



RESEARCH ARTICLE

Nurses Attitude and Self-Efficacy in Smoking Cessation Care to Hospitalized Patients

Banu MR*

Mental Health Rehabilitation, National Institute of Mental Health and Neuro Sciences (NIMHANS), India

*Corresponding author: Banu MR, Nursing Officer, Mental Health Rehabilitation, No.45 Block 8, Type III Quarters, Byrasandra Campus, National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore, Karnataka 560011, India



Abstract

Today, tobacco is the common form used for smoking. Worldwide, tobacco consumption is estimated to kill 1,000 million in the 21st century. Persons with mental illness consume about 33% of the tobacco used and nearly 46 million adults with mental illness have a smoking rate 70 percent higher than those without. Admission to the hospital provides an excellent opportunity for patients to quit smoking. A good knowledge of the hazards of smoking and cessation intervention alone is not adequate for a nurse, but a positive attitude and high self-efficacy are two eyes to provide a better practice. A cross-sectional descriptive study was done to assess nurses' attitude and self-efficacy which showed that the mean and SD was 29.3 ± 5.698 and 35.87 ± 5.883 respectively; 17 (21%) and 64 (79%) subjects had negative and positive attitude respectively; 16 (19.8%) and 65 (80.2%) subjects had less and more self-efficacy respectively. When the two domains (gender and smoking status of the subjects) were associated with experience at Centre for Addiction Medicine (CAM) unit using chi-square test, the study participants possessed a positive attitude and more self-efficacy irrespective to the associated variables. However, subjects with experience at the Centre for Addiction Medicine ($n = 27$), females ($n = 19$) and non-smokers ($n = 78$) scores were comparatively high. Fortunately, there was a significant score ($\chi^2 = 3.894$, $p = 0.048$) in the self-efficacy of the subjects who had experience at Centre for Addiction Medicine. The study also revealed that the higher the attitude on smoking cessation care, higher the self-efficacy ($r = 0.674$, $p = 0.001$) among the nurses.

Highlights

The study explored the attitude and self-efficacy of the nurses in providing smoking cessation care to hospitalized patients.

Adequate experience in Centre for Addiction medicine improves nurses' positive attitude and self-efficacy that helps in rendering substantial care to patients with addiction problem.

It is utmost important to provide adequate opportunity on rotation to all nurses to work with patients diagnosed with addiction disorder.

Keywords

Staff nurse, Smoking cessation, Attitude, Self-efficacy, Centre for Addiction Medicine (CAM)

Introduction

Smoking is injurious to health. This is the notion of the world's voice. In spite of this awareness, today smoking has become an inevitable habit among the population and tobacco is the one commonly used for smoking. The World Health Organization (WHO) in 2004 projected 58.8 million deaths to occur globally [1] from which 5.4 million are tobacco-attributed [1]. Worldwide, tobacco consumption caused an estimated 100 million deaths in the last Century and if current trends continue it will kill 1,000 million in the 21st century [2]. In fact, tobacco is the single greatest cause of preventable death globally [3]. It is predicted that 1.5 to 1.9 billion people will be smokers in 2025 [4].

Persons with mental illness, making up about 20% of the population, consume about 33% of the tobacco used. Persons with serious mental illness die 25 years earlier than average, often from smoking-related illnesses [5]. New data from the Centres for Disease Control and Prevention shows that the nearly 46 million adults with mental illness have a smoking rate 70 percent higher than those without and consume about a third of the cigarettes in the country, though they make up one-fifth of the adult population [6]. Each year, smoking

kills around 200,000 people who also experience forms of mental illness according to the National Alliance on Mental Illness (NAMI) [7].

Mentally ill patients who have fewer coping skill requires more psychosocial intervention and support to change a behaviour, especially smoking. Along with nicotine therapy and behavioural therapy, a nurse should provide intensified interventions for quitting. When persons with mental illness make an attempt at smoking cessation, they should be followed closely to monitor for more severe nicotine withdrawal, exacerbation of their psychiatric disorder and possible side effects due to cessation-induced increases in medication levels [8].

Most people who smoke want to quit [9] and many can be helped with advice and support from healthcare professionals. Nurses are the largest health care workforce and are involved in nearly all levels of health care. A meta-analysis of clinical trials has found that advice and support from nursing staff can increase people's success in quitting smoking, especially in a hospital setting [10]. Just 3-5 minutes of focused talk during the examination is enough to make the patients aware and conscious of the tobacco use [11]. Nurse-managed smoking cessation intervention can significantly increase cessation rates for hospitalized patients [12].

