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A Qualitative Study on Attitude Towards Smoking and Quitting Among Smokers in Tribal Gypsies Dwelling from Chennai

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Abstract **Background:** Tobacco happens to be as old as human civilization since the cultivation of tobacco plants, nicotiana rustica, and nicotiana tabacum, dates back to 8000 years before the American Indians spread that. Smoking tobacco discloses the consumer to more than 7000 chemicals, of which almost 250 and nearly 69 chemicals were proven to be harmful and carcinogenic correspondingly. A particular tribal community is called Narikuravars, which is partially a nomadic group that was present across the borders and has been interpreted with low educational levels, low socio-economic status, and a dearth of pertinent access to health care. **Aim:** To assess the attitudes towards smoking and quitting among smokers in tribal gypsies population dwelling from Chennai. **Materials and Methods:** An in-depth interview for 15 current smokers and a focus group discussion of 15 current smokers were conducted with a guide and moderator, which was audio recorded. About 9, 13, and 68 subjects from primary, middle, and high school literates participated in the study. Their tobacco consumption and dependence using the Fagerstrom Test for Nicotine Dependence scale (FTNDS) was assessed. **Results:** High nicotine dependency was observed among 80% of middle school and 62% of primary school literates. Similarly, a Low dependency rate was observed among primary and high school literate with a rate of 40% and 20%, respectively. All the participants were aware of the health effects of tobacco, which affects the lungs and causes cancer. Some of them have had their relatives and known people who had suffered from cancer due to smoking. However, they had no knowledge or idea about COTPA. **Conclusion:** An interdisciplinary approach is required to prevent tobacco usage along with the government's support by introducing new schemes and programs and creating awareness about the ill effects of tobacco usage. Hence, tribal gypsy people should be educated about the consequences of smoking, and multiple cessation programs are to be conducted for the betterment of their lifestyle.

Key Words Qualitative, Tribal tobacco usage, Fagerstrom scale, Nicotine dependency

1. Introduction

Tobacco is as old as human civilization since the cultivation of tobacco plants, nicotiana rustica, and Nicotiana tabacum dates back to 8000 years before that was spread by the American Indians [1]. The history of tobacco begins with the discovery of tobacco seeds in archaeological excavations in Mexico and Peru, which were found around 3500 BC. This tobacco consists of about 60 species belonging to the Solanaceae or the nightshade family and the genus Nicotiana [2]. The species of tobacco are found to be annuals that were mild-flavored and fast-burning species [3]. In India, there are more than one million deaths per year due to the usage of tobacco, which causes major health ailments among the smoking population [4]. It has been found that India ranks in the third place in global tobacco production and uses nearly 50% of its produce domestically [5]. Smoking tobacco discloses the consumer to more than 7000 chemicals, of which almost 250 and nearly 69 chemicals were proven to be harmful and carcinogenic correspondingly. Smoking has been substantiated to be a potential factor that affects every part of the body and causes aggravation of respiratory and cardiac diseases [6]. The effects of secondhand smoking cause conditions such as chronic respiratory diseases, low birth weight, sudden infant death syndrome, middle ear infections, periodontitis, and carcinomas such as prostate carcinoma, lung oropharyngeal carcinoma, and so on [7], [8]. Worldwide, the association of smoking with death is found to be 6 million deaths per year on an annual basis,

and noncommunicable diseases account for almost 63% of demises around the world. Tobacco is established as one of the major contributing factors to preventable deaths [9]. The World Health Organisation states that over 80% of the global population of 1.3 billion tobacco users belong to low and middle-income countries. Out of which, 22.3% of the population use tobacco, which consists of 36.7% of all men and 7.8% of the world's women population, as of 2022 [10].

The Global Adult Tobacco Survey (GATS) is established as a global standard unit for systematically monitoring adult tobacco use, both smoking and smokeless and for tracking the key tobacco control indicators. The component of this Survey is the Global Tobacco Surveillance System. This Survey is a national representative, as it uses a consistent and standard protocol across many countries, including India, and the recent data dates to the period between 2008 and 2022 [11].

