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Original research

Investigation the correlation between psychological empowerment and assertiveness in nursing and midwifery students in Iran



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ARTICLEINFO	A B S T R A C T
<i>Keywords:</i> Assertiveness Midwifery Nursing Psychological empowerment Student	 Background: Assertiveness is a key skill for nurses and midwives, and should be considered in the students' education. In this regard, variables such as psychological empowerment, which may have a significant correlation with assertiveness, should be identified and studied. Objectives: The aim of this study was to investigate the correlation between psychological empowerment and assertiveness in nursing and midwifery students. Design: A cross-sectional and correlational study. Settings: /Participants: This study was carried out on 200 Iranian nursing and midwifery students. Methods: The students were randomly selected for the study. The study tools were The Rathus' Assertiveness Schedule and Spreitzer's Psychological Empowerment Scale. Data were analyzed by descriptive and inferential statistics. Findings: There was a positive and significant correlation between psychological empowerment and assertiveness. Conclusions: Since psychological empowerment and assertiveness in decision-making and interaction with colleagues and patients are considered as essential skills for nurses and midwives, we recommend that, required measures should be taken to promote these skills in nursing and midwifery students.

1. Introduction

Today, the main goal of teaching in students of medical sciences, especially nursing and midwifery students is to educate them to have high level of knowledge, skills and self-confidence in sympathizing with patients and their families (Jafari et al., 2014; Shafakhah et al., 2015; Laari and Dube, 2017; Abdolrahimi et al., 2018). In this regard, assertiveness is one of the most important skills, which has an important role in promoting effective communication, increasing job satisfaction, preventing burnout, resolving conflicts in workplace, reduce depression and improving the quality of patient's care and treatment (Suzuki et al., 2009; Rezayat and Dehghan Nayeri, 2014; Stojcic et al., 2014; Omura et al., 2017; Nakamura et al., 2017).

Having assertiveness skill is very important for effective use of acquired knowledge and skills, reducing the level of stress associated with others, and providing appropriate health care (Yoshinaga et al., 2018). Assertiveness is one of the most important skills that play a very important role in managing patient treatment and preventing any unpleasant incidents in health care (Omura et al., 2019). One of the variables that can play an important role in enhancing the assertiveness skill in students is psychological empowerment (Ibrahim, 2011). So since this variable is very importance for nursing and midwifery students to have appropriate level of assertiveness skill, identifying variables such as psychological empowerment that can promote this skill is very important. Therefore, in the present study, the correlation between psychological empowerment and assertiveness was investigated.

1.1. Background

Assertiveness, as part of interpersonal and behavioral skills, is one of

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the most important social skills (Warland et al., 2014; Avsar and Alkaya, 2017). Having the assertiveness skill is of the utmost importance for health care staff working in healthcare system. The issue of assertiveness education has been raised by psychologists since the mid-20th century and has been considered seriously until now (Omura et al., 2019). Evidence suggests that, in recent years, researchers have been focused and emphasized on the importance of assertiveness skill for healthcare personnel (Lyndon et al., 2012; Omura et al., 2017; Omura et al., 2019).

Assertiveness skill emphasizes on the expression of emotions, thoughts, and tendencies in the interpersonal context. In other words, assertiveness is a kind of communication style that plays a key role in communicating successfully and effectively with others (Ibrahim, 2011). Also, people who have higher level of assertiveness in their social interactions are more likely to have better relationships with others (Lounsbury et al., 2003; Ibrahim, 2011). Assertiveness can improve stressful situations and increase the power of nurses (Deltsidou, 2009). Among the most important and positive outcomes of assertiveness for nursing and midwifery students are the development of leadership skills, increased job satisfaction, stress management, stress reduction in the workplace, increased quality of patient care, protection of patient rights, and commitment and accountability in undertaking designated tasks (Deltsidou, 2009). Having assertiveness also creates the desired behaviors and interactions, the ability to solve problems and self-consciousness (Ibrahim, 2011). The results of studies indicate that, there is a positive and significant correlation between assertiveness, job satisfaction and role transparency (Lounsbury et al., 2003). Furthermore, there is a significant and negative correlation between assertiveness with anxiety (Taghavi Larijani et al., 2010) and depression (Rezayat and Dehghan Nayyeri, 2014) in nursing and midwifery students. Also, regarding the issue of assertiveness training, empirical studies have shown that assertiveness can be taught in the form of educational programs and workshops (Warland et al., 2014; Yoshinaga et al., 2018). Therefore, in addition to focusing on assertiveness training, factors and variables that can have a significant correlation with assertiveness should also be identified and considered. Researchers believe that in health care system, psychological empowerment is one of the most important variables that play an important role in promoting the quality of performance in health care personnel as well as nursing and midwifery students (Boudrias et al., 2012). Psychological empowerment expresses the feeling of power and self-esteem as well as the ability to have control over the work environment (Sak et al., 2017; Uner and Turan, 2010). Over the last decade, the concept of empowerment in midwifery and nursing has been expanded significantly (Hermansson and Martensson, 2011). In this regard, Duff (2019) emphasizes that, the issue of empowerment must be seriously considered in promoting the nurses' level of competence.