Admission to a hospital provides an excellent opportunity for the patients to quit smoking. Every health care professional, especially nurses, should use this forum to teach and train the patients to win in their attempts. Patients frequently alter their smoking habits during inpatient treatment, which can affect both their presentation and pharmaco-therapeutic management. Cessation should be a key component of inpatient treatment planning because this setting provides a safe and timely opportunity to help patients quit [13].

Any kind of successful implementations requires an adequate positive attitude and strong self-efficacy among the healthcare provider. So is the smoking cessation care. According to Bandura, the psychologist, self-efficacy has been shown to impact on health practices as well as adaptation to illness and treatment [14]. Attitudes and beliefs about smoking are significantly associated with nurse counselling behaviours [15].

Nurses should develop a good rapport with the patients so that their suggestions are valued considerably and implemented by the patients immediately. For this reason, a nurse should have a positive attitude towards patients who smoke and possess high self-efficacy in carrying out her activities towards smoking cessation care. The success rate of people quitting is high with professional help. The chance of giving up smoking in the long-term increases with more intensive support [16,17].

Nurses are considered by society as the authority

in the field of health who should take advantage of their accomplishments and references in procedures concerned with prophylaxis and smoking habit treatment. For these reasons - nurses' attitude to smoking is so crucial [18]. Given their important role in the delivery of preventive care, they should receive proper training in cessation counselling, have a strong physician and administrative support, and be included in efforts to implement smoking-cessation guidelines in primary care [19].

To my knowledge, there are many studies evaluating the knowledge and practice of smoking cessation but most important is the attitude towards giving care and level of self-efficacy in implementing the care which are found to be very less in India, especially in terms of smoking cessation programs for persons who smoke and are hospitalized for a mental illness. The present study was thus selected to assess the nurses' attitude and self-efficacy in providing smoking cessation care to hospitalized patients in a mental health set up.

Aim of the Research

The aim of this descriptive cross-sectional research study is to determine the attitude and self-efficacy of the nurses who render smoking cessation care to hospitalized patients who may or may not be suffering from mental illness.

The research objectives are to identify the demographic characteristics of the nurses, assess the attitude and self-efficacy of the nurses in providing smoking cessation care to hospitalized patients, evaluate the smoking status among the nurses and its association with attitude and self-efficacy, find out the association between selected demographic variables with attitude and self-efficacy, and explore the correlation between attitude and self-efficacy of the nurses towards smoking cessation care to hospitalized patients.

Methodology

Research design

A descriptive cross-sectional design was adopted to realize the objectives. A self-administered questionnaire was used to evaluate the attitude and self-efficacy in smoking cessation care.

Duration

It took around four months to obtain permission to undergo the research, evaluate the number of possible study subjects, inform the hospital unit staffs about the nature and purpose of the research study, collect data, analyse the collected data, write a research report and disseminate the results.

Study location

The study was conducted in a multi-specialty hospital in Bengaluru that has a wide spectrum facility for

psychiatric setup. It has various psychiatric wards and adequate health professionals to handle the mentally ill patients. The study was planned and conducted in this area based on a high number of staff nurses. Among the various unit, Centre for Addiction Medicine is a unit where patients are admitted for de-addiction treatment. Patients with various substance abuse problems are admitted here who may or may not be suffering from mental illness simultaneously. The treatment modality varies with each patient according to their mental status and the addictive substance used. In general, the nurses are expected to examine the mental status of the patients, collect details of addictive substances used, administer medications, attend bedside rounds with a multidisciplinary team, arrange health education sessions, accompany clinical psychologist in counselling the patients, implement various psychotherapies and so. The nursing students posted in this unit share the work along with the duty nurse, arrange dramas, skits, puppet shows in creating awareness regarding the substance abuse, and are also expected to complete their academic practical requirements.

Study population

The population for the research is the staff nurses working in various psychiatric wards in the multi-specialty hospital, Bengaluru. They were classified according to their qualification in nursing. Amongst the health professionals, nurses were chosen for the study as they are high in number, available for the patients the whole day and night, expected to be the role model for their patients and easily accessible for the study.

