

## Nursing Students' Perspective about Role – Play as a Teaching

# Strategy in Psychiatric Nursing

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#### **Abstract**

Role – play can be an effective teaching strategy in psychiatric nursing if the role – plays are appropriately structured and formulated on the basis of meeting the course objectives. The purpose of the current study was to investigate nursing students' perspective about role – play as a teaching strategy in psychiatric nursing. A descriptive correlation, cross – sectional research design was utilized to conduct the current study. A 20 items questionnaire survey was completed by a convenience sample of 139 nursing students affiliated to College of Nursing (CON – R), King Saud Bin Abdulaziz University for Health Sciences – Riyadh (KSAU – HS) enrolled in psychiatric nursing course. Results of the current study concluded that role – play proven to be an effective tool for teaching psychiatric nursing. Although it initially creates anxiety and fear, psychiatric nursing students judged the use of role – play in the teaching – learning process as very positive, it improved their communication, helped them to integrate the theory and practice of psychiatric nursing, in addition, students admit that role – play enabled them to cope with anxiety, fear, doubts, before facing future real – life nursing care situations, creativity, active participation and team work were highly valued by the students. It is recommended to encourage the use of role – play and its creative and integrative aptitude to facilitate psychiatric nursing education.

**Keywords:** Role – play, nursing students, teaching strategy, psychiatric nursing, nursing education.

## 1. Introduction

With increased number of students enrolled in nursing programs and lack of clinical training sites as a result of scarce of mental health hospital and confidentiality issues related to psychiatric patients' records and information, there is a need to adopt alternative innovative ways to teach the clinical component of psychiatric nursing. Many nursing colleges already possess high – fidelity simulators that are used to teach many nursing subjects. In psychiatric nursing, simulation involves more than mannequins, instead, it takes the form of scenarios with human role – playing, computer – driven models of patient and health care environment and standardized patients. The overall objective of those simulation techniques is to develop clinical skills (Melrose, 2002 & McGuinness, 2011). Students' role can vary from simply observing to actively participate with a role in different simulation activities.

Unlike traditional teaching methods utilized in university classes, innovative teaching strategies like simulation and role – playing help students to learn the skills that they need to accommodate with their future career. Clinical education is a critical component of nursing education. In addition to providing the opportunity



to transform theory into practice, it contributes to the socialization process through which students are introduced into practice and real work milieu. Nursing students need to be provided with qualities to face situations where human relationships are highly significant (Ali, 2012, Lewin, 2007). Role – play is a teaching strategy that highlights the social nature of learning, and envisions mutual behavior as stimulating students both intellectually and socially (Jarvis, Odell, and Troiano, 2002). Andrew Schaap (2005) found that "role – playing is more likely to promote active learning amongst undergraduate students than a traditional university lecture," (p. 46).

Proper use of role – play as a teaching method offers many advantages: first it can amplify students' interest in classroom activities, "Integrating experiential learning activities in the classroom increases interest in the subject matter and understanding of course content" (Poorman, 2002, pg. 32). Moreover, role – playing boosts students' involvement in teaching – learning process as they are not passive recipients of the instructor's knowledge, rather, they take an active part. Poorman (2002) observed that "true learning cannot take place when students are passive observers of the teaching process" (p. 32). In addition, role – playing prepare students to deal more efficiently, competently and empathetically with real clinical situations that require psychiatric nursing interventions.

Riera, Cibanal & Mora (2010) mentioned that learning with role – playing enables students to gain confidence while reduces their anxiety, furthermore role – playing encourages creativity, sharpens one's perception and enables the participants to understand group dynamics, personal freedom and improve and empower their communication skills (Manzoor, Mukhtar & Hashmi, 2011)

When it applied in psychiatric nursing, the principle behind role – playing is that the student assumes a particular personality of a different person, such as a nurse, a patient, a caregiver, or another health care provider. In most situations, role – play is used as a teaching strategy in which students use their background knowledge in addition to attaining new information about the character to play the assigned role in a better way (Lloyd, 1998).