So far, very few studies have been conducted on the correlation between psychological empowerment and assertiveness in nursing and midwifery students. In this regard, Ibrahim (2011) and Bostanabad et al. (2018) reported a positive correlation between psychological empowerment and assertiveness. Other studies have shown that psychological empowerment has a positive and significant role in promoting individual and organizational performance. According to studies, psychological empowerment can reduce job burnout (Obrien, 2011), increase organizational commitment (Kebriaei et al., 2014), increase job satisfaction (Ouyang et al., 2015) and increase nurses' work engagement (Wang and Liu, 2015). In addition, psychological empowerment plays an important role in increasing cognitive skills, managing stress at work (Pines et al., 2012), effective communication (Eskandari et al., 2014), spiritual intelligence and work engagement (Torabi and Nadali, 2016).

Therefore, considering to the importance of psychological empowerment, and its role in nursing and midwifery students' professional performance, as well as the lack of sufficient knowledge about the level of psychological empowerment and assertiveness in Iranian nursing and midwifery students and their correlation with each other, the present study was designed and implemented.

2. Methods

2.1. Aim

The aim of this study was to investigate the correlation between psychological empowerment and assertiveness in nursing and midwifery students in Kermanshah-West of Iran.

2.2. Study questions

We sought to answer the following questions:

- 1) What is the level of assertiveness and psychological empowerment in nursing and midwifery students?
- 2) Is there a significant correlation between assertiveness and psychological empowerment in nursing and midwifery students?

2.3. Study design

This cross-sectional and correlational study was conducted on nursing and midwifery students of Kermanshah University of Medical sciences (KUMS) from January to August 2018.

2.4. Sample and sampling method

The statistical population in this study consisted of 200 undergraduate nursing (n = 97) and midwifery (n = 103) students who were studying at the second semester of the academic year 2017–2018. The participants were randomly selected according to their student numbers using a random table of numbers. The inclusion criteria for entry in the study included; studying nursing and midwifery at BSc. level, willing to participate in the study, and fully completing the questionnaires.

2.5. Instruments

Data collection tools consisted of the personal information form, the Rathus' Assertiveness Schedule (RAS), and the Spreitzer's Psychological Empowerment Scale. The personal information form included questions about sex, age, field of study, and marital status. The Rathus' Assertiveness Schedule (RAS) was designed by Rathus and Nevid (1977) to measure the level of assertiveness. The validity and reliability of this tool have been reviewed and approved in numerous studies. Suzuki et al. (2007) reported the reliability of this tool to be 0.84 using Cronbach's Alpha method, and 0.76 using split-half method.

In a study by Seyedfatemi et al. (2013) conducted on the nursing students, the reliability coefficient of this questionnaire was 0.82. In our study, the RAS was first translated from English to Persian using the Back & forward method. The translation steps included translation, reverse translation, review by an English expert, and peer review. Content validity of the questionnaire was evaluated by the Content Validity Index (CVI), and its CVI was 0.88. In our study, the internal consistency of the Persian version of RAS was 0.88 using Cronbach's alpha coefficient. This scale includes 30 items. Its scoring is based on the 6-option Likert scale, including "I am totally like that (score +3)", "I am relatively like that (+2)", "I'm not very much like that (+1)", "It highly differs from my characteristics (-1)", "It relatively differs from my characteristics (-2)", and "It totally differs from my characteristics (-3)." The score range is from -90 to +90, and the score closer to +90, indicates more assertiveness and vice versa. The scores closer to -90 represent a low level of assertiveness. Those who obtain the score of less than +10 are considered shy or non-assertive, and those who obtain the score of above +10 are considered assertive (Yurtsal and Ozdemir, 2015).