Sample and sampling technique

Purposive sampling technique was used to select the total sample size of eighty-one nurses.

Inclusion criteria

Both male and female nurses, smokers and non-smokers, voluntary in participation and nurses working in inpatient units were the criteria considered for inclusion in the study.

Exclusion criteria

Nurses who had attended a seminar or workshop on smoking-related topics were excluded from the study.

Description of the tool

Demographic data: Demographic data include age, sex, religion, qualification, years of experience, marital status and experience at the Centre for Addiction Medicine (CAM).

Smoking knowledge, attitudes, and practices (S-KAP) scale: A self-administered Smoking Knowledge, Attitudes, and Practices (S-KAP) scale developed by Kevin L. Delucchi, Ph.D., Barbara Tajima, Ed.M., and Joseph Guydish, Ph.D., MP [20] was used for the present study

which consisted of items assessing attitude and self-efficacy. The tool also included items from Fagerstrom Test for Nicotine Dependence scale [21,22].

Scale properties were indexed by Cronbach's alpha coefficient with 95% confidence intervals using Kistner and Muller's F approximation [23]. The scale had a Standardized Cronbach's alpha coefficient of attitude and self-efficacy items which was 0.74 and 0.72 respectively. The proposed scale has reasonably good psychometric characteristics and allows researchers to quantify staff attitude and self-efficacy of smoking cessation treatments and issues [24]. As the scoring varied in format, five items with three-point response were recorded as 1, 3, 5 instead of 1, 2, 3, allowing all the items to be analyzed using a common scale ranging from 1 to 5.

Data collection procedure

Permission was taken from the Head of the Department of Nursing for data collection. The researcher approached the hospital units and obtained permission from the nursing officials to include the staff nurses in the study. The staff nurses in each hospital unit were explained about the nature of the study. All those who were eligible and expressed willingness to participate in the study were invited. Duties were arranged accordingly so that all the nurses who gave consent were available for data collection which required 10-15 minutes of the nurses' time. Data were collected with the help of my colleagues who were involved in the distribution, supervision, and collection of the questionnaire. Out of 84 subjects who volunteered, 81 were available for data collection. The other three were on leave due to various reasons and not able to be interviewed as well.

Ethical Consideration

Permission was taken from all the concerned authorities of the multi-specialty hospital, Medical Superintendent and Head of the Department of Nursing of National Institute of Mental Health and Neuro Sciences (NIMHANS). Written permission through e-mail was taken from the developer of the study instrument to use the tool. Confidentiality and protection of respondent's identity were assured to the study subjects and written consent was obtained from them.

Data Analysis

Data analysis was done using Statistical Package for Social Sciences (SPSS) Version 15. Descriptive statistics and inferential statistics were used for the statistical analysis. Frequency and percentage were used for the demographic characteristics, chi-square test for association of demographic data and smoking status with attitude and self-efficacy, Pearson correlation coefficient for correlation of attitude and self-efficacy, and Independent two-sample t-tests (two-tailed) to

Table 1: Demographic data of the study subjects.

Demographic variables	Frequency (f)	Percentage (%)
Age in years		
20-30	29	35.8
31-40	35	43.2
41-50	13	16
51-60	4	5
Sex		
Male	19	23.5
Female	62	76.5
Marital status		
Single	21	26
Married	59	72.8
Widow/widower	1	1.2
Religion		
Hindu	43	53.1
Muslim	1	1.2
Christian	37	45.7
Professional qualification		
GNM	43	53.1
BSc Nursing	37	45.7
MSc Nursing	1	1.2
Professional experience		
< 5 year	25	30.8
6-10 years	16	19.8
11-15 years	22	27.2
> 15 years	18	22.2
Experience in CAM		
Yes	27	33.3
No	54	66.7

Note: CAM is Centre for Addiction Medicine.

compare the mean score in attitude and self-efficacy. The level of significance was set as 0.05.

Demographic data of the study subjects

The data depicted that majority 35 (43.2%) of the nurses were in the age group of 31-40 years, 62 (76.5%) female nurses, 59 (72.8%) married, 43 (53.1%) belonged to Hindu religion, 43 (53.1%) possessed Diploma in General Nursing qualification and varied professional experience from less than five years to more than 15 years. Among the participants, 27 (33.3%) had experience at the Centre for Addiction Medicine unit (CAM) (Table 1).

