

## **Original Article**

# **The Yazd People's Point of View about Effect of Visual Media on Smoking Prevalence**

Mohammad Hossein Baghianimoghadam<sup>1</sup>, Masoomeh Zinalabediny<sup>1</sup>, Hasan Shahbazi<sup>2\*</sup>, Farokhlehgha Servat<sup>3</sup>, Batol Ghane<sup>3</sup>, Vida Pourmazar<sup>4</sup>

- 1- Department of Health Education, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
- 2- Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran
- 3- Faculty of Health, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
- 4- Deputy of education, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Received: 8/22/2013

Accepted: 11/25/2013

---

### **Abstract**

**Introduction:** Smoking is a major cause of death in the world. About 5 million people die due to smoking and if the same pattern continues to 2020, it is estimated that each year 10 million people will die from smoking. There is a strong positive correlation between the onset of smoking in adolescents and young adults, and exposure to media and movies which show smoking. Therefore, the aim of this study was to investigate the point of view of Yazd people about effect of smoking in visual media on smoking prevalence.

**Materials and Methods:** This descriptive (cross-sectional) study was done on 582 people in the city of Yazd. A self-administrative questionnaire was used and its validity and reliability was measured. After completing the questionnaires, the data was analyzed, using SPSS 16 and T-test, ANOVA and chi-square test.

**Results:** Based on participants' point of view, the family, friends, and media respectively had more important role in tendency of adolescents to smoking. Data showed that about 80% of samples believed that smoking in media has a high positive effect on adolescents' smoking. More than 55% of participants confirmed that the lack of smoking in movies doesn't affect the quality of films.

**Conclusion:** The present study suggests that control and monitoring on media, limitation or lack of smoking on media and films is an important factor to decrease and control smoking in adolescents and young adults.

**Keywords:** Video-Audio Media, Prevention, Smoking, Adolescent

---

\* **Corresponding author:** Tel: 09139776513, Email: Sh\_hasan333@yahoo.com

## Introduction

Smoking is a major cause of death in the world; there are 1.1 billion smokers in the world that currently, 5 million people die due to smoking and if the same pattern continues to 2020, it is estimated that each year 10 million people will die from smoking<sup>[1-4]</sup>.

One of the major problems in public health and tobacco control is smoking by adolescents<sup>[5]</sup>. Children and young people are the majority of new smokers and tobacco manufacturing companies encourage them to start smoking<sup>[6]</sup>.

Many people believe that smoking and selling tobacco products to adolescents lower than 18 must be prohibited<sup>[7]</sup>.

Several studies in the world showed that about 70-90% of adults started their smoking at the ages lower than 18 (8-14). In 2003, the prevalence of smoking in American students was nearly 22%, in Iranian 13-15-year-old children; it was 2%.As the results of the studies in Isfahan, Tehran, Urumia, Tabriz, and Jahrom showed, the prevalence of smoking in students was 8.7, 5, 12, 14 and 12.7percent, respectively<sup>[5]</sup>.

Social scientists and policy makers are worrying about the effects of media on attitudes and behaviors of adolescents and young people<sup>[15]</sup>. Beginning of this worry concerns the history of motion pictures (1895 CE)<sup>[16]</sup>.

The role of media in shaping and changing the attitude of people is very important<sup>[17]</sup>. The media form our understanding of the world<sup>[18]</sup>.

Teenagers are the most important members of the media<sup>[19]</sup>. This media has deep potential effects, “positive or negative”, on the aspects of cognitive, social, and behavioral life of children and adolescents<sup>[20]</sup>.

Smoking in screen by popular actors in movies and media has the greatest impact on behavior, modeling, and starting of smoking<sup>[17]</sup>. Smoking in films leads to a positive attitude toward smoking and negative attitude toward the actor<sup>[21-26]</sup>. Many studies in the world have shown that there is a positive correlation between the onset of smoking in adolescents and young and exposure to the media and movies that depict smoking<sup>[27-31]</sup>.

Portrayal of smoking in movies is a major problem and a risk factor for the initiation of smoking in adolescents<sup>[30]</sup>. Center for Disease Control and Prevention in the United States in the years 2002-2005 expressed that the most important factor in smoking initiation by youth, was the display of tobacco in movies<sup>[1]</sup>. In the United States about 2050 teens start smoking each day that showing smoking in the media is liable for 1080 of them<sup>[22]</sup>. In other words, more than 52 percent of smoking initiation can be attributed to the media<sup>[21]</sup>.

