



The Open Nursing Journal

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RESEARCH ARTICLE

Effectiveness of an Educational Intervention on Clinical Competency among Mental Health Nurses Working at a Government Mental Health Hospital: A Quasi-experimental Study

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Abstract:

Background:

Mental health nurses play an important role in caring for patients with mental illnesses. In order to provide comprehensive mental health nursing care, it is important to establish periodic educational interventions about mental health and psychiatric nursing in any mental health institution. The presence of frequent educational programs can lead to improvements in mental health nurses' clinical competency.

Aim:

To evaluate the effectiveness of an educational intervention on the clinical competency of mental health nurses.

Methods:

A quasi-experiment study pretest and posttest with one group study design were conducted among 80 nurses in a large mental health hospital in Tabuk city, Saudi Arabia. Data were collected by using the clinical competence evaluation in mental health nurses scale to evaluate the effectiveness of an educational intervention on the clinical competency of mental health nurses by comparing the result of the pretest and posttest scores.

Result & Discussion:

The total score for the pre-test was (74.83±14.25/Average), and then the score increased dramatically for the post-test (96.18±26.53/Good) also, the Wilcoxon signed-rank test indicated that Post-test (Mean rank=102) significantly higher than pre-test (Mean rank=59) (U=1480, p<0.001). As a result of the current study, the program showed great effectiveness (p<0.001) with an advantage for post-test.

Conclusion:

The collected data analysis revealed a statistically significant positive effect of educational programs on improving mental health clinical competency, hence, Healthcare organizations and senior decision-makers should develop well designed periodic mental health programs that involve nurses who have a master's and doctorate degrees in mental health nursing to enhance mental health clinical competency.

Keywords: Clinical competency, Educational intervention, Effectiveness, Mental health, Nurses, Hospital.

Article History

Received: July 10, 2022

Revised: September 27, 2022

Accepted: October 21, 2022

1. INTRODUCTION

Nurses play an important role within the healthcare team and therefore, a lack of well-qualified and highly trained staff, may lead to poor healthcare quality and nursing activities cannot be carried out professionally [1]. Nursing as a pro-

fession involves multi-tasking and includes persistent care measures that start with simple activities and move gradually towards more complicated care and eventually, lead to inclusive decision-making in providing care [2]. The nurses who work in mental health facilities are considered an essential part of the psychiatric team and take responsibility for many roles, such as preparing patients with mental illnesses to handle their current and different circumstances to regain their former abilities [3]. Clinical competency is a set of knowledge, skills,

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values, attitudes, and abilities that result in successful professional performance in different aspects of a specialized career area [4]. Competency within the nursing profession contains different learning types, including skills, knowledge and attitudes [5]. Recently clinical nursing competence in the mental health field seemed to be of great importance issues in conceptual and clinical nursing training, with various factors influencing it [5]. Mental health clinical competency evaluation offers a chance to improve and develop the profession of nursing [6]. Furthermore, frequent assessment of the clinical competency of psychiatric nurses leads to the development of a standardized baseline about their clinical competency and also discloses the defect in practical skills and insufficient knowledge in their work [3]. Accordingly, training and educational interventions in different countries worldwide have improved clinical competency and supplied society with better-qualified nurses [7].

Continuing professional development (CPD) among mental health nurses has been crucial to guarantee the competence of their profession. CPD, in general, offers new information that could aid individuals in navigating novel circumstances and maintaining their progress toward objectives. They are also able to stay updated with instructional techniques. Mental health nurses' CPD with well-designed programs that focus on skill improvement provide an opportunity to raise mental health nurses' competence and enhance their ability to meet the clinical demands of the workplace. Thus, it is essential to establish a routine educational and training program within health organizational structures, especially psychiatric hospitals, to improve professional development opportunities [8]. There has been much study on the value of CPD for businesses and employees, but less attention has been paid to the value of CPD for those in the mental health field. Besides, participation in ongoing professional development, is now required for nursing and midwifery registration. However, it is unclear how clinically based mental health nurses feel about CPD and how it relates to their career goals.

