Cigarette Smoking Prevalence among Men's Of Nagpur, Maharashtra

Dr. Arun U. Deore

Department of Zoology, J. N. College, Nagpur, Maharashtra, India

Abstract

The smoking prevalence has been increased in developing countries in last few decades. Nearly 80% of more than 1 billion smokers worldwide live in low- and middle-income countries, where the burden of tobacco-related illness and death. This paper explores actual prevalence of cigarette smoking amongst men of Nagpur, Maharashtra. It is population based cross-sectional survey carried out in the people ages 15-65 years by using structured questionnaire. In total, 423 individuals have been selected for this study however, actual men participated in were 398. The ethnic breakdown of respondents is demonstrates that maximum (98%) of the respondents were Hindu. Study participants reported numerous different types of occupations. The data estimate that the true prevalence of smoking among men aged 15yrs and older in Nagpur city is 13.8%. The major risk of smoking was reported in the age group 20-24 years and lower rate of prevalence occur above 30 years of age.

Key Words: Tobacco, Nagpur, Cigarette, Smoking

Introduction

Based on size and shape of leaves and flowers, tobacco differentiated into more than 60 species which is used in variety of forms[1]. It is the second cause of death globally (after hypertension) and is currently responsible for killing one in 10 adults worldwide [2]. Tobacco use kills more than five million people every year – more than HIV/AIDS, tuberculosis and malaria combined. Tragically, the epidemic is shifting towards the developing world, where 80% of tobacco-related deaths will occur within a few decades. The shift is caused by a global tobacco industry marketing strategy that targets young people and adults in developing countries [3]. About 50% of all smokers will be killed by use of tobacco [4]. Tobacco smoking is causing over 3 million deaths every year worldwide, and if current smoking trends continue the annual mortality will exceed 10 million by 2030 [5]. About 13.3% of total deaths were expected in the year 2020 due to tobacco use in India [6].

Studies in developed countries show that cigarette smoking has dramatically decreased in recent years [7]. Nevertheless, it is alarmingly increasing in low income countries [8-11]. Nearly 80% of more than 1 billion smokers worldwide live in low- and middle-income countries, where the burden of tobacco-related illness and death is significant [3]. Cigarette smoking is an established risk factor for cancer and cardiovascular disease, and is the leading cause of avoidable disease in most industrialized countries. [12]. Tobacco use, is described as a 'gate way' to psychoactive substance and other illicit drug use among teenagers [13].

Adolescence, from childhood to adulthood, is a complex maturing period involving natural and physical development and social interactions that may have short- and long term consequences [14]. Exposure to smokers

(friends, parents, teachers), availability of tobacco, low economic status, poor academic performance, low self-esteem, lack of perceived risk of use, and lack of skills to resist influences to tobacco use are factors that are associated with cigarette smoking among the youth [15-17]. Additionally, getting involved in physical fights, alcohol use, marijuana use and having sexual intercourse are also associated with cigarette smoking [10].

Method

The study design is a population based cross sectional. The target population of the study was men aged 15 years and older, who live in Nagpur city. Data collection was carried out using a pre-coded structured questionnaire in local language. The questionnaire was field tested and necessary alteration and modifications were made before the survey was conducted. The questionnaire included Socio-demographic questions, questions on family & friend smoking history, questions on respondents smoking history & practices. The survey teams were ensuring that all eligible individuals must voluntary agree to participate in the interview and informed consent of interviewees was taken. The questionnaires were filled in a way that the privacy of respondent was seriously considered. Collected data was entered into a database created using SPSS Inc 22 statistical software. Data were screened and inspected for missing data and potential errors.

Result

In total, 423 individuals have been selected for this study however, actual men participated in were 398. The mean age of respondents was 31.3 years (mode 18 years), with minimum and maximum reported ages of 15 and 65 years, respectively. The age distribution of survey participants is shown in Table 1.

Total number of married participants were 62% (n=247), 38% (n=151) were single. The ethnic breakdown of respondents is demonstrates that maximum (98%) of the respondents were Hindu. Study participants reported numerous different types of occupations, it was tried to put them under specific categories. 91% of respondents (n=362) were able to read and write, while 9% (n=36) could not read or write. The educational breakdown of respondents is shown in Table- 2.

Major risk of smoking was reported in the age group 20-24 years (17.6%) followed by 30-34 age group people. Lower rate of prevalence occur above 30 years of age, however it is reported that the people above 60 years of age were found to be more addicted to smoking (25%). The lowest rate was observed in the people belonging to age group 35-39 years.

