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Research Article

THE EFFECT OF THE PSYCHIATRIC AND MENTAL HEALTH NURSING COURSE ON MENTAL HEALTH LITERACY IN NURSING STUDENTS: A QUASI-EXPERIMENTAL STUDY

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ABSTRACT

In the literature, it is suggested that curriculum programs should be updated, sufficient content should be added to the psychiatric and mental health nursing course, and training programs should be organized to improve students' mental health literacy. This study aimed to determine the effect of the psychiatric and mental health nursing course on mental health literacy among nursing students. This study was conducted as a quasi-experimental study with 69 nursing students. The mean age of the students was 21.97±1.14 and 79.7% were female. It was found that the posttest mean scores of the mental health literacy scale and its sub-scales were significantly higher than the pretest mean scores. It is recommended to add sufficient content to the psychiatric and mental health nursing course and support it with clinical practice. In places where there are no units on mental health for the implementation of the course, consultation-liaison psychiatric nursing practice enables students to put the information they receive in the course into practice and increases the mental health literacy level.

INTRODUCTION

Health literacy has become an important priority to people to manage their health, access the health system, and for health systems to improve human health in the 21st century (Sørensen et al., 2012; Sørensen, 2019). Mental health literacy (MHL) is one of the most important components of health literacy, which is defined as the ability to access, understand, and use information to improve and maintain health (Bjørnsen, Eilertsen, Ringdal, Espnes & Moksnes, 2017; Jorm et al., 1997; Jorm, 2019). The concept of MHL was introduced by Jorm et al. in 1997 and defined as "knowledge and beliefs that help recognize, manage or prevent mental disorders" (Jorm et al., 1997; Jorm, 2015).

Mental illnesses are increasing worldwide. According to the World Health Organization (WHO, 2022), approximately 970 million people globally live with a mental illness. The fact that mental illnesses are so common means that many people around us may face mental illness. MHL level plays an important role in the recognition, management, and prevention of mental illnesses. The students of nursing, who will carry out the profession of nursing in many areas

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that concern society, should have a high level of MHL to be beneficial to society. Therefore, nursing students should be ready to accurately determine the needs of patients in line with the knowledge they have acquired in undergraduate education, communicate basic health knowledge, and help patients use the health system to best meet their requirements (Saito & Creedy, 2021). In the studies conducted, it was determined that the mental health literacy of the students was not at an adequate level, and even they had a low level of mental health literacy in terms of beliefs about mental illnesses (Al-Yateem, Rossiter, Robb & Slewa-Younan, 2018; Göktaş et al., 2024; Özer & Altun, 2024). In studies conducted on the subject, it is recommended that the nursing education process should be comprehensive and supported by clinical and field practices (McCan, Lu & Berryman, 2009; Özer & Altun, 2024). Nurses with a high level of mental health literacy through such an education can play important roles in providing quality patient care in the clinical environment as well as improving the mental health of the society (Al-Yateem et al., 2018; Özer & Altun, 2024). Therefore, it is important to determine how the education offered to nursing students, each of whom are future nurses, affects mental health literacy.

Nursing students need to be literate about mental health when they complete their education (McCan, Lu & Berryman, 2009). Therefore, it is stated that MHL is an important issue that should be handled in the bachelor's nursing curriculum (Saito & Creedy, 2021). In the literature, it is recommended to update curricula, organize training programs, and develop programs such as simulation to improve students' MHL levels and awareness (Murphy, Klug & Kasimatis, 2023; Öztaş, Ünal, Ölçer, Çal & Öge, 2023; Saito & Creedy, 2021; Turgut, Eryalçın & Kutlu, 2023). In the institution where this study was conducted, the psychiatric and mental health (PMH) nursing course is included in undergraduate nursing education. This course is the most important course in which nursing students gain comprehensive information about mental health and mental illnesses during their undergraduate education. This course, in which many topics related to mental illnesses are discussed, can provide students with important awareness about mental illnesses. Therefore, it is necessary to investigate the impact of the PMH nursing course on nursing students' MHL. Investigating the level of MHL of nursing students is important to better understand whether students are ready to care for patients suffering from mental disorders after completing their education (Liu, Li & Peng, 2018).

MATERIAL AND METHOD

Study Design and Aim

The study was conducted as a quasi-experimental study in a one-group pretest and posttest design. This design is used when only one group is available for the study. Data are collected before and after an experimental intervention on a group (Sullivan-Bolyai & Bova, 2018). Accordingly, the aim of this study is to determine the effect of the PMH nursing course on the MHL level of nursing students.

