ISSN: 1985-5826 AJTLHE Vol.8, No.2 December 2015, 39-52

SMOKING CESSATION INTERVENTION DELIVERED BY DENTISTS (SCIDD) TRAINING MODULE

[1]Nurul Asyikin Yahya
[2]Roslan Saub
[3]Mariani Md Nor

Department of Community Oral Health and Clinical Prevention[1]
University of Malaya
Department of Community Oral Health and Clinical Prevention[2]
University of Malaya
Department of Education Psychology & Counselling[3]
Faculty of Education

INTRODUCTION

A Report on the Global Tobacco Epidemic stated that most adult smokers, 950 million were men and 177 million were women (WHO, 2015). In Malaysia, it is evident from the results of Global Adult Tobacco Survey (GATS) in 2011, that tobacco consumption is still a major public health problem (Institute for Public Health, 2012). The Cochrane Library recently reported that incorporation of an oral examination component for tobacco cessation conducted by dentists may increase tobacco abstinence rates among both cigarette smokers and smokeless tobacco users (Carr & Ebbert, 2012). Malaysian studies revealed that the lack of training were barriers to conduct smoking cessation treatment (Yahya & Croucher, 2005; Vaithilingam et al., 2012; Amer Siddiq et al., 2014). In Malaysia, the Ministry of Health National Oral Health Plan for 2011-2020, proposed for the first time for dentists to participate in and contribute to the success of the efforts in providing some form of care and advice to their patients against smoking (Oral Health Division, 2011). Thus, there is a need to develop a standard training module specifically for dentist to deliver smoking cessation treatment for their patients.

THE SCIDD MODULE DEVELOPMENT

The Smoking Cessation Intervention Delivered by Dentists (SCIDD) module was developed to train Dental Public Health officers to deliver smoking cessation interventions. The modules were adapted from the National Health Service, UK (Health Development Agency, 2003) using evidence-based guidelines (MOH, 2003; Fiore et al., 2008; Lando et al., 2007; Coleman, 2004). The SCIDD module was originally developed for standardization and training for a randomised control trial to compare the effectiveness of two types of smoking cessation interventions. The interventions were the brief advice and the 5A's intervention. The brief advice against smoking is the verbal instructions to stop smoking with or without added information about the harmful effects of smoking (Coleman, 2004). 5A's (Ask, Advice, Assess, Assist and Arrange) are an evidence-based framework for structuring smoking cessation in health care settings (Fiore et al., 2008).

1. DESIGNING THE SCIDD PROGRAM

The SCIDD module design was adapted from Nichter (2006) and World Health Organization (2005), for the application to tobacco cessation. Figure 1 shows the process of developing and implementing the SCIDD module. The next section discusses the steps of the process.

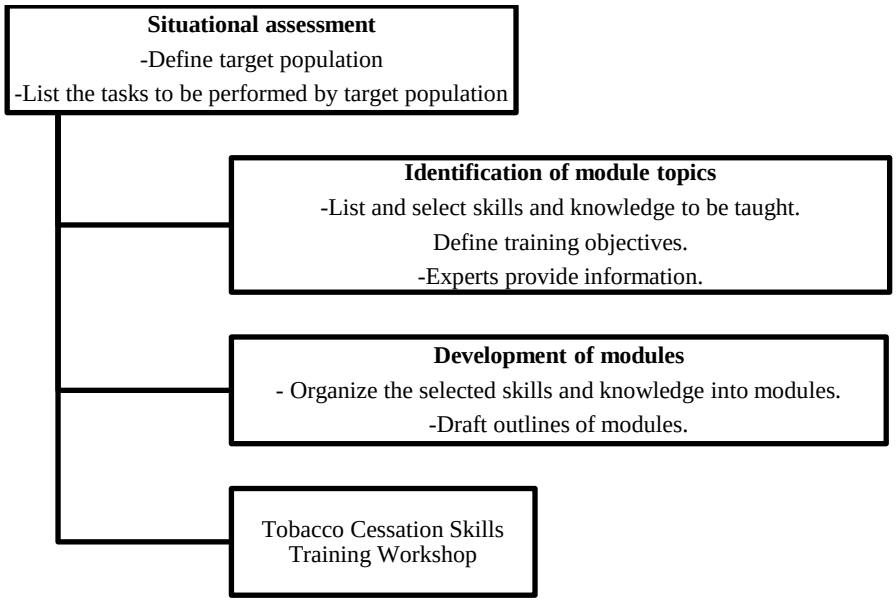

Figure 1: Steps in the development and implementation of the SCIDD module

Adapted from WHO (2005) & Nichter (2006).

