### **Original Article**

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Website: www.eurasianjpulmonol.com DOI: 10.4103/ejop.ejop\_68\_18

# Frequency and duration of smoking scenes in Turkish movies

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#### Abstract:

**BACKGROUND:** Comprehensive tobacco control law in Turkey bans advertisement, promotion of tobacco products and sponsorship by the tobacco industry. Advertisement of tobacco products was banned on television, billboards and press media, but not on movie films.

**METHODS:** To evaluate the frequency and duration of smoking in the movies, 60 most watched Turkish films which were on the vision during the second half of 2016 were determined for this descriptive study. Two young males having a university degree were trained on the aim and methodology of the study. Then the two observers viewed the films independently and recorded smoking scenes or direct appearance of tobacco products on a standard form.

**RESULTS:** There were tobacco products or smoking views in 36 (60%) out of total 60 movies. In these movies there were 4.75 times tobacco occurrences as an average (median 3). Average duration of smoking occurrences was almost 3.5 min (198 s). Smokers were mostly main characters and smoking occurrences were mostly in exciting or romantic atmosphere, which are attractive for young people.

**DISCUSSION:** In the light of Framework Convention on Tobacco Control (Article 13), smoking scenes in movies are considered as kind of tobacco advertisement and promotion, which influences smoking behavior particularly the young people. Therefore, control and prevention of smoking occurrences in movies are important for the protection of children and young people to start smoking. Some health warnings and anti-tobacco messages may be placed in the movies, to reduce tobacco views in the movies.

#### Keywords:

Film rating, movies, tobacco, tobacco control

#### Introduction

Turkey is the third country in the world having comprehensive smoke-free legislation, and the first country implementing all six MPOWER criteria successfully.<sup>[1,2]</sup> However still, there are some areas to be challenged and developed in the smoke-free legislation. Tobacco Control Law in Turkey bans advertisement and promotion of tobacco products and sponsorship by the tobacco industry. Advertisement of tobacco products on televisions, billboards, and the press media was banned but not on movie films. We have not any information about the smoking scenes in Turkish movies.

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This study was the first one to evaluate the frequency and duration of smoking scenes in Turkish movie films. Furthermore, some personal characteristics of the artists and environmental conditions regarding smoking scenes were evaluated. The ultimate aim of the study is to increase awareness on the possible impact of smoking scenes in the movie films on adolescent's attitudes toward smoking and promoting the development of rules for tobacco appearance in movies.

The first tobacco control law<sup>[3]</sup> in Turkey banned all kinds of advertisement and promotion of tobacco products, besides other measures. This Law was amended in 2008,<sup>[4]</sup> and sponsorship by the tobacco industry was also banned. Advertisement of tobacco

How to cite this article: Bilir N, Ozcebe H, Akcay S, Babaoglu E, Canbakan S, Cirit B, *et al.* Frequency and duration of smoking scenes in Turkish movies. Eurasian J Pulmonol 2018;20:128-32.

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**Received:** 18-01-2018 **Revised:** 28-11-2018 **Accepted:** 05-12-2018 products was banned at almost all channels, except movies. The Law on evaluation, classification, and support of movies<sup>[5]</sup> gives the right to the Ministry of Culture to audit the movies with regard to possible harm of the movies on health and morals of children and young people.

The presence of smoking scenes in movies and exposure of children and young people is particular concern for them for their attitudes toward smoking and intention to start smoking. The study in the USA conducted by Sargents et al., a total of 3766 students were asked to observe 50 films and report their exposure to "tobacco-use occurrences." Some students have observed >50 occurrences; whereas some have observed >150 occurrences, with a median value of 80 occurrences. At the end of the study, it was found that higher exposure to tobacco-use occurrences in movies increases their attitudes toward tobacco use positively.<sup>[6]</sup> Another study in the USA on women smoking in movies revealed that smoking of female actors was highly prevalent in movies of PG-13 (Parents strongly cautioned) group. Authors concluded that smoking of popular actresses might serve as role-model for children and adolescents and their attitudes toward smoking.<sup>[7]</sup>

US Surgeon General declared the causal association of smoking occurrences in the movies to the initiation of smoking among youth.<sup>[8]</sup> Starting smoking is 2–3 times more among youth heavily exposed smoking scenes in movies.<sup>[9]</sup> Smoking incidents in movies affect smoking behaviors of regular smokers as well. In a study in the US, young regular smokers (age 18–25) were randomly assigned into two groups. Groups watched the movies with or without smoking scenes. Immediately after the break, smokers watched movies with smoking scenes were more likely to smoke (odds ratio: 3.06; 1.01–9.29).<sup>[10]</sup>

Smoking incidents in movies in the USA show a fluctuating trend between 2002 and 2015. Smoking incidents are more frequent in R rated (restricted) and PG-13 rated (parents strongly cautioned) films then G rated (General audience) ones [Figure 1].<sup>[11]</sup>

Smoking scenes in movies have been a concern in many countries, and some form of evaluations or limitations were seen in some countries, such as counting and announcing the number of smoking scenes or advising movie producers not to use smoking scenes in the movies [Table 1].

