# Smokeless Tobacco and Rural Women: Influencing Factors towards the Usage

## Abstract
In India the use of tobacco is varied. And the prevalence of smokeless tobacco use exceeds far more than cigarettes smoking. Conversely, as the rate of oral cancer cases are rising just as the use of smokeless tobacco especially among women, due to its social and cultural attachments, absence of social taboo and ignorant.

Methodology: The present study is a community based qualitative cross-sectional study primarily based on field data collected from the subjects who were 25 years old and above through structured and semi-structured interview techniques. All together 75 married women smokeless tobacco users were interviewed from 5 rural villages.

Result: Spit tobacco or khaini and paan masala were the predominant types of smokeless tobacco consumed by the participants. Influencing factors for their initiation of tobacco usage include toothache (50%), morning sickness (30%), and peer influence (20%). However, all these factors could be attributed to the lack of knowledge about the ill effect of smokeless tobacco and social acceptability towards its usage by the women.

Conclusion: The present study has indicated that ignorance about the ill effect of smokeless tobacco is the leading factor towards the alarming use of smokeless tobacco by the women in the rural areas. Hence, proper intervention through mass campaign and awareness programme about the effect of tobacco by the various agencies is an imperative measure to control this menace.

## Index Terms
Influencing factors, smokeless tobacco, khaini, paan masala, women, Intervention.

## I. INTRODUCTION

The emergence of tobacco-related diseases is a growing public health problem. Tobacco consumption, either in smokeless form or as smoking is reported to be responsible for major non-communicable diseases namely cardiovascular diseases, chronic obstructive pulmonary disease and cancers of the lung, oral cavity, pharynx, larynx, oesophagus, stomach, pancreas, liver, kidney, ureter, uterine cervix and bone marrow (Ezzati et al, Peto, 1996). The various oral health consequences of smokeless tobacco ranges from the initial tobacco stains on teeth, periodontal diseases and tooth loss to life threatening oral cancer preceded by pre-malignant white and red lesions. A variety of tobacco uses are prevalent in India and they differ from region to region. The most widespread are chewing of betel-quad, gutkha and khaini with tobacco and this has been demonstrated as a major risk factor for cancers of oral cavity (Maher et al, 1994).

According to WHO (2012) twelve percent of all deaths in the world among adults aged 30 years and over are attributable to tobacco use and nearly six million people die from tobacco-related causes every year. If present patterns of use persist, tobacco use could cause as many as one billion premature deaths globally during the 21st century (WHO, 2011). Although most of the tobacco that is consumed throughout the world is in the form of manufactured cigarettes, smokeless tobacco now forms a significant and growing portion of global tobacco use, especially in South Asia (Eriksen et al, 2012).

Globally, cigarette smoking is the dominant form of tobacco use. But in the Indian context, tobacco use implies a varied range of chewing and smoking forms of tobacco available at different price points, reflecting the varying socio-economic and demographic patterns of consumption. Tobacco is consumed in a variety of, both smoking and smokeless forms, e.g. bidi, gutkha, khaini, paan masala, hookah, cigarettes, cigars, chillum, chutta, gul, mawa, misri, etc. Untill now, the consumption of tobacco by women in India is chiefly in smokeless form. Women smokeless tobacco users are numbered in millions in India, and several million more are dependent on tobacco used in other ways. The number of women tobacco users increases daily, not only because of the India's fast-growing population, but also because tobacco is being fostered and encouraged worldwide for commercial gain and, in spite of incontrovertible evidence on the toll of death, disease, and disability that is being caused. The Indian government though has enacted a strong legislation to curb this menace in letter, it has remained ambivalent towards a problem that has implications for excise and tax revenue, health and welfare expenditure, and political expediency.

The prevalence of tobacco use in India according to GATS (2009-10) a quarter twenty six percent of all adults in India uses smokeless tobacco either by chewing, or applying it to the teeth and gums, or by sniffing. Use of smokeless tobacco is more prevalent than the smoking version and prevalence of smokeless tobacco use (26%) is far more than prevalence of smoking (14%). The extent of use of smokeless tobacco among males (33%) is higher than females (18%). Overall, 2.9% (rural, 15.1% and urban 1.2%) of women smoke and 18.4% (rural 29.3% and urban 17.7%) used smokeless tobacco. The state of Manipur where this study has been based stands amongst the five highest tobacco use in India. It has 45% of adult who consume smokeless tobacco on everyday basis with marginal differences between male (52.1%) and female (37%) tobacco users (GATS, 2009-10). As we know the effects of smokeless tobacco on the public health especially oral health is alarmingly increasing there seems to be no sign of decreasing its usage. Particularly the marginalized and disadvantaged women in rural areas the use of smokeless tobacco is increasing on everyday basis, the reasons of
which are varied and complex. Therefore, the general aim of this qualitative study is to further explore these operating factors as to why tobacco use among the women in the rural areas are increasing despite various control measures being taken up by various agencies.