Smoking in movies has started since 1960<sup>[19, 32]</sup>.Although smoking in movies decreased from 1996to 2004<sup>[16, 33]</sup>, but still two of every three films depict smoking<sup>[16]</sup>. From 2002 to 2005, about 70% of the movies in the United States

portrayed smoking. Smoking was seen in about 75% Of Hollywood films from 2002 to 2005<sup>[17]</sup>. In India, in 2004 and 2005 about 89% Of characters of films were smoking <sup>[1]</sup>.

The most important issue is that smoking in movies was rarely associated with unattractive way and was related to negative consequences <sup>[12]</sup>. Some film makers argue that characters' smoking is needed in movies and most are used for characters that are bad, negative and traitor, while a significant number of videos showed smoking, drinking, and using drugs to control stress <sup>[1]</sup>.

Given the undeniable role and responsibilities of the actors in television and movies, animations, etc., in the prevention and incidence of smoking, we decided to study the point of view of the people of Yazd about the effects of visual media on the incidence and prevention of youth's smoking.

## Materials and Methods

This descriptive and cross-sectional study was carried out in 2012 in Yazd, Iran. The number of samples was 600 based on the 
$$n = \frac{(z_{1-\alpha/2})^2 * p(1-p)}{d^2}$$
 and  $\alpha=95\%$ ,  $p=0.5, q=0.5$  and  $d=0.4$ . To avoid random errors the samples size considered 700. The samples were aged 15-65. From every decade 10 male

and 10 female were selected from 7 clusters that randomly selected from Yazd.

A self-administrative questionnaire was used which its validity and reliability were confirmed by the opinions of experts in communication and health education, and its internal consistency was achieved by test-retest within 2 weeks (Cronbach's alpha = 0.78)

The questionnaire was in 4 sections: A) Demographic variables (Age, sex, education, occupation and marital status), B) The role of visual media on the prevalence of smoking, C) The role of visual media on the prevention of smoking and D) Guidelines. Questionnaires were completed by a trained interviewer. After completing the questionnaires, the data was analyzed with using statistical software SPSS 16 and T-test, ANOVA and chi-square test.

## Results

From 700 questionnaires distributed, 582 (83%) were returned. The mean age of the sample was  $38.02 \pm 1.33$ . About 263 (45.3%) were female and 317 (54.7%) were male. 2 (0.3%) of participants were illiterate, 50 (8.6%) undergraduates, 167 (28.8%) diploma, 102 (17.6%) more than Diploma, 215 (37.1%) Bachelor and 43 (7.4%) M.S. and PhD. 7 (1.4%) of the samples were unemployed, 126 (24.9%) student, 97 (19.1%) government employees, 145 (28.6%) were self-employed

and 132(26%) had other jobs. Total of 242 samples (41.9%) were single, and 335 (58.1%) were married.

About the effects of films on attitudes, opinions, beliefs and values of people, 211(36.4%) of participants believed that this

effect is too high, 299(51.6%) rated it as high, 54(9.3%) low and 16(2.8%) too low.

Based on participants' point of view, the family, friends and media respectively had more important role in tendency of adolescents to smoking (Table 1).

**Table 1:** Distribution of frequency of point of view of samples about the factors that affect the tendency of young people to smoking

Variables	First priority	Second priority	Third priority	Score*
<b>Family</b>	144 (25.5%)	229 (46%)	80 (21.6%)	970
<b>Friends</b>	401 (71%)	131 (26.3%)	21 (5.7%)	1486
<b>Media</b>	13 (2.3%)	123 (24.7%)	248 (67%)	533
<b>Others</b>	7 (1.2%)	15 (3%)	21 (5.7%)	72

\*The scores of priorities are: First priority=3, second priority=2 and third priority=1

About 61 (10.6%) of samples believed that smoking in Iranian films is very much, 248 (42.9%) high, 212 (36.7%) low and 57 (9.9%) too low. There was significant difference

between the attitude of participants that smoking in films affects the positive view of smoking and their spouse and occupation (P=0.001).

**Table 2:** Distribution of frequency of seeing smoking and anti-tobacco messages and programs by the subjects during the last 30 days

Number of observations	Never	Once	Twice	Three time	four time	Five time
<b>Show the smoking</b>	181 (33.5%)	58 (10.7%)	71 (13.2%)	68 (12.6%)	42 (7.8%)	120 (22.2%)
<b>Display anti-tobacco messages and programs</b>	301 (55.1%)	72 (13.2%)	85 (15.6%)	40 (7.3%)	24 (4.4%)	24 (4.4%)

Table 2 showed that 301 (55.1%) of the samples indicated that in the last month they did

not see any training program and anti-smoking advertisement in the media, 72 (13.2%) saw once,

85 (15.6%) twice, 40 (7.3%) three times, 24 (4/4%) four times and in the same proportion (4/4 %) five times and more.