Hypothesis

H_1: The PMH nursing course has an effect on improving the MHL level of nursing students.

H_0: The PMH nursing course has no effect on improving the MHL level of nursing students.

Place and Time of the Study

This study was conducted during the fall semester of the 2022-2023 academic year in the Nursing Department of the Faculty of Health Sciences at a university.

Population and Sample

The study population was fourth-year nursing students enrolled in the PMH nursing course in the fall semester of the 2022-2023 academic year. All students (75) who had to take the course compulsorily were informed about the research and their written and verbal consents were obtained. All students taking the course were informed that a study would be conducted as part of the course and that their participation in the study was voluntary. Although students' participation in the course was compulsory, they were not obliged to fill in the data collection forms of the study conducted within the scope of the course. The sample of this study consisted of 69 nursing students who participated in the research. The mean age of the students participating in the study was 21.97±1.14 and 79.7% were female. Sixty students participated in both pre and posttest measurements, three students participated only in the pretest measurement, and six students participated only in the posttest measurement. The fact that 6 of the students did not participate in the pretest and three students did not participate in the posttest shows that students' participation in the study was not compulsory. Since all students had to take the course, no control group was selected and randomization was not performed.

Inclusion criteria: To be a fourth-year nursing student, enrolling in the PMH nursing course, agreeing to participate the study

Exclusion Criteria: Absenteeism

Data Collection Instruments

The Personal Information Form: The form consists of four questions to determine the students' age, gender, and the presence of mental illness in themselves or their relatives.

The MHL Scale: The original version of the MHL scale used to identify the MHL level consists of 26 items. The MHL scale developed by Jung, von Sternberg & Davis (2016) has three sub-scales: knowledge oriented, beliefs oriented, and resource oriented. The validity and reliability study of the MHL scale was conducted by Göktaş, Işıklı, Önsüz, Yenilmez & Metintaş (2019). With the validity and reliability study, the scale was reduced to 22 items. There are 10 items in the knowledge oriented MHL sub-scale, eight items in the beliefs oriented MHL sub-scale, and four items in the resource oriented MHL sub-scale. The score from the scale varies between 0-22 for the whole scale, and it is accepted that as the score increases in the whole scale and each sub-scale, the MHL level increases. The 18 items in the first two sub-scales of the scale are in six points Likert type and the responses are "strongly agree, agree, neutral, disagree, strongly disagree, I don't know". The responses to the four items in the resource oriented MHL sub-scale are "yes" and "no". When "strongly agree", "agree" and "yes" answers are given to the items, they are evaluated as "1 points" and the other responses are evaluated as "0 points". The items of the beliefs-oriented MHL sub-scale of the scale [11-18] are reverse-scored. Cronbach's alpha coefficient of the scale is 0.71.

The study variables

Independent variable: The PMH nursing course

Dependent variables: The MHL scale and sub-scales mean scores

Data Collection

75 students enrolled in the PMH nursing course. Four students who never attended the course did not participate in the study. Two students failed the course and were excluded from the study because their absences in both the theoretical course and hospital practice during the semester exceeded the legal absenteeism period. The data of the study were obtained from 69 nursing students who attended the study. In the first week of the fall semester, the pretest data of the study were taken from the students by applying the Personal Information Form and the MHL scale. The PMH nursing course was conducted as five hours of theoretical and 8 hours of Consultation-Liaison Psychiatric (CLP) nursing practice per week for 14 weeks. In the last

week of the semester, the MHL scale was applied to the students and the posttest data of the study were collected.

Intervention

The PMH nursing course is offered as a compulsory course in the fall semester for fourth-year nursing students. All students in the fourth year of nursing enroll in this course. The theoretical subjects of the course are taught five hours a week for 14 weeks (14x5=70 hours) during the semester. Students also practice the course in the hospital for eight hours a week (14x8=112 hours). Since there are no psychiatric hospitals or psychiatry-related units in the province where the students are located, the course was carried out in other clinics in general hospitals in the form of CLP nursing practice. Educational methods such as lectures, presentations, case examples, clinical practice, short videos, movie screenings, homework, and documentaries were used to conduct the course. The 14-week theoretical and practical content of the PMH nursing course is shown in Table 1 (Boyd, 2018; Gürhan, 2016; Townsend & Morgan, 2018; Videbeck, 2020).