According to (Cherif, Verma & Somervill, 1998), role – playing activities can be divided into four stages: first, the preparation and explanation of the activity by the course instructor, second, student preparation of the activity, third, performing the role – play and forth, the debriefing or discussion after the role – play activity. Chan, 2012 mentioned that role – play makes the classroom more dynamic through various verbal and non verbal acts of the students in addition to their cognitive process that is required to understand, interpret and analyze the meanings of the role play.

Dealing with psychiatric patients requires unique skills, role playing offers the opportunity to develop and enhance communication, interviewing, assessment and intervention skills and boost critical thinking ability rather than the traditional teaching methods (Chan, 2012, Korenstein et al, 2003, Roter et al., 2004 & Simonneaux, 2001). Sympathizing with psychiatric patients can be achieved through putting oneself in their own difficult situation; this will enable to avoid the stereotype stigma that prevents true identification of psychiatric patients' distinctive needs, demands and problems.

The aim of the present study was to investigate nursing students' perspective about role – play as a teaching strategy in psychiatric nursing.

## Objectives of the study



The objective of the current study was to:

- 1. Identify nursing students' preference of teaching strategies in psychiatric nursing.
- 2. Investigate nursing students' perspective about role play as a teaching strategy in psychiatric nursing.
- 3. Explore the relationship between students' academic level and their perspective about role play as a teaching strategy in psychiatric nursing.
- 4. Examine the relationship between students' Grade Point Average and their perspective about role play as a teaching strategy in psychiatric nursing.

#### 2. Subjects and Methods

#### 2.1 Research Design

A descriptive correlation, cross – sectional research design was utilized to conduct the current study.

### 2.2 Setting

The study was conducted in the College of Nursing (CON – R), King Saud Bin Abdulaziz University for Health Sciences – Riyadh (KSAU – HS), Kingdom of Saudi Arabia.

#### 2.3 Participants

A convenience sample of one hundred and fifty three nursing students enrolled in the psychiatric/mental health nursing course for the academic year 2011 – 2012 and 2012 - 2013 were invited to participate in the study. 139 students agreed to participate in the study and completed the questionnaire survey giving a response rate of 90.8 %.

As a part of the psychiatric mental health nursing course requirements, students were required to create and demonstrate two different role – play activities with different roles as a psychiatric nurse, patient or caregiver. Guidelines for Role Play were:

- 1. Demonstrate the signs and symptoms of the disorder appropriately and comprehensively
- 2. Demonstrate skills of therapeutic communication
- 3. Demonstrate accurate and relevant history taking
- 4. Demonstrate comprehensive assessment skills
- 5. Provide relevant nursing care for the simulated case
- 6. Discuss the psychopharmacological and other treatment options relevant to the simulated case

Topics for role – play included: Bipolar Mood Disorder, Paranoid Schizophrenia, Residual Schizophrenia, Posttraumatic Stress Disorder, Obsessive-Compulsive Disorders, Somatoform Disorder (conversion disorder), Somatoform Disorder (Hypochondriasis disorder), Dissociative Disorder (dissociative identity disorder), and Alzheimer's Dementia.

#### 2.4 Data Collection Tools

Data were collected using a two parts questionnaire that was developed by the researcher after thoroughly reviewing the relevant literature. First part consisted of 20 items five point Likert scale ranging from (5 strongly agree to 1 strongly disagree), yielding a maximum possible total score of 100 and minimum possible total score of 20. The second part of the questionnaire included questions regarding students' academic level, preference of teaching method, GPA, in addition, students were asked to describe their experience with role – playing in



psychiatric nursing course in their own words, and to list the best and difficult things they faced during role – play activity.

The questionnaire was tested for content validity through revision by three experts in psychiatric nursing and education. To ensure reliability of the tool, the questionnaire was administered to fifteen nursing students then after two weeks the same questionnaire was administered to the same fifteen students who were excluded from the study. Results of that data using test – retest analysis indicated a test reliability of 0.89 where p < 0.05. A pilot study on fifteen students was performed to test for the feasibility, clarity of the questions and to estimate the necessary time to complete the questionnaire. Subjects needed 15 - 20 minutes to complete the questionnaire.

