

CBME and Introduction of Role Play into Medical Education as perceived by Indian Medical Students

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Abstract

Introduction: With the introduction of the National Medical Commission, radical changes have been brought about in the education of Indian Medical Graduates. There is a shift from the traditional didactic method of teaching to the more student-centric problem-solving, self-directed learning and simulation-based teaching. One such method is role play, which has been acclaimed worldwide as an effective tool in delivering wholesome education and also provides scope for student training in communication skills. This study aimed to understand the students' perception towards role play as a teaching method.

Methodology: This cross-sectional study was conducted on 50 students from 9th semester MBBS in a tertiary care hospital in North-East, India. 7 students participated in a role play on the sensitive topic of "Contraception" in Obstetrics & Gynaecology. Following the role-play, a structured questionnaire was handed out for the students to fill.

Results: Out of 50 students, 37 students filled out the questionnaire. Of them, 48.6% perceived that role play made participation livelier, 64.8% found that role play made the class more interesting, 62.1% thought that role plays broke the monotony of class and 56.7% found role play to be good tool for revision of key points in lectures. A good 70.2% students found role play helpful in learning communication skills and also responded that role plays mimicked real case scenarios. 45.9% students felt that they remembered clinical features better and 67.5% felt their attitude toward patients improved with 78.3% perceiving easier transition towards clinical cases.

Conclusion: Role-play is perceived by medical students as a good teaching modality as it enhances their learning in many domains by an active learning process.

Keywords: Competency-based medical education, Role play, Active learning, Self-directed learning

Introduction

Role play means simulation of a situation comprising of participants with some level of preparation. There has been a transition in undergraduate medical education from the traditional didactic way of teaching to the more interactive, innovative and problem oriented learning (Knowles et al. 2001).

The aim of medical education is not only to impart information which is memorised & reproduced in examination, but to be able to help the students assimilate, understand the concepts and to apply them in patient management.

Role play is an effective teaching-learning methodology in this regard. Students enacting as patient- doctor can experience the patient's concerns, dilemmas, questions and the doctor's responsibility of providing patients with relevant information & also to allay the patients' anxiety at the same time (Gelis et al. 2020; Iram et al.

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2012; Coonar *et al.* 1991). Roleplays have been shown to improve the communication skills and knowledge of the students (Knowles *et al.*, 2001; Herchenröther *et al.* 2021; Nestel *et al.* 2007; Gelis *et al.* 2020; Iram *et al.* 2012; Coonar *et al.* 1991).

Role plays, if conducted by outlining specific topics or situations with clear learning objectives and exchange of ideas and observations after the role play, can and have been shown to be more effective for increasing competence in health care provision (Iram *et al.* 2012).

This study was therefore conducted to analyze the perspective of medical undergraduates regarding role play and its efficacy as a teaching strategy.

Methodology

A class on "Contraception" in Obstetrics & Gynaecology for 9th semester students (n=50) of MBBS was taught using "Role Play" as the teaching-learning methodology. Seven students were chosen for this purpose. 6 enacted the role of 3 couples approaching a doctor for advice. 1 student enacted the role of a doctor. The 3 couples were advised to enact 3 case scenarios, each where they visited a doctor for advice on emergency contraception, temporary methods and permanent methods. The students were directed to play the role of patients and ask relevant questions while

displaying patients' anxiety. The student enacting the role of doctor had to be equipped with all the information to satisfy patients' queries while advising the right treatment & maintaining an empathetic attitude.

At the end the consultant in OBGYN mentoring the class, gave critical feedback regarding the students' performance and the knowledge was disseminated to all the students of 9th semester who attended the class.

All the 9th semester students i.e. 50 students were handed a post role-play validated structured questionnaire to evaluate the teaching method, which has been inspired from a study conducted by Nair *et al.* in 2019.

Results

50 medical students of 9th semester were given the structured questionnaire, comprising of 29 male (58%) and 21 female (42%) students. Of them, 37 students filled the questionnaire. Of the respondents, 35% of the students agreed that role-play made participation livelier, 13% students strongly agreed on the same, whereas 41% students were neutral in their opinion and 10% students disagreed with role-play making participation livelier. Out of 37 students, 14% strongly agreed and 51% agreed that role-play made the class and hence learning more interesting, 24% were neutral in their opinion whereas 11% disagreed with the notion.

