stroke, and emphysema. In fact, it is estimated that 50 percent of all smokers will die of causes directly linked to smoking (USDHHS 1996:971-974).

The functional values of smoking, the social rationales underlying tobacco use, are widely recognized as key to explaining and understanding tobacco use among adolescents. The Functional values are seen as one of several "personal factors" influencing smoking that also include "cognitive processes, values, personality constructs, and psychological well-being". Therefore, the Report of the Surgeon General summarized, "Since knowledge of the harmful consequences of cigarettes does not appear to deter onset, researchers are examining the social reasons and purposes of smoking" (USDHHS 1994:136). In addition, a key ingredient of tobacco, nicotine, is widely accepted as an addictive substance. As a result, teen tobacco use is

often associated with the behavioral and psychological markers of addiction, including dependence, withdrawal, the maintenance of tobacco use, and difficulty in quitting (Colby et al. 2000). Also several studies has illustrated that tobacco use is functionally perceived by many adolescents as a means by which to "act mature, be accepted by a peer group, have fun, cope with personal problems and boredom, or be rebellious" and youth tobacco use is seen as "a coping behavior for adolescents who are dealing with disruptive and stressful family events" (USDHHS 1994:136).

Tobacco use causes a wide range of major diseases which has an impact on almost all the organs of the body. These include cancers, heart disease, lung diseases and others. It plays a pivotal role in perpetuating health inequalities among different socioeconomic groups and genders. Women tobacco users do not share the same health risks as do men. However, the health consequences that are unique to women are connected to pregnancy and cancers. The World Health Organization, 2005 reported that the health consequences due to tobacco exposures include cataracts, acute myeloid leukemia, abdominal aortic, aneurysm, stomach cancer, cervical cancer, kidney cancer, periodontitis and other diseases. These diseases join the familiar list of tobacco related diseases which are mentioned earlier. In addition to this, the Tobacco Cessation Clinic, Bhagwan Mahaveer Cancer Hospital & Research center has reported that 40% of cancers diagnosed in India are caused by tobacco consumption, and, every year in India, 1.6 lakh people suffer from mouth cancer, 45 lakh from heart disease and 39 lakh from breathing problem (GoI, 2004).

Therefore, due to the various consequences, tobacco use is banned since from the past and seen in many of the literatures. In the early 1600s, the Russian Orthodox Church stated that tobacco was "an abomination to God," and in 1642, Pope Urban

VIII banned its use in churches. In 1650, Pope Innocent X ordered priests to stop using snuff during the mass. Throughout history, tobacco use has been banned by such religious groups as Methodists, Mormons, Seventh-Day Adventists, and various other sects throughout the world (Christen, Swanson, Glover, & Henderson, 1982). Tobacco chewers and smokers were said to be practicing against the laws of God.

Christen et al. (1982) listed the legal ramifications of tobacco use throughout history. The first edict against tobacco was proclaimed in Japan in 1590. If caught, users were punished by having their property confiscated and by being jailed. In 1633, Turkish smokers were punished by "hanging, beheading, quartering between four strong horses or being incarcerated in a public cage without food or water until they died". In 1634, the Russian czar punished smokers by "cutting off their noses, castration, beating the soles of their bare feet bloody, or simply flogging them with a weighted knot. The Chinese, in 1638, decapitated anyone dealing in tobacco products. Such drastic legal measures did not seem to deter the use of tobacco through the centuries, and even today the law continues to attempt to regulate tobacco by controlling advertising and by prohibiting the sale of tobacco to minors.

In the 19th century, tobacco, especially smokeless tobacco, gained in popular use. However, the popularity of smokeless tobacco declined toward the end of the 1800s for two major reasons. First, the germ theory took hold, and it was discovered that the bacillus tuberculosis organism was spread by the unsanitary behavior of spitting into cuspidors, on floors, and into streets. Laws and public displeasure soon put a halt to such practices, and the chewing of tobacco fell into disfavor. The second reason for the decline of smokeless tobacco use was the increase in the use of smoking tobacco. However, in the 1880s, the cigarette-making machine was invented,

and the cost of cigarettes was reduced and no longer did people have to roll their own. One billion cigarettes were produced in 1885 as a result of this new machine (more than this amount is now smoked daily). Modern machines can produce a full pack in 1 second or more than 170 million cigarettes a day. By 1921, cigarettes surpassed all other forms of tobacco usage (Campbell, 1964).

The 1970s brought about an increase in leisure time and an upsurge of outdoor activities which also put a squelch on smoking. According to some authors, fashion encouraged a more relaxed mode of dress so that jeans, T-shirts, and cowboy boots promoted a "natural, manly and down-to-earth" image that could also include smokeless tobacco. Moreover, advances in packaging increased the shelf life and helped to lower the price of this already economical form of tobacco (Gilmartin, 1980), and cigarette smokers found these lower prices most appealing.

On the other hand, it is reported that tobacco production, manufacturing, selling, and others have increased the revenue, providing job opportunities and are also income generation for many people. However, in spite of this, tobacco use and addiction cause unnecessary wastage of money for buying tobacco. The spending of available money on tobacco instead of buying healthy food increase the cost of health maintenance which contributes to poverty and harm the economic productivity and sustainable development.

Tobacco use causes a wide range of major diseases which has an impact on almost all the organs of the body. These include cancers, heart disease, lung diseases and others. It plays a pivotal role in perpetuating health inequalities among different socioeconomic groups and genders. Women tobacco users do not share the same

health risks as do men. However they face health consequences that are unique to women, including those connected to pregnancy and cancers.

1.2 Rationale of the Study

Tobacco consumption by women has been extremely increased all over the world in spite of being harmful and known to be a silent killer. According to the Global Youth Tobacco Survey, India 2000 – 2004, tobacco consumption among girls is increasing drastically around the globe, and the prevalence is, in many cases, comparable to or even greater among than boys. It is a known fact that tobacco use plays a vital role in perpetuating health inequalities among different socio economic groups and between genders. Women tobacco users not only share the same health risk as men, but are also faced with health consequences that are unique to women.

In India, the use of tobacco by women is considered, by different sections of society, in different ways than men. In the traditional household, tobacco use by women is rare, and is not even socially sanctioned in some parts of India. However, the use of tobacco among women is prevalent in all regions of India and among all sections of society. Overall, 2.4% of women smoke and 12% chew tobacco (GoI, 2004).

In a study it has been noted that out of 493 medical schools that responded, representing 64% of countries and 36% of schools, only 12% of medical schools did not cover the topic of tobacco in the medical curriculum and 58% of medical schools taught about tobacco during the teaching of other subjects while, 40% taught tobacco

by systematically integrating teaching with other modules and another 11% had a specific module on tobacco (Richmond, Debono, Larcos, and Kehoe 1998:247-252)

The effect of tobacco use on women's health is not less harmful to that on man. Cervical cancer, breast cancer, heart disease, damage of the reproductive system like infertility, early menopause, low birth weight babies, reduction of breast milk production, still birth, infant death and risk of stroke are some complications. Based on the report from a large teaching maternity hospital in Mumbai, 33.4% of women in reproductive age group reported as smokeless tobacco users. At the same time, women in many rural areas believed that tobacco has many magical and medicinal properties like keeping the mouth clean, getting rid of a foul smell, curing toothache, controlling morning sickness, and or reduced labor pains.

Surprisingly, the use of tobacco has no distinction on educational standards and many educated young women perceive smoking as a symbol of liberation and freedom from traditional gender roles, peer and advertising pressure encourages even educated women to smoke. *The National Family Health Survey, 1998-1999 data has revealed the prevalence of chewing in various states during 1998-1999 among women as up to 61% in Mizoram, between* 30% and 40% in Orissa and Arunachal Pradesh, between 15% and 20% in Manipur, Nagaland, Madhya Pradesh, Uttar Pradesh, West Bengal and Maharashtra and also between 10% and 15% in Karnataka, Kerala and Tamil Nadu. Similarly, studies have reflected that smokeless tobacco was more common among the women. The prevalence of chewing tobacco, especially *paan* with tobacco was as high as 27% in Goa and 35% in Kerala. In Maharashtra, (Pune district) almost no women smoked however, 49% of women reported smokeless tobacco use. *Hence, smoking in various states among women in 1998 -1999 was*

between 10 % and 25% in Mizoram and Manipur, followed by 5% to 10% women from Jammu & Kashmir, Bihar, Tripura, Sikkim, Meghalaya, and Arunachal Pradesh. Therefore, as revealed by the statistics above, it is imperative to study tobacco use among Mizos, particularly women.

1.3 Scope of the study

The scope of the study lies in the fact that tobacco use is very rampant among Mizos and that health problems are immensely related to tobacco use. Further, the scope also lies in the fact that there is high morbidity and mortality related to Tobacco use.

1.4 Statement of the Problem

The National Family Health Survey- II (G.O.I, 2004) has indicated that in spite of being a less populated and the smallest state, *Mizoram has recorded the highest percentage of tobacco consumption with 59.4% male and 22% female using 'smoke form' and 60.2% and 60.7% in 'smokeless form' respectively*. Smoking of tobacco as factory-made cigarettes, cigars and cheroots, and loose tobacco in pipes or hand-made cigarettes are all common in Mizoram. Tar, nicotine, and nitrosamine content vary greatly, depending on species, curing additives, and method of combustion. Such smoking habits are the predominant form of tobacco use in Western countries and among increasing millions in developing countries as well. Meanwhile, the Tobacco cessation clinic, civil hospital, Aizawl, Mizoram has presented a report of total cases of 1997 during June, 2005 to October, 2007 including males and

females above the age of 10 years, of which 56.18% belong in the age group of 21 years to 40 years followed by 30.74% in the age range of 41-60 years. Hence, it is one of the serious social problem as well as challenges of the tribal Mizo women that cause a major health concern.

In the light of the above, it is evident that tobacco use is very high. We however have little data on psychosocial aspects of tobacco related consumption. It is therefore the objective of this study to understand why people use tobacco, what their background factors are, psychological factors including coping and social factors including availability, access, network, socialization patterns, media influences etc.

1.5 Significance of the study

Tobacco use in any form and of any type is traditionally rooted in the Indian culture and the general consequences, problem, effects and impact mentioned by various studies are of great magnitude. Amongst the many studies, the available statistics has shown that Mizoram has the highest percentage of tobacco use by males and females both in '*smoke'* and *'smokeless form'*. The state variation on tobacco use ranges from 73 % among the males' and 62% among the females of Mizoram which is beyond the national average (GATS India, 2009 - 2010). Therefore, it is important for the Social worker to have an in-depth study on the problem and be able to influence policies and planning related to populations that consume tobacco.

1.6 Importance of the study

The importance of the study on the psychosocial effects of women and tobacco use begins with Bartlett (1958) description of a constellation of values, purpose, sanction, knowledge, and method that makes up social work practice. It is important to distinguish between the values of social work and the values of any particular society. It is certainly true that some social systems are more individualistic, whereas others are more communal, or vice versa. Social work can be approached from an individual level, a societal level, or a balance of the two. However, whether the good of each individual or the good of the majority in a community of individuals is of concern, the underlying unit remains the same. Therefore, whether individualistic or communal, the underlying concern of each system (or each social work approach) is directed toward the individuals in the system. In addition, although the level of interdependence may be debatable in any system or approach, it is recognized that individuals are interdependent (i.e., affected by one another) to some extent.

The social work knowledge is not unique to social work: “Social work, like all other professions, derives knowledge from a variety of sources and in application brings forth further knowledge from its own processes” (Bartlett 1958). The working definition addresses social work knowledge in a broad and generalized way, including issues of human development, communication, community, organizations, group processes and effect, the psychology of giving and taking, effects of societal characteristics, interaction between individuals and groups, and practitioner self-awareness. It addresses the two main streams of social work, including both knowledge about the individual and knowledge about the environment. Social work method “facilitates change: (i) within the individual in relation to his social

environment; (ii) of the social environment in its effect upon the individual; (iii) of both the individual and the social environment in their interaction".

Healy (1995) said that international social work is a 'broad umbrella term referring to any aspect of social work involving two or more nations'. Hokenstad et al.,1992 develop this idea and say that international social work is concerned with 'the profession and practice in different parts of the world . . . the different roles social workers perform, the practice methods they use, the problems they deal with and the challenges they face'.

In medical social work using a medical model framework to treat patients who experience mood disorders, anxiety disorders, psychotic disorders, and chemical dependency, clinical social workers also treat the psychosocial stressors that challenge individuals and families. They use family therapy, couples counseling, case management, and behavioral techniques, along with psychological interventions. All these processes are involved in the impact social workers have professionally (Hepworth, D., Rooney, R.,&Larsen, J.,1997). Further, the clinical social workers are not exempt from helping individuals facing more serious life-threatening difficulties such as suicide, homicide, physical/ sexual abuse, self-mutilation, and severe psychotic disorders. Their work and interventions encompass every area of psychological disorder. Clinical social workers use various instruments, both human and physical, to carry out their work. Social workers have many tools to help the advancement of their science and the interventions. There are structured tests used by social workers to measure depression, anxiety, addiction, and other mental disorders (Volland, P. J., 1996).

1.7 Objectives

The objectives of the study are -

a. To assess the pattern of tobacco use among the Mizo (tribal) women.

b. To study the relationship of psycho-social factors such as- Stress, sadness and rebelliousness; and Social factors such as accessibility of tobacco, value of tobacco use and adolescent autonomy in parent-adolescent relationship with tobacco use.

c. To find out the reasons attributed by women for using tobacco.

d. To probe into the health impact of tobacco use on women.

e. To suggest measures for social work and social policy interventions to deal with the problem of tobacco use.

1.8 Chapter Scheme

The study is broadly divided into 5 chapters as:

Chapter I - Introduction

Chapter II -Review of literature

Chapter III - Methodology

Chapter - IV Results and Discussion

Chapter V - Conclusion and Suggestions.

CHAPTER – II

REVIEW OF LITERATURE

2.1. Definitions Related to Tobacco Use

The World Health Organization (WHO, 2005) reported that tobacco use is responsible for about 5 million deaths per year worldwide. Furthermore, half of the people who smoke today will die prematurely. Smoking is the single most preventable cause of illness and death in our society and is responsible for almost half a million deaths due to cancer, heart disease, stroke, complications of pregnancy, and respiratory illness (Centers for Disease Control and Prevention [CDC], 2002a, 2002b, 2005b; U.S. Department of Health and Human Services [USDHHS], 2004). Because abstaining from smoking is the single most important preventive health behavior African American women can engage in to significantly reduce their chances of morbidity and premature mortality related to these illnesses (USDHHS, 2000).

The word **'tobacco'** itself is a plant which contains many toxins and is harmful to humans. It is manufactured in various forms and it can be taken by anyone. Tobacco once taken usually leads to dependency and addiction due to **the nicotine and other chemicals** present both in the raw and processed tobacco. The use of tobacco is harmful because it contains toxins which have affected the health of the body. According to the World Health Organization, **'health'** means well-being, sound body and sound mind, not the mere absence of disease or infirmity.**' Positive health'** includes all the physical, psychological, cultural, social, environment and political conditions.

Nicotine is the ingredient in tobacco that cause changes to the brain and behavior. Tobacco, a broad leafed plant that originated in the Americas is one of the most widely abuse psychoactive or mind altering substance. When it enters the blood stream, either through the lungs, the skin inside the mouth, or the nasal passages, it

moves to the brain. Nicotine causes two sensations: stimulation in the thought process, and general relaxation in the users. It also enhances memory and promotes a feeling of well being. In other words, it stimulates the brain's reward system and making the users feel good.

'Dependency' refers to a condition in which the body requires it or is dependant at certain level for the functioning of the system. **Nicotine dependency /Nicotine exposure** is similar in smokeless tobacco users and smokers, often leading to strong physical dependence. As a rule, smokeless tobacco products contain high levels of nitrosamines with carcinogenic potency in experimental animals. Therefore, t**obacco dependence (TD)** is a complex disorder resulting from the interplay of multiple factors beyond cigarette consumption. According to the nicotine sensitivity model, TD is strongly related to individual sensitivity to nicotine. However, current knowledge of risk factors for the onset and maintenance of TD as well as of indicators of increased susceptibility to the effects of tobacco and, in particular, nicotine is lacking, and the etiologic contribution of possible risk factors has not been accurately quantified.

'Addiction' is deeper than dependency. In addition, the person and cannot live or stay without it and also the body is ruined by it. In addition, it is like a disease which often may appear after many years of abstinence.

The word **'addiction'** has been used to describe two very different phenomena, with very different clinical significance and applicability. However, the extent of this dichotomy between psychological and neurobiological views has received scant attention. Partly this is because for some there is no dichotomy – the

mind is seen as simply the result of functions of the rain, as expressed in the maxim: 'the mind is what the brain does' (Waldrop, 1992).

The **assessment for tobacco dependence** is based on the six criteria given in the International Classification of Diseases, 10th revision known as ICD 10 which includes a strong desire or sense of compulsion to take tobacco, difficulties in controlling tobacco taking behavior in terms of its onset, termination, or levels of use, a physiological withdrawal state when tobacco use has ceased or been reduced, the characteristic withdrawal syndrome for tobacco, or use of the same (or a closely related) substance with the intention of relieving or avoiding withdrawal symptoms, evidence of tolerance, such that increased doses of tobacco are required in order to achieve effects originally produced by lower doses; progressive neglect of alternative pleasure or interests because of tobacco use, increased amount of time necessary to obtain or take the substance or to recover from its effects, progressive neglect of alternative pleasure or interests because of tobacco use, increased amount of time necessary to obtain or take the substance or to recover from its effects and persisting with tobacco use despite clear evidence of overtly harmful consequences, such as depressive mood states consequent to periods of heavy substance use, or drug related impairment of cognitive functioning.

The DSM-IV section on 'Substance-related Disorders' explains addiction in terms of the presence or absence of physical dependency, of common clinical signs such as unsuccessfully attempting to decrease use, and of effects (not causes) of addiction such as loss of usual social functioning. Neither psychological nor current neurological views factoring in the *aetiology* of addiction are considered. The significance of physical dependency as a measure of severity which is a major

difference between ‘Dependence’ and ‘Abuse’ is also unwarranted, since physical dependency can be present only with certain drugs whose use, or not, does not bear on the diagnosis or the severity of addiction. It is possible to destroy one’s life by use of hallucinogens that cannot produce physical dependency and to function quite well with regular use of a benzodiazepine that rapidly induces physical dependence.

Therefore, addiction has been used to describe very different phenomena, resulting in views of its cause and nature that are also very different. Nearly all instances of addiction can be shown to be a psychologically based compulsion in the same group with other psychological compulsions. The unity of these behaviors is indicated by the fact that they can substitute for each other, and may even be replaced by other kinds of purely psychological symptomatology such as psychologically-induced forgetting. Hence, psychological findings, explain addictive activity that is planned, anticipated, delayed, and intended (not impulsive) although not necessarily wanted. And such psychologically-based compulsive behaviors are the result of higher functions of the mind such as emotional defenses, including the ability to displace actions to substitute activities (which are then called addictions or compulsions), and the presence of a conscience and the capacity for internal conflict which leads to inhibition of direct action, thereby requiring a displacement. Finally, tobacco use or consumption is a nicotine addiction and understanding of tobacco use as an addiction is based on the psychological compulsive behavior involving recognition of the pattern, understanding the forms of helplessness , and undoing the displacement to take actions that are a more direct (and appropriate) expression of the need to reassert power.

'Tobacco use' or 'tobacco consumption' means taking of tobacco in any form such as smoking, chewing, and pasting etc. of any types and any kind whether it is local, indigenous or manufactured. The frequency of tobacco use may be varied.

Nicotine is a psychoactive drug that triggers the brain and throughout the body that can, in turn, act in concert to reinforce tobacco use (Markou and Henningfield 2003). While, only a short-term exposure to nicotine has been shown to induce long-lasting changes of the excitatory input into the brain's reward system, which may be an important early step in the path to addiction (Lavallette and van der Kooy 2004). An individual differs greatly in his or her sensitivity to nicotine dependence; evidence suggests that most adults are susceptible to the biological effects of nicotine and tobacco (Picciotto 2003).

Nicotine dependence has been established as the primary factor responsible for the maintenance of smoking, and dependence severity strongly predicts withdrawal severity and relapse. The recent conceptualizations have emphasized the multidimensional nature of dependence, which encompasses factors such as negative (e.g., smoking to alleviate negative affect) and positive (e.g., smoking to enhance mood) reinforcement, and automaticity (e.g., automatically reaching for a cigarette after quitting and disposing of cigarettes). Degree of mindfulness and level of nicotine dependence are hypothesized to be related because mindfulness reduces both self-report and objective indices of negative affect and stress, and is associated with enhanced positive affect.

Nicotine is taken in several ways. The most common and quick acting manner is smoking. The use of tobacco may be broadly classified into two forms such as 'smoke' and 'smokeless forms'. The term 'smoked tobacco' **(ST)** means tobacco

which is ingested by smoking like *cigarette, beedi, Cheroots* and others. In addition, the risks of tobacco use include the risks to others known as passive smoking or secondhand smoke**.**

The term '**smokeless tobacco' (SLT)** is used to describe the tobacco that is consumed without heating or burning at the time of use. The oral use of smokeless tobacco is widely prevalent in India with different methods of consumption like chewing, sucking and applying tobacco preparation to the teeth and gums.

One of the relevant aspects of tobacco use in the universe is *secondhand smoke.* The common feature is that they are not burned by consumers at the time of use. The term **'secondhand smoke'** refers to the smoke inhaled by persons who are not smokers themselves. Second-hand tobacco smoke is the smoke emitted from the burning end of a cigarette (side-stream smoke) or from other tobacco products, usually in combination with the mainstream smoke exhaled by the smoker, and has similar components to inhaled or mainstream smoke. However, it is three to four times more toxic per gram of particulate matter than mainstream tobacco smoke, and the toxicity of side stream smoke is higher than the sum of the toxicities of its constituents. This exposure to smoke is thus indirect and a passive form of inhalation. People in places that allow smoking can be subject to significant levels of toxins, as pollution from tobacco smoke can reach levels that are much higher than levels of other environmental toxins, such as particles found in automobile exhaust.

The other method of tobacco use which is very much popular in the middle east is called **'Water pipe'** and was apparent during the recent 12th World Conference on Tobacco or Health (Helsinki, February 2003), despite the fact that as many as 100 million people use water pipes daily (Wolfram RM, Chehne F, Oguogho

A, et al. Narghile (water pipe) smoking influences platelet function and (iso-) eicosanoids, Life). The terminology ‘Water pipe’ can depend upon region, and includes names such as "shisha", "boory", or "goza" (Egypt, Saudi Arabia;), "narghile", "nargile", or "arghile" (Israel, Jordan, Lebanon, Syria, "hookah" (Africa and Indian subconti nent;), and "nubble bubble" (many regions). Besides terminology, there is also regional variation in shape, size, appearance, and tobacco smoked (Radwan GN, Mohamed MK, El-Setouhy M, et al.2013) Review on water pipe smoking. J Egypt Soc Parasitol 2003). The term "water pipe" in reference to the study is used to refer to tobacco use methods in which smoke passes through water. It consists of head, body, water bowl, and hose. The most common type of tobacco used in the *water pipe* is called Maassei, which is sweetened and flavoured (for example, apple, mint, and cappuccino). It is used to smoke tobacco in regions of China, India, and Pakistan, and is often associated with the Eastern Mediterranean Region (EMR)**.** However, as recently as 1980, its popularity had been declining despite the fact that today boys and girls of EMR are using *water pipes*, due to which they view as fashionable. While, in some societies, gender may play an important role in maintaining low rates of women's cigarette smoking, but may not have the same magnitude of effect on *water pipe* use. The recent study in Syria examined perceptions for *water pipe* use and cigarette smoking by sex of the respondent and sex of the user/smoker. *Water pipe* use was generally more positively perceived than cigarette smoking, especially for women. Water pipe users, especially women, were particular about water pipe's positive aspects, including that it looks traditional, familiar, social, and attractive. The main attitudes and beliefs among water pipe users were that they perceived to be less harmful and have less health risks over cigarette smoking. So, it may be becoming a behavioural norm in the EMR, especially for

women and girls (Israel E, El-Setouhy M, Gadalla S, ef al. Water pipe (Sisha [sic]) smoking in cafes).

The other common practice among the Mizo is the consumption of **tobacco instilled water which is tobacco water and is called *tuibur*. The method of preparation and the practice is culturally imbedded.** The Mizo literature has reflected that the practice was started as a continuation after the stopped of practice in smoking of water pipe tobacco generally by both men and women. The tobacco instilled water is prepared through indigenous system of preparation by soaking the tobacco leaves in water and later consuming the instilled water alone. Historically, the smoking of water pipe tobacco was observed across gender. Infact, this indigenous system of preparation has been modified and innovated and gradually converted into mechanical system with the advancement of technology. The process of preparation requires three big containers which are connected to one another. The first tumbler is connected with water from the nearby stream. This is meant for storage of water that has been taken from the stream. However, the first tumbler, the second tumbler and finally the third tumbler are connected to each other by water pipes with electrical system. The second tumbler contained the tobacco leaves alone. The third tumbler is meant for storage of filtered tobacco water which is ready to be consumed after getting cool. After having required enough water stored in tumbler and first the water is boiled. Then, the boiled water is passed on to the second tumbler mixing with the tobacco leaves. After cooking for 2 hours, then the tobacco water alone travel down to the third tumbler. Finally the quantity of water is decreased and becoming only to one third of water before the preparation. It is found to be too thick and produced little

money for selling. Therefore, additional boiled water is added based on quality preference of the maker (Andrew LR.,Khiangte, 2010).

The gentle difference which is observed in the use of tobacco instilled water between the past and the current generation is that it is mostly consumed by the middle aged Mizo women. It is also important to note that beliefs such as mouth refreshment in early morning before brushing teeth, taking tobacco instilled water soon after meal to take away the meat fatty smell or highly flavour smell remaining in the mouth, relieve toothache, regulate bowel movement while having constipation, reducing labour pain while delivery of child and application of tobacco instilled water on a skin where there are rashes are some reasons why it is consumed. This assumption is that entering of the tobacco instilled water inside the pores will kill the germs of the bites and could be disinfectant.

Environmental Tobacco Smoke (EST): Globally, we aware and talk about the incidence and consequences of Environmental tobacco smoke (ETS). The EST refers to exposure to tobacco smoke. It has occurred not in the form of smoking, but indirectly from being exposed to someone else's cigarette, cigar, or pipe smoke. The breathing exposure to ETS is also known as passive smoking, second-hand smoke, or involuntary smoking. The important concepts in environmental smoking are the so called ‘mainstream smoke’ (MS) and the ‘Side streams smoke’ (SS).The **mainstream smoke** means the smoke that is inhaled and then exhaled from the smoker's lungs including passing around the smoke to people surrounding. Whereas, the smoke that enters the air directly from the burning ends of a cigarette, cigar, or pipe before inhalation by the smoker is known as the **side streams smoke**. In side streams smoke, the burning end of a cigarette is not usually hot enough for complete combustion of

the tobacco to occur and some chemicals are favoured by this incomplete burning, undiluted side streams smoke which is containing higher concentrations of several chemicals than the mainstream smoke inhaled by the smoker. The smoker is also exposed to mainstream Therefore, ETS is harmful for everyone including both the smokers and the non-smokers i.e passive smoker because they have similar exposure inside a room inspite of majority of ETS in a room comes from side stream smoke. But this exposure is limited to the time it takes to smoke a cigarette. However, exposure to ETS remains constant for the entire time spent in that room.

However, it is difficult to measure the exposure of a passive smoker to environmental tobacco smoke (EST). The exposure varies according to the type of smoke and the number of cigarettes or other tobacco products burned, the number of smokers present at the time of smoke, the rate and manner of smoking, the room volume, the room ventilation rate, and the percentage of fresh air supplied.

In connection to the above, the exposure to ETS has been estimated in terms of "cigarette equivalents". Cigarette equivalents can be measured by determining carboxyhemoglobin levels in blood. Carboxyhemoglobin is formed in the blood when someone inhales carbon monoxide. The hemoglobin in the blood that has oxygen bound to it is called oxyhemoglobin. It is the oxyhemoglobin that carries oxygen to the tissues. However, carbon monoxide has a much stronger attraction to hemoglobin than oxygen. Thus, inhaled carbon monoxide quickly replaces the oxygen in the oxyhemoglobin and binds to the hemoglobin to form carboxyhemoglobin which can be finally measured.

The term **'psychosocial'** implies a very close relationship between psychological and social factors. *Psychological factors include emotion and cognitive development- the capacity to learn, perceive and remember. Social factors are concerned with the capacity to form relationships with other people and to learn and follow culturally appropriate social codes.* According to the English Oxford Dictionary the term psychosocial pertains to "the influence of social factors on an individual mind or behavior, and to the interrelationship of behavioral and social factors. **The psychological factors that are enquired to in the study are stress, sadness and rebelliousness. Whereas, the social factors such as accessibility of tobacco, value of tobacco use and adolescent autonomy in parent-adolescent relationship with tobacco use are also explored.** The study focuses on the psychosocial factors related to tobacco use by Mizo women because it is interesting to explore the area which has not yet been covered and further since it has a bidirectional affected on tobacco users.

The study encounters that the use of tobacco is often as part of coping skills out of stress. Further the use of tobacco also induces stress. Any stress started with **a pressure** which needed a huge psychological energy. Pressure refers to those features of a situation that may be problematic for the individual and that amount to demands for adaptation of some kind. **Stress,** refers to a specific set of biochemical conditions within the body conditions that reflect the body's attempt to make an adjustment. *So, pressure is in the situation and stress is in the person. T*he level and limitation of stress could be reduced and controlled by reacting less intensely in a given situation. Therefore, to reduce the intensity or control the extent of behaviour, a person uses tobacco.

In addition, everyone in all walks of life has experiencing stress with different intensity and to certain extent. The stress can have both negative and positive consequences. In the meantime, it is also greatly depending upon the stressors and the stress management level too**.**

According to Selye, **eustress** is the stress of achievement, triumph, and exhilaration. It is the stress of winning. All of us to some extent, and some of us to a great extent, welcome certain stressful experiences because of the positive feelings obtained from them. The accompanying is a natural part of meeting challenges effectively, such as the challenges in a managerial position or in any other professional job. Conversely, stress becomes **distress** when for any reason that we begin to sense a loss of feeling secure or adequate, helplessness, desperation, and disappointment, which finally turn stress into distress. So, finally a distress is known as stress of losing. The entire continuum of tobacco use by women induces negative consequences that is recognized sooner or later and leads to distress. In connection, stress if not dealt with in a positive way and if it remains unrelieved and unsolved, obviously can affect our bodies to the point that we become more vulnerable to illness. Many of the consequences of chronic stress are manifested in gentle ways, by habits, in transactions with other people, and in general style of coping and marginally deficient in the mental skills. Many people in the United States today seem to suffer from chronic low-grade anxiety about themselves, their lives, and their surroundings. Most seem unaware of their stress because they have had it for so long.

The other determinants of stress is **`burnout'** which describes as `a process that comes about as a consequence of a depletion of energies as well as feelings of being overwhelmed with many issues that may confront an individual'

(Freudenberger,1986). The depletion of energies cause an inability to handle pressure and leading to burnout. According to Cherniss (1980), *burnout refers to `negative changes in work related attitudes and behavior in responses to job stress'*. The symptoms of stress may be associated with impairment of functioning at work, lateness, absenteeism, increased use of sick leave, interpersonal conflict, disengagement from previous levels of responsibility taking and rapid job turnover. There is also an increased risk of addictive behaviors including the misuse of psychoactive substances and gambling.

Lazarus and Folkman (1984) view **stress a**s a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and as endangering wellbeing. The two processes that have been identified as critical mediators are stressful person and his relationships with the environment and its outcome. Also any events, both major and minor, which have initiated the process, are referred to as stressors.

Meanwhile, the cognitive appraisal refers stress as a process of evaluating the significance of a stressor to one's well-being. It is the generalized beliefs about control and situational appraisals of control that have been found to alter the extent to which an encounter is appraised as threatening and/or challenging (Folkman, 1984). Thus, there is a need to evaluate perceived control over stressors as a potentially significant dimension of appraisal in smoking cessation.