II. METHODOLOGY

The present study is a community based cross-sectional study conducted in five Tangkhul Naga (tribal) villages of Ukhrul district Manipur state. The villages are situated at the far-flung remote area from the district headquarters where access to modern facilities, health care, transport and communication, and other modern technologies are at their far reach. Their main livelihoods still depend on the traditional cultivation of patty field and other petty trades and vegetables vendor. The participants were married women who were 25 years old and above. Selective house visits were done through the help of the researcher's field guide and those women who were willing to spare their time were interviewed. Confidentiality of the information was assured to them and interviews were conducted in a local language. All together 75 female smokeless tobacco users were interviewed through predesigned structured interview schedule. Interview schedule consist of queries such as age of initiation, influencing factors, general awareness of health hazard, and perceived harmful effect and benefit of tobacco use.

Working definitions: Smokeless tobacco - the term 'smokeless tobacco' includes a large variety of commercially or non-commercially available products and mixtures that contain tobacco as the principal constituent and are used either orally (through the mouth) or nasally (through the nose) without combustion such as, khaini, gutkha, paan masala with or without zarda, tuibur (or tobacco water), etc. Chewing tobacco is a subcategory of oral smokeless tobacco products that are chewed during use.

Khaini is a form of chewing tobacco product used mainly in India. The product typically consists of tobacco particles mixed with lime and additional flavorings. The product has a brown granular appearance and is available both in loose form and in individual portioned sachets.

Paan masala is a mixture of catechu, areca nuts, lime flavors and spices, which is intended to be chewed. Paan masala is sometimes mixed with chewing tobacco. The product is traditional to India, it may be handmade or pre-manufactured.

Zarda is a form of chewing tobacco traditionally used in India. It is made from dry, rather coarse tobacco flakes, lime and flavorings such as saffron. It may also contain vegetable dyes. It is sometimes chewed with areca nut. The product has a light brown to white course appearance.

Gutkha is form of chewing tobacco traditionally used in India. The product typically contains tobacco, areca nut, and catechu (acacia wood extract). Additional sweeteners and flavorings may be added. The product has a light brown to white granular appearance and is the most popular form of chewing tobacco in India. The product is also available in individual pre-packed portions.

Consumption of smokeless tobacco in the present study is defined as a regular user of tobacco in any forms other than smoking at the time of interview. The participants of the present study have been using tobacco for the past 50-40 years.

III. RESULTS

Prevalence of smokeless tobacco usage: As the nature of the present study, participants were chosen selectively meaning on the current prevailing smokeless users only, the overall prevalence rate of tobacco usage was 100% (n=75). Besides, participants have been consuming smokeless tobacco for the past 5-40 years.

Forms of tobacco: The commonest forms of tobacco used by the women were khaini or spit tobacco (55%), paan masala with zarda (35%) and gutkha (10%).

Age of initiation: The average age of initiation is 25 years. 20 (26.6%) of them started using smokeless tobacco at the age of 17-20 years old. 40 (53.3%) of them stated using tobacco at the age of 21-25 years old and while 15 (20%) of the women users started using tobacco at the age of 26-30 years old.

General awareness of harmful effects of smokeless tobacco: The level general awareness of health effects of tobacco by the participants were zero percent at the time when they first started chewing tobacco. When asked whether she was aware of the health effects of smokeless tobacco, a 45 years old women said, "...no, no, nobody taught me about the bad effects of tobacco when I began to chew for the first time. Only in course of time I came to learn as it became to take toll on my health. But knowingly still I continue taking." Also 50 years old women responded with similar tone saying, "I'm not aware of this that khaini can cause cancer or was bad for our health until now when you interview me. I just consume whenever the urgency arises." Similarly, 35 years old women when asked if she had heard from anywhere about the ill effects of smokeless tobacco described that, "when I first started to chew tobacco I was never aware of the health effects of tobacco as all my friends were chewing and they also didn't seem to know about it until recently I came to hear from my children but now I'm too late, i can't quit anymore." Like these women and many others were never aware of the health hazards of smokeless tobacco by the time they first started taking it, but only at the later stage when they have become addicted to it they were told by others. As a matter of fact, they were in complete unaware.

