

Tobacco Awareness among Hearing and Speech Disorders Using Indian Sign Language

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Abstract

Tobacco consumption is prevalent in most of the countries of the world, including India, and its addiction has subsequently engulfed lengths of populations of all age groups. Many significant tobacco cessation and prevention programs are initiated on a regular basis with an aim of raising awareness and followed by the decline of tobacco use amongst mass populations. Such programs are well received by physically, mentally, and socially balanced masses. However, it becomes a challenge when people who are auditory and speech compromised, namely The deaf and mute are considered. Through the use of Indian Sign Language, tobacco cessation and public awareness can be elevated if learned by the medical professionals, especially dentists, which in due course will aid in the prevention of various diseases caused by tobacco including oral cancers. There is a need of an hour to reach this community through Indian Sign Language.

Keywords: Awareness, communication, deaf, dentistry, dumb, Indian Sign Language, patients, tobacco

INTRODUCTION

Tobacco is a preparation of the alkaloid nicotine and harmala; alkaloid-rich leaves of an American plant. It is cured by a process of drying and fermentation and consumed in the form of smoking in cigarettes and cigars, as well as pipes and shishas, chewing tobacco, dipping tobacco, snuff, and snus. Continual tobacco consumption can potentially trigger many life-threatening diseases affecting the heart, liver, and lungs also encompassing various other types of cancers. Tobacco is injurious to health as there is release of carbon monoxide, cyanide and carcinogens, polycyclic aromatic hydrocarbons, formaldehyde, cadmium, nickel, arsenic, tobacco-specific nitrosamines, and phenols, which trigger various different of the body, causing cancer, making it a predominant global cause of death.^[1]

Oral health as mentioned by the World Health Organization (WHO) is a key indicator of overall health, well-being, and quality of life. It encompasses a range of diseases and conditions including dental caries, periodontal (gum) disease, tooth loss, oral cancer, oral manifestations of HIV infection, orodental trauma, and noma along with birth defects such as cleft lip and

palate. There are very few studies carried out in the view of the tobacco awareness among the population with hearing and speech impairment, i.e., deaf, and mute population to achieve the target of successful propagation for the maintenance of healthy population in such communities in addition to the normal population. The deaf and mute play a vital part of the society, and thus, an appropriate communication method must be established so that by communicating, raising awareness for tobacco cessation, and prevention becomes more approachable to these sections of the society too.^[2-4]

CHEMISTRY OF TOBACCO ADDICTION

The principal source of addiction is the presence of nicotine; in tobacco, which when absorbed in the bloodstream, causes a rush of adrenaline in the body. Followed by this, there is an increase in dopamine in the body which stimulates the area

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of the brain which is associated with pleasure and reward and thus, referred to as the brain's happy chemical.^[5]

Since there is a natural human inclination toward receiving happiness amidst the variety of social, mental, and physical stress and a thrill encircling all the population ages, individuals are likely to indulge into such unhealthy activity repetitively causing addiction.

WORLD NO TOBACCO DAY

As mentioned by the WHO in 2008, tobacco use is the world's single greatest preventable cause of death. World No Tobacco Day (WNTD) is celebrated every year on May 31. It was fabricated in 1987 to draw global attention to the tobacco epidemic, the diseases it causes, its prevention; and education of the masses on the health hazards produced by the consumption of tobacco. It also brings about the business strategies practiced by tobacco manufacturing establishments to advertise and merchandise their products. It also puts forward the efforts undertaken by the WHO to put a fight against tobacco use and the methods people can adopt to claim their right to health and healthy living protecting future generations.^[6]

TOBACCO HABITS AMONG HEARING AND SPEECH IMPAIRED COMMUNITY

Tobacco consumption is also practiced in the deaf and mute population due to the lack of health literacy and vulnerability among such a populace. Health literacy is defined as 'the knowledge, motivation, and a set of abilities required to access, understand, process, evaluate, and use health information to make judgments regarding three-fold health domains as health care, disease prevention, and health promotion. The reason for the rift in health literacy is due to communication difficulties faced by such people. These converse complexities arise as these individuals are unaware of the mode of occurrence of the disease, poor access to deaf and dumb tailored health information sources, thereby leading to the ignorance of health knowledge, and limited access to mass media and healthcare messages obliging their communication and language barriers. Hence, they have limited knowledge about the different medical conditions along with their purpose of occurrence and preventive methods.^[7]