Table 1. The Content of the PMH Nursing Course During the Semester

Week	Topics (5 hours)	Practice (8 hours)
1.	Introduction to the PMH nursing Standards of practice for the PMH nursing	Preparations for Practice Case presentation
2.	The history of psychiatry and psychiatric nursing Watching a documentary about psychiatry (Evgin, 2007) Watching a documentary about psychiatric nursing (Gül & Evecen, 2021)	Preparations for CLP nursing practice
3.	History taking and mental status examination Watching short videos about mental status examination Genogram and ecomap Case presentation about genogram and ecomap Homework about genogram and ecomap	CLP nursing practice
4.	Therapeutic relationship and communication Therapeutic and nontherapeutic communication techniques	CLP nursing practice
5.	Therapeutic milieu Seclusion, physical, mechanical, and chemical restraints	CLP nursing practice
6.	Psychiatric observation, interviewing, and recording Watching a video: Interviewing a patient with suicidal thoughts Watching a video and recording an observation	CLP nursing practice
7.	Anxiety disorders, obsessive-compulsive disorder, and nursing process Defense mechanisms Case presentation	CLP nursing practice
8.	Mood disorders and the nursing process Case presentation	CLP nursing practice
9.	Schizophrenia and other psychotic disorders and the nursing process Case presentation Watching a documentary about schizophrenia (Eren & Kaya, 2008)	CLP nursing practice
10.	Psychiatric emergencies and psychiatric nursing, legal issues	CLP nursing practice
11.	Traumatic life events and psychiatric nursing	CLP nursing practice
12.	CLP nursing	CLP nursing practice
13.	Substance use disorders and psychiatric nursing	CLP nursing practice
14.	Personality disorders, eating disorders	CLP nursing practice

	Watching a movie (Forman, 1975)
	Semester evaluation

Analyzing data

Descriptive statistics and normality test were used in the SSPS 26.0 package program. Since the data did not show normal distribution ($p<0.05$) as a result of the normality test, Wilcoxon and Mann-Whitney U tests were used in the analysis. To include the data of the students who attended only in the pretest or only in the posttest measurement in the analysis and to prevent data loss, a missing data analysis was performed in SPSS. Statistical significance value was accepted as $p= 0.05$ in the analyses.

Limitations

This study was conducted in a single group pretest and posttest quasi-experimental design. The most important limitation of this study is the lack of randomization and control group. Another limitation is the lack of psychiatry units in the province where the study was conducted. The study results are limited to the research group.

Ethical Considerations

Ethics committee approval (E-84771431-050.03-53970) was received from the Ethical Principles and Ethics Committee of a university. Institutional permission (22/07-1-E.2273) was obtained from the faculty where the study was conducted and permission to use the scale was obtained from the authors who conducted the adaptation study. The participating students gave informed consent for the study.

RESULTS

A total of 69 students participated in the study, with 60 students completing both the pretest and posttest measurements, three students participating only in the pretest, and six students participating only in the posttest. The students' mean age was 21.97±1.14 and 79.7% were female. 1.4% of the students stated that they had a mental illness and 24.6% stated that they had a mental illness in their relatives (Table 2).

Table 2. Participants' Characteristics

Characteristics	**n**	**%**
Age (Mean±SD = 21.97±1.14)		
20-22	48	69.6
23-26	21	30.4
Gender		
Female	55	79.7
Male	14	20.3
Having a mental illness		

Yes	1	1.4
No	68	98.6
Having a mental illness in relatives		
Yes	17	24.6
No	52	75.4

The pretest and posttest measurements according to the students' characteristics are shown in Table 3. According to the table, no statistical significant difference was found between the pretest mean scores and the students' age, gender, mental illness status in themselves, and mental illness status in their relatives ($p>0.05$). Likewise, there was no statistical difference between the posttest mean scores and age, gender, mental illness status, and mental illness status in relatives of the students ($p>0.05$).

