A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE REGARDING ORAL HEALTH HAZARDS OF TOBACCO AMONG TOBACCO CONSUMING ADULTS IN SELECTED RURAL COMMUNITY OF AMRITSAR, PUNJAB, INDIA.

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ABSTRACT

In India varieties of disorders spreading through tobacco use but despite this, the population of tobacco consumption is increasing and most of the tobacco users are consumed by the farmer and young peoples of the village. And those who suffer from tobacco use are more likely to be those who lived around them. And our purpose is to make people aware of this dangerous disease in the urban areas. This study is designed to investigate and assess the knowledge regarding oral health hazards of tobacco among tobacco consuming adults. The data collection for the study was carried out from 1st January 2017 to 31st January 2017 with a selection of 200 tobacco consuming adults who were residing urban areas Verka, Amritsar in India. The methodology is the most important part of research as it is the framework for conducting a study. The present study was conducted in the selected rural community of Amritsar namely Verka, Amritsar. There is one primary health centre and three sub-centers and a separate building for dispensary which dispenses medicines in that area which covers approximately 40,000 to 60,000 population. In our present study subjects according to age revealed that 43.5% were between 21-30 years of age followed by 28.5% aged between 31-40 years, 20% of tobacco consuming adults between 41-50 years of age and 8% between 51-60 years of age. All the tobacco consuming adults were males. According to education revealed that approximately half of the subjects i.e. 48.5% have studied up to primary education, 31.5% up to secondary education, 17.5% up to higher secondary education, 2.5% were having graduation or post graduation education. As per occupation, majority of subjects i.e. 55.5% were labourers, 20.5% were unemployed, 11% were private service employees while 13% were government employees. In context of consumption of tobacco per day, 41% were consuming tobacco 3-4 times per day, 30.5% between 1-2 times per day, 19% between 5-6 times per day and 9.5% were consuming tobacco more than 6 times per day. Age wise revealed that 43.5% were between 21-30 years of age followed by 28.5% aged between 31-40 years, 20% of tobacco consuming adults between 41-50 years of age and 8% between 51-60 years of age. With regard to age at initiation of tobacco consumption, 60% had started consuming tobacco between 21-30 years of age.

Key words: Tobacco Consuming, Public Health Challenge, Oral Health Hazards.

INTRODUCTION

The severe health effects of tobacco use comes from other chemicals. Tobacco smoking can lead to lung cancer, chronic bronchitis, and emphysema [1]. It increases the risk of heart disease, which can lead to stroke or heart attack. Smoking has also been linked to other cancers, leukemia, cataracts, and pneumonia [2]. All of these risks apply to use of any smoked product, including hookah tobacco. Smokeless tobacco increases the risk of cancer, especially mouth cancers [3].
The nicotine in any tobacco product readily absorbs into the blood when a person uses it[4]. Upon entering the blood, nicotine immediately stimulates the adrenal glands to release the hormone epinephrine (adrenaline)[5]. Epinephrine stimulates the central nervous system and increases blood pressure, breathing, and heart rate[6]. As with drugs such as cocaine and heroin, nicotine increases levels of the chemical messenger dopamine, which affects parts of the brain that control reward and pleasure[7]. Studies suggest that other chemicals in tobacco smoke, such as acetaldehyde, may enhance nicotine’s effects on the brain[8].

Research problem
A Descriptive Study to assess the knowledge and attitude regarding oral health hazards of Tobacco among Tobacco consuming adults in selected Rural community of Verka, Amritsar India.

Aim of the study
The Aim of the study is to assess the Knowledge and Attitude regarding Oral health hazards of Tobacco and to distribute pamphlets regarding oral health hazards of tobacco among Tobacco consuming Adults in selected Rural Community of Verka, Amritsar India.

Objectives
• To assess the knowledge regarding oral health hazards of tobacco among Tobacco consuming adults.
• To assess the attitude regarding oral health hazards of tobacco among tobacco consuming adults.
• To ascertain the relationship between knowledge and attitude regarding oral health hazards among tobacco consuming adults.
• To ascertain the relationship between knowledge of oral health hazards and selected socio-demographic variables.
• To ascertain the relationship between attitude of oral health hazards and selected socio-demographic variables.