## 2.5 Ethical Issues

Students were verbally invited to participate in this study. Informed written consent was obtained from the students who agreed to participate in the current study.

Participants completed the survey questionnaire on the last week of the semester. Anonymity was ensured by using identification codes on the questionnaires. It was clearly stated that students' participation is absolutely voluntary and confidential and that the responses would not in any way impact their grades of the concerned course. It was emphasized that data collected will be only used by the researcher for the purpose of the current study.

#### 2.6 Data Analysis

The data were coded for entry and analyzed using Statistical software Package for Social Sciences (SPSS version 18.0). Data was presented using descriptive statistics in the form of frequencies and percentages. Interval and ratio variables were presented in the form of means and standard deviations, and tested by Student t-test. Persons r used to test correlation. The significance level was chosen as (p < 0.05).

## 3. Results

A total number of 139 students agreed to participate in the study. Students were from different academic levels. Psychiatric nursing course usually introduced in the curriculum in level six but at some situations students may register to the course as early as level five or as late as level eight. Table 1 shows that majority of the study subjects were level seven students (n = 59, 42.4 %), level eight (n = 45, 32.4 %), level six (n = 28, 20.1%) and only seven students (5 %) were level five students. Grade point average for student ranged between 2 and 4.5 with a mean GPA of 3.48 (SD: 0.56).

*Table 1: Distribution of psychiatric nursing students by academic level (n = 139)* 

Academic Level	Frequency	Percent	
Level 5	7	5.0	
Level 6	28	20.1	
Level 7	59	42.4	
Level 8	45	32.4	
Total	139	100.0	



Students were asked to report their preference of instructional method. As presented in table 2, 74.8 % of students preferred watching a relevant video or movie. Role – play came second in students' preference as an instructional method where 69.1 % of students reported role – play as favorable method of teaching, lecturing was third in order where 57.6 % of students preferred it and 42.4 % of students mentioned it as unfavorable way of teaching. Almost 50 % of the subjects agreed upon favoring demonstration as a way of teaching.

Table 2: Psychiatric nursing students' preference of instructional method (n = 139)

Instructional Method	Yes		No	No	
	N	%	N	%	
Movie/ video	104	74.8	35	25.2	
Role – play	96	69.1	43	30.9	
Lecture	80	57.6	59	42.4	
Demonstration	71	51.1	68	48.9	

With regard to the actual total students scale score, the minimum score was 42 and the maximum score was 100 with a mean score of 76.88, SD = 12.43. Role play helped students in developing their self confidence as reported by the students (M = 4.16: SD = .88), followed by improving students knowledge (M = 4.13: SD = .95), very useful way of teaching (M = 4.08: SD = .94), generates better attention span than lectures (M = 4.06: SD = .86), and improved students communication skills (M = 4.04: SD = .85). Data is presented in table 3

Majority of students agreed upon the statement that role – play generated better attention span than lectures (n = 113, 81.3%), Role – plays improved students' knowledge about the psychiatric nursing (n = 111, 79.9%), Role – plays helped students' in developing their self confidence and is very useful method of teaching (n = 109, 78.4%), 77 % of the students (n = 107) agreed upon that they enjoyed role – play projects, 106 (76.3%) of the student agreed upon that role – plays helped in improving their communication skills, and 104 (74.8%) students stated that role – play helped them to remember information more than traditional teaching methods.



Table 3: Psychiatric nursing students' perspectives of role – play (n = 139)

