

Impact of Clinical Simulation on Student's Levels of Motivation, Satisfaction and Self-Confidence in Learning Psychiatric Mental Health Nursing

Safaa Ibrahim Shattla ⁽¹⁾ **Nabila Elsayed Sabola** ⁽²⁾ **Hanaa Mohamed Abo Shereda** ⁽³⁾,
Reda Abdel Latif ⁽⁴⁾ **Gehan Ahmed Abed** ⁽⁵⁾

^{1, 3,5} Psychiatric Mental Health Nursing, Faculty of Nursing, Menoufia University, Egypt

² Community Health Nursing, Faculty of Nursing, Menoufia University, Egypt

⁴ Public Health and Community Medicine, Faculty of Medicine, Menoufia University, Egypt

Abstract:

Background: Clinical simulation is a technique to replicate real-world environment that is safe for teaching and experimentation. It bridges the gap between classroom learning and real-life clinical experiences. It is a new trend in medical education in Egypt with few research discussing its outcome. **Objectives** The aim of the work was to examine the impact of clinical simulation on student's level of motivation, satisfaction, and self-confidence in learning psychiatric mental nursing **Methods:** An experimental research design, two groups design (the intervention group and control group) was used. The study was accomplished at faculty of nursing Menoufia University. A sample of 122 students who were enrolled in fourth year undergraduate psychiatric nursing students enrolled in psychiatric nursing course in second semester academic year 2020/ 2021. The socio-demographic data, the motivated strategies for learning questionnaire; satisfaction and self-confidence in learning questionnaire were used to evaluate the experiment outcome. **Results:** There were clinically significant improvement in all dimensions of motivation for perceived learning scores except test anxiety significantly decreased after simulation experience rather than pretest and control group. Overall satisfaction with simulation clinical experience and self-confidence scores among the intervention group significantly increased after simulation than pre and control group. **Conclusion:** Clinical simulation was effective in improving student's motivation, satisfaction, and self-confidence in perceived learning course. **Recommendation:** widen the application of clinical simulation in all medical courses to enhance learning process, decrease student's anxiety, increase motivation, satisfaction, and self-confidence in learning.

Keywords: Clinical Simulation, Motivation, Satisfaction, Self-Confidence.

Introduction

In mental health care, nurses play a vital role (WHO, 2015). Mental health care should be available to all nurses (positive attitudes, behaviors, qualifications, experience, knowledge, and skills). The Australian College of Mental Health Nurses published a report in 2013 that stated, "The Australian College of Mental Health Nurses is a professional association People with mental health disorders may receive less-than-optimal care due to a lack of understanding of mental health conditions and competency in mental health assessment

(Sivakumar et al., 2011). Nursing care of mental health disorders is a skill that all nurses should master. To lessen fear, anxiety, and promote self-efficacy, nursing students must be well prepared for real-life circumstances. Because of the sensitive, unpredictable, and sometimes volatile character of psychiatric settings, providing students with common psychiatric scenarios is a harder challenge (Innes et al., 2014).

Nursing education is now being impacted by rapid advances in health-care technologies. These changes are causing nursing educators to rethink their curriculum in order to ensure that students are equipped with the information and skills they need to face the unanticipated challenges of the twenty-first century (Saied, 2017 and Ma, 2013). Simulations are an important learning approach for preparing students to deal with these unpredictably changing obstacles and requirements. The National Council of State Boards of Nursing (NCSBN) defines simulation as a learning approach in which learners develop competencies, critical thinking, and decision-making skills through role-playing or the use of technology in a fully interactive, simulated real-world clinical setting (NCSBN, 2005 & Bruce, Levett-Jones, & Courtney-Pratt, 2019).

There are various advantages of using simulation to teach undergraduate nursing students. These benefits include assisting nursing students in managing a simulated issue in the real world and allowing them to strengthen their abilities in a safe, non-threatening atmosphere (Johnston, Parker & Fox, 2017). Additionally, simulation can teach students how to care for patients in any situation, such as an intensive care unit or an emergency room, where students may have limited access and experience (Cant and Cooper, 2014 & Mould et al., 2011). Simulation as a teaching approach improves students' critical thinking abilities, knowledge level, self-efficacy, self-confidence, and clinical performance, as well as their motivation and happiness with learning (Zapko, Ferranto, Blasiman & Shelestak, 2018 & Omar, 2016).

Fear and worry about talking with psychiatric patients, as well as stigmatization of psychiatric illness, are all hurdles in psychiatric nursing education. Before engaging with someone who has mental health issues, the pupils have no idea what is expected of them, how to act, or what to do. (Source: Sarikoc, Tanguil Ozcan, and Elcin (2017). In the clinical context, nurse educators must handle student anxiety. One technique for reducing anxiety while educating students to deal with patients in the clinical context is to use a standardized patient. One of the latest educational methods is the standardized patient, in which the instructor serves as a facilitator and the student learns in a controlled atmosphere. This method connects clinical practice with knowledge. (El malky and El-Amrosy , 2016).