The **term `stress' has been applied inconsistently**, as a stimulus, as a response or as the experience of an individual (King et al., 1987), as a result of different theoretical models and perspectives: psychological, psychodynamic, organizational, sociological and transactional. A more widely accepted dentition of

stress is the experience of an individual or someone when they perceive that the demands being placed on them as exceeding their ability to cope and a more widely term for stress when presented in this **way is `distress'**.

While**, anxiety** is another concept related to stress. The feelings of anxiety are interpreted as a signal that the environment is uncertain and uncontrollable and that feelings of sadness are interpreted as a signal that a source of reward (e.g., pleasure, comfort) has been lost. As a result, while anxiety steers preferences toward options that reduce risk and uncertainty, sadness steers preferences toward those that are more rewarding and this even when the decision is unrelated to the source of anxiety or sadness (Raghunathan and Pham, 1999).

There are different forms of an emotion which is more intense, momentary and associated with determined reasons and cognitive contents, such as joy, success, shame, guilt or fear which can arise in a moral situation. Emotions can attributed directly to a situation and affect overtly a person's behavior. On the other hand, a mood state is like a general good or bad feeling that is not related to a moral situation and influences a person's cognitive processes covertly. Since ordinary mood fluctuation is part of our everyday life, an individual could be in a happy or in a sad mood state at the time of facing a moral issue. Mood is defined as a silent, subtle and enduring kind of feeling that has little cognitive content and no obvious reason (Isen, 1984).

The emotions like **anxiety, sadness, and anger** are explored to understand the psychological aspects that are involving in tobacco use by women. They are the ones most frequently involved in social and interpersonal problems (DSM-IV diagnostic system (American Psychiatric Association, 2000). The descriptions of anger as

externalizing and sadness and anxiety and fear as internalizing emotions (Bradley, 2000) furthermore lead to an expectation that change in behaviour will be rated as greater for anger than for anxiety and sadness. Females have been shown as being more confident in their emotional expression and communication (Fischer, 1993; Wood, 1997), suggesting lower emotional anxiety and lower need for control of emotional arousal, and consequently lower control ratings than males. Among the many anxiety disorders like post-traumatic stress disorder (PSTD), social phobia, agoraphobia, panic disorder, and obsessive-compulsive disorder, the generalized anxiety disorder (GAD) is the most common type of anxiety disorder (Stanley and Novy, 2000) .

The classification between major and minor depressive disorder by the American Psychiatric Association (APA), 2000 is that the symptoms of major depressive disorder (MDD) include: depressed mood, loss of interest or pleasure in activities, weight or appetite changes, sleeping disturbances, psychomotor agitation or retardation, low energy level, feelings of worthlessness, difficulty concentrating, and suicidal ideation. Depressed mood and lack of interest are the two core symptoms in late life. *One or both of these symptoms and four or more other symptoms must be present for a minimum period of two weeks to meet the diagnostic criteria for MDD.* According to Blazer (2003), minor depression in older adults has been associated with impairment similar to that of major depression including impaired physical functioning, disability days, poorer self-rated health, use of psychotropic drugs, perceived low social support, female gender, and being unmarried. However, despite its label, minor depression can be serious for older adults and produce negative outcomes for health and well-being.

Depression, anxiety, and low self-esteem are frequently associated with eating and substance use disorders (SUD). It is relevant to understand the relationship between eating disorders (ED) and substance use disorders (SUD) in the context of tobacco use by women. Co-morbidity among eating disorders and substance use disorders is pervasive, as individuals presenting with ED are up to five times more likely to have substance use problems, and those with substance use problems are 11 times more likely to present with an ED (National Center on Addiction and Substance Abuse, 2003).

The emotions of an individual include awareness, acceptance and understanding of one's emotions (emotional regulation), and the capacity to utilize and adapt appropriate emotion regulation strategies depending on the situation (Gratz & Roemer, 2004). The association between emotional regulation and eating (or lack thereof) is clearly established (Geliebter & Aversa, 2003; Masheb & Grilo, 2006; Whiteside et al., 2007). Eating as a means to control affect, otherwise known as emotional eating, is an emotional coping strategy associated with overeating and eating disorder, especially binge eating disorder (BED) (Arnow, Kenardy, & Agras, 1995; Courbasson, Rizea, & Weiskopf, 2008; Pinaquy, Chabrol, Simon, Louvey, & Barbe, 2003). Women with eating disorder namely and bulimia, have a diminished capacity for emotion regulation and often use overeating and binge eating to **distract** themselves or **escape** from **negative or unpleasant emotions** (Whiteside et al., 2007; Wiser & Telch, 1999).

It is assumed that individuals would be more likely to lapse in *rebellious states* than in *conformist states* because they consider *smoking a rebellious activity* consistent with the desire to break rules. Smoking during a cessation attempt

constitutes breaking self-imposed rules and can satisfy a desire to feel rebellious in situations in which breaking rules imposed by others might be too costly. Lapsing during rebellious states also might result from an attempt to manage anger, a frequent concomitant of rebellious states. Finally, being in rebellious states makes invoking coping strategies for resisting the urge to smoke unlikely, because doing so would not allow one to act on rebellious impulses.

Several research studies on the social determinants of tobacco use by the youth include ***parents – adolescent communication*** on tobacco and alcohol consumption, drugs and substance abuse is limited. It is however assume that the parents - child communication is one of the factors related to tobacco use and substance abuse. In deeper sense it is also a reflection of the parenting style started from child rearing stage. The parent - child communications is presumed fundamental to understanding the influence of parents in children's decisions about tobacco and alcohol use. The verbal communication of the parents is a direct expression of their feelings and concerns about substance use and expectations for behaviors. The presumed importance of parent - child communication about substance use is reflected in family-based approaches to substance use prevention, most of which focus on improving family functioning and parenting skills, including communication (A.shery, Robertson, & Kumpfer, 1998; Grover, 1998).

The communication between the parents and their child is depending upon their relationship and there may be variation depending upon the contents and frequency of talks with their children. The discussion could range from generally talking about negative consequences of tobacco and alcohol use, to helping children recognize social or media pressures to use, to working through how to handle

situations w here tobacco and alcohol a represent, to encouraging children not to smoke or drink, to laying down explicit family rules (Catalano & Miller, 1992).

Jackson and Henriksen (1997) found that antismoking socialization that included parent - child communication about smoking reduced the onset rate of smoking among children whose parents smoked. In examining the content of parent-child communication and impact on adolescent substance use, an additional important consideration may be the timing of conversations between parents and children. These conversations could occur before or after initiation of tobacco or alcohol use or not occur at all, with potentially different effects. Andrews and colleagues (1993) reported that adolescents whose parents warned them about harmful consequences of alcohol, tobacco, and marijuana were less likely to initiate use; however, for adolescents who had already initiated use, parental warning predicted continued rather than reduced or discontinued use for some sub-groups of adolescents The parent-adolescent relationship with tobacco use involves the whole process including family environment, social environment, life styles of the family members, parenting styles, orientations on harmful effects of tobacco use. It is also linked to parental supervision of adolescent, role modeling, non- verbal communication, restrictions and the autonomy sanctioned to the child.

The quality and frequency of parents - child communication also connotes the autonomy given to children for any of social disapproved activities. In addition, several studies haves shown that adolescents are at greater risk for smoking and drinking when parents smoke or drink (Ennett & Bauman, 1991; Jackson, Henriksen, & Foshee, 1998; Kandel & Andrews, 1987), are more tolerant of tobacco and alcohol use (Andrews et al., 1993), and provide less support and supervision (Barnes &

Farrell, 1992; Biglan, Duncan, Ary, & Smolkowski, 1995; Foshee & Bauman, 1994; Kandel, 1990; Jackson et al., 1998). In addition to these aspects of the family environment, adolescents are at high risk if they have less educated parents (Chassin, Presson, Sherman, & Edwards, 1992), and are White (Bachman et al., 1991; Barnes, Far-rell, & Banerjee, 1994).

2.2 Critical Issues on Tobacco Use

India's tobacco industry is one of the biggest in the world and is holding third in tobacco production, after China and the United States of America. It is at the intersection of local and global forces fueling a worldwide epidemic of smoking deaths. According to World Bank report: Curbing the Epidemic: Government and the Economics of Tobacco Control, I999 about 6 million Indian farmers are engaged in growing tobacco and another 20 million people work on tobacco farms, and a large percentage of the population is employed in the retail trade. If the employees' families are counted, it can safely be said that the tobacco industry in India probably supports 100 million people. The industry also generates substantial employment.

The nature of world’s tobacco trade has showed that tobacco consumption is growing dramatically since the beginning of the 21st century. The worldwide consumption which is based on an estimated one billion smokers has more than doubled in the last 20 years and is projected to continue growing over the next 20 years. The *transnationalisation* of marketing and promotion of harmful commodities, such as tobacco, is one important component of globalised public health threats. Moreover, considering that in 1986, 61% of the world's tobacco consumption was in

developing countries and by the year 2000 this number is expected to jump to 71 %4; that by 2020, 70% of the expected 8.4 million deaths caused by tobacco will be in developing countries; and that at present almost 70% of tobacco is grown in developing countries, tobacco control needs to be a higher priority in development programmes.

The country wise variation in the trends of tobacco consumption reflected that not all countries are experiencing a growth in cigarette consumption. The per capita cigarette consumption has declined steadily in the developing countries in the past several decades, whereas per capita consumption has grown steadily in the less developing countries. This trend is expected to continue and the less develop countries (LDCs) are expected to become the major consumer of the world's tobacco sometime early in the next century. The international production, manufacture and trafficking of tobacco is dominated by seven trans national companies based in the United States of America and the United Kingdom (MacKay, 1991).

Further, the transnational companies operating in the less develop countries often sell cigarettes without health warnings, great advertisement on television. They also sell cigarettes which are containing higher levels of tar, nicotine and other chemicals than those marketed in the developing countries. Moreover, they also engage actively in promotional activities that target children and women, including the distribution of free cigarettes; the use of images and messages in advertisements that promote smoking as sexy, romantic, slimming, and others. Their activities include sponsorship of sporting, music, fashion and other events; and the use of Western rock stars, actors and athletes. The companies are able to engage in such

activities because there are few restrictions on marketing and containing little information on smoking restrictions.

It is as well important to note the agriculture responsibility that tobacco is one of the most widely grown non-food cash crops in the world; estimates are that 0.3% of the world's arable land is devoted to tobacco cultivation and an approximate of 72% of the world's land under tobacco consumption is located in the less developed countries and a majority of the tobacco sold in the world is produced by small farmers belonging in the less developed countries. In fact, they are also controlling the international production and selling of tobacco by arranging loans to the farmers, providing tobacco seed to farmers along with fertilizer and pesticides at minimal and reasonable prices. Also, those farmers are receiving proper instructions on planting and tending the crop, and as well as buy the products back from the farmer. Though it seems to be helpful and has great opportunity for economic promotion and development, the burden of tobacco consumption is tremendously increasing in a less developing country.

The Global Youth Tobacco Survey (GTYS) 1999-2001 has presented results from 75 sites in 43 countries and the Gaza Strip/West Bank region. The self administered consisted of a set of core questions, and are completed by a representative school based sample of students primarily between the ages of 13-15 years. The results shows that the current cigarette smoking ranges from 39.6% to less than 1%, with nearly 25% of students who smoke, having smoked their first cigarette before the age of 10 years. The majority of current smokers want to stop smoking and have already tried to quit, although very few students who currently smoke have ever attended a cessation programme. Exposure to advertising is high (75% of students had

seen pro-tobacco addiction), and exposure to environmental tobacco smoke (ETS) is very high in all countries.

The overall median for the prevalence of ever smoked cigarette among the age group was 33.0% and the highest per cent was found in the Northern Mariana Islands (79.8%), and the lowest in Tamil Nadu, India (3.4%) and four sites belongs in India among the five sites reported ever smoking rates that is less than 10%. In regarding the age of initiation of smoking cigarette, 23.9% smoked their first cigarette before age 10 years and Manipur, India (87.8%) had the highest rate of smoking initiation before age 10, and the lowest was Buenos Aires, Argentina (6.1%). The overall median per cent of current use of any tobacco product (smoked cigarettes or used other tobacco products on one or more days in the 30 days preceding the survey) was 18.7% whereas Nagaland, India has the highest of 62.8% and the lowest is in Goa, India (3.3%). The exposure of home student to environmental tobacco smoke (ETS) was assessed to understand their exposure to secondhand smoke and almost half of the students reported that they were exposed to second hand smoke from others in their home (48.9%) and the highest rate of exposure (79.8%) occurred among the students in Meghalaya, India. Overall, 70% of students were exposed to others smoking in their home in six sites and all of them were in India. To access the inclusion of the harmful effects of tobacco in school curriculum 50.8% students has reported that they were having been taught in school about the dangers of tobacco use. However, it had covered only 2.7% students in Bihar, India.

In addition, the GYTS data reflected the differences among sites i.e states within the country. There is an extremely wide range in responses to virtually all questions on tobacco use. In India, a country of over one billion people, which had

both the highest and lowest rates for current use of any tobacco product as 62.8% in Nagaland, India and 3.3% in Goa, India. These wide variations in responses within a country underscore the importance of sub-national data, and also how nations and states needs the enhancement of tobacco control within the jurisdiction. Moreover, a vast majority of students are exposed to second hand smoke in public places, and substantial proportions are exposed to tobacco in their homes. Generally, the majority of students knew that tobacco smoke from others i.e passive smoking, and secondhand smoking was harmful to them. All these findings reinforce the need for laws which protect children from exposure to second hand smoke. Survey results indicate that a large percentage, generally a majority of current smokers, have purchased their cigarettes from a store. A vast majority of 13-15 year old current smokers who tried purchasing cigarettes from a store were not refused the purchase because of their age. Thus, there is a need for strong laws prohibiting the sale of tobacco products to minors, and these laws must be enforced. In connection to this, it also shows that over two thirds of current smokers want to stop smoking. This strongly suggests the need for effective youth cessation programmes. Therefore, the need for development and effective implementation of tobacco control law in school education programmes is important.

Communities with shared values are now able to work together more easily then before as result of information technologies. The major tobacco control intervention is information. This includes information about health effects, the negative economic impact of tobacco, the benefits of quitting, what policies work and the structure and functioning of the tobacco industry**.** Therefore, tobacco dependent person's treatment should be supported remotely through the internet and religious

groups exchanging views on how to strengthen tobacco control within their communities. Many geographically based health promotion entities such as schools and cities have embraced tobacco control as part of health promotion in schools or healthy cities programs. Global networks of local groups allow for exciting local-global synergies.

Hence, the complex process of nicotine addiction involves biological, psychological, behavioral, and cultural factors. Three factors that influence smoking and that are influenced by smoking are performance, stress, and body weight. Stress results in increased smoking, but there is little empirical evidence that smoking reduces stress**. Stress reduction from smoking** is likely the relief of withdrawal reduced negative mood that is experienced between cigarettes.

Smokers weigh on average 3-4 kg less than nonsmokers, and the weight-gain seen after quitting smoking also averages 3-4 kg. The Changes in eating and energy expenditure are responsible for the body weight changes seen during smoking cessation and relapse. It is important to notice the full range of conditions under which nicotine affects behavior**.**

Nicotine can function as a reinforcer to maintain self administration behavior in humans and animals (Rose & Corrigall, 1997), and the mesolimbic dopaminergic system is one brain site mediating the reinforcing effects of nicotine and other drugs of abuse (Corrigall, Franklin, Coen, & Clarke, 1992; Pich *et al.*, 1997). Naturalistic and laboratory studies have shown that stressful situations result in increased desire to smoke and actual smoking (Perkins & Grobe, 1992; Pomerleau & Pomerleau, 1991), but little empirical evidence exists that smoking reduces stress. ***If smoking reduced stress, then smokers should be less stressed than nonsmokers, but***

surveys repeatedly indicate that smokers are more stressed than nonsmokers. Further, if smoking reduced stress, then smokers should experience increased stress when they quit, but studies have shown that individuals report feeling less stress after they quit smoking.

The association **of stress with tobacco use** is another factor frequently reported in many literatures. Almost half of the current smokers (49.3%) in a study of 1,000 randomly selected undergraduates from a major north-eastern university identified stress as a motivation for smoking. The instrument used was adapted from the 1992 National Health Interview Survey and contained multiple-choice questions that assessed smoking status, onset of smoking, and motivations for smoking or not smoking. The smoking environment has also been found to be associated with an increase in tobacco use. *A person's smoking behaviour has been shown to be associated with having parents or friends who smoke and with having a greater perceived prevalence of smoking in the individual's community of residence.*

The World Health Organization (WHO), 1992 reported that anemia in pregnancy is a common clinical problem in many developing countries. It contributes significantly to maternal mortality and to adverse pregnancy outcomes (Brabin, Hakimi, & Pelletier, 2001; Ezzati, Lopez, Dogers, Vander, & Murray, 2002; Malhotra et al., 2002; Ronnenberg et al., 2004). While, estimation of an anemia among pregnant women in India range from 50% to about 85% (International Institute for Population Sciences, 2002 and Indian Council of Medical Research, 1989). Many studies on pregnant women have often associated smoking with decreased hemoglobin levels (Chang, O'Brien, Nathanson, Mancini, & Witter, 2003; Strinic et al., 2005; Wingerd, Christianson, Lovitt, & Schoen, 1976), although not consistently

(Bodnar, Siega- Riz, Arab, Chantala, & McDonald, 2004; Cope, Nayyar, & Holder, 2001). Smoking during pregnancy also has been associated with other blood parameters that are closely related to blood hemoglobin, such as decreased serum vitamin B12 and maternal red blood cell folate (Casanueva et al., 2003).

The cultural aspects, the traditions and orientation of a person should always be considered as important determinants to tobacco use. The use of smokeless tobacco is a worldwide practice with numerous variations in the nature of the product used as well as in the customs associated with its use. In the United States, smokeless tobacco is used predominantly in the form of chewing tobacco and snuff. Chewing tobacco is chewed or held in the mouth between lip and gum. Smokeless tobacco was used in the American colonies in the early 1600s after snuff made its way from the Jamestown Colony in Virginia in 1611 through the efforts of John Rolfe. Tobacco chewing, however, was not reported until a century later in 1704. In the late 1930s in Sweden, Ahblom observed that more patients with buccal, gingival, and "mandibular" cancers than with other cancers reported the use of snuff or chewing tobacco. In the United States, case reports of oral cancer among users of snuff or chewing tobacco appeared in the early 1940s. The first epidemiologic study of smokeless tobacco was not conducted until the early 1950s. The use of smokeless tobacco products in the United States was widespread until the end of the 19th century. With the advent of anti-spitting laws, loss of social acceptability, and increased popularity of cigarette smoking, its use declined rapidly during much of this century. However, recent data indicate resurgence in smokeless tobacco habits, particularly among teenage and young adult males.

The report of the Global Tobacco Epidemic, WHO, 2009 has highlighted that it is estimated one third of adults are regularly exposed to second-hand tobacco smoke. European Union, 14% of non-smokers are exposed to other people's tobacco smoke at home, and a third of working adults are exposed to second-hand tobacco smoke at the workplace at least some of the time. Among the estimated 700 million children worldwide about 40% of all children are exposed to second-hand tobacco smoke at home. The global average of children with at least one smoking parent, according to the definition used by the Global Youth Tobacco Survey (GYTS), is estimated to be 43%. The report extended that children and women are the most affected population of second hand tobacco smoke and in all deaths attributable to second-hand tobacco smoke, as high as 31% occur among children and 64% occur among women.

Also, more than half (52%) of adults were exposed regularly to secondhand smoke at home. **The SHS exposure at home ranged from the highest of 97 % in Mizoram state to the lowest 10 % in the state of Tamil Nadu**. It also shows the state wise variation of SHS at home. The rate of exposure to secondhand smoke within the roof alone is much higher in rural areas (58%) and another 39 % is occurring in urban areas of India (GATS India, 2012).

In developed countries, smoking is estimated to cause over 90% of lung cancer in men and about 70% of lung cancer among women. In these countries, 56% of deaths due to chronic respiratory disease and 22% of cardiovascular deaths are attributable to tobacco. The attributable mortality is greater in males (13.3%) than in females (3.8%). Worldwide, the attributable fractions for mortality due to tobacco smoking were about 12% for vascular disease, 66% for cancer of the trachea,

bronchus and lung cancers. Hence, the disease consequences of tobacco use (smoking) have been more extensively and better documented than perhaps for any comparable risk factor. This is partly due to the fact that for decades, until recently, the tobacco industry kept on challenging the validity of the findings and refused to accept results that were long accepted by all health scientists.

In India, where tobacco is smoked, chewed and applied in a wide variety of ways, and a considerable number of research studies have shown that these forms of tobacco use are causal risk factors for many types of cancers and other specific diseases caused by tobacco use in India are cancer, lung diseases, vascular diseases and acute health problems suffered by tobacco harvesters.

2.3 Theories Explaining Tobacco Use

To examine the theories that are related to tobacco use and dependency, it is important to understand addiction. It shares similarities to other pleasure-orientated desires. Addictions are, however, particularly strong, but addicts do not completely lack autonomy and cognitive control – as is often stated in neurology and psychiatry (Foddy & Savulescu 2010, 2007). This notion does not contradict some of the theories in the field, including Jim Orford's (2001) psychological theory of excessive appetites, which are seen as rewarding and habit-forming, but involve high costs and various psychological and social conflicts.

The most crucial point expressed is that even though drugs might sometimes alter realities, change the speed of perception and enable creative processes, they also involve the most rigid modes of acting and "drug addicts continually fall back into what they wanted to escape". Although drug addicts might be considered as

experimenting with life, they end up following the conformist path (Deleuze & Guattari 1980).

Cognitive-behavioral theories are best conceptualized as a general category of theories, or a set of related theories, which have evolved from the theoretical writings, clinical experiences, and empirical studies of behavioral and cognitively oriented psychologists. There is no single definition of cognitive-behavioral theory. The individual theories are tied together by common assumptions, techniques and research strategies, but maintain a diversity of views about the role cognitions play in behavior change. The hyphenated term "cognitive-behavioral" reflects the importance of both behavioral and cognitive approaches to understanding and helping human beings. The hyphen brings together behavioral and cognitive theoretical views, each with its own theoretical assumptions and intervention strategies.

Cognitive-behavioral interventions target both cognitive and behavioral problems using a full integration of cognitive and behavioral strategies. Cognitive-behavioral research is based on observed changes in behavior and cognition with methodological rigor. Cognitive-behavioral theories provide great flexibility in treatment targets and interventions, sharing a fundamental emphasis on the importance of cognitive workings and private events as mediators of behavior change. Behavioral assessment, operating in the "triple response mode", provides a conceptual model of the functional relationships between thoughts, behaviors, and feelings and provides the necessary background for clinicians and researchers to implement and evaluate intervention strategies. Cognitive-behavioral theories and counseling interventions are currently highly influential. There are many different cognitive-behavioral intervention techniques and the number is likely to grow as the theories

continue to be developed and tested for effectiveness with a variety of psychological problems.

Tobacco use or tobacco consumption has indicated the taking of tobacco in a large quantity. It also means a habit of taking tobacco in any form or pattern. **'Behavioral theory'** is relevant because it is based on conditioning theories of learning where behavior is learned and unlearned. Another important theory related to the study is **'Social Learning theory'** which comprises of three major elements such as antecedents' events, behavior and consequences. This theory is based upon the facts that there are predisposing factors to behavior as well as positive or negative rewards. Therefore it focuses on behavioral analysis and identification of problematic or undesirable behavior that needs to be changed.

The term **'psychosocial' implies a very close relationship between psychological and social factors**. Psychological factors include emotion and cognitive development- the capacity to learn, perceive and remember. Social factors are concerned with the capacity to form relationships with other people and to learn and follow culturally appropriate social codes. According to the English Oxford Dictionary the term psychosocial pertains to "the influence of social factors on an individual mind or behavior, and to the interrelationship of behavioral and social factors".

Zbikowski, Klesges, Robinson and Alfano (2000**)** in their on the smoking status of adolescents ranging between the age of 15-18 years had identified the following psychosocial risk factors – Approval of smoking, Accessibility of cigarettes, Value of smoking, Rebelliousness, Social support, Sadness and Stress**.** The survey conducted among 5683 female adolescents on smokeless tobacco use ,

potential psychosocial risk factors were Perceived negative consequences, Substance use, Modeling and Active lifestyle **(**William T.R, James T.B, P. Alex Mabe and David R. M).

According to cognitive theory of depression (Beck, 1987), depression is associated with pessimistic expectancies, a negative view of the future comprising one aspect of the negative cognitive triad. Numerous studies have corroborated this prediction, finding that generalized pessimism or hopelessness correlates positively with depressive symptom severity (Haaga, Dyck, & Ernst, 1991).

Among the factors affecting the decision to smoke includes: One's level of exposure to smokers in the social environment, the degree of parental oversight or adolescent autonomy in the parent - adolescent relationship and adolescent's level of psychological distress (Chassin, Presson,Rose & Sherman,1996; Tercyak, Goldman, Smith & Audrain, 2002).

2.4 Research Studies on Tobacco Use

The prevalence of tobacco consumption by social class in India have been calculated based on scheduled caste (SC) and scheduled tribe (ST) classifications. The difference in prevalence rates between SC and STs and the general population category is very stark. While, smoking 288, smokeless tobacco 464 and any form of tobacco 664 among ST population and smoking 270, smokeless tobacco 167 and any form of tobacco 400 among SC. The variations among states reflected that consumption of tobacco in any form is highest among the north- eastern states, with Mizoram and Meghalaya topping the list. The main reason for that is a high

prevalence of smoking in those states. The chewing forms of tobacco are more popular in some of the eastern states including states like Bihar and Orissa (NFSH 52nd round, 1995-96.) Therefore, the analysis from NSS 52nd round emerge that the prevalence of smoking as well as smokeless tobacco went up between I993-94 and I995-96 with an increase in prevalence among females for both smoking and smokeless tobacco. It also shows the use of smokeless tobacco is higher than smoking among females and teenagers both in rural and urban areas. In addition, smoking is most prevalent among older age groups while, smokeless tobacco use is most prevalent in ages 20 - 44 years. So, the consumption of tobacco in any form is a more serious problem among the economically and socially vulnerable sections of the society.

2.5 Tobacco Use across Population

2.5.1 Gender and Tobacco Use

Many of the studies have reflected that an approximate of one third of female smokers quit once they learn that they are pregnant (Fingerhut, Kleinman, & Kendrick, 1990 ; Floyd, Rimer, Giovino, Mullen, & Sullivan, 1993 ; LeClere & Wilson, 1997 ; Severson, Andrews, Lichtenstein, Wall, & Zoref, 1995), but up to two-thirds of women who stop smoking during pregnancy relapses within 6 months after delivery (Colman & Joyce, 2003 ; Fingerhut et al., 1990 ; Martin et al., 2008 ; McBride & Pirie, 1990 ; McBride, Pirie, & Curry, 1992 ; Ratner, Johnson, Bottorff, Dahinten, & Hall, 2000). Women who remain tobacco abstinent after delivery experience health benefits that include protection of infants from secondhand smoke

exposure, lower risk of poor pregnancy outcomes in subsequent pregnancies, and decreased personal risk of tobacco-related health problems (Mullen, 2004). To increase the proportion of women who maintain tobacco abstinence after delivery, it is necessary to understand the modifiable factors associated with postpartum relapse to smoking.

With an estimated population of 195.5 million in 1996, Indonesia is the fourth most populous nation in the world. Indonesia has a long historical tradition of tobacco growing and trading. Tobacco is a major part of Indonesia's contemporary economic and cultural life. Indonesia is famous for its aromatic kretek cigarettes, which are made from a mixture of tobaccos and cengkih (cloves). Although several international brands are manufactured locally under license, kretek brands produced by Indonesian companies dominate the retail market. Traditionally tobacco production has been considered to be women's work. There is almost no public policy on tobacco and health in Indonesia and from 1991, cigarette packets sold in Indonesia have carried the same general health warning and there are no special warnings. It is worthy to mention to mention that since 1990 there has been an annual communications forum on smoking, conducted under the auspices of the directorate-general of food and drug control in the Ministry of Health.7 The annual "No-smoking day", promoted by the World Health Organization, allows for activities such as public meetings and media announcements to raise consciousness about tobacco and health.

Women in general tend to perceive water pipe use more positively than cigarette smoking, with women water pipe users noting its positive attributes of being familiar, looking traditional, and being social (Maziak, Ward, Soweid, et al., 2004). Other studies in the Middle East indicate that women find water pipe smoking to be

attractive (Maziak, Rastam et al., 2004) and an occasion when they can participate with others (Tamim, Terro et al., 2003). The water pipe, also known as *shisha, hookah, narghile, goza*, and *hubble bubble*, has long been used for tobacco consumption in the Middle East, India, and parts of Asia, and more recently has been introduced into the smokeless tobacco market in western nations.

In the general population, depression, anxiety and stress are more common among smokers than nonsmokers; these factors are barriers to smoking cessation and triggers for relapse (Breslau, Kilbey, & Andreski, 1991; Curry & McBride, 1994; Glassman & Covey, 1996; Glassman et al., 1990; Hall, Munoz, Reus, & Sees, 1993; Kendler et al., 1993). Among pregnant women, current and former smokers are more likely to report depressive symptoms than never-smokers (Zhu &Valbo, 2002), and pregnant smokers are more likely than pregnant nonsmokers to have a mood disorder (major depressive disorder, dysthymia, and hypomania) or an anxiety disorder (panic disorder, phobia, and generalized anxiety disorder; Goodwin, Keyes, & Simuro, 2007). Although pregnant women who quit during pregnancy have lower levels of depressive and stress symptoms, compared with women who continue to smoke (Blalock, Robinson, Wetter, & Cinciripini, 2006; Bullock, Mears, Woodcock, & Record, 2001; Ludman et al., 2000), prenatal quitters are at risk for both mood fluctuations and smoking relapse after delivery.

The rise in tobacco use among younger females in high-population countries is one of the most ominous potential developments of the epidemic's growth. In many countries, women have traditionally not used tobacco: women smoke at about one fourth the rates of men. Most women currently do not use tobacco however, the tobacco industry tap this potential of new market mainly through media - advertising,

promotion and sponsorship, including charitable donations to women's causes, weaken cultural opposition to women using tobacco (Gilmore A et al. American Journal of Public Health, 2004). Further, in most of the European Union countries, teenage girls are as likely to smoke as boys, if not more likely (Global youth tobacco survey, U.S. Centers for Disease Control and Prevention, 2007).

2.5.2 Tobacco and Youth

India has the highest and lowest rates for current use of any tobacco product in the world as 3.3% in Goa and maximum of 62.8% in Nagaland. These wide differences in prevalence within a country underscore the importance of sub national or regional data, for national estimates can obscure important regional differences within the country. Many studies conducted during 1989 and 2004 using different methods have shown that tobacco use among girls of colleges and medical and dental colleges was low relative to boys and adults in the general population and the results of the India GYTS 2000- 2004 are consistent with the above studies; however, in some of the states, there is no statistical difference in the use of cigarette and non-cigarette products between boys and girls. This indicates a breakthrough in social norms in India, where tobacco use by girls and women is considered taboo.

The average percentage of ever-smoker students in the GYTS who smoked their first cigarette before the age of 10 years was 54% which is an average for 13 states including 8 northeastern states. Early initiation before 10 years of age was reported to be high in the states where tobacco use prevalence was high. In the northeastern states, ever-tobacco users who first used tobacco before the age of 10

years was more than 65% in all the states except Mizoram which have accounted for 23.9%.

Tobacco consumption often starts in adolescent years. Everyday about 80,000 to 100,000 young people initiate smoking around the world of which most are in the developing countries. Of 1000 teenagers who smoke today, 500 will eventually die of tobacco related diseases 250 in their middle age and 250 in their old age. In India, tobacco use is estimated to cause 800,000 deaths annually. It is estimated that 5,500 adolescents start consuming tobacco every day in India, joining the four million young people under the age of 15, who already consume tobacco regularly.

In 1996, it was estimated that India is having 182 million tobacco users of whom about 83 percent were males. Teenagers (ages 10-19) accounted for anywhere between 8 - 10 million out of which about 57 percent were using smokeless tobacco. While, regarding female tobacco users, almost three-quarters of this group used smokeless tobacco, whereas the rest smoked cigarettes or *bidis*. In the urban areas, smokeless tobacco consumption seems to be higher among teenagers and young adults. The increasing consumption of smokeless tobacco among the younger generation in urban areas becomes more acutely evident in the 52nd round. Like other developing countries, the most susceptible age for initiating tobacco use in India is during adolescence and early adulthood between the ages of 15years -24 years. Most tobacco users start consuming tobacco before the age of 18 year, while some start as young as 10 years.