About 143(26.7%) of the samples viewed that

smoking in films must be forbidden, there was significant difference between the view of men and women in this question (P=0.001) (Table 3).

**Table 3:** The distribution of frequency of the overall point of view of samples about smoking in visual media

Question	N	%
Smoking should not be displayed	143	26.7
It can be displayed ,if its' outcome be negative attitude to smoking	199	37.1
It can be displayed ,if its' role is negative	138	25.7
Display smoking is not important	42	7.8
Others	14	2.6

168 of participants (34.9%) proposed that strategy for the prevention of foreign films and other media increases the quality of Iranian films. Marital status and education affected the

response to this question, and this difference was statistically significant (respectively =0.003 and P=0.02) (Table 4).

**Table 4:** The distribution of frequency of point of view of samples about prevention of adverse effect of foreign films and other visual media

Question	N	%
Increase the quality of Iranian films	168	34.9
Education through schools	92	19.1
Education through local media	91	18.9
Parent Education	89	18.5
Others	42	8.7

## Discussion

Behaviors that are supported by the media can be social norms and can increase more positive attitude toward that behavior <sup>[12]</sup>. Many studies in the developed countries, especially America, show that visual media have a huge impact on young people's attitudes and may exacerbate risky behaviors <sup>[15]</sup>. In the present study, more than 88 percent of the sample viewed that the

effect of the videos on the attitudes, opinions, beliefs and values of the people is much and too much and only 12% assessed this effect low or very low. The data of a study showed that Attitudes toward cigarette smoking can increase positive attitude to smoking in future <sup>[12]</sup>. In another study 63% of people believed that the portrayal of smoking in movies is the cause of

attitude of youth's smoking <sup>[1]</sup>. Results of the study of Dalton <sup>[21]</sup> showed that the effect of representation of smoking in movies was significantly higher than parents' smoking.

Some studies has shown that the behavior and attitudes of family and friends has major impact on adolescents and youth's smoking, but effect of the media, movies, television and internet is more important <sup>[32,34]</sup>, However many studies revealed that the influence of the media and films are more than other social influences such as family and friends <sup>[15, 28]</sup>. So far, movies that have scenes of smoking, cause the exposure to smoking more than 50 % <sup>[20, 22, 25, 35 and36]</sup>. In our study about Prioritization of family, friends and media trends in smoking in adolescents and young adults, the samples showed that friends, family, and media are respectively the most effective ones.

The results of present study showed that almost all of those participants that had watched films at last month, had seen smoking by actors, at least once. A study in Victoria showed that almost all cases within 30 days had seen the smoking or brand cigarettes in the movies <sup>[13]</sup>. In another study <sup>[37]</sup> about 80% of the students had seen using cigarettes by actors while watching TV and movies in the past 30 days.

A study in America has shown that non-smoking teens whose favorite movie stars smoke 16 times more likely in the future to find a positive attitude towards smoking <sup>[9]</sup>. Also, 18%

of boys and 6% of girls in India after watching a film in which the stars like to use smoke find a positive attitude towards smoking <sup>[15]</sup>. While nearly 56 % of the participants believed that control of Iranian film in preventing smoking is much and too much, nearly 75 % of them believed that the practice of Iranian media did not succeed in preventing smoking. Studies showed that propaganda about anti-smoking and messages in movies can reduce smoking in youth and adolescents <sup>[15]</sup>.

In this study, more than 55% of the samples indicated that unfortunately at last month did not see advertising and anti-smoking programs in the visual media. In another study, 40% of the students did not observe any anti-smoking advertisement in the media in the past 30 days <sup>[37]</sup>.

Almost 65% of the samples were evaluated as requiring visual media to spread awareness about the disadvantages of smoking before showing any film that depicts smoking, much and too much can be effective in preventing smoking. In a study in 2006, more than two-thirds of adults agreed with anti-smoking advertisements before displaying the movies <sup>[25]</sup>.

### **Acknowledgment**

We thank people who answered the questionnaires and personnel of research section of health faculty.

