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Perceived Barriers Limiting Tobacco Cessation Counseling in Patients with Mental Illness – A Cross-sectional Study

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Abstract

Introduction: Tobacco use in mentally ill patients is comparatively high than the general population. A nurse-managed smoking cessation intervention can increase cessation rates for hospitalized patients. However, many perceived barriers limit their capacity in providing tobacco cessation counseling.

Aim: This study aims to assess the nurses' perceived barriers in tobacco cessation counseling and their ability to tailor the counseling method.

Methods: A cross-sectional research design was selected. The sample size was 90 with a response rate of 78 (86.7%).Nurses working in the mental health department in a multi-specialty hospital, Bengaluru, India, were selected by purposive sampling technique. Items for assessing the barriers limiting cessation counseling was extracted from a self-administered "Smoking - Knowledge, Attitudes, and Practices" scale. Frequency and percentage were used for statistical analysis.

Results: A majority of the nurses perceived "lack of time", "lack of training" and "other health problems requiring attention" as a "very important" barriers; "patients not interested", "patients do not comply", "lack of impact on patients", "lack of patient education material", "lack of community resources to refer patients" and "complexity of smoking cessation guidelines" as "somewhat important" barriers; and "lack of reimbursement" as "only slightly important" barriers limiting the capacity to provide tobacco counseling services. Also, a majority agreed on their ability to tailor cessation counseling according to the patients' needs.

Conclusion: Nurses encounter many barriers of varying importance in providing tobacco cessation counseling. However, they agree with their ability to tailor counseling according to individual needs. The health care system should control the barriers and empower the nurses in implementing tobacco cessation counseling.

Keywords: Perceived barriers; Tobacco cessation; Counseling, Nurses; Ability and Mental illness.

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Key Messages

Tobacco use increases the tobacco-related comorbidity and worsening of psychiatric symptoms in patients with mental illness. Despite nurses' ability to tailor counseling services according to the needs, several barriers hamper tobacco cessation counseling, as perceived by them. The health care system should act to control barriers and empower nurses.

Introduction

Tobacco use is one of the preventable causes of mortality and morbidity worldwide. It causes major health problems in an otherwise healthy human. Tobacco use may be associated with other substance-use disorders such as alcohol, cannabis, and opiate dependence.[1]Despite affecting all bodily organs, tobacco use kills people due to major health issues such as cardiovascular disease, stroke, cancer, and respiratory diseases.[2]

Tobacco use in people with mental health problems is common and is associated with heavy use.[3] Smoking prevalence in mentally ill patients is comparatively high than any other general population.[4] In particular, it is still high in patients with severe mental illness and further gets magnified with a greater number of psychiatric diagnoses.[5] Persons with serious mental illness die 25 years earlier than average, often from tobacco-related illnesses.[5] The self-medication hypothesis explains that persons with mental illness use tobacco to

reduce the intensity of their psychiatric symptoms.[6] In contrast, evidence report that tobacco use may worsen psychiatric symptoms like depression and anxiety.[7] Tobacco use and psychiatric symptoms are bidirectional in influencing each other. Tobacco use increases the rate of metabolism, reducing the drug therapeutic level in the blood, thereby increasing the need for an increased dose of antipsychotic drugs.[8] Tobacco use combined with mental illness may also lead to repeated hospitalization.[9]

Patients admitted to the hospital have the opportunity of being helped by health professionals to quit tobacco. A study by Siru et al. (2009) reported that among smokers hospitalized with mental illness, 65% showed interest in quitting tobacco use, yet require professional help.[10]Excitingly, nurses are said to be a large and strategically planned group to help avert the global tobacco epidemic.[11]A nurse-managed smoking cessation intervention can significantly increase cessation rates for hospitalized patients.[12,13]

This research is undertaken to assess the barriers and their intensity in counseling patients with mental illness. This study also aimed to assess the nurses' beliefs about their ability to modify counseling according to individual needs.

Material and Methods

Setting and Participants

The cross-sectional study was conducted in a multi-specialty hospital, Bengaluru, India, which includes specialties in mental health. The nurses working in the mental health department were selected for the study by a purposive sampling technique. Ninety nurses who volunteer in participation were selected for the study.

