



## Smoking Cessation Counseling Delivered by Specialized Nurses

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### Abstract

**Objectives:** The aim of this study is to determine whether tobacco treatment specialized nurses are capable of delivering effective smoking cessation counseling intervention in Saudi Arabia.

**Method:** Participants were selected based on their clinical assessment and required counseling interventions. Fagerstorm Test for Nicotine Dependence was used and individual sessions focusing on motivation and cognitive behavior conducted. A scheduled phone called was conducted.

**Results:** One hundred and sixty-eight (168) adult participants joined, 57 (34 %) quit smoking the first session after having a cardiac procedure, 52 (31 %) required reinforcement. At ONE YEAR 32 participants (19%) remained abstinent. Twenty-three (23) participants out of 168

**Keywords:** Smoking Sessation; Counseling; Nurse; Developing Country

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## Introduction

Tobacco use is a global epidemic and it is considered the most preventable cause of premature death. The World Health Organization (WHO) has estimated that the deaths from tobacco-related disease and disabilities worldwide will increase to 10 million within the next 30 years.<sup>[1]</sup> The problem is more apparent in developing countries, for example in 2013, the prevalence among adult Saudis, was estimated at 23.7% in men and 1.5% in women.<sup>[2]</sup> In addition, the Saudi government's expenditures on tobacco control in 2014 was 18,000,000 SAR.<sup>[3]</sup> Therefore, all health care providers are obligated to participate in providing and supporting smoking cessation counseling interventions to eliminate the health and economic burden of tobacco use.<sup>[4-6]</sup>

Nurses are the largest healthcare workforce and have a tremendous impact in helping tobacco users to quit successfully.<sup>[7]</sup> The aim of this study is to determine whether tobacco treatment specialized nurses are capable of delivering effective smoking cessation counseling intervention in a setting of low resources, such as lack of pharmacological medications.

## Method

Participants were referred from the Coronary Care Unit, Adult Medical and Surgical Cardiac Unit and Cardiac Outpatient Clinic in King Faisal Cardiac Center Ministry of National Guard Health Affairs-Western Region. They were interviewed, assessed by using Fagerstorm Test for Nicotine Dependence and received a face to face counseling session for one hour by incorporating motivational interviewing strategies and cognitive behavioral therapy upon admission. A review of the participant's smoking history, previous attempts to quit, motivators to quit, triggers for smoking, assisting them in identifying high-risk situations and relapse prevention. In addition, helping the participants to explore and generate problem-solving and coping strategies to deal with high-risk situations. They were followed up by telephone every 2 weeks, 1 month, 3 months, 6 months and 9 months and 1 year consecutively.<sup>[2]</sup> The total number of participants was 168 patients. They were enrolled from March 2015-SEP 2017.

## Result

One hundred and sixty-eight (168) adult participants were joined, 57

(34%) quit smoking the first session after having a cardiac procedures, 52 (31%) required reinforcement. at one year 32 participants (19%) remained abstinent from smoking despite the service lacking pharmacological support which is one of the essential components recommended by US guidelines for treating tobacco dependency.<sup>[2]</sup> Twenty-three (23) participants out of 168 required further reinforcement as some of them were trying to quit gradually by cutting down the number of cigarettes and others were still in the pre-contemplation stage. Eighty percent (80%) attributed the relapse after an attempt to quit to psychological reasons such as stress, feeling bored and gathering with smoking friends or relatives and only 15% accounts for withdrawal symptoms.

Over all on the close follow up schedule, 66 (39%) did not reply and one died.

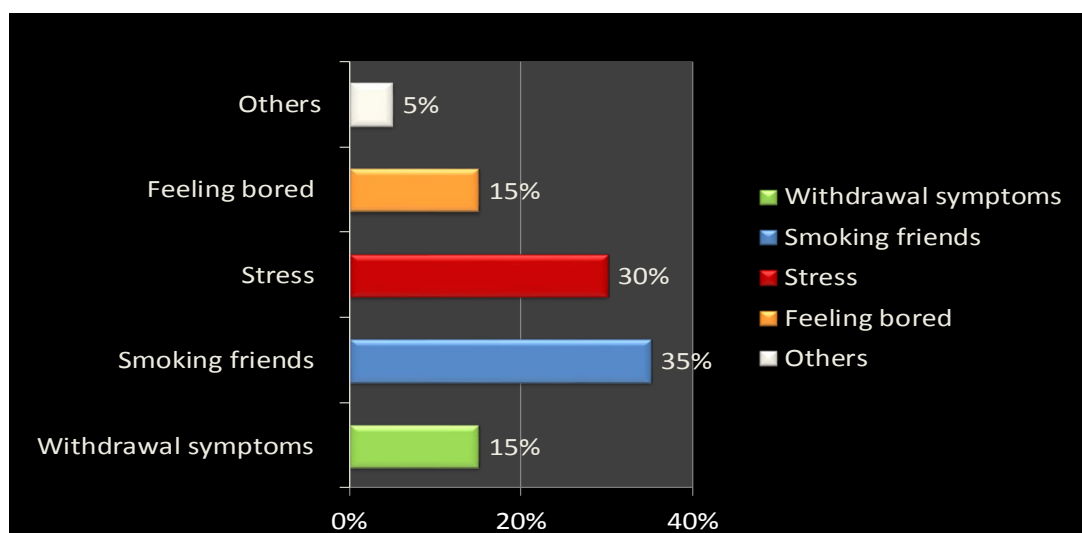
Ninety-five percent (95%) of the participants were satisfied having such sessions without exposure to pharmacological intervention. The rest were advised to have pharmacological support plus cognitive behavioral therapy which increase patients' success and abstinence rates.<sup>[5]</sup>