2. SITUATIONAL ASSESSMENT

The situational analysis was done using the literature review, which detailed tobacco-related knowledge, attitudes, and practices among Malaysian dentists. As Table 1 shows, four relevant studies were identified. Lack of knowledge, lack of skills, and the time-consuming nature of smoking cessation interventions were identified as problems among Malaysian dentists.

Table 1: Summary of studies on tobacco-related knowledge, attitudes, and practices among Malaysian dentists

Authors	**Sample Size (n)**	**Main Findings**
Yahya and Croucher (2005)	72 dentists	Time consuming (n=29, 40.3%). Lack of knowledge (n=39, 54.2%).

Asmaon and Ishak (2007)	558 dentists	Lack of information in smoking cessation (86.1%). Constrained because of lack of training in smoking cessation (66.0%). Lack of time in practice prevents involvement in smoking cessation (56.5%).
Vaithilingam *et al.* (2012)	236 dentists	Insufficient time (n=195, 82.6%). Lack of skills in counselling (n=165, 69.9%). Lack of knowledge in smoking cessation (n=112, 47.5%).
Amer *et al.* (2014)	223 dentists	Discussing patients' smoking habit is time-consuming (n=130, 60.5%).

3. IDENTIFICATION OF SCIDD MODULE TOPICS

The content of this module was identified based on the findings of the situational analysis. The module focused on basic and in-depth knowledge and skills regarding tobacco cessation and exposure to a range of clinical scenarios so as to practice cessation skills on dental patients. The objectives of the training module as follow:

1. To provide knowledge on tobacco use and its effects,
2. To explain the steps involved in the BA or 5A's approach to smoking cessation, and
3. To develop skills in conducting the BA or 5A's method of counselling on smoking cessation.

Therefore, at the end of the training, the dentists should have benefitted from the following learning outcomes:

1. They should have been able to explain the health and oral consequences of tobacco use,

2. They should have been able to describe the current approaches to smoking cessation intervention in the dental clinic,

3. They should have been able to demonstrate skills in assessing tobacco use in dental patients, and

4. They should have been able to demonstrate skills in assisting dental patients to quit tobacco use.

Based on the objectives, module content was developed for BA and the 5A's separately. To ensure the suitability of the adapted content for Malaysian use, expert opinions were sought. The experts involved were a smoking cessation specialist/consultant psychiatrist (Addiction) from the University of Malaya, Centre of Addiction Sciences, an instructional technologist, and expert in the development of training modules from the University of Malaya, and a dental public health specialist from the Ministry of Health, Malaysia. The first draft of the SCIDD module was emailed to these experts and they were asked to provide feedback.

Comments from the experts follow:

1. Since the target group will be dentists who are experienced, the module should include more discussions, small group activities (role playing), and pre-planned readings; fewer lectures should be given.

2. The content appears appropriate.

3. Time constraints are an issue if the module is based mainly on lectures; and if too much information is given in one day, it will be difficult or the participants to absorb.

4. The trainer for the SCIDD module should ideally be one individual for consistency.

The modules were revised according to this expert feedback.

4. THE CONTENT OF THE SCIDD TRAINING MODULE

The SCIDD training module has two modules (Figure 2). Two major outcomes for both modules are knowledge and skills. Multiple teaching methods are used. They include lectures, planned reading (self-reading), small group discussions, case studies, and role play. Module 1 covers the BA intervention; the total training time is 4 hours and 30 minutes. Module 2 covers the 5A's intervention; the length of training time is 6 hours. Tables 2 and 3 show the detailed lesson plan, core content, key learning outcomes, objectives, and types of delivery methods for Module 1 and Module 2, respectively.

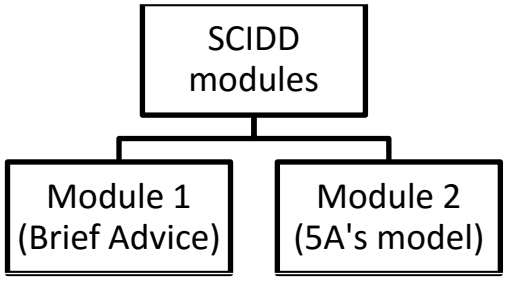

Figure 2: The Smoking Cessation Intervention Delivered by Dentists (SCIDD) modules

Table 2: Core content areas and key learning outcomes for Module 1: Brief Advice (BA) intervention (4 hours 30 minute)