Selection criteria

Inclusion criteria

Both male and female nurses working in mental health units and have atleast 2-3 weeks of clinical experience in patients with substance use disorder.

Exclusion Criteria

Nurses who do not wish to consent for the study and are on night shifts.

Measures

Demographic Data survey Tool

The demographic data consists of age, sex, marital status, religion, professional qualification, and professional experience to find out the personal profile of the study subjects.

Barriers Scale

A self-administered Smoking Knowledge, Attitudes, and Practices (S-KAP) scale[14] consisted items for measuring barriers, rating the importance of various reasons that might limit the capacity to offer smoking counseling - "not at all important", "only slightly important", "somewhat important" and "very important" barriers. The tool also has one item for assessing the ability to tailor cessation counseling according to patients' needs. Scale properties were indexed by Cronbach's alpha coefficient with 95% confidence intervals using Kistner and Muller's F approximation.[15] The barriers scale had a Standardized Cronbach's alpha coefficient of 0.81 and has reasonably good psychometric characteristics that allow researchers to quantify staff barriers in smoking cessation treatments.[16]

Study Procedure

Permission was taken from the hospital where the study was conducted. Permission was obtained through email from the tool developer to use the scale (S-KAP). The nature of the study was explained to the participants. Written consent was obtained after ensuring the confidentiality of their identity and individual responses. In April 2019, the questionnaire was distributed and collected from all areas of the nurses working in mental health units during the coffee break time. It took less than 10 minutes of their time to fill the questionnaire.

Statistical Analysis

Data were analyzed using the SPSS 22 version software. The frequency (f) and percentage (%) were used to interpret the results.

Results

Out of 90 questionnaires distributed, eight were incomplete and four were invalid. Hence a total of 78 questionnaires were complete and analyzed.

Socio-Demographic data of the study subjects

Among 78 study participants, the majority of the study subjects (43.6%) were in the age group of 31-40 years, 76.9% were females, 73.1% were married, 53.8% were Hindus, and 52.6% had Diploma Qualification with varied professional experience ranging from less than five years to more than 15 years (table 1)

Table 1: Socio-Demographic Data of the Study Subjects (N=78)

Socio-demographic Variables	Frequency	Percentage
	(f)	(%)
Age in Years		
20-30	29	37.2
31-40	34	43.6
41-50	12	15.4
51-60	3	3.8
Sex		
Male	18	23.1
Female	60	76.9
Marital Status		
Single	20	25.6
Married	57	73.1
Widow/widower	1	1.3
Religion		
Hindu	42	53.8
Muslim	1	1.3
Christian	35	44.9
Professional Qualification		
Diploma	41	52.6
BSc Nursing	36	46.2
MSc Nursing	1	1.3
Professional Experience		
< 5 year	25	32.1
6-10 years	15	19.2
11-15 years	21	26.9
>15 years	17	21.8

Barriers limiting capacity to offer tobacco cessation services

Very important barriers

The factors that the majority of nurses rated as "very important" reason are "lack of time" - 43.6%, "lack of training" - 60.3%, and "other health problems require attention" - 69.2%.

Somewhat important barriers

Most of the nurses felt that "patients not interested" - 44.9%, "patients do not comply" - 56.4%, "lack of impact on patients" - 44.9%, "lack of patient education material" - 48.7%, and "complexity of smoking cessation guidelines" - 57.7% are "somewhat important" barriers in providing counseling.

Only slightly important barriers

34.6% of the nurses rated "lack of reimbursement" and 23.1% rated "lack of community resource to refer patient" as "only slightly important" reason that incapacitates them in cessation counseling.

Not at all important barriers

20.5% of nurses reported a "lack of reimbursement" is "not at all important" reason to prevent nurses' capacity in smoking counseling (Table 2).

