

# Effectiveness of Scenario-based Roleplay as a Method of Teaching Soft Skills for Undergraduate Medical Students

## Abstract

**Background:** Despite the widespread acknowledgment of the need and significance of soft skills (SKs) in health professions education, the subject is not emphasized enough in training students. These skills can be taught to undergraduates through roleplay. Communication skills and teamwork were taught by scenario-based roleplay and assessed in this study. **Objectives:** The study aimed to implement scenario-based roleplay as a method of teaching communication skills and teamwork to undergraduate medical students and to assess their perceptions. **Methodology:** A prospective study was conducted in the simulation/skills laboratory among 41 Phase I undergraduate medical students. The SKs taught during the sessions included communication skills, empathy, and teamwork. **Results:** The mean of the responses obtained from Gap Kalamazoo Communication Skills Checklist score in the first encounter was 27.0, 38.12 in the second encounter, and 41.24 in the third encounter. The mean scores showed a statistically significant difference between E1 and E2, E1 and E3, and E2 and E3. Posttest scores of students to self-efficacy questionnaire showed significant improvement compared to pre-test scores. Students in the present study opined that they could learn the aspects that could not have been learned in didactic lectures about communication skills and teamwork. **Conclusion:** Scenario-based roleplay can be used as an effective method for teaching SKs such as communication skills and teamwork for undergraduate medical students. Different scenarios which replicate the real-life situations can be incorporated to help students to learn and face the real-life encounters.

**Keywords:** Communication skills, effectiveness, scenario-based roleplay, teamwork, undergraduate medical students

## Introduction

Soft skills (SKs) are personal characteristics that make someone capable of interacting effectively and harmoniously with other people. SKs are defined as the group of skills acquired by a person that facilitates the development of their own performance.<sup>[1]</sup>

They are described as “desirable qualities for certain types of jobs or professions that do not depend on acquired knowledge but include common sense, the ability to deal with people, and a positive flexible attitude.”<sup>[2]</sup> SKs are a term often associated with a person’s Emotional Intelligence Quotient, the cluster of personality traits, social graces, communication, language, personal habits, friendliness, managing people, leadership, etc., that characterize relationships with other people. SKs, also known as people skills, complement

hard skills to enhance an individual’s relationships, job performance, and career prospects. SKs are often described in terms of personality traits, such as optimism, integrity, and a sense of humor. These skills are also defined by abilities that can be practiced, such as leadership, empathy, communication, and sociability. SKs could be defined as life skills which are behaviors used appropriately and responsibly in the management of personal affairs. They are a set of human skills acquired through teaching or direct experience that are used to handle problems and questions commonly encountered in daily human life.<sup>[3]</sup> Health being a holistic concept, treating patients as individuals rather than just treating their diseases or syndromes is necessary and denotes a good example of SKs. Providing information, autonomy, respect, and dignity to the patient are examples where SKs are involved.<sup>[4]</sup> Communication and trust are the key elements in building

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Submitted: 23-Sep-2023

Revised: 15-Jan-2024

Accepted: 21-Feb-2024

Published: 24-May-2024

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### Access this article online

**Website:**  
<https://journals.lww.com/IJAB>

**DOI:**  
10.4103/ijabmr.ijabmr\_431\_23

### Quick Response Code:



**How to cite this article:** Lavanya KM, Somu LK, Mishra SK. Effectiveness of scenario-based roleplay as a method of teaching soft skills for undergraduate medical students. Int J App Basic Med Res 2024;14:78-84.

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a healthy relationship with the patient and their families or with other health professionals.<sup>[5,6]</sup> Teamwork is tightly connected to communication skills because the team cannot function without proper communication. Good teamwork and communication inside the team provide a safe work environment and great learning opportunities for any health professional.<sup>[6]</sup>