Influencing Factors: Well it is undeniable fact that no one was born chewing or smoking tobacco. This behavior or consumption habit was acquired and learned from the social and physical environment of our world. People learn and continue to take tobacco under different circumstances related to them. To understand how and why people starts using tobacco given the fact it is harmful, is not easy as it seems to appear. There are many complex factors including psychological, social and physical factor associated with it. From the present study the researcher could explore three prominent contributing factors which were reported by the participants.

Toothache: Tobacco use among women is prevalent in all regions of India and among all sections of society while prevalence of smoking among women is low in most areas due to social unacceptability. The use of smokeless tobacco is significantly high in the entire region particularly in rural areas. Some of the reasons for this high rate of women tobacco usage
"For me tobacco and food are equally important in my life." (60 years old)

The addiction towards smokeless tobacco was so immense, sometimes it appears their lives were dictated and entwined by and with tobacco. Their everyday actions and affairs tangled along with tobacco without which life seems to become unimaginable for them.

Morning Sickness: The second most common influencing factor reported by the participants was 'morning Sickness' or 'pregnancy sickness' which accounted for 30%. This group of women fervently attributed their present status of chewing tobacco to 'morning sickness'. They related that during pregnancy whenever 'morning sickness' occurred to their great surprise they began to look out for things like khaini, their urge to chew khaini became so much that without any trouble they would chew. On the contrary, they have never chewed until hitherto. Sometimes 'morning sickness' got prolonged and as they continue chewing, by the time they deliver their child they have become addicted into chewing tobacco. Eventually, they said there is nothing called quitting for them. Some of them in trying to quit started taking paan masala and gutkha. They thought and believed that chewing khaini comparatively more dangerous than chewing paan.

"I started chewing tobacco during 'morning sickness'. During 'morning sickness' I wanted to eat so much khaini and I have to eat if not I'll always keep asking and looking for it until I have it. Some other women even smoke, drink kerosene, petrol etc. during this period. After having chewed and got what they want the craving mind and restlessness came to an end at peace. When delivered many discarded it at the same time many continue and got addicted into it." (30 years old)

"Initially I didn't chew besides, I have never tried chewing, but during pregnancy of one of my child I suddenly wanted to chew khaini and I chewed. But after coming to know the truth about tobacco I'm trying to quit. It is really hard to quit chewing tobacco or khaini. I'm eating sweets, paan to occupy my thoughts and my mouth in that way I'm trying to quit." (45 years old)

During 'morning sickness' it is believed that a woman sense of smell and sensitivity to odors tremendously increases. Therefore, their sense of smell became very sensitive and favorable to certain smell and vice-versa. And for them the smell of khaini tobacco khaini became their favorite taste. They even said that the smell of khaini became very sweet and pleasant to chew unlike when they were not pregnant. Although, it is subject to scientific verification why and how pregnancy and the smell of tobacco khaini are linked, for these women taking khaini during pregnancy really had an effect.

"I started chewing tobacco during pregnancy of my first child. When I was pregnant one of my friends was chewing khaini, maybe because of the 'morning sickness' the smell of the khaini was so sweet that I asked her to share me and I chewed and found it was so tasty and good. It was so delicious I have no idea why it happens like that." (47 years old)
Peer influence: Peer influence is another very important factor reported by the participants (20%) for their chewing status of smokeless tobacco. People who have friends who chew tobacco are the most vulnerable group of people. Some participants reported cases of being compelled and force to take up tobacco. They said, they are often under pressure from their peers to take up tobacco, and to refuse would not be pleasing to their friendship therefore, they have to take up. According to the participants person having friends who chew tobacco are always at the receiving ends because most of the time they were exposed to chewing and directly or indirectly were prompted to give a try. They credited their chewing status to those friends who gave them promises like losing weight, taste, and so on. While others started out of curiosity or to please their friends and out of courtesy. Some cases are given below.

