Prevalence of Tobacco Usage among the Rural Population of Bhimili, Visakhaptnam District

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Abstract: Tobacco use is a serious public health challenge in several regions of the world. According to the estimates made by the World Health Organization (WHO), currently about 5 million people die prematurely every year in the World due to the use of Tobacco, mostly cigarette by Smoking. By 2030 it would double to 10 million deaths every year, with about 7 million deaths taking place in developing countries. In India, Cigarette smoking comprises a small part of the tobacco smoking problem and a minor part of overall tobacco problem, a major problem being beedi smoking, and oral use of smokeless tobacco products.

Aim of the study is to find the Prevalence of Tobacco Usage among the Rural Population of Bhimili, Visakhaptnam District. Materials & Methods: Four Hundred and fifty subjects (225 males & 225 females) of age 15-60 years were selected for the study by Simple Random Sampling. The Data was collected by interviewing the study subjects using a predesigned, pretested structured Questionnaire. Results: The Prevalence rate of Tobacco usage was 16.7%, Males accounted for 23.6% and Females 9.8%. Among Males habit of chewing Tobacco was 17.3% and Smoking was 23.6%, both habits in 15.6%. Among Females habit of chewing Tobacco was 5.8%, Smoking 9.8%, both habits in 3.6%. Conclusion: The prevalence of Tobacco Consumption was higher in Males than Females. There should be a National effort to prevent any further increase in the prevalence of Tobacco use, especially among the vulnerable groups.

Keywords: Tobacco, Prevalence, Chewing, Smoking

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I. Introduction

Globally, tobacco use remains the leading preventable risk factor for premature morbidity and mortality. Tobacco has been reported to cause nearly 5 million deaths per year or one death every 6.5 seconds. Tobacco use in the form of smoking and smokeless is harmful to all human biological systems, including the oral cavity. According to Global Adult Tobacco survey (GATS), more than $1/3^{rd}$ of the adults were current users of tobacco in any form. India is the second largest consumer of tobacco in the world, after china. ^{1,2}.

In 2004, direct health care costs attributable to tobacco reached 1.2 billion USD, 4.7% of India's total national health care expenditure. In India smoking is the most popular form of tobacco usage, followed by chewing.²

In India, the National Sample Survey Organization (NSSO) has been conducting surveys since 1950-1951. Prevalence of tobacco use has increased significantly in the recent years. Changing life styles, increasing money availability, decreasing parental control, growing influence of television, Films and such other factors have contributed to this trend.^{3,4,5}

Aim: The Prevalence of Tobacco usage among the sample of rural population of Bhimili, Visakhapatnam District

Materials & Methods: Four Hundred and fifty subjects (225 males & 225 females) of age 15-60 years were selected for the study by Simple Random Sampling. The Data was collected by Interviewing the study subjects using a predesigned, Pretested structured Questionnaire.

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Smoking was defined according to the WHO classification.

Never smokers were adults who have never smoked a cigarette or who smoked fewer than 100 cigarettes in the entire life time.

Former smokers were adults who have smoked atleast 100 cigarettes in their life time, but say they currently do not smoke.

Non Smokers were defined as adults who currently do not smoke cigarettes, including both former smokers and never smokers.

Current smokers were adults who have smoked 100 cigarettes in their life time and currently smoke cigarettes everyday (daily) or some days (nondaily).⁶

Majority of the population belong to middle and low income groups. They were divided into three age groups namely 15-20years, 21-40 years and 41 to 60 years. Each group consisting of 75 males and 75 females respectively. Data regarding the usage of Tobacco was collected from the subjects by giving a questionnaire with both English & Telugu (Regional language).

QUESTIONNAIRE

Name: Age: Gender: Education: Occupation: Address:

Tobacco usage: Yes/ No If Yes, Answer the following Number of years of usage:

Type of Tobacco product used: Chewing or Smoking

If spit Tobacco:

Number of times per day Duration of each chewing time:

Type of Tobacco used: Leaves/Pawn/Mawa etc

If the product comes in sachet –Number of sachets per day

Smoking: (Bidi/Cigarette/Cigar/Pipe)

Number of Packets/Individual Items per day:

Duration of each smoking period:

Are you aware of the harmful effects of Tobacco usage: Yes/No

II. Results

The overall prevalence rate of Tobacco usage was found to be 16.7 %, Males accounted for 23.6% and Females accounted for 9.8%.

Among the Males the prevalence of using the Tobacco in the age group of 15-20 years is 18.7%, 21-40 years is 22.7% and 41-60 years is 29.3%.

Among the Males the Maximum percentage of people using the tobacco was seen in 41-60 years age group (29.3%), followed by 21-40 years (22.7%) and 15-20 years (18.7%)

Among the Females the Maximum percentage of people using the tobacco was seen in 41-60 years age group (14.7%), followed by 15-20 years (8%) and 21-40 years (6.7%)

In Males habit of chewing Tobacco is 17.3 %, In Females habit of chewing Tobacco is 5.8%

Among Males (all the Age Groups Together) habit of chewing tobacco seen in 17.3 %, smoking 23.6% and both habits in 15.6%.

