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Review Article

Tobacco cessation counselling by dentists and patient's perception in rural areas of India

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Abstract

Tobacco consumption is the leading cause of preventable mortality and morbidity. 90% of the deaths by lung cancer are caused by it. About 50% of smokers develop chronic obstructive pulmonary disease [COPD]. There are approximately 120 million smokers in India. According to the World Health Organization (WHO), India is home to 12% of the world's smokers. More than 1 million people die every year due to tobacco related illnesses. Dentist can play an important role and contribute to the reduction of tobacco use by educating patients about its usage and smoking cessation strategies. Tobacco cessation significantly reduces the risk of dying from tobacco-related diseases. In this article, we discuss tobacco cessation, its strategies, role of dentists, patient's attitude, and awareness in rural areas.

Keywords: Tobacco cessation counselling, Role of dentists, Second hand smokers, Strategies to quit tobacco, Rural areas of India.

Introduction

On October 15, 1492, Christopher Columbus was offered dried tobacco leaves as a gift from the American Indians that he encountered. Soon after, sailors brought tobacco back to Europe, and the plant was being grown all over Europe. The major reason for tobacco's growing popularity in Europe was its assumed healing properties. Europeans believed that tobacco could cure anything, from bad breath to cancer! Over the years, scientists begin to understand the chemicals in tobacco, as well as the dangerous health effects smoking produces.

Tobacco is the common name of several plants in the Nicotiana genus and the Solanaceae (nightshade) family, and the general term for any product prepared from the cured leaves of the tobacco plant. Tobacco contains the stimulant alkaloid nicotine as well as harmala alkaloids. Dried tobacco leaves are used in cigarettes, cigars, pipes, shishas as well as e-cigarettes (both rechargeable and disposable), e-cigars, e-pipes and vaporizers. They can also be consumed as snuff, chewing tobacco, dipping tobacco and snus.

Nicotine is a stimulant and parasympathomimetic alkaloid Nicotine is highly addictive that makes it difficult for smokers to kick the habit. It is one of the most commonly abused drugs. An average cigarette consists about 2 mg of absorbed nicotine; high amounts can be more harmful. In recent, years, there is a strong evidence that the tobacco industry has known all along that cigarettes are harmful, but continued to market and sell them. There is also evidence that they knew that nicotine was addictive and exploited this hidden knowledge to get millions of people hooked on this dangerous habit.

Tobacco consumption, exposure and its effects

Tobacco is consumed in many forms and through a number of different methods. Some examples are:

1. Cigarettes
2. Cigars, Little Cigars, Cigarillos
3. Dissolvable Products
4. Electronic Cigarettes (Also Referred to as: Vape Pen, e-Hookah, Hookah Pen)...
5. Traditional Smokeless Tobacco Products
6. Water pipes (Also Referred to as: Hookah, Shisha, Narghile, Argileh)

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Cigarettes remain the most prevalent form of tobacco use. Every third adult in rural areas and every fifth adult in urban areas uses tobacco in some form or the other, revealed the Global Adult Tobacco Survey 2 (GATS 2). The survey revealed that 28.6% (266.8 million) of adults—aged 15 and above— in India currently use tobacco in some form. Among the adults 24.9% (232.4 million) are daily tobacco users and 3.7% (34.4 million) are occasional users. The prevalence of tobacco use among men is 42.4%, while among women it is 14.2%, according to the survey.

The prevalence of smoking among men is 19.0%, while among women the figure is 2.0%.

The survey also showed that second-hand smoke is gradually becoming a major cause of concern in India.

More than one-third (35%) of non-smokers were exposed to second-hand smoke (SHS) at home.

What is second-hand smoke?

Second-hand smoke is the smoke that fills restaurants, offices or other enclosed spaces when people burn tobacco products such as cigarettes, *bidis* and water-pipes. There are more than 7000 chemicals in tobacco smoke, of which at least 250 are known to be harmful and at least 69 are known to cause cancer.

Smokers are not the only people who can get cancer from tobacco smoke. People around them—their kids, partners, friends, co-workers, and others—breathe in that smoke, too. Every year, more than 7,300 non-smokers die of lung cancer from SHS.

There is no safe level of exposure to second-hand tobacco smoke. Among children, exposure to second-hand smoke may lead to sudden infant death syndrome (SIDS), ear infections, asthma attacks, and other respiratory symptoms and infections. Children who live in rural communities are more likely to live in a house with a smoker, and may consequently have a higher risk of second-hand smoke exposure than children who live in other areas. The National Survey of Children's Health reports that while 24.4% of children in urban areas lives with a smoker, 33.1% of children in large rural areas and 35% of children in small rural areas live with a smoker. The survey also found that rural residents are more likely to allow smoking in the presence of their children in comparison to urban areas.

The health effects of cigarette smoking thus begin at or near the age of initiation of cigarette smoking, which is usually in adolescence. Tobacco use leads most commonly to diseases affecting the heart, liver and lungs. Smoking is a major risk factor for heart attacks, chronic obstructive pulmonary disease (COPD), bronchitis, and various cancers(particularly lung cancer, cancers of the larynx and mouth, bladder cancer, and pancreatic cancer). It also causes peripheral arterial disease and high blood pressure. The effects depend on the number of years that a person smokes and on how much the person smokes.

There is an increased risk of cancer because tobacco products have many chemicals that damage DNA. People who use any type of tobacco product are strongly urged to quit. People who quit smoking, regardless of their age, have substantial gains in life expectancy compared with those who continue to smoke. Also, quitting smoking at the time of a cancer diagnosis reduces the risk of death.

Tobacco cessation counselling – what, why & how?

Also known as quitting smoking is the process of discontinuing tobacco smoking. Most smokers who try to quit do so without assistance.

