



Relevance of Current Age Information in Regards to Tobacco Cessation: A Cross-Sectional Study Amongst Children of 10-14 Years

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Abstract

Background: A huge burden of tobacco addiction among youth weighs heavy on any nation. There are various methods used currently for control of tobacco use. This study was done to assess the relevance and potency of information and its effect on quitting the habit.

Methods: A questionnaire survey was conducted among 10-14 year olds in Ahmedabad city. Out of a sample of those 8100 children, 440 were tobacco users. The data was analyzed using IBM SPSS 26 Windows statistical software. Chi square test was done on the quantitative data using the independent sample t-test. P value was < 0.05.

Results: Every tobacco user was aware of tobacco harm through all the awareness modules provided by the government and health authorities: 39.1% through healthcare personnel, 19% through educational institutions, 3.4% through public displays, 67.8% through multimedia, 98% through warning on pack and 100% showed willingness to quit but could not.

Discussion: Students were well versed with tobacco damage but that was not sufficient to prevent initiation or continuation of tobacco use. Additional psycho-behavioral methods should be supplemented with current awareness trends to have a long lasting success in cessation.

Conclusion: Just an awareness of tobacco related morbidity was not sufficient for patients to quit the habit. Understanding the psychology of addiction is pertinent in today's time for a successful cessation program. Methods need to be reviewed.

Keywords: WHO; National Tobacco Control Programme (NTCP);

Abbreviations

India is the second largest consumer of tobacco and currently according to WHO, five million people die because of tobacco [1]. Substance abuse is a national community burden. Despite the COTPA law brought into force in 2005 [2]. Youngsters are still found consuming tobacco in forms of smokeless tobacco which are khaini, gutkha, betel quid with tobacco, zarda and smoking tobacco which are bidi, cigarette and hookah. Heavy dependency is seen in the usage when started at a younger age. Despite this, the youth seems to have an easy access to tobacco. In India, one out of ten adolescents of 13-15 years age has smoked cigarettes and half of them before ten years of age showed an increase in tobacco usage [3]. Substance abuse later on leads to poor outcomes in the future due to irresponsible behavior. Current techniques for de-addiction involve tobacco harm awareness by targeting

people with knowledge about the dangers involved, as was envisaged under the National Tobacco Control Programme (NTCP) by the Ministry of Health and Family Welfare (MoHFW) [4]. Hence, we proceeded with the hypothesis that current cessation methods employed through education and awareness are effective in tobacco cessation and conducted a survey on the adolescent kids of Ahmedabad city.

Materials and Methods

This cross sectional study used an English questionnaire study with a random study sample of 8100 children between the ages of 10-14 years (appendix 1). Sampling was done with the help of probability proportional to enrollment size (PPE) in the schools. Only those children participated in the study who readily consented along with their parents and school authorities. Confidentiality

was maintained and no one except the participants was present with the research authors to negate any hesitation in answering. Multiple choice options were provided in the questionnaire. Out of this, a total of 440 students who confessed tobacco use filled up the questionnaires. India has recorded 8.5% prevalence of tobacco use amongst its children against 19.33% which is globally [5,6]. To calculate a 95% CI for p with a margin of error (d) no more than 0.04, sample size n came upto 434. So, the final sample size was rounded off to 440 students $[n = (1.96^2)(p)(1-p)/(0.04^2), n = 434]$. Stat test: The data was analyzed with IBM SPSS 26 for windows statistical software. Statistical analysis analyzed using chi square test and for quantitative data between the group analysis, independent sample t test. For all statistical analysis, the probability level of $p < 0.05$ is considered statically significant.

Results

440 out of 8100 used tobacco and all of them were already aware that tobacco was harmful. 39.1% said that they had already been previously sensitized by public health authorities or had been given health education at some hospital setting, 19% gained information through their own educational institutes, 3.4% of these became aware of tobacco harm through public displays of advertisements, 67.8% of them knew about dangers of tobacco through multimedia modes like television and cell phones. Whereas 98% of them were aware of the dangers of tobacco through textual and pictorial warnings on the packaging itself. All of them knew they should not be using tobacco but could not.