Education is essential for professional nursing skills and provides opportunities to acquire a wide range of knowledge, problem-solving abilities, and critical thinking. Once licensed, nurses are responsible for continuing their education to be informed on medical breakthroughs and new research. A well-educated nurse may differentiate between a patient's life and death since knowledge is a strong instrument in healthcare. Enhancing their education also gives nurses more employment options; some switch from hospital work to research. The problems with nursing competency assessments manifest the intricacy and challenges of the field [9]. The field of mental health nursing confronts various difficulties due to several factors, including a lack of clarity regarding the responsibilities of mental health nurses and an absence of guidelines for mental health treatment. The necessity for clinical competence has increased in relevance recently since communities today demand a higher quality of service, leading the healthcare system to improve the efficacy of their personnel [10]. Despite the tremendous importance of the topic, little research has been done in this area, and there is a limited understanding of clinical nurses' competency and skill level.

Mental health nurses need access to all fundamental competencies throughout their study to be clinically competent. In this regard, mental health nurses' motivation to partake in CPD activities is derived from a desire to provide their patients with high-quality treatment and from their dedication to lifelong learning as members of a self-regulated profession. Since regulatory organizations progressively demand CPD as a certification, there is a growing need to ensure that nurses maintain their performance and expertise in line with industry standards [11].

To be competent, up-to-date, and capable of meeting the demands of their patients as well as their statutory duties through their regulating bodies, mental healthcare professionals must continually update their knowledge, abilities, and attitudes. Therefore, CPD is crucial for retaining the nurses' knowledge and abilities, as it is at the core of lifelong nursing learning. Although the need for nurses' ongoing professional development is widely accepted, little is known about how nurses perceive such growth [12]. Reviewing the evidence on the value of continuous professional development for mental health nurses might lay the groundwork for more well-thought-out future initiatives in this area.

Continuous Nursing Education (CNE), also known as CPD, is a process for professional growth that involves several actions taken by an individual while acting in the ability of a practice nurse in order to uphold and advance that nurse's professionalism under the established competency standards [13]. For healthcare professionals to maintain their skill sets, ongoing professional development (CPD) or continuing education is required [12]. Recognizing that continuing education (CPD) is a method for professionals to improve and broaden their knowledge, skill, and competence, as well as to develop both personally and professionally. Professional nursing development can enhance clinical nurse retention, job satisfaction, and the quality of patient care [14]. Nurses should be supported while their coworkers and the hospital management pursue professional development [15].

Recent research on workplace learning highlights the necessity to simultaneously consider individual and group learning prerequisites if the learning is successful. Encouraging nurses' CPD in a clinical setting is essential given its good effects on patients, professionals, and organizations [16]. Additionally, CPD helps to improve the standard of care and health outcomes. Moreover, previous research, highlights that CPD encourages professionals' enthusiasm, dedication, and happiness, which improves their retention and performance [12]. Since the practice standards rely on the possession and utilization of high-level abilities, which, if neglected, may have negative consequences on the patient, CPD is crucial for trained healthcare professionals [16]. As a result, mental health nurses have an ethical and professional duty to engage in it. The effectiveness of CPD has been defined as, in theory, the practitioner improving practice *via* knowledge and competence, and this development translates into better patient health outcomes.

Individual nurses, midwives, and other healthcare workers can benefit from participating in CPD; nevertheless, restricting chances might harm job satisfaction and the desire to leave the

field. Despite a wealth of studies on CPD in healthcare, little is known about how it affects patient outcomes. Continuous Nursing Education assessment is essential since it has been demonstrated that better clinical practice or patient outcomes do not always follow more excellent knowledge for healthcare professionals [5]. However, CPD must go beyond knowledge acquisition and use employee preferences for learning connected to their jobs to yield benefits for patients and organizations [8]. Finally, there is limited consensus about the best techniques for assessment and analysis, the standard of CPD, and the price and cost-effectiveness of doing so.

1.1. Aim of the Study

To evaluate the effectiveness of an educational intervention on the clinical competency of mental health nurses.

