



Original Research Article

SEGUE framework for developing communication skills in physiotherapy students

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ABSTRACT

Context: An effective doctor-patient relationship helps increasing patient's compliance with the treatment, thereby improving his physical, functional and emotional status. Communication not only helps in creating a good inter-personal relationship and exchanging information but also in making treatment-related decisions. Physiotherapy interventions rely on a complex interplay of technical skill, communicative ability, and reflective capacity of the therapist to respond to the patient. It has been observed that the important aspect of communication, is often neglected due to time constraints within the curriculum. Also in India, the availability of structured guidelines to teach communication skills to medical professionals is an under-researched topic. The present study investigated the effectiveness of SEGUE framework (Set the stage, Elicit information, Give information, Understand the patient's perspective, End the encounter) for teaching communication skills in physiotherapy students.

Aims: To study the effect of SEGUE framework on the communication skills of Physiotherapy students.

Materials and Methods: Physiotherapy students(n=80) were assessed for their communication skills by the Likert responses of their patients to a self-structured patient feedback form. SEGUE Framework was taught to these students. The post-intervention assessment was carried out similarly.

Results: There was a significant improvement in the patient responses post-intervention.

Conclusion: We conclude that SEGUE Framework is effective in teaching communication skills in physiotherapy students.

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1. Introduction

When a patient walks in with a set of complaints, most healthcare professionals focus just on the chief complaints rather than treating the patient as a whole. To incorporate a holistic approach, it is very important to understand the patient's thoughts, beliefs, habits, lifestyle and expectations from the treatment procedures. Having good communication skills is an important aspect to establish a good doctor-patient relationship. A good doctor-patient relationship helps to improve patient's compliance with the treatment, thereby improving patient's physical, functional and emotional status, giving better patient

satisfaction rates.¹ Along with all the available treatment interventions, a good talk between the doctor and the patient can also be therapeutic by reducing the patient's anxiety and providing comfort.

There are seven pathways through which doctor-patient communication can lead to better health. Increased access to healthcare, greater patient knowledge, understanding about their body, higher quality medical decisions, increased availability of a multidisciplinary approach, increased social support, patient advocacy and empowerment, and better management of emotions are the seven ways in which an effective communication benefits the patient.²

Lack of this important aspect of practicing medicine can lead to misunderstandings between the healthcare professional and the patient, leading to undesired outcomes

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like violence against medical professionals. Instances of patient's relatives assaulting the treating doctor are a common scenario all over India.³ News reports of medical professionals launching massive protests in an Indian state, after an assault against an intern doctor of a government medical college and hospital are disturbing.⁴ One of the reasons of such violent incidences can be the lack of understanding and confidence of the patients and their relatives on the medical treatments and procedures, possibly due to lack of effective communication between the healthcare professional, the patient and their relatives.⁵

A study done by Naineni in 2019 stated that medical interns strongly believed that "soft skills" are an important aspect of medical training and agreed to the lack of a structured pattern in their curriculum.⁶

Physiotherapy interventions rely on a complex interplay of technical skill, communicative ability, and reflective capacity of the therapist to respond to the patient.⁷ Most interventions in physiotherapy are of long-term nature. Accordingly, communication skill is central in developing active participation by patients in the treatment process. It has been observed that this important aspect is often neglected due to time constraints within the curriculum.⁸

Hence, the authors felt the need for a comprehensive study of the effects of a structured framework like the SEGUE framework and its efficiency in teaching communication skills to physiotherapy students.⁹

2. Materials and Methods

This is a preliminary experimental study. It was undertaken in the Physiotherapy Out-Patient Departments of three tertiary care hospitals, namely, 1) Sancheti Institute of Orthopedic and Rehabilitation 2) Kamala Nehru Hospital 3) Late Rajiv Gandhi Hospital Nawanagar.

With the approval of the Institutional Ethics Committee, the research was commenced. Students from a Physiotherapy college (age= 23.08 ± 0.87years) were recruited with a sample size of 80. The students were made aware of the methodology of the study and written consent forms were collected from each participant. There were no dropouts in this study. The level of efficiency of communication skills of these participating students was assessed by obtaining their patients' responses in a self-made patient feedback form. The self-made feedback form was constructed by using the MedRisk Instrument for Measuring Patient Satisfaction with Physical Therapy Care (MRPS)¹⁰ and the Physical Therapy Outpatient Satisfaction Survey (PTOPS).¹¹ These assessment tools were used as references, as the items included in these two tools were similar to those in the SEGUE Framework. The authors constructed a 10-statement feedback form in English, using easy terms and then translated it into vernacular languages (i.e. Marathi and Hindi). The original feedback form underwent content validation by experts. The experts were

not only well versed in the English language but also had expertise in teaching patient communication skills to the students. The translated versions of the feedback form were content validated by the respective language experts. The Hindi questionnaire was given to a Hindi professor who had a Master's Degree in the corresponding subject and also had a sound knowledge of the English language. The Marathi questionnaire was given to an expert who had a PhD in the corresponding subject and also was well versed in the English language. The responses of the patients were to be recorded on the Likert scale.¹² Scores for each item from the feedback form were coded from 1 (strongly disagree) to 5 (strongly agree).