There are approved simulation strategies that help increase students' problem-solving, decision-making, and critical thinking skills, as well as educate them how to deal with challenging situations. Role plays, interactive videos, films, film clips, standardized patients, and manikins are some of the approaches used (Doolen et al., 2014). All of these have been utilized in psychiatric mental health nursing to aid in the description of mental diseases, the playing out of nurse patient roles, the clarification of clinical concepts, and the discovery of stigma (Szpak, Kameg, 2013 & Choi, 2012 and Fay-Hillier et al., 2012).

Theoretical Framework

As a theoretical framework, this study utilized Bandura's Social Cognitive Learning Theory (1999). According to social learning theory, the dynamic interplay between the environment, the person, and the person's behavior can be used to characterize and modify human traits and behaviors (Bandura, 1999). The sum of a person's essential characteristics, which include cognitive, affective, and biological skills, is the person. The person's actions are a collection of vocal and nonverbal interactions with their surroundings. The physical surroundings as well as the person's cognitive perception of the environment are both included in the environment. Students' behaviors and perceptions of themselves as professional nurses are influenced by the qualities or responses they perceive from their surroundings, whether from teachers, peers, patients, or professional staff (Bandura, 1999).

When acquiring new psychomotor and relational skills, role models in the environment, such as instructors or other staff members, present examples of possible behavioural options that the individual might choose to imitate (Aliakbari, Parvin, Heidari, and Haghani, 2015). Nursing programs can use the social learning theory construct to create an academic environment that builds on students' natural abilities by offering planned and progressive cognitive, psychomotor, and emotional experiences that support the development of self-efficacy and professional behaviours. To create this environment, instructors must first understand the characteristics that students bring to the programme, as well as the teaching approaches that best satisfy the students' innate needs. Simulation provides a unique construct utilized to educate using the environment and the person to assist form the person's behaviour, thanks to its contextual learning attribute (Beaird, Nye & Thacker, 2017).

Significance of the study:

The need for mental health care is widespread. Many Psychiatric student nurses have low self-confidence and self-efficacy in providing care for the psychiatric patients because they are untrained for the distinctive challenges of clinical practice in the psychiatric setting. Also, most of them fear from contact with those patients and not be motivated to learn this branch so, providing good experiences and helpful role models to students during their psychiatric mental-health clinical rotation has the potential to impact how future nurses respond to people with mental illnesses. All these learning barriers can be overcome via simulation. (El malky & El-Amrosy , 2016).

It is only recently that simulation has been used in nursing training. Simulator's value in imparting information and abilities has obtained empirical validation at the same time. Despite the fact that simulation has been successfully utilized to enhance clinical experiences in medical surgical and obstetrical curricula, it has not been frequently employed as an adjunct to psychiatric clinical experiences for undergraduate students (Dogru, B.V.; Aydn,2020 & Khalaila, 2014). Face-to-face clinical simulation has established itself as an effective teaching, learning, and research approach in health science education. However, due to the COVID-19 pandemic in recent years, institutions have been obliged to employ solutions that allow for the continuation of educational activities while ensuring the safety of students and professors through simulation and the division of students into subgroups for

effective education and preventing of the infection transmission. So, this study is very important to examine the impact of clinical simulation training program on level of motivation, satisfaction, and self-confidence in learning among psychiatric nursing students at faculty of nursing, Menoufia University.

Operational definitions:

- In this study, level of motivation was operationalized as the acquired score of level of motivation as measured by the Motivation and Learning Strategies Scale created by (Pintrich et al., 1991)

- In this study, the acquired score on the student satisfaction and self-confidence in learning scale (National League for Nursing) can be used to operationalize student satisfaction and self-confidence (NLN, 2006).

Subjects and Methods

The purpose of the study:-

The present study was carried out to examine the impact of clinical simulation training program on level of motivation, satisfaction, and self-confidence in learning psychiatric mental health nursing.

Research hypothesis:

- Psychiatric nursing students who receive psychiatric clinical simulation will have higher score in level of motivation than who not receive.
- Psychiatric nursing students who receive psychiatric clinical simulation will experience higher satisfaction and self-confidence in learning than who not receive.
- There is a relation between level of motivation, satisfaction and self-confidence in learning psychiatric nursing

Research design: -

A follow up experimental study was carried out on fourth year undergraduate students (faculty of nursing Menoufia University) who were enrolled in psychiatric nursing course during the second semester academic year 2020/ 2021.

The total sample of this study was 122 students including 91 female and 31male, after excluding any student receiving clinical simulation before, they were divided randomly into two equal groups (the intervention group and control group), 61 students each.