Among Females (all the Age Groups Together) habit of chewing tobacco seen in 5.8%, smoking 9.8% and both habits in 3.6%.

Table 1. Age Distribution of the study subjects (n = 450)

| Age Group | Number | Percentage |
|-----------|--------|------------|
| 15-20 | 150 | 33.3 |
| 21-40 | 150 | 33.3 |
| 41-60 | 150 | 33.3 |

Table 2: Gender Wise Distribution of the Study Subjects (n=450)

| Age Group | Males | Females |
|-----------|-------|---------|
| 15-20 | 75 | 75 |
| 21-40 | 75 | 75 |
| 41-60 | 75 | 75 |

Table 3: Prevalence of Tobacco usage among Males (n=225)

| Age Group | Number | Percentage |
|-----------|--------|------------|
| 15-20 | 14 | 18.7 |
| 21-40 | 17 | 22.7 |
| 41-60 | 22 | 29.3 |

Table 4: Prevalence of Tobacco usage among Females (n=225)

| Age Group | Number | Percentage |
|-----------|--------|------------|
| 15-20 | 6 | 8 |
| 21-40 | 5 | 6.7 |
| 41-60 | 11 | 14.7 |

Table 5: Distribution of Types of Tobacco usage among Males (n=225)

| Age Group | Chewing | Smoking | Both |
|-----------|---------|---------|------|
| 15-20 | 9 | 14 | 8 |
| 21-40 | 11 | 17 | 10 |
| 41-60 | 19 | 22 | 17 |
| Total | 39 | 53 | 35 |

Table 6: Distribution of Types of Tobacco usage among Females (n=225)

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|---|---------|---------|------|
| Age Group | Chewing | Smoking | Both |
| 15-20 | 4 | 6 | 2 |
| 21-40 | 2 | 5 | 1 |
| 41-60 | 7 | 11 | 5 |
| Total | 13 | 22 | 8 |

III. Discussion

In India a Wide Variety of Tobacco Products are available in different ways: Smoking, Chewing, Sucking etc. For each type of Tobacco use, a wide range of tobacco products are available. Some of the products are industrially manufactured on large scale, some locally on a small scale, some may be prepared by a vendor and some are prepared by the Users themselves. Tobacco use is harmful to the health in many ways. In India, where tobacco is smoked, chewed and applied in a number of ways are the risk factors for many types of Cancers and other Diseases. Young people do not witness high morbidity and mortality until they reach middle age. ^{7,8,9}

In a study by Indian Council of Medical Research (ICMR), which provide an estimate of the cost of treatment of three major tobacco related diseases it was found that the Government spent Rs 227 million in 1999. The Nationwide sale value during that period was Rs 224 billion. Since only a fraction goes to Tobacco sales and expenditure for treating tobacco related diseases is high. Thus, Tobacco is of no economic benefit to the nation while being a major health hazard.

Report of Global Adult Tobacco Survey (GATS), India (2009-2010) revealed the state of the epidemic of tobacco use in Indian which was comprehensively described in the recently completed GATS, an Internationally Standardized Survey designed to track tobacco use around the world. ^{3,12}

In the Study on Tobacco habits in India by Bhonsle, et al the overall prevalence rates among men varied from 61% in Maharastra to 86% in Andhra Pradesh, among Women it ranged from 15% in Bhavnagar (Gujarat) to 67% in Andhra Pradesh. Men Preferred Smoking and Chewing with some regional Variations in their study. In the study of Tobacco use in rural area of Bihar, India by Sinha et al Tobacco use was 78% in Men. GATS India revealed that more than one third (35%) of Adults in India use Tobacco in some form or the other. The Prevalence of overall tobacco use among males is 48 percent. Nearly two in five (38%) adults in rural areas use tobacco in some form. ^{10,11,12,14,15}

Bala D V et al in a study in Gujarat State in 2006 observed that 74% of Tobacco consuming youngsters currently under 25 and further 50% in the 26-35 years age group have initiated tobacco use in childhood or in adolescence. 13

According to a study conducted by Saddichha S et al in young adults the predominant form of tobacco use was cigarettes (78%) followed by smokeless form $(22\%)^{16}$

Our study the Prevalence of Smokeless Tobacco is 11.6% According to Neelopant SA and Ashtagi GS prevalence was $29.79\%^{17}$

IV. Conclusion

The results of the present study confirms the prevalence of tobacco usage is more where as the awareness about the harmful effects of the tobacco is less

Awareness should be created about the health hazards occurring due to Tobacco consumption. Non communicable disease (NCD) clinics set up under the NPCDCS programme should try and inculcate tobacco cessation clinics and more awareness should be given about tobacco control in NCD camps. People using tobacco should be counseled and advised to quit their habit. Phase wise implementation of National tobacco control programme should happen and Anti tobacco measures like advertisements, public rallies and camps should be carried out often to convince people about the harmful effects of tobacco. Government should make Strict policies towards Tobacco control, and Non Government Organizations and Civil Societies should take part in it.

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