"I start taking because one of my friends forced me to chew. At first, I vomited a lot accompanied by headache but still then I continue the next time as my friends keep offering me." (27 years old woman)

"I learned to chew tobacco from my friends. When I was working in a factory we don't have much work to do so whenever my friends chew tobacco I used to take little bit of it and try it out myself. The next day came I met my friends as usual they offer me to take again. Even at home my aunty used to share me her tobacco. And this was how and why I'm still chewing until now as I have become addicted." (57 years old)

"I learnt it from my close friends who were chewing tobacco by that time. One fine day she asked me to give a try with a promise of losing weight and better facial complexion and hence I tried. Initial taste was unbearable, but I can't understand myself how I could manage to learn chewing. I started chewing tobacco not because of toothache like many other used to cite. But for me it was because of my friends. My friends used to tell me to take saying that it is very tasty, 'come on have it, it's tasty'. I started just for the interest of my friends just to please them. Even now I have not suffered from toothache; it was purely friend's interest and pressure that I started." (36 years old)

Some women even reported that even if they have started taking tobacco because of their toothache they would still blame their friends who introduced them with the promise that khaini or paan masala is a good remedy for toothache. They also claimed that since every of their friends chew khaini because of toothache, they also started with advice from their friends that toothache can be healed by khaini.

"….although, I started chewing tobacco because of my toothache, it was my friends who told me that chewing khaini a spit tobacco is a good panacea for toothache problem. I started from there on… earlier I don't take tobacco thinking that it is bad but when people said that it is good for toothache I started taking khaini. Khaini is really bad, once a person got addicted into it he/she may find very, very hard to come out of it." (53 years old woman)

"Because my friends who were taking khaini used to tell me that for toothache the best remedy for cure is to patch khaini over the pain or affected area. I have listened to them and now it has become a habit for me not only that I cannot concentrate on anything without chewing khaini." (65 years old)

Medicinal usage: In the early days of its discovery by Columbus the Red Indians used tobacco for various purposes including healing ailments such as earaches, snake bites, cuts and burns, respiratory diseases, fever, convulsions, nervous ailments, urinary ailments, and skin diseases, toothache and to suppress hunger and fatigue. Similarly, these women also hold a strong conception that tobacco does not only harm them but it has also medicinal effect for the case of toothache, better digestion, acts as an anti-flatulence and also for smooth defecation process. When the respondents were asked on whether khaini, paan masala or gutkha does actually help them in curing their toothache some of them claimed that tobacco or khaini had cured their toothache. While majority of them claimed that their toothaches continue to persist. They stated that tobacco chewing had never cured their toothaches though definitely, it has given them momentary relief to their pain. They all said the relief lasted only for a few half an hour to an hour. They further added, since the pain keeps coming back they had to patch khaini over and over again over the aching portion as there was no other available remedy except khaini.

"It's like because of khaini that I don't experience pain anymore. My toothache had completely gone." "To me if I take khaini the pain immediately disappeared. For quite sometimes I take khaini. And now the pain has gone completely. I would give credit to khaini for curing my toothache." 

"….khaini has made my teeth stronger, otherwise my teeth must have all been gone by now." (67 years old)  

"Of course, momentarily khaini gave relief to our pain but when I threw it out, the pain appeared again and I had to patch another pinch of khaini over the pain portion. If don't take the pain starts over again therefor, I have to chew again and again which ultimately led me to addiction. I don't want to chew but I can't help anymore with this addiction." (55 years old)  

"The pain was unbearable that's why one day someone suggested me to take khaini. Accordingly, I took it and yes, it kills tooth pain somehow. Though it gave relieve for sometimes it never provide complete cure. (29 years old)  

"I started chewing tobacco or patching raja/khaini due to toothache. Of course, it gave relieve for few hours but to cure completely has never come about. It never cures. But now since I'm used to chewing tobacco whenever I feel the pain I used to patch it." (43 years old)

Tobacco does not only serve for toothache problem to them. For these rural women smokeless tobacco serves for different purposes in their everyday lives. The action of chewing was not only to satisfy their craving, habits and for toothache problem alone but in other utilities like better digestion, to ease flatulent etc. 30% of the participants reported that smokeless tobacco especially khaini helps them to relief from stomach gas, digestive problem and easy defecation.
"I feel like it is good for stomach gas and digestion. I cannot go to toilet to defecate without taking khaini in my hands." (41 years old)

"Yes, some women can't go to pass their needs to washroom without chewing it. And some other has a belief that chewing khaini is good for digestion and stomach gas." (27 years old)