Tools of the study :-

Data was collected by using three questionnaires:

The socio-demographic data of the participants was assessed, also they were subjected to the motivated strategies for learning questionnaire and satisfaction and self-confidence in learning questionnaire

The Motivated Strategies for Learning Questionnaire (MSLQ)

It was created to examine college students' motivational orientations and learning practices. It was divided into two sections: motivational and learning tactics. The first section of the scale, the "Motivation Scale" (MS), was used in our research. Students' aspirations and value beliefs for a course, their beliefs about their ability to succeed in a course, and their anxiety about assessments in a course are investigated in the motivation portion, which consists of 31 questions in six sub dimensions. Intrinsic goal orientation, extrinsic goal orientation, task value, control of learning, beliefs self-efficacy for learning and performance, and test anxiety are some of the sub aspects. High scores on one of the scale's subdimensions indicated that the student possessed a high level of that feature. (Kuznar, 2009).

Student satisfaction and self-confidence in learning (SCL).

The National League for Nursing developed it (Jeffries, 2005). There are 13 items in total, separated into two subscales that measure student happiness (five items) and self-confidence (eight items) in learning through simulation.

Ethical considerations and human rights:

The dean of Menoufia University's college of nursing granted permission to conduct this research. After describing the goal of the study and assuring them that all collected data would be kept confidential and used exclusively for research purposes, all participants signed a written consent to participate in the study.

Pilot study: -

It was conducted on 12 students (10%) to assess the study tools' clarity, feasibility, objectivity, consistency, and application, as well as the time required for data collection. According to the findings of the pilot study, no changes were required to perform. To ensure the results were stable, the pilot research sample was removed from the entire sample.

Procedure of data collection: -

After describing the study's goal to the dean of the nursing faculty at Menoufia University, approval was granted. The goal of the study was explained to the students, who gave their full informed agreement to participate. The information was gathered over a three-month period, from the beginning of March to the beginning of May 2021. The data was collected in the mornings on two days every week, from 10 a.m. to 12 p.m. The study's implementation in the faculty psychiatric lab.

The study was performed in 3 phases:

- **Pre-intervention Phase:** The interviewees were assigned to a comfortable, secluded location. The goal and content of the study were explained to the participants. The

participants were evaluated on their motivation, satisfaction, and self-confidence, as well as their socio-demographic data.

- Implementation phase: In the study group, clinical simulation was used in psychiatric course curriculum (61 students). They were placed into three groups, each of which received ten educational sessions. Depending on the students' responses, each session lasted 45-60 minutes. Each session has a distinct goal. This was accomplished through a variety of teaching methods, including brainstorming, group discussions, role playing in pairs of two researchers, one acting as a patient and the other as a student or nurse, data presentations, pictures, laptops, and posters. Summary, feedback, debriefing, and further clarification for vague items and homework exercise for the next session were done at the end of each session.

The psychiatric nursing simulation sessions:

General objective of the simulation: - The study aimed at evaluating the impact of psychiatric nursing simulation on student's motivation, performance, satisfaction, and self-confidence in learning psychiatric mental health nursing.

This aim will be fulfilled through the following objectives:

– Assess students' motivation and performance, student's satisfaction, and student's confidence, Develop and implement psychiatric clinical simulation for the student's prior clinical experience

-Evaluate the impact of psychiatric nursing simulation on students' motivation, performance, student's satisfaction, and confidence

Content of the psychiatric mental nursing simulation sessions:

1st & 2nd sessions: included developing a trusting relationship with the students and encouraging them to discuss their opinion, expectations, specific needs, and problems regarding psychiatric nursing education. Also this session included simulation about how the student can introduce himself to the patient and how can make the interview and build trust therapeutic relationship with the psychiatric patient in clinical area (by watch videos of the interviews in psychiatric nursing prior to going to in-patient clinics and making role play between two researchers in front of the students and asked two students to act the same roles one as a student and other as the psychiatric patient and provided the feedback to them and correct any mistakes).

3rd , 4th and 5th sessions : involved simulation about how can make assessment for different cases as depression , bipolar and schizophrenia and how combine critical thinking in practice of nursing process for those cases (through several ways as, watching different videos about those cases and discussed the different symptomatology with the students and help them to recognize this symptoms , other way the two researchers modeling this different psychiatric cases scenario and interject the symptoms to them self and encourage the students to elaborate the symptoms and main defense mechanism the case used)in this sessions also included explanation for the psychiatric assessment and how asked the relevant questions

and apply it in the clinical area with different cases such as, personal information, medical History, Symptomatology, Mental Status, thinking as form, content and control of thought, mood ,affect ,perception, judgment , insight and so on.

6th and 7th sessions: contained simulation about several ways of managing the aggressive behavior among psychiatric patients as, (different types of mechanicals restrain technique and seclusion)

8thand 9th : Simulation about how can manage delusional behaviors and hallucination among psychiatric patient (teaching students thought stopping techniques and asked them to re-demonstrate all procedure tough them in the previous sessions).