To measure the psychological empowerment, Spreitzer's psychological empowerment scale was used. In previous studies, the validity and reliability of this tool have been confirmed. Ouyang et al. (2015) reported the reliability of this tool to be 0.78 using Cronbach's alpha. The validity of the Persian version of Spreitzer psychological empowerment scale has been studied in Iranian nurses by Eskandari et al. (2014) and Content validity index of this scale was 0.83. Bonyad Karizme et al. (2016) examined the reliability of the Persian version of the Spreitzer's psychological empowerment scale in the Iranian nursing community and the reliability coefficient for the whole questionnaire was 0.88. In the present study, the internal consistency of the questionnaire was studied in the community of nursing and midwifery students, and its Cronbach's alpha was 0.91. This scale consists of four components, including competence, self-determination, meaning, and having impact. It also has 12 items, and the responses are based on the 7-option Likert's scale, ranging from completely disagree to completely agree that are scored from one to seven. The score range for the questionnaire is from 12 to 84. The higher score indicates the higher sense of empowerment in the person. The Ibrahim et al. (2014) study was used in the present study to determine the cut-off point. For this purpose, first, the median of the points was calculated to be 49 and then, it was divided into the total score of the questionnaire, which was 84, resulting in number 58, and at the end, the obtained score was converted to percentage (0.58%). Accordingly, the score of 0.58% and above was considered empowered and the score of 0.57% or less was considered non-empowered.

2.6. Data gathering

In order to carry out the study, the necessary permissions were obtained from the KUMS Vice Chancellor for Research and Technology. Then, the researcher attended the Faculty of Nursing and Midwifery and obtained a list of students. The list was numbered and then, samples were selected according to the random table of numbers. In this way, the researcher referred to the samples according to the students' classroom program. First, the goals of the study were explained to the students, and those who agreed with them entered the study. Then, the questionnaires were given to them and collected upon their completion. If any person did not want to participate in the study, he/she was replaced by the person below or above him/her in the students' list.

2.7. Data analysis

The data were analyzed by Statistical Package for Social Sciences (SPSS v.18.0; SPSS Inc., Chicago, IL, USA) using descriptive (mean and standard deviation) and Inferential statistics. At first, Kolmogorov-Smirnov test was used to evaluate the normality of the data. The result showed an abnormal distribution of variables of psychological empowerment and assertiveness. Therefore, in the inferential statistics, the Spearman's correlation coefficients were used. In order to investigate the correlation between psychological empowerment and assertiveness, the Spearman's correlation coefficient was used. The significance level of 0.05 was considered.

2.8. Ethical considerations

Ethics Committee of the University approved this study with the code IR.KUMS.RES.1397.486. The aims of the study were explained to all the samples and their questions were answered. Also, required assurances about the confidentiality of personal information and responses were given to the participants, and informed oral consent was obtained from all of them. They were also informed that participation in the study is voluntarily and they can withdraw from the study at any time with any reason.

Table 1
Demographic characteristics of study samples.

Field of study	Variables		N (%)
Nursing	Sex	Female	63 (64.9)
		Male	34 (34.1)
		Total	97 (100.0)
	Age	≤22	40 (41.2)
		>22	57 (58.8)
	Marital status	Single	47 (48.5)
		Married	50 (51.5)
Midwifery	Sex	Female	103 (100)
		Male	-
		Total	103 (100)
	Age	≤22	47 (45.6)
		>22	56 (54.4)
	Marital status	Single	46 (44.7)
		Married	57 (55.3)

2.9. Findings

From the 200 students participating in the study, 166 (83%) were female and 34 (17.0%) were male. Also, 97 students (48.5%) were nursing students and 103 (51.5%) were midwifery students. The mean and standard deviation of samples' age was 21.79 ± 1.99 years. From the nursing students, 63 students (64.9%) were female and 34 (34.1%) were male. More than half of the nursing students (n = 57, 58.8%) were in the age group of above 22 years old and about half of them (n = 50, 51.5%) were married. Also, 103 (51.5%) students were studying midwifery and 54.4% of them (n = 56) were in the age group of over 22 years old, from whom 55.3% were married (n = 57), (Table 1).