## Discussion

An important trick for successful results is close follow up by telephone, which allows patients to express their concerns and provides them with information regarding self-care management and support when needed. Participants were motivated and encouraged to persist with abstinence. Such results were reported by a non-randomized controlled study which was conducted in Beijing<sup>[9]</sup>. They compared face to face counseling for 40 minutes and face to face counseling with additional telephone follow up for 15-20 minutes and no pharmacotherapy was provided. The study demonstrated that providing extra telephone follow up doubled the quit rates.<sup>[8]</sup>

The reasons for relapse for the participants who had previously attempted to quit, 80% were due to behavioral reasons such as stress, feeling bored and gathering with smoking friends or relatives and only 15% accounted for withdrawal symptoms, figure 1. For this reason, a combination of cognitive behavioral therapy and pharmacotherapy is more effective than either alone.<sup>[5]</sup>

**Figure 1:** The reasons for relapse to smoking



A Cochrane review examined the effectiveness of nurse-delivered smoking cessation interventions using randomized control trials. Over 17,000 participants and 49 studies were included. The studies compared a nursing intervention to usual care and the results of 6 months follow up indicated reasonable moderate evidence of effectiveness measured by increase in successful quitting attempts (RR 1.29; 95% CI 1.20 to 1.39). Moreover, the effectiveness of the interventions provided to inpatients with cardiovascular disease were more effective than in those with non-cardiovascular conditions.<sup>[10]</sup> However, the nurses' role in developing countries like Saudi Arabia remains unrecognized, as treatment was usually solely to delivered by physicians<sup>[7]</sup>.

A cross sectional survey in Saudi Arabia indicated that delivering smoking cessation by implementing the international clinical practice guidelines is still underutilized due to several barriers such as lack of time (73%) and lack of training (67%)<sup>[7]</sup>. In our study other noted factors such as administrative support, carbon monoxide detectors/detection were not available, lack of interest and no pharmacotherapy was provided. In an attempt to improve this service and achieve the best patient outcomes, those barriers and limitations should be taken into consideration. It would be beneficial to replicate such services on a larger scale to enhance generalizability.

This success in tobacco addiction moved up a gear when tobacco treatment specialized nurses became available in certain counties. However, such services are restricted to prescribing Nicotine replacement therapy e.g. Varenicline and Bupropion. The current guidelines for treating tobacco dependency recommends that the combination of cognitive behavioral therapy and pharmacotherapy is more effective than either alone.<sup>[5,9]</sup>

**In summary:** Tobacco dependency is a major threat and can be controlled by implementing interventions such as smoking cessation counseling. Awareness of the clinical practice guidelines is a key component for controlling tobacco dependency. It is highly recommended to initiate training programs for all health care providers to be able to deliver counseling and to communicate with patients effectively during follow up.

## References

1. World Health Organization (1979) Controlling the smoking epidemic.

Report of the WHO expert Committee on Smoking Control. (Technical Report Series1979;(636):7-87.

2. World Health Organization. (2017) WHO Report on the Global Tobacco Epidemic. Country Profile: Saudi Arabia. ([http://www.who.int/tobacco/surveillance/policy/country\\_profile/sau.pdf](http://www.who.int/tobacco/surveillance/policy/country_profile/sau.pdf))

3. World Health Organization. (2015) WHO Report on the Global Tobacco Epidemic, ([http://www.who.int/tobacco/global\\_report/2015/en/](http://www.who.int/tobacco/global_report/2015/en/))

4. King B, Pechacek T, Mariolis P, (2014) Best practices for comprehensive tobacco control; National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health (OSH)

5. Fiore MC, Jaén CR, Baker TB, Bailey WC, Benowitz NL, Curry SJ, Dorfman SF, Froelicher ES, Goldstein MG, Heaton CG, Henderson PN, Heyman RB, Koh HK, Kottke TE, Lando HA, Mecklenburg RE, Mermelstein RJ, Mullen PD, Orleans CT, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME, Murray EW, Bennett G, Heishman S, Husten C, Morgan G, Williams C, Christiansen BA, Piper ME, Hasselblad V, Fraser D, Theobald W, Connell M, Leitzke C. Treating Tobacco Use and Dependence: Update. Rockville, MD: US Department of Health and Human Services (Respir Care. 2008 ;53(9):1217-22.

6. Rice VH, Hartmann-Boyce J, Stead LF. Nursing interventions for smoking cessation. Cochrane Database Syst Rev.2013;(8):CD001188. doi: 10.1002/14651858.CD001188.pub4)

7. Youdan B, Queally B. (2005) Nurses' role in promoting and supporting smoking cessation. (Nurs Times. 2005;101(10):26-7.

8. Jradi H. Awareness, practices, and barriers regarding smoking cessation treatment among physicians in Saudi Arabia. J Addict Dis. 2017;36(1):53-59. doi: 10.1080/10550887.2015.1116355. Epub 2015.

9. Wu L, He Y, Jiang B, Zuo F, Liu Q, Zhang L, Zhou C, Liu M, Chen H, Cheng KK, Chan SSC, Lam TH. Effectiveness of additional follow-up telephone counseling in a smoking cessation clinic in Beijing and predictors of quitting among Chinese male smokers (BMC Public Health. 2016;16:63. doi: 10.1186/s12889-016-2718-5.

10. National Institute for Health and Clinical Excellence (2006) The public health guidance development process.

**Table 1:** Relation between treatment duration and abstinence rate

Counseling and Treatment Duration	Abstinence Rates (%)
No minutes	11%
1-3 minutes	14.4%
4-30 minutes	18.8%
31- 90 minutes	26.5%
91-300 minutes	28.4%