The Survey reports that 19% of men, 2% of women, and 10.7% of adults currently smoke tobacco, which accounts for 99.5 million of the adult population. Similarly, 29.6% of men, 12.8% of women, and 21.4% of all adults currently use smokeless tobacco, accounting for 199.4 million of the population, respectively. On the whole, the current use of tobacco is found to be 266.8 million adults, among which men with a high percentage of 42.4% and women with 14.2%. Simultaneously, 38.7% of the adult population was found to be exposed to secondhand smoke at home, as per the Survey. The exposure to smoke at the workplace among adults is 30.2% [12]. Also, people's exposure to secondhand smoke at restaurants is 7.4%. The economic burden placed on India amounts from $907 to $285 million for treating both the smoke and smokeless tobacco-related diseases all over the nation. In India, on an economic basis, the average monthly expenditure on cigarettes as per Indian rupees was found to be 1192.5 [13]. Hence, to restrain this condition, numerous programs, schemes, and policies were introduced by the government for the welfare of the population [14]. Therefore, Control and Prevention of tobacco use is subsidized for limiting the morbidity and mortality rate. Measures like surveillance and monitoring, legislation, capacity building, and tobacco control policy were presented [15]. Previous articles state that around 55.4% and 49.6% of smoke and smokeless tobacco users planned to or were with the idea of quitting, albeit the control measures still, the use of remains a major challenge as only less than 2% of tobacco users have attempted to quit the usage of tobacco [7].

Cognitive behavioral therapy given by physicians was effective and played a major role in significantly increasing patients' smoking cessation rate, as this cessation technique provides immediate and substantial health benefits [16]. Likewise, nicotine replacement and psychotic drugs have made a rational outcome in smoking cessation among the high tobacco dependence individuals [17]. The factors present for the successful implementation of tobacco cessation programs include the social support for quitting, training of health professionals, and the integration of smoking cessations [18]. Therefore, the government of India has implemented 19 Tobacco Cessation Clinics (TCCs) all over the country to reduce the alarming effects of usage of tobacco [19]. However, there are people in India to whom these programs and facilities are unavailable, and they all live in isolation from the civilization with their own beliefs and myths. These people solely depend on the local natural resources for their income and have inadequate modern transportation. These people are referred to as tribals.

According to the census, tribal people constitute 8.6% of the country's total population and 11.3% of the total rural population. Among them, in Tamilnadu, a particular tribal community is titled Narikuravars, which is partially a nomadic group that was present across the borders and has been interpreted with low educational levels, low socioeconomic status, and dearth of pertinent access to health care [20]. Evidence states that tobacco usage and alcohol consumption were discovered to be highly prevalent among the tribal communities, and such practices are habitually instigated at a very young age and sustained lifelong and are carried on from generation to generation [21].

Due to their strong roots in their beliefs and norms, they are unaware of the outside world and the harmful effects of these practices. Several studies also indicate that oral health status and oral hygiene maintenance were very meager among these tribal populations. Hence, the study aimed to qualitatively assess the attitudes towards smoking and quitting among smokers in the tribal gypsies population dwelling in Chennai.

2. Materials and Methods

Qualitative methods were used to assess the perceptions and attitudes of the smokers, and their approach towards quitting was analyzed in patients visiting a private dental college in Tamilnadu. The sample population consists of illiterates or primary dental school, middle and high school literates, and above. The study has an inclusion criteria of current smokers, those aged 18 and above, and those who have quit in not more than one year. Similarly, the exclusion criteria involved former smokers and those unwilling to participate in the study. The study participants were recruited through the convenience sampling method. Written consents were obtained from the study participants, and the anonymity of the participants was maintained. The study was conducted in December 2022 in a private room in the Department of Public Health Dentistry. The participants have capricious levels of motivation to quit smoking in the future. The interview and group discussion were carried out until novel responses or new ideas were generated from the participants. Fragerstorm test for Nicotine Dependence Scale (FTNDS) was used to evaluate the baseline data about tobacco consumption and their tobacco dependence.

Focus Discussion and Interview

A focus group discussion encompassing 15 current smokers was conducted. The participants involved in the interview were excluded from this discussion. It consists of 4 white-

collar, 7 black-collar, and 4 blue-collar participants. Like an interview, there was a moderator and an assistant, and audio-recording was done for 30 minutes. The moderator prompted the topics, and the discussion continued as such. The areas included in the discussion were the knowledge and attitude about cigarettes and other Tobacco Products Act (COTPA) and attitude about the condition of what will happen if India closes the production of tobacco products. The discussion was healthy, and each individual participating shared their perspective about the given situation.

The data analysis was done in harmony and analyzed for data collection. The audio recordings were transcribed to their verbatim format and were read and acquainted multiple times to generate their responses. The focus group guide aided in sorting the merging key points, and segregation was done according to the responses. Initial analysis was undertaken manually, and the replies of every participant were identified and charted under the respective discussion areas. Finally, the interpretative analysis was done for the group together with analogous points for the identification of repeated responses, which utilized the various aspects of smoking behavior among the participants of the three groups.