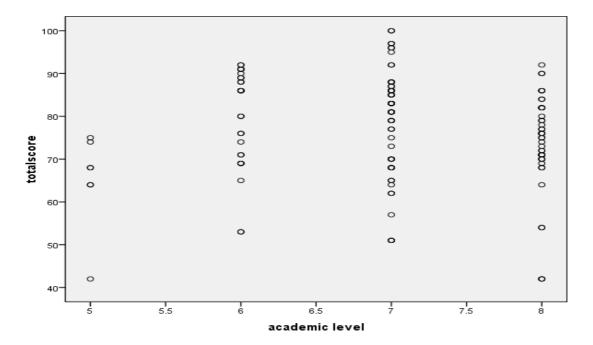
Sta	tement	Agree	Neutral	Disagree	
		N (%)	N (%)	N (%)	$Mean \pm SD$
1.	I enjoy role – playing projects	107 (77)	17 (12.2)	15 (10.8)	$3.98 \pm .981$
2.	If given a choice, I would prefer to do projects that include a role – playing activity	78 (56.1)	34 (24.5)	27 (19.4)	3.57± 1.06
3.	Role – playing helps me remember information more than traditional methods	104 (74.8)	24 (17.3)	11 (7.9)	3.99 ± .901
4.	I enjoy working with others during role – playing projects	98 (70.5)	34 (24.5)	7 (5)	3.86 ± .853
5.	I prefer hands – on activities compared to lecture note learning	97 (69.8)	26 (18.7)	16 (11.5)	3.81 ± 1.01
6.	Role – plays improved my knowledge about the psychiatric nursing	111 (79.2)	18 (12.9)	10 (7.2)	4.13 ± .947
7.	Conduction of role – plays in this psychiatric nursing will help my future clinical practice	98 (70.5)	32 (23)	9 (6.5)	3.89 ± .857
8.	Role – play is an interesting mode of information transfer	100 (71.9)	27 (19.4)	12 (8.6)	3.95 ± .954
9.	I would recommend integrating role – plays in the curriculum	83 (59.7)	39 (28.1)	17 (12.2)	3.64 ± .993
10.	Role – plays helped me to gather academic information	92 (66.2)	31 (22.3)	16 (11.5)	$3.80 \pm .914$
11.	Role – plays helped in improving my communication skills	106 (76.3)	26 (18.7)	7 (5)	4.04 ± .850
12.	Role – plays helped in removing barrier of communication with the instructor	105 (75.5)	23 (16.5)	11 (8)	3.99 ± .893
13.	Role – plays led to critical thinking	100 (71.9)	31 (22.3)	8 (5.8)	3.91 ± .838
14.	Role – plays generated better attention span than lectures	113 (81.3)	15 (10.8)	11 (7.9)	$4.06 \pm .866$
15.	Role – plays should be incorporated in clinical subjects only	59 (42.4)	58 (41.7)	22 (15.9)	3.41 ± .991
16.	Role – plays should be incorporated in theory subjects only	29 (20.9)	68 (48.9)	42 (30.2)	2.85 ± .867
17.	Role – plays should be incorporated in both clinical and theory subjects	87 (62.6)	45 (32.4)	7 (5)	3.77 ± .819
18.	Role-plays helped me in developing my self confidence	109 (78.4)	23 (16.5)	7 (5)	$4.16 \pm .879$
19.	Role – play is very useful method of teaching	109 (78.4)	20 (14.4)	10 (7.2)	4.08 ± .941
20.	Role – plays enabled me to cope with anxiety and fear before facing future real-life care situations	96 (96.1)	27 (19.4)	16 (11.5)	$3.92 \pm 1.04$



Students scores were re-coded to create a categorical classification of the students' perspective of the effectiveness of the role – play as a teaching method as following: scores 40 and below indicate disagreement, scores 41 – 60 neutral and scores 61 or more indicating favorable perspective. Analysis of the data revealed that 127 students (91.4 %) held favorable perspectives towards role – play as an instructional method while only 12 students (8.6 %) held neutral perspectives and interestingly no students showed negative perspective.

Analysis of data showed no statistically significant relationship between students' academic level and their perspectives of role – play as a teaching strategy (r = -0.047, P = 0.581).

