



Assessment of tobacco images in Amharic movies in Addis Ababa, Ethiopia

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Abstract

Background: Tobacco use is the most known addictive habit all over the world. These substances are the known cause of or predispose to several diseases mainly cancers. The uses of these substances are now spreading in Africa and Asia and it has emerged as the major public health problem in developing countries. Television shows, movies, internet, magazines, music videos and other entertainment media can impact tobacco use positively and negatively. Perhaps the most intensively studied medium is cinema. Mostly Direct advertisement is banned in almost all World Health Organization countries.

Objective: This study aims to assess the tobacco images, in Amharic video films in Addis Ababa, Ethiopia.

Design: Ten minute interval content analysis of tobacco use verbal, text and imagery information on the top 30 Amharic video films released on cinema and uploaded in You Tube channel from January 1 2018 to December 31 2018 was conducted.

Mesurments: Occurrence of any tobacco content, tobacco use, implied use, paraphernalia, tobacco branding.

Findings: 141 (18.2%) frequencies of tobacco image appeared. The types of tobacco viewed were cigarette 105 (75%), Shisha 16 (11.4) and others(any tobacco and related products) 19 (13.6%). The brand of tobacco that appeared was Niyala 10 (55.6%). Marlboro 8 (44.4%).

Conclusion:

Movies contribute to indirect tobacco use promotion, FMOH(Federal Ministry of Health) and EFDA (Ethiopian Food and Drug Administration) with all relevant stakeholders should restrict tobacco and tobacco related information in films to prevent the youth from tobacco use exposure.

Keywords: tobacco images, entertainment media, films and public health, Ethiopia

Introduction
Tobacco use is responsible for 8 million deaths globally per year. Most are the result of direct tobacco use of which more than 1,200,000 deaths are due to Environmental Tobacco Smoke (ETS) exposure mainly among women and children. 80% of the world's 1.1 billion smokers live in low-and middle income countries (1-6). It is emerging as a major public health problem in the developing countries (7).

Entertainment media comprise print (books and magazines), audio (radio and music), and audio-visual media (television, cinema, web-based media, and video/computer games). It is one of the channels of communication through which people share and exchange information. The most important channels through which adolescents are likely to be exposed to smoking behavior are television, movies and videos (8). Data on Ethiopia shows that annual growth for Internet users is at 37 percent and the number of active social media users is growing by 20 percent. Findings show that majority of Ethiopians access the Internet from a mobile device (9). And YouTube users in Ethiopia are 12.9 % of the population in 2018/19 (10).

Exposure to media can impact both positively and negatively on tobacco use, depending on how the behavior is presented. Its health and economic impact is very significant as most smokers start smoking before the age of 20 and they are dependent in later life (3). Recently, attention has shifted towards assessing the impact of smoking imagery in popular media as an important factor in establishing or maintaining pro-smoking beliefs and intentions. Frequency of viewing smoking imagery in film is strongly and directly associated with trying cigarettes (11), and extent of film viewing is associated with increasing smoking initiation among adolescents (12)

This study attempted to assess audiences exposure to tobacco use in entertainment media and will provide recommendations to stakeholders and provide a baseline information for future studies. Hence, this study will have significant contribution on the control of tobacco and alcohol exposure due to films particularly to those who are highly exposed to movies.

Methods: There are different accesses of video film in Addis Ababa like cinema, rental shops, purchasing and on line accesses including TV stations. First, we took list of Amharic films, which exhibited in Addis Ababa cinemas from the city Culture and Tourism Bureau, which responsible office for giving the license for film exhibition. After taking the list of the Amharic films, went to the Ethiopian Film Producers Association to confirm those films were casted in Addis Ababa cinemas. Then after we searched, YouTube based on the list. In addition, we downloaded 73 Amharic films, which were uploaded between January 1, and December 31

2018. Those films which had number of viewers from 4,300 to 1,000,000 were listed down. After listing, we selected the first top 30 Amharic films based on the number of viewers in YouTube channel and casted in Addis Ababa cinemas. According to Ethiopian Film Producers Association the number of cinema attendants per film in the entire duration of show was about 100,000. The duration in which one film stays on show on cinema were 2-3 months. Those films that got 200,000 viewers on YouTube channel were selected. Data was collected by using film editors who have no interest of conflict with the investigated films and was quantified the image type and frequency of tobacco use in each film by 10 minute intervals which was used by other studies (13-15). The data was collected by check lists.

Operational definition:

Tobacco use: any use of a tobacco product by any character, coded as cigarette, cigar, pipe or other (such as water pipe or chewing tobacco, inhaling/exhaling smoke).