Traditional medical education does not formally include SKs, such as ethics, professionalism, or communication.<sup>[7]</sup> Despite the widespread acknowledgment of the need and significance of SKs in health professions education, the subject is not emphasized enough in training students.<sup>[8]</sup> It is usually presumed that the affective domain gets transmitted from the teachers or seniors and medical students assimilate it (a hidden curriculum). Patient interaction, small group learning, video recording and review, rehearsal, and various teaching methods have been identified to be essential to teach SKs.<sup>[9]</sup> Roleplay is an effective teaching/learning method to make students learn communication skills and to dispose of their roles in realistic clinical situations. Roleplay in a simulated situation gives students an opportunity to develop and strengthen their skills in affective domain. It also facilitates feedback and correction of their errors. Good communication skills and other SKs can be taught to undergraduates through roleplay.<sup>[10]</sup>

Communication skills and teamwork were taught by scenario-based roleplay and assessed in this study. Unlike earlier, a well-designed and structured approach was used to develop scenario-based role play and use it as a teaching-learning method. The objectives were to determine the improvement in communication skills and teamwork of undergraduate medical students and to assess the perceptions of students about the use of roleplay as a method of teaching communication skills and teamwork.

## Methodology

This is a prospective study conducted in the simulation/skills laboratory of a Medical College in Andhra Pradesh, India. The conduct of the study included sequential steps as given in Figure 1. A core committee was formed for the development of scenarios and implementation of scenario-based roleplays for teaching SKs to undergraduate medical students. The SKs taught during the sessions included communication skills, empathy, and teamwork. One batch of Phase I undergraduate medical students who attended the Family Adoption Program were included in the study and it consisted of 45 students. Of the 45 students, 4 were excluded as they were absent during the training sessions, whereas all the other students ( $n = 41$ ) who were present on the days of training and participated in the sessions were included in the study by complete enumeration sampling. Ten Faculties, 6 from the department of community medicine and four from the department of medical education were included in the study. The framework of the training included:

### Introductory session (1 h)

The introductory session was of 1 h duration, in the form of an interactive lecture using a PowerPoint presentation and demonstration of a scenario by the faculty, followed by the formation of online discussion group on WhatsApp. Resource materials were shared in WhatsApp group. The group of 41 students was divided into 8 groups consisting of 5 students each in 7 groups and 6 students in the last group. Scenarios of communication skills were designed and validated by experts. The scenarios were designed in a way to replicate the real-life scenarios encountered in the hospital, field, and as a medical officer at the primary health center. These scenarios were shared in the WhatsApp group. Each group was assigned one scenario each of communication skills and teamwork to be performed in the next class scheduled 1 week after the introductory class. A duration of 1 week was allowed between the introductory session and the role-play sessions to give enough time for students to prepare and perform. One faculty was assigned to each role-play team and they guided the students in the conduct of the roleplay.

### Roleplay/small group session (2 h)

The sessions were conducted in the simulation laboratory of the institution. Four groups were made to perform on 1 day. It was ensured that every student had a role to perform. For every scenario, each group was given 20 min for performance and 10 min for feedback and discussion. Feedback was provided to each group using Pendleton's Model and included the following components:<sup>[11]</sup>

- Ask learner/group to state what was good about their own performance
- Provide positive feedback
- Ask learner to state what could be improved about their own performance
- Provide negative/corrective feedback.

Necessary training was given to faculty to ensure that the feedback given to students was constructive and useful for improvisation.

### Assessment (2 h)

Communication skills of students were assessed using Gap Kalamazoo Communication Skills Checklist,<sup>[12]</sup> and teamwork was assessed using TEAMWORK ASSESSMENT SCALE developed by Kiesewetter and Fischer from Munich Centre of the Learning Sciences, LMU München.<sup>[13,14]</sup>

Every student was assessed for these skills during three encounters including the first in a simulated patient, the second in the field, and third in a real patient encounter. The assessment was followed by feedback and discussion.

After completing the teaching, perceptions of students were collected using a 5-point Likert scale-based questionnaire prepared in Google Forms and validated by experts, both internal and external.

## Ethical statement

The study protocol was presented before the ethical committee, and the study was conducted after obtaining the Ethical Clearance from the Ethical Review Board of the Institution (IEC/IRB Ref No: 1081-EC/1081-08/23). The respondents were free to clarify any doubts they had about the research, feedback questionnaires, or any other related information.