The study included an initial in-depth interview with 15 participants: 5 from illiterate primary school literates, 6 from middle school, and four from high school or graduate people group. The in-depth interview was conducted by a moderator along with an assistant for aiding the former. An interview guide was formulated to probe different aspects of smoking and quitting smoking behavior from the participants. The information given by the participants was audio-recorded, and each interview lasted for 15-20 minutes for each participant.

The area of interest gyrates about the reasons for initiation of smoking and to continue with their perception as smokers, their attitude towards non-smokers, and their knowledge regarding the health effects of smoking. Further probing was done to obtain details regarding their quit attempts and anti-health warnings on multimedia like television, cigarette packets, and newspapers. The last of the discussion included their knowledge and attitude towards nicotine replacement therapy (NRT) and tobacco control policies in the country.

3. Results

Among the 30 participants, 9 were primary school literates or illiterates, 13 were middle school literates and 8 were high school literates or above. About 48% of the population had low nicotine dependency while 32% had medium nicotine dependency and 20% of participants had high nicotine dependency, respectively. Low dependency rate was observed along primary and middle school literates with a rate of 40% and 20% respectively. Medium dependency was seen among 60% of middle and high school literates. However, high nicotine dependency was observed among 80% of primary school literates and 62% of middle school literates. The responses generated after the focus group discussion were segregated and the following retorts were produced in a tabular column accordingly.

Evaluation Based on Initiation of Smoking

Most of the participants of the current study started smoking at or above 18 years of age. The main motive to start smoking was due to the influence of peers and surrounding members. The reason was found similar in middle and high school literates while primary school literates had a different perception. A primary school literate participant uttered "I observed my parents smoking and I was inquisitive to know what it is about and how it feels like". Middle school literate participants stated that "All my friends were using it". One of the high school educated said "Only when a guy smokes he is considered matured in school". All these responses have been documented in Table 1 under query numbered one.

Assessment of the Participants Grounded on Continuation of Smoking

The participants claim that smoking helps as a stress buster to primary school literate and as a pastime for middle school literates. The high school literates stated that they were addicted and they want to be included among their community. One of the primary school literate participants revealed that "Whenever I am stressed I want to relax by smoking". Similarly a middle school literate said "It's a good pastime". High school literate said "I have become addicted to that. Also people outside my community treat me like I should be doing it". These responses correspond to query number two of Table 1.

Knowledge of the Participant Considering the Health Effects of Smoking and COTPA and their Aspects Related to Quitting Attempts

Number three query of Table 1 question states that every participant were aware regarding the health effects of tobacco and the way it affects the lungs and causes cancer. A few participants had their relatives and surrounding people who had agonized from cancer because of smoking. But they had no knowledge or idea regarding COTPA. Some participants states that the habit of smoking can be temporarily affected based on their financial status. Some states that they are addicted to it and quitting might isolate them. A Primary school literate said "Whenever I feel financially down, I try to quit but then relapse due to tension". Analogously middle school literate said "I don't think I can quit". Comparably, high school literate replied "I tried to quit but the way everyone treat me makes relapse every time"

Aspects Related to Quitting Attempts

Number 4 query of Table 1 relates to the quitting attempts made by the participants of the study and points their view on relapse of the habit. The primary school literates states that even after quitting, the habit has been relapsed due to stress and tension. Similar reasons are found among the high school and above literates but the cause of relapse is due to the different view of peers over quitting the habit. The middle school literates disclosed that they don't think that they can quit.

Queries Based on Stoppage of Manufacture of Tobacco Products

Number 5 query of Table 1 shows that the majority of the participants might depend on other tobacco products as an alternative for smoking. Some state that the situation might never occur. Primary school literate stated "We can only talk about this issue but the government will never stop manufacturing cigarettes". One of the middle school literate said "When the government bans, we will go for other tobacco forms". Likewise, high school literate uttered that "The high dependent people may go for other addiction"

Knowledge About Anti-Tobacco Commercials

The entire participants were aware about the anti-tobacco commercials along with their side effects, but they didn't care about them due to addiction as stated in the query number 6 of the tabular column. The statements of the participants are as follows. One of the primary school literate said "I know about them, but then why is the government selling it". Similarly, middle school literate said "It doesn't affect me". Conflictingly, high school literate stated "Whenever I notice it, I scold myself but I couldn't quit".

4. Discussion

Qualitative research studies help apprehend a research query as either a humanistic or an idealistic approach. Though the quantitative approach is reliable since it is made objectively and propagated through other researchers, a qualitative method helps understand the populations' beliefs, experiences, behavior, attitudes, and interactions [22]. As a development, qualitative studies are recognized for their proficiency in adding a new dimension to interventional studies that cannot be obtained by measuring variables [23]. This type of research helps in viewing the participant from their aspect of view and thereby helps in opening our eyes to new perspectives and aids in modifying the design of the issue [24].