However, only 3-6% of quit attempts without assistance are successful long-term. Behavioural counselling and medications each increase the rate of successfully quitting smoking, and a combination of behavioural counselling with a medication such as bupropion is more effective than either intervention alone. A meta-analysis from 2018, conducted on 61 randomized controlled trials, showed among people who quit smoking with a cessation medication (and some behavioural help), approximately 20% were still quit a year later, as compared to 12% who did not take medication. Hence tobacco cessation counselling is required.

Various methods for tobacco cessation

1. Cold turkey (no outside help): About 90% of people who try to quit smoking do it without outside support - no aids, therapy, or medicine.

Although most people try to quit this way, it's not the most successful method. Only about 5% to 7% are able to quit on their own.

2. Behavioural therapy: This involves working with a counsellor to find ways not to smoke. Together, you'll find your triggers (such as emotions or situations that make you want to smoke) and make a plan to get through the cravings.
3. Nicotine replacement therapy: There are several types, including nicotine gum, patches, inhalers, sprays, and lozenges. They work by giving you nicotine without the use of tobacco. You may be more likely to quit with nicotine replacement therapy, but it works best when you use it with behavioural therapy and lots of support from friends and family.
4. Medication: Bupropion and varenicline (Chantix) are prescription medicines that can help with your cravings and withdrawal symptoms.
5. Non pharmacological means: In this the patient is motivated by health professionals with the following guidelines –

The 5 A's and the 5 R's:

a. Ask - Identify and document tobacco use status for every patient at every visit. (You may wish to develop your own vital signs sticker, based on the sample below).
b. Advise - In a clear, strong, and personalized manner, urge every tobacco user to quit.
c. Assess - Is the tobacco user willing to make a quit attempt at this time?
d. Assist - For the patient willing to make a quit attempt, use counselling and pharmacotherapy to help him or her quit. (See Counselling Patients to Quit and pharmacotherapy information in this packet).
e. Arrange - Schedule follow-up contact, in person or by telephone, preferably within the first week after the quit date.
f. Patients not ready to make a quit attempt may respond to a motivational intervention. The clinician can motivate patients to consider a quit attempt with the "5 R's": Relevance, Risks, Rewards, Roadblocks, and Repetition.
g. Relevance - Encourage the patient to indicate why quitting is personally relevant.
h. Risks - Ask the patient to identify potential negative consequences of tobacco use.
i. Rewards - Ask the patient to identify potential benefits of stopping tobacco use.
j. Roadblocks - Ask the patient to identify barriers or impediments to quitting.
k. Repetition - The motivational intervention should be repeated every time an unmotivated patient has an interaction with a clinician. Tobacco users who have failed in previous quit attempts should be told that most people make repeated quit attempts before they are successful.

6. Telephone support – there are toll free numbers offered by all the states on which counsellors provide routine support and counselling.
7. New approaches-

a. Transcranial magnetic stimulation- it stimulates the neural activity non-invasively in targeted areas of brain via magnetic field. The research for it is still going on and its effects are promising in the early stages.
b. Newer medications- medicines like N-acetylcysteine targets the orexin and glutamate signalling systems. This has been proven to be effective.
c. Nicotine vaccines- nicotine is attached to antigenic protein which stimulates formation of antibodies that has high affinity for nicotine and prevents it from entering in brain.

Role of dentists in tobacco cessation counselling-

Because of the oral health implications of tobacco use, dental practices may provide a uniquely effective setting for tobacco use recognition, prevention, and cessation. Health-care professionals, including dental professionals, can help smokers quit by consistently identifying patients who smoke, advising them to quit, and offering them information about cessation treatment. The dental team can play an effective role in the creation of tobacco-free communities and individuals through participation in community and political action and in counselling their patients to quit.

Hence Dental visits represent an opportunity to identify and help patients quit smoking.

Dentists who implement an effective smoking cessation program can expect to achieve quit rates up to 10-15 percent each year among their patients who smoke or use smokeless tobacco. Compared to physicians and other health professionals, dentists are less likely to provide tobacco use cessation advice and counselling and feel inadequately prepared to provide tobacco cessation education to their patients. Lack of training and confidence as well as inadequate knowledge of tobacco cessation counselling (TCC) are known barriers to counselling practices among dental students.

Thus, Dentists have an opportunity to play a role in promoting healthy lifestyles by incorporating tobacco cessation programs into their practice.

Patient's perception towards TCC in rural areas-

Rural communities are adversely impacted by increased rates of tobacco use. Smokers in rural communities face significant challenges that must be addressed. For example, patients may have to travel long distances to receive in-person cessation services. In addition, while practitioners may advise their patients to quit smoking, they may not always provide resources that help ensure successful tobacco cessation (for example, referrals to counselling or access to low-cost nicotine replacement therapy). Inadequate health insurance coverage or high out-of-pocket costs may also deter rural individuals from accessing or seeking tobacco cessation services. Rural community members may also be more likely to perceive anti-tobacco policies as a violation of their individual rights or their personal freedoms. A multilevel approach on improving access to health care system resources while addressing intrinsic and community/social factors might enhance smoking-cessation interventions and programs in rural communities.

Conclusion

1. Tobacco use is the leading preventable cause of disease, disability & death. Hence every measure should be taken to eliminate its consumption.
2. Dental teams are in an ideal position to provide help for smokers who want to quit smoking and promote smoking cessation. Thus, tobacco cessation counselling is a must for every dental practitioner.
3. The rural areas like the urban ones should have proper health education delivery system. All the advertisements promoting tobacco should be banned.
4. As smoking has such an adverse impact on oral health, it's a key priority to ensure that members of the dental team engage with tobacco users and help them out.

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Conflict of Interest

None.

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