



Original Article

Psychiatric competencies of general emergency nurses: A cross-sectional study

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Abstract

Objectives: The increase of psychiatric emergency visits to general emergency departments and the necessity of competent providers in terms of knowledge, skill, and ability is even more evident. This study was conducted to investigate the competencies of general emergency nurses in dealing with psychiatric emergencies in the hospitals of Alborz University of Medical Sciences in 2022.

Methods: In this descriptive-cross-sectional study, 227 nurses were included in the study through census method. The data were collected and analyzed through a psychometric questionnaire consisting of four sections frequency, importance, self-efficacy, and educational need assessment.

Results: The results showed that the average rating score of frequency was 2.04 ± 0.75 , importance was 2.37 ± 0.84 , and self-efficacy was 2.14 ± 0.76 . Work experience in psychiatric emergencies and the frequency of exposure and care of psychiatric patients were related to importance and self-efficacy scores. There was a positive and significant relationship between frequency and importance with self-efficacy.

Conclusion: The ranking of the importance, self-efficacy, and frequency of the competencies required in dealing with psychiatric emergencies in the nurses of this study was moderate. According to the role of demographic variables, rotating shifts of public emergency nurses in psychiatric departments and designing relevant educational interventions are suggested.

Keywords: Clinical competence; emergency nursing; psychiatry.

During the past decades, emergency department visits have increased in some developed countries,^[1] and this has caused emergency centers to experience increasing pressure; On the other hand, due to the limitation of beds in medical centers, patients spend more time in the emergency department.^[2] One of the cases of referral to emergency rooms, which has been accompanied by more growth in recent years, is psychiatric emergencies. Psychiatric emergencies are one of the examples of mental disorders. The rate of referral of patients suffering from behavioral disorders or psychiatric emergencies to public emergency rooms is mentioned in the literature

between 5% and 10%.^[3] These conditions are the unintended result of multiple factors, including a lack of resources (including a lack of psychiatric care providers), increased substance use and abuse, economic stressors, and traumatic life events, along with insufficient access to inpatient psychiatric beds.^[4]

General hospital emergency departments are open 24 h a day, 7 days a week, and as a result, are the most convenient places for people with psychiatric disorders or people in crisis to go. Individuals with no prior exposure to the mental health system may not know where to turn and regularly visit public emergency rooms.^[5] The results of studies show that many health-care pro-

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professionals have a negative perception of mental patients, and the stigma of psychiatric diagnoses is as common among nurses, physicians, and other health-care providers as it is among the general public.^[6] Emergency nurses experience strong emotions and negative attitudes when caring for these patients, especially people who have suicidal intentions.^[4,7,8] It seems that the feeling of inadequacy and lack of preparation necessary to provide care in this field is one of the most common reasons for these feelings; studies confirm that most nurses believe that they do not have the necessary skills and knowledge to effectively evaluate and treat patients with psychiatric disorders.^[9,10] Most of the training courses for nurses do not have a major focus on psychiatric diseases,^[11] whereas most of them are designed for emergency nurses focusing on the management of acute physical complaints;^[12] For example, emergency nurses usually participate in various training programs in specialized fields such as trauma, but they do not receive any similar training courses regarding the provision of psychiatric care.^[9]

It seems that in the foreseeable and not-too-distant future, patients with mental disorders and psychiatric emergencies will form a large part of the population of patients referred to the emergency room. Some emergency departments designed solutions to manage this issue, such as employing specialized personnel in the field of psychiatry or allocating special areas of the department for these patients; However, many emergency departments do not have special arrangements to provide services to these patients.^[11] Our information about the level of psychiatric competence and the level of application of psychiatric skills by emergency nurses is very little. This lack of information can create unfortunate consequences in emergency departments; therefore, examining the psychiatric competence of emergency nurses can be a sign of the existing realities and gaps. It can also be a standard for more accurate identification of deficiencies and solutions to resolve these deficiencies. In addition, since the use of tools to measure the psychiatric competence of emergency nurses is a relatively new field of study, conducting studies in this field expands the existing knowledge. For this reason, we are looking for answers to the following questions: What is the level of psychiatric competence of general emergency nurses? How often do they deal with psychiatric emergencies? And what is the relationship between this frequency and the psychiatric competence of emergency nurses? As a result, this study was conducted to determine the competencies of emergency nurses in dealing with psychiatric emergencies in general hospitals of affiliated with Alborz University of Medical Sciences.

Materials and Method

This descriptive-cross-sectional study was conducted in the emergency departments of Alborz University of Medical Sciences in 2022. Out of 360 nurses working in these hospitals,

What is presently known on this subject?

- Psychiatric emergency visits to public emergency departments are increased and competent providers are required.