In the USA and some other countries, movies are classified according to their contents, particularly their possible impact on children and youth [Figure 2].<sup>[12]</sup>

In Turkey, the Law No. 5524 gives right and duty to government auditing the movies with regard to violence, fear and sexuality images, and implementing some



Figure 1: Number of tobacco incidents in movies, USA, 2002-2015

## Table 1: Several country examples of policies regarding smoking scenes in movies

Country	Year	Policy regarding smoking scenes in movies
Canada	2005	Films not having smoking scenes are promoted as "good examples"
USA	2009-11	Number of smoking scenes in movies are announced/published
China	2011	Film producers are advised not to use smoking scenes by Ministerial Decree
Malaysia	2011	Film producers are advised not to use smoking scenes by Ministerial Decree
Kenya	2012	Number of smoking scenes in movies are announced/published
India	2012	Brand name will not be seen, producer should justify in case of brand placement

restrictive measures to protect the health and moral values of children and young people. This kind of films may not be licensed and not permitted to be circulated and aired or can be permitted with some restriction, such as putting age limitation or can be served under parental guidance [Figure 3]. However, no specific assessment was mentioned in the Law on tobacco use in movies, which can affect particularly young people's attitudes toward tobacco use.<sup>[13]</sup>

#### **Methods**

To evaluate the frequency and duration of smoking in the movies, 60 most watched Turkish films which were on the vision during the second-half of 2016 were determined for this descriptive study. Two young males having a university degree were trained on the aim and methodology of the study. Before the collection of data, the two observers watched three movies independently to make sure that they follow the same procedure of data collection. Then, the two observers viewed the films independently and recorded smoking scenes or direct appearance of tobacco product. The results were evaluated by the researchers and the observers used the structured standard guideline during data collection.

Smoking or appearance of any kind of tobacco products (cigarette, cigar, pipe, and water pipe) was considered

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GENERAL AUDIENCES	Nothing that would offend parents for viewing by children.
	Parents urged to give "parental guidance." May contain some material parents might not like for their young children.
PARENTS STRONGLY CAUTIONED	Parents are urged to b cautious. Some materi may be inappropriate f pre-teenagers.
RESTRICTED	Contains some adult material. Parents are urged to learn more about the film before taking their young children with them.
NO ONE 17 AND UNDER ADMITTED	Clearly adult. Children are not admitted.

Figure 2: Film rating system in USA

as "tobacco use occurrence." Time and duration of cigarette or smoking view, surroundings and conditions of smoking occurrences, personal characteristics of the smoking person, and their role in the movie were recorded on a pretested form. Data were evaluated on SPSS (Version 21.0, SPSS Inc., Chicago, IL, USA, licensed to Hitit University) program.

#### Results

There were tobacco products or smoking views in 36 (60%) out of total 60 movies. Number of smoking views in the movies varies between 1 and 17 times; with the average value of 4.75 (standard deviation [SD]: 4.41) times and the median value of three times. In 38.8% of films, cigarette scene was seen only once and in 30.6% of films, cigarette or smoking scene was observed four times or more [Table 2].

Smokers were mostly (83.5%) males and more than half (52.4%) were between the age group of 25 and 44 years. Various personal characteristics were recorded for male smokers such as mafia member (18.2%), farmer (11.6%). One in four of female smokers were students (24%) and 16% were writers.

More than half (61%) of smoking views were observed after 30 min of the movies. Almost half (44.3%)



Figure 3: Film rating system, Turkey

Table 2: Frequency and	types of tobacco occurrences
in 36 Turkish movies in	2016 (*)

	Once	2-3 times	4-6 times	7+times	Total
Cigarette or box	5	4	-	-	9
	10.2%	8.2%	-	-	18.4%
Smoking	5	10	10	5	30
	10.2%	20.4%	20.4%	10.2%	61.2%
Tobacco recall	9	1	-	-	10
	18.4%	2.0%	-	-	20.4%
Total	19	15	10	5	49
	38.8%	30.6%	20.4%	10.2%	100.0%

(\*) Some films have both smoking scene and appearance of cigarette or tobacco recall

of smoking views occurred at tense and exciting environment and 30% occurred at romantic atmosphere. Almost all of the smokers were the main character and the second main character (45.4% and 47.2%, respectively). Bilir, et al.: Smoking scenes in Turkish movies

in 36 Turkish movies in 2016 (*)						
	1-10 sec	11-30 sec	31-60 sec	61+ sec	Total	
Cigarette	6	5	2	3	16	
or box	3.5%	2.9%	1.2%	1.7%	9.3%	
Smoking	43	44	34	25	146	
	25.0%	25.6%	19.8%	14.5%	84.9%	
Tobacco	4	3	2	1	10	
recall	2.3%	1.7%	1.2%	0.6%	5.8%	
Total	53	52	38	29	172	
	30.8%	30.2%	22.1%	16.9%	100.0%	