In relation to the first question of the research: "What is the level of assertiveness and psychological empowerment of nursing and midwifery students?" results showed that the mean scores of assertiveness in nursing and midwifery students were 20.05 ± 32.15 and 20.08 ± 27.38 from 90 respectively (Table 2). In the nursing students, 71.1% (n = 69) were assertive and 28.9% (n = 28) were not assertive. Also, 70.9% (n = 73) of the midwifery students were assertive and 29.1% (n = 30) of them were not assertive (Table 3). The mean score of psychological empowerment in nursing and midwifery students was 49.93 ± 13.16 and 51.76 ± 10.78 out of 84 respectively (Table 2). In the nursing students, 30.9% (n = 30) were empowered and 69.1%(n = 67) were not. Also, 25.2% (n = 26) of the midwifery students were empowered and 74.8% (n = 77) of them were not empowered (Table 3).

In relation to the second question of the research: "Is there a significant correlation between assertiveness and psychological empowerment of nursing and midwifery students?" the result of Spearman's correlation coefficient showed that there was a positive and significant correlation between psychological empowerment and assertiveness variables (r = 0.212, P = 0.037), so that by increasing the level of psychological empowerment, student's assertiveness was also increased. Among the subscales of psychological empowerment, the subscales of meaning (r = 0.247) and self-determination (r = 0.240) had significant

Table 2

Mean and standard deviation of assertiveness and psychological empowerment in nursing and midwifery students.

Field of study	dy Assertiveness Psychological empowerment	
	Mean \pm SD ^a	Mean \pm SD
Nursing Midwifery	20.05 ± 32.16 20.08 ± 27.38	49.93 ± 13.16 51.76 ± 10.78

^a Standard deviation.

Table 3

Frequency of assertiveness and psychological empowerment according to the field of study.

Variables		Nursing	Midwifery
		N (%)	N (%)
Assertiveness	Assertive	69 (71.1)	73 (70.9)
	Non-assertive	28 (28.9)	30 (29.1)
Psychological empowerment	Empowered	30 (30.9)	26 (25.2)
	Not-empowered	67 (69.1)	77 (74.8)

Table 4

Correlation between assertiveness and psychological empowerment.

Variables	Assertiveness	
	r	<i>p</i> -value
Meaning	0.247*	< 0.001
Competence	0.101	0.155
Self-determination	0.240*	< 0.001
Impact	0.074	0.301
Total score of psychological empowerment	0.277*	< 0.001

*.Correlation is significant at p < 0.001.

correlation with the assertiveness ($P \le 0.01$). There was no significant correlation between the scores of competence and impact, and the assertiveness (Table 4).

3. Discussion

Our results showed that, the mean of total assertiveness in nursing and midwifery students was moderate. More than half of the nursing and midwifery students were assertive and about one-third of them were not assertive. In a study by Unal et al. (2012) in Turkey, more than half of nursing students were shy or non-assertive. Karagozoglu et al. (2008) also reported that, the level of assertiveness of nursing and midwifery students in Turkey is high. The results of a study of nursing students in Ireland showed that, the level of assertiveness of students who had passed their three-year course was high (Begley and Glacken, 2004).

The results of studies by Taghavi Larijani et al. (2010) and Seyed fatemi et al. (2013) indicated that, the nursing and midwifery students in Iran have a moderate level of assertiveness. Also, results of a study of nursing students in Iran revealed that, more than half of the students had moderate to low level of assertiveness (Rezayat and Dehghan Nayeri, 2014).

In the present study, the total mean of psychological empowerment was moderate, and more than half of the nursing and midwifery students were psychologically empowered and about one-third of them were not empowered. In this regard, Royan et al. (2017), in a systematic review, showed that the psychological empowerment of Iranian nurses is in moderate level. The results of Ibrahim et al. (2014) study in Egypt showed that most nurses had moderate level of psychological empowerment. Also, Ouyang's et al. (2015) study in China showed that, the level of psychological empowerment in nurses was moderate.