Table 3. Pretest and Posttest Measurements According to Students' Characteristics

Characteristics	**Scale and Subscales**	**Pretest**
Age	Overall MHL	p: 0.171, Z: -1.370
	Knowledge oriented MHL	p: 0.056, Z: -1.912
	Beliefs oriented MHL	p: 0.842, Z: -0.199
	Resource oriented MHL	p: 0.170, Z: -1.372
Gender	Overall MHL	p: 0.490, Z: -0.690
	Knowledge oriented MHL	p: 0.171, Z: -1.369
	Beliefs oriented MHL	p: 0.206, Z: -1.266
	Resource oriented MHL	p: 0.309, Z: -1.017
Having a mental illness	Overall MHL	p: 0.165, Z: -1.388
	Knowledge oriented MHL	p: 0.122, Z: -1.545
	Beliefs oriented MHL	p: 0.683, Z: -0.408
	Resource oriented MHL	p: 0.444, Z: -0.766
Having a mental illness in relatives	Overall MHL	p: 0.389, Z: -0.861
	Knowledge oriented MHL	p: 0.324, Z: -0.985
	Beliefs oriented MHL	p: 0.322, Z: -0.990
	Resource oriented MHL	p: 0.718, Z: -0.631
Characteristics	**Scale and Subscales**	**Posttest**
Age	Overall MHL	p: 0.639, Z: -0.469
	Knowledge oriented MHL	p: 0.723, Z: -0.354
	Beliefs oriented MHL	p: 0.505, Z: -0.666
	Resource oriented MHL	p: 0.356, Z: -0.922
Gender	Overall MHL	p: 0.137, Z: -1.488
	Knowledge oriented MHL	p: 0.338, Z: -0.959
	Beliefs oriented MHL	p: 0.093, Z: -1.679
	Resource oriented MHL	p: 0.519, Z: -0.644
Having a mental illness	Overall MHL	p: 0.286, Z: -1.067
	Knowledge oriented MHL	p: 0.388, Z: -0.862
	Beliefs oriented MHL	p: 0.569, Z: -0.570
	Resource oriented MHL	p: 0.530, Z: -0.628
Having a mental illness in relatives	Overall MHL	p: 0.174, Z: -1.361
	Knowledge oriented MHL	p: 0.174, Z: -1.358
	Beliefs oriented MHL	p: 0.527, Z: -0.633
	Resource oriented MHL	p: 0.595, Z: -0.532

The students' mean scores from the MHL scale and its subscales are shown in Table 4. The students' mean MHL scores were 14.80±2.50 in the pretest, and 19.18±2.07 in the posttest. It was found that the posttest mean scores from the MHL scale and its sub-scales were

statistically higher than the pretest mean scores. The differences between pretest and posttest MHL mean scores were statistically significant (p= 0.000).

Table 4. Comparison of the Students' Pretest and Posttest Mean Scores

Scale and Subscales	Pretest X±SS	Posttest X±SS	Z	p
Overall MHL	14.80±2.50	19.18±2.07	Z: -6.895	**p: 0.000**
Knowledge-oriented MHL	8.15±1.33	9.36±0.87	Z: -5.078	**p: 0.000**
Beliefs-oriented MHL	4.55±1.45	6.21±1.55	Z: -6.497	**p: 0.000**
Resource-oriented MHL	2.10±1.33	3.61±0.76	Z: -5.935	**p: 0.000**

DISCUSSION

The study was conducted to examine the effect of the PMH nursing course on nursing students' MHL level. The hypothesis "the PMH nursing course has an effect on improving the mental health literacy level of nursing students" was confirmed for the study. The fact that there was no difference between the pretest mean scores and the students' age, gender, mental illness status in themselves, and mental illness status in their relatives showed that the students had similar MHL levels before the PMH nursing course. According to the posttest measurements, the effect of the course on MHL did not change according to the students' age, gender, and the presence of mental illness in themselves or their relatives (Table 3). This means that the PMH nursing course improved the MHL level of all students with different characteristics. Improved MHL is important for early intervention in mental problems, promoting improved mental health, and supporting the community mentally (Al-Yateem et al., 2018). Previous studies conducted in different groups in the literature have also revealed that training programs improve the level of MHL (Morgado et al., 2021; Perry et al., 2014; Skre et al., 2013). These studies support the results of this study.

The knowledge-oriented MHL subscale of the scale aims to assess students' knowledge level about mental illnesses. Lack of knowledge on mental health is the most crucial determinant of negative attitudes and stigmatization towards mental illnesses (Ross & Goldner, 2009). According to the pretest results of this study, we can say that the knowledge-oriented MHL level of nursing students is positive. The results of the study conducted by Saito & Creedy (2021) support this finding. According to the posttest results of this study, students' knowledge-oriented MHL level increased significantly. This shows that the PMH nursing course was effective in increasing students' knowledge about mental illnesses. Improved knowledge about mental illnesses can be very useful both for students and for the patients and relatives they will care for while practicing their profession.