Figure 1. Relationship between psychiatric nursing students' academic level and their perspectives of role – play as a teaching strategy (n = 139)

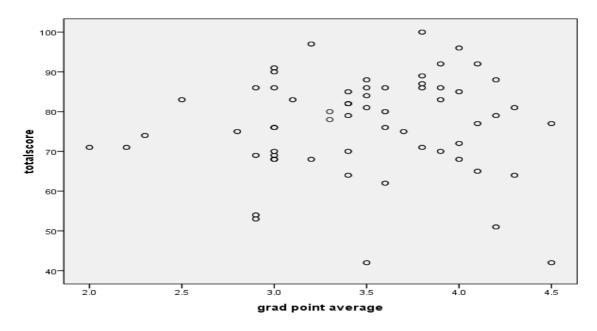


$$r = -0.047$$
,  $P = 0.581$ 

Analysis of data showed strong statistically significant relationship between students' Grade Point Average and their perspectives of role – play as a teaching strategy. This finding indicated that those students with high GPA favored role – play as a teaching strategy while those students with lower GPA viewed role play as less effective teaching strategy (r = 0.669, P = 0.039)



Figure 2. Relationship between psychiatric nursing students' Grade Point Average and their perspectives of role - play as a teaching strategy (n = 139)



r = 0.669, P = 0.039

Students were asked to describe their experience with role – play in psychiatric / mental health nursing course in their own words. Content analysis of that part of the questionnaire revealed different experiences as reported by the students ".... It taught me how to write a scenario and getting me excited to demonstrate the signs and symptoms of the assigned diagnosis.", "it was better than lecture and presentations. It helped me to memories the topic during the exam time." "it was interesting experience which helped me learn easily and in less stressful way.". "role playing is an excellent idea to deliver knowledge to students who are studying the subject for the first time.", "it facilitated my learning process especially the application part of the role play", "...even I didn't get the full mark in the role play assignment, but I loved the experience,..... it made me not to forget important things that was emphasized during the role play", "....it was useful, fun and good experience". "......I enjoyed it, it helped me to understand how depressed people feel", "it helped me to identify the symptom on the real patients more easily", "....it is way better than the traditional teaching methods of teaching", "it taught me how is the team work looks like...", "....role playing was interesting in the psychiatric nursing course because all the scenarios stick in our minds and helped us through the real application...", ".. Actually, role play made me so confident about my information and always reminded me about the demonstrated clinical cases......i really loved this experience", "before I did it I was so afraid, but it built my confidence", "it removed the fear and anxiety that I experience during presentation, also it made me thinking more critically about different cases". "Role play helped me to understand many signs and symptoms that I was not able to see it during clinical time on the real patients, "role play is the best instructional tool for education".

Students were asked to list the best and difficult things they faced during role – play. The students' opinions are listed in table 4. Students' responses were classified into three main categories as: role – play as an instructional method, information retention, and student's emotional consequences. With regard to the



difficulties, students responses were categorized into two variables related to the role – play scenario and student emotions.

Table 4: Pros and Cons of role – play as reported by psychiatric nursing students

Pros	N	Cons	N
Role – play as an instructional method  Break the routine method of teaching  Put the student in near real situation  Live the live experience  Help understanding the signs and symptoms  Simple way to present information  Facilitate working with the real patient  Enjoyable, interesting, useful experience  Enhancing group work with classmates  Improve the students communication skills  Easy way to receive marks in the course	18 3 6 15 19 33 78 83 48 8	Role – play scenario  – Creating and writing the scenario  – Time consuming in preparing the scenario  – Some symptoms were difficult to demonstrate  – Working with uncooperative classmates  – Miscommunication between the assignment group  Student's emotions	36 78 19 18 13
Retention of information  Information is easier to remember  Role play made the subject unforgettable  Emotional consequences  Help reducing student anxiety  Improved students self confidence	113 51 54 62	<ul> <li>Fear</li> <li>Creating Anxiety</li> <li>Stress</li> <li>Being shy</li> </ul>	21 63 28 9

#### 4. Discussion

Role – play is acknowledged to be an effective instructional method in nursing education that enhance students' critical thinking ability, improve communication skills and prepare nursing students to practice nursing skills in the real clinical situations.

Findings of the current study highlighted students' preference of role – play as a teaching strategy over traditional teaching strategies as lecturing, thins finding is consistent with the findings of the study conducted by Trapp, Koontz, Peer, & Ward (1995) & Manzoor, Mukhtar & Hashmi (2012) who concluded that role – plays were identified as most preferable and effective method of teaching by a majority of their study subjects.

