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The impact of social media-based support groups on smoking relapse prevention in Saudi Arabia



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ABSTRACT

Background and objective: Tobacco smoking remains a major preventable cause of mortality and morbidity across the globe. People who attempt to quit smoking often experience episodes of relapse before finally quitting. Understanding the part that social networking sites and social media can play in smoking cessation and prevention of relapse is important to aid the development of novel techniques to curb the smoking epidemic. This study investigated the use of extra-treatment provided outside of the formal healthcare setting, bolstered by online social support in order to prevent smoking relapse in Saudi Arabia. *Methods:* This cross-sectional study included 473 smokers taking part in smoking cessation intervention programs run by the Riyadh branch of King Abdul-Aziz Medical City and PURITY, a Saudi anti-smoking association. Only subjects who expressed an interest in quitting smoking, and those attempting to quit, were considered for inclusion. The sample was divided into three groups: subjects who subscribed to support groups on Twitter (n = 150), and WhatsApp (n = 150), and a control group of subjects who had not subscribed to any social media support groups (n = 173).

Results: A significant difference was found between the mean average numbers of people who quit smoking among the three groups, with social media support proving to be more effective than other traditional methods. Our findings imply that Twitter and WhatsApp users found it easier to quit smoking than those who did not take part in these social media groups.

Conclusion: Social media provides a good platform to discuss smoking cessation treatment, and thus reduce smoking relapses. Our findings support the suggestion that more social media support groups should be developed to help people to effectively cease smoking after abstinence. Individuals who struggle to quit smoking should be encouraged to join support groups on their social media platform of choice to increase their likelihood of quitting. Future studies should assess the effectiveness of social media to help people quit smoking by including a greater diversity of social media platforms, including Facebook, Snapchat, and Instagram.

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1. Introduction

Smoking is a leading preventable cause of death, and the second highest contributor to the global disease burden; however, smoking rates have declined over the last decade. Efforts to assist and encourage smokers to quit are a significant element of public health campaigns against this epidemic [1]. According to the World Health Organization, smoking causes approximately 6 million deaths each year [1], of which, over 5 million deaths are di-

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https://doi.org/10.1016/j.cmpb.2018.03.005 0169-2607/© 2018 Elsevier B.V. All rights reserved. rectly related to tobacco smoking. The current global smoking population is estimated to be around 1 billion. Eighty percent of smokers live in low-income and middle-income countries, i.e. the regions where the burden of smoking-related illness is cited to be the highest [2].

Smoking is highly prevalent in the Saudi Arabian population. Bassiony [3] indicated that the prevalence of smoking ranges between 2.4 and 52.3% across various demographic groups; for example, 12–29% of school students, 2.4–37% of university students, 25% of the elderly, and 11.7–52% of adults are smokers. In the Saudi population, smoking prevalence among males was between 13 and 38%, and between 1 and 16% among females.

Evidently, smoking is sufficiently prevalent in Saudi Arabia to warrant efforts to reduce it. One remedy for the widespread habit of smoking is to encourage its cessation among groups of smokers. However, cessation is constrained by relapse tendencies. In 1992, Garvey and colleagues observed that around 90% of smokers who attempt to quit experience relapse within 1 year, and most relapse in the early days and weeks following the cessation effort. The existence of a greater proportion of smokers in the surrounding environment also amplifies the likelihood of relapse, although further investigation revealed that demographic variables such as education level, gender, and age did not predict relapse [4].

The Internet is a helpful resource for individuals seeking a variety of health-related information. Substantial improvements in social media technologies, and their ubiquity, provides new opportunities to offer geographically distant consumers with cost-effective, easily accessible, personalized health content, as well as social network-based support. The literature demonstrates social support as a suitable approach to address high smoking relapse rates [5]. Two forms of social support have been eminent; namely, intratreatment social support, and extra-treatment social support [6]. Intra-treatment social support is provided by a healthcare practitioner and is considered a part of the treatment program. In terms of smoking, intra-treatment support aims to encourage cessation by sharing information about the effectiveness of various quitting modalities, and asserting the belief that quitting is possible. Intratreatment support also communicates care and concern with reference to patients' feelings, and encourages them to talk about the cessation processes.