## Statistical analysis

Data extraction and analysis were done using Microsoft Excel 2007. Data were entered into an Excel spreadsheet, double-checked for errors, and analyzed using IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp. Results were expressed as percentages for categorical variables. Continuous variables were expressed as mean and standard deviation. Pearson's Chi-squared test was applied to test the relationship between categorical variables. Paired *t*-test and ANOVA test were used to analyze the relationship between continuous variables. A *P* value (significance) of <0.05 is deemed statistically significant. A significance of 0.000 should be read as  $P < 0.0001$  (very highly significant).

## Results

The perception about the use of scenario-based roleplay as a method of teaching SKs was found to be positive among the majority of the students in all parameters as shown by their level of agreement on the Likert scale. The satisfaction index was found to be above the fixed cutoff of 80% for all the parameters [Table 1]. For complete questionnaire with results, check supplementary Table 1 on web.

Self-efficacy scores of students showed a significant improvement in the posttest median scores compared to pretest median scores in all parameters. This is attributed to the training in SKs by scenario-based role-play method [Table 2].

Considering the responses obtained from Gap Kalamazoo Communication Skills Checklist as a Likert scale data, the scores of students in each of the three encounters were calculated and compared mutually. The mean score in the

first encounter was 27.0, 38.12 in the second encounter, and 41.24 in the third encounter. The mean scores showed a statistically significant difference between E1 and E2, E1 and E3, and E2 and E3. There was a statistically significant improvement in scores over subsequent encounters [Table 3].

The median of the Teamwork Assessment Scale scores of students in each of the three encounters was calculated and compared mutually. The median score in the first encounter was 7 (6–8), 9 (8–9) in the second encounter, and 12 (11–13) in the third encounter. The median scores showed a statistically significant difference between E1 and E2, E1 and E3, and E2 and E3. There was a statistically significant improvement in scores over subsequent encounters [Table 4].

The themes for AHA moment throughout the activity were the doctor–patient conversation, watching friends' roleplay, enjoying every moment, and acting out scenarios. The following are the representative verbatim:

- “Interacting with friends while preparing for the role play”
- “Enjoying other group performances”
- “Being an actor for the first time in my life.”

For improvement of the sessions, students suggested awarding the performers, increasing time duration, using real patients, and providing checklists and video recordings. Themes generated from the responses to questions on two points they liked the most about the sessions and two points they did not like about the sessions are given in Table 5.

## Discussion

Communication skills and teamwork are the most important SKs for health-care staff in addition to empathy, adaptability, confidence, and time management. Communication is critical in many workplaces, but it is much more so for health-care workers. In addition to regularly speaking with coworkers, health-care professionals must speak with patients and their relatives. According to the Institute for Health-care Communication, a patient's willingness to seek clinical recommendations, self-manage a persistent medical condition, and cultivate preventive lifestyle

**Table 1: Perceptions of students about the use of scenario-based roleplay as a method of teaching soft skills**

Question	1, n (%)	2, n (%)	3, n (%)	4, n (%)	5, n (%)	SI
I feel comfortable to learn soft skills using roleplay as a teaching method	0	1 (2.4)	4 (9.8)	22 (53.7)	14 (34.1)	83.9
The feedback received was constructive and useful	0	1 (2.4)	3 (7.3)	25 (61.0)	12 (29.3)	83.4
Scenario-based roleplays provided real-life experiences of the commonly encountered scenarios	0	0	8 (19.5)	22 (53.7)	11 (26.8)	81.4
Participants played an active role in demonstrating the scenarios during the roleplay-based teaching sessions on soft skills	0	1 (2.4)	5 (12.2)	22 (63.7)	13 (31.7)	82.9
I prefer roleplay to be used as a routine method for teaching soft skills to undergraduate students	0	0	0	18 (44.0)	23 (56.0)	91.2
Overall, I am satisfied with the use of role play for teaching/learning soft skills	0	0	0	16 (39.0)	25 (61.0)	92.2

1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly agree. SI: Satisfaction Index

**Table 2: Self-efficacy scores of students due to training in soft skills by scenario-based role play method (Wilcoxon signed-rank test)**

