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RESEARCH

SMOKING CESSATION AND THE PHARMACY: WHAT ARE THE ISSUES THAT NEED TO BE ADDRESSED BEFORE THE IMPLEMENTATION OF AN INTENSIVE PHARMACY BASED SMOKING CESSATION PROGRAM? PHARMACISTS AND PHARMACY ASSISTANT PERSPECTIVE.

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ABSTRACT

Aim: To elicit information on smoking cessation from pharmacists and pharmacy assistants, and to use this information to identify issues or factors that may need to be considered before the implementation of a pharmacy based smoking cessation program.

Method: Role specific surveys were distributed to pharmacists and pharmacy assistants.

Results: Ninety percent of pharmacists surveyed believe that pharmacists have the potential to help people quit smoking and 84.8% are willing to take a more active role in smoking cessation. Lack of time (59.1%) was the most commonly identified barrier to becoming more actively involved in smoking cessation. Of the pharmacy assistants surveyed 87% believed they needed more training on smoking cessation guidelines.

Conclusion: There a number of factors that need to be addressed before the implementation of a pharmacy based smoking cessation program. Promotion of the pharmacy as an avenue for smoking cessation intervention is needed. In order to do this pharmacist must enhance their knowledge of smoking cessation recommendations. Pharmacy assistants have the potential to play a key role in a pharmacy based smoking cessation program. Pharmacy assistants can be used to overcome the time issues identified by pharmacists. However pharmacy assistants must first be properly trained on smoking cessation recommendations.

INTRODUCTION

Smoking is the largest preventable cause of death and disease in Australia [1]. Cigarette smoking is still responsible for 7.8% of total disease burden in Australia. Tobacco smoking is a bigger burden on the Australian society than high blood pressure, high body mass, physical inactivity and high blood cholesterol respectively [2].

Community pharmacy personnel are in constant contact with members of the lay public, and hence have the ability to influence smoking behaviour in a greater capacity than many healthcare professionals. Pharmacist's expertise in drug therapy and their accessibility to the public places them in an ideal position to promote smoking cessation.

Although there is limited data on the use of the community pharmacy as an environment for smoking cessation intervention, the studies that are available all support the possibility of trained pharmacy personnel delivering smoking cessation intervention [3] [4] [5] [6].The study by Dent el al (2009) assessed the effectiveness of a face to face group program conducted by a pharmacist team versus brief telephone assistance delivered by a pharmacist team. The study used biochemical verification of self-reported cessation to assess the point prevalence of quit rates. The point prevalence quit rate was twenty-eight percent in the face to face treatment group and twelve percent in the brief intervention group. The study thus supports the role for pharmacists in smoking cessation intervention. Moreover, the study also found a strong dose-response relationship between intensity of counseling and cessation success. The more intense the treatment intervention in length or number of treatment sessions delivered, the greater the rate of smoking cessation. Therefore not only can pharmacists increase smoking cessation rates, the intensity of the intervention may also directly influence smoking

cessation success An intensive pharmacy based smoking cessation intervention could hence have a significant impact on smoking rates and prevention of tobacco-related diseases [3].

The aim of the present study is to gather information on smoking cessation from pharmacists and pharmacy assistants. Using surveys the present study will review the attitudes of pharmacists and pharmacy assistants towards smoking cessation as well as their knowledge of smoking cessation recommendations. The information gathered will allow for an investigation into current smoking cessation practice and will provide an indication of what issues needs to be targeted to support the implementation of a pharmacy-based smoking cessation program.

METHOD

Ethics

Ethics clearance was obtained from Charles Sturt University Human Research Ethics Committee. The protocol number issued with respect to this study is 2009/033.

Study Design

A survey based cross-sectional study was chosen as the study's primary method. The aim of the survey was to elicit information on smoking cessation from pharmacists and pharmacy assistants.

All respondents were asked to provide their age, gender and suburb of the pharmacy where they worked. However no personally identifying information was collected.

Survey design

Two different surveys were used for the pharmacists and pharmacy assistants. The surveys elicited information regarding pharmacists' and pharmacy assistants' knowledge, attitudes and practices in relation to smoking cessation and provision of information about smoking cessation (Figure 1 and 2). The surveys were based on the survey used in a previous study by Aquilino, Farris, Faris, Zillich and Lowe (2003). That study also used a cross-sectional survey to examine community pharmacy practice with regard to providing smoking cessation counseling [7]. Survey items such as pharmacy personnel contact with smokers, attitude towards smoking cessation and barriers to providing smoking cessation services were adapted from this study. The surveys were then revised to include current Australian clinical practice guidelines concerning smoking cessation [8].