## References

- 1- Goswami, H. Kashyap, R. Tobacco in Movies and Impact on Youth. Burning Brain Society, Chandigarh, India, 2006. [Internet]. Available at: <http://smokefreemovies.ucsf.edu/pdf/BurningBrain-tobaccoinmovies.pdf>
- 2- Al-Muzahmi, S. N. El-Aziz, S. A. Al-Lawati, J. A. The Global Youth Tobacco Survey (GYTS – Oman).2007. [Internet].Available at: [http://www.moh.gov.om/reports/GlobalYouthTobaccoSurvey \(GYTS\) 2007.pdf](http://www.moh.gov.om/reports/GlobalYouthTobaccoSurvey(GYTS)2007.pdf)
- 3- Arora, M. et al. Tobacco Use in Hollywood Movies, Tobacco Promotional Activities and Their Association with Tobacco Use among Indian Adolescents. Top Control 2011[Epub ahead of print].
- 4- Buckles, M. P. Trinidad and Tobago Global School-based Student Health Survey. 2007. [Internet].Available at: From:[http://www.who.int/chp/gshs/2007\\_GSHS\\_Trinidad\\_and\\_Tobago\\_Report.pdf](http://www.who.int/chp/gshs/2007_GSHS_Trinidad_and_Tobago_Report.pdf)
- 5- Rahmanian, K.;Jafarzadeh, A.;Khalooei, A. Determinants of Smoking Behavior among high School students in Jahrom. Payavard Salamat 2010; 4(1-2): 88-96. [Persian]
- 6- Dalton, A. Factors Affect the Health of Middle School Students. A Master's Research Paper Presented to The Faculty of the College of Education Ohio University. 2008. [Internet].Available at: <http://www.cehs.ohio.edu/resources/documents/dalton.pdf>
- 7- Brener, N. D.; Billy, J. O. G.; Grady, W. R. Assessment of factors affecting the validity of self-reported health-risk behavior among adolescents: evidence from the scientific literature. Journal of Adolescent Health 2003; 33: 436-457.
- 8- Surani, S.et al. III Effects of Smoking: Baseline Knowledge among School Children and Implementation of the "AntE Tobacco" Project. Int J Pediatr 2011; 584589: 1-7.
- 9- World Health Organization. Tobacco Free Film, Tobacco Free Fashion. 2003. [Internet].Available at: <http://www.who.int/tobacco/media/en/brochure-en.pdf>
- 10-U.S. Centers for Disease Control and Prevention (CDC). Smoking in Top-Grossing Movies—United States, 2010. Morbidity and Mortality Weekly Report (MMWR) 2011; 60(27): 909-913.
- 11-Gidwani, P. P.et al. Television viewing and initiation of smoking among youth. Pediatrics 2002; 110: 505-8.
- 12-Sargent, J. D. Smoking in movies: Impact on Adolescent Smoking, A Readable Detailed Overview of the Research Described in This Report. Adolescent Medicine 2005; 16: 345–370.
- 13-Bovet, P.;Viswanathan, B.; Warren, W. The Global Youth Tobacco Survey in the Seychelles - 2002.Ministry of Health 2002, Seychelles, Victoria. [Internet].Available at: [http://www.who.int /tobacco/surveillance/Seychelles%20GYTS%202002.pdf](http://www.who.int/tobacco/surveillance/Seychelles%20GYTS%202002.pdf)
- 14- West Virginia Department of Education; West Virginia Department of Health and Human Resources, Bureau for Public Health, Office of Epidemiology and Health Promotion, Division of Tobacco Prevention and Health Statistics Center. 2002. West Virginia Youth Tobacco Survey. Published 2003. [Internet]. Available at: <http://www.wvdhhr.org/bph/oehp/tobacco/yts/survey.pdf>
- 15-Vasan, A. Films and TV: Viewing Patterns and Influence on Behaviors of College Students. Health and Population Innovation Fellowship Program me Working Paper, No 13, New Delhi: Population Council. [Internet].Available from: [http://www.popcouncil.org/pdfs/wp/India\\_HPIF/013.pdf](http://www.popcouncil.org/pdfs/wp/India_HPIF/013.pdf)