Table 3: Types and duration of tobacco occurrences in 36 Turkish movies in 2016 (\*)

(\*) Some films have both smoking scene and appearance of cigarette or tobacco recall

The average duration of smoking scenes in the movies was almost 3.5 min (197.9 s, SD 253.1 s) per movie, with a median value of 99 s. The total duration of smoking scenes was >1 min in 16.9% of the movies. The minimum duration of smoking scenes is 8 s, and the maximum duration is 1150 s (almost 20 min) in the movies [Table 3].

#### Discussion

Children and young people have been a major target group of the tobacco industry. Tobacco advertisement and promotion, using role models have been commonly used by the tobacco industry to reach this group. Prevention of starting smoking is one of the main strategies of effective tobacco control. People usually take smoking habit at early ages. The Global Adult Tobacco Survey (GATS) in Turkey revealed that the average age of starting smoking was 17 years.<sup>[14]</sup> Therefore, the protection of children and young people against tobacco advertisement is important for them to prevent smoking.

In this study, it was found that 60% of Turkish movies contain tobacco-use occurrences, mostly in the form of cigarette smoking. As an average, there were five times of tobacco-use occurrences per film and total duration of tobacco-use occurrences was almost 200 s. According to studies conducted in the USA, the children and adolescents are affected by the smoking scenes in the movies.<sup>[10]</sup> In this study, we have not evaluated the behaviors of the children and adolescents, but Turkish children and adolescents are exposed to smoking scenes in the cinemas.

Tobacco use in movies, particularly smoking of well-known film stars is important for children and young people to develop a positive attitude toward smoking and higher receptivity of smoking.<sup>[6]</sup> More than 80% of smokers were men, and almost all of them were the main character of the movie in our study. The main character of the movie is mostly well-known film star may have a high impact on children and adolescents. On the other hand, smoking is shown as a male behavior mainly in our movies. The prevalence of daily smoking is 41.4% in males and 16.3% in females by GATS 2016 in Turkey.<sup>[15]</sup> The movie writers and directors are also emphasizing that smoking is mostly a masculine behavior in their movies, probably unconsciously. The movie writers, directors, and actress should be more aware of their role model in movies.

Tobacco use occurrences in the movies are usually placed in the pleasant or exciting atmosphere, not including the characters suffering from a health condition as a consequence of tobacco use. In this study, almost half of the smoking scenes were in exciting and 30% were in a romantic atmosphere. The adolescents are more sensitive for exciting and romantic events because of their psychological and behavioral development. These occurrences can affect the adolescent's feelings and behaviors.

Tobacco industry has used movies to advertise and promote their products. By this way, tobacco industry aims to influence children and youth. There is a dose-response relationship between exposure to tobacco occurrences in the movies and initiation of tobacco use, particularly among children. The Centres for Diseases Control and Prevention (CDC) report points to the relation between exposure to tobacco use occurrences and smoking habit of young people; starting smoking is 2-3 times more among youth heavily exposed to smoking in movies compared to the group not exposed or less exposed.<sup>[16]</sup> Advertisement of tobacco products can reach everywhere by movies; in most of the countries, cinema films are not covered by tobacco control legislation with regard to advertisement of tobacco products.<sup>[17]</sup> Several international organizations started to consider smoking scenes in movies as a kind of promotion of tobacco products, therefore should be considered as a public health concern, and something should be done to control smoking incidents in movies. An example was introduced by CDC in 2002 in the USA by reporting smoking incidents in movies. Some other countries, such as India, China, Latin American countries began to monitor smoking incidents in national movies.<sup>[17]</sup> National movies usually contain more smoking incidents than movies produced in the USA. For example, 88% of national films rated for young in Argentina contain smoking incidents. National films produced in Germany, Italy or Mexico contain more smoking incidents than the American films, only movies produced in the United Kingdom and the Netherlands contain equal tobacco imageries as the American films.<sup>[17]</sup>

Our study showed that Turkey needs some regulatory measures to ban or reduce smoking occurrences in Turkish movies. Article 13 of the international treaty on tobacco control (WHO Framework Convention on Tobacco Control [FCTC]) clearly banned all kinds Bilir, et al.: Smoking scenes in Turkish movies

of advertisement, promotion, and sponsorship by tobacco industry. WHO FCTC guidelines of Article 13 emphasized that the presence of tobacco use in movies should be considered as kind of promotion of tobacco use, which influences smoking behavior particularly the young people.<sup>[17]</sup>

