

Enhancing Communication skills by Role Plays in Endocrine Pharmacology: Students Perspective

Anshu Gupta

Associate Professor, Dept. of Pharmacology, MMIMSR, MMU Ambala, Haryana

Email: anshudmc@gmail.com

Abstract

Communication skill is one of the six required competencies by the Accreditation Council for Graduate Medical Education (ACGME). They can have a better outcome if practiced than just preached. Role plays are widely used as an educational method of learning communication skills in medical students. This paper studies the student's perspective of role-plays as a teaching-learning strategy and how role-plays helpful in developing communication skills.

Methodology: Fourth semester undergraduate medical students participated in a role-play sessions in endocrine pharmacology classes. Before and after the session, students completed questionnaires. In the pre-session questionnaire, students were asked about their previous experiences of role-play as teaching learning tool. Immediately after the session, students provided reflections and answered questions in relation to the role-play activity as a teaching learning method and development of communication skills. Descriptive statistics were used to analyze data.

Results: 127 students completed pre evaluation forms and 124 completed the post evaluation forms. Most students (n = 112; 90.3%) supported role plays to be conducted in class. Students considered role-plays as a feasible way of learning (81.2%). Ninety one(73.4%) agreed that they helped in improving the communication skills. Improvement in communication with the teacher and the peers was identified as an advantage of role-plays by 66 of the participants (53.2%). Students were of the view that the communication skill development should be started in early years of MBBS.

Conclusion: Role-play was valued by students in the acquisition of communication skills during pharmacology classes which will be of help in real settings.

Key words: Communication skills, Role plays, Counseling, Medical Students.

Access this article online	
Quick Response Code: 	Website: www.innovativepublication.com
	DOI: 10.5958/2393-9087.2016.00009.1

Background

Communication skills are one of the core competencies which a medical graduate should possess while passing the medical degree. In medical education effective communication includes the ability to adapt, to be responsive and to manage self-awareness during the process of talking and listening. It is not only dependent on the observable behavior of the physician but also on the behavior and perceptions of the patients. The art of communication with patients has been successfully introduced using many approaches such as ward round based teaching, small group learning, case based discussions, demonstrations, role plays, simulations and incorporation in problem based learning.¹

Role plays are most common for teaching communication skills in medical student's worldwide.² Role-play is used as a training method to acquire knowledge, attitudes and skills in a range of disciplines and with learners of different ages. Definition of Role Play by Van Ments (1989) is one particular type of

simulation that focuses attention on the interaction of people with one another. It emphasizes the functions performed by different people under various circumstances. The idea of role-play, in its simplest form, is that of asking someone to imagine that they are either themselves or another person in a particular situation.³ Students are then asked to behave exactly as they feel that person would. As a result of doing this they, or the rest of the class, or both, will learn something about the person and/ or situation, importance of communication skills as a stepping stone towards quality care of patients.⁴ Role-playing is not very commonly used but very useful educational tool for teaching skills. Its effectiveness is increased when the role-play is facilitated well.

Role plays provide a supportive, motivational and learner-centered environment. They allow for sustained and deliberate practice in a safe environment. Real life clinical experiences are mapped by simulations. They are relevant to medical interviewing since communication is the core clinical skill and has many technical elements, as communication skills can be articulated in the same way as technical aspects of clinical procedures.²

Role-play activities can be performed in different ways as an educational method. Four "learning environments" in the theory of experiential learning provided by Kolb & Fry (1975) are – Affectively-oriented (feeling), symbolically-oriented (thinking), perceptually-oriented (watching), and behaviorally-

oriented (doing). Within each environment there are two tasks. First, "grasping" which consists of concrete experiences and abstract conceptualization. Second, "transforming" which consists of reflection and action the acquisition of skills in future.

For the acquisition of patient-centered interviewing skills, the central idea of incorporating role-plays as part of curriculum is to offer the under-graduates an opportunity to learn how to communicate, counsel the patients when they will start their career in the society. Engaging students in role-play not only promotes active learning, but can also be used to deliver components of the curriculum of both basic and clinical subjects of a medical program.³

Unidirectional transfer of knowledge is not an effective way in increasing competence for better doctor-patient relationship. The contemporary teaching methodologies which emphasize 'interactivity' like role-plays have been shown to be more effective basis for increasing competence of attitude and communication in health care provision.² The study aimed that constructing and implementing role-plays develop clinical communication among students with specific objectives of:

To determine students perspective of role-plays as a teaching strategy in endocrine pharmacology.

To determine how role plays are helpful or unhelpful in the process of developing communication skills.

