

Development and Validation of the Islamic-based Smoking Cessation Program Module for Young Adults

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ABSTRACT

Objective: This study aims to develop and validate the new Islamic-based Smoking Cessation Program (ISCP) for undergraduate male smokers.

Methods: The development of the intervention was based on the Intervention Mapping (IM) Protocol, where basic health education program planning activities involved four main steps which are; conducting a needs and capacity assessment of the program, developing the program, formative evaluation including; validating and implementing the program. A content validity level (CVL) was used to assess the content validity quantitatively, with a CVL of more than 70% being considered appropriate.

Results: The module was found to have a high level of authenticity (content validity level = 79%). Revision and modification were completed based on the expert panel comments and suggestions to improve the module.

Conclusion: The ISCP module has good content validity and can be used to assist undergraduate smokers in their cessation journey.

Keywords: Islam, Smoking, University students, Smoking cessation program.

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INTRODUCTION

The danger of smoking is extreme and the tobacco-related mortality rate among young adults; persons aged between 15-24 years (1), nowadays is very alarming; nearly one in three young smokers will eventually die early from a tobacco-related disease nowadays (2). Despite declines in overall smoking prevalence among young adults, the proportion initiating smoking in early adulthood and those who transitioned to daily smoking in early adulthood also were increased overtime (3). These phenomena warrant prompt action to minimize the tobacco-related negative effects such as premature death, tobacco-related morbidity, and addiction on our future generations. The negative effects of cigarette smoking are continuing to increase in developing countries such as Malaysia. Hence, it is crucial to take appropriate measures that will effectively tackle the issue.

In the Malaysian context, the cessation program is well established in a clinical context as the health care system is serious in handling this issue. The Malaysian government even had developed and recently revised a Clinical Practice Guidelines (CPG) on Treatment of Tobacco Use Disorder to serve as a useful tool for health professionals to treat tobacco use in the clinical setting(4). However, the smoking cessation program at the university level targeting young adult smokers is not quite established yet as compared to the school level where the government is seriously conducting the Young Doctor program for smoking prevention program targeting adolescent smokers. This grants the need for the development of a smoking cessation program targeting university students in Malaysia.

Due to their specific developmental tasks and higher rates of risk-taking behaviours, young adults differ from adolescents and middle-aged adults and are therefore more susceptible to preventable causes of morbidity and mortality. (5) Since young adults' brains are still not fully mature unlike the adults' brains, different strategies are needed to assist in their cessation journey. Thus, the development of a new cessation module that accommodates the need of this target population is highly needed. There is limited evidence that either behavioural support or smoking cessation

medication increases the proportion of young people who stop smoking in the long run, according to a systematic review of smoking cessation interventions for young adults that included 41 trials and more than 13,000 young people(6)

Religiosity is often left out during the counselling session as they were considered not important and not necessarily related to the direct cessation therapy(7). Past research suggested that it is very important to include religious elements in the discussion of a therapy. Religious elements have been reported to have positive effects on smokers to quit smoking (8–13).

Because religion is a very promising factor in regulating a person's health behaviour (14), it is critical to develop a new religious-based smoking cessation programmes among smokers, particularly at the university level, as this age group of students has shown to respond well to religious interventions (15,16). In order to create a highly suitable program for the undergraduate male smokers, thus our study aims are to develop the Islamic-based Smoking Cessation Program (ISCP) module and determine the content validity of the program module.