Implied tobacco use: a smoky atmosphere, a character holding a cigarette but not seen smoking it, or any other implied but not actual tobacco use.

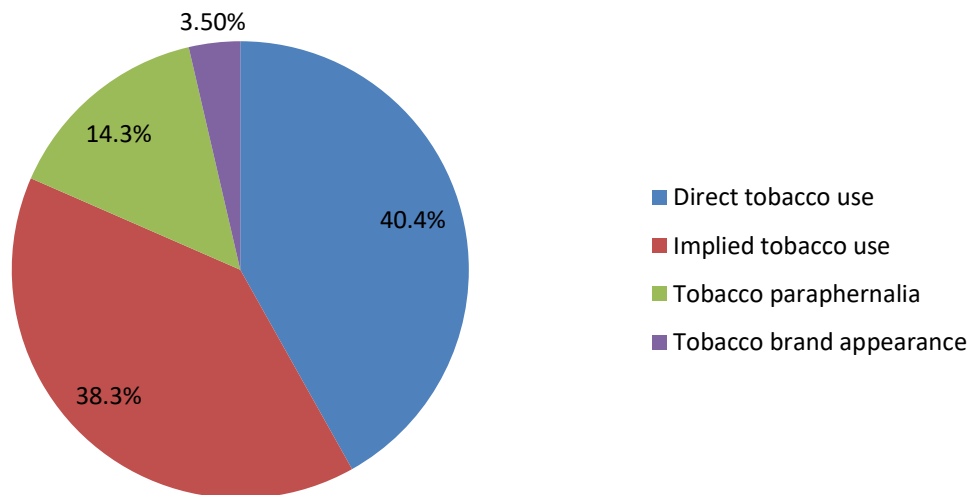
Tobacco paraphernalia: tobacco or tobacco-related materials, such as a cigarette or other tobacco pack, matches, lighter, ashtray, no smoking or smoking area signs, but without actual or implied use.

Tobacco brand appearance: clear and unambiguous tobacco branding, including cigarette or other tobacco packs, and branded merchandising.

Any tobacco content: the occurrence of any of the above

Results: The investigated films were 30 Amharic films. The total number of viewers of those films on YouTube were 15,875,763 with an average viewers of 497,745 (ranging from 209,000 to 1,000,000). The total time length of view was 41.62 hours and average length of the movies was 1:39:05.40 hours. Tobacco Images or other appearances of tobacco found in 17 films for the 297:43 (average of 23.2 per film) minute of screen duration time.

Fig.1 Type of tobacco image appearance



141 (18.2%) contained at least one type of tobacco image or other appearance. . Direct tobacco use has appeared 57 (40.4%) times, implied tobacco use 54 (38.3%) times, tobacco paraphernalia 20 (14.3%) times, and tobacco brand appearance 5 (3.5%) times (Fig.1). The types of tobacco viewed were cigarette 105 (75%), Shisha 16 (11.4) and others(tobacco related products and signs) 19 (13.6%)(Fig.2). The brand of the tobacco that appeared was Marlboro 8 (44.4%) and Niyala 10 (55.6%).

Fig.2 Type of tobacco viewed(%)