A study on **Peer Influence: Use of Alcohol, Tobacco**, **and Prescription Medications** was conducted by Alberto Varela, BS; Mary E. Pritchard among 312 colleges students at Bosh University in **2001** and had found that participants were

most likely to take health risks when accompanied by someone they consider a friend. It also indicated gender differences in risk-taking behaviors, as well as an interaction effect between companion and gender. The result on tobacco use by the colleges students shows that participants were more likely to smoke cigarettes in the presence of someone else, $F(3, 305)=35.03$, $p<.01$, specifically with their friends. Men were more likely than were women to smoke alone or with friends, but women were more likely than men to smoke with their family members. There was a significant interaction of companion on chewing tobacco, $F(3, 300) = 8.27$, $p < .01$. We also found an interaction effect between companion and gender, $F(3, 300) = 7.87$, $p < .01$. Men were more likely to use chewing tobacco with their friends or by themselves, whereas use of chewing tobacco had very little variation across companion for women.

Peer relations are an important source of influence on adolescents' use of substances (Hawkins, Catalano, & Miller, 1992; Kobus, 2003; Wills & Cleary, 1999; Wills, Resko, Ainette, & Mendoza, 2004). The specific processes involved in peers' encouraging or deterring substance use may include normative or informational social influence, selection, socialization, or network position (Ennett & Bauman, 1993, 1994; Kobus, 2003; Wills & Cleary, 1999; Wills et al., 2004).

Social network analysis is a promising approach for examining the complexities of peer interactions and their impact on adolescent behaviors, such as substance use. It also allows for a closer examination of social structure and position than do self-report of peers' attitudes, relationships, and behaviors (Cairns & Cairns, 1994. Social network analysis requires each respondent to report only on his or her

own behaviors, whereas self-report methods require the respondent to report his or her own behaviors and estimate peer behaviors.

A study on **Early Adolescent Social Networks and Substance Use** was conducted by David B. Henry Kimberly, Kobus University of Illinois at Chicago to examine the relationships between social network position and the use of tobacco, alcohol, marijuana, and inhalants. Social network analyses of peer nominations were used to categorize youth as members of social groups, liaisons between groups, or social isolates. The isolates students mean having not more than one bidirectional dyadic tie to another student. Group members are the students tied to at least two other students who also identified each other as friends, thus forming a triangular relational tie and liaisons are the students who were connected to at least two other students by bidirectional dyadic ties, neither of whom were connected to the other. Among the 1,119 respondents from 144 classes in 14 public schools studying in the sixth grade the study out found that the liaisons were more likely to use tobacco than members or isolates and were more likely to use alcohol than isolates. It is because that the liaisons may be at increased risk for the use of alcohol and tobacco with explanations on having greater opportunity for association with substance-using youth. Further, individuals who are occupying the liaison position are seen as bridges between multiple peer groups and/or other peers who are not members of groups. As bridges, these individuals are constrained by the multiple and possibly conflicting norms and values of the various groups to which they are connected. So, they may experience stress similar to that experienced by boundary spanners in organizations. (i.e., stress resulting from the conflicting demands and expectations of multiple social groups). If so, liaisons may turn to tobacco or alcohol as a way to cope through self-

medication. The results also reveal a snapshot of a dynamic process whereby substance use promotes group acceptance or rejection. Youth who occupied the position of liaison and used tobacco or alcohol may have been attempting to gain social approval through their substance use and, in so doing, facilitate peer group entry (cf. Luthar & D'Avanzo, 1999; Maggs, Almeida, & Galambos, 1995). This possibility is supported by the research of Michell (1997; Michell & Amos, 1997). Finally, it is possible that liaisons were in the process of being marginalized by peer groups. The sixth-grade substance users who occupied the liaison position in the study might, in three years as ninth graders, become isolated from peer groups. The general social stigma associated with substance use combined with the increased developmental importance of peers and the emergence of substance use around sixth grade may promote instability and alignment of peer groups based in part on substance use.

The Global Youth Tobacco Survey of Orissa ,1999-2003 shows that, about 30% of the tobacco user consumed tobacco for the first time at the age of ten year or earlier and from rural areas in Gujarat, Tamil Nadu and Karnataka, where one third to one half of children under the age of ten years experimented with tobacco in some form. On the other hand the same study at Patna (Bihar) revealed 29% of grade 3 students reported tobacco initiation at eight years of age.

To assess the ***prevalence of tobacco use and to address reduction of the impoverishment due to tobacco use in Kerala***, India, a study was conducted among school children and youth between the age of 12years - 19 years by K. R. Thankappan and C. U. Thresia in 2007.The study shows that current use of any form of tobacco was reported by 11 per cent of them. The proportion of school students experimented

with some form of tobacco was 35% which comprised of 24% smoking and 11% using smokeless tobacco. The prevalence of current smoking among these children was 8.1% and use of smokeless tobacco was 3.2%. It was found that tobacco use was four times higher among the students who received pocket money, three times higher among those with lower academic performance and three times higher among those whose friends used tobacco compared to their counterparts. A similar finding was reported in a recent study from Delhi and Chennai schools where tobacco use among students in sixth grade was two to four times higher compared to eighth grade students. The prevalence of current tobacco use among male college students in Kerala was 13.6 % and overall prevalence of current smoking was 11.7 %. More than 37 % of the students experimented with some form of tobacco. The study noted that like many other parts of India, the factors associated with tobacco use in Kerala are closely linked with age, sex, social class, education and professional status. Although limited, some of the available studies indicate a variety of socio-cultural influences attributable to tobacco use. In connection to tobacco use by school going children in Kerala, school going boys, whose fathers were current tobacco users, were two times more likely to use tobacco compared to their counterparts. Also boys having friends who were current tobacco users were 2.9 times more likely to use tobacco compared to those whose friends were not using tobacco. Among the college students, those having a tobacco using household member were three times more likely to use tobacco compared to those who did not have any tobacco user in the household. This was consistent with the findings from the study among the south Indian college students in which '**for friendship'** was the most common reason cited for smoking.

2.5.3 Children and Tobacco Use

It is well known that in any aspect of life including behavior of tobacco use, family interaction influences children's behavior, and because family is the social unit primarily responsible for modeling communication behavior and teaching social skills, family interaction might also provide models for competencies related to drug resistance and use (Baumrind, 1991; Noller, 1994; Patterson & Yoerger, 1997; Socha & Stamp, 1995). In fact although peers play a crucial role in levels of current adolescent drug use the attitudes and behaviors of parents, the overall quality of family life, and the relationship between parents and children are what play the most crucial role in adolescent behaviors such as initiation and experimentation with ATOD (Brown, Mounts, Lamborn,& Steinberg, 1993; Hoffman & Su, 1998;Kumpfer & Alvarado, 1995; M.A. Miller et al., 2000). According to Kandel (1996), scholars who view family influences as less important than peer influences are ignorant of the central role family relationships play in influencing adolescents' values, norms, and behavior. Furthermore, Coombs, Paulson and Richardson (1991) noted, that parental influence may be more important than peer influence in young people's reasons for nonuse. The quality of family life consistently emerges as a pronounced influence on adolescent substance use behavior (Gullota, Adams, & Montemayor, 1995; Hawkins, Catalano, & Miller, 1992).

The **General Social Survey (GSS) using data from the 1977-1994** conducted by National Opinion Research Council has examined the impact of parental divorce on the alcohol and tobacco consumption of adult offspring. Divorce greatly increases the likelihood of being a smoker and, for men, a problem drinker. Parental remarriage completely offsets the effects of parental divorce on men's

drinking but does not substantially affect cigarette use. The respondent socioeconomic characteristics accounted for a portion of the relationship between parental divorce and smoking but did not affect rates of problem drinking including social control and psychosocial adjustment due to parental divorce. In connection to previous research in the area and having a conclusion that parental divorce can have many lasting effects on the well-being of adult offspring, including marital instability (Amato 1996; Glenn & Kramer 1987; Kulka & Weingarten 1979; Mc Lanahan & Bumpass 1988; Mueller & Pope 1977;) Alcohol and tobacco use may well be two additional forms of maladjustment related to parental divorce. While talking Social control, after a divorce almost every familial routine is disrupted (Wallerstein & Kelly 1980) and divorced mothers often experience considerable emotional distress affecting their parenting skills (Dornbusch et al. 1985; Wallerstein & Kelly 1980). Moreover, single mothers are likely to be working and therefore less able to supervise children (McKeever & Wolfinger 1997).

Kandel and Yamaguchi, have written that adolescents are especially at risk as the chances of initiation into alcohol and tobacco use peaks at about age 18 years. Further, the GSS also mentioned that low levels of education increase the likelihood of divorce (Bumpass, Martin, & Sweet 1991), so divorced parents as a whole comprise a disproportionately uneducated group. Due to their lower average level of education, divorced parents may be relatively permissive about smoking. In contrast, educated parents, even if divorced, are more likely to dissuade their children from smoking through both exhortation and example. Resnick et al. 1997 mentioned that the absence of cigarettes in the house substantially decreases the likelihood that offspring will smoke.

The psychosocial effects of parental divorce often persist into adulthood, including poor mental health (Amato 1991; Amato & Booth 1991; Cherlin et al. 1998; Kuh & Maclean 1990; Roy 1985; Schooler 1972) and difficulty in romantic relationships (Amato 1996; Amato and Rogers 1997; Silvestri 1992; Webster, Orbuch & House 1995). Single-parenting and step-parenting produce almost identical increases in the risk of smoking which is against an evidence of the social control argument: the presence of a step-parent, no matter how ineffectual a disciplinarian, should provide an additional agent of social control and thereby reduce initiation into smoking. Female respondents from step-families report higher rates of problem drinking than women from either intact families or mother only families.

A study on the **pattern of tobacco use among school children** in thirty government middle schools and senior schools of National Capital Territory (NCT), Delhi, India was conducted by Vinita Singh, Hem Raj Pal, Manju Mehta1, S.N. Dwivedi & Umesh Kapil, 2005. Data were obtained on the use of tobacco, age of initiation, reason of initiation of consumption of tobacco, places of tobacco consumption, money spent on the purchase of tobacco, frequency of consumption among 3,422 consisting 56.5% girls and 43.5% boys school children belonging to the age group of 10 years to 14 years using a pre-tested semi-structured questionnaire. Surprisingly, it was found out that an overall 9.8 per cent of the school children in the study had experimented at least once with any form of tobacco in their lifetime. The proportion of children who were current users of tobacco products were 5.4% having 4.6% boys and 0.8% girls. Among the current users, nearly 70.2% comprising 85.6% boys and 14.4% girls consumed *pan masala* with tobacco, whereas, 85.5% boys and 14.5% girls consumed tobacco as *gutka*. Also, as high as 97% boys and 3% girls

smoked tobacco in the form of cigarette followed by 10.1% who smoked *bidi*. Further, a little 31 % of the children consumed tobacco in more than one form and nearly 14% of the respondents have reported that they are consuming betel leaf with tobacco out of which 11.1% are consuming "*zarda*".

The inquiry on the reasons for initiation of tobacco use shows that more than one third of *the children (37.8%) reported that tobacco was first introduced to them by their friends and 29.3% were introduced by their family members or relatives*. Moreover, nearly a quarter of the children were influenced by tobacco advertisements in various media outlets such as television, videos, movies, newspapers and others. In addition to this, 30.3 % of the respondents were started using tobacco out of their enjoyment and another 26.1% used because of their curiosity.

Hence, the accessibility and availability of tobacco products among the respondents shows that the ease availability played a vital role in their consumption. *Majority of 80.9 % consumed tobacco in public places*, 8 % in school followed by 6 % which was taken place at home. It was found that nearly 84 % of the respondents purchased tobacco from the shop and reported that they were never refused by the sellers or/shopkeepers despite being a minors.

A communication on the harmful effects of tobacco by parents and teachers was studied and that the parents of 59 % of the respondents discussed the harmful effects of tobacco consumption with their children and only about 25 % had given efforts to stop consuming tobacco.

The results on the determinants of tobacco use reveals that family plays a very important role in initiation of tobacco use by a young child or adolescent. *Tobacco*

use by parents or an elder sibling increases the likelihood that a child begins smoking apart from pocket money, amount of pocket money, school environment, satisfaction with teaching, satisfaction with results, hobbies (reading, friends, watching movies), not having friends, age and location of school. Other studies on similar aspects looked into actors that the students not participating in sports, or having user friends to be at a nearly double the risk.

To **examine the dependency on tobacco by children** was assessing based on the intervals within which tobacco product is needed after getting up in the morning. The same study shows that nearly 22% of current users reported the need of tobacco as first thing in the morning and also the GYTS shows that around three fourths of *cigarette smokers and around half of the smokeless tobacco users reported "needing tobacco" first thing in the morning. The same is observed in majority of the North eastern states of the country*. This finding shows that children are already developing dependency on tobacco at very young age.

Tobacco, alcohol and drug use is a widespread and increasing problem among young people. Recent trends show a growth in heavy drinking with an associated increase of smoking and illegal drug use. One in four deaths of European men aged 15 years – 29 years is related to alcohol and an UK survey found that 13% of 11 years – 15 year olds smoke regularly and 20% had used illegal drugs in the past year. A number of systematic reviews and meta analyses have shown parenting programmes to be effective in changing children's behaviour, reducing time in institutions for juvenile delinquents and improving psychosocial health of mothers. However, behavioral problems are not the only aspect of a child's health that is influenced by their family and home environment. Low parental supervision and monitoring has

been found to be a strong predictor of smoking in girls and increased drinking and problem behavior in boys. So, the expressions of parental disapproval have been demonstrated to be effective deterrents to children smoking.

In the midst of the present worldwide tobacco epidemic, concern is growing regarding the use of a water pipe (referred to in various regions as *shisha, hookah, narghile, and hubble- bubble)* to smoke tobacco, a practice dating back at least 400 years. This early form of smoking is experiencing a global revival, particularly in Middle Eastern countries. (Maziak,Ward, Soweid, & Eissenberg, 2004). Some of this increase in use has been attributed to the popularity of flavored or sweetened tobaccos for use in the water pipe (Rastam, Ward, Eissenberg, & Maziak, 2004). Recent reports indicate that water pipes are commonly used in Egypt, Saudi Arabia, Jordan, Lebanon, Syria, Kuwait, Israel, Africa, India, and certain parts of Asia (Al Mutairi, Shihab-Eldeen, Mojiminiyi, & Anwar, 2006; Maziak, Ward, Soweid, et al., 2004; Singh et al., 2006). Water pipe use has recently grown in popularity and present-day water pipe smokers include trendy youth, university students, and even high-school-aged children (Maziak, Ward, Soweid, et al., 2004). Growing evidence indicates that women are increasingly likely to become water pipe smokers. Some of this trend may be attributable to the introduction of sweetened and flavored water pipe tobacco during the 1990s (Rastam et al., 2004), which may be attracting female teenagers (Hadidi & Mohammed, 2004).

In the developing world, tobacco use rates for adult females remain relatively low, but could rise quickly among teenage females. In South-East Asia, the adult male smoking rate is ten times higher than the adult female rate. Among 13 years -15 year olds, however, the male smoking rate is only about two and a half times higher

(Guindon GE, Boisclair D. Past, current and future trends in tobacco use, World Bank, 2003). Although anyone who uses tobacco can become addicted to nicotine, people who do not start smoking before age 21 are unlikely to ever begin. Adolescent experimentation with a highly addictive product aggressively pushed by the tobacco industry can easily lead to a lifetime of tobacco dependence. The younger children are when they first try smoking, the more likely they are to become regular smokers and the less likely they are to quit.

The Global School Personnel Survey (GSPS) in India conducted simultaneously with the GYTS, has revealed that tobacco policies in schools restricting student smoking and school personnel smoking are rarely adopted and enforced. Tobacco prevention instruction by teachers on six different teaching and training measures was below 35%. A special striking feature was the lack of teaching material and training for teachers regarding tobacco legislation. However, there is evidence that central government schools that adopt tobacco control policies had a low prevalence of current tobacco use among students and school personnel as compared to state schools, which had no policies.

2.5.4 Women and Smoking

Tobacco use plays a pivotal role in perpetuating health inequalities among different socioeconomic groups and between genders. **Women tobacco users** not only share the same health risks as men, but are also faced with health consequences that are unique to women, including those connected to pregnancy and cervical cancer. However, tobacco use among women is prevalent in all regions of India and

among all sections of society. In India, 2.4% of women smoke and 12% chew tobacco. The prevalence of smoking among women is low in most areas due to social unacceptability, but is somewhat common in parts of the north, east, northeast and Andhra Pradesh.

In India, the limited studies on pregnant women indicated that **tobacco use by the pregnant women** is not different from that of women in the general population which reflected the absence of specific tobacco use prevention efforts during antenatal care. In a report from a large teaching maternity hospital in Mumbai, 33.4% of women in the reproductive age group were smokeless tobacco users. Women in many rural areas believe that tobacco has many magical and medicinal properties; keeping the mouth clean, getting rid of a foul smell, curing toothache, controlling morning sickness, during labour pains.

A longitudinal **analysis of smoking, transitions and occasional tobacco use among young adult women** was studied by Liane McDermott, Annette Dobson, Neville Owen to examine the factors associated with these transitions, by comparing socio demographic, lifestyle and psychosocial characteristics of those who changed from occasional smoking to daily smoking, non-daily smoking or non-smoking. The respondents were women between the ages of 18years - 23 years randomly selected from the Medicare Australia database. The survey was conducted for three times and the self-reported smoking status at survey I (1996), survey II (2000) and survey III (2003), for 7510 participants who took part in all three surveys and who had complete data on smoking at survey I. Data was collected through mailed questionnaires containing 300 items, on general health and well-being; health service use symptoms; stress; smoking and alcohol; weight, exercise and eating; time use; social support;

demographics; and aspirations which was approved by the human research ethics committees of the University of Newcastle and the University of Queensland.

The results shows that among the 7510 participants who has completed surveys1, 2 and 3, 11% (n = 829) reported were smoking occasionally, 17% (n= 1291) smoked regularly, 15% (n= 1127) were ex-smokers and 57% (n = 4263) reported never smoking. Thus, 39% of all current smokers were occasional smokers. Among the baseline occasional smokers, 40% (n = 331) reported that they had smoked daily for 6 months and 58% (n = 484) reported never smoking daily for 6 months.

The three smoking groups compared in the subsequent analysis of smoking transitions between survey 1 and 2 comprised those 240 daily smokers, 226 non-daily smokers and 361 stopped smoking at survey 2. The groups compared in the analysis of smoking transitions between surveys 1 and 3 comprised 193 daily smokers 177 non-daily smokers and 454 stopped smoking at survey 3.(Daily smoker and non-daily smoker = decreased, quit rate = increased).

It was found that young women who were most susceptible to progressing to daily smoking and had intermediate levels of education. These educational qualifications may place them in occupational groups (eg, hairdresser, clerical and administrative worker, or sales assistant) that have higher smoking rates than the wider population. In connection to this, a recent study among the young, non professional Australian workers found that 50% were current smokers, with smoking rates ranging from 38% among those working in retail or fast food outlets to 71% among hair dressers.

It was further found out *that marriage and parenthood modify smoking behavior* and in the multivariate analysis, marriage was statistically significantly associated with not smoking at both points of time, whereas the relationship between not smoking and becoming a parent was evident only for surveys 1 and 2. This can be because of a strong association between parenthood and marriage which concerned more with lifestyle and health, increased personal commitment to a spouse, as well as to preparation for parenthood. Also a qualitative research on life transitions and young women's smoking behaviour suggested that around their mid-20s, young women become more concerned about the addictive nature of cigarettes and their capacity to quit, as they consider their future health and plans for having children.

The associations between tobacco, alcohol and illicit drug use was examined and was found that the use of one or more of these substances is associated with subsequent use of the others. As young adulthood is a stage of life that includes going out with friends, drinking and experimenting with drugs in settings such as private parties, raves, pubs and clubs. Young women regard smoking as a normative behavior in these social settings, and as a means to meet and bond with others. Some of them only smoke in these circumstances, regarding themselves as "social smokers" and may quit smoking as they mature out of this "single, partying" stage of life towards marriage and parenthood.

2.6 Second Hand Smoke (SHS)

Tobacco use and exposure to secondhand smoke (SHS) are widely viewed as serious threats to the health of pregnant women, infants, and children around the

world. In fact, it has been a leading preventable cause of morbidity and mortality for women and men, and a leading preventable cause of poor pregnancy and infant outcomes, such as low birth weight (LBW), preterm delivery, placental abruption, and sudden infant death syndrome (SIDS) for many years.

In many low and middle-income countries (LMICs) the prevalence of tobacco use by women, including pregnant women, is low and recent surveys confirmed that that there is a changing situation in using tobacco during pregnancy. Increased tobacco use and exposure to SHS among pregnant women in LMICs, where poor pregnancy outcomes are already common, threatens to undermine improvements in maternal and child health in these countries. The reduction of active smoking among pregnant women and eliminating SHS exposure of pregnant women and infants are directly relevant to Millennium Development Goals- number 4 emphasis on reduction of mortality and morbidity by improving maternal health.

In many countries tobacco use has long been considered a culturally inappropriate behavior for women and girls, and the stigma associated with tobacco use has inhibited tobacco use initiation among women and girls. However, globalization, modernization and efforts to improve the status of women are eroding traditional cultural constraints on women's behavior, including women's tobacco use behaviors. In this regards, there are the dual challenges of maintaining and even reducing the generally low prevalence of cigarette smoking in women, while also reducing the high prevalence of their exposure to SHS, reflective of the high rates of smoking among men in many countries.

However, tobacco use by men and women in high-income countries continues to decrease, the multi-national companies and many national tobacco industries have

targeted women and girls in LMICs as an untapped and potentially vast market. Western style tobacco marketing frequently associates women's cigarette smoking with independence, sophistication, sex appeal, slimness, and fashion. Additionally, exposures to images of tobacco use in movies and other entertainment media are likely to contribute to a view of cigarette smoking as 'normal' in LMICs.

Tobacco use by women at the individual level comprises of women's knowledge of health hazards of tobacco use, including use during pregnancy and postpartum; perceived 'benefits' of tobacco use; perceived social acceptability of tobacco use for women and girls; perceived ability to ask family members not to smoke in the home; awareness and perceptions of cigarette brands and tobacco marketing strategies targeting women; perceived social support for quitting.

In addition, pregnant women's exposure to SHS inside the house and in workplaces is widely prevalent. The local understanding and concerns about tobacco use and SHS is best mechanized by rising awareness on the harms of tobacco use and SHS exposure; industry targeted marketing strategies in place in individual communities; community implementation of evidence-based tobacco control strategies. Towards the health care of the pregnant women tobacco use and exposure to SHS, knowledge of health risks, including pregnancy-specific health risks, training and perceived ability to deliver cessation interventions, prohibitions on tobacco use in healthcare settings, barriers to providers' assessing and assisting pregnant women to quit tobacco use.

2.7 Legislation and Regulation on Tobacco

Legislation is at the core of the effectiveness and success of tobacco control program and regulation. It is known that the impact of tobacco has been in several ways entering all populations and age group. The WHO adopted Framework Convention on Tobacco Control (FCTC) in May 2003 at its 56th session and the convention was to take effect after a minimum of 40 countries had ratified to it. India is the largest democratic country as well as the 8th nation that has ratified FCTC on the 8th February, 2004.

A framework convention (FCTC) is an international legal instrument by establishing a general system of governance for tobacco control. It lays down the general requirements for those countries rectified to it in respect of the measures that need to be taken in the area of tobacco control. The countries could modify the existing laws or develop new laws which could reflect the commitments.

The main objectives and key provisions of FCTC is 'to protect present and future generations from the devastating health, social, environment and economic consequences of tobacco consumption and exposure to tobacco smoke by providing a framework for tobacco control measures to be implemented by the parties at the national, regional and International levels in order to reduce continually and substantially the prevalence of tobacco use and exposure to tobacco smoke'.

The WHO has a constitutional mandate and FCTC recommends initiatives at the national and international level. The main provisions of the FCTC on The Cigarettes and Other Tobacco Products Act, 2003 are:

a. Tax policies - Ministry of Finance to increase taxes on tobacco products.

b. Protection from secondhand smoke - Strict prohibition of smoking in a defined public places.

c. Content regulation – Testing and measuring nicotine and tar content of tobacco products.

d. Packaging and Labeling – Information on nicotine and tar contents along with permissible limits to be indicated on every package of cigarettes and tobacco products.

e. Health Warnings – Prominent warning, including pictorial warnings depiction of skull and cross bones and any other such warnings that is to be notified.

f. Education, Communication, Training and Public awareness – It is not a legislative measures in the Indian Act and require administrative actions to mobilize multiple stakeholders, engage civil society and utilized public-private partnership.

g. Advertising, Promotion and Sponsorship – The Indian Act imposes a total ban on direct and indirect advertisements on cigarettes and other tobacco products and also prohibits sponsorship of sports and cultural events. This is extent to producers, suppliers and distributors and control of media.

h. Tobacco Dependence and Cessation – It is not a legislative measure and administrative action by the Ministry of Health and allied agencies to expand and strengthen existing tobacco cessation programmes.

i. Smugglings- The measure to curb illicit trade on tobacco under the Indian Custom Act 1962, which need review and amendment to incorporate the recommendations of FCTC.

j. Sales to and by minors – Prohibition of sale to minors by limiting accessibility by minor and ban within 100 yards of educational institutes. However, the FCTC has no provisions on prohibition of sales of cigarette and tobacco products by a minor.

2.7. 1 Tobacco Control in India

In India, the legislation on tobacco control started evolving in the mid 1970s mainly due to increasing scientific evidence of tobacco being a major cause of mortality and morbidity in the world. The growing awareness on the adverse health effects of tobacco consumption in India, the government of India enacted ***The Cigarette (Regulation of production, Supply and Distribution) Act 1975,*** which made mandatory to display a statutory health warning on all packages and advertisements of cigarettes. The Act was passed to regulate the restriction of productions, supply and distribution of cigarettes and clearly state that " *Smoking of Cigarette is harmful habit, and in the course of time, can lead to grave health hazards….*"(Battle for tobacco control-The Indian experience, Legislation and Enforcement, Report on tobacco Control, GoI, 2004). The main highlights of the Act relevant to the study are that it requires the manufacturers to display a statutory warning' to inform citizens on the harmful effects of smoking as 'cigarette smoking is injurious to health' it also made an obligation that manufacturing, distribution and supply of cigarette should bear specific health warnings and clearly visible to the buyers.

During the 1980s and 1990s, the states and central government imposed further restrictions on tobacco trades and efforts and initiated to bring forth a

comprehensive legislation on tobacco Control. There was national consultation on 'Tobacco or Health' in 1991 and the proposal was deferred to evaluate the revenue and economic impact of tobacco control.

Further, the issue of tobacco use and its health effects increasing received international and national concern. There was a tremendous pressure from the civil society and the National Commission for Human Right, India also stepped out advocating tobacco control is essential measures to promotes human rights and convened a South East Asia Regional Consultation on 'Public Health and Human Rights'. Later, the high court of Kerala and the Supreme Court of India called for effective bans on smoking in public places and affirmed the rights of non-smokers to breathe air free from tobacco smoke.

The critical analysis of The Cigarette Act, 1975 indicated the inadequate accomplishment due to incomprehensive coverage and was feeble in its provisions. Also the health warning is too mild to be effective deterrent. The main criticism of the Act is that in its purview did not include he non cigarette products like *beedi, cheroots, gutkha and cigars* and these are hugely consumed tobacco products in India.

Finally, the Indian parliament has passed the Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Bill, in April 2003 and became an Act on 18th May, 2003 and was enforced on 1st May, 2004.

CHAPTER – III

METHODOLOGY

3.1 Methodology

The study is descriptive in design. Data collection was done through survey using a semi-structured interview schedule among 350 women tobacco users. The respondents were women between the ages of 13 years to 60 years. The study employs both qualitative and quantitative methods. Focus group discussion (FGDs) and case studies were used to collect qualitative data.

The semi-structured interview schedule comprised of different categories of questions such as socio-economic profile, psycho-social aspects, tobacco use pattern, health consequences of tobacco use, morbidity pattern and the economic impact, etc.

3.2 Research Design

The present study is descriptive in nature. It documents the facts on the magnitude of tobacco consumption among the Mizo women. The area of the study is also fertile in the particular state although the use of smokeless tobacco by women of Mizoram has crossed the national average. The study has attained the set forth clear and specific objectives and employed structured techniques of data collection.

3.3 Sampling Design

The study follows multi- stage sampling procedures. The state of Mizoram is divided into 8 districts and among them Aizawl district alone is having more than one third of the total population of the state. The government documents and reports have shown that the Aizawl district has huge tobacco related cancer incidences and also

Mizoram is marked at the top most for some of the leading cancer sites in the world. *The selected i.e Aizawl district* has both rural and urban areas and has the highest population concentration too. The selected area has gender indicators such as sex ratio, female literacy, and female work participation rates and others which are closer to that of the Mizoram state. Therefore, localities having urban setting within Aizawl district viz *Chawlhmun locality and Kulikawn locality* and another two villages having rural setting viz *Muthi village and Samtlang village* has been chosen based on the above mentioned gender indicators.

3.4 Background of the Study

The history of the Mizo has highlighted that during the earlier period there were no schools and any educational institutions or any other occupation except farming. All the family members whosoever was found to be able to work, were engaged in either the field or at home. The girl child particularly at the age of 7 years to 8 years began to take responsibilities of carrying out the household chores under the supervision of mothers. There were no separate baby sitters so she was often entrusted to look after her younger siblings when her parents were away in the field, cooking in the evening, washing utensils, cleaning the house, washing clothes, collection of fire woods, pounding rice for the meal, preparation of foods for the pigs and other pets at home and carrying water for the whole family besides working in the field. The roles and duties of the female were thus not lighter than the male members of the family. Also, the Mizo women are a tribal women and this has highlighted the natural responsibilities of tribal women in general. As the Mizos were warriors, the females would often go along and return with them. Whenever they stayed in a jungle

for any purpose like hunting, the women would cook and prepare '*vaihlo-zial'* i.e Mizo cigarette for the male members (Dokhuma, 1998: 115).

3.5 Selection of Respondents

The respondents were selected by adopting proportionate stratified random sampling of only women population across the age groups of adolescents (13-18 years), Young adult (19-35 years) and middle age (36-60 years) and few of the respondents were above 60 years, both in the urban and rural areas. In each of the areas, a community based organization – women group, youth group and a group of senior citizen prepared a list of women of the required age group under the leadership of local council and village council. Finally, selection of the respondents from the list was done through simple random sampling from each of the age group categories.

3.6 Data Collection

The study employed the use of a semi - structured interviewed schedule to collect data. To explore the relevance of the tool, a pre-test was conducted in Aizawl city among the Mizo women. The pre-testing of the interview scheduled consisted 30 Mizo women, between the age group of 15 years - 50 years comprising of 15 educated women who are beyond matriculation and the remaining 15 respondents were uneducated women and or less educated women working both in organized and unorganized sector. The pilot study has shown that tobacco use is widely prevalent among Mizo women in urban and semi - urban as well as no differentiation was found between the younger and older women with a distinction on the forms and types of

tobacco used. It also reflected that there were no educational differences on the use of tobacco including their occupation. Thus, the pilot study helps the researcher to adopt appropriate method of study and sampling procedure.

Apart from the semi structured interview schedule, the problem was probe further by gathering qualitative information through case studies, key informant interviews and focus group discussion.

3.7 The Research Experience

The research study on the psychosocial aspects of tobacco use among Mizo women is conducted in Aizawl district, Mizoram. The study has employed both qualitative and quantitative approaches. The research was conducted through congenial research environment and survey was done with the full cooperation of the community leaders in selection of sample respondents. The research experience revealed the importance of research ethics to the researcher. Information was elicited from the respondents, through case studies, Focus Group Discussions (FGDs), Key Informant Interviews (KIIs) and secondary documents were collected from journals, books and scholarly articles including electronic materials. A central government survey has revealed that a high percentage of women in Mizoram consume tobacco in various forms, making them the most cancer-prone in the country and the National Family Health Survey (NFHS III) reported, 22% Mizo women are regular smokers as against the national average of 2.5%, making them the most cancer-prone in the country.