What does this article add to the existing knowledge?

- There is a positive and significant relationship between the frequency and importance with self-efficacy in the field of psychiatric emergencies.

What are the implications for practice?

- Rotating shifts of public emergency nurses in psychiatric departments and designing relevant educational interventions are suggested.

298 were eligible to enter the study; the link of electronic questionnaires was available to them through the group messaging program (WhatsApp) in the census method. The follow-up of completing the questionnaires was done by sending two reminders. Finally, 227 nurses completed the questionnaire. At least 6 months of work experience in the emergency room, having at least a bachelor's degree in nursing, and willingness to participate in the study were the inclusion criteria.

To collect data, a questionnaire was developed in the study of Mello et al.[9] was used. After obtaining translation permission from the main researcher, the psychometric steps of the instrument were performed based on the WHO protocol^[13] in three steps: forward translation, expert panel, pre-testing, and cognitive interviewing. In this way, first, the English questionnaire was translated into Persian independently by two of the main researchers and then the disputed items were agreed upon. In the next step, a group of experts including psychiatric nurses, psychiatrists, and faculty members of the psychiatric nursing department assessed the content validity of the questionnaire. At this stage, changes were made in the structure of the questionnaire and localization was done. In the final step, to ensure face validity, the questionnaire was given to 10 public emergency nurses as the target group, and ambiguous items were corrected. The final questionnaire consisted of two parts. The first part includes demographic information (age, gender, education degree, nursing work experience, work experience in the emergency department, work experience in the psychiatric emergency room, history of participation in neuropsychological training courses, and history of psychiatric disorders. In the family, the experience of dealing with and caring for patients with psychiatric disorders was dedicated). The second part consisted of 40 items in four sections: importance, self-efficacy, frequency, and educational need assessment. The parts of importance, self-efficacy, and frequency were measured in two parts of assessment and tasks, and all the items were scored from 0 to 4 using a 5-point Likert Scale including never, rarely, sometimes, often, and always. An electronic and self-administered questionnaire was provided to the research subjects. Data were analyzed using Statistical Package for the Social Sciences, version 22.

This article is extracted from the Master's thesis in emergency nursing at Alborz University of Medical Sciences, which

Table 1. Demographic characteristics of nurses participating in the study

Variable	Subgroup	Frequency	Percentage
Gender	Man	172	75.8
	Woman	55	24.2
Degree	BS	197	86.8
	Master's degree	30	13.2
Age (year)	<30	90	39.6
	30–40	110	48.5
	>40	27	11.9
Work experience as a clinical nurse (years)	<5	90	39.6
	5–10	68	30
	>10	69	30.4
Work experience in the emergency department (years)	<1	40	17.6
	1–5	120	52.9
Work experience in psychiatric emergency	>5	67	29.5
	No	183	80.6
Experience of participating in psychiatric training course	Yes	44	19.4
	No	160	70.5
A history of mental disorders	Yes	67	29.5
	No	173	76.2
History of mental disorders in first-degree relatives	Yes	54	23.8
	No	160	70.5
Frequency of exposure and care of patients with psychiatric and mental disorders (per month)	Yes	67	29.5
	None to one person	133	58.6
	Two to five people	63	27.8
	About 10 people	9	4
	More than 10 people	22	9.7

was approved by the ethics committee with the code of ethics IR.ABZUMS.REC.1400.297. This study was conducted in accordance with the Declaration of Helsinki.

Results

Seventy-six percent of the research subjects were women, and the average age was 33.05 ± 6.51 years. Eighty-seven percent had a bachelor's degree, 90 subjects (39.6%) had < 5 years of experience as clinical nurses, and 120 nurses (52.9%) had experience working in the emergency department in the range of 1–5 years. Among the subjects, only 19.4% had experience working in psychiatric emergency and 29.5% had experience participating in psychiatric training courses. 23.8% of the studied samples had a history of mental and psychiatric disorders and 29.5% of first-degree relatives had a history of mental and psychiatric disorders. Furthermore, about 60% (133 people) of nurses reported that they rarely (none to one person) take care of patients with psychiatric and mental disorders in a month (Table 1).

The highest frequency average in the assessment section was related to the item of the history of alcohol and drug abuse, and the lowest average was related to the item of psychiatric

tests. In the task section, the highest average was related to the item of educating the patient and his family in relation to drug side effects, and the lowest was related to the item of giving medication (referring to psychiatric drugs). The highest average importance in the assessment section was related to the item of the history of alcohol and drug abuse, and the lowest was related to the item of neuropsychological tests. Furthermore, in the tasks section, the highest average is for the item of educating the patient and his family in relation to drug side effects and the lowest average is for the item of using techniques to reduce tension in the patient (deep breathing, calm tone, counting numbers, and drinking a glass of water). The highest mean of self-efficacy in the examination section was related to the item of alcohol and drug abuse history and the lowest mean was related to the item of performing psychiatric tests. In the task section, the item of giving medication (refers to psychiatric drugs) was the highest average and the lowest average was related to the item of identifying unusual behavioral changes and related intervention (supporting the patient and family and teaching the family).