- 16- Worth, K.;Tanski, S.; Sargent, J.D. Trends in top box office movie tobacco use 1996-2004, in First Look Report. 2006, American Legacy Foundation: Washington, DC. p. 15.
- 17- Ahmad, S. A.; Kaiser, F. Effects of portrayal of smoking in movies on adolescents attitudes. *RMJ* 2009; 34(2): 131-134.
- 18- American Academy of Pediatrics, Committee on Public Education. Media education. *Pediatrics* 1999; 104(2):341-3.
- 19- Watson, N. A.et al. Filthy or fashionable? Young people's perceptions of smoking in the media. *Health Education Research* 2003; 18(5): 554-567.
- 20- Ray, M.;Jat, K.R. Effect of electronic media on children. *Indian Pediatrics* 2010; 47: 561-568.
- 21- Dalton, M. A.et al. Effect of viewing smoking in movies on adolescent smoking initiation: a cohort study. *Lancet* 2003; 362(9380): 281-5.
- 22- Glantz, S. A. Smoking in Movies: A Major Problem and a Real Solution. *Lancet*. 2003; 362(9380): 258-9.
- 23- Sargent, J. D.et al. Exposure to movie smoking: its relation to smoking initiation among US adolescents. *Pediatrics* 2005; 116(5):1183-91.
- 24- Sargent, J. D.et al. Viewing Tobacco Use in Movies: Does It Shape Attitudes That Mediate Adolescent Smoking?. *Am J Prev Med* 2002; 22(3): 137-45.
- 25- Wellman, R. J.et al. The Extent to Which Tobacco Marketing and Tobacco Use in Films Contribute to Children's Use of Tobacco. *Archive of Pediatric and Adolescent Medicine* 2006; 160(12): 1285-1296
- 26- Carter, O. B.et al. Impact Of Smoking Images In Magazines On The Smoking Attitudes And Intentions Of Youth. *Tob Control* 2007; 16(6): 368-72.
- 27- National Cancer Institute. The Role of the Media in Promoting and Reducing Tobacco Use. *Smoking and Tobacco Control Monograph No. 19*, NIH Pub. No. 07-6242, June 2008. [Internet]. Available at: [http://cancercontrol.cancer.gov/tcrb/monographs/19/m19\\_complete.pdf](http://cancercontrol.cancer.gov/tcrb/monographs/19/m19_complete.pdf)
- 28- Sargent, J. D.et al. Effect of Seeing Tobacco Use in Films on Trying Smoking Among Adolescents: Cross Sectional Study. *BMJ* 2001; 323(7326): 1394-7.
- 29- Robert Wood Johnson Foundation (RWJF). Retrospective Series: Social Norms and Attitudes about Smoking, 1991–2010. Available at: <http://www.rwjf.org/files/research/72054.trendssocialnorms.041211.pdf>
- 30- World Health Organization. Smoke-free movies: From evidence to action. 2009. Available at: [http://whqlibdoc.who.int/publications/2009/9789241597937\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241597937_eng.pdf)
- 31- Tickle, J. J.et al. Favorite Movie Stars, Their Tobacco Use in Contemporary Movies, and Its Association With Adolescent Smoking. *Tobacco Control* 2001; 10: 16-22.
- 32- Cady, E. T.et al. Images and perception of smoking in the movies: Does smoking glamorize characters?. Presented at the Annual Meeting of the Australian and New Zealand Communication Association Christchurch, New Zealand, 2005. [Internet]. Available at: <http://www.mang.canterbury.ac.nz/anzca/FullPapers/09MedSocNewMediaFINAL.pdf>



Journal of Community Health Research. 2013;2(3):179-187.  
<http://jhr.ssu.ac.ir>

33-California Department of Health Services,Tobacco Control Section, Communities of Excellence in Tobacco Control, Module 3: Priority Populations Speak about Tobacco Control. Sacramento, CA: CDHS/TCS, 2006.

[Internet].Available at: <http://www.cdph.ca.gov/programs/tobacco/Documents/CTCPAdultSmoking06.pdf>

34-Scene Smoking, Cigarettes, Cinema & the Myth of Cool. Smoking in Film and Television, Hollywood Insiders Speak out about Artists' Rights, Social Responsibility, and the First Amendment. [Internet].Available at: <http://www.saclung.org>.

35-Hache, T. Smoking in the Movies a look at one of the tobacco industry's most successful youth marketing strategies and what people are doing to fight back. Non-Smokers' Rights Association .February 2010

36- Davis, R. M.et al. The role of the media in promoting and reducing tobacco use.NCI Tobacco Control Monograph Series No. 19.Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute. NIH Pub. No. 07-6242. 2008.

37- Office of Policy, Planning and Assessment and Community Services Section (2007). 2004 Tennessee Youth Tobacco Survey Summary. Tennessee Department of Health, Nashville, TN. [Internet].Available at: [http://health.tn.gov/statistics/PdfFiles/Tennessee\\_Youth\\_Tobacco\\_Survey\\_Summary.pdf](http://health.tn.gov/statistics/PdfFiles/Tennessee_Youth_Tobacco_Survey_Summary.pdf)