1.2. The Objective of the Study

To measure the effectiveness of an education program to enhance clinical competency instead of measuring the pre and post-results of the test.

1.3. Research Hypothesis

Implementing an educational intervention will improve mental health clinical competency in nurses.

2. RESEARCH METHODOLOGY

A quasi-experimental study pretest and posttest with one group design were used in the current study to evaluate the effectiveness of an educational intervention on mental health nurses' clinical competency. The quasi-experiment purpose was to assess the effect of an intervention on a selected population. The interval between the pretest and posttest was 3 months. The study was conducted in the city of Tabuk which is located in the northwest of Saudi Arabia. The study was conducted in a large government mental health hospital called (ERADH mental health complex) from 1 November 2021 until 1 March 2022. The ERADH mental health complex was established in 1983 with 200-bed capacity and the total number of beneficiaries of hospital services annually is about 40000 referrals. The hospital also, includes different departments such as mental health ward for males and females, an addiction ward, an outpatient department, an emergency room, halfway houses, an occupational and recreational therapy department and home care.

A total of 135 nurses work at ERADH mental health complex. However, only 80 nurses responded and agreed to participate in this study, therefore, the total response rate was

around 60% of the nurses that were recruited for the current study according to convenience sampling. Some of the potential reasons for nurses not being able to be included in the study include: the night shift nurses not being able to join, some nurses being on annual leave and others being assigned to assignments external to the hospital at the time of the study. The inclusion criteria were full-time nurses who work in direct contact with patients. The participants who were included in the current quasi-experimental study were informed about the aim and the type of methods that were utilized in this study. In addition, participants were informed that participation in the current study is voluntary and they have the right to refuse or withdraw from the study at any time without any harm or discrimination against them.

The data collection process during the current study was collected through two stages: In the first stage, the researcher distributed the questionnaire through paper forms to the participants before attending the educational intervention. The purpose of this step was to establish pre-assessment for the level of mental health nurses' clinical competency. In the second stage, the researcher distributed the same questionnaire to the same participants to compare both results of the pretest and posttest. Data collection was implemented by using two types of tools to measure the effectiveness of the independent variable (educational intervention) and the dependent variable (mental health clinical competency).

2.1. Demographic and Job Experience Information

A self-administered questionnaire was developed by the researchers after reviewing related literature to collect information about the demographic and job experience information which included questions such as age, gender, nationality, marital status, education, total work experience within the Ministry of Health and total years of work experience in the current ward.

2.2. Clinical Competence Evaluation in Mental Health Nurses Scale

The clinical competence evaluation in mental health nurses scale was developed by Moskoei and colleagues [17]. and is a self-administered tool, utilized in the current study to determine the mental health clinical competency among mental health nurses. The scale can also be used to assess specific educational demands of mental health nurses. The scale contains 45 items ranging from 0 (Never), 1 (Barely), 2 (Sometimes), 3 (Mostly), and 4 (Always). The reliability of the scale was 0.98 according to the Cronbach alpha which indicates that it is an excellent tool with high reliability. Cronbach's alpha for the current study instrument was 0.95 in targeted populations (Table 1).

Table 1. Cronbach's alpha result for a study tool.

Item	r	Item	r	Item	r	Item	r
1	0.436**	12	0.432**	23	0.547**	34	0.684**
2	0.419**	13	0.335*	24	0.508**	35	0.700**
3	0.576**	14	0.459**	25	0.600**	36	0.756**
4	0.607**	15	0.543**	26	0.742**	37	0.644**
5	0.610**	16	0.618**	27	0.529**	38	0.597**
6	0.378*	17	0.533**	28	0.644**	39	0.662**

(Table 1) contd....