Of the current study subjects, 78 (56.1%) students agreed that role – play should be incorporated in clinical subjects, 20 (14. 4%) students agreed that it should be incorporated in theory classes and 41 (29. 5%) agreed for inclusion of role- plays in both clinical and theory classes. This finding is similar to the findings of the study conducted by Manzoor, Mukhtar & Hashmi (2012) who found that 54.7% of their subjects agreed that role plays should be integrated into clinical subjects, 7.8% agreed that they should be integrated into basic sciences subjects and 37.5% agreed to incorporate role – plays in both clinical and basic sciences subjects, and Dieckmann, et al., (2008) who recommended the use of role – plays as an essential component to be integrated in the medical curriculum education. This finding can be interpreted by the fact that clinical subjects need more interaction between the instructor and the students as well as among students in order to deliver the information more effectively, while theory classes which basically relay on transmission of facts and theory information could be delivered through lecturing or other similar teaching strategies.

Consistent with the findings of the studies conducted by Lanea & Rollnickb (2005) & Manzoor, Mukhtar & Hashmi (2012), results of the current study showed that one hundred students, 71.9 % of the subjects found role – play an interesting mode of learning and information transfer, almost three quarters of the current study subjects 70.5 % reported that role – play will help them in their future clinical practice, these findings are congruent with Shankar (2008) who found that the participants reported that the skills gained during role – play would be useful in their future career. Furthermore 79.9 % of the current study subjects (111 students) reported improvement in their psychiatric / mental health knowledge, 106 students (76.3%) agreed that role-play helped them to improve their communication skills. In their literature review, Babatsikou & Gerogianni (2012) found that the most important issues derived from the analysis of role – play situation are understanding, self-disclosure and trust, respect and power and interpersonal conflicts.



Results of the current study implied that role – play improved 100 students' critical thinking abilities (71.9 %) which is consistent with the studies conducted by Alexander, Keitz, Sloane & Tulsky (2006), Lim, Oh & Seet (2008), Chan (2012) and Manzoor, Mukhtar & Hashmi (2012) who all agreed upon role – play promoted critical thinking about the subject throughout observation of other groups' role – plays as well as reflecting on the assigned patients' need and feelings through interaction with the group members as an active participant.

In agreement with the findings of the studies by Land (1987) and Manzoor, Mukhtar & Hashmi (2012), current results revealed that role – play improved the students' attention span when compared with didactic teaching as reported by 113 students (81.3 %).

Although some students mentioned that they were anxious and afraid before demonstrating the assigned role – play, 109 students (78.4%) favored role – play as a teaching strategy that enhanced their self confidence while 96 students (69.1%) agreed that role – play enabled them to cope with anxiety and fear before facing future real – life nursing care situations and 69.1% agreed that role – plays helped in removing barrier of communication with the course instructor. Those findings are similar to the findings of Whitehair & O,Reilly (2010) who identified increased self confidence and personal growth and collaboration as positive outcomes of the role – play experience.

Research lack studies that investigate the impact of role – play as a teaching strategy in psychiatric nursing education on nursing students' GPA. Findings of the current study revealed strong statistically significant relationship between students' GPA and their perspectives of role – play as a teaching strategy. This finding can be explained by the tendency of students with high GPA to be more knowledgeable, creative, active learners and consider due dates of their assignments, such criteria would contribute to higher GPA.

#### 5. Conclusions and recommendations

Nursing students should not be merely based on being prepared to think but also they need to be equipped with abilities to face real clinical situations where interpersonal relationships are highly substantial. Effective therapeutic communication is a must when dealing with psychiatric patients to achieve the desirable therapeutic outcome. Based on this perspective, and in addition to the theoretical basis, role – play can be used as a teaching strategy that empowers psychiatric nursing students to implement the expected therapeutic outcome.

Findings of the current study concluded that role – play proven to be an effective tool for the teaching psychiatric nursing. Although it initially creates anxiety and fear, psychiatric nursing students judged the use of role – play in the teaching – learning process as very positive, improved their communication, helped them to integrate the theory and practice of psychiatric nursing, in addition, students admit that role – play enabled them to cope with anxiety, fear, doubts, before facing future real – life nursing care situations. Creativity, active participation and team work were highly valued by the students.

