Teaching medical students basic communication skills online during the COVID-19 pandemic

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Introduction

Communication skills training is an important component of undergraduate medical teaching. The Family Medicine department of the Faculty of Medicine, University of Kelaniya conducts didactic lectures on basic communication skills, breaking bad news and communicating in other difficult situations. Students are given the opportunity to demonstrate and receive feedback on communication with patients during the family medicine clinical appointment and communication skills are assessed at an objective structured clinical examination. The department also conducts a small group practical session on basic communication skills for third year students. This is usually conducted as a face to face discussion and role play session among groups of approximately 20 students and one facilitator. The facilitator usually starts with a recap of the lecture on basic communication skills. The introduction is followed by role play among students which enables them to practice different communication skills using about four scenarios which are repeated allowing about eight students in each group to practice their skills and get feedback from the facilitator and peers.

Due to the restrictions imposed during the COVID-19 pandemic we were unable to conduct this small group discussion face to face and were compelled to conduct communication skills online. Although online teaching was already well established with a dedicated Moodle platform for medical students

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prior to the COVID-19 pandemic teaching communication skills online was a new experience for the department and was approached with caution by the teachers.

A description of the method we followed is given below.

Method

There were four facilitators and 160 participants. Made for purpose short videos of doctor patient consultations were utilised as teaching material. Each of the videos was carefully curated to demonstrate different levels of communication competency as well as different micro skills of communication. The batch was divided into two for the teaching. A session of two hours' duration was conducted for each group.

Format of the Session

Facilitators were provided with a detailed programme of the schedule, content and objectives of the session.

Introduction

1.
"Bad consultation" -
A videotaped consultation between a doctor and a patient.
Demonstrating extremely poor consultation and communications skills acted as an ice breaker and set the informal tone of the session.

2.
A short video animation created using free online software was used to highlight evidence based positive outcomes of good communication such as:

- Ability to understand patient agenda better
- Improved patient adherence
- Early problem identification
- Increased patient satisfaction
- Faster symptom resolution
- Less referrals and investigations
- Less doctor shopping

3.
A short introduction was conducted to refresh knowledge taught during lectures and set out the learning objectives.

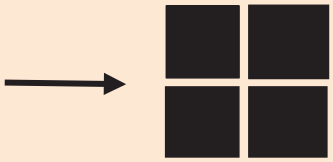
Objectives

- Understand the concept of doctor's agenda, patient's agenda and how to use good communication skills in reaching a shared agenda during a consultation
- Be able to critically evaluate behaviours related to good communication during a doctor patient consultation such as
    - Establishing rapport
    - Use of communication micro-skills such as active listening, facilitation, clarification, reflection, silence, touch, signposting, summarising and demonstrating empathy
    - Using different types of questions
    - Using non-verbal communication

Main session

1.
The second video of a clinical consultation "Diabetes consultation" was pitched at a level of communication that was of a higher standard than the first demonstration video.

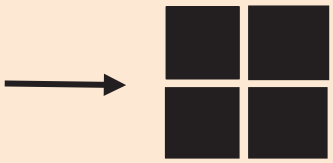
Joining breakout rooms …….
Breakout session 1



2.
For the first discussion students were divided into four breakout rooms with one facilitator for each room. Facilitator and students discussed the positive and negative aspects of the "Diabetes consultation". The facilitator discussed the verbal and nonverbal communication skills that were demonstrated by the doctor in the demonstration video with students. Students were encouraged to reflect critically on the video and discuss the demonstrated skills among themselves and with the facilitator. Students who did not participate spontaneously were drawn into the conversation by asking questions from them.

3.
Third video "DM good consultation"
This video attempted to demonstrate a higher standard of patient centred communication.

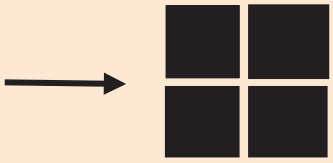
Joining breakout rooms ……
Breakout session 2



4.
The third video attempted to demonstrate the subtle nuances between a satisfactory level of communication demonstrated in the second video and a higher standard of more patient centred communication. The discussion focused on recognising the consultation and communication skills that were used to elevate this doctor patient interaction.

