



ORIGINAL ARTICLE

Individual and Social Factors Affecting Nurses' Attitudes Toward and Quality of Care Given to Patients Who Attempted SuicideFatemeh Basaadat Kavkouhi¹, Fariba Bolourchifard^{2,*}, Ali Darvishpoor Kakhaki², Maliheh Nasiri²¹Student Research Committee, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran²School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran**Corresponding Author:** Fariba Bolourchifard, E-mail: bolourchifard@gmail.com**ARTICLE INFO***Article history*

Received: Sep 3, 2017

Accepted: Mar 9, 2018

Published: Jun 13, 2018

Volume: 3

Issue: 2

Conflicts of interest: None

Funding: None

*Key words**Nurses' Attitudes,**Suicide,**Quality of Nursing Care***ABSTRACT**

Introduction: Nurses are the first healthcare professionals who meet patients who attempt suicide, and their attitudes toward these patients may be important. The purpose of this study was to evaluate the effect of demographic factors on nurses' attitudes toward patients who attempt suicide and the quality of nursing care that these patients receive. **Materials and Methods:** This descriptive-correlational study was performed using the convenience sampling method on 182 nurses working at selected hospitals of medical universities in Tehran, Iran. Data were collected using questionnaires that gathered information about demographics, nurses' attitudes toward patients who attempted suicide, and the quality of nursing care provided. Data were analyzed by the Statistical Package for the Social Sciences v.20 software and by the Pearson test and t-tests. **Results:** Regarding social and mental aspects, we found no significant statistical relationship between age and work experience with respect to nurses' attitudes toward and the quality of care provided to patients who attempted suicide, but women provided higher-quality nursing care than men ($P=0.046$). Although the relationship between education and quality of nursing care was statistically significant ($P=0.007$), we found no significant relationship between education and attitude. **Conclusion:** We found no significant relationship between age and work experience with respect to nurses' attitudes toward, and the quality of care provided to, patients who attempted suicide, but women provided higher-quality nursing care than men. Furthermore, quality of care was higher from nurses who had a bachelor-level education, suggesting that higher-educated nurses should be recruited to care for critical patients.

INTRODUCTION

Worldwide, more than 800,000 people die annually because of suicide, which is the second leading cause of death in people between the ages of 15 and 29 (1). Estimates show that, in 2008, for each actual suicide case, 10-20 cases of attempted suicide occurred (2). Suicide is not a disease; it is a deliberate act committed by a person. In fact, in many cases, suicide was not successful act in which a person causes self-harm by ingesting substances over a therapeutic dose or by other ways (3). Suicide is one of the most common causes of non-disease death and one of the greatest public health problems worldwide. Whether resulting in death or not, suicidal behaviors can cause great pain and suffering to a suicidal person; they also have a significant health cost and are a burden to the community (4, 5).

Cases of attempted suicide affect many other people, including physicians, nurses, relatives, and friends, as well as the general public (4). Doctors and nurses care for patients who attempt suicide (6) and manage them in the hospital (7). Nursing care is important in all care provided in medical set-

tings (8) and is comprised of both physical and psychosocial components (7). Western studies on nursing care have suggested the importance of psychosocial factors and of filling emotional needs on consolidating the connection between nurses and patients (9). Studies of patients who attempted suicide multiple times revealed a generally negative attitude among healthcare professionals toward these patients (4). One of the reasons for this attitude is the pressure from the initial care provided to doctors and nurses (10), which increase the pressure among emergency staff who have a primary contact and exacerbates the negative attitude (5). Also, the pressure of hospitals to reduce costs has resulted in a reduction in the quality of health services (11), which has only been exacerbated by fewer nurses in teaching hospitals, owing to a higher workload (12). Fatigue and lack of time have led to negative attitudes and emotional stress among nursing staff (13). In one study, older, more experienced nurses had a more positive attitude toward suicidal patients than younger nurses (4). In another study, age, work experience, and sex had no effect on nurses' attitudes (5).