Item	r	Item	r	Item	r	Item	r
7	0.552**	18	0.706**	29	0.728**	40	0.540**
8	0.561**	19	0.656**	30	0.537**	41	0.577**
9	0.633**	20	0.575**	31	0.463**	42	0.559**
10	0.605**	21	0.611**	32	0.622**	43	0.511**
11	0.576**	22	0.662**	33	0.756**	44	0.589**
						45	0.478**
The Cronbach's alpha = 0.955							

2.3. Procedure

Before conducting the study, the instrument that was used to collect data from the targeted population was translated from English to Arabic using back-to-back translation. Furthermore, a group of jury members that consisted of five experts in the mental health nursing field reviewed the tool in both the English and Arabic versions for their content validity and relevance, and consequently, no modifications were made to the tools. Moreover, a pilot study was conducted in order to test the study's applicability, feasibility and to estimate the time that was needed for the current study and the completion of the questionnaires. Ten percent of the participants (n=20) were randomly chosen for the pilot study from the selected population. Ten percent of the participants were later included in the current study because no modifications were needed for the current study's tools.

The Ethical approval to conduct this study was obtained from the Tabuk Institutional Review Board of the Ministry of Health, IRB protocol no: TU-077/021/113, in Saudi Arabia. The researchers maintained that voluntary participation and the right of anonymity and confidentiality were guaranteed as the participating nurses did not share their names or any personal identifying data. The researcher explained that participation in the current study is not likely to produce any potential risks or harm to the participants. Furthermore, written informed consent was obtained from the participants. The privacy of collected data was protected by using a password-protected file for data storage on the researcher's computer. Data collection took place over a period of four months, from 1/12/2021 to 1/03/2022 and the questionnaires were distributed to participants in paper form during both the pretest and posttest.

Table 2. Content of the educational intervention

Day	Topic	Activity Type	
		Lecture	Workshop
First Day	Communication skills for dealing with patients with mental disorders	√	-
Second Day	Patient safety in inpatient care	√	√
Third Day	Risk assessment.		
	Mental disorders (signs and symptoms, causes, nursing role)	√	√
	Dealing with different cases of patients with mental disorders		
Fourth Day	Pharmacological safety when dealing with patients with mental disorders	√	
Fifth Day	Nursing care plan for patients with mental disorders	√	
	Patient restraint and limit setting		√

2.4. Content of the Educational Intervention

The program is a brief educational and training program on psychological nursing and mental health, and it was created to improve and develop the knowledge and skills of mental and psychological health nurses and nurses within the ERADH complex in relation to severe and long-term pathological mental illnesses and the biological and psychosocial causes that help their occurrence (Table 2).

2.5. Validation of the Educational Program

The educational course had been developed by the researcher and had been reviewed and validated by the scientific and training committee within the hospital which was made up of five consultants in the mental health and psychiatric field.

2.6. Duration of Educational Intervention

The educational intervention lasted for one week from 09:00 am to 01:30 pm.

2.7. The Educational and Training Methods used in the Educational Intervention Included

2.7.1. Lectures

Multiple lectures had been discussed and explained to the participants over one week which included topics such as communication skills with mentally ill patients, patient safety at inpatient care, risk assessment, psychiatric disease (signs and symptoms, causes, nursing role), dealing with different cases of psychiatric patients, pharmacological safety when dealing with mentally ill patients, nursing care plans of psychiatric patients, patient restraint and seclusion.

2.7.2. Workshops

Workshops include nursing training on correct skills and methods such as restraint, nursing care plan and risk assessment. The training takes place during the work of booths and practical corners of what the nursing applies to the patient and explains them in a practical way in front of the participants.

2.7.3. Group Discussions

Through a group discussion, participants shared clinical examples and practical experience.

2.8. Data Analysis

Results were expressed as descriptive statistics including the frequency, mean, and standard deviation (SD) for quantitative data. Furthermore, the non-parametric test was conducted (Wilcoxon signed rank test) to test the difference between the pretest and posttest. The data were analyzed using SPSS, version 25. A value of $P < 0.05$ was considered statistically significant.

3. RESULTS

As shown in Table 3 a total of 80 healthcare employees participated in the study including 45(56.3%) males while females were 35(43%), 43(53.8%) aged from 30-40 years old,

while 34(42.5%) were less than 30 years old, only 3(3.8%) aged from 41-50 years old. 72(90%) were Saudi, while 8(10%) were non-Saudi.