Operational Definitions
Knowledge: It is information, fact, descriptions or skills acquired through experience or education regarding Oral health hazards of tobacco among Tobacco consuming adults[9].

Oral health hazards: Health hazards of oral cavity caused by chewing, snuffing or inhalation of tobacco.

Attitude: Attitudes are generally positive or negative views of a person regarding oral health hazards of tobacco.

Tobacco: An agent consumed by adults through chewing, snuffing or inhaling which causes oral health hazards.

Tobacco consuming adults: Adult males who are consuming tobacco between the age of 21 to 60 years residing in selected community.

Assumption
Tobacco consuming adults may have less knowledge and negative attitude regarding oral Health hazards of tobacco.

Delimitations
Study was limited to:
1. Tobacco-consuming adults in the rural community of Verka, Amritsar.
2. Tobacco-consuming adults who were willing to participate and were give informed consent.
3. Sample size was 200 subjects who were purposely selected from the selected rural area i.e. Verka, Amritsar. The data was collected through self-structured tool.

Conceptual framework
Conceptual framework of the present study is based on Betty Neuman’s Systems Model. It is focused on the response of the client system to actual or potential stressors (environmental forces) and the use of primary, secondary and tertiary prevention as nursing interventions for retention, attainment and maintenance of optimal client system wellness[10,11].

METHODOLOGY
The methodology is the most important part of research as it is the framework for conducting a study[12]. Research methodology defines what that the activity of research is, how to proceed and how to measure progress. It indicates the general pattern for organizing the procedures to gather valid and reliable data for an investigation[13]. The present research statement is "A Descriptive Study to assess the knowledge and attitude regarding oral health hazards of Tobacco among Tobacco consuming adults in selected Rural community of India".

Research approach
Approach to research involves the description of plan to investigate the phenomenon under study. It helps to identify presence or absence of and comparison between groups. In non-experimental research approach, the researcher describes the phenomenon[14]. Polit & Beck (2008)[15]. Described that in non-experimental approach, the researcher observes, describes and document aspects of a situation as it naturally occurs and sometimes to serve as a starting point for hypothesis generation or theory development

Research setting
The present study was conducted in the selected rural community of Amritsar namely Verka, Amritsar. There is one Primary health centre and three sub-centres and a separate building for dispensary which
dispenses medicines in that area which covers approximately 40,000 to 60,000 population.

**Inclusion & Exclusion criteria**

**Inclusion criteria:** The study had included:
- Tobacco consuming Adults residing in the selected rural Community of India.
- Those who were willing to participate in the study and had given consent.

**Exclusion criteria:** The study had excluded:
- Non-tobacco consuming adults.
- Those who were not willing to participate in the study and not given written consent.

**Procedure for data collection**

The data collection for the study was carried out from 1st January 2017 to 31st January 2017 with a selection of 200 tobacco consuming adults who were residing urban areas in India. Study procedure was explained to study subjects. Researcher first introduced himself to the respondents and explained the purpose of study. They were assured that their responses would be kept confidential and the information will be used only for research purpose. The sample consisted of 200 Tobacco consuming adults from several rural place in India. Structured questionnaire and 5-point liker scale was distributed to all the subjects through purposive sampling technique. The structured questionnaire and liker scale was edited by the experts. A good rapport was established with the subjects. Verbal consent was taken from Adults Consuming Tobacco. The time taken by respondents for interview was average 15-20 minutes.

**Ethical considerations**

Keeping in mind the legal rights of the subjects, only those tobacco consuming adults who were willing to participate were included in the study. Oral information regarding research study was given to selected tobacco consuming adults. Verbal consent was also taken from the study participants. Anonymity of study subjects and confidentiality of information was maintained throughout the data collection. A written permission for conducting pilot study and final study was taken from Block Development Officer of Verka, Amritsar and Principal, Khalsa College of Nursing, Amritsar (Punjab).

**Difficulty faced during the study**

Non-cooperation from some respondents and time duration is less.

**Analysis and interpretation**

This chapter deals with analysis and interpretation of data obtained from the sample of 200 tobacco consuming adults in the selected rural community of Amritsar.