In fact, the study is enhancing the capacity and knowledge of the researcher to come up with suggestions and recommendations for further research including social work intervention.

3.8 Limitations of the Study

The limitation of the study is that tobacco, particularly the use of smokeless tobacco by women is highly prevalent all over Mizoram. The exploration of the psychosocial aspects of tobacco use would have therefore been more interesting if it had covered the entire state. The incidence of tobacco related death among women in the state is also higher in comparison to the other states of India. The total size of 350 respondents from rural and urban communities of Aizawl district is minimal to represent the entire women population of the state.

3.9 Conceptual Framework

The concepts related to tobacco use are that **tobacco** is leafy plant having nicotine content in it. Tobacco is one of the agricultural - livelihood product and the **nicotine** content of tobacco leave are containing nearly 4000 chemicals and many of them are poisonous that are harmful to human health. Tobacco is commonly used to make cigarettes. It was first introduced in India in the year 1600 and the Mayan Indian of Mexico carved drawings in stones showing tobacco use is dated back between 600 AD to 900 AD. Today, India is among the largest producer of tobacco next to China.

There are different types of tobacco products and they are classifying mainly into two forms as **smoking forms of tobacco (ST)** and the **smokeless forms of tobacco (SLT)**. The smoking forms of tobacco are the taking of tobacco by inhaling and ingested the smokes. They are cigarettes, cigars, cheroots, pipe tobacco, Hookah, bidi, local cigarette (Zozial), etc. On the other hand, the smokeless forms of tobacco are the tobacco that are consume without heating or burning at the time of use and administered orally. It includes chewing and pasting of tobacco like snuff, snus, paan with tobacco, zarda paan, sahdah, khaini, gutkha products, tobacco water (tuibur), etc.

The nicotine content of tobacco causes changes to the brain and behavior becoming psychoactive drug causing two sensations like stimulation in the though process and general relaxation. It induces **dependency** on the user, a condition where the system requires tobacco to function at a certain level. It could be either *physical dependency or psychological dependency or both.* Further, consumption of tobacco is leading to **addiction**. It is a state where an individual cannot at all function or survive without using it. The nicotine of tobacco is a psychoactive drug that stimulated a person and having a potential of being dependent on it and or leading to *either physical addiction or psychological addiction or both*.

Inadditon, the concern of smoke forms of tobacco is that it not only harms the users. It does not end in itself and the risk includes the non user who is a **passive smokers**. The smokes that are containing poisons are passes to the next person and consume by people who are not smokers themselves. This is also known as **secondhand smoke (SHS).** The inhalation of smokes from other person's smokes still continue to carry substances which are dangerous and harmful to health and placed them at-risk of different types of cancers, COPD, SIDs and others. Apart form this;

the global concern is the **environmental tobacco smoke (ETS).** It is exposure to tobacco smoke, indirectly being exposed to tobacco smoke in the surroundings and is also known as passive smoke, secondhand smoke and or involuntary smoking. It is more or less similar but the environmental tobacco smoke is conceptualized to be beyond the individual level and which affect a larger group of people. The two important concepts in the environmental tobacco smoke are the *mainstream smoke* (*MS)* and the *side stream smoke (SS)*.The smoke that is inhaled and again exhale from the smoker's lungs which passes the smoke in the surroundings is the mainstream smoke and the smoke that enters the air directly from the burning ends before inhalation by the smoker is called the side stream smoke. The exposure to this environmental tobacco smoke varies on the quantity of smoke, the volume of the room, the ventilation rate and the supplied of fresh air during smoking. It is also important to include the inhalation of smoke that is remaining in the articles, assets, gadgets and furniture those are present in the room during smoking.

Tobacco smoking and using of smokeless tobacco in any forms has tremendous harmful effects. In fact, using of tobacco leads to various diseases and caused mortality. The economic impact at the individual level and tobacco and its related diseases health care expenditures is becoming a concern too. Besides, it is also relevant to enquire the *psychological factors like the emotion and cognitive development* and the *social factors* that responsible for formation of *social relationships inclusive of the socio-cultural aspects* of tobacco use. Further, it is interesting to observe the *interplay of psychological determinants and the social determinants.* Therefore, it is important to probe the psychosocial determinants of tobacco use by women. The key elements include **stress** that is understood as a

coping skills rooted from the experience of *pressure*. It present when the body attempts to make adjustment on situations those are beyond the system could control and is expressing through behaviors leading to using of tobacco as a coping skills. In addition, prolong experience of pressure might cause *burnt-out* and leads to stress. So, the frequency and quantity of using tobacco is depending upon the nature of stressors or and experiences and intensity of stress. However, the use of tobacco and stress is bidirectional that the experiences of stress lead to tobacco use and also the use of tobacco lead to stress. However, this study focuses on the former explanation.

The related concept of stress is **anxiety** that is understood as a blue print that is giving hint and beforehand information that the environment is uncertain and uncontrollable leading to feeling of sadness. Therefore, *anxiousness is having a potential to use tobacco feeling that it would reduce the risks and situations*. In addition, the concept is **sadness** and **depression** is also relevant aspects. The two emotions could taken place due to various reasons and thinking that taking tobacco would minimized the intensity of feelings and or remove it out of thought for a certain period and enjoy the given moment. Therefore, *tobacco has been taken just to relief the experience of the situation.* Likewise, this sadness in many cases would lead to depression that does not allow a person to have a peaceful mind and disturb the sound sleeping. In extreme cases, a person might not at all feel sleepy without having focus or concentration but found it boring and tobacco has been taken feel more comfortable with the situation and or to keep him occupied.

The other important psychological dimension of tobacco use is **rebelliousness.** It is understood that the use of tobacco in any form is harmful and not advisable, strictly restricted to certain level especially among children and youth. The consistent

communication on control of initiation and continuation of tobacco use may be cause **angriness** and responded through **rebelliousness**. The repetition on not to use tobacco may induce experimentation and attempt on experience of using it. Further, the consistent statement of control on tobacco use to the current user may also be irritating and responded in angriness.

In connection to the above conceptualization, the socialization process is found to be an important determinant of tobacco use. The **social relation** that is an individual relationship with other in the social group, the nature of relationship and the group practices are having great impact for initiation of tobacco use. The influence of others to take tobacco is called the **peer influence** and the overall relationship including communication and group behavior, submissiveness and conformity to others which are encompasses in the **social networks** plays a significant role on tobacco use.

The typical form of tobacco water called *tuibur* in a local language is the tobacco water which has been distilled out of a mixture of tobacco leaves and boiled water. The tobacco water alone is taken after filtration of the leaves and only when it is cool. It is distinct from water-pipe tobacco where the tobacco water is suck through pipe.

Therefore, the conceptual framework is drawn along with the **cognitive behavioral theories** which assumed that the social learning has tremendous contributions on initiation and the use of tobacco.

CHAPTER – IV

RESULTS & DISCUSSIONS

4.1 Demographic Profile of the Respondents

The study on '*Psychosocial aspects of tobacco Use among Mizo women'* is Conduct in Mizoram. Mizo is a one of the tribes in India having a distinct socio-cultural practice. The Mizo society is closely knitted like any other tribal society and gender inequalities and disparities in the society functioning and between the couples too are thought to be normal by the people. It is not much connected with other parts of the country and in many of political cases the 73rd amendment of Indian constitution safeguarded the rights and opportunities of the Mizos. Majority of them are Christians and being a young culture, the state has celebrated its Gospel centenary in 1994. Unlike many of the tribal communities in India, the Mizos are much advanced in different areas and largely influenced by modernization. The lifestyles such as the practices, habits, standards of living, access of education to boys and girls, socialization, and fashions. All these have reflected the widely imitation of western cultures. However, the socio-culture practice is strongly imbedded and has been shaped the habits and conscience of the people till date.

The research study on psychosocial aspects of tobacco use among Mizo women was conducted in two rural villages - *Muthi* village and *Samtlang* village and two urban localities- *Kulikawn veng* and *Chawlhmun veng* of Aizawl District. It comprises of 350 women tobacco users respondents belonging to the age group of 13 years and above. The respondents were mainly using tobacco water, *sahdah, khaini* and smoking while adolescents were found to be using more of *tiranga, pan-masala and sahdah* which are known as smokeless tobacco. The practice of taking tobacco both in smoking and smokeless forms is widely prevalent among Mizo women across all age groups.

It is significant to made a study in this area due to high rate of smoke and smokeless forms of tobacco use by Mizo women which has shown by the *national level survey like National Family Health Survey – III (2005-2006), Global Youth Tobacco Survey, India (2011), Global School Personnel Survey, India (GSPS), 2006 and the report of Population Based Cancer Registry on the incidences of Female Tobacco related Cancers* and the overall mortality due to tobacco use.

4.1.1 Age Group

The study has classified the age group of the respondents into three as adolescents between 13 years to 18 years, Young women between the age of 19 years and 35 years and finally the middle-aged women, 35 years and above extending upto 60 years. The laws and legislation pertaining to children like the Convention on the Rights of the Child (CRC) 2003, The Prevention of Child Labour Act 1948, and The Tobacco Control Act has defined a child *as a minor and any person below the age of 18 years.* And The COTPA, 2003 which is solely meant for prohibition of tobacco itself defines any one below the age of 18 years as a minor. Meanwhile, youth is also defined differently from place to place depending upon the context. The National Youth Policy of India 2003 define youth as all the youth of the country in the age bracket of 13 to 35 years, broadly divided into two sub-groups viz. 13-19 years and 20-35 years. The middle-aged women of the study refer to respondents who are 36 years and above. However, it comprises of 13 women respondents who are above 50 years as the use of tobacco by adult women is also much prevalent.

Table 1: Age Group

Sl.No	Age Group	Locality		Total n =350
		Rural n = 105	Urban n = 245	
1	Adolescent (13 -18)	8 (7.6)	9 (15.9)	47 (13.4)
2	Youth (18-35)	37 (35.2)	01 (41.2)	138 (39.4)
3	Middle Aged (36 and Above)	60 (57.1)	05 (42.9)	165 (47.1)
Mean Age		39.6 (16.8)	32.9 (12.9)	34.9 (14.5)

Sources: Computed Figures in Parenthesis are percentages

The perception on initiation of tobacco use is likely to be influenced by the age of an individual. The age- wise distribution of respondents between 13 years and 60 years of women tobacco users reveals the following. Sixty respondents are middle aged women from rural areas who are 36 years and above in age. Likewise, less than half the respondents from urban areas (42.9%) were from the same age group. The table has shown that in all the three age groups nearly half of the respondents (57.1 % from rural and 42.9% from urban) are middle-aged women. Following this, the majority of respondents across urban and rural areas are youth. 101 women respondents from urban communities and 37 respondents of women from rural setting are youth. Out of 350 respondents, more than one third of the respondents (35.2 % and 41.2 %) are young women. Among the adolescent girls, there are 39 urban respondents and another 8 respondents are from rural areas which is 13.4 % of the total respondents. The Table 1 shows that tobacco consumption is more prevalent among women between the age group of 13 years and 60 years both in the rural and urban communities.

Among the 138 (39.4 %) young women respondents from both rural and urban tribal communities, the distribution shows that a higher number of 101 (41.2%) are belonging to urban communities and 37 (35.2 %) respondents from rural areas. The remaining 47 respondents that is 13.4 % were below the age of 18 years (minors) and out of which 15.9% were from urban areas against 7.6% from rural areas. *The mean age of tobacco use by the respondents was 36.5 years.*

Tobacco use by women is strictly forbidden in many cultures while it is openly permitted in some communities. The study shows that the Mizo women use tobacco largely regardless of their age or geographical residence. The tradition and practice of using tobacco by the Mizo women did not have restrictions or societal disapproval. Historically, it has rooted traditionally and became a part of their lifestyle mainly started with an engagement in the agricultural field. Here, the backbone of the Mizo economy which is cultivation has contributed a lot that, the girl child started working in field and insects disturbed them in the midst of the work. So, to prevent them from mosquito bites that may cause fever and infections, the elders used to pluck tobacco leaf from nearby the sites. It was rolled immediately and offered to them as a mosquito repellent. In addition, in those days, tobacco leaves were carried from the fields and kept it ready at home as a first aid disinfectant. All the members of the family excluding children smoked openly and the use of tobacco by children within the house depended upon their choice. Using of tobacco by minors at home was not a common practice among the Mizo families. Therefore, the use of smoke and smokeless forms of tobacco already existed and was mainly confined to three types of tobacco products like smoking of local bidi i.e nicotine roll *(vaihlo zial /zozial*), smoking of water pipe tobacco *(vaibel)* and taking of tobacco instilled water *(tuibur).*

The pregnant women usually ate the ashes of rolled local bidi which was taken mainly due to having salty taste. The harmful effect of taking tobacco during pregnancy and harm to the reproductive health was not well known apparently in the past. The main reason for taking tobacco during pregnancy was largely to avoid nausea and feeling of discomfort during the early trimester of pregnancy.

The Table no 1 on the age distribution among the respondents shows that a maximum number of 165 (47.1 %) respondents were middle aged women, and among them more than half (57.1%) were women from rural areas followed by 42.9 % of urban middle aged women respondents. In fact tobacco use by Mizo women is prevalent among the middle aged women both in urban and rural communities. It is observed that majority of the respondents use as a continuation of the habit which was inculcated in their early years of life starting as young as before attaining 13 years of age.

4.1.2 Marital Status

It is important to know the marital status of the respondents in relation to tobacco use. It also reveals the nature and extension of restrictions of tobacco use by women in a particular stage of life. However, the practice is present regardless of their marital status.

Table 2: Marital Status

Sl.No	Marital Status	Locality		Total n =350
		Rural n = 105	Urban n = 245	
1	Married	74 (70.5)	130 (53.1)	204 (58.3)
2	Unmarried	18 (17.1)	97 (39.6)	115 (32.9)
3	Widow	9 (8.6)	7 (2.9)	16 (4.6)
4	Divorced	4 (3.8)	10 (4.1)	14 (4.0)
5	Remarried	0 0.0	1 (0.4)	1 (0.3)

Source: Computed **Figures in parentheses are percentages**

The Table 2 on the marital status of the respondents shows that the use of tobacco is highest among the married respondents. The rural – urban variation on tobacco use by married women shows that more than two thirds (70.5 %) of the respondents are married women belonging to rural areas which is against to 53.1% married women respondents from urban communities. Among the married women respondents, the use of tobacco is much higher in rural communities compared to urban communities and overall it has contributed more than half (58.3%) of the total respondents. While, a reversal pattern of rural-urban variation is noted on tobacco use among the unmarried women and 39.6% are respondent belonging to urban communities and less than half of the total unmarried respondents (17.1 %) are belonging to rural areas. The distribution of residents among the widow has reflected that 8.6% widow respondents' are from the rural areas against to 2.9% widow respondents from the urban communities. In all the marital classification, there is only one remarried respondents from the urban communities.

The data has shown that more than half of the respondents (58.3%) were married women. And probes during the interview revealed that husbands did not generally have restrictions and did not control the use of tobacco by their wives. Many of the married women respondents started using tobacco after getting married especially during the first trimester of pregnancy to avoid the feelings of nausea and vomiting. Further, many of the respondents who use tobacco after marriage were influenced by their spouse or other older women in the taking of tobacco. And few of the respondents reported that after quitting tobacco for more than two to three years again relapse occurred during the onset of another pregnancy. Many of the research studies on smoking and pregnancy has mentioned that smoking during pregnancy is common in many cultures due to the salty taste of cigarette ashes which is greatly presumed to be mainly due to iron deficiency and the ashes was taken as iron supplementation.

Tobacco is also widely consumed by the unmarried Mizo women. Nearly one third (32.9 %) of the unmarried women respondents belonging to urban communities use tobacco. The respondents have a strong opinion that using tobacco did not decrease their value in the society and there was no such kind of social disapproval for unmarried women using tobacco. The using of tobacco is continuing mainly due to seeking of social conformity. In many of the cultures, studies have reflected that the use of any one or the other forms of tobacco is common as an instrument or a mechanism of networking among the peers. Therefore, the underlying common social factor responsible for tobacco use by the youth often refers to peer pressure and peer influences. The unmarried respondents includes adolescent girls who more likely using smokeless tobacco like *sahdah, khaini, tiranga, pan-masala , zarda- pan* and

tobacco instilled water. Many of Mizo elderly especially from the rural areas recommend and advice pasting of tobacco water on itching skin due to worm infections. The other magical belief includes ideas that taking tobacco water decreases tooth ache pain, taking tobacco water decreases labour pain during delivering of baby or taking tobacco water gives rapid bowel motion and regulates the bowel movement. All these beliefs are a stronghold of encouragements for many of the unmarried respondents continuing using tobacco.

In addition, the manufacturing of current smokeless forms of tobacco like *pan-masala, zarda- pan and tiranga began recently.* These modern products of smokeless tobacco targeted more of children and youngsters with an attractive packet and with reasonable prices which cost Re.1 or so. Therefore, it is largely used by the younger generations including school children. The minor respondents below 18 years of age have mentioned that they began to use it as a mouth fresher which is based on the media advertisement and later became addicted to it. The popularity of the practice was also highly contributed by the easy availability of outlets within the areas, cheap price and as it was affordable for most of the consumers, socialization and peer influence shopkeeper compensation instead of one rupee change and others. Above all, there is a lack of awareness on the content of nicotine in these items and as it is a tobacco product which could be addicted.

Therefore, as shown in the table 2 on marital status of the respondents, all category of the tribal Mizo women including married and unmarried use tobacco products regardless of the minimal control of tobacco use within the family.

4.1.3 Age at Marriage

The age at marriage of the respondents is an important factor to understand the age of initiation of tobacco use by women and the physical and psychological maturity levels to enter into addiction. In India, early marriage is widely practiced and is one of the many social problems. The government of India has for long tried to prevent and prohibited early childhood marriages using different mechanisms such as law and legislations, enforcement, policies, programmes and also through voluntary efforts. This practice is well taken by the Mizo. The history of the Mizo cultural practice reflects the opinion of the public that girl child does not required much or high educational qualification. Literacy was thought to be the sole need and the highest educational qualification for Mizo girl child. The societal expectation for the girl child was looking after her younger siblings and other younger children from the neighborhood, housekeeping, and carrying water, cooking for the family, cooking and feeding the pig and other pets in the house and so on. It was observed that parents did not much interfere in their children lives including behavior as long as they did the assigned tasks.

Table 3: Age at Marriage

Sl. No	Category	Frequency	Percent
1	Below 18 years	157	44.8
2	19-25 Years	159	45.4
3	26-32 years	31	8.9
4	33-40 years	3	0.9
Total		**350**	**100**

Source: Computed

The Table 3 on the age at marriage of the respondents shows that nearly half of the respondents (44.8%) got married before reaching the age of 18 years. The perception of the society was that getting husband on or after crossing 18 years of age was devaluing of the girl status in the society. Further, the traditional Mizo family has more family members and bigger the size of the family was appreciated and it was linked to the nature of working in the field as well. Regarding marriage of daughter, it is a usual Mizo practice that the eldest daughter will start and arrangement for the marriage of other daughters will be accordingly. This means that she was also responsible for the delaying of her younger sister's marriage. It was also reported that boys might prefer marrying the younger sister instead of the elder sister and finally she would be left out. Therefore, earlier, it is a norm of practice that the daughter gets marriage before reaching certain age.

Besides the chronological age, the age at marriage has broader perspective of the girl child. It was responsible for the physical health complaint, reproductive health issues, absence of having career and further effect on parenting style. This vicious cycle reveals that drop-out rates or non- enrollment of girl child in a school was prevalent all over India including Mizoram. In addition, the respondents reveal that getting married by 18 years was solemnized in the church where the priest resided. During the past three or four decades, there was not enough number of priest resided in all the villages and three nearby villages shared one priest and the proposed spouse has to go to the place of the priest. Therefore, instead of that, many girls would like to get married before 18 years. Secondly, 45.4% were married between 19 years and 25 years, thinking to be more fertile reproductive age and is at present a common practice among the Mizo. However, it is also seen that habit of taking tobacco in this

age group is also prevalent inclusive of pregnant women. A small number of 8.9 % married between the age of 26 years and 32 years and the remaining 3 respondents were married late just before reaching 40 years. *The mean age at marriage of the women respondents is 23 years w*hich is closer to the national mean age at marriage for females, 23.5 years in the country. In connection to this, among females the mean age at marriage varied from 17.8 years (Rajasthan) to 24.0 years (Goa) in India (Population by marital status and sex: India- Census of India 2011).

In conclusion of the table 3 on the age at marriage of the respondents, the table has shown that child marriage is also prevalent among the tribal women in Mizoram and particularly it is higher among the rural respondents.

4.1.4 Educational Status

The educational status of the respondents is an important part of demographic profile. It has relationship with awareness on anti tobacco efforts, parenting, knowledge on harmful consequences of tobacco use, as well as the socioeconomic background inclusive of purchasing power for daily tobacco use. Literacy is also an important part of educational qualification. The literacy rate is an indicator to measure the development of the society. As per the Population Censes of India, 2011 the literacy rate is 74.04% and the state of Mizoram is holding 3rd position in the country with 91.06% which consisted of 93.7% male 89.4% female respectively.

Table 4: Educational Status

Sl.No	Educational Status	Locality		Total n =350
		Rural n = 105	Urban n = 245	
1	Illiterate	9 (8.6)	4 (1.6)	13 (3.7)
2	Primary school	21 (20.0)	35 (14.3)	56 (16.0)
3	Middle school	20 (19.0)	51 (20.8)	71 (20.3)
4	High school	32 (30.5)	107 (43.7)	139 (39.7)
5	Higher Secondary	16 (15.2)	20 (8.2)	36 (10.3)
6	Graduate	6 (5.7)	20 (8.2)	26 (7.4)
7	Post Graduate	1 (1.0)	8 (3.3)	9 (2.6)

Source: Computed

The educational status of the respondents as shown in Table 4 indicated that majority of the respondents had their schooling up to high school showing a positive trend increasing from 16% at primary level to 39.7 % at high school. But, the trend drastically declined as only 2.6% are engaged in higher studies and with 7.4 % having education up to the college. It also shows that only 10 % are graduate and post-graduate and as high as 76% drop out of formal education at primary, middle and high school. It is noteworthy to mention that among the middle aged women group, the respondents were encouraged to attend adult literacy programme which was held once in a week on every Sunday after scripture class in the church.

The reasons attributed for the girl not going for higher education was that the society strongly believes that just having basic education or being literate is enough for a girl child. In addition, the community was hardly having an educational institution to accommodate both boys and girls within the village. In such case,

opportunities were denied for girl child and culturally girls were assigned roles like housekeeping, cooking and looking after siblings or if necessary helping-out the family in the field. However, all these constraints were partly due to family financial conditions causing partialization among the siblings.

Another relevant factor responsible for de-motivation of girl child to continue education after completion of elementary school was increased assigned roles and responsibilities in the family as well as in the community. Besides the household chores, they were expected to participate in any kind of voluntary services occurred in the community called *hnatlang*, attending condolence services especially at nighttime for a week called *khawhar in kal* which is now minimized to three day nights counting from the day of funeral and early involvement in serious romance. The remaining of nearly 4% was illiterate that they did not enroll at all in the school. The reasons for lack of enrollment in school was that the parents did not instruct them to go to school, respondents did not ask their parents for schooling, during parents absence in field they have to take the responsibilities at doing household chores and looking after their younger siblings and sometimes they even looked after the children of their neighbors or relatives at home when the parents were away for work.

Hence, among the respondents, more than half (69%) of them had education upto middle and high school and 10% of the respondents upto higher secondary. These respondents having better educational qualifications were mainly those are brought-up in a family of priest, father as a school teacher, father as a postman in the village and only those parents who had distinguished status in the society. However, the present studies show that majority of the entire respondents have education upto certain level but still indulge in tobacco. Despite the fact, the female literacy rate of

Mizoram according to 2001 population census was 86.75 percent and showing upward trend to 89.4 percent against 65.46 percent of the national average for female literacy rate of 2011 census of India.

In other words, the use of tobacco among Mizo women is culturally rooted practice irrespective of the education standard of the person. It is seen from the table that among the total respondents except a small percentage of the respondents, the remaining are tobacco users.

4.1.5 Type of Family

Family has played an important factor including parenting and orientation on anti tobacco efforts. The availability of parent-child communication on the harmful effects of tobacco use is also an important factor. The traditional Mizo family is usually an extended family which consisted of the couple with four to five children and another one or two relative's staying with them. A slight difference is observed between the rural and urban practice where the urban family no longer has more than four children and many of the family now restricted to three children.

The type of family depending upon the size of the family that the respondents belonging to and it was classified into three types of family as nuclear, joint and extended family. The type of the family mentioned in the table no.5 shows that more than two thirds of the urban respondents (75.5%) have nuclear family and half (51.4%) of the rural respondents belong to a nuclear family. The data shows that tobacco is widely practiced in nuclear families with not much difference across rural and urban communities.

Table 5: Types of family

Sl.No	Types	Locality		Total n =350
		Rural n=105	Urban n=245	
1.	Nuclear	54 (51.4)	185 (75.5)	239 (68.3)
2.	Joint	8 (7.6)	25 (10.2)	33 (9.4)
3.	Extended	43 (41.0)	35 (14.3)	78 (22.3)

Source: Computed Figures in parentheses are percentages.

Nearly half (41.0%) of the rural respondents were from extended family and 14.3 % of urban communities were from extended families respectively. In the case of extended family system, the respondents were mainly the husband's relatives who come from other villages and staying with them to continue formal education, vocational training after drop-out of school or due to employment opportunities. The joint family system is more practiced in urban communities having 10.2% respondents against 7.6% respondents from rural communities. It was observed that the traditional joint family system is declining even among the Mizos. Among the respondents coming from either joint family or an extended family usually there were at least one or two members using tobacco. The above Table 5 indicated that more number of the respondents are having nuclear family and is also the most common type of family both in urban and rural communities.

4.2 Social Background

The social background of the respondents was inquired by exploring the religion of the respondents and the denomination followed by them. This aspect is relevant to the study because majority of the Mizo from Mizoram are Christian and

Christianity itself is existing for almost 120 years. The religions and denominations and the use of tobacco is an interesting dimension to explore. Every religion has a teaching on physical and psychological purities and campaigning for the attainment of salvation. It is belief that a person should not harm others as well as his or her own self which has included leading of impurities on her own body. While, nicotine is a substance that not only dirt but impure the physical and psychological state of an individual. Therefore, consumption and tobacco use is not approved by most religion including the Christian.

4.2.1 Religion of the Respondents

Religion is relevant with tobacco use because all the religions teach about purity of heart and hygiene /cleanliness of the body. In Mizoram, majority of the women are belonging to Christian and one hundred years back the tribal in Mizoram are converted in to Christianity.

Table 6: Religion

Sl.No	Religion	Locality		Total n =350
		Rural n= 105	Urban n= 245	
1	Christian	105 (100)	244 (99.6)	349 (99.7)
2	Hindu	0 (0.0)	1 (0.4)	1 (0.3)

Source: Computed Figures in parentheses are percentages

The Table 6 has shown the religion and denomination of the respondents. In terms of religion of the respondents only one respondent was non-Christian, who was

converted to Hindu due to marriage. Christianity is encircling around purity and self discipline.

4.2.2 Denomination of the Respondents

In Christianity, there are several denominations having one faith in Christ. Each of the denomination has their own structure and system which affected the ministry functioning. Moreover, the core of the diversion from one denomination to another is the philosophy and teaching which is structuring the life of a person. The different denomination existing in Mizoram are the Presbyterian, Roman Catholic, United Pentecostal Church, Baptist, Salvation Army, Seventh Day Adventist, Isua Krista Kohhran (IKK) and other local religious sects like Pu Chana Pawl, Kohhran Thianghlim, Thangfala pawl, Vanawia pawl and others.

In connection to the denomination of the respondents, it is observed that the Seventh Day Adventist who has continuous teaching and campaign on cleanliness has minimum respondents. The second least respondents are belonging to the Salvation Army which demanded physical cleanliness for promotion of status in church duties within the church functioning like participation in church band party, employee of the ministries and others. Thus, every denomination of Christianity emphasized on cleanliness to Godliness propagating human body as a temple of God and not to dirt and harms the temple. In fact, the data reflected that the use of tobacco is very high even among the Christian respondents and had only one respondent belonging to Hindu. But, so ever, the data has reflected that tobacco use and nicotine dependency is much prevalent and Christianity unable to control the behavior of tobacco use. In-

depth, the Christianity among the Mizo was rooted with certain disapproved behavior but exception on tobacco use was widely exercise as it is part of the culture. Hence, this practice is gradually decreasing because of two factors mainly individual's faith and health concern.

Table 7: Denomination

Sl.No	Denomination	Locality		Total n= 350
		Rural n= 105	Urban n = 245	
1	Presbyterian	56 (53.3)	146 (59.6)	202 (57.7)
2	United Pentecostal church	19 (18.1)	29 (11.8)	48 (13.7)
3	Roman Catholic	2 (1.9)	32 (13.1)	34 (9.7)
4	Baptist	8 (7.6)	10 (4.1)	18 (5.1)
5	Salvation Army	4 (3.8)	11 (4.5)	15 (4.3)
6	Local Denominations	9 (8.6)	12 (4.9)	21 (6.0)
7	Seventh day Adventist	3 (2.9)	4 (1.6)	7 (2.0)
8	Others	4 (3.8)	1 (0.4)	5 (1.4)

Source: Computed Figures in parentheses are percentages

The denominations of the respondents are shown in Table 7. The respondents are from eight denominations and more than half of all respondents (57.7%) are belonging to protestant i.e. Presbyterian and this particular denomination is currently having majority of membership within the state. It is followed by 13.7 % of the respondents from united Pentecostal church which is less in population in the state and a good number of 9.7 % of the respondents are also followers of Roman Catholic, while, 4.3% of the respondents belong to Salvation Army and a minimum of 2.3% of

the respondents are from Seventh day Adventist. Despite, majority belonging to Christianity, it does not have control on the use of tobacco.

4.3 Economic Background

To understand the economic background that may have a causal relationship with tobacco use and dependency, attempts is made to document occupation and the annual income of the respondents. The study tries to understand the nature of work of the respondents. By and large it explores the social environment of the respondents. It is also significant to have knowledge on the personal annual income of the respondents that is found to be linked with the purchasing capacity of tobacco.

4.3.1 Occupation

In connection to the age at marriage and educational status of the respondents, it is also important to know the occupation of the respondents. The other significant area includes the relationship of the type and nature of the work. In some societies, women were confined within the house and they were hardly found working in the fields, markets or else seeking employment outside the house. However, in terms of work participation the Mizo women were traditionally not less inferior to men. It is important to note the link between the occupation of the respondents, the nature of work and its relationship with tobacco use. The occupation depicted the concern for oral health and heath education in general in the area of work, the work load that induced in tobacco use including smoking and the bidirectional effects of stress and tobacco use.

The Table 8 on the occupation of the respondent shows that nearly one- third of all respondents (30.3%) are self-employed engaging in various tasks like having small grocery shops, poultry farming, pig farming, kitchen gardening and sell the vegetables, selling *second hand* clothes and transporting vegetables from their village to main bazaar of Aizawl. It also informed that they were not much aware of the health consequences of tobacco use regardless of the psycho social issues involved in using it. Their nature of work did not have a formal standardized system of operation and self regulation.

Table 8: Occupation

Sl.No	Occupational Group	Locality		Total n =350
		Rural n= 105	Urban n= 245	
1	Homemaker	42 (40.0)	59 (24.1)	101 (28.9)
2	Self Employed	41 (39.0)	65 (26.5)	106 (30.3)
3	Private employee	0 (0.0)	10 (4.1)	10 (2.9)
4	Government Employees	13 (12.4)	27 (11.0)	40 (11.4)
5	Unemployed	9 (8.6)	84 (34.3)	93 (26.6)

Source: Computed **Figures in parentheses are percentages**

Some of the respondents indicated that they were *homemaker* (28.9%) and they focused more within the house but sometimes have a kitchen garden or a small vegetable garden for the family consumption which was not far from the house. Another quarter (26.6 %) of the respondents is *unemployed* women without assigned work or regular occupation. This category includes students where interface is strongly with their peers. It also includes elderly women who are no more able to give - up their habits and practices and grandmothers unable to take-up work or duty and

no more tried to quit the use of tobacco. Hence, very small percent (11.4%) respondents were *Government employees* but having not very high educational qualification. They were primary and middle school teachers, nurses working in public health clinic (PHC) of the village and were holding clerical position in government offices. The remaining 3 % were concentrated on *private jobs* like working in marketing company, waitress in restaurants, salesperson in shops and teaching in private or religious based institutions. Overall, occupational differences were not found in using tobacco among the respondents. Except few, all are working in the unorganized sector.

