Can a Relationship of Trust Be Built Between Student Doctors and Patients Through Remote Interviews During COVID-19?

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Introduction: Clinical clerkships could not be conducted as usual in 2021, due to the COVID-19 pandemic. We conducted a questionnaire survey of medical students and patients to determine whether remote medical interviews conducted in such a scenario could build a trusting relationship between the two.
Materials and Methods: Fifth-year students at Tokai University School of Medicine conducted tablet-based medical interviews (remote medical interviews) with patients as part of their clinical clerkship of breast endocrine surgery. Later, both the patients and students had to rate the trustworthiness of their relationship and their preference for remote/face-to-face medical interviews in a questionnaire survey. Forty-three students and 42 patients took part in the survey.
Results and Discussion: All the patients and students agreed that a trusting relationship had been established. The results showed that most of the students preferred remote medical interviews, but patients were very divided in their preferences between face-to-face and remote medical interviews. Overall, we may conclude that remote medical interviews could be a safe tool for clinical practice in the future.

Key words: clinical clerkship, remote medical interviews, student doctors, COVID-19

INTRODUCTION

This study aims to investigate whether a trusting relationship between student doctors and patients can be established through remote interaction during the ongoing COVID-19 pandemic. Medical students are first required to clear an objective structured clinical examination (OSCE) [1] to become a 'student doctor,' and then enrolled for clinical clerkship [2]. During the clerkship, student doctors are allowed to treat real patients under the guidance and supervision of senior doctors [3]. It has also been used in medicine for a long time to say, "If you don't build a trusting relationship with your patients, you can't provide better treatment" [4], and it is very important to build a trusting relationship with student patients in clinical clerkships [5].

However, the COVID-19 pandemic has raised concerns that physical contact between student doctors and patients or supervising doctors may lead to the spread of infection. At the same time, outpatient practice is mandatory for medical students to fulfill their academic requirements [6]. Using a questionnaire survey of patients and students, this study seeks to examine whether student doctors can complete a safe and fulfilling clinical clerkship through remote medical interviews.

MATERIALS AND METHODS

In this study, fifth-year students at Tokai University School of Medicine conducted tablet-based medical interviews (remote medical interviews) with patients as part of their clinical clerkship of breast endocrine surgery. Two examination rooms were used for conducting the interviews (Fig. 1). Tablets (iPad®) with FaceTime® video communication software were placed on the desks in both the rooms (Fig. 2). The student doctor first logged on to FaceTime® on both the tablets, called their patient into the patient examination room, and instructed them to be seated in front of the tablet. The student then promptly moved to the student examination room. After introducing themselves and explaining the reason for the video interaction, they started the remote medical interview. When the interview ended, the patient was asked to return to the waiting area and FaceTime® was logged off. All tablet operations were performed using gloves.

The student presented the content of the medical interview to the supervising physician and discussed the patient's future examination and treatment plans. The patient was then called into the supervisor's examination room, where the content of the remote interview was reconfirmed in the presence of the student physician and a face-to-face interaction was conducted.

After the physical examination, the clinical study was explained to the patient, and if they were willing, the patients were instructed to complete an anonymous

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Fig. 1 Two examination rooms were used in this study: room 8 was occupied by students and room 9 by patients.

Fig. 2 A view inside the examination room. Both booths had the same layout.