The present study reports that the main reason for initiation of smoking is due to peer influence and, to some extent, the influence from their parents that has been cited in the table of query one. Similarly, lethargy et al. 2019 also state that the main cause of the initiation of smoking was due to peer pressure [25]. Reasons for continuing smoking in the current study affirm that the participants adopted this habit due to stress to some extent, and few participants were already found to be addicted to it, as cited in query 2 of the table. This has been supported by a previous study dated 2016 that states that the main reason for continuing to smoke tobacco is due to stress that is observed in both men and women [26]. High nicotine dependency was observed among the primary and middle school literates as it is directly oriented to the socio-economic and educational status of the participants.

Query 3 of the table probes the study population's awareness of the habit's adverse effects and the COTPA act. The current study reveals that all the participants have an awareness of the health issues caused by smoking tobacco. They have also observed people who passed due to cancer because of smoking. However, they are unaware of the COTPA act. A previous article dated 2013 stated that people of higher socio-economic status and age more than 60 years were aware of the ill effects of smoking and about the COTPA act [27]. The current study is found to concur with this article, where the participants knew the ill effects of smoking with a percentage of 97.5% and the awareness about COTPA was 47.5%. This was also found to be on par with an article in the state of Assam [28].

The responses obtained for query four of Table 1 agree with a previous study of the social phenomenology approach dated 2016. The study shows that the need for health progress and a hike in the cost of cigarettes were the reasons for quitting [29]. The current study also highlights the cause for the failure attempts, which was peer pressure. Query 6 of Table 1 encloses the participants' knowledge of anti-tobacco commercials. A study conducted in north India in 2012 reports that anti-tobacco commercials inspired 37% of the population. These populations are being influenced by celebrities who support no-smoking [30]. The current study also agrees with the same, where the population is aware of anti-tobacco commercials, but the inspiration rate is low due to addiction.

The use of qualitative study is to analyze the psychological and knowledge of the participant that plays a vital role in intervention. The primary care physicians act as a front line defense against tobacco and oral cancer, helping in early detection, diagnosis, and treatment planning for the patient [31]. Conversely, the development of modern science also aids in identifying diseases within minutes to hours. Concerning health sectors, more investment in training health professionals from primary care to psychology, intersectoral and multidisciplinary actions, and biopsies are required on a large scale [32]. Further training is advised for undergraduates and postgraduates to improve their awareness of tobacco usage and its risks to the patient's health.

5. Conclusion

The current study shows that people with low and average literacy rates tend to have high nicotine dependency due to their feeble knowledge and socio-economic status. An interdisciplinary approach is required to prevent tobacco usage along with the support of the government by introducing new schemes and programs and creating awareness about the ill effects of the usage of tobacco. Hence, tribal gypsy people should be educated about the consequences of smoking, and multiple cessation programs are to be conducted for the betterment of their lifestyle.

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S.no	Area of discussion	Illiterates/ primary school	Middle school	High school and above
1)	Evaluation based on initiation of smoking	I observed my parents smoking and I was inquisitive to know what it is about and how it feels like	All my friends were using it	Only when a guy smoke he was considered matured in school
2)	Assessment of the participants grounded on continuation of smoking	Whenever I am stressed I want to relax by smoking	It's a good pastime	I have become addicted to that. Also people outside my community treat me like I should be doing it
3)	Knowledge of the participant considering the health effects of smoking and COTPA	Every participant was aware regarding the health effects of tobacco and the way it affects the lungs and causes cancer. A few participants had their relatives and surrounding people who had agonized from cancer because of smoking. But they had no knowledge or idea regarding COTPA.		
4)	Aspects related to quitting attempts	Whenever I feel financially down, I try to quit but then relapse due to tension	I don't think I can quit	I tried to quit but the way everyone treat me makes relapse everytime
5)	Queries based on stoppage of manufacture of tobacco products	We can only talk about this issue but the government will never stop manufacturing the cigarettes	When government bans, we will go for other tobacco forms	High dependent people may go for other addiction
6)	Knowledge about Anti-tobacco commercials	I know, but then why is the government selling it	It doesn't affect me	Whenever I notice it, I scold myself but I couldn't quit

Table 1: Perspectives and Attitudes towards Smoking Across Educational Levels/Literacy Status: A Comparative Analysis

Conflict of Interest

The authors declare no conflict of interests. All authors read and approved final version of the paper.

Authors Contribution

All authors contributed equally in this paper.

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