The analysis and interpretation of data involve the objective material in the possession of the researcher and his subjective reactions and desire to derive from the data the inherent meanings in that relation to the problem Basavanthappa (2007)[16].

The data analysis was based on the following objectives of the study:
- To assess the knowledge regarding oral health hazards of tobacco among tobacco consuming adults.
- To assess the attitude regarding oral health hazards of tobacco among tobacco consuming adults.
- To ascertain relationship between knowledge and attitude regarding oral health hazards of tobacco among tobacco consuming adults.
- To ascertain the relationship between knowledge of oral health hazards and selected socio-demographic variables.
- To ascertain the relationship between attitude of oral health hazards and selected socio-demographic variables.
- To prepare and issue the pamphlets regarding oral health hazards of tobacco.

The raw data was collected and entered in a master data sheet. Then it was analyzed and interpreted using descriptive and inferential statistics. The analyzed data are organized according to the objectives and presented under the following major headings

**Sample CHARACTERISTICS**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Demographic Variables</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age (In years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21-30</td>
<td>87</td>
<td>43.5</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>57</td>
<td>28.5</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>51-60</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>2.</td>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upto primary</td>
<td>97</td>
<td>48.5</td>
</tr>
</tbody>
</table>
Table 1 and figures 3(a) to 3(g) reveals the frequency and percentage distribution of characteristics of the study subjects.

Distribution of study subjects according to age revealed that 43.5% were between 21-30 years of age followed by 28.5% aged between 31-40 years, 20% of tobacco consuming adults between 41-50 years of age and 8% between 51-60 years of age. All the tobacco consuming adults were males. According to education revealed that approximately half of the subjects i.e. 48.5% have studied upto primary education, 31.5% upto secondary education, 17.5% upto higher secondary while 2.5% were having graduation or post graduation education. As per occupation, majority of subjects i.e. 55.5% were labourers, 20.5% were unemployed, 11% were private service employees while 13% were government employees.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Demographic variables</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>How did you get into the habit of tobacco consumption?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self interest</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Influence of others(friends)</td>
<td>102</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Influence of parents or elders in the family</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Advertisements</td>
<td>58</td>
<td>29</td>
</tr>
<tr>
<td>6.</td>
<td>What form of tobacco do you use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cigarette</td>
<td>67</td>
<td>33.5</td>
</tr>
<tr>
<td></td>
<td>Snuff</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Betel leaf with tobacco</td>
<td>53</td>
<td>26.5</td>
</tr>
<tr>
<td></td>
<td>Tobacco chewing or squid</td>
<td>58</td>
<td>29</td>
</tr>
<tr>
<td>7.</td>
<td>At what age did you start tobacco consumption?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Below 20 years</td>
<td>52</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>20-30 years</td>
<td>120</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>30-40 years</td>
<td>21</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>40-50 years</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>50-60 years</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

| 3. | Occupation | | |
|    | Unemployed | 41 | 20.5 |
|    | Government service | 26 | 13 |
|    | Private service | 22 | 11 |
|    | Labourer | 111 | 55.5 |

| 4. | Consumption of tobacco per day | | |
|    | 1-2 | 61 | 30.5 |
|    | 3-4 | 82 | 41 |
|    | 5-6 | 38 | 19 |
|    | More than 6 | 19 | 9.5 |
employees. In context of consumption of tobacco per
day, 41% were consuming tobacco 3-4 times per
day, 30.5% between 1-2 times per day, 19% between 5-6
times per day and 9.5% were consuming tobacco more
than 6 times per day. As per the reason for getting into the
habit of tobacco consumption, half of the subjects (51%) were
influenced by others (friends), 29% through advertisements, 11% through the influence of their parents
and elders in the family and 9% were self interested for
getting into the habit of tobacco consumption. In the
context of form of tobacco usage, 33.5% were cigarettes
smokers, 29% were consuming tobacco chewing or squid
products and 26.5% were consuming betel leaf while 11%
were consuming tobacco through snuff. With respect to
age for initiation of tobacco usage, 60% had started
consuming tobacco between 20-30 years of age, 26%
below 20 years whereas 10.5% between 30-40 years of
age, 2.5% and 1% between 40-50 and 50-60 years of age
respectively.