Smoking status of the participants

Only 3 (3.7%) of the study subjects had the habit of smoking and the remaining 78 (96.3%) were non-smokers. All the three smoking subjects were males and none of the female nurses smoked according to their written report. Among the three smokers, 2 (66.7%) smoked his first cigarette after 60 minutes of waking up and 1 (33.3%) smoked within 31-60 minutes of waking. All the three smokers did not find difficulty to refrain from smoking in places where it is forbidden, and they also expressed possibility to give up smoking sometimes later, as they all smoked less than five cigarettes per day. One of three smokers scored 3/10 in Fagerstrom Test for Nicotine Dependence (FTND) and the other two

Table 2: Mean and standard deviation of attitude and self-efficacy scales.

Scores	Minimum	Maximum	Mean	SD
Attitude	12	39	29.23	5.698
Self-efficacy	19	47	35.87	5.883

Table 3: Score ranges of attitude and self-efficacy.

Scores	Frequency	Percentage
Attitude		
Negative	17	21
Positive	64	79
Self-efficacy		
Less	16	19.8
More	65	80.2

scored 2/10 which was considered to be low and very low dependence respectively.

Mean and Standard Deviation of attitude and self-efficacy scales

The minimum: maximum score for attitude and self-efficacy was 12:39 and 19:47 respectively. Thus, the mean and SD for attitude and self-efficacy was 29.3 ± 5.698 and 35.87 ± 5.883 respectively (Table 2).

Score ranges of attitude and self-efficacy

The minimum score summed with the maximum score divided by two was considered as margin to differentiate negative and positive attitude as well as less and more self-efficacy. With this regard, 17 (21%) had a negative attitude and 64 (79%) positive attitude. Similarly, 16 (19.8%) had less self-efficacy and 65 (80.2%) more self-efficacy (Table 3).

Association of attitude and self-efficacy score with experience at centre for addiction medicine unit

Irrespective of experience at Centre for Addiction Medicine unit, 64 (79%) study subjects possessed positive attitude and 65 (80.2%) high self-efficacy. However, subjects who had experience at Centre for Addiction Medicine unit possessed more positive attitude 23 (85.2%) and high self-efficacy 25 (92.6%) than those who did not. Though there was no significant difference in attitude score between subjects with and without experience at Centre for Addiction Medicine, there was a significant difference ($p < 0.05$) in self-efficacy score (Table 4).

Association of attitude and self-efficacy score with gender

Irrespective of the gender, 64 (79%) subjects had a positive attitude and 65 (80.2%) high self-efficacy in smoking cessation care. The table also explores the more positive attitude and self-efficacy scores in female subjects than males. Though there seems to be no statistically significant difference, female subjects had slightly higher scores (attitude-82.3% and self-efficacy-82.3%) than the males (attitude-68.4% and self-efficacy-73.7%) (Table 5).

Table 4: Association of attitude and self-efficacy score with experience at centre for addiction medicine unit.

	Experience at CAM				Total		Pearson chi-square tests		
	Yes		No						
	Fre (f)	Perc (%)	Fre (f)	Perc (%)	Fre (f)	Perc (%)	P value	df	Asymp.sig (2-sided)
Negative	4	14.8	13	24.1	17	21	0.931	1	0.335
Positive	23	85.2	41	75.9	64	79			
Total	27	100	54	100	81	100			
Less	2	7.4	14	25.9	16	19.8	3.894	1	0.048*
More	25	92.6	40	74.1	65	80.2			
Total	27	100	54	100	81	100			

Note: CAM is Centre for Addiction Medicine, *p < 0.05.

Table 5: Association of attitude and self-efficacy score with gender.

Domains		Gender				Total		Pearson chi-square tests		
		Male		Female						
		Fre (f)	Perc (%)	Fre (f)	Perc (%)	Fre (f)	Perc (%)	p value	df	Asymp.sig (2-sided)
Attitude	Negative	6	31.6	11	17.7	17	21.0	1.679	1	0.195
	Positive	13	68.4	51	82.3	64	79.0			
	Total	19	100	62	100	81	100			
Self - Efficacy	Less	5	26.3	11	17.7	16	19.8	0.674	1	0.412
	More	14	73.7	51	82.3	65	80.2			
	Total	19	100	62	100	81	100			

Table 6: Association of attitude and self-efficacy score with nurses' smoking status.