The beliefs-oriented MHL sub-scale of the scale aims to identify attitudes and beliefs toward mental illnesses. According to the pretest of the study, it is difficult to say that the students' level of beliefs-oriented MHL is positive. In the study of Poreddi, Thimmaiah & BadaMath (2017), a significant number of the nursing students had negative attitudes towards mental illnesses, which is consistent with the pretest results of this study. Negative beliefs and attitudes about mental illnesses lead to discrimination and stigmatization of individuals having mental illness and disruption of the therapeutic relationship between nurse-patient (Poreddi et al., 2017). The significant difference between the posttest and pretest mean scores of the study shows that the students had positive attitudes at the end of the semester. Tambag's (2018) study also revealed that the PMH nursing course positively affected students' attitudes towards mental illness.

The resource-oriented MHL sub-scale is related to the knowledge of the institutions, organizations, people, or individuals to whom those receiving education on mental health can inform and refer patients in case of mental illness. This study findings show that the PMH nursing course significantly increased the resource-oriented MHL level of nursing students. This result is crucial in terms of guiding the students who will carry out the nursing profession after graduation in directing individuals with mental problems to the relevant institutions and organizations both in society and in the institutions where they work. Because nurses are the healthcare professionals who have the most contact with patients and families (Özer & Altun, 2022). Nurses have a great role in informing society, developing MHL, and creating a healthy community environment (Tay, Tay & Klainin-Yobas, 2018). This study results show that students are ready to guide the individuals they care for in their professional lives.

The overall MHL level is revealed by the scores from the three subscales of the scale. MHL level is a very important factor in recognizing mental problems and seeking help for these problems (Kim, Yu & Kim, 2020). It is stated that sufficient content regarding mental health should be integrated into the undergraduate nursing curriculum and students should reinforce their knowledge with sufficient clinical experience (Saito & Creedy, 2021). In the study, nursing students were provided with information about mental health within the scope of the PMH nursing course for one semester. The implementation of this course should be carried out in units related to psychiatry or outside psychiatric units as CLP nursing practice. However, since there were no units related to psychiatry in the province where the study was conducted, the students only practiced the course as CLP nursing practice outside the psychiatric units. The increase in the MHL level of the students demonstrates that the PMH nursing course and the CLP nursing practice carried out within the scope of the course are effective in improving MHL.

In a study conducted by McCann et al., (2009), it was found that the MHL level of nursing students increased significantly in the third year. It was stated that this situation emerged due to the effect of the theoretical and clinical education received by the students within the scope of the PMH nursing course in the fourth and fifth semesters. These results support this study's findings. Liu et al. (2018) stated that the MHL level of nursing students is an indicator of whether students are ready to care for individuals having mental problems after graduation. The results of this study show that students are ready to prevent mental problems, intervene early, and take necessary measures. In addition, the most fundamental element of the PMH nursing is the therapeutic relationship between nurse-patient (Lessard-Deschênes & Goulet, 2022). One of the most important factors shaping this relationship is the MHL level (Wang et al., 2023). The results of this study are also important in terms of showing that students can maintain the therapeutic relationship they will develop with patients.

CONCLUSIONS

This study reveals that the PMH nursing course and the CLP nursing practice conducted within the scope of the course improved the general MHL level of nursing students. It was revealed that the students increased their level of knowledge about mental health, developed positive attitudes, and guided individuals with mental problems to the relevant institutions and organizations. This result shows that after completing their nursing education, students are ready to develop therapeutic relationships with the individuals they care for, prevent mental problems, intervene early in the event of mental problems, and take necessary measures. It is recommended to conduct randomized controlled studies on MHL of nursing students.

Implications for Practice

This study determined the effect of the PMH nursing course on the MHL level of bachelor’s nursing students. According to the results of the study, the PMH nursing course in the nursing curriculum provides sufficient information that students need about mental illnesses. The CLP nursing practice carried out within the scope of the course contributes to the improvement of students' MHL. It is recommended to add sufficient content to the PMH nursing course in the nursing curriculum and support it with clinical practice. In places where there are no units on mental health for the implementation of the course, CLP nursing practice enables students to put the information they receive in the course into practice and increases the level of MHL.

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