We believe that, the difference in the scores of assertiveness and psychological empowerment among students can be attributed to the cultural characteristics of society and the characteristics of nursing and midwifery education in the educational system. Some scholars believe that assertiveness is one of the psychological characteristics of Western societies (Eskin, 2003). Some also believe that, the low level of assertiveness is one of the challenges of students in Asian societies (Poyrazli et al., 2002). Therefore, in planning to promote the level of assertiveness in nursing and midwifery students, attention should be paid to the infrastructure and social-cultural conditions of the society. Empirical evidence suggests that, the skill of assertiveness can be taught to students by different teaching methods (Deltsidou, 2009; Eslami et al., 2016). In this regard, university tutors play a vital role in the promotion of assertiveness in students (Deltsidou, 2009). The university tutors should support students in order to increase their level of assertiveness, and provide students with the opportunity to express themselves and their positive and negative emotions about different subjects.

In our opinion nursing and midwifery students are among the most important human capitals of the health system. Lack of attention to the quality of nursing and midwifery curriculum can, in the future, put society at risk of a shortage of competent workforce in the field of health care and treatment. Therefore, education system in the universities of medical sciences should design and develop a comprehensive program to enhance the psychological empowerment of students.

Our findings showed that, there is a positive and significant correlation between psychological empowerment and assertiveness. There was also a positive and significant correlation between the dimensions of meaning and self-determination, and assertiveness. The correlation between psychological empowerment and assertiveness suggests that, increasing the level of psychological empowerment in nursing and midwifery students increases their level of assertiveness. In this regard, Ibrahim et al. (2011) reported a positive correlation between these two variables while examining the correlation between the psychological empowerment and assertiveness of nursing students in Egypt. Bostanabad et al. (2018) Showed that there was a significant correlation between psychological empowerment and assertiveness in Iranian nurses. Evidence suggests that psychological empowerment increases job satisfaction and organizational commitment, and leads to better occupational performance (Kostiwa and Meeks, 2009; Ouyang et al., 2015; Seibert et al., 2011). In fact, psychological empowerment of medical staff is one of the key factors in the effectiveness of hospitals and medical centers. Empowerment has a significant role in increasing the productivity of employees and achieving the organizational goals (Casey et al., 2010). Considering the role of nursing and midwifery students in promoting the health system of society, lack of assertiveness and psychological skills can lead to the lack of mutual understanding and constructive decision-making in clinical situations. Conversely, psychological empowerment increases the flexibility and response of healthcare staff in the challenging situations.

Nursing and midwifery students will be employed in the future as nurses and midwives. Therefore, in order to enhance their psychological empowerment, the necessary platforms for the development of "independence" and "feeling of being effective" should be provided for them. Granting more responsibility and empowerment to students during the learning process can play an important role in the promotion of these two components. Improving the level of competence in different areas, especially in the clinical diagnosis and treatment, should be taken into consideration in the education of nursing and midwifery students. Self-determination is another component of psychological empowerment. Empirical evidence suggests that self-determination has a significant correlation with independence, competence, academic success, and involvement in learning process (Perlman et al., 2019). Considering the significant correlation that exists between self-determination and assertiveness, efforts must be taken to promote this component in nursing and midwifery students.

In the present study, we encountered some limitations. Our study was also cross-sectional and due to the nature of cross-sectional studies, it was not possible to explain the causal relationship between the main variables of the study. In our study, the statistical sample was limited to nursing and midwifery students. So, cautious must be taken when generalizing these results to other students of medical sciences.

4. Conclusion

The results of present study showed that, assertiveness and

psychological empowerment of nursing and midwifery students were at moderate level. Also, there was a positive and significant correlation between psychological empowerment and assertiveness. Considering the importance of assertiveness and psychological empowerment, it is suggested that variables that can affect the assertiveness and psychological empowerment of nursing and midwifery students should be further studied. Also, the teaching of assertiveness and psychological empowerment should be considered as an important part of nursing and midwifery curriculum at the undergraduate level. Considering the significant correlation between psychological empowerment and assertiveness, it is suggested that, necessary platforms should be provided by educational managers and planners, and faculty members to promote the psychological empowerment of nursing and midwiferv students. In this regard, the tendency towards independence, self-efficacy and selfdetermination should be promoted in nursing and midwifery students. Also, attention should be paid to the component of competence as a critical factor in students' performance. For this purpose, clinical nursing and midwifery curricula should be carefully reviewed. Holding training workshops is also useful in this regard.

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Ethical approval

Ethics Committee of the Kermanshah University of Medical Sciences approved the study.

Declaration of competing interest

The authors declare there are no competing interests.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.nepr.2019.102667.

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