Domains		Smoking status				Total		Pearson chi-square tests		
		Smokers		Non-smokers						
		Fre (f)	Perc (%)	Fre (f)	Perc (%)	Fre (f)	Perc (%)	p value	df	Asymp.sig (2-sided)
Attitude	Negative	1	33.3	16	20.5	17	21	0.286	1	0.593
	Positive	2	66.7	62	79.5	64	79			
	Total	3	3.7	78	96.3	81	100			
Self-Efficacy	Less	1	33.3	15	19.2	16	19.8	0.363	1	0.547
	More	2	66.7	63	80.8	65	80.2			
	Total	3	3.7	78	96.3	81	100			

Association of attitude and self-efficacy score with nurses' smoking status

Irrespective of the nurses smoking status, 64 (79%) of them scored positive attitude and 65 (80.2%) high self-efficacy. However, though there was no statistically significant difference, the scores of non-smokers (positive attitude-79.5% and high self-efficacy-80.8%) were slightly higher than that of smokers (positive attitude-66.7% and high self-efficacy-67.7%) (Table 6).

Correlation between attitude and self-efficacy

There was a significant correlation between the two domains where $r = 0.674$ which is statistically significant at $p = 0.01$ level. This implies that higher the attitude on smoking cessation care, higher the self-efficacy (Table 7).

Table 7: Correlation between attitude and self-efficacy.

Correlation	Attitude
Self-efficacy	0.674**
Sig. (2-tailed)	0.001

Note: **p < 0.01.

Discussion

Hospital is the right place for a nurse to create awareness and help patients to quit smoking and hospital stay is a great opportunity for the patient to refrain from smoking. It was found that 99.1% of the nurses felt that hospitalization is the suitable time for smoking cessation intervention [25]. The present study revealed that the nurses had positive attitude and high self-efficacy in rendering smoking cessation interventions which may probably be due to the wide exposure of the nurses

to hospitalized patients in hospital with well-equipped psychiatric units and special units for de-addiction.

In the present study, among the 81 study subjects, 19 (23.5%) were male nurses and 62 (76.5%) were female nurses. As the hospital possessed relatively more female nurses, it is obvious that there were comparatively more female study participants. There were only 3.7% of study subjects who were smokers and all of them were males. Another similar study also expressed that only two percent of participants were current, and one percent was former smokers [26]. Worldwide it is estimated that men smoke nearly five times as much as women [5]. The World Health Organization stated about 22 percent of women in developed countries and nine percent of women in developing countries smoke tobacco [27]. However, numerically the number of women smoking could be more in developing countries [28]. Though the female participants were more when compared to males, there was no female nurse who smoked which might contribute to higher attitude and self-efficacy scores in females. This is in contradiction with a study which revealed that smoking is more common in female nurses and the prevalence of smoking among female nurses was 18.6%, which was higher than the age-adjusted prevalence of the general female population [29]. In India, smoking among females is considered to be against the culture and tradition. Moreover, people who are orthodox and follow the culture strongly, believe smoking to be against their customs. However, smoking among nurses varies across countries in the world.

To lean on the better way of smoking cessation intervention, a positive attitude and high self-efficacy play a major role. In this study, irrespective of the demographic data, a majority of the study subjects showed positive attitudes 64 (79%) and high self-efficacy 65 (80.2%) in providing smoking cessation care to hospitalized patients. The nurses working in mental health unit commonly come across patients who smoke and are aware of the options to help them in quitting. This may be the major reason that most of the study participants had better scores in attitude and self-efficacy. All nurses irrespective of their demographic characteristics had a positive attitude to motivate patients to quit tobacco use [25]. However, the present study showed experience at the Centre for Addiction Medicine unit inculcates more positive attitude (85.2%) and higher self-efficacy (92.6%) than those who lacked the experience. This is because of the experience they gained at Centre for Addiction Medicine where there are different units accommodated with patients addicted to various substances who may or may not be suffering from mental illness. Though other nurses in different psychiatric units provide care to patients who smoke, structured treatment modalities, structured teaching programs, attending regular rounds with multidisciplinary team who are specialized in addiction

medicine, conducting health education programs and dramas with the help of nursing students, attending counselling sessions along with clinical psychologist greatly influence the nurses working at Centre for Addiction Medicine to develop more positive attitude and practice high self-efficacy in providing care to hospitalized patients.