NO.	LESSON	CORE CONTENT	KEY LEARNING OUTCOMES	OBJECTIVE(S)	DELIVERY METHODS
1.	Smoking, health, and oral health (1 hour, 30 minutes)	Health and oral health effects of smoking. Behavioural and pharmacological determinants of smoking behaviour. The health benefits of quitting.	1. Able to list the major life-threatening and non-life-threatening diseases related to oral and general health caused by smoking and potential years of life lost. 2. Able to describe the effects of passive smoking on adults and children. 3. Able to explain the benefits of quitting smoking. 4. Able to describe compensatory smoking in relation to reducing the frequency of smoking or switching to lower tar cigarettes.	Knowledge Knowledge Knowledge Knowledge	• Planned reading • Group discussion • Case studies
2.	The Brief Advice Guideline for Smoking Cessation in a Dental Setting (Gordon *et al.*, 2007; Coleman, 2004) (1 hour, 30 minutes)	Ask and record smoking status. Assessing a person's readiness to change. Assessing tobacco use and nicotine dependence. Advice all smokers to quit.	1. Able to ask about smoking in an appropriate way, to elicit an accurate response. 2. Able to record status and action taken in an appropriate computer or paper-based system. 3. Able to ask appropriate questions to assess readiness to attempt to quit. 4. Able to assess willingness to use appropriate treatments. 5. Assess a client's nicotine	Skills Skills Knowledge/Skills Skills Skills Skills	• Lecture • Group discussion • Case studies • Role play • Clinical demonstration

			dependence using an appropriate method. 6. Assess a client's commitment to the present quit attempt and to attending treatment. 7. Able to describe the relevance to treatment of past quitting history and smoking characteristics. 8. Able to demonstrate the use of the CO monitor as a motivational tool and as a means of assessing and validating smoking status.	Knowledge Skills	
3.	The Effects of Quitting Smoking. *(Standard for Training in Smoking Cessation Training 2003. Health Development Agency, National Health Service, UK)* (1 hour, 30 minutes)	Barriers to quitting smoking. Withdrawal syndrome in smoking cessation.	1. Able to describe the main features of the tobacco withdrawal syndrome. 2. Able to describe the common and less common tobacco withdrawal symptoms and their duration. 3. Able to address problems with patient's motivation, strong withdrawal reactions, and adherence to treatment.	Knowledge Knowledge Skill	• Lecture • Group discussion • Case studies • Role play

Table 3: Core content areas and key learning outcomes for Module 2: 5A's intervention (6 hours)

NO.	LESSON	CORE CONTENT	KEY LEARNING OUTCOMES	OBJECTIVE (S)	DELIVERY METHODS
1.	Smoking, health, and oral health (1 hour, 30 minutes)	Health and oral health effects of smoking. Behavioural and pharmacological determinants of smoking behaviour. The health benefits of quitting.	**1.** Able to list the major life-threatening and non-life-threatening diseases related to oral and general health caused by smoking and potential years of life lost. 2. Able to describe the effects of passive smoking on adults and children. 3. Able to describe behavioural and pharmacological determinants of smoking behaviour. 4. Able to explain the benefits of quitting smoking. **5.** Able to describe compensatory smoking in relation to reducing frequency of smoking or switching to lower tar cigarettes.	Knowledge Knowledge Knowledge Knowledge Knowledge	• Planned reading • Group discussion • Case studies
2.	The 5A's Guideline for Smoking Cessation in a Dental Setting *(Gordon et al., 2007; Coleman, 2004)*. (2 hours)	Ask and record smoking status. Assessing a person's readiness to change. Assessing tobacco use and nicotine dependence. Advising smokers to quit. Assisting smokers to quit.	1. Able to ask about smoking in an appropriate way, to elicit an accurate response. 2. Able to record status and action taken in an appropriate computer or paper-based system. 3. Able to ask appropriate questions to assess readiness to make a quit attempt. 4. Able to assess willingness to use appropriate treatments. 5. Able to assess a client's nicotine dependence using an appropriate method.	Skill Skill Skill/ Knowledge Skill Skill Skill Knowledge	• Lecture • Group discussion • Case studies • Role play • Clinical demonstration

			6. Able to assess a client's commitment to the present quit attempt and to attending treatment 7. Able to describe the relevance to treatment of past quitting history and smoking characteristics. 8. Able to demonstrate the use of the CO monitor as a motivational tool and as a means of assessing and validating smoking status.	Skill	

Table 3: Core content areas and key learning outcomes for Module 2: 5A's intervention (6 hours) *(continued)*