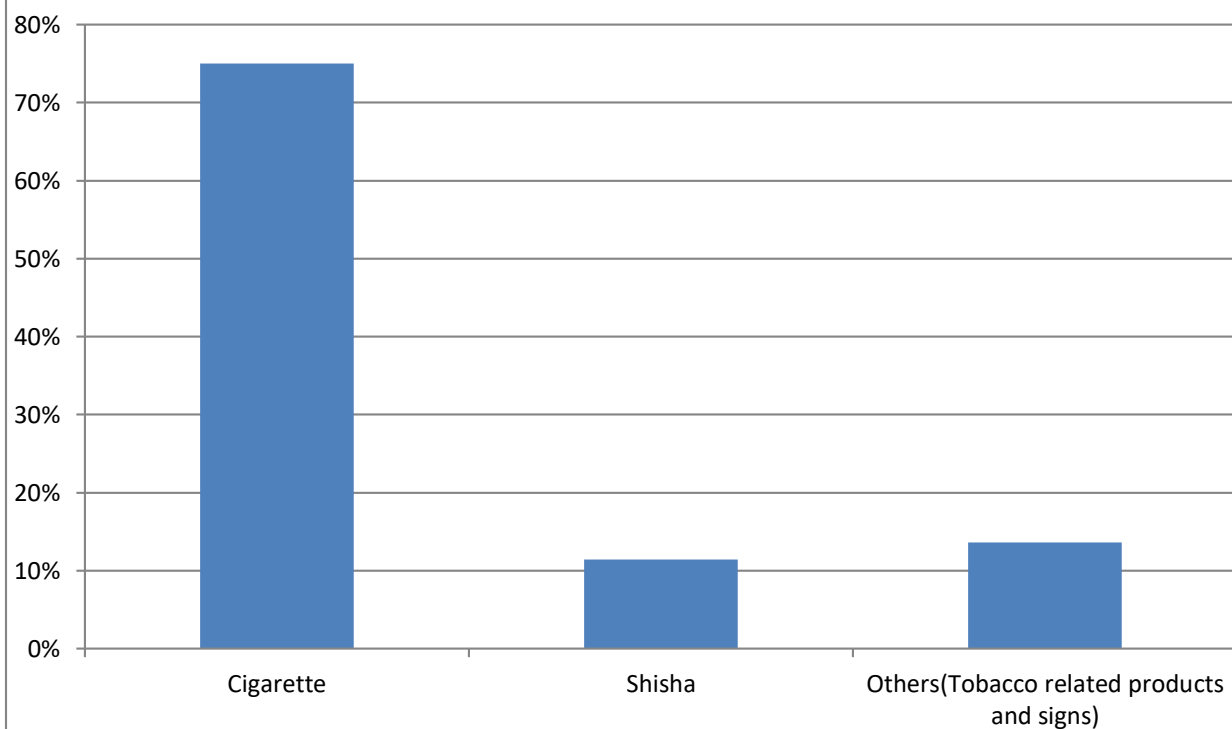


Table 1 Tobacco imaging types and brands in Amharic video films in Addis Ababa Ethiopia 2018

Product type	Frequency(n)	Percentage(%)
Cigarette	105	75.0
Shisha	16	11.4
Others	8	5.7
Cigar	5	3.7
Hashish	3	2.1
Ashtray	3	2.1
Total	141	100
Type of brand		
Niyala	10	55.6
Marlboro	8	44.4
Total	18	100

Discussion: This research has shown that tobacco commonly seen in Amharic films 18.2% of containing at least one tobacco episode this is less than the study conducted in UK which is 22%(16) of the 30 films analyzed. And Tobacco branding appeared in 3.5% this is comparable to the above study tobacco branding in 4%.

This study has found the tobacco use in Amharic films has no restriction for the audience age this means in the country there is no movie rating system. The Film policy of the Federal Democratic Republic of Ethiopia presented in it but not applied. The censorship of films before release to the audiences is ceased from October 4 2018, according to the information from Addis Ababa Culture and Tourism office.

And also agreeing to the film producers association representative information in the association there are 210 film producers and the Ethiopia film industry is increases by number of production up to 84-90 films per year and the audiences also increase 100,000 per film. As our observation the genre of films is different but all films are similar identification in tobacco imaging. This imaging condition is one of the factors of tobacco use initiation for peoples that are under twenty years of age.

Exposure to tobacco smoking and other forms of tobacco imagery in film is a potent driver of youth and adult smoking, with major consequences for the subsequent health of the smoker such as lung cancer, COPD and pneumonia. The serious potential hazard represented by tobacco exposure should also be a determinant of film classification, to prevent unnecessary or inappropriate exposure of children and young people to smoking role models (15). Structural preventive measure applying this concept would be to incorporate movie alcohol use in to the movie rating systems, which would lower the “dose” of exposure(17).

This study demonstrates that tobacco imagery, including branding, occur frequently in Amharic video films verbal and visual content. We were unable to measure any effect of exposure on use of tobacco in our study, but there is strong evidence that exposure to such imagery in other media increases tobacco use initiation (16). It is widely acknowledged that smoking and other tobacco use on-screen in popular films as well as in television programming can normalize smoking.(13)

As Ethiopian Food, Medicine Agency Tobacco Control Directive 2015 and The advertisement proclamation 759/2012 any tobacco products prohibited to communicate by audio ,visual or audiovisual means (18, 19). there are these and other directive and proclamation but can't protect the tobacco and alcohol product advertizing indirectly in movies and other type of means. The latest proclamation no.1112/2019 band direct and indirect advertisements of alcohol and tobacco, it is a good measure to protect the generation, the application and the result of the proclamation will evaluat on the feature.To our knowlage this study is the first study in the Country we didn't found other study in the area.

In amharic films tobacco images are more frequent and the screen time length is long and also the main characters use of tobacco is high in the films. The tobacco branding is frequently seen in the films. According to our result the Amharic film production contributes to indirect tobacco use promotion, especially to those below the age of 20 years who are the highest consumer of the entertainment media. And tobacco industries got possibility to indirect influence.