Considering the variability of results in other studies, we examined individual and social factors that affect nurses' attitudes toward patients who attempt suicide and the quality of nursing care that these patients receive.

MATERIALS AND METHODS

In 2016, this descriptive-correlational study was performed using the convenience sampling method on 182 nurses working at selected hospitals of medical universities in Tehran, Iran. Based on the formula for determining sample size in correlation studies, with a confidence level of 95% and $r=0.25$ (5), the final number of samples (nurses) was 200; after attrition, 182 nurses were selected. Nurses who cared for patients who attempted suicide were selected from emergency, surgery, burn, intensive care unit, and poisoning wards. After receiving approval from our institution's ethics committee, data were collected across work shifts (morning, evening, and night) among nurses who met our study's inclusion criteria, which included being willing to participate in the study, having at least a bachelor's degree in nursing, and having a history of caring for patients who attempted suicide.

Data were collected using a demographic questionnaire for nurses, a questionnaire to determine attitudes toward suicide, and a quality patient care scale questionnaire (Qualpacs). The demographic questionnaire, which was devised according to study objectives and related articles, consisted of 11 questions about nurses' personal and occupational characteristics. The 15-item questionnaire about attitudes toward suicide attempts was developed in 1994 by McLaughlin (8) and is based on a five-point Likert scale (1=completely disagree to 5=completely agree). Owing to inconsistency with Iranian culture, question 15 was deleted. For this questionnaire, the lowest score is 14 and the highest score is 70. A score higher than 42 indicates a favorable (positive) attitude, and a score less than 42 indicates an undesirable (negative) attitude.

Presented in 1972 by Wandelt and Ager of the Michigan Nursing School, Qualpacs is one of the most prestigious tools for measuring the quality of nursing care. It has been revised many times with respect to psychosocial and communications factors. It has been used in research by Neishabory et al (11). Since 1975, it has been used to study the quality of nursing care in the United States, England, and Nigeria; in 2003, it was adapted to Iranian culture and used in Tabriz. Qualpacs consists of 41 items and examines the quality of nursing care in two aspects: psychosocial (28 questions) and communications (13 questions). It is graded based on a Likert scale of three levels (rarely, sometimes, and most times). The lowest score of the Qualpacs questionnaire is 41 and the highest score is 123; the higher the score, the better the quality of care.

Both questionnaires—the 15-item questionnaire about attitudes toward suicide attempts and the 41-item Qualpacs questionnaire—were evaluated for validity and reliability. Face validity and content validity were analyzed to determine the validity of both questionnaires. To determine face validity, the questionnaires were provided to 15 nurses who

were not included in the main study. After collecting the data, changes were made. To determine content validity using a qualitative method, the questionnaires were provided to 15 faculty members of the Nursing and Midwifery Department of Shahid Beheshti University of Medical Sciences. The results showed that the content validity index for attitudes toward suicide was 0.97, the quality of nursing care in the psychosocial aspect was 0.99, and the quality of nursing care in the communications aspect was 0.99.

Cronbach's alpha coefficient and re-test were used to determine the reliability of the tools. In this way, all three questionnaires were given to 20 nurses who were eligible to participate in the research twice with a 15-day interval; these nurses did not participate in the main study. Using the Pearson correlation coefficient, the results of the two tests, for all three questionnaires, were as follows: demographic information, 0.72; attitude toward suicide, 0.91; and quality of nursing care in psychosocial and communications aspects, 0.81. Cronbach's alpha coefficient, calculated for all three questionnaires regarding attitudes toward attempted suicide, was 0.7; quality of nursing care in the psychosocial aspect was 0.89; and quality of nursing care in the communications aspect was 0.87.

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 20 software; descriptive and inferential statistics and Pearson and t-tests were also used. *P* values less than 0.05 were considered statistically significant.