Furthermore, 48(60%) were married, 25(31.3%) were single, and only 7(8.8%) were divorced. 38(47.5%) held diploma, 40(50%) had a bachelor degree, and only 2(2.5%) had a higher education degree. Moreover, 39(48.8%) had experience working at the Ministry of health for 5-10 years and 25(31.3%) had experience less than 5 years, 14(17.5%) had experience from 11-15 years each, and only 2(2.5%) had an experience of more than 15 years.

In addition, the majority of the sample (76.5%) had a work experience within the current ward for less than 5 years, and 14(17.5%) had work experience from 5-10 years, while only 3(15%) had a work experience from 5-10 years. Finally, half of the participants worked in the male admission ward, 17 (21.3%) served in the female admission ward, 12 (15%) worked in the outpatient department and 11(13.8%) in other departments.

As shown in Table 4 the scale was measured using 45 items, and the 5-point Likert scale measured the clinical competency among mental health nurses from Always (4) to Never (0). The total score for the pre-test was $(74.83 \pm 14.25/\text{Average})$, and then the score increased dramatically for the post-test $(96.18 \pm 26.53/\text{Good})$.

Table 3. Frequency and percentage distribution of study participants according to their sociodemographic characteristics (n=80).

Factor	-	N (%)
Gender	Male	45 (56.3%)
	Female	35 (43%)
Age	Less than 30 years	34 (42.5%)
	From 30-40- years	43 (53.8%)
	From 41-50 years	3 (3.8%)
Nationality	Saudi	72 (90%)
	Non-Saudi	8 (10%)
Marital statue	Single	25 (31.3%)
	Married	48 (60%)
	Divorced	7 (8.8%)
Education level	Diploma	38 (47.5%)
	Bachelor	40 (50%)
	Higher education	2 (2.5%)
Total work experience at ministry of health	Less than 5 years	25 (31.3%)
	From 5-10 years	39 (48.8%)
	From 11-15 years	14 (17.5%)
	Above 15 years	2 (2.5%)
Total work experience within the current ward	Less than 5 years	61 (76.3%)
	From 5-10 years	14 (17.5%)
	Above 15 years	5 (6.3%)
Work area	Male admission ward	40 (50%)
	Female admission ward	17 (21.3%)
	Outpatient department	12 (15%)
	Other	11 (13.8%)