Methodology

Study design: It is an experimental study conducted in Endocrine pharmacology classes, MMIMSR, MMU, and Mullana.

Planning: After obtaining valuable inputs from the faculty involved in medical education unit of our institute four sessions of role play were planned to be conducted during endocrine pharmacology classes. The study was approved by the Institutional Ethics Committee.

Study period: April 2015 –June 2015.

Participants: MBBS students of 4th semester (second Prof) participated in the study after giving verbal consent. A total of 127 students participated and filled the pre session questionnaire and 124 students filled the post sessions questionnaire. Students present in the class were included and who did not consent to participate and absentees were excluded from the study. Students were randomly divided into four groups of 30-32 students each. A role play was assigned to each group and the students were randomly redistributed as a medical interviewer, patient, patient attendants, observers and members to give suggestions and reflections of role-play. All the sessions were facilitated by a facilitator.

- **Role play sessions:** Twenty minutes were assigned for conduct of role play and discussion by the end of the lecture. Each role is allocated 10 minutes in role play and 10 minutes in feedback. The students played different roles which were assigned to them 3 days before hand, the interactive sessions. The participants were distributed randomly as medical interviewer, as a patient, patient attendant, observer and members to give suggestions and reflections of role-play.
- Part of the feedback process involved a brief period in which reflection on performance was encouraged. Affective domain such as communication skills, demonstration of proper technique, counseling and explanation on prognosis as in real set up with the patient were exhibited. The following role play sessions were conducted:

1. Interviewing a patient of a multinodular goiter for diagnosis, treatment and prognosis
2. Counseling a female patient for use of oral contraceptives
3. Counseling a patient of Diabetes mellitus type II on insulin therapy
4. Interview a female patient of a Rheumatoid Arthritis on corticosteroids presenting with a non-healing ulcer on right leg. Provide the diagnosis, treatment and reason for the problem

Student Feedback

- Before commencing and at the end of all four sessions a pre validated (validated on 10 students, excluded from data analysis) pre and post-test questionnaire was administered to all the participating students regarding their perceptions on role play for communications skills, counseling and explaining prognosis of a disease. It consisted of both close and open ended questions. A negative question has been added as well.

Data Analysis: The data collected was analyzed for Descriptive Statistical Analysis using Microsoft Excel 2010. The results obtained were presented in the forms of frequencies and percentages. All likert survey responses (1-5) were categorized into either positive (strongly agree, agree) and negative responses (neutral, disagree & strongly disagree). The data is represented as proportions and represented in the form of tables and charts.

Observations

The results of the study are as under:

Pre questionnaire feedback

A total of 127 (84.7%) students filled the pre-questionnaire form as 23 (15.3%) students were drop outs as absentees and they were excluded. The total number of males is 51 (40.1%) and females are 76

(59.9%). All the students are in the age group of 19-22 years. Out of all the students 24 (18.9%) had a previous exposure to role plays as a teaching learning method. They had been a part of some kind of theatre, drama and role plays which has enhanced the process of learning better. They were of the view that the role plays are helpful in retaining the lessons. They also found them interesting and motivational for further studies.

Some of the students, who had not participated actively earlier, were keen and curious to participate as "I am curious to know how it will help in studying pharmacology". Few students were shy to take part in such activities, one of the students mentioned "I get nervous facing audience."

Role play sessions

The students were motivated to make adequate preparations for role play sessions. They were guided to prepare their script and to follow *ask-tell-ask* pattern of communication. It is to elicit the information from the patient first, provide information to the patient and attendants followed by understanding patient's perspective. Seventy eight percent of the students made adequate preparations by devoting time to prepare their script. They consulted books (52%) and different e-learning Medias (64.6%) such as teaching learning videos from you tube, internet etc. Three groups made rehearsals in the hostel as well.

All the students participated actively during role play sessions and conducted them very nicely. (89%) of the students were excited for their assigned role, demonstrated enthusiasm, and were highly engaged in the process. In the conduction of role-plays, 29 (22.9%) students played the role of interviewer, patient, patient attendants, while 37(29%) were observers. Rest of the class discussed the situation and gave reflections in the presence of the facilitator. Students (76.4%) are of the view that providing reflections are essential as they can add some more important points to the topic, comes to know about their performance as well to boost their confidence level next time they perform.