Table 1: Participants with their age groups and smoking frequency

Age category	Participants	%	Smokers	% with respect to their age group	% among total participants
15-19	87	21.8	12	13.7	3
20-24	102	25.6	18	17.6	4.5
25-29	63	15.8	8	12.6	2
30-34	31	7.7	5	16.1	1.2
35-39	44	11	3	6.8	0.7
40-44	28	7	3	10.7	0.7
45-49	27	6.7	2	7.4	0.5
≥50	16	4	4	25	1
Total	**398***	**100**	**55**	**100**	**13.8**

(***Participants responded the questions**)

Table 2: Respondents by Level of Education

Educational status	Number	%
Primary (grades 1-5)	27	6.7
Secondary (grades 6-8)	86	21.6
High school (grades 9-12)	201	50.5
University	68	17
Other	29	7.2
Total	**398**	**100**

Chart-1: Graphical representation of smokers
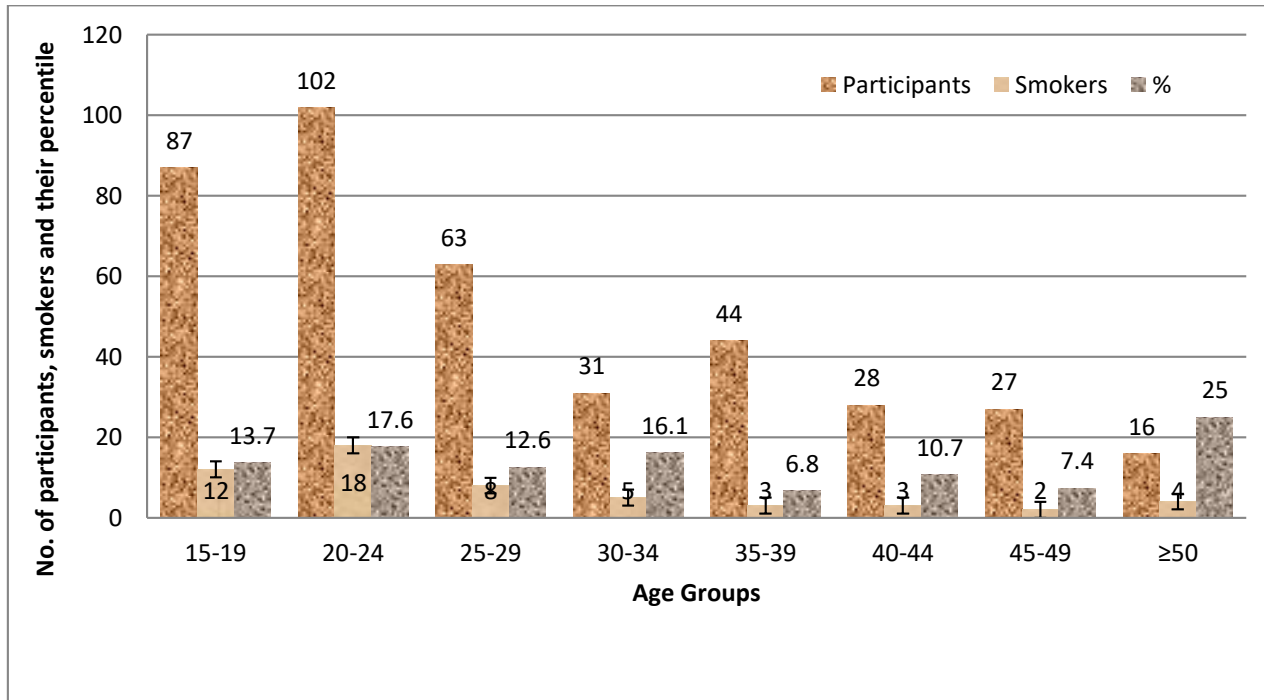
Our data estimate that the true prevalence of smoking among men aged 15yrs and older in Nagpur city is 13.8%.The study findings show that 78.5% of respondents received information regarding adverse effects of smoking but most of them didn't know about the what type of consequence of smoking occurs. 87.3% of all of the participants and 67.4% of smokers were anticipating some type of health problems as a result of smoking but only 42.6% of previously smokers quitted smoking due to health problems.

Discussion

The study was conducted to estimate the prevalence of cigarette smoking in Nagpur city among men aged 15yrs and older. The prevalence of smoking among them was estimated to be 13.8%. Meanwhile this study shows that the initiation of smoking among smokers began in very early age, where 15% of smokers started to smoke before age of 15yrs, while 57% of smokers started to smoke between 16-20yrs of their age.

The prevalence of cigarette among men aged 15 and older in Pakistan is 36% while the prevalence of smoking among men aged 15yrs and older in Islamic Republic of Iran is documented 25.5% [18] which is much higher than smoking prevalence in Nagpur city. While the prevalence of smoking among in some major Asian countries was reported to be: 43.8%. The prevalence of cigarette among men aged 15 and older in Pakistan is 36% while the prevalence of smoking among men aged 15yrs and older in Islamic Republic of Iran is documented 25.5% [18] which is much higher than smoking prevalence in Nagpur city. While the prevalence of smoking among in some major Asian countries was reported to be: 43.8% in Turkey, 52.9% in China, and 28.3%

in Bangladesh [18]. However, in India previous studies reported a frequency 10.3% [19-21].and this frequency is more or less similar to present study.