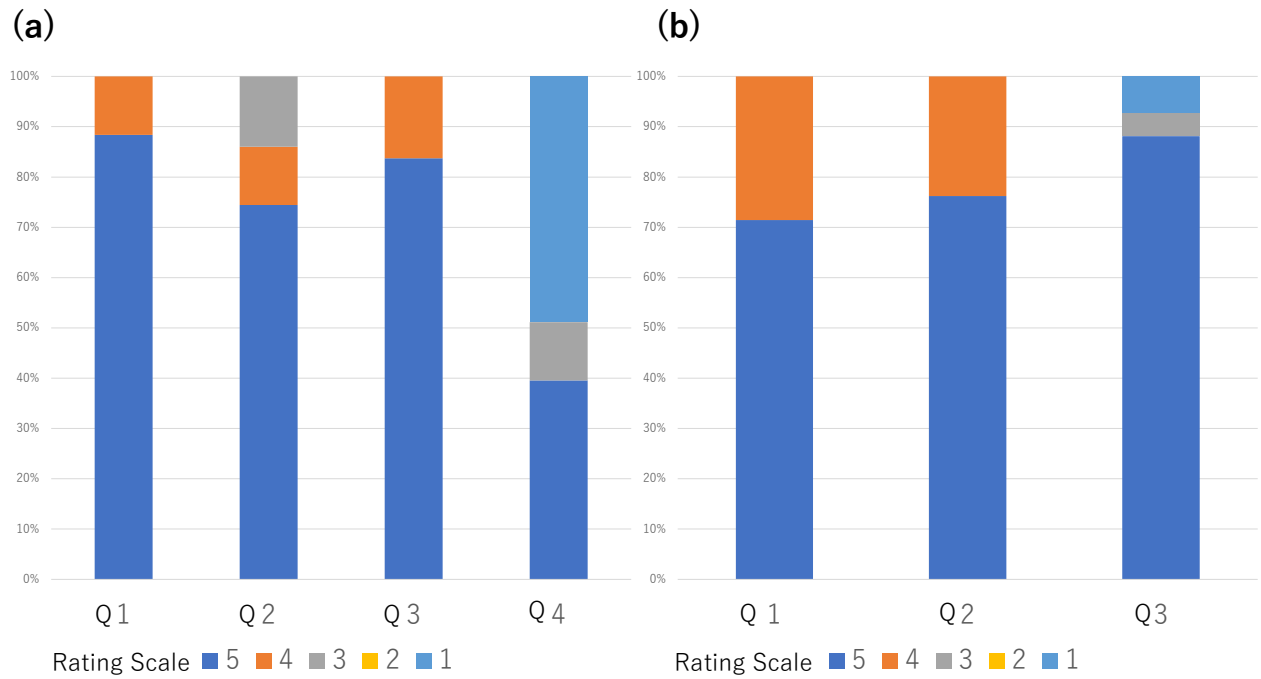

Fig. 3 Results of questionnaire tabulation. The vertical axis shows the percentage of the evaluation when the total is 100% (5 very good; 4 good; 3 average; 2 rather bad; 1 bad). The horizontal axis shows the number of each question item.

(a) Results of the questionnaire from patients. The horizontal axis indicates:
1. Was the student doctor's language and dress appropriate?
2. Was the doctor sincere and kind?
3. Did the doctor take the patient's point of view into consideration?
4. What was your impression of the remote medical interview (remote better or face-to-face better)?

(b) Results of the questionnaire to students. The horizontal axis is:
1. Do you think a remote medical interview can establish the same doctor-patient relationship as a face-to-face one?
2. Was the remote interview smooth?
3. What was your impression of the remote medical interview (is remote better or face-to-face better)?

5-point questionnaire and place it in the collection box at the outpatient reception. The questionnaire included the following items:

1. Was the student doctor's language and dress appropriate?
2. Did you feel the student doctor was sincere and kind?
3. Did you feel the student doctor took the patient's point of view into consideration (were the explanations easy to understand) ?
4. What do you feel about remote medical interviews (which is better, remote or face-to-face)? Rate on a 5-point scale by ticking the boxes (5 for remote is better; 4 for online is better; 3 for

undecided; 2 for face-to-face is better; 1 for face-to-face is better).