4.3.2 Annual Income of the Respondents

It is relevant to know the annual income of the respondents which has reflected the amount of personal annual income which is related to the availability of money for purchasing on tobacco products.

Table 9: Annual Personal Income

Sl.No	Amount	Locality		Total n =350
		Rural n= 105	Urban n= 245	
1	No Personal Income	57 (54.3)	126 (51.4)	183 (52.3)
2	Below Rs 24000	9 (8.6)	25 (10.2)	34 (9.7)
3	Rs 24000 – 48000	26 (24.8)	41 (16.7)	67 (19.1)
4	Rs 48000 – 100000	12 (11.4)	48 (19.6)	60 (17.1)
5	Rs 100000 and Above	1 (1.0)	5 (2.0)	6 (1.7)

Source: Computed Figures in parentheses are percentages

The use of tobacco is very much prevalent among the Mizo women and it is interesting to know that more than half (52.3 %) of the respondents had no personal income but they received money from their parents to buy tobacco products. Here, the assumption is that the respondents do not have separate income and depend on the income of the family members and also the money which they have earned is calculated in the family income. Among the respondents having an annual income, a maximum of 19.1% of the respondents is having an annual income between Rs 24,001.00 and Rs 48,000.00.

This group of the respondents has a regular employment and mainly concentrated in unorganized sector. While, the remaining 17.1 % of the respondents had an annual personal income of Rs 48,001.00 but which is below Rs 100,000.00. They are engaged mainly in government sector and few of them are also entrepreneurs. In this category of income, a wide rural and urban difference is observed that 19.6 % are respondents belonging to urban communities and another 11.4 % are respondents belonging to rural areas. Another 9.7 % has an annual personal income which is below Rs 24,000.00 and calculated to be Rs 2000.00 per month. The respondents in this group mainly sell vegetables and also earned from small piggery and poultry farm. A small number of the respondents (1.7%) has a regular annual income beyond Rs. 100,001 and are government servant.

4.4 Tobacco Use Practices

Tobacco use by women is prevalent all over the world and becoming one of the preventable causes of death. Several literature and studies have shown the change in the trend of tobacco use and women are shifted from *smoke forms* of tobacco use to

smokeless forms of tobacco. Among them, smoke form of tobacco use is still higher in developed countries while is declining in the less economically developed countries. However, the use of smokeless forms of tobacco is drastically increased among women from the less developed countries.

Table 10: Tobacco Use Practices

Sl.No	Form of Tobacco	Locality				Total	
		Rural		Urban			
		Mean	S.D	Mean	S.D	Mean	S.D
1	Smoke Form	1.5 (16.2)	4.0	1.4 (8.9)	5.4	1.4 (10.4)	5.0
2	Smokeless Form	7.8 (83.8)	8.8	14.2 (91.1)	12.2	12.3 (89.6)	11.7
Daily Personal Expenditure on Tobacco		**9.2 (100)**	**9.6**	**15.6 (100)**	**13.5**	**13.7 (100)**	**12.8**

Source: Computed **Figures in parentheses are percentages**

The Table 10 on the tobacco use practices shows the rural-urban geographical variation on *smoke forms* and *smokeless forms* of tobacco use. The use of smoke forms of tobacco by women is much higher in the rural areas (16.2%) as compared to 8.9% in the urban communities. The smoke forms of tobacco used by the respondents are *cigarrete, zozial,* Bidi and pipe tobacco. While, the other smoke forms of tobacco like *cigars, cheroots, dhumti,* pipe tobacco, *chilum, hookah* which are largely used in other parts of the country are not practice by the respondents of the study. *And the mean value for using smoke forms of tobacco is 10.4*. The use of smokeless tobacco is largely prevalent in both rural and urban communities and the practice is observed to be more among urban respondents as compared to rural respondents. Majority of the respondents 89.6% are using smokeless tobacco like paan (betel quit with tobacco), paan with zarda, *sahdah,* khaini, *tuibur* and other gutkha products. The other

smokeless forms of tobacco like *mishri, snus,* Manipuri tobacco, *Mawa, gul, bajjar, gudhaku* are contemporary in other parts but not practiced.

4.4.1 Pattern of Smoke Forms of Tobacco Use

Tobacco use by women is prevalent worldwide regardless of the geographical locations, economic back ground and or educational status. It plays a significant role in maintaining the health and beyond which the reproductive health is also affected. Many research studies has highlighted that the trend of using smoke forms of tobacco by women is declining in many areas due to social unacceptability and switching over to modernization , Societal approval seeking behaviour.

However, smoking practice by women is still common in the north, east and some states of northeast India. In connection to this, smoking by women of Mizoram is largely practiced and there is no societal disapproval of the behaviour.

Table 11: Smoke Forms of Tobacco Use

Sl.No	Types	Locality				Total	
		Rural		Urban			
		Mean	S.D	Mean	S.D	Mean	S.D
	Smoke Form	**1.5 (16.2)**	**4.0**	**1.4 (8.9)**	**5.4**	**1.4 (10.4)**	**5.0**
1	Zozial	0.4 (4.4)	2.2	1.0 (6.1)	4.2	0.8 (5.8)	3.7
2	Cigarette	1.1 (11.7)	3.2	0.4 (2.7)	3.5	0.6 (4.6)	3.4
3	Bidi	0 (0.0)	0	0.0 (0.0)	0.1	0.0 (0.0)	0.1
4	Pipe Tobacco	0.0 (0.0)	0.0	0 (0.0)	0.0	0.0 (0.0)	0.0

Source: Computed **Figures in parentheses are percentages**

The smoke form of tobacco use by the women of the study is shown in the above table and the mean value is 10.4. The different types of smoke form of tobacco use by the respondents are *zozial*, cigarette, bidi and pipe tobacco. It shows that the mean value of smoking of *zozial* is greater among the urban respondents (6.1) against 4.4 of the rural respondents. There is a wide difference between the rural and urban respondents on cigarette smoking which has a mean value of 11.7 and 2.7 respectively. Here, the traditional system of rolled tobacco i.e *zozial* is cheaper in price but highly smoked by the rural respondents reported has less personal annual income.

It is found that the respondents concentrated mainly on two types of smoke form of tobacco such as *zozial* and cigarette and this is observed to be an accelerating factor of smoking rate among the Mizo women.

4.4.2 Pattern of Smokeless Forms of Tobacco Use

It is evident that women using tobacco everywhere widely use it in smokeless form. The patterns of using smokeless tobacco shows the respondents belonging to urban communities is much higher (91.1%) as compare to 83.8% of the respondents from the rural communities.

Table 12: Smokeless Forms of Tobacco Use

Sl.No	Types	Locality				Total	
		Rural		Urban			
		Mean	S.D	Mean	S.D	Mean	S.D
Sl.No	**Smokeless Form**	**7.8 (83.8)**	**8.8**	**14.2 (91.1)**	**12.2**	**12.3 (89.6)**	**11.7**
1.	Paan Masala	5.5 (59.6)	7.4	6.8 (43.7)	8.7	6.4 (46.9)	8.3
2.	Paan/Kuhva	0.6 (6.2)	1.8	2.2 (14.1)	5.3	1.7 (12.5)	4.6
3.	Sahdah	1.0 (10.6)	1.6	1.5 (9.7)	3.2	1.4 (9.9)	2.8
4.	Zarda Paan	0.4 (3.8)	1.0	1.7 (11.2)	3.6	1.3 (9.7)	3.1
5.	Tuibur	0.1 (1.5)	1.1	0.9 (5.8)	2.8	0.7 (4.9)	2.4
6.	Tiranga	0.2 (2.1)	2.0	0.8 (5.1)	2.6	0.6 (4.5)	2.4
7.	Khaini	0.0 (0.0)	0.0	0.2 (1.4)	1.0	0.2 (1.1)	0.8
Daily Personal Expenditure on Tobacco		**9.2 (100)**	**9.6**	**15.6 (100)**	**13.5**	**13.7 (100)**	**12.8**

Source: Computed **Figures in parentheses are percentages**

The study has attempted the use of chewing and pasting forms of smokeless tobacco products by the respondents. Among the seven types of smokeless tobacco use by the respondents, *pan-masala* is largely taken both by the urban (59.6%) and rural respondents (43.7%). It is followed by chewing of *betel quid with tobacco* and the respondents belonging to urban areas has chewed betel quid more than twice 14.1 % to that of rural respondents 6.2%. Thirdly, pasting of sahdah in the gum between the teeth and the lips is also a common practice in rural as well as urban communities. Moreover, taking of *paan with zarda (11.2%), tuibur (5.8%), tiranga (5.1%) and khaini (1.4%)* are found to be little heavier practice by the respondents belonging to urban communities in comparison to that of the respondents from rural areas. It is found that the Mizo tribal women use both smoke and smokeless forms of tobacco.

4.5 Tobacco Use Dependency

Johnson (2003) suggested dividing addiction into three types: psychological, Physical, and what he termed addictive character. Others have claimed that neurobiological factors alone explain all addiction, that addiction is a 'chronic relapsing disease of the brain'. Some have said that the very fact of vulnerability to relapse in addicts implies that addiction must be caused by long-lasting changes in brain function (Kalivas & Volkow, 2005). However, relapse to old symptomatology is also a well-known property of human psychology, due to the lasting nature of character and emotional conflict over a lifetime. Robins showed that Vietnam veterans were able to stop their extensive use of heroin upon return to the USA despite having become physically dependent and presumably having developed the brain changes known to occur with prolonged drug use. In contrast, heroin addicts from the same time who remained in the USA could not stop use after the same detoxification treatment. Otherwise, the veterans had the form of 'addiction' that is described by physical dependency: they had (only) a physical addiction (physical dependency) that was resolvable with detoxification. This is the same use of the term 'addiction' that describes many cigarette smokers and others whose use is not determined by psychological factors but rather by physiologically-induced cravings (due to withdrawal) and habit. In contrast, the addicts who stayed at home were using heroin as a psychological symptom as described above, a kind of addiction that cannot be resolved by detoxification.

The table 13 on tobacco dependence is measures based on psychological dependency and psychological addiction, craving for tobacco, physical dependency and physical addiction.

Table 13: Tobacco Dependence

Sl.No	Tobacco Dependence	Locality				Total n =350	
		Rural n = 105		Urban n = 245			
		Mean	S.D	Mean	S.D	Mean	S.D
1	Tobacco leads to psychological dependency	2	0.9	3	1.1	2.5	1.1
2	Psychologically addicted to tobacco	2	1.0	3	1.1	2.4	1.1
3	Craving for tobacco	2	0.8	2	0.9	2.3	0.8
4	Tobacco leads to physical dependency	2	0.9	2	0.9	2.1	0.9
5	Physically addicted to tobacco	2	1.0	2	0.9	1.8	0.9
Tobacco Dependence		**2**	**0.8**	**2**	**0.8**	**2.2**	**0.8**

Source: Computed **Figures in parentheses are percentages**

The dependency on tobacco is developing after prolonged use. It means when an individual cannot stay without using it. However the level and degree of dependence is varying and the study has revealed that the respondents are having either physical dependency or psychological dependency or both. The Table 13 on tobacco dependence shows that a mean value of 3 is label for the psychological dependency and psychological addiction while a mean value of 2 for physical craving, physical dependency and addiction among the respondents belonging to urban areas. On the other hand the same attempts have been made among the respondents from the rural communities and the mean value for physical and psychological craving, dependency and addiction is 2. It shows that the use of tobacco by the tribal Mizo women is closely related to physical and psychological addition. In other words, the use of tobacco by the tribal Mizo women is at the psychological level and due to the physical dependency.

4.5.1 Physically Addicted to Tobacco and Psychologically Addicted to Tobacco

Addicted users of nicotine become tolerant to the drug; that is, despite experiencing initial unpleasant side effects such as tremulousness, dizziness, and nausea, such users increase their dosage until it levels off at one that fulfils their need. Therefore, the users seek nicotine continually. Some users of smokeless tobacco use it even while sleeping. The physical dependence associated with nicotine induces withdrawal symptoms when addicted users abruptly discontinue its use. So, the ex-users often experience craving for nicotine and many become users again.

Table 14: Relationship between Physical and Psychological Addiction of Tobacco Use

Sl.No	Psychologically addicted to tobacco	Physically addicted to tobacco				
		Never	**Sometimes**	**Mostly**	**Always**	**Total**
1	Never	96 (65.3)	7 (5.2)	0 (0.0)	0 (0.0)	103 (29.4)
2	Sometimes	13 (8.8)	60 (44.8)	4 (9.1)	1 (4.0)	78 (22.3)
3	Mostly	25 (17.0)	41 (30.6)	34 (77.3)	1 (4.0)	101 (28.9)
3	Always	13 (8.8)	26 (19.4)	6 (13.6)	23 (92.0)	68 (19.4)
Total		**147 (100)**	**134 (100)**	**44 (100)**	**25 (100)**	**350 (100)**

Source: Computed **Figures in parentheses are percentages**

The above Table 14 on the relationship between physical and psychological addiction to tobacco use has shown that there is a positive relationship between physical and psychological dependency of tobacco use. Spearman correlation (.5%) is positive and significant at 1% level. It also shows that most of the respondents who are feeling always physically addicted to tobacco feels that they are always psychologically addicted to tobacco (92%). Majority of the respondents who feel physically addicted to tobacco also feel that they are psychologically addicted to tobacco (77%). Similarly, the respondents those who sometimes feel physically

addicted to tobacco also sometimes feel that they are psychologically addicted to tobacco (45%). On the other hand, most of the respondents who are never physically addicted to tobacco are also never had a feeling of psychologically addiction to tobacco (65%). Hence, the physical addition goes along with the psychological craving and addiction and also who had never experience a physically addiction to tobacco also never experience the psychological demands.

4.5.2 Co-relationship among Socio Economic Characteristics, Stress, Tobacco Use and Tobacco Dependence: Pearson's R.

The Co-relationship between Socio economic characteristics, stress, and tobacco use and tobacco dependence is test with Pearson's R. It is found that tobacco dependence is significantly related of age group, education and annual personal income of the respondents. Firstly, higher the age group, greater is the expenditure on smokeless forms of tobacco and also with the frequency of using smoke and smokeless forms of tobacco. Secondly, higher the personnel income higher the daily expenditure on smokeless (SL) forms of tobacco and frequency of using tobacco. Thirdly, smoke forms of tobacco are more in rural communities where as more of smokeless tobacco (SL) in urban communities.

The co- relationship of tobacco dependence and psychosocial factors have shown that tobacco dependence (TD) is positively related to daily personnel expenditure on smoke forms and smokeless forms of tobacco of use and with the frequency of using it. Secondly, stress is not related to daily personal expenditure on tobacco or the frequency of tobacco use but positively related to tobacco dependence. However, tobacco dependence is positively related to age group and personal income.

Table 15: Socio Economic Characteristics, Stress, Tobacco Use and Tobacco Dependence: Pearson's R

Variable	Daily Personal Expenditure on			Frequency of Use Of			*Tobacco Dependence*
	Smoke Form	**Smokeless Form**	**Tobacco Use**	**Smoke Form**	**Smokeless Form**	**Tobacco Use**	
Socio Economic							
Age Group	0.08	0.24**	0.25**	0.19**	0.28**	0.35**	0.18**
Education Status	0.08	0.17**	0.18**	-0.12*	-0.02	-0.07	0.03
Annual Personal Income	0.07	0.26**	0.27**	0.07	0.23**	0.26**	0.18**
Psycho Social							
Stress	0.03	-0.02	0.00	0.03	0.05	0.06	0.43**
Tobacco Dependence	0.23**	0.35**	0.41**	0.20**	0.34**	0.41**	1
Social Disapproval of Tobacco Use	-0.05	0.03	0.01	-0.06	-0.10*	0.08	0.04
Daily Personal Expenditure							
Smoke Form	1	0.02	0.41**	0.74**	-0.10	0.20**	0.23**
Smokeless Form	0.02	1	0.92**	-0.10	0.52**	0.48**	0.35**
Tobacco	0.41**	0.92**	1	0.20**	0.44**	0.51**	0.41**
Frequency of Use of							
Smoke Form	0.74**	-0.10	0.20**	1	-0.16	0.25**	0.20**
Smokeless Form	-0.10	0.52**	0.44**	-0.16**	1	0.92**	0.34**
Tobacco Use	0.20**	0.48**	0.51**	0.25**	0.92**	1	0.41*

Source: Computed * P<0.05 ** P< 0.01

Hence, it is found that the *expenditure on tobacco in urban areas as compared to rural areas that Rs 16.00 per day in urban whereas Rs 9.00 per day in rural communities. It shows that higher the personal income, higher the expenditure on tobacco.* And daily expenditure on smokeless forms of tobacco is greater among urban women respondents Rs 14.00 per day as compared to rural women respondents Rs.8.00 per day. The pattern of daily personal expenditure on smokeless tobacco in rural and urban communities is on gutkha products, local paan *(kuhva)* and *sahdah*. While, it is also observed that there is no differences on daily expenditure on smoke tobacco between urban and rural women respondents.

Therefore, the table has shown that the mean expenditure on tobacco by the respondents is Rs 12.50 paisa per day and the daily expenditure on tobacco is higher among the urban respondents than that of the rural respondents. Also, the daily expenditure on smokeless tobacco is higher among the urban women respondents as compared to the rural women respondents whereas, the daily expenditure on smoke tobacco is greater among the rural women respondents as compared to the urban women respondents.

In conclusion, the tribal Mizo women are using tobacco in both smoke form and smokeless form. Smokeless form of tobacco is much more prevalent in urban communities and smoking is largely practiced by the women residing in rural areas.

4.6 Perception on Tobacco Use

The study attempts to explore the perception of the respondents on tobacco use and its relationship to well-being of an individual. The semi-structured interview schedule on the perception on tobacco use consisted of the respondent general feeling, feeling of anxiety and anxious, developing of hopelessness, discouragement and sadness and a feeling of stress and strain which disturbed them due to tobacco use. The four items investigated documents base on the experiences which the respondents come across and are perceived by them to be due to tobacco use.

4.6.1 General feeling

Tobacco use, dependency and nicotine addiction is not less than addiction of substances, drugs or alcohol. It does reflect the psychological state and social

situations or positions of an individual. The general well-being affecting normal functioning of the respondents was assessed. It is measured by the four point scales as always having a good feeling, mostly felling good, sometimes and never has a good feeling at all due to tobacco use.

Table 16: Feeling on Tobacco Use

Sl.No	Feel good	Frequency	Percent
1	Always	33	9.4
2	Mostly	261	74.6
3	Sometimes	30	8.6
4	Never	26	7.4
Total		**350**	**100.0**

Source: Computed

The Table 16 on the feeling of the respondents shows that more than two thirds (74.6%) of the respondents perceived that they *feel good and fine* most of the time. They reported that some of the uncomfortable psychological states which they come across happened not due to their using of tobacco but because of other unfortunate incidents that occur within the family. On the other hand, 26 respondents (7.4%) of the same study reported they were *unhappy and never feel good* at all the given times and this group of the respondents assumed it to be *partly connected with their continuous use of tobacco.* It is supported by their feeling difficulties in normal functioning and a *feeling of incompleteness without the use of tobacco*. The direct cause and effects of tobacco use by the respondent is not much except for physical health complaints. Contrary to this, 9.4 % of the respondents are *always feeling good* and similar to that of non users of tobacco and the psychological dependency and addiction of tobacco is not reported. While, the remaining 8.6 % have a fluctuation of psychological states and showing that they are not always having good feeling. So,

majority of the respondents' were felling good in general for most of the time and the relationship between tobacco use and individual psychological states are not observed.

4.6.2 Anxiety

While understanding the psychological state of the person using tobacco, anxiousness is another relevant variable. It may caused by several unconditional psychological situations and habitual use of tobacco, always using tobacco and even rarely using of tobacco that is likely to induce anxiousness in the psychological states of a mind. This feeling of anxiousness may also reversely lead to nicotine dependency.

Table 17: Anxiety

Sl. No	Categories	Frequency	Percent
1	Always	6	1.7
2	Mostly	15	4.3
3	Sometimes	150	42.9
4	Never	179	51.1
Total		**350**	**100.0**

Source: Computed

The Table 17 on the felling of anxiousness shows the exploration of an anxiety level of an individual or and the feeling of anxiousness that arises especially at late night due to tobacco use. The data shows that half of the respondents (51.1%) did not experience anxiety at all due to tobacco use. Contrary to this, nearly half (42.9%) of the respondents had noticed that they were sometimes disturbed by anxiety which they knew was induced by tobacco use. Although they frequently confronted with the

similar situation only few of the respondents (4.3%) noticed that they mostly feel anxious and nervous and the remaining 6 respondents had confirmed that they are always anxious because of their tobacco use.

4.6.3 Sadness

The human nature itself is complex and most often we feel sad due to one or the other reason. There are many factors for feeling sad, discouraged and being hopeless in life. It may be caused due to different life issues and challenges including bereavement, trauma, crisis, chronological health problems, financial constrain, relationship problem and extended up to substance abuse and drug addiction. One of the common reasons for feeling sad, discouraged or hopeless in life is caused by nicotine addiction. Due to nicotine addiction an individual becomes hopeless in life and it is also known to cause depression in some of extreme cases. It covers the emotional condition of uncertainty about the future, ranging from worry, over or less insecurity, irritability more than usual, worrying on minor matters and apprehension to overpowering dread that is beyond control. Rarely are stressors of our lives realized and some of the people lack coping skills to overcome the situations. In general, it also reflected the inadequate skills of stress management.

Table 18: Sadness

Sl.No	Sad/Discourage/Hopeless	Frequency	Percent
1	Always	11	3.1
2	Mostly	23	6.6
3	Sometimes	228	65.1
4	Never	88	25.1
Total		**350**	**100.0**

Source: Computed

The Table 18 on sadness, discouragement and hopelessness in life and sadness due to prolonged use of tobacco shows that more than half of the respondents (65.1%) have encountered different types of sadness in life. Then they also felt discouraged in life again causing lack and loss of interest, de-motivated, loss of hope for the future. Besides, they also experience sadness without knowing the cause or reason but is never connected it with tobacco use.

The feeling of hopelessness is a dangerous situation and in many of extreme cases it may lead to suicidal attempt. It was observed that the respondents from urban communities have recognized more of the situation as compared to respondents from rural areas. On the other hand, 25.1% of the respondents reported that they so far had never experienced certain discouragement or sadness in life. The remaining 23 respondents (9.7%) have agreed that their regular use of tobacco was responsible for always or mostly encountering of sadness, discouragement or hopelessness in lives. The respondents were tremendously disturbed and affected by either of these in one or the other way which encircled their lives. Therefore, the above table clearly shows that more than two thirds (74.8%) of the respondents had developed varying degrees of sadness which were perceived by them due to their tobacco use.

4.6.4 Stress and Strain

The term strain and stress are common psychological conditions. It is often said that adolescence is a period of storm and stress mainly due to instability of psychological situation. However, it has affected all the population as well and the stressors are also certainly different from person to person who have undergone it.

The stress which the respondents had experienced was partly perceived should be related to tobacco use. The semi-structured interview schedule on assessment of the stress experienced by the respondents has included whether the respondent is under strain condition which is lead by pressures, directly response to it and could not control the situations.

Table 19: Stress and Strain

Sl.No	Stress behavior	Locality				Total n =349	
		Rural n = 105		Urban n = 245			
		Mean	S.D	Mean	S.D	Mean	S.D
1	Been under strain	2	0.5	2	0.7	2	0.6
2	Felt sad, discourage or hopeless in life	2	0.6	2	0.7	2	0.7
3	Been concerned or worried about your health	2	0.6	2	0.8	2	0.8
4	Felt tired, worn out, used up or exhausted	2	0.5	2	0.7	2	0.7
5	Been bother by any illness, bodily disorder, pains or fears	2	0.7	2	0.7	2	0.7
6	Feeling tense on any issue recently	1	0.6	2	0.8	1	0.7
7	Reasons to wonder if you were losing your mind, losing control over act, talk, think, feel	2	0.7	1	0.8	1	0.8
Stress		**2**	**0.4**	**2**	**0.6**	**2**	**0.6**

Source: Computed

The Table 19 on stress and strain shows that the mean value of stress and strain is 2 and is same for both the rural and urban respondents. It also explores the worries develop due to their health condition which is assumed to be nicotine effects. This means that which are not yet likely to present at the earlier stage of tobacco use and later which the respondents presumed and linked with tobacco use. The Table 19 shows that the mean value is 2 for both the rural and urban respondents. The other item is on feeling of tired easily and exhausted soon as compared to the non-users. This is experienced by all the respondents and the mean value is 2 .It also attempted to examine the bodily pains and fears produced by taking of tobacco. It has a mean value of 2 for all the respondents but it is important to note that the bodily pains could also cause by other physical activities also. The fears which sometimes encountered by them are thought to be occurring due to other factors and not by use of tobacco alone. The other relevant aspect of this examination is the association between tobacco use and *feeling tense* easily. Here, a difference is noticed between the rural and urban respondents. The respondents belonging to rural areas are less in agreement of nicotine dependency provoking feeling of tension. Adversely, the experience of blank mind, over act and over talk, fantasying and spending though on imagination world is more among the respondents of the rural areas as compared to the respondents of the urban areas.

It could be concluded that tobacco use and experience of stress and strain is associated and it is more or less significant among the rural and urban tribal Mizo women.

4.6.5 Frequency of Tobacco Use

It is also relevant to know the extent of frequency of tobacco use by the respondents which have an implication on nicotine dependency ranging from *rare user* to a respondent who is *always and continuously using* tobacco.

The Table 20 on the frequency of tobacco use by the respondents shows that more than half (51.4%) of the respondents were *frequent users of tobacco*. *Frequent user means a respondent who is using tobacco between 5 times and 8 times per day.*

Table 20: Frequency of Tobacco Use

Sl.No	Use	Frequency	Percent
1	Always	43	12.3
2	Frequently	180	51.4
3	Occasionally	57	16.3
4	Rarely	70	20.0
Total		**350**	**100**

Source: Computed

This category of users are *dual users including smoke and smokeless forms* such as *sahdah, khaini*, tobacco instilled water, smoking, betel quit with tobacco, *zarda paan* and others. The respondent's regularly *using tobacco twice or trice times a week is called rare user*. Out of the total respondent, 20 % are the rare users who are using tobacco as compensation to being feeling occupied out of their boredom of loneliness and usually happen when mingled and socialization with tobacco users. Therefore, the peer pressure, seeking for conformity to groups, social approval, and tobacco as a mechanism of networking in social gatherings are also relevant. The other group of tobacco user having 16.3 % respondents is the *occasional user*. The respondents reveals that tobacco was used based on the availability in the nearby

surroundings as well based on their getting of opportunity of using tobacco. However, the most dangerous and crucial group of tobacco user having 12.3% respondents has fall under the category of *always and continuous tobacco user (Regular users)*. The respondents use tobacco in any form and with any types beyond ten times a day. They reported that they continuously used unless they were in a formal functions, meetings or else during the sleep.

In other words, the frequency of tobacco use among the tribal Mizo women has shown that half of the respondents are using tobacco frequently which is between 5times and 8times per day. This includes the use of smoke forms of tobacco, smokeless forms of tobacco and the dual users. And 127 respondents out of 350 respondents are occasional users and rare users of tobacco products. While, the remaining 43 (12.3%) respondents are a regular user taking tobacco continuously that is more than 8 times per day.

4.7 Determinants of Tobacco Use

Tobacco, alcohol, and illicit drug use are a public health problem in developed and in developing countries. It is observed in some populations' that tobacco and alcohol remain commonly used and illicit drug consumption is still frequent in adolescent. Most people begin smoking at adolescence. The associations of family environment and individual factors with tobacco use, alcohol and illicit drug use in adolescents was studied by Bruno Challier, Nearkasen Chau, Rosemay Prdine, Marie Choquet and Bernard Legras in 1999. To assess the roles, epidemiological cross-sectional study was conducted among 3294 from 2 middle and 2 high school

adolescents from the urban area of north-eastern France. Out of which, 2396 respondents or 72.7% agreed to participate and 13.0% refused to participate and another 14.3% could not participate because they were when the study was conducted and found that there was a strong association between tobacco, alcohol, and illicit drug use. In addition, the prevalence of alcohol use and illicit drug use were respectively 7 and 10 times higher in smokers than in non-smokers.

On the whole, the potential risk factors for tobacco, alcohol, and illicit drug use were age, psychosomatic status and psychotropic drug consumption, boring family atmosphere, not living with both father and mother, and health perception. Mother being a housewife was a protective factor.

4.7.1 Social Factors

The social factors which determined tobacco use by the respondents is assessed using 14 items such as the social environment like peer taking tobacco, experimentation, easy availability of tobacco in the environment, enhancement of social interaction and social network. It enquires tobacco use within the house like use of tobacco by siblings, use of tobacco by parents, lack of parent-child communication on tobacco and absence of awareness on harmful consequences of tobacco. At personal level, the social factors that responsible for tobacco use includes personal involvement in preparation of tobacco water, personal involvement in preparation of pipe tobacco, personal involvement in preparation and selling of *zozial* and cigarettes. In addition it also explores how tobacco use is initiated to the child by receiving compliments from the shopkeepers as well as how media and advertisement

has influenced them. These attempts of enquiries has made based on the culture and traditions of the respondents.

The Table 21 shows the social determinants that are responsible for respondents taking tobacco. The social factors are assessed through 14 items and the mean for those reason ranges from a maximum of 3.1 to a minimum of 2.2 as shown in the table, these reasons are more or less similar for both rural and urban respondents and not much difference is found.

Table 21: Social Determinants

Sl.No	Factor	Locality				Total n =350	
		Rural n = 105		Urban n = 245			
		Mean	S.D	Mean	S.D	Mean	S.D
1	Peers taking tobacco	3.0	0.6	3	0.7	3	0.7
2	Easy availability of tobacco in the environments	2.8	0.5	3	0.7	3	0.7
3	Experimentation	2.9	0.5	3	0.6	3	0.6
4	Enhancing social interaction	2.8	0.5	3	0.8	3	0.7
5	Due to siblings using tobacco at home	2.7	0.5	3	0.6	3	0.6
6	Due to parents using tobacco at home	2.8	0.6	3	0.7	3	0.7
7	Lack of parental communication and control	2.8	0.6	2	0.6	3	0.6
8	Absence of awareness on harmful consequences of tobacco	2.9	0.6	2	0.6	3	0.6
9	Personal involvement in preparation of tuibur	2.8	0.6	2	0.7	3	0.7
10	Personal involvement in preparation of pipe tobacco	2.8	0.6	2	0.7	2	0.7
11	Personal involvement in preparation of zozial	2.8	0.6	2	0.7	2	0.7
12	Personal involvement in selling of zozial and cigarettes	2.8	0.6	2	0.6	2	0.6
13	Receiving compliments from shopkeepers	2.3	0.5	2	0.6	2	0.6
14	Media and advertisement	2.3	0.5	2	0.6	2	0.6

Source: Computed

Among the reasons given by the respondents, *peer taking tobacco* is the greatest temptation to use tobacco both by the respondents belonging in the urban and rural communities. This is followed by the *easy accessibility of tobacco* in the surrounding environment. This reflected that the mechanism of prohibition of selling of tobacco to minor needs much more attention.

The other factors includes experimentation of tobacco use where the respondent's had develop curiosity to experience on how an individual is physically and psychologically act while using tobacco, the respondents started using it as the group members are using and offer to them. Initially, it is used to enhancement of social interaction. The study has also found that the use of tobacco by both the parent, either of the parents and siblings at home is also responsible for the respondent's continuation of tobacco use. In this case, the availability of tobacco products within the house, limited exercise of control and lack of rigid disapproval of tobacco use by parents are the responsible factors.