"...even, it is good for passing 'no.2' and digestion. When we don't feel like passing 'no. 2' we chew khaini and it makes me better pass my needs. (32 years old woman)

"I feel like it helps in better digestion and passing my needs." (58 years old)

Quit attempts: Tobacco consumption over a period of time leads to chronic dependence due to highly addictive nature of nicotine. Cessation of tobacco use is an established tobacco control measure. Majority of the participants reported that they have made several attempts to quit tobacco at some point of time. Unfortunately, all their attempts were unsuccessful except, few who have quitted as they claimed their toothache was cured but still majority of them continue chewing even after their toothache. Many narrated their futile attempts, expressed remorse and desperateness for their inability to quit. They said, in addition to their toothache which was the initial factor for their initiation, addiction has made them impossible to quit.

"...you know how I quit it was because, all my teeth were gone and so do my toothache." (69 years old)

"...as long as my toothache persists I know I can never quit." (50 years old)

"After my toothache was gone, I have tried so many times to quit but this habit is so strong that I can never quit unless something would struck me. That is why sometime we women used to crack jokes like we used to advice our husband and sons not to drink, or to quit, but they may also be experiencing the same hardship just like we can't quit khaini! ha...ha...ha...ha...ha... so we can't say anything to our husband and sons who are drinking alcohol since we also can't quit our own, ha...ha...ha... sometimes out of sickness I used to stop for a week, but soon when I get better I started again." (48 years old)

"I have tried and could stop a month but I can't quit completely because, I always remember. I think, as long as tobacco is available in the market I may continue chewing." (55 years old)

Some of the women were successful till the half way to quitting. They said after several attempts at last they could manage to stop for few weeks or months but has to return back to their earlier habit of chewing due to the their tempting friends who were still chewing tobacco, as they could not resist the prompting. While others said they have to start chewing again because their toothache problem came back again after a short period of relieve. Others still blame on the market for their unsuccessful cessation. After several failed attempts many of the participants conveyed their untold regrets about their addiction. A woman even said that she has lost all hope of ever quitting. They all voiced their dismayed attempts. The fact was that none them has ever received proper cessation advice from the professional.

IV. DISCUSSION AND CONCLUSION

The reasons why women started taking tobacco means many things. As for instance, tobacco companies have an interest in their product sales, governments have an interest in the tax revenue from the sale of tobacco, farmers have an interest in tobacco production, anti-smoking groups and public health professionals have an interest in tobacco use prevention, and academics have an interest in smoking as a fundable research topic and finally an individual has her own reason to start. Thus, chewing tobacco or smoking is like a playing field on which there are many players where they are intricately linked. Therefore, one has to explore from all angles in order to understand why one start taking tobacco. In the present study the three major reasons for their initiation was toothache, ‘morning sickness’ and peer influence similar with the studies conducted by many researcher around the world (Gupta et al, 1986; Pedenker & Gupta, 2004; Sinha, 2005; Daniel et al, 2008; Prakash C. et al, 2011; Alamgir, 2014). This is in fact the reason which may explain the use of tobacco almost exclusively in the chewing form by the women. Indian women particularly rural women have a widespread misconception that tobacco is good for toothache, gum diseases, aches in throat, ingestion. According to the reports from Global Youth Tobacco Survey (2009-10), in the Northeastern states of India, tobacco users reported significantly more often that tobacco relieves toothache and helps in ‘morning sickness’ as in the case of present study (Aghi, 1993; Sinha et al, 2003; Steven et al, 2010). In the present study the participants were not aware of the causes of 'morning sickness'. They all believed that 'morning sickness was caused by the baby in their womb. They have a strong perception that during 'morning sickness' whenever they craved for something to eat, chew or feels like drinking something, they believed that it was the baby who wants to eat, chew or drink. Similarly, several studies indicate that some women, including some pregnant women, perceive a benefit to using tobacco products. In India, for example, many women who chew tobacco consider it to aid in performing manual labor, suppressing hunger, reducing toothache, relieving morning sickness and controlling labor pains (Nicter et al, 1991; 2009). In countries of South Asia, particularly India, traditional values do not favor smoking by the young women, but there is no such taboo against using smokeless tobacco. Thus, most women who use tobacco use it in smokeless forms (Prakash et al, 2003). It was also revealed by the participants from the present study that use of smokeless tobacco has no social and cultural taboo. Therefore, this could be one plausible reason besides cited above factors. The use of smokeless tobacco by women is also a common cultural practice which is accepted as "normal" by men and by society at large (WHO, 2010).