RESULTS

The number of nurses participating in this study in Loghman Hakim, Motehari, and Baharlu hospitals were 80, 70, and 32, respectively. Of the participants, 76.4% were women and 23.63% were men; the average age was 32 years (range, 22–52 years). Of the participants, 39.6% had a working experience of less than 5 years, 32% had a working experience of 5–10 years, and the rest had a working experience of more than 10 years. The shortest work experience was 6 months and the longest was 28.5 years. In terms of caring for patients who attempted suicide, 76.6% of participants who had less than 5 years' experience had done so. In addition, 31.3% of participants had a relative, friend, or acquaintance who attempted or committed suicide. Other demographic information is presented in Table 1.

The Pearson correlation coefficient was used to determine the correlation between age and attitude and quality

Table 1. Demographic information of nurses working in selected hospitals

Variable	Age	
	Pearson coefficient	P value
Attitude	−0.03	0.63
Quality of nursing care in psychosocial aspects	−0.04	0.51
Quality of nursing care in communications aspects	−0.04	0.58

of nursing care. For attitude, $P=0.63$; for quality of nursing care in psychosocial aspects, $P=0.51$; and for quality of nursing care in communications aspects, $P=0.58$. No statistically significant relationship was observed (Table 2).

Paternal t-test was used to examine the sex of nurses with attitude and quality of nursing care in terms of psychosocial and communications aspects. No statistically significant relationship was observed between sex and attitude and quality of nursing care in psychosocial aspects, but a statistically significant relationship was observed between sex and quality of nursing care in communications aspects (Table 3).

No statistically significant relationship was observed between work experience and quality of nursing care and attitude in psychosocial aspects ($P<0.05$). The results are presented in Table 4.

Paired t-test was used to examine level of education and attitude and quality of nursing care in psychosocial and communications aspects. No statistically significant relationship was observed between education level and attitude. However, a statistically significant relationship was observed between level of education and quality of nursing care in terms of psychosocial and communications aspects (Table 5).

DISCUSSION

We observed no statistically significant relationship between the age of nurses and their attitude toward suicide and the quality of nursing care provided in psychosocial and communications aspects. Regarding the relationship between age and attitude of nurses, in a study of 160 nurses who cared for patients who attempted suicide, the results showed that with an increase in the age of nurses, their attitudes toward these patients were more favorable (14). In another study of nurses' attitudes toward patients who attempted suicide, older nurses had a better attitude than younger nurses (8). Conversely, other studies found no statistically significant relationship between age and attitude of nurses. For example, Alston and Robinson in 1992 (15), Schmidt in 1998 (3), and Suokas et al. in 2009 (5) observed no statistically significant relationship between age and attitude of nurses. Also, in 2016, Darabzadeh observed no statistically significant relationship between age and quality of nursing care in psychosocial and communications aspects (16).

In terms of sex and attitude, we found no statistically significant relationship between sex and nurses' attitude toward

Table 2. Correlation of age with attitude and quality of nursing care in psychosocial and communications aspects of nurses working in the investigated areas

Variable	Frequency	Percent	Variable	Gender	Frequency	Percent
Gender						
Female	139	76.4	Employee status	Temporary	25	13.7
Male						
Ward	43	23.6		Contractual	79	4.43
Surgery	15	8.2	Marital status	Single	61	33.5
Poisoning	20	11		Married	119	65.4
ICU	79	43.4	Shift	Widow	22	1.1
Emergency	33	18.1		Morning	32	17.6
Burning	35	19.2		Evening	1	0.5
Level of education						
Bachelor	167	91.8		Night	14	7.7
Master	14	7.7		Rotation	135	74.2
Doctorate	1	0.5	Having a person attempting suicide in your relatives	Yes	57	31.3
Employee status				No	125	68.7
Official	78	42.9				

Table 3. Comparison of correlation of sex with attitude and quality of nursing care in psychosocial and communication aspects of nurses working in the investigated areas