The proportion of nurses trained in smoking cessation found a positive association between training in smoking cessation and activity relating to smoking cessation and positive attitudes towards giving such interventions [30], more frequent practice of cessation interventions [26] helping patients to quit smoking [31] and behaviour for smoking cessation counselling [32]. Attitudes and beliefs about smoking are significantly associated with nurse counselling behaviours [15]. The present study also revealed a highly significant correlation between attitude and self-efficacy ($r = 0.674$). Brief training facilitates both short- and long-term changes in nurse attitudes and behaviours regarding smoking cessation counselling [33]. Another study showed no significant differences in smoking cessation self-efficacy scores in the treatment and control groups but when background variables were controlled, self-efficacy was significantly higher in the intervention group [34].

Almost all the participant believed that they could succeed in helping patients to quit smoking behaviour. Participants also believed that they possessed appropriate skills to deliver the antismoking message effectively, although stronger beliefs were characteristic of non-smokers [35]. Non-smokers in this study had a more positive attitude (79.5%) than the smokers (66.7%). This implied the strong belief they possessed in smoking cessation strategies that would enable them to be a good role model. With regard to the beliefs towards tobacco control policies, non-smokers were more positive in regard to banning smoking when compared to current smokers [36].

Ensuring that Registered Nurses (RNs) are knowledgeable and have the self-efficacy to provide clinical interventions, can contribute to declines in tobacco use among their patients who smoke [37]. More flexible, open-ended, combination approaches of pharmacotherapy and counselling may be more successful in smoking cessation in psychiatric patients. Training all practice nurses in smoking cessation, and offering nurses who smoke effective smoking cessation services, is likely to help achieve the targets for smoking cessation [38].

The role of nurses and their holistic focus enable them to include smoking cessation and promotion of smoke-free environments in nursing care at all levels of the continuum of health and illness [39]. Though the participants who smoke was less in this study, studies show that smoking prevalence for mental health nurses remains higher than for other nurses and the general

population [40]. This is of concern because the smoking status of nurses has been shown to affect their attitudes towards smoking and smoking cessation, and also has an impact on the provision of smoking cessation advice [41,42]. This has a greater effect on the nurses' self-efficacy. Reducing the number of mental health workers who smoke will play a key role in the success of this strategy. In addition to intervention, psychiatric nurses need to step up and take an active role in initiating and supporting tobacco control policy and legislation [43]. Continuing education, skill development and improved understanding of tobacco cessation facts may increase self-efficacy [44].

This study suggest that all the nurses should develop positive attitude and cultivate more self-efficacy by exposing them to a formal training in smoking cessation interventions, so that their behaviour in these interventions improves to benefit the hospitalized patients who smoke and are hospitalized for mental illness. It is an essential responsibility for the nursing profession to train nursing staff to help patients quit smoking.

Limitations

The limitations in the study were lack of randomization among study subjects, the smoking status was a written report by the participants rather than physiological report (single breath test for carbon dioxide), and the study was limited to the nurses working in psychiatric set up alone.

Conclusion

The majority of the study participants had a positive attitude and more self-efficacy in rendering the smoking cessation intervention to the hospitalized patients. When associated with experience at the Centre for Addiction Medicine unit, the subjects had higher scores than those without. Similarly, when associated with gender, female subjects had higher scores than males. Though there was no association found between smokers and non-smokers, non-smokers had high scores in both attitude and self-efficacy. Attitude and self-efficacy were highly positively correlated. Hospitals should implement a more focused training program on topics related to smoking and interventions. Moreover, the nurses should be rotated in their area of duties so that every nurse receives substantial experience at the Centre for Addiction Medicine.

Implication

Implication for nursing practice

The present study showed that nurses possessed positive attitude and high self-efficacy in providing smoking cessation care. Further, it was evident that the participants who had experience at Centre for Addiction Medicine unit had comparatively high scores. Hence adequate exposure to the unit and intensive training in

smoking cessation interventions may be incorporated, so that all the nurses are trained adequately to gain positive attitude and develop more self-efficacy in caring for hospitalized patients who smoke, especially if suffering from mental illness.