Feedback after sessions

After all the four sessions 124 (97.6%) students responded the post-test questionnaire as rest were either excluded or absent that particular day. When the students were asked to share their perspective about conduction of role-plays as a teaching learning methodology in endocrine pharmacology, their responses to the survey captured the multiple benefits of role play as supplements to traditional lecture. They strongly supported 112 (90.3%) the conduction of role play in the class. Only 12 (9.7%) disagreed, but not strongly with the idea that role play enhanced their

learning experience. Ninety seven (78.1%) admitted that it improved their knowledge about the subject of pharmacology. Students considered role-plays as a feasible way of learning (81.2%). Role-plays led to critical thinking 76% with clarity of communication 74.3%) and generated better attention span than lectures (69.8%). Time allocation was considered appropriate. Hundred five of the participants (84.6%) thought that conduction of role-plays in the subject will help them in their future clinical settings and 112 (90.3%) found them as an interesting mode of learning information transfer to the patients and their attendants. (Fig. 1) Twenty three participants (18.5%) agreed that role-plays should be incorporated in clinical subjects only, 15 agreed(12.1%) that they should be incorporated only in the basic sciences and 86 agreed (69.3%) for inclusion of role plays in both the clinical and basic sciences.

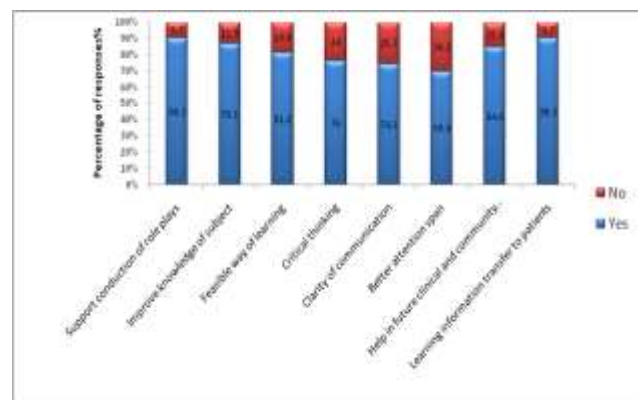


Fig. 1: Perceptions of students regarding Role Play as a teaching learning strategy

Multiple responses were obtained about student's perspective for role-plays to enhance the communication skills amongst them, 91 (73.4%) agreed that they helped in improving the communication skills along with gathering academic information. Improvement in communication with the teacher and the peers was identified as an advantage of role-plays by 66 of the participants (53.2%) and 57 (46%) strongly agreed that it helped them in making acquaintance with usual situations in clinical settings and community. Out of a total 124 participants, 94 (75.8%) agreed to incorporate role-plays in curriculum of pharmacology as a teaching learning method so as to improve the communication skills in addition to drug knowledge among students. It was identified by 96 participants that induction of role-plays in curriculum will prove to be a feasible way for adult learning.

Table 1: Perceptions of Students on Enhancement of Communication Skills by Role Play

S. No	Item	Strongly Agree	Agree	No Response	Disagree	Strongly disagree
1.	Improved communication skills along with gathering academic information	71	20	17	12	4
2.	Improved communication with teachers and peers	40	26	34	18	6
3.	Acquaintance with usual situation in clinical settings and community	57	25	26	13	3
4.	Incorporation of role play in pharmacology curriculum	62	32	16	9	5
5.	Role play induction as feasible way of adult learning	65	31	12	10	6

Some of the students also remarked that the communication skill development should be started in early years of MBBS and not only in internship. Students also reported the key aspects of helpful role-play were opportunities for observation, rehearsal and discussion, realistic roles. They found it helpful in developing the communication skills along with knowledge of subject.

The students who disagreed or found the role plays unhelpful had a view "I'm not used to study in this way" or "I am accustomed to traditional teaching" "I am shy to participate as I can make mistake. "Skills can only be learnt in real situation with experience."

Discussion

Role play is a powerful intervention which can be used to enhance cognition, psychomotor skills and affective domains in learners. They make the learners more confident to deal with realistic, serious complex and ambivalent professional situations.⁷ The power of role play to engage emotions is its power as a teaching aid.⁸ Role-plays are predominantly used in teaching communication skills, counseling, describing prognosis and certain sensitive topics such as drug and alcohol use, domestic violence and sexual health.⁹⁻¹¹ Teaching of communication skills in palliative medicine can also be achieved using role-plays.¹² Interaction in class helps student engagement in the lecture and motivates them positively to learn. Active participation and involvement is a prerequisite for learning beyond the recall of facts, and improvement in academic performance.⁵ Medical students should learn how to deal with patients while handling sensitive issues during their course.¹⁴ Role play is used as an effective teaching strategy if the role-plays are properly structured and formulated on the basis of meeting objectives of the course.¹³

In our study the students of 4th semester were exposed to role plays during their lectures on endocrine pharmacology so as to enhance their communication skills which is quintessential part of medical education. The role plays were followed by didactic lectures

during later part of the time allotted for lecture. All the students welcomed and actively participated in the activity. They were more attentive and listening to their peers. It created an atmosphere of a real situation. Students or trainees welcome role-playing because this activity brings variations, movement, and most likely, simulated life experience into the classroom or training session.¹⁴ Role Play is an enjoyable activity for whole class. The students rehearsed their roles provided beforehand at homes. It is like a real setting experience on certain issues of explaining a diagnosis, counseling a patient, regarding treatment or breaking a bad news.