The final session: also known debriefing session and feedback from the students take 20 minutes and give post -test questionnaires for the students.

Post assessment phase: - the motivation scale and satisfaction and confidence scale were introduced for the studied groups for post intervention evaluation.

Statistical Analysis:

SPSS version 20 was used to code, tabulate, and statistically analyze the data. The mean and standard deviation were used to present quantitative data (SD). The chi-square (2) test was used to examine qualitative data, which was presented as a number and a percentage. Student t test was used to compare between pre-intervention and control while paired t test was used to compare pre intervention and post intervention measurements. Person correlation (r test) was used to test the association between the variable. Level of significance was set as highly significant level as P value < 0.001 and significant level as P-value <0.05.

Results

-The studied participants had mean age is 20.02 ± 0.76 versus 20.08 ± 0.75 years for intervention and control group respectively. About 21.3% is males and 78.7% was female in the intervention group versus 29.5% males and 70.5 % female for controls.

-There is non-significant difference between intervention group (pre) and control measurement, while there is significant improvement after the simulation intervention among intervention group in all sub dimensions of motivation scale (Intrinsic goal orientation, Extrinsic goal orientation, Control of Learning Believes, Self-Efficacy for Learning& Performance, & Total motivation score) except Test Anxiety reduced post simulation rather than pre simulation (Table 2)

-(Table 3) displayed that the student satisfaction and self-confidence scales (in pre simulation measurement) are non-significantly differ from control measurements, but an improvement was observed in post education measurements. This indicates that the students agree that the simulation's teaching methods and strategies were effective, and that their self-confidence has grown because of their clinical simulation experience. They were especially confident in their ability to recognize disease signs and symptoms, as well as in their ability to acquire the

necessary knowledge and skills to perform necessary tasks in clinical practice. They also claimed to be able to accurately analyze an individual with any anomalies.

-There was significant positive correlation between both student satisfaction and self-confidence and all motivation sub dimensions except test Anxiety was negatively correlated with both (Table 4).

-On educational method evaluation, intervention group showed significant higher rate of agreement with all parameters measuring self-evaluation and satisfaction related to educational method than in control group (Table 5).

Table1. Socio-demographic Characteristics of The Studied groups

Socio-demographic Characteristics	The studied groups				Test	P value
	Intervention group N = 61		Control group N = 61			
Age /year Mean \pm SD Range	20.02 \pm 0.76 19 – 21		20.08 \pm 0.75 19 – 21		t-test 0.48	0.64
	No	%	No	%	χ^2	
Sex						
Male	13	21.3	18	29.5	1.08	0.30
Female	48	78.7	43	70.5		
Previous experience simulation					0.90	0.34
No	57	93.4	54	88.5		
Yes	4	6.6	7	11.5		

χ^2 = Chi squared test

Table 2: Effect of simulations on student motivation level sub dimensions among intervention group compared to control group.

Motivation scale sub-dimensions	The studied groups			Test of sig.	P value
	intervention group (pre) N = 61	Control group N = 61	intervention group (Post) N = 61		
Intrinsic goal orientation Mean \pm SD Range	12.75 \pm 2.14 7 – 17	12.39 \pm 3.27 7 – 21	16.77 \pm 1.19 14 – 19	1.28 14.87	0.21 ¹ <0.001 ²
Extrinsic goal orientation Mean \pm SD Range	12.36 \pm 2.21 6 – 18	11.49 \pm 3.29 6 – 20	15.80 \pm 1.39 13 – 19	1.71 11.84	0.09 ¹ <0.001 ²
Task value					

Mean \pm SD	14.77 \pm 2.82	13.97 \pm 3.55	19.33 \pm 1.93	1.38	0.17¹
Range	8 – 19	8 – 19	16 – 44	12.84	<0.001²
Control of Learning Believes					
Mean \pm SD	13.20 \pm 2.01	13.31 \pm 4.78	16.11 \pm 2.03	0.17	0.86¹
Range	9 – 16	7 – 27	12 – 19	10.89	<0.001²
Self-Efficacy for Learning & Performance					
Mean \pm SD	20.06 \pm 4.06	20.75 \pm 4.42	29.27 \pm 4.29	0.89	0.37¹
Range	10 – 28	13 – 32	15 – 39	18.26	<0.001²
Test Anxiety					
Mean \pm SD	18.23 \pm 3.10	17.67 \pm 2.98	11.80 \pm 1.77	1.01	0.31¹
Range	12 – 24	11 – 22	8 – 17	14.48	<0.001²
Total motivation score					
Mean \pm SD	84.95 \pm 11.38	85.41 \pm 12.75	115.39 \pm 12.56	0.21	0.83¹
Range	52 – 107	62 – 121	84 – 144	20.27	<0.001²

1= comparing the intervention group (pre) with control group

2= comparing the intervention group (pre) with the study group (post)

Table 3: Effect of simulations on total score of satisfaction and self-confidence in learning among intervention group compared to control group.