While, on the other hand, the respondents are from different economic background pursuing different nature of work. This includes the personal involvement in the preparation and selling of tobacco products and is a valid determining factor for the respondents tobacco use. In addition to this, another common reason for using tobacco especially by the minor and youngsters is that receiving compliments from the shop keepers such as giving of *pan-masala or tiranga* instead of Re 1 or Rs 2 change. These newly introduced sachet of tobacco products are commercially meant to attract the minor and is less expensive which is affordable by them with their pocket money. The other relevant issue of tobacco products gaining popularity is the media and advertisement. Further, advertisements of the new tobacco products

targeted the minor which has influenced them strongly and revealing the weaknesses of the value system. It is partly important to notice that there is only little parent – child communication on inculcation of anti-tobacco attitudes and lack of orientation on the harmful health consequences of tobacco use. Many of the respondents has justify that they did not receive communication or teaching from their parents not to indulge in tobacco.

Further, several studies has shown that many of the licit and illicit drug users continue the use in adulthood, and the consequences could affect continuity while participating in work and involving in family roles, favour delinquent activities, self-reported health, and psychological symptoms. Among the people having used alcohol and/or marijuana during the last year, adolescents are more at risk of dependence than any other age group. Adolescence is an exposed life period due to misunderstood physical and social environment and to life difficulties. Prevention is important for adolescents, particularly because of lack of employment or school dropout in many countries and Hammarstrom underlined that unemployment is a risk indicator or increasing alcohol, tobacco, and illicit drug uses as well as for deteriorated health behaviour.

The study has reflected that among the listed social determinants of tobacco use the peer taking tobacco, the easy availability either to buy from nearby shops or receiving offers, attempt to experimentation, enhancement of social interaction and use by family members either of parents or their siblings and availability at home are found to have greater influence for initiation of tobacco use than those other social factors like personal involvement in preparation and selling of tobacco products, receiving compliments from shop keeper and influence of media.

4.7.2 Psychological Factors

The psychological reasons that proved the use of tobacco among the respondents are mouth refreshment and cleaner so as to avoid foul smell, coping mechanism from stress, to relieve from toothache, to avoid nausea mainly on the onset of pregnancy, to escape from boredom means feeling of general boredom and taking tobacco for *time pass*, to occupy the respondents during leisure time and finally to make them keep awake at late night or to avoid sleeping especially at night when they are engaged to work. The psychological causes leading to the use of tobacco by the rural and urban respondents are similar.

Table 22: Psychological Determinants

Sl.No	Factor	Locality				Total n =350	
		Rural n = 105		Urban n = 245			
		Mean	S.D	Mean	S.D	Mean	S.D
1	Mouth refreshment and cleaner	2.6	0.6	2.7	0.7	2.7	0.7
2	Coping mechanism for stress	2.4	0.7	2.6	0.8	2.5	0.7
3	Relief from toothache	2.5	0.7	2.4	0.7	2.4	0.7
4	To avoid nausea	2.4	0.7	2.3	0.7	2.3	0.7
5	Boredom/time pass	2.0	0.3	2.4	0.7	2.3	0.6
6	To avoid sleeping at late night	2.2	0.5	2.2	0.6	2.2	0.6

Source: Computed

The psychological factors which determined the use of tobacco by women is shown in Table 22. It is observed that the traditional beliefs are still strong among the respondents. Majority of the respondents take tobacco products both in smoke forms and smokeless forms as a *mouth refreshment* .The mean for urban is 2.7 and 2.6 for rural respondents. The respondents usually has taken the tobacco products soon after meal, taking food especially those which are highly flavour like pork, oily and spicy

foods, garlic, sweets and foods which are very sour and hot. Once it has been taken, the respondents assumed that the natural taste and the condition of the tongue have returned back to normal. So, it is use as mouth refreshment to regain the normal smell of the mouth. Secondly, it is also use as mouth cleaner to avoid the foul smell and odour caused by food. Some of the respondents reported that they had dental problems and the others did not brush their teeth regularly which also induce unhygienic smell. Therefore, to get out of those situations, the adult respondent usually has taken *tuibur, paan and paan with zarda* and smoke cigarettes or *zozial* and the minor respondents used *gutkha* products.

In connection to this, the respondents both from the rural and urban communities have highly used tobacco products as a coping mechanism for coping from stress. The respondents have come across many stressors, big and small which they cannot handle efficiently. In such case, the respondents started responding to the situation by taking tobacco. Here, taking of tobacco products in a huge quantity or continuously taking it and function as a way of coping mechanism is assumed to be due to nicotine content in the tobacco products and is likely utilized as a stimulant.

Every culture is having its own practices and many of these clashes with the scientific knowledge. The tradition is passed on from generation to generation and some people are overwhelmed by modernization and advancement. The respondents use tobacco water to help get relief from toothache. The mean value of using tobacco water for this purpose is 2.5 among the rural respondents and 2.4 among the urban respondents. The respondents largely accepted that most of the toothache is general where they need not consult the dentist and taking of tobacco water is sufficient to relieve the conditions. In the case of children, the tobacco water is pasted on a piece

of linen or cotton ball and put on aching teeth. It is also further important to note that tobacco water is also put on the skin rash due to insects' bites. The assumption is that the nicotine content of the tobacco water kills germs however; in case of toothache tobacco water relieves the pain but not cure.

The other psychological aspects of using tobacco products by the respondents are to *avoid nausea*. This reflects that tobacco use is related practiced during pregnancy and it is more or less similar among the urban and rural respondents and the mean value is 2.3 and 2.4 respectively. Without having insight of the harmful consequences on health of a pregnant mother and her fetus, tobacco is consumed by the respondents even during pregnancy. Further information in this area reflected that a pregnant mother is usually smoking and also ate the ashes of smokes.

Many of the respondents are using tobacco due to *being bored*, without having focus and constructive thoughts. It induces the temptation when they are alone and the mean value for using tobacco as *time pass* is 2.4 which is higher in urban communities as compared to rural areas which is 2.0. At the same time, use of tobacco in a group or while with friend is more likely to be popular among the rural respondents as compared to the urban respondents. Further, some of the respondents have reported that they sometimes feel bored using tobacco but inspite of the fact they are still using it which is related with the development of psychological dependency.

Apart from the above factors, the other common reason given by the respondents is that using of tobacco at late night helps them to remain awake and overcome the feeling of sleepiness. There are many personal factors involving which made the respondents not feeling sleepy at nights. Besides, the Mizo society has a practice of going and staying overnight to condolence the family on the first night

when there is a death. The gatherers are not permitted to sleep or look sleepy. Therefore, to remain awake at late night the respondents take tobacco. Likewise, when there is a patient in a critical condition, relatives, friends, neighbours and well wishers are gathered together nearby the patient and even stay overnight as necessary.

In this regard, it is assumed that the nicotine contents of tobacco makes the person alert. So, the table on the psychological determinants of tobacco use shows the presence of psychological factors apart from the social determinants in taking tobacco.

4.8 Health and Tobacco Use

The rise in tobacco use in the context of recent epidemiological transition from communicable to non-communicable eases may pose a serious challenge on health care systems and force difficult decisions about the allocation of scarce resources. This will cause new morbidity patterns of coronary artery diseases cancers (particularly lung cancer) and chronic obstructive lung diseases, which is the major result of smoking in adults. Many studies confirm that 90 % of smokers start before attainment of the age of 18 years. The tobacco industry uses nearly 1.6 million dollar in all major marketing countries to hook these risk. The factors for initiating smoking include peer approval, low socio-economic status, poor academic achievement, and poor self-image, and susceptibility to influence of others and advertising images project smoking as pervasive and glamorous.

Tobacco consumers also encounter major oral health problems like toothache, loss of teeth, color of tooth, etc. Incidences of tuberculosis (TB) and lung cancers

have been strongly proved to their correlation with the history of smoking habits of their patients. Occurrence of other cancers like mouth, oesophagus and stomach cancers are more among tobacco consumers.

4.8.1 Perception on Minor Health Complaints

It is interesting to observe the perception of minor health complaints that could occur due to tobacco use. The respondents both from the rural and urban communities more or less perceived that skin problems (96.6%) mainly pimples, acne, skin rashes are highly accompanied by using of tobacco. Some of the respondents reported that they developed pimples after taking smokeless tobacco like *sahdah* and gutkha products. According to the respondents, the perception on the minor health complaints are headache (96.3%), stomach pain (96%), acute ulcer (95.7%), physical weakness (95.7%), cough (94.3%), tiredness (94.6%) , body pain and aching (94. 3%) and constipation (93.7%). The respondents had strongly perceived the above complaints could happen by tobacco use. In addition, the respondents were given opportunities to rank one or more minor physical health complaints that are associated with tobacco use and no great difference is found between the urban and rural respondents.

Besides the respondent's perception on minor physical health complaints, the severity of occurrence of these complaints is also assessed and shown in Table 24. Many of the respondents are severely affected by acute ulcer (6.7%) and the respondents from the urban communities have more of this complaint 7.1% as compared to respondents belonging to rural areas 5.8%. As stated earlier some of the respondents using one or more tobacco products known as dual users could also hike the incidences of stomach ulcer.

Table 23: Perceived Minor Physical Health Complaints

Sl.No	Problem	Locality		Total n = 349
		Rural n = 105	Urban n = 244	
1	Skin Problems	104 (99.0)	233 (95.5)	337 (96.6)
2	Headaches	104 (99.0)	232 (95.1)	336 (96.3)
3	Stomach Pain	104 (99.0)	231 (94.7)	335 (96.0)
4	Acute Ulcer	104 (99.0)	230 (94.3)	334 (95.7)
5	Physical weakness	104 (99.0)	230 (94.3)	334 (95.7)
6	Cough	104 (99.0)	225 (92.2)	329 (94.3)
7	Tiredness	104 (99.0)	226 (92.6)	330 (94.6)
8	Body pain & Aching	104 (99.0)	225 (92.2)	329 (94.3)
9	Constipation	104 (99.0)	223 (91.4)	327 (93.7)
Test Statistics				
Kendall's W		0.23	0.33	0.26
Chi-Square		196.0	646.8	727.6
Degree of freedom		8.00	8.00	8.00
Asymp. Sig.		0.00	0.00	0.00

Source: Computed **Figures in parentheses are percentages**

Moreover, the lifestyle and food habits of the Mizo are also highly responsible to induce ulcer apart from using tobacco. This is because that the food varieties depends on the availability of the seasonal foods like sticky rice, bamboo shoot, corn, *zawngtah, chingit, bai, khanghu, thingthupui , bawl, sa-um* which are highly flavoured, preserved, pungent smell and mostly difficult to digest even for a person who is not using tobacco. Therefore, taking of all these foods and being tobacco user tend to lead to acute ulcer. All these facts along with improper dietary habits may also

responsible for it. Finally, the respondents belonging to urban communities who are having less physical activities as compared to the respondents belonging to the rural areas have reported it more. Secondly, *stomach pain* is another severe minor health complaint and respondents assumed mainly due to high intake of paan and

Table 24: Severity of Minor Health Complaints

Sl.No	Problem	Locality		Total n = 349
		Rural n = 105	Urban n = 244	
1	Acute Ulcer	5.8	7.1	6.7
2	Stomach Pain	7.2	6.4	6.6
3	Headaches	5.3	5.9	5.7
4	Physical weakness	5.4	5.8	5.7
5	Cough	5.0	5.6	5.4
6	Tiredness	5.1	4.7	4.8
7	Skin Problems	2.9	4.0	3.7
8	Constipation	5.2	2.6	3.4
9	Body pain & Aching	3.1	2.9	2.9

Source: Computed

paan with zarda accompanied by less intake of water. The incidence is higher among the respondents belonging to the rural areas (7.2%) as compared to the respondents belonging to urban areas (6.8%). The greater intake of *smokeless tobacco* in urban areas could be linked with the stomach ache and less intake of water is also observed among the respondents from the rural areas. Thirdly, *headache* is prevalent both among the rural and urban respondents with a mean value of 5.7 which is similar to physical weaknesses that is encountered by the respondents. These two minor health complaints could also happen due to other factors. But, it is strongly assumed that regular use of tobacco is highly responsible for the said health complaints. While, the mean value for *cough* is 5.4 and the urban respondents have more of this complaint which could be due to the dust produced by tobacco products. Apart from these the

mean value for tiredness (4.8), skin problems (3.7), constipation (3.4) and body pain and aching (2.9) are also reflected and the relationship between tobacco use and these minor health complaints are observed.

The major differences between the two Table 23 and Table 24 is that the former table assessed the perception of the respondents which could occur minor physical health complaints due to regular use of tobacco and the later Table 24 emphasis the actual severity of occurrence of these minor physical health complaints that has been encountered by the respondents.

The study shows that the perceived minor health complaints of the respondents are severely occur and the use of tobacco products is highly responsible for it.

4.8.2 Perception on Psychological Consequences

In continuation of exploring the perception of the respondents, the study also attempted to found the perceived psychological consequences that is linked to tobacco use. This is significant because the respondent's perception is based on their experiences or those which are likely to happen from their experience. The respondents perception on the psychological consequences that is induced by tobacco use is assess by five items like tension, aggressiveness, reduction or decrease of memory power, dullness and inferiority complex**.**

Table 25: Perceived Psychological Consequences

Sl.No	Psychological consequences	Locality		Total n =350
		Rural n = 105	Urban n = 245	
1	Tension	44 (41.9)	52 (21.2)	96 (27.4)
2	Aggressiveness	33 (31.4)	31 (12.7)	64 (18.3)
3	Reduced memory power	4 (3.8)	3 (1.2)	7 (2.0)
4	Dullness	0 (0.0)	3 (1.2)	3 (0.9)
5	Inferiority Complex	0 (0.0)	3 (1.2)	3 (0.9)

Source: Computed **Figures in parentheses are percentages**

In connection to the occurrence of the perception of psychological consequences due to tobacco use, the *occurrence of tension* is highest among the respondents and it is 41.9 % and 21.2 % among the rural and urban respondents respectively. The Table 25 on perceived psychological consequences due to tobacco use shows that *aggressive behavior* is common and it is 31.4% among the rural respondents and 12.7% among the urban respondents. The third item, tobacco use and *reduction of memory power* is present but not significant among the rural and urban respondents. While, the other remaining two items that are the use of tobacco and *causing to dullness and leading to inferiority complex* is little observed among the respondents belonging to urban areas and is totally absent among the rural respondents.

The perceived psychological consequences of tobacco use as shown in table 25 indicated that tension and aggressive behavior and reduction of memory power is positively present among the respondents and it is more experienced by the urban

women respondents than that of the rural women respondents. Whereas, dullness and inferiority complex which is arises out of using tobacco are also mildly observed among the rural women respondents and it is totally absent among the urban women respondents.

4.8.3 Perception on Health Effects Due to Tobacco Use

The mortality due to tobacco use is high in all over the countries. Similarly *beedi* smokers are reported to have higher death rates compared to non- tobacco users. The case control study conducted between 1995 -2000 consisting of 43,000 adult male deaths with 35,000 living controls, from urban Chennai and rural areas (Viluppurum district) of Tamil Nadu, South India. In the urban study areas 59.6% of the men between 25 years and 69 years of age who died from medical causes had been smokers and 52.2% in the rural areas as against to 39 % of non-smokers of corresponding age (Gajalaskmi V, Petro R, Kanak TS, Jha P.,2003).

The public health mortality of tobacco use is largely contributed incidences of cancers of any types and affecting men and women, adults and children. The global evidence reported by International Agency for Research on Cancer (IARS) states that tobacco smoking is the major cause of cancer and in particular associated with lung cancer, cancers of oropharynx and hypophyarynx, oesophagus, stomach, liver, pancreas, larynx, nasal cavity, urinary bladder, kidney and cervix, and myeloid leukemia (Overall Evaluations of Carcinogenicity; An updating of IARC monographs, 1987).

The ten leading sites of cancer in females mentioned are lung, stomach, cervix uteri, breast, rectum, liver, oesophagus, thyroid, ovary and colon. In addition, the same report has shown the ten leading sited of females' cancer in Aizawl district are cervic, uteri, lung, stomach, breast, rectum, Non Hodgeskin lymphoma (NHL) ,liver, thyroid, pancreas It also mentioned the three major contributors to total incidences of tobacco related cancer (TRC) among the females in Mizoram are lung (69.8%), oesophagus (9.3%) and mouth (6.1%) as given by the report of PBCR (North-East) ICMR, 2005-2006.

Further, tobacco use especially smoking is related to Cardiovascular diseases (CDV) such as chronic heart disease (CHD- heart attack), angina (chest pain), sudden cardiac death (SCD), arrhythmias (electrical disturbances) and others are the largest contributor to tobacco related deaths and it accounted for 29.2% of total global deaths according the World Health Report, 2003 and also accounted for 80% of death that has taken place in low and middle income countries. The major constituents of tobacco smoke which are responsible for the cardiovascular effects are nicotine and carbon monoxide. In women below the age of 50 years, the majority of CHD is attributable to smoking and the risk increase with the number of cigarette smoked and the duration of smoking. Therefore, the social ingredients of tobacco consumption in India, which characterized by higher consumption patterns among the poor is relevant to the social dimensions of CVD (Gramenzi A, et al, 1989).

The other compelling evidence supporting a relationship between tobacco smoking and various lung diseases not only cancer inclusive of chronic obstructive pulmonary diseases (COPD), bronchial asthma, respiratory infections and these problems are reported by non smokers who are exposed to second hand smoke. The

relationship of COPD with tobacco smoking seems to be independent of the type of products smokes like cigarette and *beedis or chuttas.* The prevalence of asthma and its relationship to smoking is being studied by ICMR and the analysis of the records of 51,504 individuals has shown an increase risk of asthma in smokers.

In India, pulmonary tuberculosis (TB) is a highly prevalent disease and one of a major cause of death and TB occurs predominantly among the socially and economically disadvantaged people. Smoking decreases the immune defenses and increase susceptibility to pulmonary TB. It is found that the heavier the smoking, cigarettes or *beedis,* the greater the prevalence of TB among smokers. The National Family Health Survey (NFHS)-II, 2000 has conducted survey among a representative sample of 492,197 persons in 92,486 households in India. The survey results indicated that the overall prevalence of TB in India was 0.6 % in rural areas and 0.4% in urban areas. The prevalence was 0.62% among males and 0.46% among females and increase with age (GoI, 2004).

The other important aspects of tobacco use include tobacco use and reproductive health. The US Surgeon General's Report, 2001 summaries the following evidence on women and smoking. It harms the sexual and reproductive health of both men and women, the damaging effects are seen throughout reproductive life from puberty through young adulthood and into middle age. The effects of maternal smoking during pregnancy encompass decrease fetal growth,

Table 26: Perceived Health Effects Due to Tobacco Use

Sl.No	Health Effects	Locality		Total n =350
		Rural n = 105	Urban n = 245	
1	Oral Cancer	97 (92.4)	198 (80.8)	295 (84.3)
2	Pregnancy related	87 (82.9)	172 (70.2)	259 (74.0)
3	Respiratory infection	97 (92.4)	152 (62.0)	249 (71.1)
4	Oesophagus cancer	94 (89.5)	139 (56.7)	233 (66.6)
5	COPD	94 (89.5)	96 (39.2)	190 (54.3)
6	Dental problems	84 (80.0)	101 (41.2)	185 (52.9)
7	Cardiovascular diseases	78 (74.3)	92 (37.6)	170 (48.6)
8	High cholesterol level	55 (52.4)	112 (45.7)	167 (47.7)
9	Still birth	80 (76.2)	80 (32.7)	160 (45.7)
10	Stroke	70 (66.7)	75 (30.6)	145 (41.4)
11	Disability	58 (55.2)	72 (29.4)	130 (37.1)
12	Infertility	56 (53.3)	65 (26.5)	121 (34.6)
13	Cervical cancer	43 (41.0)	65 (26.5)	108 (30.9)
14	Breast cancer	30 (28.6)	56 (22.9)	86 (24.6)
15	Stomach ulcer	14 (13.3)	58 (23.7)	72 (20.6)
16	Stomach cancer	0 (0.0)	64 (26.1)	64 (18.3)
17	Lung cancer	0 (0.0)	45 (18.4)	45 (12.9)
18	Breathing problems/asthma	26 (24.8)	18 (7.3)	44 (12.6)
19	Low blood pressure	0 (0.0)	10 (4.1)	10 (2.9)
20	Cataract	2 (1.9)	8 (3.3)	10 (2.9)
21	Liver problem	1 (1.0)	1 (0.4)	2 (0.6)

Source: Computed **Figures in parentheses are percentages**

spontaneous abortions, fetal death, and pregnancy related complications including preterm delivery (Women and Smoking; Report of Surgeon General, 2001). Cigarette smoking by pregnant women has independent factors of decreased infant birth weightand women smokers are less likely to breastfeed their infants than women non smokers.

To assess the knowledge level on the perception on health consequences of tobacco use , a list of 21 items on major health problems were given out of which 7 major health problems like oral cancer, pregnancy related, respiratory infection, oesophagus cancer, dental problems, reduced memory power and chronic obstructive pulmonary disease (COPD) are known by 50% of the respondents. It is also seen that on these 7 major health problems, the rural respondents have better knowledge than the respondents belonging to urban communities.

Among the listed major health problems, 84.3% of the respondents know the association of tobacco use *and oral cancer* and they had assumed that it is mainly caused by the use of smokeless tobacco. And 74 % knew that the use of both smoke and smokeless tobacco *leads to pregnancy related problems like still birth, pre-mature birth, and delay of pregnancy*. It is observed that, the respondents did not aware that tobacco use could also affect the reproductive health of men and can lead to infertility. However, 71.1 % of the respondents also have knowledge on the association of tobacco use and respiratory infections and majority of the respondents believed that respiratory infections are caused alone by smoking. Fourthly, oesophagus cancer is one of the prevalent tobacco related cancer (TRC) among males and females in the Mizoram. Two -thirds of the respondents have knowledge on the association between tobacco use and oesophagus cancer.

The chronic obstructive pulmonary heart disease COPD is not very well known by the public while most people are aware of asthma. Due to the prevalence of smoking in both the genders, the case of COPD is commonly registered and 54.3% of the respondents themselves have knowledge on the association between smoking and respiratory infection, bronchitis including in adults and not only asthma to the aged person.

In contrast to its effects on the other parts of the body, the effects of tobacco use and mouth cancer has increasingly drawn public attention. The uses of tobacco could cause a wide spectrum of oral mucosal alterations or lesions depending upon the types of tobacco products use, the ways of administering tobacco, the frequency of tobacco use and the entire duration of tobacco use. In India, majority of oral cancers condition is caused by the use of tobacco. However, the limitation of knowledge on tobacco use causes dental problems and it could effects to oral cancer is not much known by the respondents. Therefore 50 % of the respondents knew that tobacco use can lead to tooth decay, infection on the gums, shaking of teeth, staining of teeth and changing teeth colour due to smokeless tobacco use.

While, the association between tobacco use and cardio vascular disease is increasingly recognized by the respondents. Any death without proof of any other cause and undiagnosed was easily label as heart attack. Therefore, it is commonly known but is never thought to have connection with tobacco use. Now, the wider spectrum of cardio vascular diseases that can cause by smoking such as chest pain, sudden cardiac death and electrical disturbances are recognized by nearly half of the respondents.

The Table 26 on the perceived health effects due to tobacco use has shown that majority of the respondents perceived that tobacco use has greater potentials for leading to oral cancer and pregnancy related problems. And more than half of the respondents perceived that the possibility of respiratory infection, dental problems, oesophagus cancer and chronic obstructive pulmonary diseases. While, little less than half of the respondents perceived that tobacco use can increase the cholesterol level, stroke and even disability. Further, the relationship between tobacco use and the risk of still birth, fertility and cervical cancer are also perceived by the respondents. On the other hand, few of the entire respondents could only perceive the relationship between tobacco use and breast cancer, stomach cancer, lung cancer, liver problems, low blood pressure and cataract. Therefore, the effects of tobacco use on almost all the organs of the body and tobacco related diseases are not well perceived by the respondents.

4.9 Awareness Level

The Government of India has made a mandatory intervention to control and minimize the use of tobacco and regulates tobacco products at an optimum level in India. The COTPA 2003 focuses on ensuring public health and inclusive of the backward population. The reason is that tobacco use by women is high in every part of the world and more of smokeless forms of tobacco intakes by women belonging to less economically well to do countries. Therefore, the study is conducted among the women of Mizoram state where the rate of consumption of smokeless tobacco by women is highest all over the countries. And it crosses beyond the national average reflected in the National Family Health Survey III. Apart from having a

comprehensive package of tobacco control law, it is interesting to assess the awareness level of the respondents on the availability of tobacco cessation in the area.

4.9.1 Tobacco Cessation Clinic (TCC)

Tobacco cessation services address the needs of tobacco users to give-up the tobacco using habit. It aims to reduce the rate of tobacco consumption in the country through behavioral change intervention. It is establish in par with the FCTC. It has been started with the establishment and initiatives of the National Tobacco Control Cells, GoI and the WHO as part of tobacco control in India. So, the Ministry of Health, GoI recognized the urgent needs and started with 13 centers on a pilot basis. At the initial stage in 2002, the WHO has supported the setting up of 12 TCCs in different settings like in cancer treatment centers, psychiatric centers, and medical colleges and also in the reputed non-governmental organizations. The trained personnel included the clinical psychologists and medical social workers, which develop manual on TCC and concentrated mainly on behavioral change counseling.

The initial goal of psychosocial intervention is to increase motivation initiate a quit attempt and help the patient quit for a short period. However, the main goal of tobacco cessation is to sustained abstinence, change of life style and improves the quality of life (Callum C., 1998).

Table 27: Tobacco Cessation Clinic (TCC)

Sl.No	Aware of TCC	Locality		Total n =350
		Rural n = 105	Urban n = 245	
1	No	102 (97.1)	223 (91.0)	325 (92.9)
2	Yes	3 (2.9)	22 (9.0)	25 (7.1)

Source: Computed Figures in parentheses are percentages

The Table 27 shows the awareness on the existence of tobacco cessation clinic (TCC) in Aizawl Civil Hospital. Contrary to the extensiveness of the intervention that has taken place by the TCC, 92.9 % of the respondents have had never heard the presence of TCC in Aizawl civil hospital. Among them, 97% of the respondents are from rural areas and another 91% respondents from the urban communities. The respondents did not have knowledge of the free services provided by the central government that is designed their tobacco using habits and to protect them from further ill -health due to tobacco use. The date has shown that 9% of urban respondents and 2.9 % of rural respondents alone have known the existence of tobacco cessation clinic at Aizawl hospital through their friends and mainly from schools. Even the respondents who are aware of the existence of TCC at Aizawl hospital do not access and avail the services *due to inadequate knowledge* on the services provided by the TCC Aizawl. The above data highlighted the important of creating more awareness on the existence of TCC at Aizawl hospital and also to have greater implications on the intervention, the public should aware the existence of TCC programmes and services.

4.9.2 Attempt to Quit

The public health concern of tobacco use by women is to ensure the health rights and promote the general well being of the population in particular the women reproductive health by mobilizing the users to attempt to quit of tobacco use. Therefore, all the tobacco users are the target of the TCC. The trained personnel of TCC have provided behavioral counseling and administering pharmacotherapy with bupropion. In contrary to the core aim of TCC, 66.9% of the respondents did not ever attempt to quit it and the remaining 31.1% of the respondents aim to change their behavior of using tobacco for various reasons including physical health concern, found to be expensive-spending amount regularly, unhygienic, feel bored of continuing using tobacco, spirituality and also due to family request.

Table 28: Reasons Attribute to Quit Tobacco Use

Sl.No	Reasons for attempt	Locality		Total
		Rural	Urban	
		n = 105	n = 245	n =350
1.	Not Attempted	56 (53.3)	178 (72.7)	234 (66.9)
2.	Physical Health Concerns	36 (34.3)	49 (20.0)	85 (24.3)
3.	Costly/ expensive	6 (5.7)	7 (2.9)	13 (3.7)
4.	Unhygienic	1 (1.0)	8 (3.3)	9 (2.6)
5.	Bored	3 (2.9)	3 (1.2)	6 (1.7)
6.	Spiritual	1 (1.0)	0 (0.0)	1 (0.3)
7.	Family's Request	2 (1.9)	0 (0.0)	2 (0.6)

Source: Computed **Figures in parentheses are percentages**

The above Table 28 on the assessment of reasons for attempting to quit using tobacco has shown that two-thirds of the total respondents including the rural and urban respondents have not made an attempt to quit it. So far, those respondents had not yet recognized that they had experienced major health problems and complaints due to using of tobacco. The remaining 30 % of the total respondents have attempted to quit using tobacco for various reasons and less than a quarter (24 %) of the respondents *interested to stop further use* after knowing the health consequences that can happen due to tobacco use. The other 3.7% of the respondents has attempted to quit tobacco due *t to it being expensive*. While, 2.6 % of the respondents mainly of the minors who has found that using tobacco are *orally unhygienic, disrupt whitening of teeth, unpolished teeth*. Regular using of tobacco after developing dependency is also sometimes *found boring and irritating* by the users. Like many other parts of the country only few respondents (2%) attempted to quitting tobacco due to family request for the sake of health and also some wanted to be free from tobacco. Only a small number of respondents had attempted to get out of tobacco due to their *spiritual commitment,* thinking that involvement and active participation in the church did no longer suit consumption of tobacco.

It is observed that there are some respondents who would like to quit tobacco use but due to lack of knowledge, many of the respondents are less motivated to attempt to quit tobacco use and they did not seek for any of the professional help. It is also known that the respondents believed that coming out of addiction is possible only through spiritual support.

4.9.3 Seek Help for Tobacco Cessation

The agency where, the respondents soughed help to quit tobacco is important because once the physical or psychological or both dependency has developed it is not easy to get abstinence by self initiation. In fact, the FCTC -WHO knew the situation better and therefore establish TCC with a set of professionals and other requirements.

Table 29: Agency

Sl.No	Agency	Locality		Total n =350
		Rural n = 105	Urban n = 245	
1	No response	87 (82.9)	179 (73.1)	266 (76.0)
2	Self	18 (17.1)	65 (26.5)	83 (23.7)
3	PHC	0 (0.0)	1 (0.4)	1 (0.3)

Source: Computed **Figures in parentheses are percentages**

Out of the entire respondents only 31.1% of the respondents has attempted to quit using tobacco and among them 7.1 % of the respondents did not mention the place where they have soughed help for quitting tobacco. So, the Table 29 shows the place where the respondents seek help so as to be able to quit tobacco and that two-thirds of the respondents did *not ever attempt to quit* tobacco use and therefore they did not seek any professional assistance. However, less than a quarter (23.7%) had attempted to *quit it by themselves* in their own way such as keeping themselves away from tobacco products, not receiving tobacco offered to them and also through spiritual campaign for quitting tobacco products. Only 1 % of the respondents visited primary health centre in seeking help to stop using tobacco.

4.9.4 Prohibition of Smoking

The health consequences of exposure to smoking is entirely a preventable tobacco related mortality. The smoking bans and restrictions are policies and regulations that ban the consumption of tobacco product, smoking in public places where the general public has access like public transports, shopping malls, hospitals, restaurants, hotels, educational institutions, government offices, waiting lounge and others. The illegal smoking at the stipulated restricted area is punishable and is under the purview of legislation. This aspect tries to protect promote the public health by preventing exposure to secondhand smoke.

The Table 30 on prohibition of smoking in public places explores the legal awareness level of the respondents. It shows that majority of the respondents (82.9%) of them knew that smoking in public places is prohibited against 17.1% who do not have such awareness. The contradictory statement is that the respondents have high level of awareness on prohibition of smoking at public places but the incidences of secondhand smoke (SHS) is much in the area as compared to other state of India.

Table 30: Prohibition of Smoking in Public Places

Sl.No	Aware of the prohibition	Locality		Total n =350
		Rural n = 105	Urban n = 245	
1	No	11 (10.5)	49 (20.0)	60 (17.1)
2	Yes	94 (89.5)	196 (80.0)	290 (82.9)

Source: Computed **Figures in parentheses are percentages**

Therefore, in probing to the situations, it may be assume that due to the less access of place for smoking, many of the smokers smoke inside the house. Despite the fact, it is observed that smoking in public place is prevalent in Mizoram.

