ORIGINAL ARTICLE

The Relationship between Empathy and Stigma towards Psychiatric Disorders among Nursing Students

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Background: Considering the importance of the two variables of stigma and empathy in the patients care with psychiatric disorders and the impact of cultural conditions, there is evidence that these two variables have mutual effects. This study's objective was to determine the relationship between stigma and empathy towards psychiatric disorders among nursing students.

Methods: Descriptive correlational method was used in this study. The sample consists of 155 nursing students who were attending mental health training at Mashhad Ibn-Sina Psychiatric Hospital; they were selected as available. The data collection tools was Jefferson Nurses' Empathy Questionnaire and the Kassam opening minds scale for Health Care Providers (OMS-HC). Data analysis was performed using descriptive and analytical statistics.

Results: Pearson correlation test showed that there was a significant linear relationship between the stigma total mean score ($r=0.23$, $p=0.004$) and subscale of stigma social responsibility ($r=0.29$, $p<0.001$) with empathy total mean score. The results of multiple regression analysis showed that only the stigma social responsibility subscale had a negative and significant correlation with the empathy total score.

Conclusion: The results showed that there is an inverse relationship between social responsibility of patients with psychiatric disorders and empathy. Therefore, it is recommended that educational interventions considered in accordance with society culture in order to promote empathy and reduce stigma in nursing students.

Keywords: Empathy, Nursing, Psychiatric Disorders, Stigma

دراسة العلاقة بين التعاطف والوصمة بالنسبة للمشكلات النفسية لدى طلاب التمريض

المقدمة والهدف : بسبب أهمية المتغيرين التعاطف والوصمة (مثلا وصمة العار) في الانتباه إلى مرضى المشكلات النفسية وتأثير العوامل عليهم هناك مجموعة من الشواهد التي تشير إلى أن هذين المتغيرين لهم آثار متقابلة . تهدف هذه الدراسة إلى تحديد العلاقة والربط بين الوصمة والتعاطف بالنسبة إلى المشكلات النفسية لدى طلاب التمريض .

الطريقة : في هذه الدراسة التوصيفية الربطية تم إختيار ١٥٥ طالب من الفصل الرابع من طلاب التمريض الذين كانوا في مرحلة إجتياز الفترة التعليمية للصحة النفسية في مشفى ابن سينا للأمراض النفسية في مدينة مشهد . كانت وسيلة جمع البيانات هي ورقة أسئلة إستفسار الوصمة مرتين الإهتمام الصحي kassam وورقة أسئلة إستفسار تعاطف المرضين jefferson تم تحليل البيانات بالإستفادة من الإحصاء التوصيفي والتحليلي .

الحاصل : لقد أثار إختبار ربط بيرسون إنه بين متوسط علامة كل الوصمة ($r=0.٢٣$ و $p=0.٠٠٤$) ومقياس تحمل المسؤولية الإجتماعية للوصمة ($r=-0.٢٩$ و $p<0.٠٠١$) مع متوسط العلامة الكلية للتعاطف هناك علاقة طردية و ذات معنى . أشارت نتائج إختبار التراجع المتعدد أنه فقط مقياس تحمل المسؤولية الإجتماعية للوصمة له علاقة عكسية وذات معنى مع علامة التعاطف الكلية .

النتيجة: أثبتت النتائج أنه بين تحمل المسؤولية الإجتماعية للمرضى المصابين بمشكلات نفسية والتعاطف علاقة عكسية. لذلك ينصح بالتدخل التعليمي المتناسب مع ثقافة المجتمع وذلك لزيادة التعاطف وتقليل الوصمة لدى طلاب التمريض.