The results of the Pearson correlation test showed that there is a positive and significant relationship between frequency ($r=0.575$, $p<0.001$) and importance rating ($r=0.507$, $p<0.001$)

Table 3. Educational needs of nurses in dealing with psychiatric emergencies in emergency nurses

Variable	Mean	SD
Familiarity with common neuropsychiatric drugs	2.72	0.98
Getting to know the side effects of neuropsychiatric drugs	2.80	0.95
Familiarity with nursing diagnoses related to psychiatric disorders	2.53	1.08
Getting to know the neuropsychology tests	2.30	1.14
Familiarity with therapeutic communication techniques	2.62	0.95
Mean	2.59	0.79

SD: Standard deviation.

with the level of self-efficacy in dealing with psychiatric emergencies. Furthermore, the results showed that there was a positive and significant relationship between frequency and the importance rating of nurses' competencies in dealing with psychiatric emergencies ($p < 0.001$, $r = 0.700$).

The results showed that the mean and standard deviation in the variables of frequency was 2.10 ± 0.83 , importance was 2.47 ± 0.86 , and self-efficacy was 2.20 ± 0.83 (Table 2). The highest educational need for the item "familiarity with the side effects of psychiatric drugs" with an average of 2.80 (standard deviation=0.95) and the lowest sense of need for the item "familiarity with psychological tests" with an average of 2.30 (standard deviation=1.14) was related (Table 3).

Discussion

The present study was conducted to investigate the competencies of general emergency nurses in dealing with psychiatric emergencies. The results of the study showed that the average frequency of the required competencies of nurses in dealing with psychiatric emergencies was 2.04 ± 0.75 . Considering that a 5-point Likert Scale with a minimum score of 0 and a maximum score of 4 was used in this study, the average frequency score obtained in this study can be interpreted as average; In other words, 41% of nurses chose the "sometimes" option for the level of exposure to psychiatric emergency situations. The highest average frequency in the assessment section was assigned to the item "examining the history of alcohol and drug abuse" and in the task section to "educating the patient and his family in relation to drug side effects," whereas in the study of Mello et al.,^[9] the highest average rate of frequency was assigned to the investigation of suicidal ideation with 3.01; In general, their subjects chose "often" or "sometimes" for the frequency of examining cases related to psychiatric emergencies.

The average rating of the importance of the competencies required in dealing with psychiatric emergencies was reported as 2.37 (standard deviation=0.84), which can be interpreted as average. In the assessment section, "examining the history

Table 2. Average competencies required for psychiatric emergency

Variable	Subgroup	Mean	SD
Frequency	Assessment	1.99	0.8
	Task	2.10	0.83
	Overall	2.04	0.75
Importance	Assessment	2.29	0.9
	Task	2.47	0.86
	Overall	2.37	0.84
Self-Efficacy	Assessment	2.09	0.77
	Task	2.20	0.83
	Overall	2.14	0.76

SD: Standard deviation.

of alcohol and drug abuse" and in the tasks section, "teaching the patient and his family to drug side effects" received the highest average. Examining suicide ideation or other suicide was the most important from the point of view of the nurses of the Mello study. The analysis of the results of the present study as well as the Mello study shows that the cases that were more repeatable became more important and necessary.^[9]

Wardaningsih believes that addressing mental health issues in the community and health-care settings is a critical aspect of care.^[14] The results of the Gnanapragasam et al.^[15] study showed that psychiatric emergencies are situations in which people's thoughts and behavior change drastically and possible risk threats to real life for the individual or others in the environment. Quick identification and appropriate interventions reduce mortality and disability in psychiatric emergencies.