Table 1: Displaying the responses for various aspects of "Role play" amongst the students

Topics	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Roleplay makes participation livelier	5, 13%	13, 35%	15, 41%	3, 8%	1, 3%
Learning more Interesting	5, 14%	19, 51%	9, 24%	4, 11%	0, 0%
Breaks monotony	4, 11%	19, 51%	12, 33%	2, 5%	0, 0%
Revision of key points of lecture	8, 22%	13, 35%	12, 33%	2, 5%	2, 5%
Helped with communication skills	8, 21%	18, 49%	10, 27%	0, 0%	1, 3%
Clinical features remembered better	5, 14%	12, 32%	16, 43%	1, 3%	3, 8%
Mimicked real case scenarios	9, 24%	17, 46%	10, 27%	1, 3%	0, 0%
Improvement of attitude towards patient	9, 24%	17, 46%	10, 27%	1, 3%	0, 0%
Easier transition towards ward cases	4, 11%	15, 40%	15, 40%	2, 6%	1, 3%

A separate panel was provided in the questionnaire for the students to pen down their thoughts on role-play as a teaching methodology in Medical Education. Students described role-play to be informative, helpful in application of theoretical knowledge to practice and providing an idea about real-life scenarios and an overview of the doctor-patient relationship. It was also documented that students benefitted more from role-plays following prior study and preparation of the topic and also that it helps in revision of the topic. Needless to say, role-play was widely lauded by the students for improving their communication skills and ethical aspects of AETCOM, and they also learned talking to patients in a way comfortable to the latter and avoided using medical jargon.

It is also important to note some limitations. Some thought that role-plays required acting skills whereas not everyone can act. Also noted was that not everyone participates equally, with the same people participating again and again. It is also observed that those participating learn more, while others do not gain as much by observation. A comment on preference of clinical scenario discussion over role-play was also documented.

Discussion

It is of utmost importance for a clinician to have good communication skills. However, it has been observed that despite having good knowledge, there is a lack of ability to properly communicate with patients, navigate through sensitive issues with high emotional content and empathy, and in order to harbour these soft skills, one needs to practice (Rodriguez, 2016; Bouaoud, 2021; Salman, 2021; Ravichandra, 2021). In a study conducted by Rodriguez *et al.*, it was reported that skills required to navigate sensitive issues are not obtained by practice of straightforward clinical cases. Many specialties in medical science are impacted by difficult communication, hence requiring rigorous education (Rodriguez, 2016). Chatterjee *et al.* focused on the need of medical communication skills training in Indian setting as well Acharya, 2014; Moghadam, 2018; Dalwood, 2020; Putter-Katz, 2018; Chatterjee, 2011).

This is where simulation-based teaching methods come into play, one such method being role-play, which has garnered a high reputation as a teaching method for medical students (Nestel, 2007; Iram, 2012; Bharti, 2023). Role play has emerged as an effective tool in providing the training required in communication skills, applying theoretical knowledge to practice, increasing the attention span and retentive power of the students, to increase interaction and hence provide medical undergraduates a wholesome education (Knowles *et al.* 2001; Herchenröther *et al.* 2021; Nestel *et al.* 2007; Anthony *et al.* 2020; Iram *et al.* 2012; Coonar *et al.* 1991).

Learning through experience has a long-lasting effect on students (Bharti, 2023; Jabeen, 2013). Learning by doing is now known as "Experiential learning", and has 4 stages comprising of concrete experience, reflective observation of the new experience, abstract conceptualization and active experimentation (McLeod, 2023). This essentially implies that learners retain more information by what they "do" as opposed to what is "heard", "read" or "observed" (Bariud, 2022).

Knowles *et al.* (2011) observed that role play combined with traditional methods is better at delivering knowledge to medical students than the didactic method alone. It has also been reported that a simulation-based undergraduate curriculum is helpful in developing problem-solving abilities and the ability to apply knowledge to patient care, particularly in unanticipated circumstances (Salman, 2021). Role-play or simulation-based teaching methods can also help in proper assessment, guidance, rectification and improvement in communication skills. Marked improvement of communication skills scores was shown when the role-play method was implemented as an intervention (Ravichandra, 2021). Further, a study conducted by Jabeen *et al.* showed that 97.9% of students were in favour of using simulated patients for assessment of communication skills (Jabeen, 2013).

Studies have shown that there is a positive perception of medical students towards role

play as a teaching method in medicine. In a study conducted by Manzoor *et al.*, 78.5% admitted that role-plays improved their knowledge and 84.6% found that role plays helped in clinical performance. Improvement in communication skills, making acquaintance with local situation and better attention span were other positive impacts observed (Iram, 2012). Anthony *et al.* reported on peer role play for training communication skills, where students participated as both doctor and patient for enacting a situation. Role play not only improved communication skills like other simulation-based teaching method, but was also relatively less expensive (Anthony, 2020; Dalwood, 2020; Putter-Katz, 2018).

Conclusion

Role play as a novel teaching modality is highly recommended for medical undergraduates in the Indian context. It is also perceived by students as a better method compared to the traditional didactic method.

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