Table 4. The descriptive information of the pretest and posttest

No.	Items	Pretest	Posttest
Emotional and Moral Competency		<i>M±SD</i>	<i>M±SD</i>
1	Demonstrate patience when taking care of the patient.	1.89±0.78	2.33±0.74
2	Show respect to the patient.	1.63±0.74	2.33±0.88
3	Avoid rushing into judgment about the patient.	1.58±0.92	2.25±1.03
4	Keep the secrets of the patient (unless there is risk to the patient or the others).	1.61±0.99	2.14±1.17
5	Never discuss the patient's issues in presence of others	1.71±1.07	2.23±1.11
6	Observe the patient's rights (e.g. privacy, right to decide about treatment, etc).	2.13±1.01	2.26±1.13
7	Show responsiveness and reliance in doing the assigned tasks.	1.90±0.99	2.31±1.11
8	Offer nursing care without discrimination or based on racial, cultural, and religious specifications.	1.66±0.99	2.31±1.06
9	Show respect in dealing with colleagues	1.70±1.04	2.31±1.12
10	Show honesty in their interactions with the patient.	1.84±0.97	2.31±1.15
11	Have the ability to control one's emotions (e.g. anger, anxiety, and fear).	1.66±1.07	2.40±1.07
12	Show eagerness and interest in taking care of the patient.	1.98±1.07	2.20±0.97
Specific Care Competency			
13	Introduce oneself to the patient.	2.34±1.01	2.11±1.04
14	Observe the principles of interviewing from the beginning to the end.	1.84±1.10	2.25±1.07
15	Gain the patient's trust to establish communication.	1.60±0.99	2.29±1.09
16	Address the patients by their names.	1.71±1.05	2.20±1.11
17	Motivate the patients to express their feelings.	1.76±1.12	2.34±1.08
18	Observe the limits (physical distance, to address the patient with respectful titles,)	1.79±0.92	2.24±1.09
19	Follow an active listening method in communication with the patient.	1.71±1.06	2.01±1.11
20	Help the patient to improve their self-confidence by improving the capabilities and advantages of the patient.	1.64±1.01	2.04±1.13
21	Explain medical procedures before starting them (e.g. Injection, vital sign checkup, administering medicines).	1.54±1.01	2.21±1.19
22	Use the medical procedures as a chance to communicate with the patient	1.60±1.92	2.11±1.03
23	Use a variety of references (e.g. family, medical file, etc.) to collect information.	1.85±1.18	2.20±1.11
24	Use different screening tools (narcotic drug abuse, personality disorder, depression, etc.) to examine hazardous behavior (e.g. aggressiveness, suicide, murder, etc).	1.78±1.01	2.24±1.05
25	Record and report any change in the mental health of the patient and other problems	1.78±0.98	2.01±1.04
26	Record and recognize defensive mechanisms used by the patients (e.g. projection, denial, displacement, etc.).	1.39±0.96	1.99±1.11
27	Prioritize psycho-nursing diagnosis in providing health care to the patients.	1.55±1.01	1.99±0.93
28	Employ practical skills (e.g. doing injections, administering medicines, checking vital signs, etc.).	1.61±0.99	1.89±1.08
29	Carry out nursing skills based on reliable references and new research (evidence-based),	1.59±0.95	1.98±1.14
30	Carry out the measures recorded in the medical file of the patient	1.49±0.94	1.91±1.01
31	Use stress shooting approaches (e.g. relaxation, deep breath, etc.) when the patient is anxious or disturbed.	1.60±1.11	2.14±1.08
32	Carry out the required health care in emergency and attack cases (e.g. physical restrain, isolation room, etc.).	1.64±0.97	2.00±1.16
33	Provide a safe environment for the patient (by taking care of oneself, other, escaping, etc.).	1.46±0.98	2.11±1.07
34	Observe the patient carefully to ensure that the patient has taken their medicine.	1.58±1.03	2.08±1.18
35	Use nursing measures in the fields of using psychedelic drugs and the side effects.	1.55±0.93	2.23±1.23
36	Pay attention to the optimum usage of medicines, materials, and equipment.	1.53±1.08	2.09±1.21
37	Cooperate and consult with other members of the health team.	1.55±1.09	1.93±1.12
38	Provide required training to improve the patient and their family's health.	1.64±1.02	1.98±1.11
39	To use proper training methods based on age, education level, and nature of the disease.	1.51±0.98	2.03±1.08
40	To prepare a discharge plan for the patient and their family.	1.39±1.12	1.99±1.27
41	To negotiate with the patient's family to take part in providing health care service.	1.51±1.15	1.94±1.27
42	To motivate the patient to follow the treatment program.	1.49±1.23	2.03±1.20
43	To help the patient to take care of themselves as much as possible.	1.34±1.16	2.01±1.06
44	To follow psychological rehabilitation principles and standards (e.g. self-care, treatment follow-up, etc.) to improve patients' health and to help them in regaining their abilities.	1.60±1.16	2.16±1.12

(Table 4) contd....

45	To use learning opportunities such as continuing studies, and participating in educational workshops to improve personal and professional progress.	1.63±1.23	2.11±1.28
Total score ±SD		74.83±14.25Average	96.18±26.53Good

Note: Scoring system: Score Excellent from 136-180, Score good from 91-135, Average score from 46-90, Weak score < 46.

Table 5. The differences between pre-test and post-test.

Group	N	Mean rank	Wilcoxon W	P value
Pre-test	80	59	1480	<0.001
Post-test	80	102		
<i>*p≤0.05, **p≤0.01, ***p≤0.001</i>				

As shown in Table 5 the relatively small sample was not normally distributed ($p<0.05$) therefore a non-parametric test was conducted, thus the Wilcoxon signed rank test indicated that the post-test (Mean rank=102) was significantly higher than the pre-test (Mean rank=59) ($U=1480, p<0.001$). As a result of the current study, the program showed great effectiveness ($p<0.001$) with an advantage for the post-test.