Number	Soft skill parameters	Before training, median (Q <sub>1</sub> -Q <sub>3</sub> )	After training, median (Q <sub>1</sub> -Q <sub>3</sub> )	P
1	Skill of delivering the message to the patient/family	6 (4-8)	8 (7-9)	0.000
2	Identifying the problems of patient/family	6 (4-8)	8 (7-9)	0.000
3	Understanding the problems of the patient/family	6 (4-8)	8 (7-9)	0.000
4	Listening skills	7 (4-8)	8 (7-9)	0.000
5	Identifying possible solutions to the problems of the families	6 (4-8)	8 (7-9)	0.000
6	Providing advice to the patient/family	6 (4-8)	8 (7-9)	0.000
7	Team skills	6 (4-8)	8 (7-9)	0.000
8	Professionalism	6 (4-8)	8 (7-9)	0.000
9	Attitude toward patient's/family health and providing health education	6 (4-8)	8 (7-9)	0.000
10	Importance of close-ended and open-ended questions in doctor-patient/family communication	6 (4-7)	8 (7-9)	0.000
11	Skill of receiving feedback and inculcating change	6 (4-8)	8 (7-9)	0.000
12	Confidence in communicating with the patient/family	5 (4-8)	8 (6-9)	0.000
13	Demonstrating empathy toward patient and family	6 (4-8)	8 (7-9)	0.000

**Table 3: Comparison of communication skills scores over first, second, and last encounters (paired t-test)**

Mean scores in encounters (E)	Comparison of mean communication skills score	P
E1=27.0	E1 versus E2	0.000
E2=38.12	E1 versus E3	0.000
E3=41.24	E2 versus E3	0.000

**Table 4: Comparison of Teamwork Assessment Scale scores over first, second, and last encounters (Wilcoxon signed-rank test)**

Encounter (E), median (IQR)	Comparison of median scores	P
E1=7 (6-8)	E1 versus E2	0.000
E2=9 (8-9)	E1 versus E3	0.000
E3=12 (11-13)	E2 versus E3	0.000

IQR: Interquartile range

patterns is closely related to a health-care team member's communication skill.<sup>[15]</sup> Teamwork: A team player personality is an important characteristic in health-care staff. Some areas of health care could be compared with professional sports, with many people coming together to provide care for patients. With the best interests of the patient, everyone must understand how to deal with all other team members. Higher team functioning is related to better patient outcomes, according to a study published in the *Journal of the American College of Surgeons*.<sup>[15]</sup>

The present study involved an introductory session in the form of an interactive lecture followed by a practical activity. A systematic review conducted by Berkhof *et al.* identified that didactic lectures combined with practical components had the most significant positive impact on the improvement of communication skills.<sup>[16]</sup>

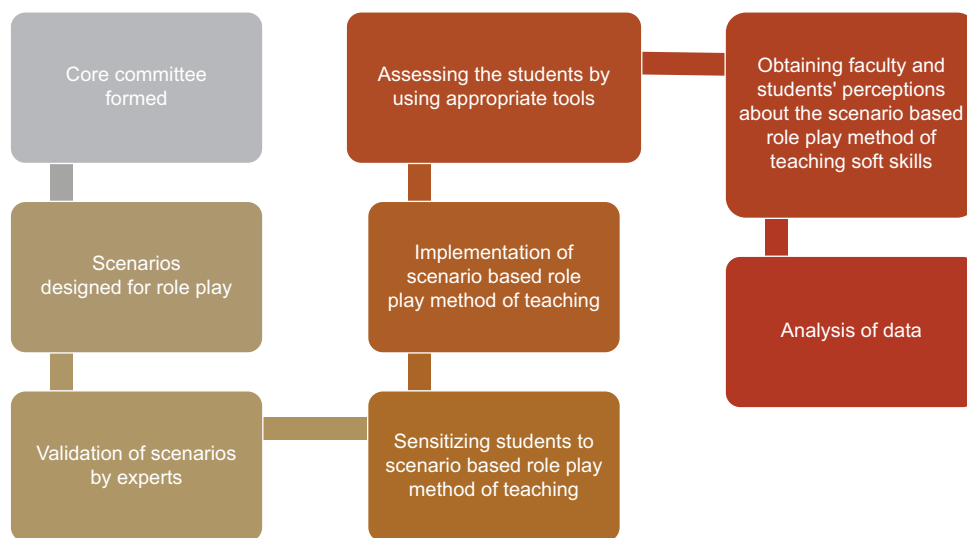
The scenario-based role-play method of teaching used in the present study included feedback to students about their performance of the scenario in the roleplay. Feedback helps in improving one's performance. One of the important aspects of developing SKs is being receptive to feedback. In general, learners value feedback more when it is given by someone they respect as a role model. Appropriate feedback contributes significantly in developing learners' competence and confidence at all stages of their professional careers; it helps them think about the gap between actual and desired performance and identify ways to narrow the gap and improve. For health professionals in particular, it promotes reflective and experiential learning, which involves "training on the job," and reflecting on experiences, incidents, and feelings. More importantly, feedback aims to develop performance to a higher level by dealing with underperformance in a constructive way. When people are open to receiving feedback, they readily accept the advice in a positive way and use it to enhance their skills, including SKs. When constructive feedback is used wisely, it can positively impact the learners' personal and professional development.<sup>[17]</sup>