Figure 1 Pharmacist Survey design

Figure 2: Pharmacy assistant survey design

Population sample

The populations were sampled from the Sydney south west region and the Central western regions in New South Wales. These geographical regions were selected as a convenience sample within modest travelling distance of the investigator's location.

Recruitment of population sample

Sixty pharmacy assistants and sixty pharmacists' surveys were printed. The aim was to recruit thirty pharmacists and thirty pharmacy assistants across each region. Each survey was accompanied by a research information statement outlining the study, its potential risks and benefits to participants and the contact information of the investigators. The surveys were distributed personally or via post.

Data Collection and Analysis

The print format surveys were collected by face to face contact and returned post from the prepaid envelopes. SPSS version 17 was used as the data analysis program. SPSS was chosen as it allows for the entry and analysis of free format data. The data were entered, coded as required and assessed for data entry errors and missing values. Descriptive statistics such as percentages and frequencies were prepared for all relevant variables explored. These statistics were then analyzed and where appropriate grouped into categories for further analysis. Chi-square and correlation tables were used to decipher any potential relationship between variables. All significance calculations were based on a 95 percent confidence interval at a p value of less than .05.

RESULTS

Study Population

The overall study consisted of 33 pharmacists and 31 pharmacy assistants. Figure 3 shows the process of participants' recruitment in the study.

and 3.2% were not confident with the services they provided.

Training

Fifty-eight percent of respondents had received previous training on smoking cessation. The training received was reported as been very effective or effective by 83.3 percent of respondents. Thirty-nine percent of respondents received their training 12 months ago, 22.2 received it 18 months ago while 16.7 percent received training 6 months ago. Eighty-seven percent of respondents felt that they needed more training on smoking cessation.

Five As smoking cessation recommendation

Ninety percent of respondents were not aware or had never heard of the five As smoking cessation recommendation. The remaining 9.7 percent were able to identify the different components of the five A's however none of the respondents was able to provide a correct explanation of the smoking cessation recommendation.

Effective method of quitting

Participants were asked what they consider to be the most effective method of quitting smoking. The vast majority of respondents (90%) thought use of pharmacotherapies combined with support and counseling were the most effective method of smoking cessation.

Barriers faced by pharmacy assistants

The majority of respondents (69.2%) felt that their lack of knowledge was the biggest barrier to them becoming more actively involved in smoking cessation.

Patient's attitude towards quitting (19.2%), lack of understanding of what the patient is experiencing (7.7%) and lack of time (3.8%)were all identified by pharmacy assistants as barriers.

DISCUSSION

The study found that the majority of pharmacists believe they have the potential to help people quit smoking. Many pharmacist respondents reported that as the first point of contact for many smokers, pharmacists have an enormous potential to help people quit smoking. Some of the roles expressed by respondents included "providing the best choice for each individual customer" and also providing "support and provision of information and advice". The study also found that respondents would be willing to take a more active role in smoking cessation. These findings reflect previous studies which also found that pharmacist believe they have the potential to play a bigger role in smoking cessation [7] [9] [6] [5].

The positive attitudes of pharmacists toward smoking cessation and the generally strong support for greater professional roles was reflected in the level of reported smoking cessation interventions. All of the surveyed pharmacists reported speaking to customers about smoking cessation at least once a month. The majority of respondents also reported speaking to a customer about smoking cessation less than seven days before completing the survey.

The participation of pharmacist in smoking cessation activities was higher than that found in previous studies [7] [9] [10] [11] [12]. Previous studies have found that while many pharmacists believe they have a role in smoking cessation, the majority do not actively engage in smoking cessation activities [7] [9] [10] [11] [12].

These studies found that most of the surveyed pharmacists failed to identify and record smoking status of patients. This was also shown in the Australian study by Edwards et al (2006). The researchers found that while the surveyed pharmacists reported providing a moderate level of advice to patients, they were less likely to ask about the smoking status of patients or assess their readiness to quit [10]. Therefore it appears that pharmacists may only counsel on smoking cessation when they are approached by smokers. This is of concern as a pharmacist who only initiates smoking cessation counseling upon request may only help those smokers who are in the contemplation or preparation stage of the quitting process [13]. Pharmacists may then exclude the many smokers who are in the pre-contemplation stage of the quitting process [7] [13].

The present study also found that the majority of pharmacist respondents were not aware of the five "As" smoking cessation recommendation. The five "As" are an evidence-based framework for structuring smoking cessation in healthcare settings [8]. The five "As" for smoking cessation are Ask, Assess, Advise, Assist and Arrange. Healthcare professionals are encouraged to ask or identify the smoking status of patients, assess their readiness to quit and level of nicotine dependence, advice smokers to quit, assist with the quit attempt and arrange a follow-up.