Extra-treatment social support aims to creating a way for other people to positively influence smokers by encouraging and supporting them to quit through information-sharing and discussion. This type of social support usually comprises a recruited network of family members, friends, workmates, and all those who lie outside of the treatment plan.

Acknowledging the potential effectiveness of social support, interventions for promoting smoking cessation have gone further by integrating social media platforms to enhance social support against relapse. Alrukban [7] indicated that social media allows smokers using a particular quitting intervention to connect with others in the same situation. Patients can therefore share their thoughts and experiences, and inspire others by reporting their successes about what seems to have worked for them [7]. It also helps patients to connect with healthcare practitioners, and other supportive friends and family members [8].

Evidence suggests that social media-based support is more effective than traditional approaches to social support. For instance, in 2016, Baskerville and colleagues established that adults who used social media support after attempting to quit smoking were two times more likely to succeed than those who utilized traditional approaches. These findings were based on a comparison between the achievements of subjects in the 'Break it Off social media campaign, and those who used a telephone helpline [9].

In light of its potential effectiveness, there is an increased interest in research into the use of social media for support. Nevertheless, research evaluating the utility and effectiveness of social media is in its infancy, especially in Saudi Arabia. As a result, social media support for smokers attempting to quit is limited [10]. A few studies have focused on intra-treatment social media support, but they have ignored extra-treatment support [11–13].

Studies that have found social media to be effective have also noted that the provision of misleading information is a concern. According to Almotairi [11], subjects can only rely on the views of an informed practitioner. Considering that social media support circles do not necessarily include such practitioners, the risk of encountering misleading information is particularly inherent [14,15], raising questions as to the utility of extra-treatment media social support. The objective of this study was to investigate the use of extra-treatment, in the form of social media support groups, for preventing smoking relapse among the Saudi population.

2. Methods

2.1. Study design

A cross-sectional exploratory/descriptive research design was used to determine the relationship between extra-treatment social media support and smoking relapse prevention. Three different groups of smokers were surveyed and the rates of smoking relapse were compared between them. The three groups included participants who had subscribed to one of two types of extra-treatment social media support group; one on Twitter and the other on WhatsApp. The third (control) group of smokers did not subscribe to any social media-based extra-treatment support group.

2.2. Study area and settings

Considering several regions from which the potential research population could be recruited, this study was limited to Riyadh only. Like any capital city, the population of Riyadh is assumed to include individuals from different socioeconomic backgrounds. Therefore, a study conducted in Riyadh should comprise smokers with wide-ranging demographic characteristics.

2.3. Study subjects, sample size and sampling technique

All participants were smokers taken from the smoking cessation intervention programs designed by King Abdul-Aziz Medical City, Riyadh, and PURITY, a Saudi anti-smoking association in Riyadh. Only those subjects who expressed interest in quitting and attempting to quit were considered for participation. Neither nonsmokers nor smokers with no intention to quit smoking were included.

The researchers visited King Abdulaziz Medical City hospital in Riyadh, and PURITY in Riyadh, to recruit smokers participating in the cessation intervention program, based on the selection criteria. The total convenience sample size was 473, of which 150 participants were selected from subjects subscribed to a Twitter-based support group, 150 were subscribed to a WhatsApp-based support group, and a control group (n = 173) of subjects not subscribed to any social media support group but who were instead offered telephone-based interventions.

2.4. Data collection methods, instruments used, and measurements

Data were collected from participants face to face using the survey questionnaire. The questionnaire was designed to be as objective as possible to ensure reliable results, and were divided into two sections: participants' demographic characteristics (e.g., gender, age, duration of smoking), and participants' experiences of quitting smoking after subscribing to the social media-based extra-treatment support group. The purpose of the questionnaire was to investigate the elements of perceived cessation experiences (dependent variables), such as satisfaction with support, cessation success, and perceived usefulness.

2.5. Data analysis and data management plan

Data were analyzed using Statistical Package for Social Sciences (SPSS) software, version 20. Data management was carried out by categorizing subscribers of WhatsApp-based and Twitterbased support groups. Statistical analysis was conducted to determine any significant differences between the three groups. Five Download English Version:

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