Written consent was taken from the patients (age= 49.049±12.065 years), regardless of their gender and medical diagnosis. All patients who came to the outpatient clinic for the first time and who had received their first course of physical therapy intervention from the participants were a part of the study. Patients who had a cognitive inability to respond to the survey (even when the survey was read to them) were excluded. The pre-intervention, as well as the post-intervention criteria for patient selection, remained the same.

On the selected day, patients were approached by one of the investigators during post-treatment time. They were asked to complete the feedback form of their language of preference. The patients were given privacy while they completed the questionnaire. They were encouraged to ask questions if clarification was needed, and the investigators were available to read the survey instructions to the patients if they requested. Patients were instructed not to identify themselves or their therapists on the survey instrument. After the completion of the questionnaire, the forms were collected on the same day, by the investigators and kept in a sealed folder.

After the collection of the pre-intervention data of all the 80 participants, a session was conducted by an expert who taught the framework and demonstrated its practical application. SEGUE framework is a research-based checklist of 32 medical communication tasks. It is an acronym for set the stage, elicit information, give information, understand the patient's perspective, end the encounter. It connotes the general transition or flow of a medical encounter from beginning to end.⁹ After teaching the framework to the participants, post-intervention data were collected similarly. The session was conducted interactively. Various possible situations encountered in the clinics were discussed and participants shared their experiences. This was followed by a doubt solving session. Non-parametric data of the pre and post values of the same group of participating students was obtained. Hence data were analyzed using Wilcoxon signed-rank test in IBM SPSS Statistics 26.Ink.

Table 1: Demographic information of participating students

Course	Interns		Externs		First year postgraduate students		Second year postgraduate students	
	Males	Females	Males	Females	Males	Females	Males	Females
Gender								
Number of students	3	47	0	1	1	24	0	4

Table 2: Comparison of pre and post-intervention scores of patient feedback on the performance of 80 students

	Questions	Pre-intervention scores	Post-intervention scores
1.	My therapist treats me respectfully.	388	400
2.	My therapist understands my concerns.	381	400
3.	My therapist seems to have a genuine interest in me as a person.	376	400
4.	I am given privacy when I need it.	374	400
5.	My therapist always gives me a chance to express my views.	384	400
6.	My therapist explains the procedures in simple terms.	387	400
7.	My therapist thoroughly explains the treatment(s) I receive.	386	400
8.	My therapist answers all my questions.	383	400
9.	My therapist gives me detailed instructions regarding my home exercise program.	387	400
10.	My therapist advises me on ways to avoid future problems.	365	400

3. Results

80 physiotherapy students participated in the research. Both male and female students were a part of this study. There was a significant improvement in the patients' responses post-intervention ($P < 0.005$).

4. Discussion

The purpose of the present study was to investigate the effectiveness of SEGUE framework for teaching communication skills to physiotherapy students. The results suggest that there was a significant improvement in the post-intervention scores of the students as observed on the patient feedback form. These results are consistent with the previous study done in nursing simulation practice with the standardized patient for improving nursing students communication.¹³ In a similar study, the communication skills of 60 undergraduate third-year medical students significantly improved after administering this framework.¹⁴

Having a structured pattern to teach communication skills, not only helps to have a uniformity in the teaching pattern for the teachers but also helps the students to understand the concept better. SEGUE framework enlists all the possible verbal and non-verbal communication skills thereby having an upper-hand in teaching the different aspects of communicating with patients. The framework is a set of guidelines, which can be incorporated by the user in his or her unique style making it more useful in a variety of

different clinical situations.⁹

A positive response to the SEGUE framework as a teaching tool has been obtained from student and faculty. This framework has a high degree of acceptability, which can be used reliably, has evidence of validity and applies to a variety of contexts.⁹

In this study, the outcome measure for assessing the communication skills of the students was by their patients' responses to a feedback form. This in itself has its benefits and limitations. In most of the studies, the assessment of the students' performance is done by medical professors or standardized patients.^{13,14} In this study the authors took into consideration the feedback of actual patients. This gave us a better idea about what is the response of the patients of this particular geographic area and socioeconomic background.

It was observed that the patients' responses varied depending on their overall satisfaction of the treatment session and the results they received at the end of the session. There was no critical review of the students done by the patients. So the change in the students' communication skills cannot be objectified. This can be considered as a limitation of the study. The students could have been further assessed by senior clinical therapists using the framework to assess the change in communication skills and a comparison between the results of the therapists and the patients could be done.

Observation results of a study titled, 'Contextualizing SEGUE: Evaluating Residents' Communication Skills Within the Framework of a Structured Medical Interview'

by Skillings et al. 2010 stated that SEGUE Framework teaches and assesses only the presence or absence of the interviewing tasks (yes/no).¹⁵ It does not measure the quality, nor does it assess the context in which the “task” is applied. The study further mentioned that the primary difference in skill level may lie in the quality, the timing, or how the SEGUE tasks are used in a medical interview. Modifications in this framework can be made by taking into consideration the needs of this particular population, and its validity and reliability can be further analyzed.

This study thus provides a future scope for further research on an objective assessment of improvement in communication skills. Also, this study shows the need to modify the existing framework for this particular population.

5. Conclusion

This study aimed at assessing the effectiveness of SEGUE framework in teaching communication skills in physiotherapy students. The results indicated that this structured framework did show significant improvement in the communication skills of the Physiotherapy students.

6. Source of Funding

None.

7. Conflict of Interest

None.

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