**MAIN ANALYSIS**

**Objective 1:** To assess the knowledge regarding oral
health hazards of tobacco among tobacco consuming adults.

Table 2. Frequency and percentage distribution of Tobacco consuming adults according to level of knowledge regarding oral health hazards of tobacco

<table>
<thead>
<tr>
<th>Level of knowledge</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good (&gt;69%)</td>
<td>25</td>
<td>12.5</td>
</tr>
<tr>
<td>Average (34-69%)</td>
<td>73</td>
<td>36.5</td>
</tr>
<tr>
<td>Below average (&lt;34%)</td>
<td>102</td>
<td>51</td>
</tr>
</tbody>
</table>

Maximum Score: 26
Minimum Score: 0

Table 2 and figure 4 depicts the frequency and
percentage distribution of Tobacco consuming adults
according to level of knowledge regarding oral health
hazards of tobacco. It showed that half (51%) of the
tobacco consuming adults have below average knowledge
followed by 36.5% who have average knowledge and
12.5% having good knowledge regarding oral health
hazards of tobacco.

Hence, it was concluded that majority of tobacco
consuming adults had below average knowledge regarding
oral health hazards of tobacco.

**Objective 2:** To assess the attitude regarding oral
health hazards of tobacco among tobacco consuming adults.

Table 3. Frequency and Percentage distribution of Tobacco consuming adults according to attitude regarding oral health hazards of tobacco.

<table>
<thead>
<tr>
<th>Attitude</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive (&gt; or =60%)</td>
<td>56</td>
<td>28</td>
</tr>
<tr>
<td>Negative (&lt;60%)</td>
<td>144</td>
<td>72</td>
</tr>
</tbody>
</table>

Maximum Score: 100
Minimum Score: 20

Table 3 and figure 5 represents frequency and
percentage distribution of Tobacco consuming adults
according to attitude regarding oral health hazards of
tobacco. It showed that majority (72%) of the tobacco
consuming adults had negative attitude whereas 28% of
tobacco consuming adults had a positive attitude towards
oral health hazards of tobacco.

Hence, it was concluded that majority of tobacco
consuming adults had negative attitude regarding oral
health hazards of tobacco.

**Objective 3:** To ascertain the relationship between
knowledge and attitude regarding oral health hazards of tobacco among tobacco consuming adults.

Table 4. Relationship of knowledge and attitude regarding oral health hazards of tobacco among tobacco consuming adults.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Coefficient of Correlation (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>10.4</td>
<td>5.15</td>
<td>+0.73*</td>
</tr>
<tr>
<td>Attitude</td>
<td>49</td>
<td>13.95</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at p<0.05
Table 4 represents the relationship of level of knowledge and attitude regarding oral health hazards of tobacco among tobacco consuming adults. The coefficient of correlation of both knowledge and attitude among tobacco consuming adults was calculated which was found to be positively correlated i.e. \( r = +0.73 \) and significant at \( p < 0.05 \).

Hence, it was concluded that as level of knowledge increases, positive attitude also increases and vice versa.

**DISCUSSION**

This chapter deals with finding of the present study, “A descriptive study to assess the knowledge and attitude regarding oral health hazards of tobacco among tobacco consuming adults in selected rural community of Amritsar, Punjab”. In this chapter, an attempt has been made to discuss the finding of the study in accordance with the objective of the study[17,18]. The present study was conducted in Verka, Amritsar. Total sample was 200 subjects. Purposive sampling technique was used to collect the samples. Before collecting data investigator gave brief introduction about self, purpose of the study and instruction regarding filling of the tool and gain confidence[19].

Objective 1: To assess the level of knowledge regarding oral health hazards of tobacco among tobacco consuming adults.

The analysis of data of the level of knowledge regarding oral health hazards of tobacco among tobacco consuming adults revealed that majority i.e. 51% subjects had below average knowledge regarding oral health hazards of tobacco.

This finding was inconsistent with the result of Dsouza, Vanutha M (2005)[20]. Who conducted a correlative study on knowledge on oral health hazards among tobacco consuming adults gave findings that majority of subjects had good knowledge regarding oral health hazards but had poor health status.