4.10 Suggestions by the Respondents

The respondents were asked their suggestions for control tobacco in Mizoram. This item is important and included because prevention and control of tobacco needs joint efforts and the suggestions are found to be effective that is based on the experience of tobacco users. The respondent is allow to have more than one suggestion and it is divided into two parts as preventive measures that will prevent the initiation of tobacco use and the rehabilitative measures which are meant for current tobacco users.

4.10.1 Suggested Preventive Measures

The suggestion of the respondents for the prevention of initiation of tobacco use is divided into 7 areas which focus on personal level, family level, and community level and by and large at the societal level.

The important of family teaching and discipline for control of tobacco use by children is suggested by 26.3% of the respondents and have a feeling of lack of parent- child communication on the harmful consequences of tobacco and is a disapproved behavior. It is followed by 24 % of the respondents suggesting prohibition of selling and buying tobacco products by minors and breaking of the rule

Table 31: Preventive Measures

Sl.No	Preventive Measures	Locality		Total n = 349
		Rural n = 105	Urban n = 244	
1	Family teaching & discipline	9 (8.6)	83 (33.9)	92 (26.3)
2	Prohibition of tobacco products	8 (7.6)	76 (31.0)	84 (24.0)
3	More awareness	26 (24.8)	55 (22.4)	81 (20)
4	Church intervention	5 (4.8)	50 (20.4)	55 (15.7)
5	Self discipline	14 (13.3)	29 (11.8)	43 (12.3)
6	Health education	1 (1.0)	3 (1.2)	4 (1.1)
7	ID to buy tobacco products	0 (0.0)	2 (0.8)	2 (0.6)

Source: Computed **Figures in parentheses are percentages**

would be punishable as per the COTPA 2008. The Act is enforced and exercise within the state however, the efforts is found to be inadequate still for prevention of the initiation of tobacco products. Because, nearly one third of the respondents aware the prohibition of smoking in public place but more than 90% of the same respondents do not aware the existence of TCC, its programmes and services at Aizawl hospital and out of 24.7% of the respondents who has attempted to quit tobacco as high as 23.7% reported that they has attempted by themselves in their own way and did not seek any professional help.

Thirdly, generation of awareness is found to be relevant due to the magnitude of secondhand smoke. So, 20% of the respondents feel that comprehensive and extensive awareness and education should be promoted. Fourthly, in the area of prevention of tobacco use, the respondents suggested to have more of church intervention. Thus, majority of the people of the state are Christian and the church

plays an important role on behavior change of an individual. Everyone have lots of respect for the church and is much influential therefore, 15.7% of the respondents suggested a church based interventions for modification of behaviors. Fifthly, the public should be empowered to exercise their capacity to be able to discipline themselves and it is relevant to teach refusal skills. Here the suggestion focus at the individual level and agree that many of the respondent's behavior was initiated due to submissiveness. So, 12.3% of the respondents have suggested self discipline as one of the preventive measures for tobacco use.

While, surprisingly, many of the respondents feel less important to promote and include tobacco and health in the general health education including in the education curriculum. It is observed that only 4 respondents have made this suggestion. Further, another 2 of the respondents has a feeling that separate identity card is to be issue to the person who would like to buy tobacco products. The emphasis is that tobacco products would no more be assessable easily to the public and would be effective measure for tobacco control. In addition this would also strengthen the mechanism for tobacco control within the state.

The suggestions of the respondents on prevention of tobacco initiation has appreciated the existing efforts and also feel that there is a long way ahead to strengthen the existing interventions as well as inclusion of new practice for tobacco control in Mizoram.

4.10.2 Suggested Rehabilitative Measures

The rehabilitative measured suggested by the respondents are 10 items. They are counseling, which mean that counseling for tobacco cessation should be given for long period on regular intervals and in a more systematic process towards abstinences. Secondly, the respondents proposed that popularization of self control promotes human dignity and maintenance of their reputation. They should make them aware of their health rights. Thirdly, the respondents' belief that ongoing of awareness and providing them knowledge on the harmful consequences of tobacco will be still relevant in the rehabilitation process of current tobacco users. Here, the suggestion aim that the contents of the awareness provided at the prevention and rehabilitation level should also be distinguish.

The suggestion in the rehabilitation of tobacco users is promotion of spiritual conviction. The strong faith and belief on spirituality would help the tobacco users to give-up the habits that are disapproved. A the same time, they suggested a provision of support like a continuous monitoring and evaluation as well as continuous encouragement to engage them in the process of recovery. The sixth suggestion is that tobacco should be heavily taxable and marketing on tobacco should also be given heavy punishment. Some of the respondents proposed the participation of civil society in controlling tobacco use like other smugglings. On the other hand, less than 1 % of the respondents belief on the effectiveness of medical help, learning from others who able to quit tobacco, opening of rehabilitation centers and providing help desk and help line which is toll free.

Table 32: Rehabilitative Measures

Sl.No	Rehabilitative Measures	Locality		Total n = 349
		Rural n = 105	Urban n = 244	
1	Counseling	0 (0.0)	71 (29.0)	71 (20.3)
2	Self control	2 (1.9)	17 (6.9)	19 (5.4)
3	Awareness	2 (1.9)	14 (5.7)	16 (4.6)
4	Spiritual conviction	4 (3.8)	6 (2.4)	10 (2.9)
5	Support/encouragement	0 (0.0)	6 (2.4)	6 (1.7)
6	Heavy tax on tobacco products	0 (0.0)	3 (1.2)	3 (0.9)
7	Medical help	2 (1.9)	1 (0.4)	3 (0.9)
8	Learn from those who quit	0 (0.0	3 (1.2)	3 (0.9)
9	Rehabilitation centers	2 (1.9)	0 (0.0)	2 (0.6)
10	Help desk/help line	2 (1.9)	0 (0.0)	2 (0.6)

Source: Computed **Figures in parentheses are percentages**

The above Table 32 has shown the rehabilitative measures suggested by the respondents. The maximum number of the respondents 20.3% suggested counseling which is a spiritual counseling given for behavior modification. The respondents who had proposed this suggestion did not talk of the psychosocial counseling and strongly believes that spiritual counseling will to enhance the entire need for behavioral change. It is followed by 5.4% of the respondent who suggested for initiation of self control. Among the current users, the initiation and activation of controlling one's behavior would remind themselves and keep them away from tobacco. Another 4.6% of the respondents suggested awareness. Here, awareness is comprehensive and intensive including education on tobacco and its consequences. Such awareness is felt

important because many of the current tobacco users started taking as they did not receive proper education and awareness on tobacco. Further, once they knew, the already develop dependency either at the physical or psychological level or both and found it difficult to quit it.

While, 2.9 % of the respondents suggested for spiritual conviction. Here, spiritual conviction is mainly suggested for those current users of tobacco who actively participated and involve in the church. They are having the opinion that the spiritual conviction and commitment level will dictate their behavior and would no longer want to decrease their reputation and dignity. Therefore, the degree and level of spirituality is sufficient for rehabilitation of tobacco users.

The respondents felt the need of holistic intervention for rehabilitation of tobacco users and 1.7% of the respondents assume that support and encouragement would be effective. Encouragement means encourage the current to attempt to quit tobacco products and support is mainly of continuing request by their family and peers. The particular suggestion reflected the significant of socialization of tobacco users. In continuation of the rehabilitative suggestion made by the respondents, 3 of the respondents suggested to raise the tax on tobacco. If a tax on tobacco products is hugely increasing, this would lead to decrease of demand and supply. Many of the current users will not afford to buy tobacco products and forced themselves to quit using it and or at least the consumption level will be decreasing.

The different perspective is highlighted another 3 of the respondents are suggesting medical help for rehabilitation. In fact, the attempt to quit and quit rate is very low in every place. It is well known that attempt to quit by self without seeking help is difficult and also the chance of relapse is high. Therefore, arrangement of

medical help especially of professionals is found to be necessary by the respondents. Also, 0.9% of the respondents suggested that learning success stories from those who has quit tobacco. This suggestion comprises of the kind and nature of the attempt, duration of the attempt period, the process and techniques employed by them. In addition, it would also be encouraging for rehabilitation by learning from the success stories.

Another of the respondents suggested for constitution of rehabilitation centers with all the require facilities. This would help rehabilitation as well as would keep the current users away from others. They will not have an opportunity to influence the non users for initiation and also would be helpful for prevention of tobacco using practice. The remaining 0.6% of the entire respondents suggested for a provision of helpline which is toll free and or help desk. It is assume that the users who really interest in rehabilitation will look straight forward. It is found to be effective rather than spreading the efforts to the whole users without knowing whether they really wanted to be rehabilitated.

4.11 Qualitative Information

4.11.1 Case Studies

a. Case –I Mrs Rosy (Fictitious)

Mrs Rosy is over 70 years of age and lives in a small village in Aizawl District, Mizoram. The village chief was educated by the British Missionary in Mizoram. Therefore, he had started elementary education classes Nursery –class III in the village and later on continued by his son therefore, it is remarkable due to his efforts in initiating education from the very early years.

Mrs. Rosy has 5 siblings and is the 4th in birth order. Two of her siblings passed away in the last 3 years. However all her siblings have crossed 75 years of age which is rather unusual among the Mizos. She is a Christian belonging to the Presbyterian denomination. Her parents did not receive education and their main occupation was of cultivation. However, the family was known for having enough paddy in the village. Her mother had passed away at the age of 78 and her father at the age of 82 years.

Though there was a school within the village her parents did not give importance to the education of their children and hence she never went to school. Basic education like alphabets, numbers, spellings, sentence constructions were taught as part of church based education in Sunday school .Due to being financially stable, the client rarely went to the field '*ram tang'* and she joined her parents at work only at the age of 17 years which was just one year before her marriage. The main duty and responsibilities were to do household chores and to look after her sister as well as other children from the neighborhood (baby sitting) during daytime when the parents were away at the field.

Tobacco Use: At the very young age of 14 years Mrs. Rosy started using tobacco products mainly local cigarette called *Zozial*. According to the client's statement, the reason for initiation was due to not having parental supervision in the day, which had increased her sense of liberty. Besides when she began working her parents suggested that she smoke, while working in the field so as to be safe from bites. She claims she never heard words of disapproval or restrictions inside and outside the house in reference to smoking, which in a manner encouraged her to smoke. So, she assumed it was permitted by the parents and she smokes even today.

In addition, when she was at home especially during summer season, her parents used to bring tobacco leaves for her from the field which she could use at home to prevent insects bites.

As a child she had babysitting chores and tasks at home like cleaning dishes and some leisure time was available in the evening to spend with her friends .After this she helped out her sisters in *lakaih (spinning yarn)* or rolling *meizial (rolling of local cigarettes)*.

Marriage Life: At the age of 18 years she got married and had 1st child birth at 19 years of age. As usual practice till the date of delivering a child, she worked in the field and continued smoking tobacco. Sometimes she was at home and usually smoked while making jaggery i.e. *'fu her'*. Soon after 3 months of delivery, she continued working in the field following the same schedule. Gradually she became addicted to smoking.

By her own admission, she too never communicated anti – tobacco messages nor spoke of harmful consequences of using tobacco to her four children. It was because that her education was low, nature of work (working in the field) demanded, it was traditionally practiced and no disapproval was observed. As a mother she never thought that it was a part of her responsibility in rearing children.

After 20 years of smoking, she also tried to give up smoking as her friends told her that they were bored by practice and unfortunately she was not successful. However, she had another attempt at quitting tobacco after 4 years due to economic reason. She found it to be expensive spending Rs 4.00 to Rs. 6.00 per day, but she was still unable to quit.

Assessment: The assessment in this case was that Mrs. Rosy started using tobacco because of absence of restrictions or disapproval from parents or elsewhere. The parents encouraged her to try tobacco leaf and smoking to prevent insect bites. She was also affected by the oral tradition that eating of local cigarette ashes during pregnancy decreases nausea. Therefore she herself did not communicate anti tobacco education to her own children. Moreover, though she wanted to quit she did not approach professional help or agency due to lack of awareness. Now at the age of 82 years she had multiple minor health complaints like cough, breathlessness, burning sensation of stomach, 'unusual sound in chest' (awm hnawk) , body aches and pain.

b. Case II Ms. Biaki (Fictitious)

Ms. Biaki is currently 60 years old. She has studied up to class – III which was not considered very low during the time and got married at 16 years of age to one of the relatives as suggested by the parents. She is the middle child out of seven siblings and had three older siblings and another three of the siblings were younger to her. The main occupation of the family was cultivation and the all the family members who so ever available were engaged in the paddy field. In particular, her main job apart from schooling was tending to the house and looking after her younger siblings when the parents were away at the field. And she started working at the field since from 13 years old.

During her school days, she started using tobacco products along with her schoolmates. Usually, in a small village all the age mates are enrolled in the same school. Whenever they did any tasks it was done in groups and with friends but never

alone. This indicated that even initiation of tobacco using behavior was along with her friends. She began smoking the local cigarette called *zozial*. She collected the raw materials from the field and dried it at home. The practice was not rejected by the parents however they told her that children must not use tobacco regularly as it was unnecessary for children to use tobacco. She has seven children and did not take any special pre-natal and post-natal care during pregnancy and continued smoking too. In addition she also took *'tuibur' {*tobacco water) which is smeared on the gums. She regularly did field work till two three days of delivery (getting labour pains). Soon after two weeks she continued her work but usually returned early by 2.00 p.m. During her absence, the baby was attended to by her mother-in-law and sometimes by her sisters-in-law as they lived in a joint family.

She claims she has stopped using tobacco from 1995. She also claims that for a long time she had never thought that she needed to quit tobacco as she did not have any health complaints. Once she had entered a gospel camping in their church for a week and the preaching focused on cleanliness of the body and concentrated on alcoholism. Though she did not take alcohol she had wondered if taking tobacco also 'polluted' the system. For the first time then she began thinking of quitting tobacco. Later, after six months of not using tobacco she again developed craving for tobacco especially when she was socializing and with her friends. This was because that many of her contacts still offered her tobacco and she found it impolite to resist it. In spite of the fact that she sought conformity she was finally able to overcome it and has not relapsed till date.

From the year 1997, she started having respiratory complaints which was with prolonged coughing. She assumed it was due to her advancing years that she had a

decline in health. She was diagnosed as Asthma. She often had body ache and decline of physical and mental alertness. Since 1999 she has been under medication.

Assessment: it is observed and assessed that initiation of tobacco use was mainly due to seeking of conformity with peers rather than peer pressure. There was little parent-child communication on tobacco and the parents did not have restrictions on child tobacco use due to limited awareness level. Also prolonged use of tobacco induced both physical and psychological dependency and now she believes that her health conditions are due to her tobacco consumption. The case also reflects that strong faith and belief in spiritual gospel camping and faith healers enabled her quitting of tobacco and aided recovery from the adverse health effects.

c. Case-III Ms. Zozo (Fictitious)

Ms. Zozo, aged 26 years resides in Kulikawn, Aizawl. She is the eldest of the siblings and has two younger brothers. Her father is government employee and the mother is house wife. All of the siblings have passed matriculation. She had studied up to bachelor degree. Within two years after completion of bachelor degree, she got a regular appointment as a teacher in Government primary school teacher in one of the village nearby Aizawl district.

She is seen as an intelligent and active person since childhood. She did her education in one of the best schools of Aizawl City and continued HSSLC and bachelor degree from one of the colleges in Aizawl. She is carefree in nature, talkative and well socialized.

Socialization: Since childhood, she was very much socialized and participated in all activities within the community and in the schools. She continues to be very active till today and has lots of friends. She regularly attended the Sunday school and was also active in the church youth group.

Family environment: She hails from a well reputed and organized family. She did not so far face economic difficulties. The parents were responsible in taking care of their children and had good parent-child communication. Whenever, she had a romantic liaison or doubts she always consulted her mother and received good parental advice and suggestions which continues till date.

Tobacco use: She is well socialized and had many friends. She started using smokeless tobacco *'sahdah'* along with her friends. Initially, she used when she was only with friends and never alone. Therefore, the parent did not observe it. However, while entering college, she started exercising liberty, started using it at home and slowly resisted parental control. Then, the parent immediately intervened and disapproved of her behavior and the mother constantly told her the harmful effects of tobacco. As she did not quit it, now the parents have been silent about it.

Assessment: The assessment of the case is that she is an educated, intelligent child and actively participated in many activities. She had good strengths and is part of many social groups where she sought conformity with peers. She started using tobacco .It is also observed that any disapproval of behavior even by her parents was not well received by her. She also received education and teaching within the family, from the church and also from the school. Unfortunately, it is observed that the peer groups are more influential than the parents. She once attempted to quit *sahdah* without any professional help but it was not successful.

Summary of Case Study

The case study has presented three cases of tobacco users. The oldest client is 70 years old, followed by 60 years and 26 years old respectively. The clients use smoking tobacco mainly local cigarettes (zozial) and smokeless tobacco like sahdah, tobacco water (tuibur) and paan with tobacco. The mean age of tobacco initiation is 13.5 years. Among them, two of the clients are senior citizen and the other client is in the youth category. It also gives an opportunity to explore the different perspectives.

The educational level and initiation and practice of tobacco is an ongoing debate. Education upto primary level for the present elderly of their age is valued as they were tough and guided by the western Christian missionaries. The training was respected of the day and it was the minimum educational qualification required for school teacher. On the other hand, one of the clients who have belonged to youth category has completed degree course. It is found that the educational qualification and tobacco use of the client has no relationship.

The relevance of parenting, child rearing, parent-child communication and tobacco use is emphasizing throughout. As reported by the clients, there was no restriction and control on tobacco use by the family in two of the clients who are elderly. It has reflected the social system of that day. The family occupation was agriculture and the clients were also involved at a very young age before reaching 13 years of age. The nature of work could also have an implication on the risk of tobacco use as tobacco was always prescribed by parents for insects' bites, antiseptic lotion, and relieving toothache and to overcome the feeling of vomiting. It could also be connected with the easy availability of tobacco in the areas. The cases have shown the absence of parent communication on the harmful consequences of tobacco use and the

absence of awareness and knowledge on the parents is also reflected and they were convinced by the cultural practice. The client is receiving awareness on the effects of tobacco use after 10 years to 15 years of use. And they are not willing to attempt to quit using it after the development of dependency and addiction at large. While, the other client who is youth has presented different scenario that the parent teaching on the consequences of tobacco use is not listen and friends are more influential on her behavior. It is observed that seeking of conformity in the social groups, maintenance of social relationship to hold her status is more important than her parent's teaching. This is relevant to notice because peer pressure has been often quoted for initiation of tobacco use.

In addition, the case studies have shown that, the prolong use of tobacco leads to various health complaints like ulcers, physical inactiveness, dullness, reduction of memory power and forgetfulness, respiratory infections, pimples and body ache and pains. These health problems are link to tobacco use only after having major health complaints.

The other important aspect is that the clients have strong faith in Christianity and their parents were also a good Christian. The Christian ethics, importance of cleanliness and purity were continuously emphasis by parents. Since childhood, all the clients have attended Sunday school too. But, they were mainly taught on not to indulge in alcohol and drugs and tobacco was not included in their communication. From few years back not even yet a decade, the awareness level is increasing and using of tobacco for Christian became a concern in Mizoram. Therefore, the faith and spirituality of the client has no relationship with tobacco use.

In connection to seeking help to quit tobacco use and or attempt to quit, the client believes that spiritual camping could do the needful and approach faith healers for quitting and health complaints due to tobacco use.

4.11.2 Key Informant Interview (KII)

a. Name: Mrs Laura (Fictitious)

Sex: Female

Age: 52 years

Marital status: Widow

Occupation: Tobacco distiller and tobacco water *(tuibur*) seller

Size of family: 7

No of Children: 4

Mrs. Laura got married to Mr. John (Fictitious), at the age of 19 years old. They lived in one of the villages of khawzawl district. They economically depended on cultivating land which the husband received from his parents. The couple had 4 children, 2 daughters and 2 sons. Unfortunately, the husband passed away due to respiratory disease (asthma) when she was just 30 years age and her eldest son was 11 years.

Occupation: The client husband's family was not capable of providing assistance to them. She continued to manage the family by working in the paddy field and she was sometimes helped by her family or by her neighbor and often by the community members. If there are any helpless members within the community such as orphans, widowed or handicapped to look after them, the community came forward to ensure that the basic need of those categories of people was looked after by them. Her children were all in schools therefore, she felt that life was really difficult for her. When she was not able to cope up with the cultivation work she was helped by her first cousin who was living in the nearby village and returned back to his family after a week or so and came back during reaping of paddy which is the period when she

was in need of more labour. This was the sole reason for her son and daughter to eventually drop-out from school,

When her eldest child became 17 years old she sold the cultivated land and the family migrated to Aizawl seeking better employment. They stayed in a rented house paying Rs. 500 per month and she changed her occupation by selling vegetables in the market (Aizawl). Here, the eldest daughter helped her out in selling of vegetables in the market and also selling door to door within locality while the older son earned money by being a wage labour whenever it was possible. The third child who was 12 years old used to cook and looked after the house and the youngest child was able to continue schooling.

She soon began of shifting her occupation. The main reason for shifting her occupation was that she could only somehow able to manage the family by selling vegetables and not even have the basic necessities. Secondly, she felt tired of running up and down every day going to market early in the morning and returning after dark in the evening.

At the age of 43 years, she decided to stop selling vegetables and started distillation and selling of tobacco water. Her selection of this particular occupation is that she had seen and observed how tobacco is produced which was simple and required little physical activity as compared to her usual work. Also the other members of the family could join her, require less seed money for the job and finally there is good scope of selling tobacco water with high demand in the market.

Awareness level: The client has education up to class- I and was able to read and write. She is highly respected and appreciated for being able to manage the family

for more than 10 years having had only this basic education. She never thought of the harmful effects of tobacco, the health consequences and the contribution of tobacco distillation to environment pollution. Her main purpose was to generate more money, having reliable occupation that requires minimum physical activities.

Assessment: After working on distillation of tobacco water, the standards of family living got better and now they have been able to have their own house. On the other hand, the older daughter who used to be economically helpful got married and recently the older son also got married and is staying with them. She intends to give up tobacco distillation and sale eventually after family income is stabilized.

b. Name: Ms.Kathy (Fictitious)

Sex: Female

Age: 51 years

Marital status: Married

Name of NGO: MHIP (Women Group)

Years of experience: 9 years

Number of children: 4

Occupation: Housewife

Educational qualification- class VII

The key informant Mrs. Kathy married at 21 years of age to the present husband in one of the villages of Kolasib district. Her husband is working in Power & Electricity Department. After having the 2nd child, the family had migrated to another small village in Aizawl and after 6 years of living shifted to a third village due to transfers of the husband. Her parents were not educated but maintained an adequate

standard of living. She belongs to Salvation Army and converted to another denomination church once she got married.

Educational Background: She is educated up to class -VI standard and did not at all plan to study further because a girl having education up to class-VI was thought to be more than enough. In addition she did her schooling in Kolasib which is 6 hours of journey by bus from her village and also managed in staying at a relative's house. Her family was well disciplined and well managed. The family belongs to Seventh day Adventist church and indulging in tobacco, drugs and other substances is against the core teachings of the denomination. All her 4 children were well brought up and good education was provided to them.

Once the family shifted to the new village she was nominated as an executive member of MHIP, and for the next term again elected as one of the office bearers. During this period the women's group was actively functioning and their main thrust area was promotion of cleanliness; personnel hygiene, household cleanliness, to promote the women's health of MHIP members in the area.

During 1995-1996, there were more than 50 women who used one or the other tobacco products in their village (undocumented). It is mainly available from 2 main shops within the- sahdah, *khaini*, *zozial* and *kuhva* were largely sold. In the year 1999-2000, the group had organized one day programme and three times in a year. Talk was invited from school teachers, health worker and church leaders within the community on harmful effects of tobacco on health, importance of oral hygiene, economic impact of tobacco expenditure in family management of income. A resource person from the church talked on use of tobacco and religiosity, leadership in the church and use of tobacco within the church compound. According to the KII

statement, the talk reflected on use of tobacco but such talks lead to less participation of the church members in the activities.

However, after three/four months, more than 10 young mothers and 2 unmarried women who had actively participated in the programmes quit tobacco. The campaign on anti-tobacco was continued and the women's group has also convinced one of the shop owners belonging to Seventh Day Adventist not to further sell tobacco products.

Assessment: The assessment from the KII interview revealed that the local women's intervention on anti-tobacco education along with other activities was a success. If the women group intervention solely and strictly focused on anti-tobacco campaign, many women get irritated and lost their active participation in local group. Secondly, the Mizo women were greatly involved in church and had high level of commitment to the church. The talk on Christianity and tobacco used was found to be convincing. They influenced each other. Lastly, the women's group focused on banning of tobacco products among the shop owners within their locality. In such case, the women's group has interacted with the shop owner and on the other hand the church leader were requested to make interventions and the shop owners were convinced through this dual intervention.

Summary of Key Informant Interview (KII)

The study has presented two informant interviews. One of the informants is tuibur (tobacco distilled water) seller and the other one is working for banning of tobacco in the area. The former case has shown that selling of tobacco products is a livelihood and she has decided to produce tobacco water to earn the family living. She is a bread winner of the family and could no longer continue the job which demands heavy physical labour after crossing 45 years of age. So, the economic condition is one of the motivating factors for selling of tobacco which need less capital amount, simple techniques that do not need educational qualification and is also good market. Meanwhile, the motivation is accompanied by limitation of awareness and knowledge on the harmful consequences of tobacco products. After having intensive knowledge, she is decided to discontinue producing and selling of tuibur which is greatly depends upon stabilization of her economic condition.

The later key informant has focus on reduction tobacco inclusive of seller and buyer. The relevance of intervention by the community based women group for banning and control of tobacco is seen. The importance of consistency and providing comprehensive information is a mandatory for strategic intervention. The informant's at the same time mobilize the women group to focus their action on banning of tobacco. It is found that selling of tobacco products in the village is given-up and that will reduce the risk of tobacco related health complaints of the villager and to some extent it will also reduce some amount of money that is spent for buying tobacco. The action obviously will have economic impact too. Therefore, the community based organization has an important role by being a change agent for tobacco control in the society.

4.11.3 Focus Group Discussion (FGD)

The focus group discussion is conducted in Kulikawn, Aizawl. It was conducted among the high school students enrolled in private and goverment schools. The focus group discussion was held for 3 hours and it was a mixed group having 4 boys and 4 girls. It was voluntary participation of current tobacco users. The objectives of FGD were given with an orientation for the discussion.

Objective of FGD

a. To explore the social factors responsible for initiation of tobacco among the adolescents in Aizawl.

b. To attempt and explore the refusal skills used by the participants.

c. To probe how peer has influence them for tobacco use.

Description of the Discussion

i. Exploration of social factors responsible for initiation of tobacco among the children in Aizawl - The social factors that were responsible for initiation of tobacco among the school children are curiosity to experiment it as they were told their experience of experimentation by their peers. They started with *gutkha* products like *pan masala, sweety supari* and *tiranga* which were not known by them as a tobacco products. Other common reasons to them was starting with chewing of *paan* following the parent practice at home and having just for the sake of fun and socialization. At the initial stage, these tobacco products are not used when they were

alone and never had a craving and or searching for it. After a year or so the continuation of using depends on the availability nearby and later, the participants searching for it.

ii. Exploration on the refusal skills - After establishment of the practice, the participants carry their own tobacco pack of what they had dependency over it. In exploration of the refusals skills, it is found that all the participants were submissive and their frequency of using is depending upon the availability of receiving offer to them. The rare statements made by them are "I don't want, it is harmful to health, I am not supposed to take, and parents did not allow taking…" The main reason was that they feel shy or shame to express that parent has control over their tobacco use, being unlikely or different from the peers. To ignore the offer is found to be in-polite .The often refusal skills mentioned is that 'I don't like having it now'.

iii. Peer influence on tobacco – It is interesting to know and to probe how peer has influence them and how they also influence the other peers. When socialized in groups-friends, classmates, neighbours, they were usually offered tobacco products in an attractive way as part of their socialization. If it is rejected, the person is told that it is not a big thing just to have once or twice and cannot lead to addiction, such socialization is the place where tobacco can be consume freely because in the presence of older people they feel uncomfortable to take tobacco. The health consequences are totally neglected by both the parties. So, to have an image of adult and the participants simply take to escape from quoting "not manly, not cool, outdated and others". Finally, in probing the skills that influencing them, it is found that they also had use the same tactic to influence other peers.

Summary of Focus Group Discussion

To summarize the focus group discussion (FGD), all the set objectives were discussed and all the participants were really active and fully involved. From the discussion the children were simply started taking tobacco as taken by their friends' and late offered to them. Communication on harmful consequences of tobacco use by parents especially at younger stage is also found to be absent. The participant's did not have awareness and knowledge on tobacco use before initiation and the using of tobacco is taken casually by children and the adults. All these have leaded them to submissiveness and neglect the refusal skills. Lastly, the peer influence on tobacco use is taken lightly and expected to present in the socialization. Seeking conformity to the peers, the participants also has a feeling not to reject the offer. It is found that the same tactics was use to influence their other peers but is done unintentionally. Based on the focus discussion, orientation and parental communication on consequences is absent and they do not received proper awareness and education. Apart from these, seeking conformity to the group is also one of the challenging factors for the initiation of tobacco use and the lack of refusal skills make them prone of addiction.

CHAPTER – V

CONCLUSION & SUGGESTIONS

5. Conclusion and Suggestions

5.1 Conclusion

The study on '*Psychosocial aspects of tobacco Use among Mizo women'* is Conduct in Mizoram. Mizo is a one of the tribes in India having a distinct socio-cultural practice. The Mizo society is closely knitted like any other tribal society and gender inequalities and disparities in the society functioning and between the couples too are thought to be normal by the people. It is not much connected with other parts of the country and in many of political cases the 73rd amendment of the Indian constitution safeguarded the rights and opportunities of the Mizos. Majority of them are Christians and being a young culture, the state has celebrated its Gospel centenary in 1994. Unlike many of the tribal communities in India, the Mizos are much advanced in different areas and largely influenced by modernization. The lifestyles such as the practices, habits, standards of living, access of education to boys and girls, socialization, and fashions. All these have reflected the widely imitation of western cultures. However, the socio-culture practice is strongly imbedded and has been shaped the habits and conscience of the people till date.

The use of local alcohol that is the rice bear and tobacco consumption is fond to be culturally originated. Many of references on the Mizo history and cultures have shown the offering and use of alcohol and tobacco has taken part in any of the socialization mainly considering their economy. Particularly the use of tobacco was popular due to the prevalence of mosquitoes in the paddy field which disturbed their working and as mosquitoes repellent the whole community used it. Also, some of the Mizo folk story told us that many bachelors visited the girl at their house at night regardless of being her boyfriend of having romantic affairs. This was the traditional

practice and during that time, the girl will be busy with cooking pig-food or rolling of zozial and helped by those visitors. At the mean time, to note the choice of the girl, the girl used to tie the edge of bidi by her hair while the rest of the bidi were tied with a yarn. All these factors responsible for the engagement and promotion of tobacco use with the absence of its health hazards. Therefore, the study is unique from other tribal communities and it is more challenging for the researcher to probe further the consequences of tobacco use.

It is significant to made a study in this area due to high rate of smoke and smokeless forms of tobacco use by Mizo women which has shown by the *national level survey like National Family Health Survey – III (2005-2006), Global Youth Tobacco Survey, India (2011), Global School Personnel Survey, India (GSPS), 2006 and the report of Population Based Cancer Registry on the incidences of Female Tobacco related Cancers* and the overall mortality due to tobacco use.

The enquiries has fulfill the objectives of the study and consisted of socio-demographic profile of the respondent, perception on tobacco use, pattern of tobacco use, social and psychological determinants of tobacco use, health consequences, awareness level on tobacco cessation and suggestions made by the respondents to control tobacco use. The study is realistic and sensible in exploration of the actual phenomena inclusive of the respondent's perceptions, knowledge on consequences of tobacco use by women, assessment of the respondent's awareness level and the commitment and attempt made for tobacco cessation. In fact, the study is comprehensive and has coverage of the psychological aspects (cause-effect) due to tobacco use. The entire probing aim to assess the current position of the respondents In fact tobacco use by Mizo women is prevalent among the middle aged women both

in urban and rural communities. It is observed that majority of the respondents use as a continuation of the habit which was inculcated in their early years of life starting as young as before reaching 13 years of age and the data has shown that tobacco consumption is more prevalent among middle age women between the age group of 36 years and 60 years in both rural and urban communities. *The mean age of tobacco use by the respondents was 36.5 years.*

Tobacco use by women is strictly forbidden in many cultures while it is openly permitted in some communities. The study shows that the Mizo women use tobacco largely regardless of their age or geographical residence. The tradition and practice of using tobacco by the Mizo women did not have restrictions or societal disapproval. The data has shown that more than half of the respondents (58.3%) were married women. And probes during the interview revealed that husbands did not generally have restrictions and did not control the use of tobacco by their wives

The age at marriage of the respondents is an important factor to understand the age of initiation of tobacco use by women and the physical and psychological maturity levels to enter into addiction. The age at marriage of the respondents shows that 44.8% of the respondents got married before attaining 18 years of age and t*he mean age at marriage of the women respondents is 23 years w*hich is closer to the national mean age for females, 23.5 year.