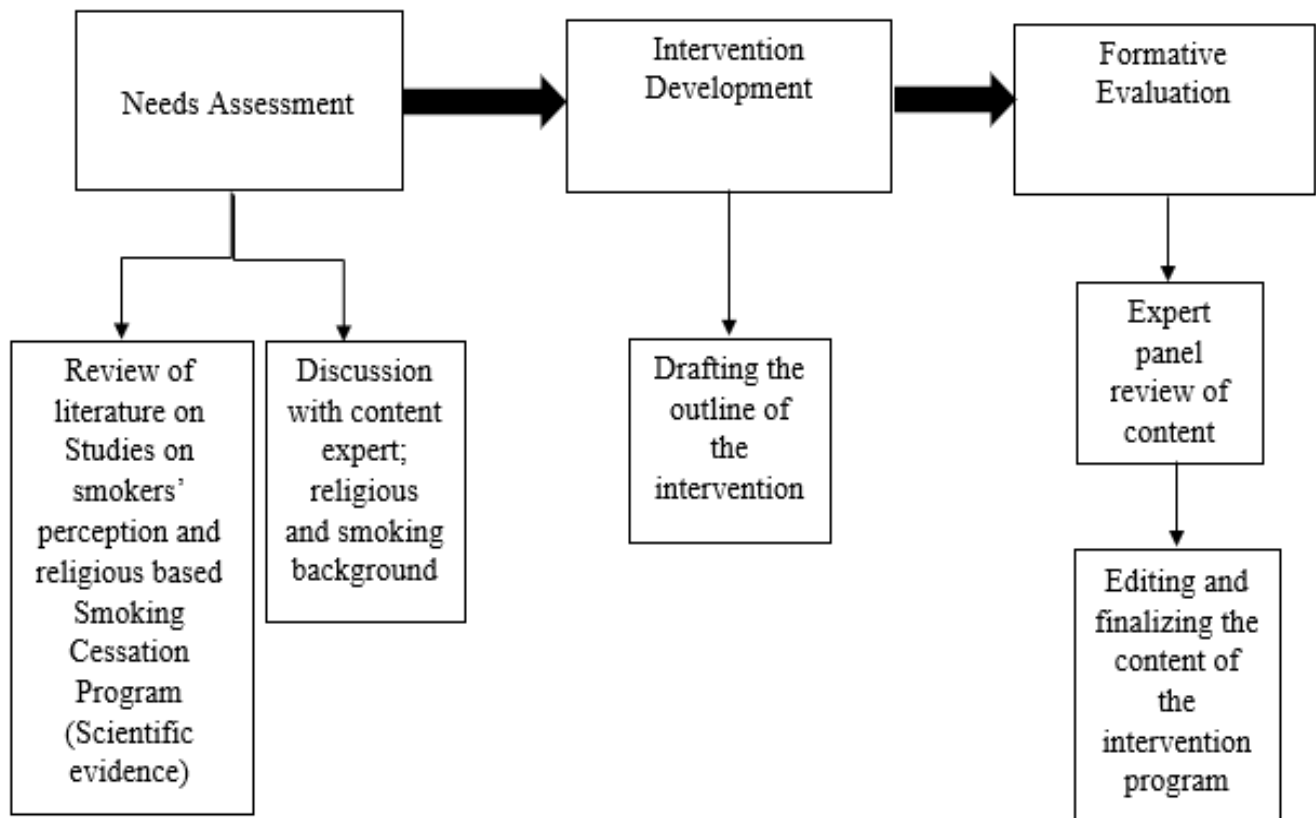
METHODS

Development of the ISCP

The development of the intervention was based on the Intervention Mapping (IM) Protocol (17), where basic health education program planning activities involved four main steps which are; conducting a needs and capacity assessment of the program, developing the program, formative evaluation including; validity study of the module. The adaptation of the protocol was summarized in Figure 1.

Needs Assessment

Before embarking on the development process, the researcher has performed a thorough needs assessment and came out with the relevant and important content to be included as part of the elements in the intervention program. On top of that, the needs assessment was done to justify the need for religious-based intervention development for a smoking cessation program among Malaysian Muslim smokers. The needs



assessment was conducted by reviewing current related literature and discussion with the content's expert which are the religious and smoking experts.

Figure 1 Intervention development protocol based on the Intervention Mapping (IM) Protocol (17)

Systematic Literature Review

Current literatures were reviewed for the need assessment process. The literature search was guided by a search framework of Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA). Four electronic databases were searched using specific keywords and resulted in 12 studies that were included in the final review.

According to the literatures, the majority of studies focused on the Christian religion and developed countries such as the United States. Focusing on Islamic-based interventions for Muslim smokers is clearly necessary, particularly in Muslim-majority developing nations like Malaysia. The literary works also demonstrated the significance of religion and spirituality as determinants of smoking

cessation. Hence offering a fresh alternative intervention that could support other ongoing smoke control initiatives.

One study focuses on the perception of the university students in Malaysia on the effect of religious beliefs on smoking behavior, where they concluded that Islamic faith plays an important role in determining the smoking practices among university students (18). The study grants the need to focus on the Muslim university student smokers as the target population for the ISCP.

From the literatures found, it was also concluded that religious-based smoking intervention plays an important role in sculpturing the health behaviour of a person thus making it a very promising tool in promoting an effective smoking cessation (19) but studies focusing on religious-based intervention were very limited as there were only a few studies stressing on the topic in Malaysia (8,9,18).

A randomized control trial was conducted by (8) on the effects of Al-Quran recitation and 12'M' counselling on smoking intensity among Malaysian Muslim smokers. The study does not include various aspects of religiosity and

spirituality but only focuses on the Al-Quran recitation as the essence of religious/spiritual intervention. Nevertheless, the results suggest that the Al-Quran recitation approach which is a part of the religious component is a potential method that will help to improve smoking cessation efforts in our country.

There are three domains to measure Islamic religiosity as proposed by (18), based on Hadith Jibril. The three domains were *Islam*; which centres on the bodily action or human activity, *Iman*; the mind or understanding of God, and *Ihsan*; the spirit or actualisation of virtue and goodness. These three domains were applied as a guide in developing the ISCP.