Peer influence is another very important factor reported by the participants for their initiation of tobacco use. Twenty percent of the participants attributed their initiation to their friends. It has been widely reported by many studies that peer influence is an important factor for usage of tobacco among adolescents and others. Factors such as age, school grade, gender, socioeconomic status, self-efficacy, social skills and exposure to tobacco advertising, along with the prevalence of tobacco use among peers, family members and society at large, are commonly found to be associated with one’s tobacco use (Sinha, 2003). In the
present study many of the participants expressed concern about their inability to quit because of their friends, as their friends were still using. Many of them who started using tobacco because of their toothache who also was advised and guided by their friends to take tobacco as a cure for toothache while others were still compelled to take up for the sake of friendship.

It is obvious from the present study that misconception about the medicinal values of smokeless tobacco particularly khaini is widely thought and believed. Apart from toothache remedy tobacco was also used to enhance digestion, reduce hunger and to assist with routine defecation as was also reported by Nicter in his study of Health Service Research in the Third World (Nicter, 1991). The use of tobacco as medicine by the Tangkhul Naga people has a long historical tradition like in the rest of the world. Before the arrival of the modern smokeless tobacco 'tobacco water' or 'nicotine water' extracted from 'kaporham' (Local name for hookah-like wooden smoking device). The tobacco smoke is passed through the water in the device and as the saturation of the nicotine level in the water is reached, it is stored for chewing. This water has been used widely by men and women of that time for various proposes such as, toothache remedy, snake bite, leech bite, anti-mosquitoes ointment, besides for other recreational purposes. But when the participants were asked whether they have seen or heard of any cases of oral cancer being caused by the 'tobacco water' the responses were all negative. Hence, we may suppose that the nature of tobacco consumption and types were less harmful than the present tobacco. Nevertheless, it is already a well-known proven fact that all forms of tobacco are harmful to our health but varies in degree of harmfulness if we are to consider the present account. The reason clearly cited by the participants for using tobacco as a medicine was absence of modern medical facilities and lack of health education; therefore, they have to go for whatever that is at their disposal.

Moreover, when we look at the percentage (2.7%) of those who have quitted in the present study it is almost negligible. It was reported that each and everyone have made futile attempts to quit while few of them could manage months. There was hardly any external assistance and advice to help them quit. Neither of them has received formal cessation counseling nor do they have ventured out for help. This clearly indicates that health care facilities and awareness about the very nature of their health soundness is very much lacking in the rural part of this region. Besides, studies have reported that women have less success in quitting; and therefore, more complex approaches may be needed to achieve better outcomes. Intensive counseling would address the circumstances that create obstacles to cessation. Awareness and advocacy are also needed (WHO, 2003).

Finally, findings from this study have important implications for tobacco control program efforts being developed by country. It is apparent from the present study that the overall understanding and the level of awareness about health risks attributable to consumption of smokeless tobacco products is at its lowest. As we know the level of knowledge of ill effects of tobacco products, individual attitude towards the use of tobacco and perception about the social acceptance are the major determinants of tobacco use. On the other hand, misconception of tobacco smoked or smokeless has medicinal value for curing or reducing discomforts such as toothache, headache, and stomach ache, 'morning sickness'. This shows that the target population was not only unaware of oral health hazards of these habits but also they were least concerned for oral health as compared to general health. Unfortunately, the relative scarcity of oral health facilities in rural areas of India could be a factor in exacerbating this situation. Thus, it is recommended that mass health campaign concerning with dental care and 'morning sickness', and education on the health hazards of smokeless tobacco are required to control and minimize its usage for long term healthy living. This campaign should reach out to all the section of the people particularly to the rural areas.

V. LIMITATIONS

Limitation of this study is that subjects were small in number which does not necessarily represent the whole population or the study area i.e. Tangkhul Naga community. And since interview method was used a respondent may give what is perceived as a generally desirable response because a truthful response for her would be sometimes embarrassing. To minimize this tendency, respondents were informed before each interview of the confidentiality and anonymity of the study. Every effort was made to ensure that the respondents understood that no information that they gave would be used against them.

REFERENCES

Adverse Effects on Health in a North Indian Rural Population. OHDM, 13 (1) 81-86.


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