SCL subscales	The studied groups			Test of sig.	P value
	intervention group (pre) N = 61	Control group N = 61	intervention group (Post) N = 61		
Student satisfaction					
Mean \pm SD	14.84 \pm 3.55	13.77 \pm 3.65	21.9 \pm 1.9	1.63	0.11 ¹
Range	9 – 21	6 – 21	17 – 26	18.30	<0.001 ²
Self confidence					
Mean \pm SD	22.54 \pm 4.61	23.70 \pm 3.46	31.78 \pm 2.94	1.58	0.12 ¹
Range	15 – 29	18 – 32	22 – 38	18.11	<0.001 ²

1= comparing the intervention group (pre) with control group

2= comparing the intervention group (pre) with the study group (post)

Table 4: Correlation between student satisfaction and self-confidence and motivation scale sub-dimensions

Motivation scale sub-dimensions	Student satisfaction post		Self-confidence post	
	R	P value	R	P value
Intrinsic goal orientation	0.36	<0.001	0.13	0.16
Extrinsic goal orientation	0.03	0.74	0.06	0.49
Task value	0.12	0.21	0.0	0.99
Control of Learning Believes	0.40	<0.001	0.27	0.003
Self-Efficacy for Learning& Performance	0.34	<0.001	0.34	<0.001
Test anxiety	- 0.22	0.02	- 0.28	0.001
Total motivation score	0.41	<0.001	0.28	0.002

Table 5: Evaluation of Educational Method of Intervention and Control Groups

Educational method evaluation	intervention group(n=61)		Control group(n=61)		Test	p-value
	I agree % (n)	I do not agree % (n)	I agree % (n)	I do not agree % (n)		
A-Self-evaluation related to the educational method	58	3 (4.9)	48	13	7.19	0.007
1- Detecting signs and symptoms of the disease	(95.1)	2(3.3)	(78.7)	(21.3)	11.6	0.001
2-Comprehend how to conduct an interview	59	4(6.6)	46	15	4.6	0.03
3- Feeling efficient in conducting an interview	(96.7)	1 (1.6)	(75.4)	(24.6)	4.8	0.028
4- Feeling motivated to conduct an interview	57	5(8.2)	49	12	12.5	<0.00
5- Feeling efficient in asking appropriate questions	(93.4)	8(13.1)	(80.3)	(19.7)	8.66	1
6- Feeling efficient in decision-	60		54	7(11.5)		0.003
	(98.4)		(88.5)	21		
	56(91.8)		40	(34.4)		
	8)		(65.6)	22		
	53(86.9)		39	(36.1)		
	9)		(63.9)			

making skills						
B- Satisfaction related to the educational method	50(82.0)	11 (18.0)	38 (62.3)	23 (37.7)	5.87	0.01
7-Proper physical environment	52 (85.2)	9 (14.8)	37 (60.6)	24 (39.4)	7.99	0.005
8- Proper duration	56 (91.8)	1(1.6)	44 (72.1)	17 (27.9)	5.54	0.02
9- Being supportive and efficient in conducting an interview	57 (98.4)	2 (3.3)	48 (85.2)	13 (21.3)	6.31	0.01
10- Encouraging learning	60 (93.4)	0(0.0)	52 (78.7)	9 (14.8)	15.3	<0.001
11- Entertaining while learning	61 (100)		55 (90.2)	6 (9.8)		
12- The education method being necessary	59 (96.7)		43 (70.5)	18 (29.5)		
13- The willingness to use this education method in other classes.						

Discussion

In medical education, simulation has become a routine tool. It was implemented as a teaching technique to improve students' learning satisfaction, critical thinking abilities, knowledge level, clinical performance, and proper application of technological innovations to the psychiatric mental health speciality. Simulated scenarios assist educators in overcoming some of the learning barriers that exist in today's clinical environment, such as healthcare agency restrictions that limit student activities and a lack of contact hours in the clinical context. According to Bandura's theory, learners' self-efficacy grows as a result of behaviour modelling and reinforcement in simulation exercises (Guinea et al., 2019 & Basak,; Unver,.; Moss.; Watts, and Gaiosio , 2016).

There is a little specific evidence to support the use of simulation in the development of undergraduate nurses' skill and confidence in mental health nursing care. So, the current study conducted to evaluate the impact of using clinical simulation in psychiatric cases on nursing student's level of motivation, satisfaction, and self-confidence in learning psychiatric nursing.

The results of the present study declared that the motivation for perceived learning was significantly improved in all its sub dimensions regarding post intervention measurement, as all sub dimensions increased except anxiety domain, it decreased in post intervention. This may be due to the effectiveness of simulation sessions on different psychiatric cases and good attendance of the students. This similar results were found by Sarikoc et al., (2017) and Dankbaar et al., (2016) who reported that, the motivation scores, interim and post-test scores for perceived learning were higher in the experimental group rather than pre-test scores and

the scores of the control group except test anxiety in the experimental group decreased after practical training to the extent that their anxiety level was lower than the control group. In the same line El malky & El-Amrosy, (2016) & Oh, Jeon & Koh, (2015) reported high motivation related to the learning process among studied students. The motivation of a student was directly related to self-regulated skills for learning activities.