Ability to tailor Tobacco cessation counseling

While 14.1% of nurses "strongly agreed", the majority of the nurses 57.7% "agreed" their ability

Table 2: Barriers that might limit the capacity to offer counseling (N=78)

Barriers	Not at all important		Only slightly important		Somewhat important		Very important	
	Fre (f)	Per (%)	Fre (f)	Per (%)	Fre (f)	Per (%)	Fre (f)	Per (%)
Patient not interested	3	3.8	15	19. 2	35	44.9	25	32. 1
Patients do not comply	3	3.8	11	14. 1	44	56.4	20	25. 6
Lack of impact on patients	6	7.7	15	19. 2	35	44.9	22	28. 2
Lack of time	8	10. 3	12	15. 4	24	30.8	34	43. 6
Lack of reimbursement	16	20. 5	27	34. 6	18	23.1	17	21. 8
Lack of community resources to refer patients	7	9	18	23. 1	32	41	21	26. 9
Lack of patient education material	3	3.8	13	16. 7	38	48.7	24	30. 8
Lack of training	1	1.3	5	6.4	25	32.1	47	60. 3
Complexity of smoking cessation guidelines	2	2.6	11	14. 1	45	57.7	20	25. 6
Other health problems require attention	1	1.3	2	2.6	21	26.9	54	69.2

Table 3: Ability to tailor tobacco cessation counseling to patients needs (N=78)

I am able to tailor cessation counseling to my patients' needs									
Strongly Disagree		Disagree		unsure		agree		strongly agree	
Fre (f)	Per (%)	Fre (f)	Per (%)	Fre (f)	Per(%)	Fre (f)	Per(%)	Fre (f)	Per(%)
0	0	2	2.6	20	25.6	45	57.7	11	14.1

to tailor cessation counseling. 25.6% of nurses were "unsure" about their ability and only 2.6% of nurses "disagreed" their ability to tailor the counseling style according to the patients' needs (Table 3).

Discussion

Main Summary

Counseling plays a major role in smoking cessation among individuals. There are various nurse-related and patient-related barriers limiting tobacco cessation counseling. Lack of time, adequate training, and patients' health issues requiring more attention were "very important barriers". Uninterested patients, poor compliance, poor community referral services, lack of patient education material, complex tobacco cessation guidelines, less impact on patients were "somewhat important" barriers and only lack of reimbursement was a "slightly important" barrier in counseling services. However, nurses believe their ability to tailor the counseling method according to the needs of the individual. Counseling, by itself, requires good training and practice while barriers in counseling make it tough to practice.

Comparison with other studies

Compared with other health professionals, nurses constitute the largest workforce and are readily available for the patients. As patient education and preventive healthcare is an integral component of nursing,[17] improving nurses' involvement in tobacco cessation interventions[18] would help to motivate patients in quitting or cutting down tobacco use. This study reported that "lack of patients' interest" and "lack of counseling impact" on patient's health as "somewhat important" barriers limiting counseling services.Lack of motivation and uninterested are important factors that limit counseling.[19]Low motivation to quit smoking is assumed in smokers with a mental illness. However, no difference in motivation to quit between those with mental illness and the general population is reported.[10]

Patients not complying with the counseling sessions is detrimental to provide cessation services. Treatment adherence and retention are critical obstacles to overcome in smokers with mental illness.[20] Also, available educational material on tobacco cessation does not cater to the needs of all the patients, in general. It is neither suited to the various literacy levels of the individuals nor readily available. This is consistent with a study where 81% reported a perceived lack of necessary materials as a major barrierin smoking cessation.[21]

Community services that provide tobacco cessation treatment are inadequate for the high prevalence rate of tobacco use. This difficulty to refer patients aids to barriers in rendering counseling care. From this study, nearly one-fourth of the nurses felt that "lack of community resources" was only a 'slightly important" reason that limits them from providing better smoking counseling. In contrast, a survey report implied that 63% of the nurses reported a "lack of community resources to refer to" as a major barrier in smoking cessation.[22]

The most important barriers found from this study was "lack of time" and "lack of adequate training" on tobacco cessation interventions in working place. This might be attributed to the prevailing shortage of working staff and highly demanding work to be carried out while working with patients with mental illness. This leads to inadequate or no time to think about other issues such as tobacco use.