Variable	Sex	Frequency	Mean	Standard deviation	P value
Attitude	Men	43	47.09	5.74	0.019
	Women	139	45.81	5.67	
Quality of nursing care in psychosocial aspects	Men	43	30.74	5.67	0.15
	Women	139	32.67	4.52	
Quality of nursing care in communications aspects	Men	43	2.30	0.40	0.046
	Women	139	2.39	0.32	

patients who attempted suicide and quality of nursing care provided in psychosocial aspects; but we did find a statistically significant relationship between sex and quality of nursing care. Women nurses had a higher level of communication. In this regard, Samuelsson et al. in 1997 (18) and Suokas et al. in 2009 (5) reported results that were inconsistent with ours. Also, in other studies, no statistically significant relationship was observed between sex and quality of nursing care (14, 18).

In addition, we observed no statistically significant relationship between level of education and the attitude of nurses toward patients who attempted suicide; but we did observe a statistically significant relationship between level of education and quality of nursing care provided in psychosocial and communications aspects, especially in nurses with a bachelor's degree. Our results indicated that the quality of care provided by nurses with a bachelor's degree was higher than the quality of care provided by nurses with a master's degree. In 1992, Alston and Robinson reported that increased levels of education led to a better understanding of suicidal patients and a more favorable attitude toward these patients, which was inconsistent with our results. Conversely, in 2005, Botega et al. (19) reported that with increasing education, nurses' attitudes toward suicide became more unfavorable. Other studies found no statistically significant relationship between level of education and quality of nursing care (14, 18).

In terms of the relationship between work experience and nurses' attitudes toward patients who attempt suicide and the quality of nursing care provided in these psychosocial and communications aspects, studies have found no statis-

tically significant relationship between work experience and quality of nursing care. In the study of McLaughlin in 1994 (8), Samuelsson et al. in 1997 (16), and Botega et al. in 2005 (19), nurses with more work experience had a more favorable attitude toward patients who attempted suicide. Schmidt in 1998 (3) and Suokas et al. in 2009 (5) did not find any statistically significant relationship between attitude and experience. Darabzadeh (17) and Saifollahi (14) observed no statistically significant relationship between experience and quality of nursing care.

CONCLUSION

Likely because of the personality and emotional characteristics of women, communication relationships between female nurses and patients are higher than between male nurses and patients. Also, the quality of nursing care in psychosocial and communications aspects provided by nurses with a bachelor's degree was higher than the care provided by nurses with a master's degree. This is possibly due to an increased level of expectation which reduces the quality of nursing care. We suggest that further studies be done with larger sample sizes.

ACKNOWLEDGMENTS

This article is based on a master's thesis for internal-surgical nursing. The authors thank all the nurses who participated in this research and the managers of Loghman Hakim, Motahari, and Baharlou hospitals for their cooperation in conducting this research.

AUTHOR CONTRIBUTIONS

All authors contribute equally to this article

CONFLICT OF INTEREST

None

ETHICAL STANDARDS

This study approved by Shahid Beheshti University of Medical Sciences's ethics committee.

Table 4. Comparison of work experience with attitude and quality of nursing care in psychosocial and communications aspects of nurses working in the investigated areas

Variable	Work experience	
	Pearson coefficient	P value
Attitude	-0.003	0.96
Quality of nursing care in psychosocial aspects	-0.03	0.6
Quality of nursing care in communications aspects	-0.03	0.67

Table 5. Comparison of correlation of education level with attitude and quality of nursing care in the psychosocial and communications aspects of nurses working in the investigated areas

Variable	Level of education	Frequency	Mean	Standard deviation	P value
Attitude	Bachelor of science	167	46.14	5.73	0.850
	Master of science	14	46.42	5.07	
Quality of nursing care in psychosocial aspects	Bachelor of science	167	32.52	4.83	0.007
	Master of science	14	28.85	4.14	
Quality of nursing care in communications aspects	Bachelor of science	167	2.39	0.34	0.018
	Master of science	14	2.16	0.30	