The present study demonstrated that there was an increase in satisfaction observed after simulation in the intervention group. This may be due to the nontraditional method of teaching is more satisfying in learning rather than traditional methods. This result congruent with the result of Zapko, Ferranto, Blasiman, Shelestak, (2018) found the students were satisfied and self-confident improved after their simulation experience. In the same line, Saied, (2017) reported that the students were satisfied with the high fidelity simulated pediatric scenario experience as a teaching method. Also, Lubbers and Rossman, (2017) was congruent with the present study where medical students were found to be satisfied with simulation based education.

According to the current work, the participant in post intervention measurement agreed that the teaching methods and strategies used in the simulation were effective, clinical instructors / faculties did not embarrass them in front of others and give them clear idea of what is expected from them. Also, students indicted that learning by simulation enables them to improve and retain knowledge e.g., can recognize signs and symptoms of diseases and can perform necessary tasks in a clinical practice. These knowledge acquisition abilities improve their self-confidence. This may be the new technique in dividing the students into subgroups especially with the disaster of Covid-19 for a measure precaution for the students and small groups help students to understanding well and all take chance for re-demonstration for all practical skills. Similar results were noted by omer, (2016) and Khalaila, (2013), Their research found that participants were happy with their education and that the clinical simulation session boosted their self-confidence. The findings of this study corroborate those of several other studies conducted in various professions, all of which found significant learner satisfaction with clinical simulation learning and strong learner confidence in their abilities. (Lubbers, & Rossman, (2017); Agha, Alhamrani, & Khan, (2015) ; Hayden , Gross , Smiley, (2014).

Regarding the student's self- confidence scores the study represented that the intervention group had higher confidence after the simulated psychiatric scenarios rather than control group. This indicates that the simulation is a productive learning strategy that improves confidence among students. This result was consistent with

Al Gharibi, & Arulappan, (2020) who discovered that repeated simulation enhances students' self-confidence, knowledge, competence, critical thinking, and satisfaction. In the same line Saied, 2017 noted that after the simulated encounter, the student's self-confidence was great. Also, the findings of the study conducted by Davison, Mackay, Michael and McGivern,(2017) suggested that all simulation modalities have the potential to decrease student anxiety, and increase student confidence, knowledge and communication skills.

Similar findings were found by Ma (2013) who proved that there was higher student confidence level after a simulation.

The findings of the current study showed significant correlation between student satisfaction and all motivation sub dimensions. This referred to the importance of simulation in learning process and led to improve in all previous dimensions. This result matched with Saied, (2017) who Self-efficacy was found to be positively connected with satisfaction and self-confidence after the simulation. Self-confidence was also positively connected with simulation satisfaction.

Regarding the evaluation of educational method, the result of the present study showed that there were highly satisfied at the end of the study, the rate of intervention group that agreed to all items as in self-evaluation and satisfaction related to the educational method is higher than the control group and the post-test scores of intervention group. This finding proposed that the use of simulation in psychiatric nursing training positively affected the self-evaluation of the students and made them feel more powerful in terms of theoretical and practical knowledge, also the students were satisfied with the arrangements made in the physical environment and simulation technology improve their self-confidence, satisfaction with the learning, and critical thinking skills. These results are consisted with Sarikoc , Ozcan and Elcin, (2017) that demonstrate the students in the experimental group rated higher scores for the appropriateness of the physical environment compared to the students in the control group.

The trainings in a safe environment by using simulation are considered to help students remove obscurity and myths and they find the opportunity to assess and improve them in a safe environment especially in this time of increasing numbers of students in college and spread of corona virus. So, this study is very important and every department in the college should applied it in clinical practice as a newly technique in learning process.

Conclusion

After the training intervention, students in the intervention group felt motivated and confident in conducting interviews with psychiatric patients and more competent in practical psychiatric training compared to the students in the control group. Based on the results of the present study proposed that simulation may allow undergraduate nurses to improve their motivation, skills, satisfaction, confidence, and knowledge in psychiatric nursing education.

Recommendation

Generalization of this training technique and apply clinical simulation such as, standardized patient, video recording and role plays in nursing education curriculum not only in psychiatric department but also in all departments in nursing and medicine colleges before contact with the acute case to improve the knowledge and skills of students, also to reduce fear from real contact with the patients and training in safe environment.