The educational status of the respondents is one of a major concern with tobacco use and majority of the respondents had their schooling up to high school and more than half (69%) of them had middle school education and high school and another 10% of the respondents had completed higher secondary. The female literacy rate of Mizoram according to Population Census, 2011 was showing upward trend

from 86.75 percent in 2001 census to 89.4 percent against 65.46 percent of the national average of female literacy rate, 2011. Therefore, the practice of using tobacco by Mizo women is culturally rooted regardless of the education standard.

The size of the family is explored and more than half (68.3%) of the respondents are from nuclear family and it is the most common type of family both in urban and rural communities. This is followed by 22.3% of the respondents belonging to extended family and the remaining 9.4% are from joint family.

The study attempts to understand the social background of the respondents and *99.7% are Christian and 57.7% of them belong to Presbyterian Church*. Also, among the Christian, the Presbyterian Church has the largest population within the entire state.

The economic condition of the respondents is relevant to understand the occupation and the annual income of the respondents. More than half 56.5% of the respondents are home maker and unemployed and 14.3% are regular employees. The study has shown that *52.3% of the respondents has no personal income* and depend on the family earning for buying tobacco products and also *9.7% are living below poverty line (BPL)*

The pattern of using tobacco by the respondents was explored. The expenditure on smoke form of tobacco is higher in rural community and the pattern is reverse in urban communities. *And the mean value for using smoke forms of tobacco is 10.4.* It is also found that the *expenditure on tobacco in urban areas is Rs 16.00 and Rs 9.00 per day in rural communities. It shows that higher the personal income, higher the expenditure on tobacco.* And daily expenditure on smokeless forms of

tobacco is Rs 14.00 per day and Rs.8.00 per day among the rural women respondents. Hence, *the mean expenditure on tobacco is Rs 12.50 paisa per day* and the daily expenditure on tobacco is higher among the urban respondents than that of the rural respondents.

To understand the perceived psychosocial challenges lying behind tobacco use the general feelings of the respondents I explored and majority of the respondents' were felling good in general for most of the time and *the relationship between tobacco use and individual psychological states are not perceived*. While, half of the respondents do not encounter anxiety at all and anxiety due to tobacco use was perceived only by 1.7% of the respondents and 3.7% of the respondents has experience sadness for almost all the time. Also, the experience of *stress and strain is associated with tobacco use and it is more or less significant among the rural and urban tribal Mizo women.*

In connection to the frequency of using tobacco per day was assessed by four point scales as always, frequently, occasionally and rarely. *A maximum of 51 % of the respondents are a frequent users who has taken tobacco 5times to 8 times per day. Further, 12.3% are regular users who are using continuously which is more than 8 times a day.*

The social determinants of tobacco use by the respondents is assessed by using 14 items The study has reflected that peer taking tobacco, easy availability, receiving offers, attempt to experimentation, enhancement of social interaction and use by family members either of the parents or their siblings and availability at home are found to have greater influence for initiation of tobacco use than the personal

involvement in preparation and selling of tobacco products, receiving compliments from shop keeper and media.

The psychological determinants are assessed by using six items and majority of the respondents take tobacco products both in smoke form and smokeless form as mouth *refreshment.* The psychological causes leading to the use of tobacco by the rural and urban respondents are similar and are significant.

The following are the perception on minor health complaints cause by tobacco use. The perception are assess using 9 items and the respondents has given multiple ranking that *96.3% had encountered headache, 96% stomach pain, 95.7% acute ulcer, physical 95.7% physical weakness, 94.3% cough, 94.6% tiredness, 94.3% body pain and aching and 93.7% constipation. Therefore, tobacco use and the above minor health complaints are found to be associated.*

The perceived psychological consequences of tobacco use like *tension and aggressive behavior and reduction of memory power is positively present* among the respondents and it is more experienced by the urban women respondents than that of the rural women respondents. Whereas, *dullness and inferiority complex which is arises out of using tobacco are also mildly observed* among the rural women respondents and it is totally absent among the urban women respondents.

The perceived health effects due to tobacco use has shown that *majority of the respondents agreed that tobacco use could lead to oral cancer and pregnancy related problems.* And more than half of the respondents perceived that the possibility of respiratory infection, dental problems, oesophagus cancer and chronic obstructive pulmonary diseases. While, little less than half of the respondents perceived that

tobacco use can increase the cholesterol level, stroke and even disability. Further, the relationship between tobacco use and the risk of still birth, fertility and cervical cancer are also perceived by the respondents. On the other hand, *few of the entire respondents could only perceive the relationship between tobacco use and breast cancer, stomach cancer, lung cancer, liver problems, low blood pressure and catarac*t. Therefore, the effects of tobacco use on almost all the organs of the body and tobacco related diseases are not well perceived by the respondents.

The importance of awareness to quit tobacco use is emphasized and the main goal of tobacco cessation is to sustained abstinence, change of life style and improves the quality of life. Contrary to the extensiveness of the intervention *the data has shown that as much as 92.9 % of the respondents had not known the presence of Tobacco Cessation Clinic (TCC) in Aizawl civil hospital.* Therefore, more efforts need to be given on awareness on the existence of TCC at Aizawl hospital along with the programmes and services. In connection to this, out of *350 respondents 33.1% had ever attempted to quit and majority of them was due to health concerns*. The other reasons include the feeling that tobacco use is unhygienic, expensive, family request and bored of using it. However, *23.7% of them had attempted by themselves mainly through gospel camping and availability of professional help is not known*. While, regarding the awareness on the prohibition of smoking in public places, *82.9% of the respondents aware that smoking in public places is prohibited and it is a legal purview.*

Lastly, the respondents were asked to made suggestions based on their experiences. The *suggestions consisted of preventive aspect and rehabilitative aspects*. In the area of prevention of tobacco use the suggestions emphasize family teaching & discipline, prohibition of selling tobacco products both to minor and adult,

generation of comprehensive and extensive awareness, church intervention on tobacco control, teaching on self discipline, and inclusion of tobacco in health education and issue of separate identity card to buy tobacco products.

The suggestive measures proposed by the respondents are generation of awareness campaign, spiritual camping, and family orientation on no tobacco, counseling, support and encouragement to quit. However, the significance of professional lead with systematic orientation on the provisions like counseling, creating awareness, mass media campaign, provision of help desk, providing telephonic toll free, health education are neglected by majority of them. While, banning of selling and buying tobacco products by minor is part of the COTPA 2003, but banning of cultivation of tobacco so as to cause unavailability is a livelihood issue where there is a long way to go.

Towards conclusion of the study, the results has reflected that there is no relationship between tobacco use and education, tobacco use and occupation, frequency of tobacco use and personnel income of the respondents, awareness on health effects of tobacco use and rate of quit or attempt to quit tobacco. On the other hand, the study has shown the urban-rural variation on the pattern of tobacco use and found that smokeless tobacco is more prevalent among the women respondents from urban communities as compared to rural settings and reversely, smoke forms of tobacco use by women is more prevalent in rural settings as compared to urban communities.

Finally, the study found the importance of public participation and civil society efforts to reduce the incidences of tobacco use by Mizo women, the interventions that have been made by Tobacco Society of Mizoram, Mizoram State

Cancer Institute, Government of Mizoram is relevant to highlight. In continuation of the voluntary humanitarian efforts of the Indian society for Tobacco and Health, Mizoram Chapter, the first ever 'World no Tobacco day' was marked on 31st May 2002 in collaboration with the Tobacco Society of Mizoram, Health department, Government of Mizoram. During that five year plan, the state government did not have separate programme and the resources for interventions and tobacco control was only a part of the National Cancer Control Programme (NCCP). Thus, the challenging task of assurance of public health was gradually taken-up by the state government. Initially it is started with institutional arrangement and focus on ensuring mechanisms on COTPA 2003. The main activities were registry of client(s), counseling services, distribution of IEC materials and organizing an awareness programmes in schools. The society within a short span of time has tremendous vibration and has excellent networking and work in partnership with the civil society organizations with delegated activities as ISTH-MC- creation and generation of awareness especially among the school children and churches interventions, MHIP – banning of *gutkha* products, MJA- dissemination of IEC materials like article writing on editorial board, quotation related to tobacco control in India, coverage of the activities of MSTCS to seek public cooperation, MZP – advocacy on tobacco control in the educational sectors like education department, schools and colleges , MKHC - working with Synod Social Front like conducting survey and made church interventions through the church women group i.e *Kohhran Hmeichhia* . It is known that the MSTCS working in partnership with these community based organizations strengthen the mechanisms, wider coverage within a short span of time and voluntarily engaging them for all these activities and till date the resources of the society is not compounded. It is noteworthy to mention that the society has excellent institutional arrangement and convinced all

the dignitaries of the state government and capacity building is also ongoing. Therefore, the interventions of the society in the area of tobacco control are covering the state inclusive of all the eight districts of Mizoram. So, having the lenses of all this initiatives it could be known that COTPA, 2003 is well implemented and exercising for speeding – up the initiatives.

The other major achievements of MSTCS are:

a. Inclusion of education on Tobacco and Control in the school curriculum of class IV and class-VII edited by the Mizoram state government.

b. Inclusion of Thematic topic on tobacco and health in the Wednesday Night church service of Presbyterian denomination.

c. Inclusion of the topic on tobacco and health in the yearly observation of health Sunday like other thematic selection - leprosy Sunday, cancer Sunday etc.

d. Adoption of Tobacco free community –Thingsul Tlangnuam, Aizawl District, Mizoram.

The study has appreciated the initiatives of MSTCS in terms of capacity building, CSO involvements, networking with allied government departments and resources mobilizations. The future plans are inclusion of tobacco and health in the curriculum of CCE from the next academic session 2014 and inclusion of topic on tobacco and health in children Sunday school curriculum, 2014. All these intervention is expected to reduce secondhand smoke which is prevalence in the state.

5.2 Suggestions

The suggestions from the study will be effective and tremendous helpful for future interventions. The suggestions are broadly divided into three as *Policy related suggestions* which consisted of Strengthening of Mechanism, Mass media campaign, School Health Programme and Advocacy and Empowerment. The another suggestions is *practice related to social work interventions* and they are sub divided into Individual level, Family level, Community level and also the *Research related suggestions.*

5.2.1 Policy Related Suggestions

a. Strengthening of Mechanism - According to the Frame Work Convention on Tobacco, The Government of India as a signatory is taking initiatives and makes various interventions on tobacco control in India. The policy urges multi-sectoral involvement and cooperation. The required networking among different professionals will lead to success of the legislation. Therefore, the ongoing capacity building activities is suggested to be strengthening so as to achieve the maximum expectations out of the legislation.

b. Institutional Arrangement - The programme on tobacco control is spreading in all over the country without having the full institutional arrangements that has designed in the policy. Initially, the task has been taken up by the Health department of the respective states as only a part of the National Cancer Control Programme (NCC). Despite of the efforts taken by the tobacco control cell, the inadequate institutional arrangements is observed as a loop holes in delivering the services and its

existence is less likely to be ware by the public. Therefore, the study suggested that there should be adequate institutional arrangement to carry out the task on time and as it is to be.

c. School Health Programme - The School Health Programme under the health department and Education department-State Council for education and Resource Centre (SCERT) should be integrated with holistic perspective and for protong action. Either, it is suggested that there should be distinction of implementation in zone wise to have larger coverage. Therefore the school health programme should focuses on prevention of tobacco initiation among the school children and rehabilitation of the already tobacco users among the school children. Here, tobacco use in this stage would be easier to intervene for quitting. On the other hand, the children themselves could be an ambassador in spreading the information to their peers, to their parents and in the neighbor to those who do not have the same opportunity of accessing the information.

d. ARSH – The project on Adolescents Reproductive and Sexual Health (ARSH) is part of the Reproductive and Child Health (RCH) phase – II under National Rural Health Mission which aims to promote the health of adolescents' sexual and reproductive health by reducing infant motility rate (IMR) and maternal morbidity rate (MMR). It reflects the prevalence of anemia and malnutrition among the adolescents which could have impact on the health at later stage. The programmes sounded off sexual health and hygiene, health education, promotion of lifestyles which has implications on IMR and MMR. At the same time, the magnititude of tobacco use by Indian adolescents is shown by several studies and therefore, the ARSH could intervene in the area of tobacco control among the adolescents which is

one of the causal factors responsible for reproductive health and non communicable mortality in India.

e. Millennium Development Goals (MDGs) - The MGDs set by the United Nations in 2000 has eight goals to achieve by 2015. It focuses on eradication of global challenges like poverty, provision of drinking water, eradication of hunger, promotion of health, gender equality, sustainable development, empowerment and global partnership. The MGDs did not directly mentioned tobacco control, in fact it is well known that the prevalence of tobacco use and the third goal of MDGs reflected that women's health and passive smoking pronounce gender inequality in health inclusive of mortality and morbidity and health economic burden leading to poverty. Therefore, it is suggested that apart from the above points the global partnership could be bidirectional and use tobacco control to address MGDs and MGDs also to address tobacco control.

f. Civil society participation: The policy in detail expresses the need of people's participation and targeted the civil society initiatives in strengthening the efforts of the personnel of tobacco control. It has reflected the importance of coordination between the cell and community based organizations and also coordination between the communities based organization so as to have joint efforts for tobacco control within the state. In this case, it is very much relevant for Mizoram state having one of the best communities networking for all the populations like the MHIP, YMA, and MUP which is exist in every locality. Further, the state is inhabited by more of the Christians who are attending church on every Sunday regardless of their denomination. The church provided separate services for children, youth, and women

and for all the populations. Therefore, it is suggested to be an effective platform to take tobacco control initiatives.

g. Mass Media Campaign - The mass media campaign is an interesting and challenging task in the areas of intervention on tobacco control. Media is a convincing tool for all groups of population; it attracted people rather than the verbal expressions. It also has a wider coverage within a given period. The mass media campaign as indicated by the name targeted to reach the public by using print media, electronic media, skits, short play, street play and dissemination of IEC materials. The contents should be relevant for the age group and on their status of using tobacco. As the policy has suggested, it found to be effective to have mass media campaign such as cartoon, role play, article writing and others covering the legal aspects of banning of smoking at public places, smoke free, harmful effects of exposure to secondhand smoke, health consequences of tobacco use and assurance of public health rights.

h. Advocacy and Empowerment - Advocacy and empowerment is a process and is a vicious cycle. Effective advocacy leads to empowerment and for continuous empowerment, advocacy is again important. The professionals, meant personnel of the work, volunteers who have humanitarian values and other civil society organizations could address the issue of public health rights by controlling and restriction on tobacco. This advocacy could be extended to various allied departments like the education department, the police department for strengthening anti tobacco squads, tourism department and others.

5.2.2 Suggestions on Practice Related to Social Work Interventions

The suggestions on the study are evolving around the practice related to social work interventions. It is seen that the suggestions are at the multi level interventions as-

a. Individual level - The theoretical implications on tobacco use, theory of addiction, cognitive theory, and social learning theory (SLT) are relevant in the study and highlight the significance of genetic factors towards addiction to nicotine, self image, personality trait, orientation and individual environment. Besides initiation of tobacco use and the social determinants of tobacco use has to be considered. The social work intervention at the individual level includes inculcation of knowledge on the health consequences and harmful effects of tobacco use and orientation on the refusal skills that make the non user more vulnerable to their social world. The intervention should be at the prevention of tobacco initiation and the rehabilitation of the current users. The professional social work knowledge aims to consider the personality structure, psychodynamic theory especially the social learning theory that makes many of the children tobacco users developing the habits through modeling, imitations and after all learning from the environment. Thus, the social work intervention should have preventive aspects, remedial and rehabilitation of the current users.

b. Social Environment level - Several research studies, literatures and articles have showed the significance of the social environment for initiation and continuation of tobacco use. Parents and peer smoking are strong predictors of adolescent tobacco use behavior along with normative beliefs and expectations and social norms. It is therefore important to consider the socio cultural factors of tobacco users, smoke free homes, parent-child communication, and use of tobacco by siblings, selection of peer

group, tobacco free socialization which is necessary to covers the educational institutions. The social work intervention should consider the relevant of the social environment and extended up to environmental modification as necessary.

c. Community level - It is equally important to take initiatives at the community level. At a community level, the emphasis is on tobacco free homes and tobacco free communities. It is relevant to come up with the following suggestions at a community level because the study has resulted that the use of tobacco at home is widely prevalent with an absence of notion on the effects of secondhand smoke and third hand smoke. The inhalation of passive smoking and inhalation of smoke that is remaining in the household articles and belongings share the same health risk. It is observed that in urban areas, there is more use of smokeless tobacco while smoke form is more practice in rural areas. The social work intervention at the community level includes on creating awareness and education on the importance of smoke free homes and smoke free communities along with the health consequences that can happen due to smoke and affecting the communities by polluting the environment. The social work intervention made a commitment to ensure the public health rights. The urge for public participation would somehow depend on the level of initiatives made at the community level. Further, convincing of the community leaders could enhance an introduction of smoke free homes and smoke free communities.

d. Capacity Building - The study has found that capacity building is tremendously important for the success of tobacco control. Apart from the mentioned social work interventions it requires enhancement of capacity building to success. Here, every sectors and persons engaged in the process need to be sensitize to strengthen the mechanism and execute the stipulated roles with coordination. The social worker

intervention should evoke the need for capacity building as provided in the provisions of national tobacco control.

e. Awareness Generation - Building awareness and providing knowledge is really significant to mobilize the people. The public should aware of their rights and responsibilities and enhancement of the rights of others too. From the study, it is known that the public should have legal awareness like banning of *selling tobacco to and by minor*: As the age of initiation of tobacco use is becoming more advance due to easy accessibility, affordability of tobacco products including cheaper rate of Rs. 1 and poor restriction mechanism to protect minors from selling and buying of tobacco products. The Study have resulted that the degree of nicotine-addiction is more pronounced in adults who initiate tobacco use at an early age i.e below 18 years. Therefore, the social work interventions in this particular area include generation of awareness and dissemination of IEC materials by using mass media campaign like talk show, radio talk, film show, distributions of pamphlets, ensuring labeling of pictorial health warning and signage which transmitted education to the public.

f. Formulation of Tobacco Cessation Support Group – The study has come up with the suggestion on formulation of Tobacco Cessation Support Group. It is because that the quit rate or tobacco cessation rate is low all over the world with less number of tobacco users attempted to quit. This shows the relevance and need of extensive psychosocial support for tobacco cessation and highlighted the need for engagement in the cessation process. The inference of the suggestion is that formulation of Tobacco Cessation Support Group will focus on assurance of public health.

g. Right Based Tobacco Control - The health right of the individual is universal and is also human rights. It is the right of everyone to be healthy and increase the life expectancy. Also it is partly the responsibility of an individual to assurance the health rights to others. It is therefore, the study suggested right based approach towards public health that would focus on reduction of exposure to secondhand smoke and the inhalation of passive smoking and environmental smoke could also be minimize through right based tobacco control.

5.2.3 Research Related Suggestions

The professional intervention called for the urgent need of research related studies on tobacco. It is known that there is in exhaustive research studies in all the areas and across populations at the national, regional and state level. Therefore, it is suggested that research studies employing qualitative and quantitative approach is needed in the area of tobacco and children, tobacco and youth, tobacco and women's reproductive health, maternal smoking, social networking and tobacco use, family environment and tobacco use, communication on anti-tobacco, media and tobacco use, cultural implications on tobacco use, education and tobacco use, occupation and tobacco use, stress management and dependency on substance, socio-economic burden of tobacco use, politics of tobacco manufacturing companies, evaluation of anti tobacco interventions and constructive critical analysis of the current intervention. Above all, research studies on the public relation, societal attitude, community participation and initiatives of civil society organization should not be denied along with the relevant of ethnographic studies in the area.

APPENDICES

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Psychosocial aspects of Tobacco use among Mizo women

INETRVIEW SCHEDULE

(confidential & research purpose only)

Ms.Elizabeth. H
Ph.D Research scholar
Deptt. Of Social work
Mizoram University

J.V. Jeyasingh
Supervisor
Deptt. Of Social work
Mizoram University.

Date : **Schedule No:**
Locality :

I. Profile of respondent

a) **Name** :
b) **Age** :

c) **Marital Status** : 1) Married ☐ 2) unmarried ☐ 3) widow ☐
4) Divorced ☐ 5) Remarried ☐

d) **Educational standard** : 1) Illiterate ☐ 2) Primary school ☐
3) Middle school ☐ 4) High school ☐
5) Higher secondary ☐ 6) Graduate ☐
7) Post graduate ☐ 8) others ☐

e) **Occupation of the respondent** : 1) homemaker ☐ 2) self – employed ☐
3) private - employee ☐ 4) Govt. Employee ☐
5) unemployed ☐

f) **Annual Income of the respondent :**

g) **Age at marriage** : 1) below 18 years ☐ 2) 19 – 25 years ☐
3) 26 – 32 years ☐ 4) 33-40 years ☐
5) 41 and above ☐

h) **Type of family** : 1) Nuclear ☐ 2) Joint ☐
3) Extended ☐

i) **Religion** :1) Christian ☐ 2) Hindu ☐ 3) Muslim ☐
4) Buddhist ☐ 5)others ☐

j) Denomination **:1)Seventh day Adventist ☐ 2) United Pentecostal church ☐ 3) Salvation Army 4)Roman Catholic 5) Baptist ☐ 6) Presbyterian ☐ 7) Local church ☐ 8) others ☐**

ii) Address :

II. Family Background:

S/n	Name	Relationship with respondent	Sex	Age	Ednal. Qual.	Occup ation	Monthly Income	Use of Tobacco
i								
ii								
iii								
iv								
v								
vi								

III. Self Perception on Tobacco use:

i)	Have you felt sad, discouraged or hopeless in life of late?	Always	Mostly	Sometimes	Never
ii)	Have you been under any type of strain, stress, or pressure?	Always	Mostly	Sometimes	Never
iii)	Have you had any reason to wonder if you were losing your mind, losing control over the way you act, talk, think, feel, or of your memory?	Always	Mostly	Sometimes	Never
iv)	Have you been bothered by any illness, bodily disorder, pains or fears about your health?	Always	Mostly	Sometimes	Never
v)	Have you felt tired, worn out, used-up, or exhausted?	Always	Mostly	Sometimes	Never
vi)	Have you been concerned or worried about your	Always	Mostly	Sometimes	Never

	health?				
vii)	**Have been feeling tense on any issue recently?**	**Always**	**Mostly**	**Sometimes**	**Never**
viii)	**How often do you have cravings for tobacco?**	**Always**	**Mostly**	**Sometimes**	**Never**
ix)	**Are you physically addicted to tobacco?**	**Always**	**Mostly**	**Sometimes**	**Never**
x)	**Are you psychologically addicted to tobacco?**	**Always**	**Mostly**	**Sometimes**	**Never**
xi)	**Tobacco use leads to physical dependency.**	**Always**	**Mostly**	**Sometimes**	**Never**
xii)	**Tobacco use leads to psychological craving.**	**Always**	**Mostly**	**Sometimes**	**Never**
xiii)	**I take tobacco despite my parents telling me not to.**	**Always**	**Mostly**	**Sometimes**	**Never**
xiv)	**community disapproved tobacco use by women?**	**Always**	**Mostly**	**Sometimes**	**Never**
xv)	**Tobacco use by women decreases their value in the society.**	**Always**	**Mostly**	**Sometimes**	**Never**
xvi)	**Do you smoke cigarettes?**	**Always**	**Mostly**	**Sometimes**	**Never**
xvii)	**Have you been waking up fresh and rested?**	**Always**	**Mostly**	**Sometimes**	**Never**
xviii	**How often do you feel good?**	**Always**	**Mostly**	**Sometimes**	**Never**
xix)	**Have you begun feeling anxious of late night?**	**Always**	**Mostly**	**Sometimes**	**Never**
xx)	**Do you control of your behavior, emotions, or feelings frequently?**	**Always**	**Mostly**	**Sometimes**	**Never**
xxi)	**Is tobacco use associated with relaxing and calming the body?**	**Always**	**Mostly**	**Sometimes**	**Never**
xxii)	**I chew tobacco even in religious function.**	**Always**	**Mostly**	**Sometimes**	**Never**
xxiii	**I smoke even in places that forbid smoking.**	**Always**	**Mostly**	**Sometimes**	**Never**

IV.Pattern Of Tobacco Use:

Sl.no	**Forms of Tobacco Use**	**Age at first use**	**Duration (months/Year)**	**Frequency (hours) per day**	**Qnty. per day**	**Amount spent per day (Rs)**
1	**Smoke form** **i) Cigarette**					
	ii) zozial (local)					
	iii) Bidi					
	Iv) pipe tobacco					
2	**Smokeless form**					

	i) Sahdah					
	ii) Khaini					
	iii) Gitkha products **a) Tiranga** **b) Paan Masala**					
	iv) Zarda paan					
	v) Tuibur					
	vi) Paan					

V. Reasons for Tobacco Use:

V.1. Social Factors

i.	**Because of personal involvement in preparation of Zozial (local cigarette)**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
ii	**Because of personal involvement in preparation of pipe tobacco**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
iii	**Because of personal involvement in preparation of 'tuibur'.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
iv	**Because of personal involvement in selling of zozial or cigarettes.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
v	**Absence of awareness on harmful consequences of tobacco use on health**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
iv	**Due to parents using tobacco at home.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
vii	**Due to siblings and others use of tobacco use**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
viii	**Due to lack of parental communication and control.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
ix	**Easy availability of tobacco products in the environment**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
x	**Due to peers taking tobacco.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
xi	**Tobacco is used commonly for enhancing social interaction.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
xii	**Media and advertising of tobacco.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
xiii	**Experimentation**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
xiv	**Receiving compliments (free) from shopkeepers**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
xv	**Any others.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**

V.2. Psychological factors

i.	**Coping mechanism for stress.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
ii	**To avoid nausea.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
iii	**Relief from toothache.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
iv	**Mouth cleaner and refreshment.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
v	**To avoid feeling sleepy during late night.**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**
iv	**Any other**	**Strongly agree**	**Agree**	**Disagree**	**Strongly Disagree**

VI. Health consequences:

VI.1. Rank in order of perception of most common complaint due to tobacco use

i.	**Stomach pain**	
ii	**Acute ulcer**	
iii	**Cough**	
iv	**Headaches**	
v	**Constipation**	
vi	**Weakness**	
vii	**Tiredness**	
viii	**Body pain & aching**	
ix	**Skin problems eg. Pimples**	

VI.2. which of the following are linked with frequent use of tobacco?

i.	**Oral cancer**	**Yes**	**No**
ii	**Oesophagus cancer**	**Yes**	**No**
iii	**Breast cancer**	**Yes**	**No**
iv	**Cervical cancer**	**Yes**	**No**
V	**Cardiovascular diseases**	**Yes**	**No**
Vi	**COPD**	**Yes**	**No**
vii	**Respiratory infection**	**Yes**	**No**
viii	**Premature cataract**	**Yes**	**No**

ix	**Stroke**	**Yes**	**No**
x	**Reduced memory power**	**Yes**	**No**
xi	**Infertility**	**Yes**	**No**
xii	**Dental problems**	**Yes**	**No**
xiii	**Disabilities**	**Yes**	**No**
xiv	**Pregnancy related**	**Yes**	**No**
xv	**Still birth**	**Yes**	**No**
xvi	**High cholesterol level**	**Yes**	**No**
xvii	**Any other**	**Yes**	**No**

VI. 3. Which are the health consequences of your frequent tobacco use?

i)
ii)
iii)
iv)

VI.4. what are the psychological problems due to your frequent use of tobacco?

i)
ii)
iii)
iv)

VII. Tobacco Cessassion

a) Are you aware of the tobacco Cessassion clinic, Aizawl Hospital?

b) Have you tried to quit tobacco?If yes, give details.

c)

S/n	No. of Attempt	Reasons for attempt	Agency	Success	Failure
i	**Attempt –I**				
ii	**Attempt –II**				
iii	**Attempt –III**				
iv	**Attempt -4 above**				

d) Have you noticed that smoking in public place is prohibited?

e) **Kindly suggest some measures to prevent tobacco use among Mizo women**

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f) **Kindly suggest some measures to rehabilitate Mizo women tobacco users**

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Particulars of the Candidate

I. Personnel Identification:

- Name : H. Elizabeth
- Gender : Female
- Date of Birth : 15.12.1982
- Caste : Schedule Tribe (ST)
- Permanent Address : House No V/50, Bawngkawn North, Near Hindi Bible School, Aizawl, Mizoram -796014, India.
- Office address : Department of Social Work, Mizoram University Campus, Tanhril, Aizawl, Mizoram -796001, India.
- Contact : Phone: 09436195610
  email: lizahatzaw@gmail.com

II. Educational Background:

S.No	EDN	YEAR OF PASSING	CLASS/ DIVN	INSTITUTION / BOARD
1	HSLC	1996	III- Divn	Mizoram Board of School Education (MBSE)
2	HSSLC	1999	II Divn	Mizoram Board of School Education (MBSE)
3	B.Sc (H.SC) Child welfare	2002	I Divn	North Eastern Hill University (NEHU)
4	MSW (Family & Child Welfare)	2004	I Class	Mizoram University (MZU)
5	NET	2003		UGC
6	Ph.D	20th March, 2008	On going	Mizoram University (MZU)

The Courses Studied in MSW, Mizoram University were

- Family & Child welfare
- Human Growth & Development
- Human Rights & Social work
- Women & Development
- Social work Research

- Community development
- Case work
- Group work

III. WORK EXPERIENCE:

S.No	Designation	Date from	To	Institution/University
1.	Social Investigator			IWDP, Department of Agriculture, Govt. of Mizoram
2.	Programme coordinator			Agapia Social centre, Aizawl Mizoram (Faith based NGO)
3.	Social worker			Adoption cell, MHIP General Hqrs, Aizawl. Mizoram
4.	Assistant Professor	1.2.2007	Till date	Mizoram University Aizawl

Papers Taught/Teaching and year in the Department

Sl.no	Core Subjects
1	Working with individual
2	Working with groups
3	Human growth & development
4	Social work with children
5	Soc. Work in health & mental health
6	Social welfare administration
7	Women & development
8	Human rights, Advocacy & soc. work

Other relevant Information:

1. Attended Research Methodology workshop in Social Sciences during 26th Now-1st Dec, 2007 organized by the department of Social work, Mizoram University
2. Participated in two day workshop on Advocacy on Tobacco Control Laws & Related Issues in India (Eastern and North Eastern Region) organized by

National Institute of Health and Family Welfare, Govt. of India during 15th -16th December, 2008.

3. Joint publication of article on Traditional medicine, Healing and Herbal Medicine in Mizoram (28 & 29th May, 2009- UNCTAD).
4. Research Presentation on First Social scientist Meet, ICSSR- NERC, NEHU Shillong on 9th March, 2010.
5. Presented Paper on Globalization and challenges to social work interventions in the National Seminar on Social Development in North East, School of social sciences, Mizoram University during 3rd -4th March, 2011.
6. Publication of article on Implications of tobacco use among women in Northeast, Contemporary social scientist, 2330-956X Issue I, Vol –I

7. Attended One week workshop on Applied Statistics during 23rd – 28th July, 2012 organized by the Academic staff college, Mizoram University.

8. Attended One week workshop on Data Analysis through SPSS. 27th Aug- 1st Sept, 2012 organized by the Academic staff college, Mizoram University.

9. Presented paper on 'Tobacco and women's Health in Mizoram' in the National seminar on Development in North East India: Problems and Prospects sponsored by ICSSR, New Delhi on 6th & 7th, June, 2013 organized by department of Education, Mizoram University.