5.
Fourth video – "Headache"

Joining breakout rooms ……
Breakout session 3



6.
Third breakout room
The final video aimed to consolidate the information and skills that the students should have picked up during the session and there was a highly interactive discussion at this stage as students were armed with the knowledge gained from the previous videos and discussions.

7.
Five minute summary and conclusion.

Feedback from facilitators

The facilitators were surprised at the level of student participation and interactivity of the session compared to previous face to face sessions. Some facilitators admitted that the session had been an interesting and positive experience despite their initial scepticism. They were satisfied that the objectives of the session were achieved.

Student feedback

At the end of the session students were asked about the organisation of the session, satisfaction with the opportunity to clarify doubts and satisfaction with learning. 122 students had voluntarily completed all or part of the anonymous feedback form set up in their Moodle based computer assisted learning platform.

Student comments

Students declared that the session was "fun", "interesting", "attractive", "enjoyable, "entertaining", "held their attention throughout" and said they had a "happy time."

They described how they were motivated to become "kinder doctors" They mentioned that the initial recap of information had been important to orient them at the start.

They also mentioned that they had been glad to have an opportunity for synchronous interaction with their peers during a time when face to face interaction was limited due to the pandemic.

Some students felt they were able to participate more freely than at face to face events perhaps because they were in the privacy of their own homes and comparatively less visible when joining from a distance on screen.

Figure 1.
Satisfaction with organisation of the session

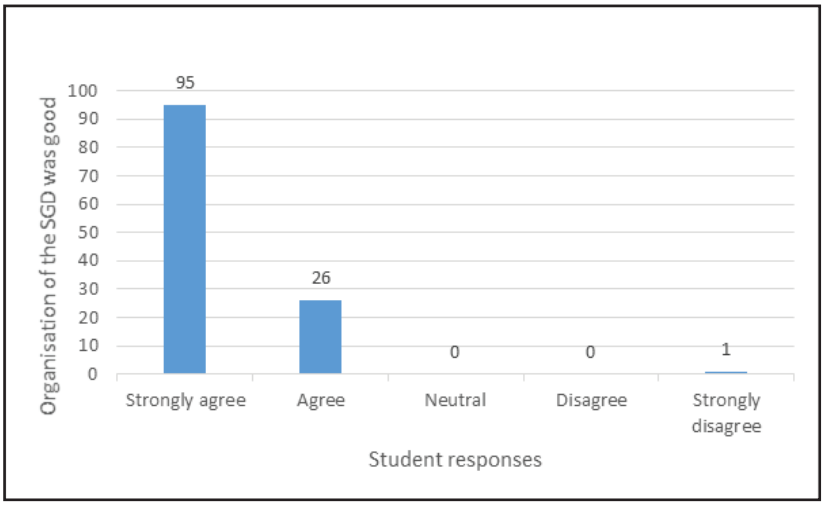


Figure 2.
Opportunity to discuss doubts

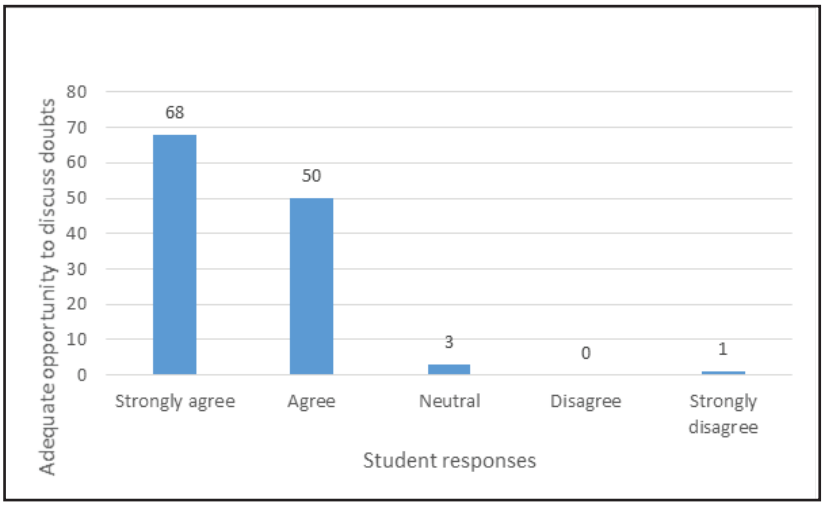
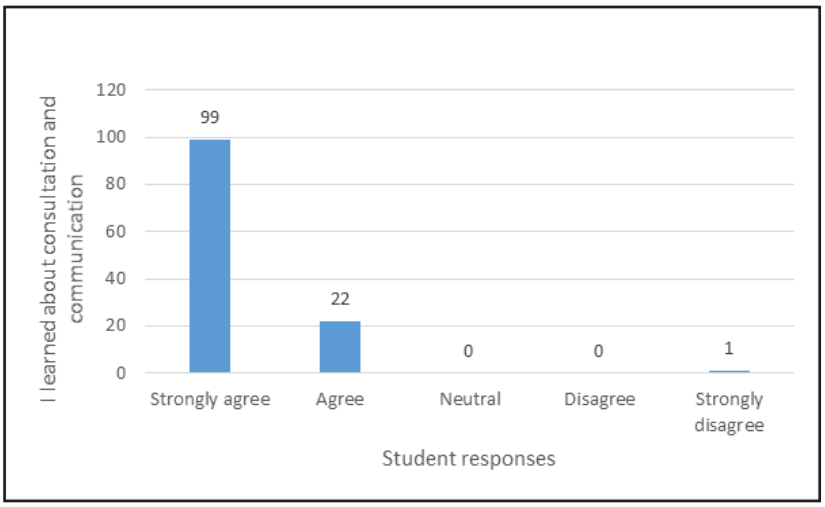