Collaboration with others is the foundation of teamwork. Teamwork may be done in a group setting, or independently with another coworker to accomplish a joint task. Allowing every team member to contribute their fair share during a team project or day-to-day responsibilities and acknowledging and celebrating the group's diverse skills and personalities is a key to successful teamwork. Working in a well-functioning team provides great learning opportunities to all team members.<sup>[17]</sup>

Simply placing health-care professionals together in the same shift or room does not initiate teamwork, but it depends highly on the set of social and interpersonal skills

**Table 5: Themes generated from the analysis of Student’s responses to open-ended questions**

Question number	Open-ended question	Themes generated	Verbatim
1	Mention any two points that you liked the most about the sessions on soft skills	Facilitation by faculty Feedback Interactive Teamwork Active involvement of students Real-life scenarios Appropriate learning method	“Faculty friendliness and support, that made students stress-free and go on with a good role-play session” Interaction was good with each other Feeling like we are in the real profession of doctors Problems encountered during role play which also reflect in real life
2	Mention any two points you did not like about the sessions on soft skills	Shortage of time Absence of some students Nothing to not like	The time duration was low and active participation was less If all could attend it will be more enthusiastic to do



**Figure 1: Methodology of conducting the study**

they possess. These skills should be taught in training programs in a systematic and efficient way and any training effort should be underpinned by a properly developed skills framework, which ideally should have empirical data to substantiate learning activities and objectives, be developed into structured skill and team taxonomies to facilitate instruction and include feedback to the team that explores and rectifies gaps in team performance.<sup>[18]</sup>

The present study showed that the self-efficacy scores of students improved significantly with the scenario-based roleplay for teaching SKs. Simulated patients provide a safe, low-anxiety learning experience where students could learn from feedback and build competence and confidence.<sup>[19]</sup> Role-play provides better learning opportunity in both affective domain and the cognitive domain. Emotions and values are involved in the affective domain, whereas experiences are analyzed in the cognitive domain.<sup>[20]</sup> Several authors through their studies have evidenced the importance of roleplay in medical education.<sup>[21,22]</sup> Modi *et al.* reported that roleplays can provide room for rehearsal, improvisation, and even teaching of complex case scenarios conveniently.<sup>[23]</sup>

Students in the present study opined that they could learn the aspects that could not have been learned in didactic lectures about communication skills and teamwork. This is very similar to the findings of the recently done study by Nair, where the students’ perception of roleplay in teaching communication skills was evaluated.<sup>[24]</sup> The majority of the students in this study had a positive perception of roleplay and felt that other departments should also adopt this method for training undergraduate students in communication skills and teamwork. Contrastingly, Stevenson and Sander<sup>[25]</sup> reported that the majority of the students had a negative perception about roleplay.