REFERENCES

1. World Health Organization. World health statistics 2015. World Health Organization; 2015 May 14.
2. Rezaeian M, Gorgi Z, Rezaei F, Sheikh Fathollahi M. Epidemiology of Suicide and Suicide Attempts in Counties under the Supervision of Shiraz University of Medical Sciences from 2009 to 2012. *JOURNAL OF HEALTH AND DEVELOPMENT*. 2016;5(1):58-70.
3. Schmidt JD. Nurses' attitudes toward the care of the attempted suicide patient, Florida Atlantic University. Master of Science in Nursing. 1997.
4. Ouzouni C. and Nakakis K. Attitudes towards attempted suicide: the development of a measurement tool. *Health science Journal*. 2009;3(4):222-231.
5. Suokas J, Suominen K, Lonnqvist J. The attitudes of emergency staff toward attempted suicide patients: a comparative study before and after establishment of a psychiatric consultation service. *Crisis*. 2009;30(3):161-165.
6. Ramon S. Attitudes of doctors and nurses to self-poisoning patients. *Social Science & Medicine. Part A: Medical Psychology & Medical Sociology*. 1980;14(4):317-324.
7. Soltani M, Hejazi SM, Noorian A, Zendedel A, Ashkanifar, M. The Effect of Selected Aerobic Exercise on the Balance Improvement in Multiple Sclerosis Patients. *Journal of Mashhad School Nursing Midwifery*. 2009;9(2):107-113.
8. McLaughlin C. Casualty nurses attitudes to attempted suicide. *Journal of Advanced Nursing*. 1994;20:1111-1118.
9. Hamric AB, Blackhall LJ. Nurse-physician perspectives on the care of dying patients in intensive care units: collaboration, moral distress, and ethical climate. *Critical care medicine*. 2007;35(2):422-9.
10. Baljani E, Azimi N, Hosseinlo A. A survey on nurses' perception of the importance of caring behaviors and factors affecting its provision. *Evidence Based Care*. 2012;2(1):13-21.
11. Patel A. Attitudes towards self-poisoning. *British Medical Journal*. 1975;2(5968):426-429.
12. Neishabory M, Raees Dane N, Ghorbani R, Sadeghi T. [Nurses' and patients' viewpoints regarding quality of nursing care in the teaching hospitals of Semnan University of Medical Sciences, 2009]. *Koomesh*. 2010;12(2):134-143.
13. Larrabee JH, Ostrow CL, Withrow ML, Janney MA, Hobbs GR Jr, Burant C. Predictors of Patient Satisfaction with Inpatient Hospital Nursing Care. *Research Nursing Health*. 2004;27:254-268.
14. Rafiee F, Haghdoost Oskouie SF, Nikravesh M. Conditions affecting Quality of Nursing Care in Burn Centers of Tehran. *Iranian Journal of Nursing*. 2007;20:7-24.
15. Saifollahi Z. Correlation between critical nurses' knowledge about pressure ulcer and quality of nursing care in hospitals affiliated to Shahid Beheshti University of Medical Science in 2014. MS Dissertation, Shahid Beheshti University of Medical Science. 2015.
16. Alston MH, Robinson BH. Attitudes toward suicide. *Omega*. 1992;25(3):205-215.
17. Lachin JM. Introduction to sample size determination and power analysis for clinical trials. *Controlled Clinical Trials*. 1981;2:93-113.
18. Samuelsson M, Sunbering Y, Winell I, Asberg M. Nurses' attitudes to attempted suicide patients. *Scandinavian Journal of Caring Sciences*. 1997;11(4):232-237.
19. Darab Zadeh F. Correlation between moral distress and quality of care in Surgical ward nurses to hospitals Shahid Beheshti University of Medical Science of 2015. MS Dissertation, Shahid Beheshti University of Medical Science. 2016.