In order to attain a greater involvement of students in their learning process and better integration of theory and practice, it is recommended to initiate, maintain and boost the use of role –play and its creative and integrative aptitude to facilitate psychiatric nursing education.

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#### References

- 1. Alexander SC, Keitz SA, Sloane R, Tulsky JA. (2006). A controlled trial of a short course to improve residents' communication with patients at the end of life. *Acad Med*, 81:1008-12.
- 2. Ali, W. G. (2012). Caring and effective teaching behavior of clinical nursing instructors in clinical area by their students. *Journal of Education and Practice*. **3** (7): 15 26.
- 3. Babatsikou, F. P. & Gerogianni, G. K. (2012). The importance of role-play in nursing practice. *Health Science Journal*. **6** (1): 4 10.
- 4. Chan, Z. (2012). Role playing in the problem based learning class. *Journal of Nurse Education in Practice*. **12** (21): 21 27.



- 5. Cherif, A., Verma, S. & Summervill, C. (1998). From the Los Angeles zoo to the classroom. *The American Biology Teacher*. **60** (8), 613-617.
- 6. Dieckmann P, Rall M, Eich C, Schnabel K, Junger J, Nikendei C. (2008). Role playing as an essential element of simulation procedures in medicine]. *Z Evid Fortbild Qual Gesundhwes*. **102**:642-7. German.
- 7. Jarvis, L., Odell, K. & Troiano, M. (2002). Role-Playing as a Teaching Strategy: Strategies for Application and Presentation. Staff Development and Presentation.
- 8. Land H. (1987). Pathways to learning: Using experiential exercises in teaching with special population. *J Teach Social Work*. 1:87-96.
- 9. Lanea C. Rollnickb S. (2007). The use of simulated patients and role play in communication skills training: a review of the literature to August 2005. *Patient Educ Couns.* **67**:13-20.
- 10. Lim EC, Oh VM, Seet RC. (2008). Overcoming preconceptions and perceived barriers to medical communication using a 'dual role play' training course. *Intern Med J.* 38:708-13.
- 11. Lipkin M, Lozore A, Putnam S, editors. The medical in review. New York: Springer; 1993.
- 12. Lloyd, C. V. (1998). Engaging students at the top (without leaving the rest behind). *Journal of Adolescent & Adult Literacy.* **42** (3), 184-191.
- 13. Manzoor, I., Mukhtar, F. & Hashmi, N. R. (2012). Medical Students' Perspective about Role-Plays as A Teaching Strategy in Community Medicine. *Journal of the College of Physicians and Surgeons Pakistan.* 22 (4): 222-225.
- 14. McGuinness, T. M. (2011). Simulation in psychiatric nursing education. Journal of Psychosocial *Nursing and Mental Health Services*. **49** (5): 9 10.
- 15. Riera, J. R., Cibanal, J. L.& Mora, M. P. (2010). Using Role Plying In the Integration of Knowledge in the Teaching-Learning Process in Nursing: Assessment of Students. *Texto Contexto Enferm, Florianópolis, Out-Dez;* **19** (4): 618-26.
- 16. Poorman, P. B. (2002). Biography and role-playing: fostering empathy in abnormal psychology. *Teaching of Psychology*. **29** (1), 32-36.
- 17. Schaap, A. (2005). Learning political theory by role-playing. *Politics*. **25**(1), 46-52.
- 18. Shankar P. R. (2008). Using case scenarios and role-plays to explore issues of human sexuality. *Educ Health*. 21:108.
- 19. Trapp, J. N., Koontz, S. A., Peer, D. S. & Ward, C. E. (1995). Evaluating the effectiveness of role plying simulation and other methods in teaching managerial skills. *Developments in Business Simulation & Experiential Exercises*. 22. 116 123.
- 20. Whitehair, L. & O,Reilly, M. (2010). Media supported problem-based learning and role-play in clinical nurse education. In C. H. Steel, M.J. Keppell, P. Gerbic & S. Housego (Eds.), Curriculum, technology & transformation for an unknown future. Proceedings ascilite Sydney. 1056 1067.