Implication for nursing research

Further studies are warranted in smoking related topics with larger population and different interventional strategies. Additionally, comparison of nurses' attitude and self-efficacy in smoking cessation care between the patients suffering and not suffering from mental illness is required to find out the level of ease and difficulties in providing the intervention. None of the study reviewed revealed the outcomes of smoking cessation program for persons who smoke and are hospitalized for a mental illness; this is extremely important and should be encouraged and scrutinized further.

Implication for nursing education

Positive attitude and high self-efficacy are required for a nursing student while engaging in smoking cessation care to the patients, especially if accompanied with mental illness. Before the students start working as bedside nurses, it is important to impart education regarding smoking related courses. Apart from the regular course in those topics, academic education should be planned for smoking cessation interventions so as to impact a change from negative to positive attitude, preserve high positive attitude and enhance more self-efficacy which require a structured teaching strategy.

Acknowledgment

I extend my sincere thanks to the authorities who permitted me to conduct the study. I express my hearty thanks to Mr. Delucchi, K for permitting me to use the items from S-KAP instrument in this study. I also thank Ms. Mariamma Philip for helping me in statistics. It is my huge pleasure in thanking the participants and other nursing professionals.

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. No assistance of medical writing experts was obtained to write or there is no conflict of interest in the study.

References

1. (2008) The global burden of disease.
2. (2014) Tobacco fact sheet. World Health Organization.
3. World Health Organization (2008) Report on the global tobacco epidemic: The MPOWER package.
4. Guindon GE, Boisclair D (2003) Past, current and future trends in tobacco use. UCSF, Washington.
5. Belluck P (2013) Smoking, once used to reward, faces a ban in mental hospitals. The New York Times.
6. CDC (2013) Morbidity and mortality weekly report: Adult