Reflections provided over the performance of the participants helped to understand the topic better by all the students. An advantage of these procedures is that they require little preparation. The students get time to reflect back, discuss in their groups and delve deeper into the material.^[16]

Feedback is an essential part of learning. Active learning allows teachers to receive feedback on student's needs and perceptions, and on future teaching-learning directions.^[15] Feedback questionnaire with either close, open ended or both items throw a light on the students perception, on the strategies used and also gave an insight to their learning needs. In the study most of the students provided the feedback that they welcome role-playing activities during lectures as they found it a feasible way to learn, their attention span was increased, helped to development of communication skills with patients which are useful in future.

Conclusions

Role-plays are well accepted by the students as an effective teaching learning method as it helps to gain knowledge about the subject and skills to communicate effectively with the patients in real situations.

Future

We would like to incorporate role-plays in other topics of pharmacology lectures along with other interactivities so that the students are well exposed to

communication skills in different real situations with patients.

Lecture Recall." *Teacher Education and Special Education* 1987;10:14-8.

Acknowledgements

I sincerely acknowledge Dr Sanjay Bedi Co-ordinator MEU, Dr. Rani Walia Prof and head Pharmacology, Manoj Goyal Professor Pharmacology, and Principal MMIMSR.

Funding: None

Conflict of Interest: None

References

1. Tayem Y, Altabtabaei AS, Mohammad MW, Arrfedi MM, Aljawder HS, Aldebous FA et al. Competence of medical students in communicating drug therapy: Value of role Play demonstrations. *Indian J Pharmacol* 2016;48(1):37-41.
2. Nestel D, Tierney T. Role-play for medical students learning about communication: Guidelines for maximizing benefits. *BMC Medical Education* 2007, 7: 3 (accessed on 10th Sept 2015 from <http://www.biomedcentral.com/1472-6920/7/3>).
3. Manzoor I, Mukhtar F, Hashmi NR. Medical Students' Perspective about role-plays as a teaching strategy in community medicine. *Journal of the College of Physicians and Surgeons Pakistan* 2012;22:222-5.
4. Stewart MA. Effective physician-patient communication and health outcomes: a review. *Can Med Assoc J* 1995;152:1423-33.
5. Joyner B, Young L. Teaching medical students using role play: twelve tips for successful role plays. *Med Teach* 2006;28:225-9.
6. Gupta A, Bhatti K, Walia R, Agnihotri P, Kaushal S. Implementation of Interactive Teaching Learning Methods in large Group in Endocrine Pharmacology. *Indian jour of Pharmacy and Pharmacology* 2015:6.
7. Skelton J, Hammond P, Wiskin C, Fitzmaurice D, editors. *Role play as a teaching methodology*. Barmingham: University of Birmingham;1999.
8. Maguire P, Pitceathly C. Key communication skills and how to acquire them. *BMJ* 2002;325:697-700.
9. Frith J. The use of role-plays in teaching drug and alcohol management. *Aust Fam Physician* 1996;25:532-3.
10. Skelton JR, Matthews PM. Teaching sexual history taking to health care professionals in primary care. *Med Educ* 2001;35:603-8.
11. Abraham A, Cheng TL, Wright JL, Addlestone I, Huang Z, Greenberg L. Assessing an educational intervention to improve physician violence screening skills. *Paediatrics* 2001;107:E68.
12. Rodger CC. Using role-plays to teach palliative medicine. *Med Teach* 1993;15:187-93.
13. Lipkin M, Lozore A, Putnam S, editors. *The medical in review*. New York: Springer; 1993.
14. Land H. Pathways to learning: Using experiential exercises in teaching with special population. *J Teach Social Work* 1987;1:87-96.
15. Jason H and Westberg J. *Providing constructive Feedback*. (Boulder, CO, ACIS Guidebook for Health Professionals) 1991.
16. Ruhl, Kathy L., Charles A. Hughes, and Patrick J. Schloss Winter "Using the Pause Procedure to Enhance