الكلمات الدليلية : المشكلات النفسية، الوصمة، التمريض ، التعاطف

نرسنگ کی طالبات میں نفسیاتی بیماریوں کے تعلق سے یکجہتی، ہمدردی اور بدنامی کا خوف

بیک گراونڈ: نفسیاتی بیماروں کی دیکھ بھال اور نرسنگ میں اسٹگما یعنی بدنامی کے خوف اور ہمدلی ایک دوسرے کے مقابل قرار پاتے ہیں البتہ معاشرے کی صورتحال بھی نفسیاتی بیماروں پر اپنے منفی اثرات چھوڑتی ہے۔اس تحقیق کا ہدف نرسنگ کی طالبات میں نفسیاتی مریضوں کے تعلق سے ہمدردی اور اسٹگما کے کردار کا جائزہ لینا ہے۔

روش: اس تحقیق میں مشہد کے ابن سینا مینٹل ہاسپٹل میں ایک سو پچپن نرسنگ کی طالبات نے شرکت کی، یہ طالبات نرسنگ کورس کے چوتھے ٹرم میں تھیں، انہیں ابن سینا کے وارڈ ون میں نفسیاتی بیماریوں کے بارے میں ٹریننگ دی جارہی تھی، تحقیق میں شریک طالبات کو سوالنامہ دیا گیا، یہ سوالنامہ کسام میڈیکل کیر نیز جفرسن ہمدردی کے اصولوں کے مطابق بنایا گیا تھا۔ڈیٹا کا تجزیہ اسٹاٹسٹکس کی روش سے انجام دیا گیا۔

نتیجے: پئیر سن یکجہتی کے ٹسٹ سے پتہ چلتا ہے کہ اسٹگما اور سماجی ذمہ داریوں میں کافی فاصلہ پایاجاتا ہے، ملٹی پل ریگریشن سے معلوم ہوتا ہے کہ صرف یکجہتی کے اصولوں اور سماجی ذمہ داریوں میں تعلق پایا جاتا ہے۔

سفارش: نرسنگ طالبات میں نفسیاتی مریضوں کے تعلق سے منفی سوچ یا اسٹگما کو دور کرنے کےلئے انہیں ان کی سماجی ذمہ داریوں کا احساس دلانا اور ہمدردی کے اصول سکھانا ضروری ہے۔

کلیدی الفاظ: اسٹگما، بدنامی کا خوف،ہمدردی سماجی ذمہ داریاں۔

بررسی همبستگی همدلی و استیگما نسبت به اختلالات روانپزشکی در دانشجویان پرستاری

زمینه و هدف: با توجه به اهمیت دو متغیر استیگما و همدلی در مراقبت از بیماران مبتلا به اختلالات روانپزشکی و تأثیر شرایط فرهنگی بر آنها، شواهدی وجود دارد که نشان می دهد این دو متغیر دارای اثرات متقابلی می باشند. هدف از این مطالعه تعیین همبستگی بین استیگما و همدلی نسبت به اختلالات روانپزشکی در دانشجویان پرستاری بود.

روش: در این مطالعه توصیفی همبستگی، ۱۵۵دانشجوی ترم ۴ پرستاری که در حال گذراندن کارآموزی بهداشت روان یک در بیمارستان روانپزشکی ابن سینا در مشهد بودند؛ به صورت در دسترس انتخاب شدند. ابزار گردآوری داده ها پرسشنامه استیگمای فراهم‌کنندگان مراقبت بهداشتی Kassam و پرسشنامه همدلی پرستاران Jefferson بود. آنالیز داده ها با استفاده از آمار توصیفی و تحلیلی انجام شد.

یافته ها: آزمون همبستگی پیرسون نشان داد که بین میانگین نمره کل استیگما ($r=-0/23$ و $p=0/004$) و زیر مقیاس مسئولیت پذیری اجتماعی استیگما (۰/۲۹ $r=-$ و $p<0/001$) با میانگین نمره کل همدلی ارتباط خطی معناداری وجود دارد. نتایج آزمون رگرسیون چندگانه نشان داد که فقط زیرمقیاس مسئولیت پذیری اجتماعی استیگما همبستگی منفی و معناداری با نمره کل همدلی دارد.

نتیجه گیری: نتایج نشان داد که بین مسئولیت پذیری اجتماعی بیماران مبتلا به اختلالات روانپزشکی و همدلی ارتباط معکوسی وجود دارد. لذا، توصیه می شود مداخلات آموزشی متناسب با فرهنگ جامعه در جهت ارتقاء همدلی و کاهش استیگما در دانشجویان پرستاری مد نظر قرار گیرد.