Objective 2: To assess the attitude regarding oral health hazards of tobacco among tobacco consuming adults.

The analysis of data of attitude regarding oral health hazards of tobacco among tobacco consuming adults revealed that 72% subjects had Negative attitude regarding oral health hazards of tobacco.

This finding was incongruent with result of Mark A et al (2012)[21]. Who conducted a study on attitudes of Hungarian dental professionals to tobacco use and cessation and it was found that the there is a high interest in encouraging and assisting patients in giving up smoking.

Objective 3: To determine the relationship between knowledge and attitude regarding oral health hazards of tobacco among tobacco consuming adults.

Karl Pearson’s correlation was applied and value yield positive correlation among level of knowledge and attitude regarding oral health hazards of tobacco. This finding was supported by Shanmugavel A, Shive SE (2010)[22,23]. Who conducted a study on Oral health practices and oral cancer knowledge, attitude and behaviour among college students and these were found to have positive relationship among study.

**CONCLUSION & RECOMMENDATIONS**

This chapter deals with the brief description of the study undertaken including the conclusion drawn from the major findings implications of the study and recommendation for the future research.

Level of knowledge had shown positive co-relation with attitude regarding oral health hazards of tobacco among tobacco consuming adults.

The student researcher observed that more and more people are getting addicted to tobacco which leads to various oral health hazards. A descriptive study was adopted to conduct the present study. The sample was 200 subjects who were purposely selected from the selected rural area i.e. Verka, Amritsar. The data was collected through self-structured tool. The descriptive statistics was used for data analysis. The analysis findings were depicting through the use of frequency distribution tables and bars, diagrams.

**Major findings**

According to age, majority of subjects (43.5%) were in age group of 21–30 years. According to educational status of subjects it was depicted that majority (48.5%) subjects were educated up to primary education while only 2.5% were having up to graduation or post graduation education[24,25]. As per occupational status of subjects more than half of the subjects i.e. 55.5% were laborers. In context of consumption of tobacco per day, 41% of subjects were consuming tobacco 3–4 times a day while only 9% were consuming tobacco more than 6 times a day. 51% of subjects had got into the habit of tobacco consumption through the influence of others(friends). According to form of tobacco usage, 33.5% were consuming cigarettes. With regard to age at initiation of tobacco consumption, 60% had started consuming tobacco between 21-30 years of age[26,27].

**CONCLUSION**

Half of the subjects i.e. 51% had below average knowledge and majority of the tobacco consuming adults had negative attitude regarding oral health hazards of tobacco. This study shows that there is positive co-relation between level of knowledge and attitude regarding oral health hazards of tobacco among tobacco consuming adults. Hence, the assumption is accepted .There is a relationship between knowledge regarding oral health hazards education and occupation and there is a
relationship between attitude and reason for getting into the habit of tobacco consumption.

Implications

Nursing education

The study has an important implication in the nursing education and other field. In the revised curriculum of basic nursing education & in post graduation there is much emphasis on tobacco and tobacco consuming subjects. In service and continuing education needs to be planned and implemented for Community Health Nurses to enrich their information on recent research regarding level of knowledge and attitude regarding oral health hazards of tobacco.

Nursing research

A very limited research studies have been conducted on level of knowledge and attitude regarding oral health hazards of tobacco in India. More research is needed to delineate specific assessment parameters and intervention techniques. In addition, it is essential that nurses acquire greater biotechnological knowledge and skill in objective level of tobacco consumption measurement to facilitate the design and implementation of sophisticated nursing research studies on tobacco consumption that can address complex bio psychosocial hypotheses about tobacco consumption in both healthy and ill persons, thus providing data that have relevance for all disciplines that care for and about tobacco consuming adults.

Recommendations

• Similar study can be under-taken on a large sample for making a more valid generalization.
• A comparative study can be conducted regarding level of knowledge and practices regarding oral health hazards of tobacco among rural and urban community.
• Similar study can be conducted on different population in different setting.
• A Quasi-experimental study can be conducted on knowledge and attitude regarding oral health hazards of tobacco among tobacco consuming adults.

REFERENCES