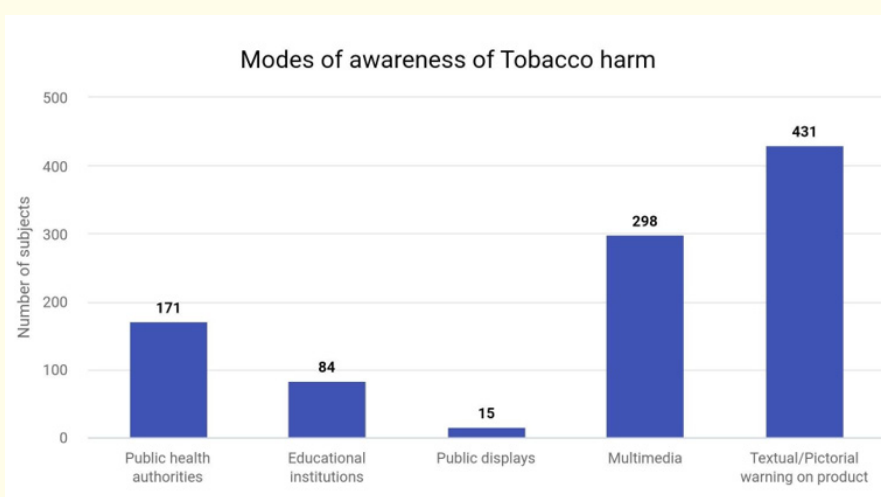


Figure 1

Discussion

Findings suggest ignorance of tobacco harm is not the root cause of tobacco use since each user was aware of the repercussions associated with tobacco use. Thus, it can be inferred that there is a bigger psychological factor associated with tobacco use. Contemporary cessation interventions seldom focus on how tobacco use was initiated. A study was done and they found that 19.2% felt tobacco relieved toothache, 38.1% felt it helped in defecation [1].

Farmers and laborers used tobacco to relieve tiredness. Mothers applied tobacco leaf soaked in castor oil on the chest of a rapidly breathing child from pneumonia. Tobacco was given to young girls to relieve pain from menstruation [7]. Advice to quit was given in all these cases previously but hardly half of them followed up, showing that the information for tobacco harm was not satisfactory enough to trigger cessation. Our findings highlight the use of tobacco to fit in a social group, to imitate behavior of friends or to get away from emotional problems [8]. Among initiators 73.7% had at least one family member using tobacco. Initiation

was seen due to low self esteem, powerlessness, dependency, social isolation, lower parental support and affection and family conflicts. This study draws parallel with the Hutchinson smoking prevention project and showed that social programming alone is not sufficient for cessation. This is similar to the Minnesota Wisconsin adolescent tobacco research project and also highlighted that the smoking rates didn't drop despite the anti tobacco messages and thus needed intensive programming [9,10]. Quit rates increase when motivation enhancement and contingency based reinforcement are included along with life skills training like saying no to tobacco, developing positive self image and not getting influenced by peers. As young people are less concerned about the health risks, cessation through a patient centric approach should be carried out where each model is designed as per the user, focusing on those problems relevant to the patient. One model is Donovan and Wallace biopsychological model for addiction having the biomedical modalities (detoxification, anti craving medication, substitution treatment), psychological modalities like counseling and cognitive behavioral therapy, psychotherapy, family therapy and motivational intervention and lastly sociocultural modalities including community

reinforcements, vocational rehabilitation, cultural specific intervention [11]. This shows that the existing approaches should be tailored and reviewed for better cessation by focusing on subtler psychological aspects. The initial hypothesis that the current age information provided for tobacco cessation was relevant, stands null and void. The research authors would like to do a prolonged intensive study to provide more impactful insights.

Conclusion

Addiction has a psychosomatic behavioral impact on an individual. Interventions aimed at teaching social resistance skills with re-iterating the generic personal and social tactics would be effective. The pathophysiology of tobacco related morbidity to patients is not efficient for tobacco cessation. Understanding the psychology of addiction is pertinent in today's time for a successful cessation program.

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