5. In addition, a free column was provided.

The students were asked to fill a Google Form® at the end of the two-week clinical clerkship. The questionnaire items were as follows:

1. Do you think a remote medical interview can establish the same doctor-patient relationship as a face-to-face one?
2. Was the remote medical interview smooth?
3. What do you feel about remote medical interviews (which is better, remote or face-to-face)? Rate on a 5-point scale by ticking the boxes (5 for remote is better; 4 for online is better; 3 for undecided; 2 for face-to-face is better; 1 for face-to-face is better).
4. In addition, a free column was provided.

The results of the questionnaires were compared using a simple tally.

RESULTS

Consent for the questionnaire survey was obtained from 43 patients and 42 students who visited the Department of Breast Oncology at Tokai University from April 2020 to February 2021.

Results of the patient questionnaire (Fig. 3a)

1. 38 patients rated 5 (very good); five patients rated 4 (good).
2. 32 patients rated 5 (very good); five rated 4 (good); six rated 3 (normal).
3. 36 patients rated 5; seven rated 4.
4. 17 chose 5 (remote is better); five chose 3 (undecided), 21 chose 1 (face-to-face is better).
5. The following comments were made in the free column.
   - Appreciation of students (10 respondents)
   - It was difficult to hear the voice (8 respondents)
   - I realized how much Coronavirus had come to affect us.
   - I am used to online, so it was fine, but some older people may be confused.
   - I was surprised at first, but soon got used to it.

Results of the students' questionnaire (Fig. 3b)

1. 30 students rated 5 (sufficiently established) and 12 rated 4 (established).
2. 32 students rated 5 (smooth) and 10 rated 4 (rather smooth).
3. 37 students chose 5 (remote is better); 2 chose undecided; 3 chose face-to-face is better.
4. The following comments were made in the free column:
   - The voice was difficult to hear (4 respondents).
   - It was my first experience with online medical care, but I was able to adjust quickly.
   - It was my first experience with an online clinic, but I was able to adjust quickly.
   - Infection control was sufficiently taken care of, so I was able to engage in practical training with peace of mind.

DISCUSSION

This study investigated whether a trusting relationship between student doctors and patients could be obtained through remote medical interviews.

Questions regarding the trust relationship with the patient, with higher scores for questions 1 through 3 indicating a higher level of trust between the patient and the student — Q1. Was the doctor's language and clothing appropriate? Q2. Did you feel the doctor was sincere and kind? Q3. Was the explanation easy to understand? — had a high rating of 4 or 5 on a 5-point scale. Similarly, for the question "Do you think a remote medical interview can establish the same doctor-patient relationship as a face-to-face one?", all the students gave a high rating of 4 or 5. Therefore, we concluded that remote medical interviews were able to establish a trusting relationship between student doctors and patients.

The most common comment in the free column related to voice problems. Initially, we used a microphone and speaker built into the tablet, but when these voice-related complaints became common, we introduced an external device with an integrated microphone and speaker for the interviews, but even then the complaints persisted. At the same time, if the volume of the speaker is too high, the conversation may be overheard in the waiting booth. The use of earphones would reduce the possibility of audio leakage, but the use of the same device for too many patients is not advisable. Therefore, there is room for further improvement regarding audio problems.

It was very interesting to note that more than 90% of students said the remote interview was better than the face-to-face interview, while the same number of patients answered that the remote interview was better than the face-to-face interview. In this study, the questionnaire was anonymous in order to investigate the true intentions of the patients, so it is unclear what kind of patients chose remote or face-to-face. However, it is possible that age and the frequency of use of online tools may have had an influence, as the comment in the free text section stated, "I am used to online, so it was fine, but some older people may be confused."

Through this study, we found that the remote medical interview seemed to be sufficient for student-physician-patient trust, suggesting that under the COVID-19 pandemic, the remote medical interview may be a safe tool in clinical clerkship. Moreover, if medical interviews that can build a relationship of trust with patients are possible in remote interviews, it is expected that remote interviews will be one option for solving various problems toward the publicization of the OSCE in Japan. However, which patients prefer remote or face-to-face interviews could be reassessed in the future using basic attributes.

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DECLARATION

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