- smoking: Focusing on people with mental illness, United Stated.
7. Stewart C (2013) Smoking, and mental illness: Will e-cigarettes save lives? *Mental Health Humor*.
 8. Chad M, Jeanette W, Mandy M, Alexis G, Laura M (2009) Smoking cessation for persons with mental illness: A toolkit for mental health providers. Aurora, Colorado.
 9. Devlin M (2009) 2008 New Zealand tobacco use survey: Quitting results. Ministry of Health, Wellington, NZ.
 10. Rice VH, Stead LF (2007) Nursing interventions for smoking cessation. *Cochrane Database Syst Rev*.
 11. Quick Reference Guide for Clinicians (2010) Treating tobacco use and dependence.
 12. Taylor CB, Miller NH, Herman S, Smith PM, Sobel D, et al. (1996) A nurse-managed smoking cessation program for hospitalized smokers. *Am J Public Health* 86: 1557-1560.
 13. Olivier D, Lubman DI, Fraser R (2007) Tobacco smoking within psychiatric inpatient settings: Biopsychosocial perspective. *Aust N Z J Psychiatry* 41: 572-580.
 14. Lev EL (1997) Bandura's theory of self-efficacy: Applications to oncology. *Sch Inq Nurs Pract* 11: 21-37.
 15. Borrelli B, Hecht JP, Papandonatos GD, Emmons KM, Tatewosian LR, et al. (2001) Smoking-cessation counseling in the home. Attitudes, beliefs, and behaviors of home healthcare nurses. *Am J Prev Med* 21: 272-277.
 16. West R, McNeill A, Raw M (2000) Smoking cessation guidelines for health professionals: An update. *Health education authority. Thorax* 55: 987-999.
 17. Percival J (2002) Strategies for smoking cessation. *Nurs Times* 98: 66-67.
 18. Dao TM, Nguyen VH, Dao NP (2008) Smoking among Vietnamese health professionals: Knowledge, beliefs, attitudes, and healthcare practice. *Asia Pac J Public Health* 20: 7-15.
 19. Adamek R, Stoczyński J, Maksymiuk T, Zysnarska M, Gromadecka-Sutkiewicz M, et al. (2012) Prevalence of tobacco smoking among nurses and the awareness of harmfulness of smoking habit. *Przegl Lek* 69: 969-972.
 20. Delucchi KL, Tajima B, Guydish J (2009) Development of the smoking knowledge, attitudes, and practices (S-KAP) instrument. *J Drug Issues* 39: 347-364.
 21. Heatherton TF, Kozlowski LT, Frecker RC, Fagerstrom KO (1991) The Fagerstrom Test for Nicotine Dependence: A revision of the fagerstrom tolerance questionnaire. *Br J Addict* 86: 1119-1127.
 22. Pomerleau C, Carton SM, Lutzke ML, Flessland KA, Pomerleau OF (1994) Reliability of the Fagerstrom tolerance questionnaire and the Fagerstrom test for nicotine dependence. *Addict Behav* 19: 33-39.
 23. Kistner EO, Muller KE (2004) Exact distributions of intraclass correlation and Cronbach's alpha with Gaussian data and general covariance. *Psychometrika* 69: 459-474.
 24. Guydish J, Tajima B, Chan M, Delucchi KL, Ziedonis D (2011) Measuring smoking knowledge, attitudes and services (S-KAS) among clients in addiction treatment. *Drug Alcohol Depend* 114: 237-241.
 25. Sreedharan J, Muttappallymyalil J, Venkatramana M (2010) Nurses attitude and practice in providing tobacco cessation care to patients. *J Prev Med Hyg* 51: 57-61.
 26. Chan SS, Sarna L, Wong DC, Lam T (2007) Nurses tobacco-related knowledge, attitudes, and practice in four major cities in China. *J Nurs Scholarsh* 39: 46-53.
 27. World Health Organization (1998) Female smoking.
 28. Mackay J, Amos A (2003) Women and tobacco. *Respirology* 8: 123-130.
 29. Ohida T, Osaki Y, Kobayashi Y, Sekiyama M, Minowa M (1999) Smoking prevalence of female nurses in the national hospitals of Japan. *Tobacco Control* 8: 192-195.
 30. McEwen A, West R (2001) Smoking cessation activities by general practitioners and practice nurses. *Tobacco Control*.
 31. McCarty MC, Hennrikus DJ, Lando HA, Vessey JT (2001) Nurses' attitudes concerning the delivery of brief cessation advice to hospitalized smokers. *Pre Med* 33: 674-681.
 32. Barta SK, Stacy RD (2005) The effects of a theory-based training program on nurses' self-efficacy and behavior for smoking cessation counseling. *J Contin Educ Nurs* 36: 117-123.
 33. Borrelli B, Lee C, Novak S (2008) Is provider training effective? Changes in attitudes towards smoking cessation and counseling behaviors of home health care nurses. *Prev Med* 46: 358-363.
 34. Johnson JL, Budz B, Mackay M, Miller C (1999) Evaluation of a nurse-delivered smoking cessation intervention for hospitalized patients with cardiac disease. *Heart Lung* 28: 55-64.
 35. Dwyer T, Bradshaw J, Happell B (2009) Comparison of mental health nurses' attitudes towards smoking and smoking behavior. *Int J Ment Health Nurs* 18: 424-433.
 36. Patelarou E, Vardavas CI, Ntzilepi P, Warren CW, Barbouni A, et al. (2011) Nursing education and beliefs towards tobacco cessation and control: A cross-sectional national survey (GHPSS) among nursing students in Greece. *Tob Induc Dis* 9: 4.
 37. Lenz BK (2008) Beliefs, knowledge, and self-efficacy of nursing students regarding tobacco cessation. *Am J Prev Med* 35: 494-500.
 38. Hall S, Vogt F, Marteau TM (2005) A short report: Survey of practice nurses' attitudes towards giving smoking cessation advice. *Family Practice* 22: 614-616.
 39. Jones M, McLachlan R (2006) Leading for Outcomes - A framework for holistic care. New Zealand College of Nurses.
 40. Hay DR (1998) Cigarette smoking by New Zealand doctors and nurses: results from the 1996 population census. *N Z Med J* 111: 102-104.
 41. Becker DM, Myers AH, Sacci M, Weida S, Swank R, et al. (1986) Smoking behavior and attitudes towards smoking among hospital nurses. *Am J Public Health* 76: 1449-1451.
 42. Padula CA (1992) Nurses and smoking: Review and implications. *J Prof Nurs* 8: 120-132.
 43. Cataldo JK (2001) The role of advanced practice psychiatric nurses in treating tobacco use and dependence. *Arch Psychiatr Nurs* 15: 107-119.
 44. Wetta-Hall R, Ablah E, Frazier LM, Molgaard CA, Berry M, et al. (2005) Factors influencing nurses' smoking cessation assessment and counseling practices. *Journal of Addictions Nursing* 16: 131-135.