Since many of the pharmacists were unaware of these recommendations, it is likely that they are not practicing in accordance with the recommendations. Meschack et al (2009) found that pharmacists who have knowledge of the five "As" recommendation were more likely to ask patients about their smoking status than those who have no knowledge of these guidelines [12]. Therefore enhancing the knowledge of pharmacists in regards to smoking cessation recommendation is essential before the commencement of a pharmacy based smoking cessation program. Knowledge of the five "As" smoking cessation program will not only ensure pharmacists counseling practices are based on the highest level of evidence, it will also help to promote the pharmacy as a credible source of information and support on smoking cessation.

Although the present study found that only thirty-one percent of the surveyed pharmacists had knowledge of the five "As" smoking cessation guidelines, ninety percent of respondents felt that they had enough knowledge and training to provide smokers with evidence based smoking cessation services. This was also found in the study by Aquilino et al (2003) which found that although the actions of the surveyed pharmacists did not reflect the five "As" smoking cessation recommendation, the majority of the pharmacists felt they had the knowledge and felt prepared in providing smoking cessation counseling [7]. When asked what advice and/or products were provided during their interaction with customers, the pharmacists in the present study were more likely to report providing information on medications rather than information about behavioural strategies. Provision of behavioural strategies during smoking cessation intervention is however an important component of the guidelines for smoking cessation [7]. Therefore while pharmacists may have the knowledge and training needed for the provision of drug based smoking cessation recommendations, their lack of knowledge of the clinical guidelines may be hindering the effectiveness of their smoking cessation activities. This issue was addressed in a paper by Lee et al (2011). The authors state that

pharmacists must move away from the conventional dispensing of smoking cessation pharmacotherapy and develop a more multifaceted approach to smoking cessation intervention [14].

Although pharmacists have the potential to help patients quit smoking, there are some barriers that pharmacists must first overcome in order to become more actively involved in smoking cessation. The most frequently stated barrier to smoking cessation services was a lack of time. This finding is consistent with previous research on the barriers to smoking cessation interventions [7] [6] [5]. Pharmacists also reported a lack of remuneration as a barrier to becoming more actively involved in smoking cessation interventions. While lack of time and remuneration may not be factors in brief interventions, which can be looked upon as part of normal delivery of pharmacy services, these factors become more problematic when developing and maintaining an intensive smoking cessation program. However these issues need not prove detrimental to the development of a smoking cessation program in a pharmacy. Previous research has found that nearly half of smokers would be likely or very likely to meet with a pharmacist for one-on-one counseling if a fee is required [11].

Pharmacy assistants could help overcome the identified lack of time barrier by identifying and recording patient's smoking status while collecting other patient information needed for the prescription dispensing process [15]. However before pharmacy assistants can become actively involved in smoking cessation interventions, they must first have the proper training and education [15].

The present study found that nearly sixty percent of the surveyed pharmacy assistants had received previous training on smoking cessation. The majority of pharmacy assistants felt that this training was effective; however eighty-seven percent still felt they needed more training on smoking cessation recommendations. The majority of pharmacy assistants also reported a lack of knowledge as the biggest barrier to becoming more actively involved in smoking cessation. Studies assessing the knowledge and attitudes of pharmacy assistants towards smoking cessation are lacking, however the study by Zillich et al (2004) found that pharmacy assistants who attended a continuing education program improved their knowledge of smoking cessation, their confidence in discussing smoking cessation with patients and their perception of how smoking cessation counseling would affect abstinence [15]. The information program used in that study only ran for two hours and however it is an indication that even a brief educational program can be effective in helping pharmacy assistants to become more confident and effective in smoking cessation counseling. Therefore there is an enormous potential to employ pharmacy assistants as part of a team approach to smoking cessation interventions in the community pharmacy.

LIMITATIONS OF THE STUDY

There are several limitations to this study. The self-reported answers provided by respondents could be subjected to recall bias [16]. The assumption is that respondents only provided accurate responses. However since the data collected is based on memory, respondents may have overstated or understated the findings. The population sample was quite relatively small compared to previous studies. However the response rate was quite high.

CONCLUSION

There are a number of factors that need to be considered before the implementation of a pharmacy based smoking cessation program. In order to promote the pharmacy as a credible source of smoking cessation intervention, pharmacists must actively identify the smoking status of patients. To do this pharmacist must first enhance their knowledge of the current smoking cessation guidelines. Lack of time was identified by pharmacists as the biggest barrier to providing a more intensive smoking cessation intervention. This perceived barrier may be overcome by the involvement of properly trained pharmacy assistants in smoking cessation interventions.

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