واژه های کلیدی: اختلالات روانپزشکی، استیگما، پرستاری، همدلی

INTRODUCTION

The Stigma of psychiatric disorders is a cultural problem, which often prevents talking freely and finding help with psychological problems (1). Such that, in several studies, is recognized as the main factor of non-follow-up, continued treatment and recovery in psychiatric disorders (2, 3, 4). In fact, Stigma is a collection of negative attitudes and beliefs about psychiatric disorders that is rooted in societies and it provokes fear, exclusion, avoidance and discrimination against people with psychiatric disorders and reduces their autonomy, self-efficacy and social isolation (5). However, from the point of view of people with psychiatric disorders, the core recovery is the meaning of life, and it will be achieved through employment, social relations and pursuit of life goals (6).

Stigma, first introduced by Erving Goffman (1963), manifests at various levels simultaneously — self-stigma (internal stigma), social stigma (communication with others) and structural stigma (policies and discrimination and deprivation rules) (7). Stigma is seen in health care systems as a feeling deprived of decision making, mandatory treatment received, failure to provide adequate information on treatment and disease conditions, behaviour of health care personnel about the impossibility of recovery and disease treatment and use of stigma language in talking to these patients (8). As can be said, these patients experience the most severe stigma and discrimination in the health care system (8, 9).

The nurse central role in providing mental health care and psychiatric disorders is not acceptable, even in nursing culture. Because the professional nurses who often deal with these disorders may be influenced by the stereotypes in society (particularly the danger of these patients) and keep up the stigmatic attitudes (10). As such, these attitudes lead to anxiety in nursing students and affect learning in the clinical environment (11).

Studies have shown that empathy has a significant effect on the attitude and behaviour in society against individuals who stigmatized in a social group (12, 13). So that, review of studies also suggest that empathy may be a potential predictor of stigma (14). Therefore, since negative attitudes lead to less satisfaction in caring for stigmatized individuals and it is associated with poorer health outcomes and unwillingness to follow up on treatment in the future; the relationship between patient and nurse care is critical to improving the quality of nursing care (15). On the one hand, the essential quality of any therapeutic relationship is empathy that leads to more patient satisfaction, continuity of treatment, and even recovery from the disease, and ultimately reducing resource use and saving on health care costs (16), it also considered as standards and professional qualifications for nursing (15). In fact, the empathy concept in nursing care means the cognitive ability to understand the feelings and experiences of patient and the appropriate response to these feelings along with the ability to distinguish between their emotions and the patient (17, 18), which helps to relieve loneliness and isolation of the patient (19). However, stigmatic attitudes with the lack of empathy toward psychiatric disorders are the main fences to effective communication between nurses and patients (20). They can be associated with the available names label verification in society such as no treatment of these disorders (21). On the one hand, the type and the amount of available information in the social understanding context of psychiatric disorders seem to be effective in reducing stigma and promoting empathy toward these disorders (22). In this regard, the results of Yang et al. (2014) showed that nurses with higher empathy score; and have less isolation and avoidance behaviours toward patients in psychiatric wards (23). In addition, in the study of Decety et al. (2009), students' empathy responses to the patients' pain with HIV were influenced by their stigmatic attitudes (24). However, the results of Silkea et al. (2017) showed that empathy toward psychiatric disorders has a restrictive effect on the implicit and explicit adolescent stigma responses (25). Also, the results of Webb et al. (2016) showed that there is a negligible negative correlation between empathy and stigma (in comparison with psychiatric disorders, Alzheimer's and homelessness) in American College of Arts students (14). Even if in this study, stigma was studied in an interview with numerous disorders. Therefore, considering both variables of the stigma and empathy are influenced by cultural and social values and clinical experience of students in health centres (26, 27), according to the searches conducted in electronic resources, it seems that the relationship between empathy and stigma toward psychiatric disorders in Iran has not been studied. On the other hand, studies outside of Iran did not directly investigate this relationship; therefore, the researcher aimed to determine the relationship between empathy and stigma with regard to psychiatric disorders in nursing students.