The relationship between parents smoking habits and children smoking habits is documented in other countries as well. A study conducted in Malaysia found that children whose fathers are smokers are almost twice at higher risk of smoking compared to those whose fathers are not smokers [22]; this study also shows that within families, sibling's smoking habits are also significantly associated with children smoking habit

References

1. Feinhandler SJ, Fleming HC, Monahan JM. Pre-Columbian tobaccos in the Pacific. *Econ Bot* 1979; **33**: 213-26.

2. World health organization http://www.who.int/mediacentre/events/annual/wntd/en/

3. World Health Organization (WHO). Facts on the tobacco epidemic and its control. *Fact Files;* .http://www.who.int/features/factfiles/tobacco/en

4. Peto R, Lopez AD, Boreham J, Thun M, Heath C Jr, Doll R. Mortality from smoking worldwide. *Br Med Bull* 1996; **52**: 12-21.

5. Gupta PC. Tobacco control in India. *Indian J Med Res* 2006; **123**: 579-82.

6. Ministry of Health and Family Welfare, Government of India. Reddy SK, Gupta PC, editor. Report on tobacco control in India. New Delhi: Ministry of Health and Family Welfare; 2004.

7. Tyas SL, Pederson LL. Psychosocial factors related to adolescent smoking: a critical review of the literature. Tob Control. 1998;7:409-420. doi:10.1136/tc.7.4.409

8. Rudatsikira E, Muula AS, Siziya MS. Prevalence, correlates of and perceptions toward cigarette smoking among adolescents in South Korea. Indian J Pediatr. 2009;76:505-510. doi:10.1007/s12098-009-0073-6

9. Rudatsikira E, Abdo A, Muula AS. Prevalence and determinants of adolescent tobacco smoking in Addis Ababa, Ethiopia. BMC Public Health. 2007;7: 176. doi:10.1186/1471-2458-7-176

10. Ary DV, Biglan A. Longitudinal changes in adolescent cigarette smoking behavior: Onset and cessation. J Behav Med. 1988;11(4):361-382. doi:10.1007/bf00844936

11. World Health Organization. Report on the global tobacco epidemic 2015. World Health Organization; 2015. https:// www.who.int/tobacco/global_report/2015/en/.

12. J.A. Baron, Beneficial effects of nicotine and cigarette smoking: the real, the possible and the spurious. Britiih Medical BullaKn 1996;52 (No. 1):58-73

13. Gilliland FD, Islam T, Berhane K, et al. Regular smoking and asthma incidence in adolescents. Am J Respir Crit Care Med. 2006;174. doi:10.1164/rccm.200605-722oc

14. Mowery PD, Farrelly MC, Haviland ML, Gable JM,Wells HE. Progression to established smoking among US youth. Am J Public Health. 2004; 94: 331-337. doi:10.2105/ajph.94.2.331

15. Escario JJ, Wilkinson AV. Visibility of smoking among school teachers in Spain and associations with student smoking: a cross-sectional study. BMJ Open. 2018;8:e018736. doi:10.1136/bmjopen-2017-018736

16. Kliegman RM, Stanton BMD, Geme JS, Schor NF. Substance Abuse. In: Nelson Textbook of Pediatrics. Vol 2. 20th ed. Elsevier;2016: 955.

17. Bandason T, Rusakaniko S. Prevalence and associated factors of smoking among secondary school students in Harare Zimbabwe. Tob Induc Dis. 2010;8(October). doi:10.1186/1617-9625-8-12

18. World Health Organization Country profile. http://www.emro.who.int/emrinfo/index.aspx?Ctry=ira

19. Mishra S, Joseph RA, Gupta PC, et al. Trends in bidi and cigarette smoking in India from 1998 to 2015, by age, gender and education. BMJ Glob Health. 2016;1(1):e000005. doi:10.1136/bmjgh-2015-000005

20. Subramanian SV, Nandy S, Kelly M, Gordon D, Smith GD. Patterns and distribution of tobacco consumption in India: cross sectional multilevel evidence from the 1998-9 national family health survey. BMJ. 2004;328(7443):801- 806. doi:10.1136/bmj.328.7443.801.

21. Rani M, Bonu S, Jha P, Nguyen SN, Jamjoum L. Tobacco use in India: prevalence and predictors of smoking and chewing in a national cross sectional household survey. Tob Control. 2003;12(4):e4. doi:10.1136/tc.12.4.e4.
22. K Shamsuddin, M Abdul Haris. 2000. Family Influence on Current Smoking Habits Among SecondarySchool Children in Kota Bharu, Kelantan. *Singapore Medical Journal* 2000 Vol 41(4): 167-171.