# **Original Article**

# SOCIAL NETWORKING MEDIA: A NEWER APPROACH TO INCREASE AWARENESS AGAINST TOBACCO CHEWING

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# ABSTRACT

**Background:** Facebook is the most famous social networking website with more than 1.6 billion active users. This study which involves active participation and evaluation of responses to see it's usefulness in planning advertisement for future media campaigns and intervention using social networking sites.

**Method:** This was an interventional study, where intervention was done by providing health related message about tobacco chewing. The study was designed in two phases: 1) involvement phase 2) study phase

**Result:** Total 840 users "Liked" the page, and participated in the study. There were females (29.2%) and males (57.1%) from the age group of 15-25 years. The proportion of the participants who liked the page were from Gujarat 31% followed by Delhi 20% and Maharashtra 17%. The percentage of reach for images was 76.3% followed by 69.4% for status update , 54.5% for video, 47.1% for slogan and message and for web links 30.6%. Total 71% of the users had clicked for images, 35% of the users had clicked for video, 22% users had clicked for status update, 16% of the users had any clicked for slogan and messages and 12% of the users had clicked for web links.

**Conclusion:** Facebook has been found highly effective in transmitting messages to health consumers, especially among the youngsters. So information regarding tobacco addiction and outcomes of tobacco chewing can be communicated effectively through Facebook through intense messages.

**Keywords:** social networking, Facebook, youth, tobacco addiction, health campaign

## INTRODUCTION

Facebook is the most famous social networking website with more than 1.6 billion active users. USA ranks first in use of Facebook while India ranks third in the list. There are 80 million users are in India<sup>1</sup> with 12.6% people as active users<sup>2</sup>. This type of social networking website allows people to create their profile and share various links, pictures, texts, views and suggestion regarding particular thought<sup>3</sup> audio and video clips and animation with the users attached with them in friend list. Follow up rates by active users in this type of social networking website is also important.<sup>4</sup> In today's era most of the people specially young people spend their leisure time with Facebook and other type of social networking media by internet.5 The health department can display information, warning signs and effects which are harmful for health and provide education regarding maintenance of a better and healthy life. Thus the collaboration of health department with Facebook and other type of social networking media has great scope. $^{6}$ 

A large number of public health researchers have shown that tobacco control media campaigns can decrease tobacco chewing initiation in youths, increase motivation among adults to quit and reduce overall smoking and tobacco chewing prevalence.<sup>7</sup> Some of the developing health problem like tobacco smoking and tobacco chewing is considered a heavily rising public health issue in India. This study which involves active participation and evaluation of responses will be useful in planning advertisement for future media campaigns and intervention using social networking sites.

## METHODOLOGY

**Study Design:** This was an interventional study, where intervention was done by providing health re-

lated message about tobacco chewing. The study was designed in two phases: 1) involvement phase 2) study phase

Involvement Phase: A web page named with "India Free From Tobacco Chewing" was created on the website of Facebook. The main aims and objective regarding the study, introduction regarding the page and study and information regarding participation was mentioned on the page. The target was Indian population and the page was created under sponsorship (advertisement). This type of sponsored advertisement are usually found in sidebar of a Facebook page through which everyone would know about the study and can participate in study. By clicking the share option they can share the sponsored link to their whole friend list and thus all friends in the list can see the link directly on their web page. By this way study population was increased. We kept this sponsored ad on Facebook for one month and during this phase all were free to get involved in the study. Any Facebook user can like the page and get involved in study or free to leave the study. In our study we operationally defined involvement as, if anyone like the page, share the page, comment on the page or get involved in the study. The persons who disliked the page were not included in the study.

Intervention: The intervention was the message regarding health hazards of tobacco chewing, delivered to the all participants of the study on webpage in form of images, animation or video etc. This type of awareness message was uploaded on the web page on daily basis. The frequency of delivering message was two per day. These messages were delivered for 30 days on daily basis. The contents of the messages were hazards of tobacco chewing, COTPA rules and benefits after stoppage of tobacco chewing. The responses given by participants were observed on daily basis and there was active participation by administrator of the page which could maintain interest of the participant in the study. By this way participants were involved in the study through like, comment or share. Some messages which were not related to the study were also delivered to allay boredom of the study.

Analysis: After 30 days of posting various type of messages analysis of the page was done. The numbers or participants who liked, shared, commented, tagged and who had seen the sponsored link and videos were noted. The reach was defined to the number of people who received the post by direct or indirect method. The person who liked, commented or shared the post, had transmitted the messages indirectly to others who were in the list of friends. The total number of the persons and the extent of their reach was counted. So, total reached people was far more than the participants involved in the study. Involvement rate was the rate of any click i.e. share, like, comment etc. By involvement single person could see the post more than one time, as first time seen by him and next time when commented, liked, shared by the friend list person.

#### RESULTS

As shown in table 1, the total targeted people were more than 48 million (n= 4,80,82,370) through the social networking media. Total 840 users "Liked" the page, and participated in the study.

#### Table 1: Participant's profile and their frequencies

Participant's profile	Frequencies
Total Targeted People	48082370
People Who had liked the page.	840
People Who had shared the page.	539
People Who had written on timeline of the	1283
page.	
People Who had shared the link to the page	487
People Who had seen sponsored advertise-	28658
ment on the page.	

The table 2, shows the age and gender wise details of the study participant who liked the page. There was a large percentage of females (29.2%) and males (57.1%) from the age group of 15-25 years.