4. DISCUSSION

This study evaluates the effectiveness of an educational intervention in improving the clinical competency of mental health nurses working in a large mental health hospital in Saudi Arabia. The findings indicated that mean clinical competency of mental health nurses was average in the pre-test score. This result may be due to the fact that nurses at the hospital did not attend any educational interventions before due to a lack of specialized and trained nurses in mental health nursing. Moreover, due to the lack of support and guidance from senior staff most of the nurses have a deficiency in specific knowledge and confidence needed to deal with patients with mental illnesses. This result is consistent with the study of [18]. and another study done by [19] found that nurses are lacking on specific knowledge and confidence needed to deal with suicidal patients which in turn reflects on their ability to effectively provide care to patients with mental illnesses.

The current study shows that the mean score had increased dramatically for the post-test from an average to a good score. This result may be linked to the interventional program about mental health nurses that lead to improving the nurse's knowledge and attitude about mental health nursing. In this respect, this finding is supported by [20, 21] who also found an increase in posttest scores about educational interventions of mental health nursing.

This study found that the educational intervention had a statistically significant positive effect on mental health nurses' clinical competency. One possible explanation for this result may be related to applying an extensive and well-designed mental health program to create an opportunity for nurses' continuous education inside the hospital. Furthermore, provide a chance to discuss and explain any updates about mental health nursing which in turn may enhance nursing practice when dealing with patients with mental illnesses. These results were consistent with previous studies conducted by [22, 23] who reported a positive impact on participants' competence and attitude scores regarding a similar educational program about suicide prevention and mental health nursing.

5. LIMITATIONS

This study is not without limitations. The first is with regards to the chosen study design, in which randomization was not used therefore limiting the study's ability to conclude a causal association between the intervention and outcome. The sample size of the current study is relatively small and from a single site, therefore, limiting the generalizability of the study findings. Furthermore, the current study utilized a single cohort pre and post-design without a comparison or control group and did not include a follow-up. Thus, it would be beneficial if future studies replicate the current study, however, making use of a control group, randomization, and including a follow-up.

CONCLUSION

This study aimed to evaluate the effectiveness of an educational intervention on the clinical competency of mental health nurses. A total of 80 nurses participated in this study. The results of the current study showed that post-test scores were significantly higher than at the pre-test. Hence, the results of the current study, suggest that the program shows great potential and is likely to be very effective.

RECOMMENDATIONS

The current study has developed important recommendations, which include:

- The hospital and nursing administration besides the training and educational department should consider establishing more educational programs about mental health nursing that involve qualified and well-trained mental health nurses.
- It is important to initiate a follow-up assessment to examine the effectiveness of any educational program about mental health nursing.
- The nursing administration and training and educational department within the hospital should consider providing frequent training and orientation programs for new nursing staff who are assigned to work in the hospital.
- This study would benefit from being replicated using two groups of participants rather than one.

LIST OF ABBREVIATIONS

CPD = Continuing Professional Development

CNE = Continuous Nursing Education

SD = Standard Deviation

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Ethical approval to conduct this study was obtained from the Tabuk Institutional Review Board of the Ministry of Health, IRB protocol no: TU-077/021/113, in Saudi Arabia.

HUMAN AND ANIMAL RIGHTS

No animals were used in this research. All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committees and with the 1975 Declaration of Helsinki, as revised in 2013.

CONSENT FOR PUBLICATION

Informed consent was obtained from all participants.

STANDARDS OF REPORTING

STROBE guidelines were followed.

AVAILABILITY OF DATA AND MATERIALS

The data and supportive information are available within the article.

FUNDING

None.

CONFLICT OF INTEREST

The authors declare no conflict of interest financial or otherwise.

ACKNOWLEDGEMENTS

The researchers appreciate all nursing staff and jury members who generously offered their time to participate in the study.

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