METHODS

This descriptive correlational study was conducted in summer of 2016 at Mashhad Ibn-Sina Psychiatric Hospital (event place of mental health apprenticeship at all nursing and midwifery faculties in Khorasan province). The research population was nursing students. Sampling was made of all students undergoing mental health apprenticeship as available. Based on the formula for determining the sample size in the correlation studies ($n = \frac{z_{1-\alpha/2}+z_{1-\beta}}{z_r} + 3 = 136$), with a confidence interval of 95% and a test power of 80% and r=182/0 (obtained from Webb et al. (2016) (14), the sample size was estimated to be 136. This was determined by taking 15% sample loss (156 individuals). At the end, one person was excluded due to non-responding to demographic information and a total of 155 individuals were included in the study. The criteria for entering the study were passing mental health course 1, lack of employment experience in psychiatric wards, lack of a psychiatric disorders person with first and second degree relatives. To collect data from demographic questionnaire, the Jefferson Nurses' Empathy Questionnaire (28) and the Kassam opening minds scale for Health Care Providers (OMS-HC) were used (29). The demographic information questionnaire consists of questions about age, sex, marital status, place of

residence and college. The Kassam opening minds scale for Health Care Providers (OMS-HC) consists of 20 items that are measured with a 5-point Likert scale (totally disagree=1, disagree=2, no opinion=3, agree=4 and totally agree=5). Scores range is from 20 to 100, and a lower score indicates less stigma. This questionnaire consists of five dimensions: social distance (items 1, 3, 16, 17 and 19), other concepts (overshadow of detection and dangerous) (items 2 and 15), detection (items 4, 5, 6, 7, and 10), recovery (items 8, 9, and 14), and social responsibility (items 11, 12, 13, 18, and 20). The Jefferson Nurses' empathy questionnaire also has 20 items that are measured at 7 Likert scale and have 3 subscales for adopting views with 10 items (2, 4, 5, 9, 10, 13, 15, 16, 17 and 20), sympathetic care with 7 items (1, 7, 8, 11, 12, 14, 18, and 19) and put yourself instead of patient with two items (3, and 6). Scores range is from 140 to 20, which higher scores indicate greater empathy. Items 20-11 are scored in reverse order. Both the nurses' empathy questionnaire and Kassam opening minds scale for Health Care Providers (OMS-HC) were translated into Persian, and then they were introduced to the PhD in English language and PhD in clinical psychology. The validity and reliability of the Jefferson Nurses' empathy questionnaire was confirmed by 10 faculty members of Mashhad University of Medical Sciences (CVR=87%, CVI=95%) and internal consistency (α=0.86), respectively. The validity of OMS-HC was confirmed by 10 faculty members of Mashhad University of Medical Sciences (CVR=81%, CVI=91%) and its reliability was confirmed by internal consistency (α=0.73).

Once obtaining the agreement of the Ethics Committee of the Mashhad University of Medical Sciences with the IR.MUMS.REC.1395.318 license number and a letter from the research deputy of the Mashhad Nursing and Midwifery faculty and coordinating with the hospital, the purpose of the study and its implementation were explained to eligible students, if they were willing to participate in the study, after obtaining the written consent and coordinating with the professors on the first day of mental health training and before entering the psychiatric departments Questionnaires were completed. All statistical analysis was performed using SPSS v.18.0. Descriptive statistics including frequency distribution (in qualitative variables), and mean and standard deviation (in quantitative variables) were used to describe the demographic information of the participants in the study. Initially, the data normality were evaluated using the Kolmogorov-Smirnov test (KS-test). In order to determine the relationship between the stigma and empathy, first, the relationship of all stigma dimensions with empathy was determined using Pearson correlation coefficient. Then, variables with significant relationship ($p<0.05$) entered the multivariate regression model. The normal distribution of dependent variable and the normal distribution of error values were considered. Using Durbin-Watsone test that was 63.1, the data independence is confirmed. Similarly, data-coherent is confirmed using a VIF statistic that was less than 5 (between 1 and 1.02). In this study both data independence data and data-coherent is verified. All statistical analyses with 95% confidence interval were performed.