References

- 1- World Health Organization, 2015. Mental health atlas 2014 (9241565012). Retrieved from. http://apps.who.int/iris/bitstream/10665/178879/1/9789241565011_eng.pdf?
- 2-Australian College of Mental Health Nurses, 2013. Scope of Practice of Mental Health Nurses in Australia 2013. ACMHN, Canberra.
- 3-Sivakumar, S., Weiland, T.J., Gerdtz, M.F., Knott, J., Jelinek, G.A., 2011. Mental health-related learning needs of clinicians working in Australian emergency departments: a national survey of self-reported confidence and knowledge. *Emerg. Med. Australas.* 23 (6):697–711. <http://dx.doi.org/10.1111/j.1742-6723.2011.01472.x>.
- 4- Innes, K., Morphet, J., O'Brien, A.P., Munro, I., 2014. Caring for the mental illness patient in emergency departments - an exploration of the issues from a healthcare provider perspective. *J. Clin. Nurs.* 23 (13/14):2003–2011. <http://dx.doi.org/10.1111/jocn.12437>.
- 5- Saied, H., 2017. The Impact of Simulation on Pediatric Nursing Students' Knowledge, Self-efficacy, Satisfaction, and Confidence. *Journal of Education and Practice* www.iiste.org. ISSN 2222-1735 (Paper) ISSN 2222-288X (Online). Vol.8, No.11,
- 6- Ma, X. 2013. BSN Students' Perception of Satisfaction and Self-confidence after a Simulated Mock Code Experience: A Descriptive Study. Master of Science in nursing theses, school of nursing Cedarville University.
- 7- National Council of State Boards of Nursing (NCSBN) 2005. Clinical Instruction in Prelicensure Nursing Programs. Retrieve April 28, 2013 from: <https://www.ncsbn.org/2822.htm?iframe=true&width=515&height=300>.
- 8- Bruce, R.; Levett-Jones, T.; Courtney-Pratt, H. Transfer of learning from university-based simulation experiences to nursing students' future clinical practice: An exploratory study. *Clin. Simul. Nurs.* 2019, 35, 17–24.
- 9-Johnston, S.; Parker, C.N.; Fox, A. Impact of audio-visual storytelling in simulation learning experiences of undergraduate nursing students. *Nurse Educ. Today* 2017, 56, 52–56.
- 10-Cant, R.P.; Cooper, S.J. Simulation-based learning in nurse education: Systematic review: Simulation in nursing. *J. Adv. Nurs.* 2014, 66, 3–15.
- 11-Mould, J., White, H., Gallagher, R., 2011. Evaluation of a critical care simulation series for undergraduate nursing students. *Contemporary Nurse.* 38: 180-190.
- 12-Zapko, K.A.; Ferranto, M.L.G.; Blasiman, R.; Shelestak, D. Evaluating best educational practices, student satisfaction, and self-confidence in simulation: A descriptive study. *Nurse Educ. Today* 2018, 60, 28–34
- 13- Omar, T., 2016. Nursing Students' Perceptions of Satisfaction and Self-Confidence with Clinical Simulation Experience. *Journal of Education and Practice.* Retrieved on 8-3-2017. <http://files.eric.ed.gov/fulltext/EJ1092418.pdf>
- 14-Sarikoc, G., Tanguil Ozcan , C. and Elcin , M., 2017. The impact of using standardized patients in psychiatric cases on the levels of motivation and perceived learning of the nursing students. *Nurse Educ Today.*; 51:15-22. doi: 10.1016/j.nedt.2017.01.001.
- 15- El malky, M. and El-Amrosy, S. 2016. Effects of psychiatric nursing Clinical Simulation Experience on Students' Anxiety, Therapeutic Communication Skills and Psychiatric nursing Assessment. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)* e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 5, Issue 5 Ver. VI (Sep. - Oct. 2016), PP 63-71 www.iosrjournals.org
- 16- Doolen, J., Giddings, M., Johnson, M., Nathan, G., Badia, L.O., 2014. An evaluation of mental health simulation with SPs. *Int. J. Nurs. Educ. Scholarsh.* 11 (1), 1–8. Eccles, J.S., Wigfield, A., 2002. Motivational beliefs, values and goals. *Annu. Rev. Psychol.* 53, 109–132.
- 17-Szpak, J., & Kameg, K. (2013). Simulation decreases nursing student anxiety prior to communication with mentally ill patients. *Clinical Simulation in Nursing*, 9(1), e13-e19. <http://dx.doi.org/10.1016/j.ecns.2011.07.003>.
- 18- Choi, Y.J., 2012. Exploring experiences of psychiatric nursing simulations using SPs for undergraduate students. *Asian Nurs. Res.* 6, 91–95.
- 19- Fay-Hillier, T.M., Regan, R.V., Gallagher, G.M., 2012. Communication and patient safety in simulation for mental health nursing education. *Issues Ment. Health Nurs.* 33 (11), 718–726.
- 20-Bandura, A. (1999). A social cognitive theory of personality. In L. Pervin & O. John (Ed.), *Handbook of personality* (2nd ed., pp. 154-196). New York: Guilford Publications. (Reprinted in D. Cervone & Y. Shoda [Eds.], *The coherence of personality*. New York: Guilford Press.)
- 21-Aliakbari, F., Parvin,N., Heidari,M., and Haghani,F., 2015. Learning theories application in nursing education. *J Educ Health Promot.* 2015; 4: 2. PMID: PMC4355834. PMID: 25767813, Published online 2015 Feb 23. doi: 10.4103/2277-9531.151867