Discussion with Content Experts

Apart from the literature review, a small number of content experts were consulted for their ideas and confirmation on the needs and necessities of the religious/spiritual intervention before finalising the program contents. The content experts came from various knowledge backgrounds including smoking cessation experts and religious experts. They were consulted for the content validation after the drafting of the program contents. Taking all of the details into consideration, the content expert team gathered together to discuss the important yet relevant elements to be integrated into the intervention program to effectively suit the Malaysian Muslim smoker population.

Formative Evaluation: Validity Testing of the Module

The criteria for validating the module were based on Russel's evaluation list of modular material (22). According to the list, the validity of the good modules must contain these five features; a) Module Content Meet the population target; b) The contents of the Modules can be implemented perfectly; c) The content of the Modular Module with time; d) Module Content successfully enhances the level of participant's performance, and e) Module Content can alter the participant's attitude. The scale for this assessment is from 1 to 10 with 1 (strongly disagree) up to 10 (strongly agree). To determine the level of validity of module content, the number of scores were filled by the experts, (x) will be divided by the actual score (y) and multiplied

by one hundred. A module has a high level of authenticity when it achieves 70% and is considered to have dominated or achieved a high level of achievement (23). The formula is as follows:

$$\frac{\text{Expert Score Amount (x)}}{\text{Total Actual Score (y)}} \times 100\% = \text{level of content validity}$$

The level of achievement then may be converted to a decimal figure to make it resemble the correlation coefficient value (20).

Description of the Module

The module is based on the concept of Islam in Hadith Jibril (21). The module can be conducted in a 3-hour program with three sessions, an hour per session, and a short break in between each session. This program can be conducted by one person; any individual that has received briefing/training on how to use this module. Summary of each theme is shown in **Table 1**.

Table 1 Summary of topics in the ISCP Module

Theme	Topic
Theme 1: Health concepts in Islam.	Topic 1: Basic health concepts in Islam, smoking behaviour in Islamic society, and Islamic law concerning smoking.
	Topic 2: Dangers of smoking (health-based)
	Topic 3: Integration of Islam into daily lives generally and also in smoking cessation specifically.
Theme 2: Basic concepts of Islam as a religion.	Topic 1: Integration of Islam and Iman in aiding smoking cessation.
	Topic 2: Ihsan and its relation to smoking behaviour.
Theme 3: Coping strategies related to smoking with integration of Islamic teachings.	Topic 1: Group support for motivational enhancement.
	Topic 2: Healthy living techniques without smoking in Islam.
	Topic 3: Stress management for smoking cessation.

RESULTS

Validity of Module's Content

Table 2 showed that overall validity testing results for the module showed that the content validity coefficient was 0.79 with value ranging from 0.70 to 0.86 for each item. Most of the experts agreed with the statement that the contents of the module were appropriately met the target population resulted in the highest validity coefficient score of 0.86, followed by the content validity coefficient of 0.81 which referred to the module's contents can be implemented perfectly. Apart from that, the statement concerning the content of the ISCP module can improve the participants' attitude and enhance the participants' performance acquired the validity coefficient of 0.80 and 0.79 accordingly. Lastly, the statement concerning the time allocation for the completion of the module acquired a minimum validity coefficient of 0.70. According to Sidek & Jamaludin (23), the value of 70% and above of the level achievement is considered a higher level of achievement which indicates that the module has a good validity if it acquired the percentage of 70% from the validity testing.

DISCUSSION

The experts panel agreed that the module content includes the appropriate module content, according to the target population, meeting the objectives outlined for the module, in addition to the appropriate time allocation. This is in line with Russell's (1974) view, which stipulates that for a good validity evaluation, a module should have five things, which include; 1) meeting the target population, 2) the teaching situation or module implementation method is appropriate, 3) the time allocated to carry out the module is sufficient, 4) the module successfully led to the improvement of participants' achievement in the targeted aspect, and 5) the module succeeded in changing participants' attitudes towards greater excellence.

Apart from that, this newly developed cessation module is uniquely distinguished from previous modules available in term of the Islamic input and its personalisation to young adult smokers which were hope to give great impact on this target population.

Table 2 Analysis of validity coefficient for ISCP module's content.

Criteria	Percentage (%)	Validity Coefficient	Interpretation
The content of the module meets the target population	85.7	0.86	Accepted
The contents of the module can be implemented Perfectly	81.4	0.81	Accepted
Time allocated to the individuals to complete the module was sufficient and appropriate	70.0	0.70	Accepted
The contents of the module can enhance the participants' performance	78.6	0.79	Accepted
The contents of the module can improve the participants' attitude	80.0	0.80	Accepted
Overall Validity Coefficient for Module's Content	79.1	0.79	Good

CONCLUSION

In conclusion, as the ISCP module has good content validity results, therefore this module can be implemented for undergraduate students in the future study and is expected to make a great contribution to the target population.

ETHICAL CONSIDERATION

The study was fully approved by the university's research ethic committee (IREC 2019-186) and informed consent was obtained from all of the participants prior to the data collection process.

CONFLICT OF INTEREST

The authors declare that there was no conflict of interest in this study.

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