Tobacco is becoming major public health problem and its use is under strict regulation and harm caused by its use should be prevented. The globalization impact and the commercial interest of the tobacco industries are factors that we cannot escape from it but we can prevent and minimize its damage to the public. The movies are a single factor to promote tobacco initiation specially peoples before age of 20 therefore the young peoples are at risk of initiating tobacco use in their early age because of the media influence and we suggest that regulatory bodies with all relevant stakeholders should restrict tobacco related information in films to prevent the youth from tobacco use exposure, establish awarnnes creating mechanism, apply the film policy so that, the film professionals can perform the movie rating system, encourage tobacco free films by supporting the producers and other research should have to be done in this area specially to identify the age of audiences,to discribe the effect of the imagery and the regulatory mechanism.

Acronyms and abbreviations

COPD-----Chronic Obstructive Pulmonary Disease

CSA-----Central Statistics Agency

DALY-----Disability-Adjusted Life Years

EDHS-----	Ethiopian Demographic and Health Survey
EFDA -----	Ethiopian Food and Drug Administration
ETS-----	Environmental Tobacco Smoke
FMoH-----	Federal Ministry of Health
GATS-----	Global Adult Tobacco Survey
GBD-----	Global Burden Of Disease
GYTS-----	Global Youth Tobacco Survey
NCD-----	None Communicable Disease
NCI-----	National Cancer Institute
REC-----	Research Ethical Committee
TV-----	Television
UK-----	United Kingdom
US-----	United States
WMS-----	Welfare Monitoring Survey
WHO-----	World Health Organization

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Amsalu Bekele(MD)-Manuscript writing, search for funding

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Competing interests; .

None.

References

1. Ababulgu SA, Dereje N, Girma A. Secondhand tobacco smoke exposure among adolescents in an Ethiopian school. *Healthcare in Low-resource Settings*. 2016;4(1).
2. Jeffrey Drope PaNWS. *The Tobacco Atlas Sixth Edition*. 2018.
3. WHO tobacco fact sheet. 2019,May.
4. Ababulgu SA DN, Girma A. . Secondhand tobacco smoke exposure among adolescents in an Ethiopian school. *Healthcare in Low-resource Settings* 2016.
5. McCool JP CL, Petrie KJ. . The influence of smoking imagery on the smoking intentions of young people: testing a media interpretation model. *Adolescent Health*. 2005;36(6)(475):85.
6. WHO. tobacco fact sheet. 2019,May.
7. McCool JP, Cameron LD, Petrie KJ. The influence of smoking imagery on the smoking intentions of young people: testing a media interpretation model. *J Adolesc Health*. 2005;36(6):475-85.
8. McCool JP CL, Petrie KJ.. Adolescent perceptions of smoking imagery in film. . 2001.
9. capital. internet users in ethiopia. 2019.
10. social media stata /ethiopia. 2019.
11. Bhaumik S, Arora M, Singh A, Sargent JD. Impact of entertainment media smoking on adolescent smoking behaviours. *Cochrane Database of Systematic Reviews*. 2015.
12. McCool JP, Cameron L, Petrie K. Stereotyping the smoker: adolescents' appraisals of smokers in film. *Tob Control*. 2004;13(3):308-14.
13. Lyons A. Tobacco and alcohol in films and on television. . 2012.
14. Lyons A, McNeill A, Britton J. Tobacco imagery on prime time UK television. *Tob Control*. 2014;23(3):257-63.
15. Lyons A, McNeill A, Chen Y, Britton J. Tobacco and tobacco branding in films most popular in the UK from 1989 to 2008. *Thorax*. 2010;65(5):417-22.
16. Cranwell J, Murray R, Lewis S, Leonardi-Bee J, Dockrell M, Britton J. Adolescents' exposure to tobacco and alcohol content in YouTube music videos. *Addiction*. 2015;110(4):703-11.
17. Reiner Hanewinkel P, James D. Sargent,MD Kate Hunt, PhD, Helen Sweeting, PhD, Rutger C.M.E.Engels, PhD, Ron H.J. Scholte, PhD, Federica Mathis, BSc,Ewa Florek, MD, and Matthis Morgenstern, PhD. Portrayal of Alcohol Consumption in Movies and Drinking Initiation in Low-Risk Adolescents. 2014.
18. Ethiopian Food MaH, Authority AaC. Tobacco Control Directive. march 2015.
19. ETHIOPIA TFDRO. Advertisement Proclamation 759 2012.