They are also passive in their personal health decision-making due to the lack of understanding of the issues. Furthermore, there are very few deaf and mute tailored education program for tobacco cessation. Thus, the promulgation of tobacco prevention and cessation is effortless as compared to the special population, for the ones who are deaf and mute.^[7]

CHALLENGES FACED BY THE DENTISTS WHILE EDUCATING SUCH PATIENTS FOR TOBACCO PREVENTION

Owing to limited conversation skills, oral health is often neglected in such a population. In a clinical setting, the dentist

faces difficulties due to the lack of training in other methods of communication. Thus, a method of communication must be established to raise awareness for tobacco prevention, especially among the youth, which is the most affected age group.^[8]

POSSIBLE SOLUTION: INDIAN SIGN LANGUAGE

Indian sign language can be a vital solution against tobacco prevention and cessation. Sign language is a language that uses visual-manual modality to convey meaning. It is not only used by deaf and hard of hearing people but also other auditory and speech-compromised people such as mute people, people with apraxia of speech, Down's syndrome, and cerebral palsy. It is expressed through annual articulations and nonmanual elements. It is a natural language with its own grammar and lexicon.^[9]

The use of Indian sign language is predominantly the only way nonsigning individuals can communicate with such people and so, this can prove to be a vital communication method to promote tobacco cessation and prevention.^[9]

SIGN LANGUAGE IN TOBACCO CESSATION AND PREVENTION AMONG SUCH YOUTH

The habit of tobacco consumption majorly engulfs the youth due to a variety of reasons. Their lack of maturity in understanding the harms of consuming tobacco and also due to the surrounding peer pressure who encourage them. Furthermore, considering the deaf and mute community, due to the difficulty in communication with the other people in the society and social exclusions, mental frustration can also promote indulgence in tobacco habits.

As specified in a study conducted at the California School of Deaf Fremont, it was observed that students can grasp information and understand better by visual methods. Due to the unavailability of the DVDs and videos for tobacco prevention, a DVD which included videos performed by deaf students using American Sign Language with the subsequent addition of voice and subtitles. Furthermore, a teacher's guide with vocabulary from each lesson encompassing various activities and discussion topics were included for class discussion. Each DVD chapter consisted of particular topics, which provided the statistics including the period when deaf individuals started smoking and the number of deaf youth that smokes, the advertisements used by tobacco manufacturing establishments, and methods by which smoking was made appealing to such people, the different methods by which people responded to the use of tobacco along with the communal pressure exerted to engage in this practice, the advantages of a healthy body with the importance of positive self-esteem, actual insights of an adolescent who practiced smoking and attempted to look older and the lessons that were learned by the adolescent, and the personal experiences of deaf people who have been affected by the practice of tobacco consumption.^[10]

TOBACCO PREVENTION IN SIGN LANGUAGE

Authors have attempted to contribute a small video in Indian sign language for tobacco awareness. The video has been performed by an expert from Indian sign language who have also given consent to publish the video [Video 1].

FUTURE SCOPE OF USING SIGN LANGUAGE IN TOBACCO CESSATION AND PREVENTION

With the concept of mobile app videos and DVDs being inculcated with the methods of tobacco prevention using Indian Sign Language if applied, the propagation of tobacco cessation and prevention can be potentially successful among the special population which can subsequently lead to a substantial curb in the diseases caused by tobacco consumption too.

CONCLUSION

Due to the complex conversive, understanding and reciprocation factors, inadequate, improper, and unethical care is received by such patients. The communication gap exists between the normal and the speech and hearing compromised population. Hence, we need a principal communication method or a platform. Indian sign language could be the best solution to convey the harmful effects of tobacco.

Cancer awareness should be made available in all national languages including sign language and braille. Furthermore, the inclusion of videos created for the deaf and mute population can bring about a new insight among the youth in tobacco prevention and cessation.

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Conflicts of interest

There are no conflicts of interest.

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