Figure 3.
Acquisition of knowledge



They appreciated the strict time management of the session. However, some students observed that the time delays during going into break up rooms was a negative aspect. Students specifically mentioned that they appreciated the efforts taken by teachers to use different digital methods such as cartoon clips and made for purpose videos. They also appreciated that the different levels of communication displayed by the different videos helped them to recognise and discriminate between subtle differences in the quality of communication.

The session had inspired them to improve their communication skills.

Student suggestions

Some requested that links for videos should have been provided so that students could have viewed them later as there had been internet connectivity issues for some.

One student suggested that a quiz could have been incorporated to further increase the interactivity and engagement. This could be easily done using online resources in the future.

A few students mentioned that some students did not participate due to difficulty with English and suggested there should be separate groups for students who were more conversant in their mother tongue to increase interactivity.

Take home messages mentioned by students

- The doctor patient relationship and good communication is important and an essential skill to learn
- It is important to listen carefully, facilitate the conversation skilfully and utilise good non-verbal communication
- Building rapport is important
- Demonstrating empathy is important
- It is important to be direct and clear
- Spending adequate time to talk with patients is important
- It is important to recognise and respect the patient as a person
- The mental status of both doctor and patient is important
- It is important to giving hope
- Good communication can increase diagnostic efficiency
- Good communication can be therapeutic for patients
- It is important to learn how to use the different types of questions properly
- It is important to give the fullest attention to the patient during the consultation
- Communication skills cannot be improved overnight but must be learned through careful practice
- The importance of compassion
- Good communication can have a positive impact on patient views regarding doctors
- The patient should be made to feel safe and comfortable
- Communication skills can be efficiently mastered even by introverts.
- The importance of ethics in communication

Discussion

Students did not get an opportunity to actively practice and receive feedback on communication skills during this session. Since students were participating from their homes we thought that introducing online role play would not be feasible due to technical problems such as poor internet connections according to our prior experiences in conducting online sessions.

However, students actively participated in the discussions and rapidly picked up and improved on their knowledge as they progressed through the video demonstrations as demonstrated by the development of the discussions during each two-hour session. The level of student analysis and critique of the demonstrated consultations became more advanced as the session progressed demonstrating the increase in awareness and knowledge.

In organising the session care was taken to ensure that the session incorporated different online teaching learning resources such as animated videos, pre-recorded consultation videos, zoom breakout rooms and Moodle for gathering feedback to make the session interesting, captured student attention and kept them engaged. Student feedback shows that this objective was achieved. While content of a teaching session is important and technology should not take precedence over content how we teach is just as important as what we teach and using various methods to capture student attention was a successful strategy in this teaching session.

With students joining from individual locations and no face to face interaction it is very important that online learning is structured in a way that is interesting and enjoyable to students in order to have maximum impact. We speculate that some facilitation and organisational strategies also helped to keep students engaged and participating throughout eg. Students were asked to name themselves using their preferred names on zoom, facilitators asked questions from students who participated less in a non-threatening manner, facilitators promoted student interactions and brainstorming within breakout rooms and the session was kept strictly to time.