Role play is a feasible and active teaching/learning method to train students to face realistic clinical situations requiring communication skills, counseling, empathy, and breaking bad news. Role play in a simulated environment provides room for students to develop their affective domain and also the opportunity for rectification of their errors through constructive feedback. Roleplay can be used to teach good communication skills to undergraduate students.<sup>[10]</sup>

The majority of students in the present study felt that the roleplay helped them to learn the correct attitudes required of a doctor to treat his patients. They agreed that the roleplay is useful as an effective method for teaching communication skills. In consistence with the present study, several studies reported that significantly greater number of students identified roleplay as the most effective method of teaching/learning.<sup>[26,27]</sup> A study found that students had positive perceptions about roleplaying because it simulated life experience into the classroom or training session.<sup>[10]</sup> The perception of the students regarding roleplay in teaching communication skills was similar to that in other studies.<sup>[26,27]</sup>

The students felt the roleplay was very lively and encouraged active participation because of well-structured scenarios of commonly encountered experiences. The majority of the students felt that the debriefing session with group discussion and feedback helped them learn more from the roleplay. Similar findings were also reported by Nair,<sup>[24]</sup> wherein, the majority of the students expressed a positive perception of roleplay and agreed that it could be adopted by other departments.

The teaching by demonstrations enacted by trained faculty followed by roleplay by the students can be one way in the present situation of academics, where students are getting the opportunity to interact with simulated patients in a safe and nonthreatening environment. Scenario-based roleplays can be one of the methods to teach the attitude, ethics, and communication competencies, which is being implemented in the competency-based medical education curriculum.

Didactic lectures alone may not be effective for teaching communication skills. Roleplays by the students in the classrooms provide a safe environment and experiential learning. By taking up roles, they understand the doctor's perspectives in doctor's role and patient's perspectives in patient's role. It enables them to learn empathy, have fun, and understand the complexities of the doctor-patient relationship.

The possible reasons for the overall positive perception of roleplay could be, well-defined ground rules, providing adequate time for preparation for the roleplay, active involvement of all the students (either as an actor or an observer), good delivery of debriefing, and feedback and providing an opportunity for reflection. An added advantage was the sense of humor maintained throughout the sessions to keep the students active, engaged, and entertained. The guidelines of Nestel and Tierney were used for maximizing benefits of roleplay.<sup>[28]</sup>

The students in the present study perceived improved knowledge and skills by roleplay. This may be because of the use of multiple methods of teaching and re-enforcement, including interactive lectures, demonstration by the faculty, video demonstrations, roleplay by the students, and

summarizing key features presented in the roleplay using PowerPoint slides.

The facilitator ensured the active involvement of the students in the learning process by asking open-ended questions, which also propelled students for reflection followed by discussion. The students perceived the roleplay positively because the complete process of roleplay followed the principles of adult learning identified by Knowles *et al.*, such as "the need to know, readiness to learn, and orientation/problem centeredness."<sup>[29]</sup>

The study proved that role-play sessions had a positive impact on improving communication skills and teamwork in undergraduate students. This study offers a realistic basis for the use of scenario-based role play as a method of teaching SKs for undergraduate medical students and would go a big way in shaping doctors of tomorrow for their future medical profession. The positive feedback from both students and faculty emphasizes that the incorporation of role play as a teaching/learning method should be seriously considered to foster learning communication skills, teamwork, and other SKs.

This study had many strengths. Unlike other studies, this study was conducted using scenarios developed by the core committee and validated by internal and external experts. The scenarios reflected the real-life situations encountered in day-to-day clinical practice of health-care professionals. What stands out in this study is that each student was exposed to these situations in three encounters, one in a simulated patient, the other in the field study, and the third in a real patient encounter. A well-designed and structured approach was used to teach SKs using scenario-based role plays. The study included the comparison of SKs over multiple encounters at appropriately spaced intervals and evidenced the improvement in skills on subsequent exposures. In the process, students could also learn the components of leadership, professionalism, and empathy.

## Conclusion and Recommendations

SKs being an indispensable must-learn competency in the undergraduate medical curriculum, scenario-based role play can be used as an effective method for teaching SKs such as communication skills and teamwork for undergraduate medical students. Different scenarios which replicate the real-life situations can be incorporated to help students to learn and face the real-life encounters. More multicentric studies may be conducted to provide additional evidence so that it helps teachers, students as well as policymakers to plan effective teaching-learning methods that can ultimately benefit the students in SKs competencies.