The results of Clark and colleagues showed that nurses lack the necessary skills to deal with and treat psychiatric patients.^[16] Studies show that nurses have a series of challenges in dealing with these psychiatric emergencies, which include the existence of chaos, lack of knowledge and experience or sufficient skills in dealing with these emergencies, and the lack of a suitable support structure for employees, the negative attitude of health-care providers toward this population, unpleasant duties of nurses, and aggressive behavior of the

patient and lack of motivation to change in the patient; all of which disappeared through appropriate intervention,^[17] The results of the studies show that teaching how to deal with psychiatric emergencies is very important and vital so that failure to teach emergency triage nurses about these emergencies will cause them many problems.^[18-20]

The average self-efficacy of nurses in dealing with psychiatric emergencies was 2.14 (standard deviation=0.76). In other words, nearly 70% of the research participants rated their self-efficacy as moderate-to-very low. More than any other case, the nurses evaluated themselves as competent in examining the patient's psychological history, while the psychiatric test received the lowest score, and these results were predictable, considering the specialization of psychiatric tests and the lack of training in this area. It is worth considering here that the examination of the patient by means of psychiatric tests in the ranking of importance was also assigned a very low score, and this shows that nurses do not feel the need and necessity to perform this examination in daily practice. In Mello et al.'s^[9] study, the average self-efficacy scores were reported from 0.89 to 3.47. In Pekurinen et al.'s^[21] study, the results showed that psychiatric nurses had lower mental health and work self-efficacy than other nursing groups. Meanwhile, some studies point to the inverse relationship between self-efficacy and the control of moral tensions.^[22]

The results of the present study showed that general emergency nurses need more than anything to know the side effects of psychiatric drugs. Familiarity with new drugs and therapeutic communication techniques was placed in the next order, while the lowest average, or in other words, the lowest feeling of need for training was assigned to the item of familiarity with psychiatric tests.

Our results indicated that the ranking of importance and frequency has a positive and significant relationship with the level of self-efficacy in dealing with psychiatric emergencies in general emergency nurses. Furthermore, the results showed that there is a positive and significant relationship between the frequency and the ranking of the importance of nurses' competencies. In the study of Todorova et al.,^[23] the results showed that ambulance nurses believe that the combination of pre-hospital and neuropsychiatric specialties in the pre-hospital emergency department gives them deep knowledge about various psychiatric diseases, treatment options, and alternatives in which increases the space to provide patients with the necessary continuity of care. In a study conducted by Martinez et al.^[19] entitled "Students' perceptions and attitudes following a workplace violence simulation," the results showed that these simulations improved communication skills, empathy, self-efficacy in managing verbally aggressive patients, self-efficacy in determining personal boundaries, and self-efficacy in getting support.

Mavrogiorgou et al.^[24] express that the basic components of successful treatment include establishing a stable and reliable relationship with the patient and the self-efficacy of "quieting" agitated patients with peace and patience. A quick and unambiguous decision about treatment, including consideration of available options for effective drug therapy, is effective based on available tools. Mello points out that since the frequency and importance of functions affect self-efficacy, training, and interventions to emphasize the importance of coping skills may improve self-efficacy.^[9] Some studies emphasize that using empathy methods, avoiding stigmatization, and reducing sensitivity in the patient is very important and vital, and for this reason, training on how to deal with psychiatric emergencies should be provided to all nurses.^[15]

Among the demographic characteristics that were examined in this study, only the experience of working in psychiatric emergencies and the frequency of exposure and care of patients with psychiatric disorders (per month) had a significant relationship with the competence ranking. In Karaminia et al.'s^[25] study, the results showed that there was a significant relationship between work history, shift work, and overtime with clinical competence. The results of Mello et al.'s^[9] study also showed that young and less experienced nurses had lower self-efficacy scores and indicates that young and less experienced nurses may need more support. Although studies in Iran show that there is no significant relationship between gender, level of education, and work experience with nurses competencies,^[26,27] which can be related to the level of quality of in-service training. In our study, age, gender, general work experience, and even educational level were not related to the ranking of competencies, and this shows that the completely specialized and overlooked nature of psychiatric emergencies requires different conditions and requires planning and action. The results of the present study show that it is necessary to dedicate part of the in-service education of all personnel, especially emergency nurses to topics related to the competencies required in dealing with psychiatric patients.

Limitations

This study has some limitations. First, we only examined some competencies of emergency nurses in psychiatric disorders. Also, we faced some problems in the implementation of the project, such as the fact that due to the outbreak of the COVID-19 pandemic, the nurses were faced with a lack of time, and the completion of the questionnaire was done with multiple follow-ups.

Conclusion

The findings of this study showed that the ranking of importance and frequency as well as the self-efficacy of general emergency nurses in facing the required competencies of psychiatric

emergencies was at a medium level. The ranking of importance and frequency has a positive and significant relationship with the level of self-efficacy. A positive relationship was observed between the frequency of exposure and the experience of working in neuropsychological emergencies with self-efficacy. The greatest educational need felt by the nurses was knowing the side effects of psychiatric drugs. Therefore, it is suggested to solve the major educational needs of nurses through the design of continuous educational programs in different formats, especially micro-learning and simulation courses. In addition, the temporary and rotating presence of general emergency nurses in psychiatric departments will be helpful.

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