RESULTS

The students mean age who participate in the study was 22.22±1.67 (19 up to 32 years) and 54.8% (85 persons) were female and 45.2% (70 persons) were male. Other demographic information is given in Table 1. The mean of total stigma score for psychiatric disorders in students was 57.03 ± 6.27 out of 100 and the scores range was 41-76. The mean of total empathy score for psychiatric disorders in students was 100.92±13.18 out of 140 and the scores range was 65-139. The mean scores for both stigma and empathy dimensions are presented in Table 2.

The total mean value of stigma with total empathy score had a significant linear inverse relationship (r=-0.23 and

Table 1. Demographic Features of Participated Nursing Students in Study

Characteristics		n (%)
Gender	Male	70(45.2)
	Female	85 (54.8)
Faculty of education	Neyshabour	32(20.6)
	Gonabad	36(23.2)
	Sabzevar	20(12.9)
	Esfaraen	29(18.7)
	Ghoochan	20(12.9)
	Torbat-heidarie	18(11.6)
Marital status	No Married	103(66.5)
	Married	52(33.5)
Residential area	Urban	136(87.7)
	Rural	19(12.26)
Age	Mean ± SD	
	22.22 ± 1.67	

Table 2. Data descriptive and subscale scores of empathy and stigma toward psychiatric disorders among nursing students

Outcome Variables	Subscale	Mean ± SD	Changing range
Stigma	Social distance	15.35 ±2.56	9-23
	Diagnostic overshadowing	5.61 ± 1.42	3-10
	Disclosure	13.64 ± 3.09	6-23
	Recovery	9.28 ± 1.74	5-14
	Social responsibility	13.14 ± 2.05	8-19
	Total stigma	57.03 ± 6.47	41-76
Empathy	View adaptation	49.30 ± 6.47	27-69
	Empathic care	40.22 ± 6.24	23-56
	Putting themselves instead of patient	11.40 ± 1.93	5-14
	Total Empathy	100.92 ± 13.18	65-139

Table 3. The Relationship between Empathy and Stigma towards Psychiatric Disorders among Nursing Students

	View adaptation	Empathic care	Putting themselves instead of patient	Total Empathy
Social distance	r=0.85 p=0.29	r =-0.14 p =0.09	r=-0.13 p=0.10	r=-0.14 p=0.08
Diagnostic overshadowing	r=-0.07 p=0.41	r=-0.06 p=0.45	r=-0.04 p=0.60	r=-0.08 p=0.34
Disclosure	r=-0.11 p=0.16	r=-0.11 p=0.19	r=-0.15 p=0.06	r=-0.15 p=0.09
Recovery	r=0.02 p=0.78	r=-0.003 p=0.97	r=-0.005 p=0.95	r=-0.01 p=0.85
Social responsibility	r=-0.27 p<0.001	r=-0.27 p<0.001	r=-0.21 p<0.007	r=-0.29 p<0.001
Total stigma	r=-0.16 p=0.04	r=-0.22 p=0.006	r=-0.17 p=0.03	r=-0.23 p=0.004

p=0.004). The linear relationship between the empathy and stigma subscales is expressed in detail.

The statistical method of stepwise regression test was used to calculate the pure relationship between the two variables of stigma and empathy. The results of ANOVA showed that the regression model has a suitable adaptability in this study (P=0.003 and F=0.89). In order to determine the relationship between stigma and empathy, the total mean value of empathy with the mean value of the stigma dimensions was entered into the regression model. The stigma total variables and the social distance dimensions, other concepts, detection and recovery in the regression model were not adaptable. Consequently, they were removed from the model. Once removing these three variables, it was found that the Social Responsibility subscale scores had a significant relationship with total empathy score (beta coefficient=-0.24).