NO.	LESSON	CORE CONTENT	1. KEY LEARNING OUTCOMES	OBJECTIVE (S)	DELIVERY METHODS •
3.	The Effects of Quitting Smoking *(Standard for Training in Smoking Cessation Training 2003. Health Development Agency, National Health Service, UK)* (1 hour, 30 minutes)	Barriers to quitting smoking. Withdrawal syndrome in smoking cessation.	2. Able to describe common barriers to quitting. 3. Able to describe the main features of the tobacco withdrawal syndrome. 4. Able to describe the common and less common tobacco withdrawal symptoms and their duration. 5. Able to address problems with patient's motivation, strong withdrawal reactions, and adherence to treatment.	Knowledge Knowledge Knowledge Skill	• Lecture • Group discussion • Case studies • Role play
4.	Behavioural Support in Smoking Cessation (1 hour)	Relapse prevention. Cognitive and behavioural strategies to assist cessation.	1. Maximize commitment to the target quit date. 2. Able to discuss relapse situations and known predictors of relapse. 3. Able to deal appropriately with lapses and with full relapse during treatment. 4. Respond to common questions and issues raised by smokers.	Skill Knowledge Skill Skill	• Lecture • Group discussion • Case studies • Role play

MODULE AND WORKSHOP IMPLEMENTATION

A one-day workshop was held for training and standardization of each intervention on two separate dates. Eight Dental Public Health specialists from the Ministry of Health Malaysia were trained in interactive learning methods involving planned readings, lectures, group discussion and role-plays in a one day session. However, only six were actively involved in the clinical trial. A simulated practical session on the interventions and the clinical protocol was carried out on mock patients. The six participating dental public health specialists' ranged from 49 to 54 years old. Five females had 25 to 30 years of clinical practice experience. At the initial phase of the trial, 192 eligible dental patients were recruited for the 5A's group, while for the brief advice group was 208 dental patients.

Dentists could be trained and has a role in counselling patients to quit smoking. Furthermore, dentists have the greatest potential to promote a decrease in tobacco use showing its relevance to oral health effect and thus, a decrease in tobacco induced mortality and morbidity.

REFERENCES

Amer Siddiq AN, Rahimah AK, Yahya NA, Hazli Z, Rusdi AR, Mohamed Hussain H. 2014. *Empowering Malaysian dentists to tobacco dependence treatment conduct.* Int Dent. J 64: 206-212.

Asmaon AF, Ishak AR. 2007. *Dentist's Role as Smoking Cessation Counsellor.* Malaysian Dental Journal*. 28*(2),72-7.

Carr AB, Ebbert J. 2012. *Interventions for tobacco cessation in the dental setting.* Cochrane Database Syst Rev. 6: CD005084.

Coleman T. 2004. *Use of simple advice and behavioural support*. BMJ. 328 (7436): 397-399.

Fiore MC, Jaen CR, Baker TB et al. 2008. *A Clinical Practice Guideline for Treating Tobacco Use and Dependence: Update.* Am J Prev Med. 35(2): 158-176.

Health Development Agency. 2003. *Standard for training in smoking cessation treatments.* National Health Service, United Kingdom.

Institute for Public Health. 2012. *Report of the Global Adult Tobacco Survey (GATS) Malaysia 2011.* Kuala Lumpur. Ministry of Health Malaysia.

Lando HA, Hennrikus D, Boyle R, Lazovich D, Stafne E, Rindal B. 2007. *Promoting tobacco abstinence among older adolescents in dental clinics.* Journal of Smoking Cessation. 2(01):23-30.

Ministry of Health Malaysia (MOH). 2003. *Clinical practice guideline on treatment of tobacco use and dependence.* Kuala Lumpur. Ministry of Health Malaysia.

Nichter M. 2006*. Introducing tobacco cessation in developing countries: an overview of Project Quit Tobacco International.* Tobacco Control. 15(suppl 1), i12-i17.

Oral Health Division. 2011. *National Oral Health Plan for Malaysia 2011-2020*. Kuala Lumpur. Ministry of Health Malaysia.

Vaithilingam RD, Mohd. Noor NM, Mustafa R, Taiyeb-Ali TB. 2012*. Practices and Beliefs among Malaysian Dentists and Periodontists towards Smoking Cessation Intervention.* Sains Malaysiana. 41(7): 931 – 937.

World Health Organization. 2015. *WHO global report on trends in tobacco smoking 2000-2025.* Geneva, Switzerland. World Health Organization.

Yahya NA, Croucher RE. 2005. *Smoking cessation for adolescents: Opinions and experience of Malaysian Government Dental Practitioners.* Malaysian Dental Journal. 26 (2): 108-115.