 Table 2: Age and gender wise detail of Participant

 who like the page (n=840):

Age wise distribution of user's who	Female	Male
like the page	(%)	(%)
15 - 20 years	16.8	38.6
20 - 25 years	12.4	18.5
25 - 30 years	2.3	5.7
30 - 35 years	0.5	2.8
35 - 40 years	0.4	0.4
40 - 50 years	0.6	0.2
50 - 60 years	0.3	0.3
60 + years	0	0.1

As shown in the table 3, the major portion of the participants who liked the page were from Gujarat (31%) followed by Delhi (20%) and Maharashtra (17%).

Table 3: State wise frequency distribution of Partici-pants who like the page (n=840):

State	Percentage	
Gujarat	31%	
Maharashtra	17%	
Delhi	20%	
Andhra Pradesh	11%	
West Bengal	5%	
Karnataka	4%	
Tamil Nadu	3%	
Other states	9%	

Table 4 shows the uptake of each form of the messages i.e. images, web links, status update and video clips. The highest reach were for images (76.3%) followed by status update (69.4%), video (54.5%), (47.1%) for slogan and message was observed in descending order while lowest reach was for web links (30.6%). The same order of preferences was found in involvement

rate by users. While analyzing involvement, 71% of the unique users had any click for images, 35% of the unique users had any click for video, 22% users had any click for status update, 16% of the unique users had any click for slogan and messages and 12 % of the unique users had any click for web links.

Total (n = 840)	Read or Seen by participant	Like/Unlike/share by participants and their group friends.		Involvement Rate (%)
		Male	Female	
Status updates	583 (69.4%)	1298	286	22
Images	641 (76.3%)	1456	389	71
Slogans and Messages	396 (47.1%)	672	263	16
Video	458 (54.5%)	240	172	35
Links	257(30.6%)	138	89	12

Table 4: Participation of participants in various means of social media

While studying the popularity, it was observed that popularity of the page increased with sharing new post on regular interval. It was also observed that users were actively having conversation on the post and easily putting their queries as comments or as message to inbox. The active responses by the page administrator were provided to all comments or queries of the users. While negative feedback was also noted on insight analysis page, out of the surprise, none of the participants had unsubscribed from the Facebook page.

#### DISCUSSION

In the present scenario, Facebook has blended with youngster's life. In today's world, communication has become faster and effective through internet and web based communication media like Facebook. As shown in table 1, a large number (28,658) of people had seen but comparatively less number of people have liked, commented and shared the link to the page. In our study, maximum participants were between the age of 15 to 20 years and more than 84% participants were between 15 to 25 years. Among the people who liked the page 49.2% were males of age group 13-17 years. This may be due to the fact that younger generation make more use of Facebook. Also, these age groups are more vulnerable for addiction of tobacco chewing. The National Household Survey of Drug and Alcohol Abuse in India (NHSDAA), conducted in 2002 among males, covering over 40,000 individuals aged 12-60 years in nearly 20,000 households in 25 states revealed that the overall prevalence of current tobacco use was 55.8% showing an increase in tobacco use with age, levelling off after 50 years of age.8 Involvement by sharing, liking, disliking was more by male participants compared to females. This may be due to more number of male user of Facebook. As shown in table 2, large portion of participants were from area of Gujarat, Maharashtra and Delhi. Most of the likes were driven by urban youth among them New Delhi and Mumbai was on top. It may be due to ease of internet accessibility to the urban population. Considering rural and urban participants, maximum participants involved were from urban areas. This may be due to the fact that urban population has more access to internet. As shown in table 3, maximum response was for images posted while followed by text updates, video clips and web links. This meant that images were the preferred form of health message among the users to respond. It also indicated that more time consumed to view the post acted as a hurdle for participating in the study.

While Tobacco control program is yet in planning phase of web based interventions in tobacco related health problems, this study findings supports Facebook as a viable option for tobacco related health education among the population.9, 10 According to a study by Pechmann et al<sup>11</sup>, evidence clearly indicates that mass media campaigns can be one of the most effective strategy in changing social norms and prevention of tobacco use among youths. According to USDHHS<sup>12</sup>, media campaigns have been proven to reduce tobacco use. In a study done by DE Ramo et al, at California in 2010 has also recommended Facebook as a media to reach tobacco users and other substance users.13 While use of internet media is considered as challenge in tobacco control policy, the present study favors use of Facebook as a communication tool to spread health messages among the internet users.14 Health information gathering is no exception to this phenomenon; social media provides an outlet for the publication of health information to consumers, while allowing consumers to respond and contribute to advice that was traditionally only issued by providers.15 Social media attends to the needs of modern health consumers, who are highly engaged and desire to be more involved in their health than ever before, while providing the means for reach that was previously unimaginable.<sup>16</sup> Organizations are attracted to using social media partially because of the huge opportunity it provides in reaching their target population.<sup>17</sup> Furthermore, messages counter to public health problem are rapidly being disseminated to the public through social media.

#### CONCLUSION

Although an abundance of evidence exists on the topic of traditional media like newspaper, radio and television use in public health campaigns, the utility of social media like Facebook is not well documented in the literature. But due to internet development of late, Facebook has been found highly effective in transmitting messages to health consumers, especially among the youngsters. So, awareness and true information regarding problems and outcomes of tobacco chewing addiction can be communicated effectively through Facebook through messages which are vivid e.g. images.

#### RECOMMENDATION

Facebook can play a key role in communication of other health related programme. In each post of communication, made on Facebook, all participants can be actively involved and all participants can inquires about their queries and can solve their confusion or false belief regarding the health problems. Electronic media is the future of mass communication and intervention. So by using Facebook, effect of health programme and its outcome can also be studied.

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