During the past 10 years, some countries started activities to reduce tobacco scenes in the movies. In Canada, a group consisted of governmental and nongovernmental organizations evaluated the films regarding the presence of smoking scenes and endorsed best practices. China introduced regulation for restricting tobacco appearances in movies and television programs, India banned brand display in domestic and imported films. In the USA, CDC announced that movies will be evaluated regarding the use of tobacco products in the movies.<sup>[17,18]</sup> Considering the importance of tobacco imagery in the films, the World Health Organization announced the theme of World No Tobacco Day 2003 as "Tobacco Free Film, Tobacco Free Fashion." By using this theme, WHO recommended reducing tobacco occurrences in the movies. To reduce tobacco views in the movies, some health warnings and anti-tobacco messages may be placed in the movies.

The study has some limitations. We have not collected the data from the audience (especially the children and adolescents) about their smoking attitudes and behaviors. The second limitation is that the movies selected are only come to the theaters in the second part of the year 2016, and the most watched. Third, we have not connected to the movie directors, writers, and actress about their smoking behaviors and the relationship between the film companies and the tobacco industry.

#### Conclusion

The prevalence of smoking has increased among young adults in Turkey; therefore all settings will be smoke-free including movies. The government may introduce some new regulation for cinema movies and the collaboration between the Ministry of Health and the Ministry of Culture and Tourism should be strengthened for supporting the policy of no smoking new generation in Turkey.

**Financial support and sponsorship** Nil.

#### **Conflicts of interest**

There are no conflicts of interest.

#### References

- Heydari G, Chamyani F, Masjedi MR, Fadaizadeh L. Comparison of tobacco control programs worldwide: A quantitative analysis of the 2015 World Health Organization MPOWER report. Int J Prev Med 2016;7:127.
- World Health Organization. World Report on Global Tobacco Epidemic. MPOWER 2017. Geneva: World Health Organization; 2017.
- 3. Law on Prevention of Harms of Tobacco Products. Official Gazette, No. 22829; 1996.
- 4. Bill Amending the Law on Prevention of Hazards of Tobacco Products. Official Gazette No. 26761; 2008.
- Sinema Filmlerinin Degerlendirilmesi ve Siniflandirilmasi ile Desteklenmesi Hakkinda Kanun, No. 5224, Official Gazette No. 25529; 2004.
- Sargent JD, Dalton MA, Beach ML, Mott LA, Tickle JJ, Ahrens MB, *et al.* Viewing tobacco use in movies: Does it shape attitudes that mediate adolescent smoking? Am J Prev Med 2002;22:137-45.
- 7. Escamilla G, Cradock AL, Kawachi I. Women and smoking in hollywood movies: A content analysis. Am J Public Health 2000;90:412-4.
- 8. Office of the Surgeon General. Preventing Tobacco Use among Youth and Young Adults. A Report of the Surgeon General. Atlanta, GA: CDC; 2012.
- 9. Tynan MA, Polansky JR, Titus K, Atayeva R, Glantz SA. Tobacco use in top-grossing movies – United States, 2010-2016. MMWR Morb Mortal Wkly Rep 2017;66:681-6.
- Shmueli D, Prochaska JJ, Glantz SA. Effect of smoking scenes in films on immediate smoking: A randomized controlled study. Am J Prev Med 2010;38:351-8.
- 11. Smoking in the Movies, Centers for Diseases Control and Prevention, Fact Sheet. Available from: https://www.cdc.gov/ tobacco/data\_statistics/fact\_sheets/youth\_data/movies/index. htm. [Last accessed on 2017 Nov 28].
- 12. Motion Picture Association of America. Film Ratings; Classification of Rating Rules. Washington DC: Natl. Assoc. of Theatre Owners, Inc.; 2010. Available from: https://en.wikipedia.org/.../Motion\_Picture\_Association\_of\_America\_film\_rating\_syst. [Last accessed on 2017 Nov 28].
- Available from: http://www.sinema.gov.tr. [Last accessed 2017 Nov 28].
- 14. Global Adult Tobacco Survey, 2012, Turkey Report. Ministry of Health Publication No. 948. Ankara; 2014.
- Ministry of Health, Turkey. Global Adult Tobacco Survey, 2016. Turkey: Ministry of Health, Turkey; 2016.
- Gajanan M. Health experts are worried about a huge rise in smoking in movies. Time Health 2017. Available from: https:// www.webmd.com/news/articles. [Last accessed on 2017 Nov 28].
- 17. World Health Organization. Smoke Free Movies, From Evidence to Action., Geneva: World Health Organization; 2015. p. 8-28.
- Glantz SA, Titus K, Mitschel S, Polansky JR, Kaufmann R. Smoking in top grossing movies, US, 1991-2010. MMWR Morb Mortal Wkly Rep 2010;59:1014-7.