Trained professionals are reportedly 1.5 to 2.5 times more likely to engage in tobacco cessation strategies[23] and a lack of concrete techniques in smoking counseling incapacitates smoking cessation advice.[24]Nurses are overburdened with demands and time pressure[25] along with the lack of familiarity with effective treatments,[26] and absence of adequate training[27]which probably limits them from providing counseling services.

On the other hand, evidence also reported that health professionals do not ask about tobacco usage, do not utilize the available interventions, and do not believe talking about tobacco as worth the benefit to the patient.[28] Even though nurses read available tobacco cessation guidelines, the reading materials seem to be complex to understand. More than half of the nurses in this study reported the "complexity of the guidelines" to be one of the barriers in giving tobacco cessation services.

Patients are primarily admitted for their mental problems in the mental health hospital. Mental health professionals believe that symptoms such as depression, anxiety, positive and negative symptoms, and other psychiatric symptoms require attention and priority. The psychological symptoms, often overshadow the mental health benefits of smoking cessation.[29] However, patients are likely to accept advice on changing their tobacco use habits from an acknowledged expert on health problems.[30]Symptom management is also considered a significant barrier within studies concerning people with a mental illness[31] which is in line with the present study.

While a majority of nurses in this study expressed "lack of reimbursement" as only a "sightly important" barrier, only 20.5% perceived it as a "not at all an important" barrier that limits counseling. In contrast, a study reported that incentives for such activities strongly support the provision of smoking counseling.[32] Additionally, evidence also projected that disincentives or lack of reimbursement are notable barriers in providing counseling services.[33]

Other factors such as inadequate knowledge, resistance to advice, difficulty in follow up, difficulty in assessing patient's level of motivation, inadequate space, and poor peer environment to quit and ineffective pharmacotherapy;[22,34] lack of support from hospital administration, and lack of commitment from other health professionals in hospitals;[35] stigmas, perceived hopelessness for abstinence and lack of focus on tobacco users with mental illness[36] limits health professionals in cessation counseling.

Despite various barriers that constrain the nurses' capacity in tobacco counseling, 57.7% of the nurses agreed and 14.1% strongly agreed on their ability to tailor the tobacco cessation counseling according to the patients' needs. This is in line with another study that emphasized that nurses' self-reported delivery of cessation advice was related to attitudes toward offering counseling advice and perceived ability to offer advice.[24]

Strengths and Limitations

The major strength of this study was readily available research participants for inclusion in the study. The time involved in data collection was much less that encouraged the participants to volunteer for the study. The limitation of the study is the small sample size selected by a purposive sampling technique. Additionally, as the results were obtained from nurses exclusively working for patients with mental illness, the generalization of the results may be limited.

Recommendations

Further, research with a large population may be recommended. Also, qualitative methods may be adopted to assess the lived-in experience of barriers hindering tobacco cessation counseling.

Based on the study findings, the private and public organizations in the community and hospital levels should meticulously work in coordination to find out the factors preventing adequate tobacco cessation counseling and strive to overcome those obstacles.

Special training in tobacco cessation counseling, availability of patient education materials in different languages with various levels of literacy, imparting tobacco cessation lessons in educational curriculum, availability of a very simple, brief handbook of tobacco cessation guidelines that can also be used in the busy working area, integrating tobacco cessation treatment along with management of psychiatric illness, ongoing and periodic continuing education and training program, exposure to duties in deaddiction units would help in improving the quality, frequency, and intensity of tobacco cessation counseling process.

Moreover, every patient on each visit should be asked about their tobacco use, interest to quit, and offer help readily. The psychiatric inpatient units could serve an important area in promoting tobacco cessation.

Conclusion

Nurses are huge health care professionals who would bring a major revolution in tobacco cessation through effective counseling techniques. Hospitalization provides a unique opportunity for nurses to deliver tobacco cessation counseling services. Nurses encounter many barriers of varying grades of importance that incapacitates in providing tobacco cessation counseling. However, they agree with their ability to tailor counseling according to individual needs. The health care system should investigate the barriers to control them and empower nurses in implementing tobacco cessation counseling, in general, and to

patients with mental illness, in particular.

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