- 22-Beaird, G., Nye, C., & Thacker, L. R. (2017). The use of video recording and standardized patient feedback to improve communication performance in undergraduate nursing students. *Clinical Simulation in Nursing*, 13(4), 176–185. doi:10.1016/j.ecns.2016.12.005
- 23-Do ğru, B.V.; Aydın, L.Z. The effects of training with simulation on knowledge, skill and anxiety levels of the nursing students in terms of cardiac auscultation: A randomized controlled study. *Nurse Educ. Today* 2020, 84, 104216.
- 24-Khalaila, R. Simulation in nursing education: An evaluation of student's outcomes at their first clinical practice combined with simulation. *Nurse Educ. Today* 2014, 34, 252–258. [CrossRef] 45.
- 25- Pintrich, P.R., Smith, D.A.F., Garcia, T., McKeachie, W.J.A., 1991. *Manual for the Use of the Motivated Strategies for Learning*. School of Education Building. The University of Michigan, Michigan.
- 26- National League for Nursing (NLN). 2006. *Simulation Innovation Resource Center*. www.sirc.nln.org/mod/page/view.php?id=347 Accessed: Jun 2014.
- 27- Kuznar, K., A., 2009. *Effects of High-Fidelity Human Patient Simulation Experience on Self-Efficacy, Motivation and Learning of First Semester Associate Degree Nursing Students*. Dissertations/Theses – Doctoral Dissertations. <http://www.proquest.com/en-US/products/dissertations/individuals.shtml>
- 28- Jeffries, P. R. 2005. A framework for designing, implementing, and evaluating simulations used as teaching strategies in nursing. *Nursing Education Perspectives*, 26(2), 96-103.
- 29-Guinea, S.; Andersen, P.; Reid-Searl, K.; Levett-Jones, T.; Dwyer, T.; Heaton, L.; Flenady, T.; Applegarth, J.; Bickell, P. Simulation based learning for patient safety: The development of the Tag Team Patient Safety Simulation methodology for nursing education. *Collegian* 2019, 26, 392–398
- 30-Basak, T.; Unver, V.; Moss, J.; Watts, P.; Gaioso, V. Beginning and advanced students' perceptions of the use of low- and high-fidelity mannequins in nursing simulation. *Nurse Educ. Today* 2016, 36, 37–43. [CrossRef] 46.
- 31-Dankbaar, M., Jelmer Alsmas, E. H., Jansen, Jeroen J. G. van Merriënboer, Jan L. C. M. van Saase, and Stephanie C. E. 2016. An experimental study on the effects of a simulation game on students' clinical cognitive skills and motivation. *Schuit Adv Health Sci Educ Theory Pract.* 2016; 21: 505–521. doi: 10.1007/s10459-015-9641-x
- 32- Oh, P.J., Jeon, K.D., Koh, M.S., 2015. The effects of simulation-based learning using standardized patients in nursing students: A meta-analysis, *Nurse Educ. Today*, 35(5):e6-e15 <http://dx.doi.org/10.1016/j.nedt.2015.01.019>
- 33-Saied, H., 2017. The Impact of Simulation on Pediatric Nursing Students' Knowledge, Self-efficacy, Satisfaction, and Confidence. *Journal of Education and Practice* www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.8, No.11, 2017.
- 34- Lubbers, J., Rossman, C. 2017. Satisfaction and self-confidence with nursing clinical simulation: Novice learners, medium-fidelity, and community settings. *Nurse Educ. Today*. Jan; 48:140-144. doi: 10.1016/j.nedt.2016.10.010.
- 35-Agha, S., Alhamrani, A., Khan, M. 2015. Satisfaction of Medical Students with Simulation based learning. *Saudi Medical Journal*. 36: 731-736.
- 36- Hayden, J., Gross, L., Smiley, R. 2014. Simulation in Nursing Education: Current Regulations and Practices. *Journal of Nursing Regulation*. 5: 25-30.
- 37-Al Gharibi, K. A., & Arulappan, J. (2020). Repeated simulation experience on self-confidence, critical thinking, and competence of nurses and nursing students—An integrative review. *SAGE Open Nursing*, 6, 2377960820927377.
- 38- Davison, J., Mackay, B., Michael J. and Mc Govern. 2017. The Potential of Simulation to Enhance Nursing Students' Preparation for Suicide Risk Assessment: A Review. *Scientific Research an Academic Publisher*. *Open Journal of Nursing*, 2017, 7, 129-144.