DISCUSSION

The results of this study showed that the social responsibility score subscale has a negative and significant relationship with the empathy level (beta coefficient=-24.2). However, there was no significant relationship between stigma total score and its other subscales and empathy. In other words, consistent with the results of this study, there was a restricted negative relationship between empathy with psychiatric disorders and social responsibility of these disorders in nursing students; but there was no significant relationship between the other stigma and empathy dimensions. In this regard, Silkea et al. (2017) showed that there is a negligible negative relationship between empathy and psychiatric disorders with implicit and explicit stigma in adolescents (beta coefficient=-0.15) (25). The results of Web et al. (2016) indicate a limited negative relationship between empathy and stigma with psychiatric, Alzheimer's and homeless disorders in American College students (p=0.001 and r=-0.182) (14). The results of these two studies can confirm the present study results in terms of insignificant relationship between empathy and responsibility of patients with psychiatric disorders.

In fact, empathy is a cognitive-emotional structure that helps individuals communicate with thoughts, feelings and experiences of others, and gave them an excellent emotional response and predict their behavior. The ability to empathize can reduce stigma by understanding the people emotions with psychiatric disorders. So, many studies have been

Table 4. The Modified Relationship between Empathy and Stigma towards Psychiatric Disorders among Nursing Students

Variable		R	R^2	β	T	P value
Social responsibility		0.24	0.05	-0.24	-3.00	0.003
Deleted variables	Social distance			-0.11	-1.43	0.154
	Diagnostic overshadowing			-0.09	-1.15	0.253
	Disclosure			-0.08	-0.96	0.339
	Recovery			-0.03	0.35	0.726
	Total stigma			-0.115	-1.31	0.191

designed, such as hearing impairment simulation interventions to empathize people with psychiatric disorders and reduce stigma (14). On the other hand, according to Thomas Allport's (1954) hypothesis, contact with patients with psychiatric disorders can diminish the stereotypes of these patients through empathy. In the first place, empathy causes people to feel more positive about these disorders and then influence the individual behavioral motivations to provide more emotional and social support (30). However, as empathy is different in various cultures (31); in European cultures, in comparison with Asian cultures, the verbal expression of emotions is for greater empathy and are associated with more emotional support and stigma attitudes reduction (32). On the one hand, cultural context has a decisive role in affecting the stigmatic attitudes of individuals. So, compliance with values is extremely valuable and it is natural that psychiatric disorders are considered to be devalued (33). Meanwhile, collectivist cultures, in contrast to individualist cultures, have more stigmatic attitudes about these disorders. Since in collective culture, including Iran, due to cultural constraints, group coordination forms the core of cultural values. Therefore, in these cultures, compliance with norms is highly valuable (34). Therefore, it seems that according to the results of this study, due to cultural conditions of Iran, there was no significant relationship between other dimensions of stigma and empathy. In this regard, Yang et al. (2014) in their study showed that there was a significant negative correlation between empathy with the separation and avoidance behaviors of psychiatric disorders in nurses working in psychiatric wards (23), which did not match the results of this study. One of the reasons for this disagreement can be cultural differences between society and research community that include nurses working in psychiatric wards. Because employment and close contact with psychiatric disorders patients seems to act as a factor in empowering patients and reducing their stigma. However, in the present study, nursing students were studied before entering the mental training and contact with these patients. Decety et al. (2009) showed that there is a significant negative correlation between empathy with students' stigmatic attitudes toward pain in HIV patients (24). Although, in this study, stigma and empathy were studied in a different group, but the results did not match the results of this study. One of the reasons for this disagreement can be the cultural conditions governing societies that can greatly affect these two variables.

Of the limitations of this study was the participants' selection from nursing faculty located in different cities and various psychiatric instructors' attitudes (which provided mental health theory training) which could affect stigma and empathy toward psychiatric disorders in students before entering mental health training. It is suggested that given the impact of social and cultural conditions on stigma and empathy toward psychiatric disorders, other studies is conducted over a longer period and with a larger sample size on a students by one to two instructors with roughly the same attitudes toward psychiatric disorders. The results of this study indicated that there was a negative relationship between empathy and psychiatric disorders and social responsibility, but there was no relationship between empathy and other aspects of stigma.

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