Studies of transition to online teaching methods during the COVID-19 pandemic have shown that student acceptance and effectiveness of online and distance teaching learning formats have been divided. In developing countries, barriers were slow/unreliable internet connections, lack of good learning environment, lack of familiarity with online learning and financial difficulties in acquiring the technical equipment and data.[1,2,3] In relation to these difficulties one additional advantage that our students had was that through the Lanka Education and Research Network (LEARN) system they could access the zoom session without spending money on data except for the initial login to zoom.

Previous studies on medical student attitudes towards communication skills training in Sri Lanka have shown that a significant minority of students did not take communication skills training seriously.[4] However student take home messages from the session reflect that they valued the session and considered good communication an important skill to perfect.

There is limited knowledge on student's attitudes and participation during small group activities in Sri Lankan medical education settings. A previous evaluation conducted by us revealed that compared to some other methods of teaching learning during the family medicine appointment such as direct observation and feedback and learning from patients SGDs had a lower rating with regard to satisfaction with teaching method.[5] The facilitators of this session were of the opinion that student participation during this online small group session was better than at the previous face to face sessions with earlier batches. In another recent evaluation of an online communication skills teaching session during the pandemic some facilitators had reported the same phenomenon of better participation in online teaching learning activities compared to face to face activities.[6] Some of our students mentioned that they did not usually participate during small group activities but they had readily participated in this online workshop. This may have been due to various reasons such as the online format that provided a safer and less visible option for participation. However, it must be noted that some students had mentioned that participation could have been improved through various strategies such as use of mother tongue in some groups etc.

Student feedback demonstrated that they were happy to have had an opportunity to interact with each other at least in an online forum during a time when a lot of the traditional teaching learning activities and opportunities to socialise with each other were limited.

Conclusion

Students demonstrated a good understanding of the principles of effective doctor-patient communication through higher level analytic and evaluative reflections in their discussions and take home messages. The knowledge gained from this session will be reinforced and students will get the opportunity to apply this knowledge during their future clinical attachments in family medicine and other disciplines. It is also notable that facilitator scepticism towards online teaching of communication skills transformed into a positive experience while students found the online learning format acceptable and had an enjoyable learning experience which they valued. In conclusion we believe that the online basic communication skills session was at least as effective as the previous face to face sessions.

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References

1. Baticulon RE, Sy JJ, Alberto NRI, Baron MBC, Mabulay REC, Rizada LGT, et al. Barriers to Online Learning in the Time of COVID-19: A National Survey of Medical Students in the Philippines. Med Sci Educ 2021 312 [Internet]. 2021 Feb 24 [cited 2021 Jul 24];31(2):615–26. Available from: https://link.springer.com/article/10.1007/s40670-021-01231-z
2. Adams D, Chuah KM, Sumintono B, Mohamed A. Students' readiness for e-learning during the COVID-19 pandemic in a South-East Asian university: a Rasch analysis. Asian Educ Dev Stud. 2021;
3. Khan M A, Vivek, Nabi M K, Khojah M, Tahir M. Students' perception towards e-learning during covid-19 pandemic in India: An empirical study. Sustain. 2021;13(1):1–14.
4. KN M, D H E, K M D. Attitudes of Sri Lankan medical students toward learning communication skills. Educ Health (Abingdon) [Internet]. 2012 Sep [cited 2021 Jul 23];25(3):165–71. Available from: https://ppubmed.ncbi.nlm.nih.gov/23823636/
5. Perera D P, Withana S S, Mendis K, Kasunjith DVT, Jayathilaka W TS , Wickramasuriya S. Evaluation of the undergraduate family medicine programme of Faculty of Medicine, University of Kelaniya: quantitative and qualitative student feedback. BMC Med Educ [Internet]. 2019 Dec 2 [cited 2019 Dec 29];19(1):444. Available from: https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-019-1882-6
6. Perron N J , Dao M D, Rieder A, Sommer J, Audétat M-C. Online Synchronous Clinical Communication Training During the Covid-19 Pandemic. Adv Med Educ Pract [Internet]. 2020 Dec [cited 2021 Jul 24];11:1029. Available from: /pmc/articles/PMC7769081/