## Limitations of the study

The present study included only first-semester students and considering the small sample size, study results may not be generalized. Other factors influencing the learning such as

academic performance could not be explored in the present study.

### Acknowledgments

We would like to acknowledge the study participants and the faculty who helped in the conduct of the study.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

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**Supplementary Table 1: Perceptions of students about the use of scenario-based roleplay as a method of teaching soft skills**

Question	1, n (%)	2, n (%)	3, n (%)	4, n (%)	5, n (%)	SI
I feel comfortable to learn soft skills using role play as a teaching method	0	1 (2.4)	4 (9.8)	22 (53.7)	14 (34.1)	83.9
I find role play is a newer and better method of teaching soft skills compared to traditional methods	0	0	2 (4.9)	26 (63.4)	13 (31.7)	85.4
I am now familiar with all the components of communication skills	0	0	7 (19.5)	26 (63.4)	8 (17.1)	80.5
I am now familiar with all the components of teamwork	0	0	6 (14.6)	29 (70.8)	6 (14.6)	80.0
My skill of communication with the patients/families has improved after participating in these role-play sessions	0	1 (2.4)	5 (12.2)	26 (63.4)	9 (22.0)	80.9
My skill of participation in teamwork has improved after participating in these role-play sessions	0	2 (4.9)	3 (14.6)	27 (65.9)	9 (14.6)	80.9
I was exposed to different types of scenarios of soft skills, that can be encountered commonly in the medical profession	0	0	4 (9.8)	20 (48.8)	17 (41.5)	86.3
My skill of understanding the problems of the patients/families has improved after participating in the roleplay-based teaching sessions of soft skills	0	0	6 (14.6)	22 (53.7)	13 (31.7)	83.4
The role-play method of teaching promoted collaboration and teamwork among the participants	0	2 (4.9)	5 (19.5)	21 (51.2)	13 (24.4)	81.9
The role play method of teaching promoted the demonstration of professionalism among the participants	0	0	4 (9.8)	28 (68.3)	9 (22.0)	82.4
I am able to identify possible solutions to the problems of the patients/families after participating in the roleplay-based teaching sessions of communication skills	0	0	7 (17.1)	23 (56.1)	11 (26.8)	81.9
My attitude towards patient's/family health and providing health education has improved after participating in the roleplay-based teaching sessions of communication skills	0	0	4 (9.8)	26 (63.4)	11 (26.8)	83.4
I could receive feedback from the preceptor during the roleplay-based teaching sessions of communication skills	0	0	5 (12.2)	27 (65.9)	9 (22.0)	81.9
The feedback received was constructive and useful	0	1 (2.4)	3 (7.3)	25 (61.0)	12 (29.3)	83.4
I feel comfortable asking questions to the preceptor in nonthreatening environment during the roleplay-based teaching sessions	0	0	5 (12.2)	26 (63.4)	10 (24.4)	82.4
Participants played an active role in demonstrating the scenarios during the roleplay-based teaching sessions of communication skills	0	1 (2.4)	5 (12.2)	22 (63.7)	13 (31.7)	82.9
Scenario-based role plays provided real-life experiences of the commonly encountered scenarios	0	0	8 (19.5)	22 (53.7)	11 (26.8)	81.4
Roleplay-based teaching sessions of communication skills promoted the development of a strong bond with other student participants	0	0	5 (12.2)	22 (53.7)	14 (34.1)	84.3
Role play can be performed easily without being stressful to students	0	0	8 (19.5)	23 (56.1)	10 (24.4)	80.9
Role play can be used to teach soft skills within the time available	0	0	3 (7.3)	28 (68.3)	10 (24.4)	83.4
I prefer to use role play as a routine method for teaching soft skills to undergraduate students	0	0	0	18 (44.0)	23 (56.0)	91.2
Overall, I am satisfied with the use of roleplay for teaching/learning soft skills	0	0	0	16 (39.0)	25 (61.0)	92.2

1: Strongly disagree; 2: Disagree; 3: Neutral; 4: Agree; 5: Strongly agree. SI: Satisfaction Index