Original Paper

English Education as Seen by Japanese Doctors, Researchers and Students

(English education / medical English / questionnaire survey)

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Effective English teaching will benefit Japanese medical students who will later become researchers and doctors. Analyzing the English required for students in an academic setting is important and can help English teachers focus their teaching to better meet the needs of their students. We devised a questionnaire to allow doctors and medical students to state their true feelings about English with a view to analyzing their English usage in their career and study and their expectations for English education. We observed that on many issues, students agreed with doctors and researchers, but there were areas of disagreement such as what should be taught for medical English education. The necessity of English proficiency combined with the relative lack of time for extensive English study, makes it incumbent on English teachers to strategically plan what to teach and then maximize time spent teaching. Our research showed that there are still gaps in the English education, but hopefully we can use the results to sharpen the focus of English education at Faculty of Medicine, Shimane University.

INTRODUCTION

In today's world, it is useful and necessary to know more than one language to succeed and broaden our knowledge. The goal of English study for medical professionals is not just to learn a language to complete a requirement, but to use English to serve patients better [ ]. English proficiency is crucial to medical professionals especially for international communication, and reading journals and textbooks as shown in Kawagoe's study [ ]. When it comes to teaching English to Japanese medical students, it is important that English teachers tailor their teaching to provide maximum benefit to the students. New, innovative programs are impossible without collaboration between doctors and English communication specialists [ ]. So, what do Japanese medical professionals and medical students at our school expect from English education? In our research, we devised a questionnaire to allow doctors and medical students to anonymously state their true feelings about English. The main objective of this survey was to allow English teachers to review the results and then be more able to perfectly match their English instruction to the needs and wants of medical professionals and students.

By using an anonymous questionnaire, we tried to follow the spirit of the Declaration of Helsinki (1964), basic principle number 1.6. No names or identification numbers of any kind were used to respect the privacy of the doctors, researchers and students who participated in the study.

METHODS

A self-designed questionnaire was circulated to doctors, researchers and 2nd year students at Faculty of Medicine, Shimane University, in August, 2007. We used a self-made questionnaire with 17 multiple-choice questions and a question allowing for any suggestions on how to improve our university English education for students. The questions asked are listed in Table 1.

We received 30 questionnaires (collection rate approximately 45) from BM professionals, 66 (collection rate approximately 70) from CM professionals and 80 (collection rate 100) from medical students.

RESULTS

Completed questionnaires from 30 basic medicine (BM) doctors and researchers came from the following

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Table 1. Questions asked in the Questionnaire

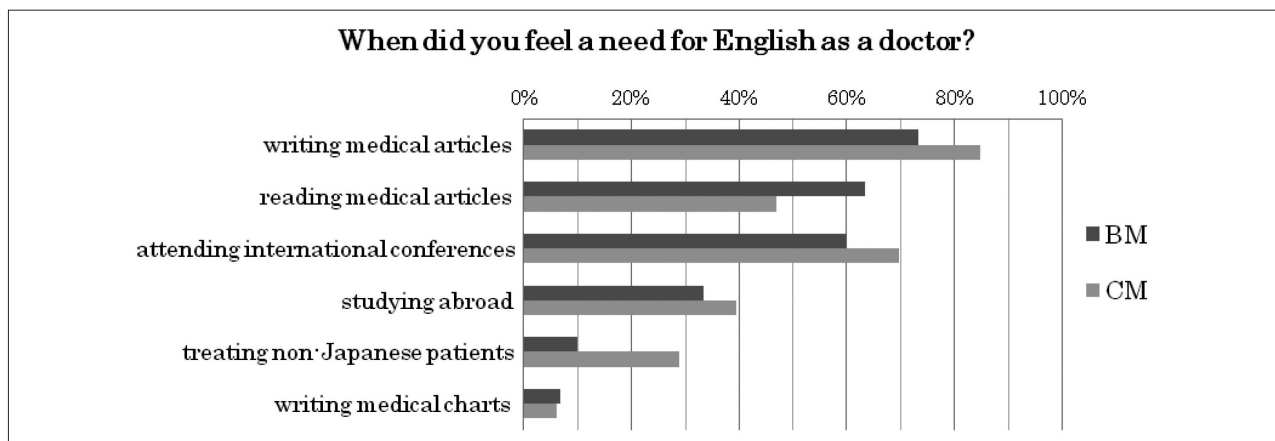| No.	Questions
Q1	Which dept. do you belong to?
Q2	How much have you studied abroad?
Q3	How many first-name medical publications in English do you have?
Q4	How many foreign patients have you treated?
Q5	How many times have you presented at an international conference?
Q6	When did you feel the need for English as a doctor?
Q7	What should we do regarding English class for 1-2 grade medical students?
Q8	What do you expect from a foreign teacher when they teach basic English for 1-2 grade students?
Q9	When should students start studying medical English?
Q10	Who is ideal to teach medical English to medical university students?
Q11	What should be taught in medical English classes?
Q12	What do you expect most from foreign teachers in medical English classes?
Q13	Do you think a specialist is necessary to teach medical English?
Q14	Do you think the present English education in our faculty is systematic?
Q15	Have you taught medical English to medical university students?
Q16	Who is actually teaching medical English to medical university students that visit your department?
Q17	Who decides what medical English to teach?
Q18	What do you teach for medical English?
Q19	Please freely suggest any ideas you have for our university to improve English education for medical students.

Fig. 1. Questionnaire results from Basic Medicine doctors and researchers (BM) and Clinical Medicine doctors and researchers (CM) for the question: When did you feel a need for English as a doctor?

departments: anatomy (4 responses), physiology (5), biochemistry (7), pharmacology (1), pathology (1), microbiology/immunology (2), legal medicine (4), public health (5) and medical information (1).

Completed questionnaires from 66 clinical medicine (CM) doctors and researchers came from the following departments: internal medicine 1 (6 responses), internal medicine 2 (4), internal medicine 3 (3), internal medicine 4 (5), dermatology (6), pediatrics (3), surgery (4), orthopedics (3), neurosurgery (2), urology (1), psychiatry (5), obstetrics and gynecology (2), otorhinolaryngology (2), ophthalmology (5), radiology (4), anesthesiology (2), oral

and maxillofacial surgery (5), laboratory medicine (1), emergency medicine (1), local medicine (1) and blood transfusion (1).

Complete results from this survey are available upon request, however, we will highlight questions which are of importance in our research here.

Question 6 asked, "When did you feel a need for English as a doctor?" (Fig.1) The three top answers were *writing a medical article* (73), *reading medical articles* (63), and *attending international conferences* (60). CM doctors felt a significantly stronger need for English when treating patients than did BM doctors and

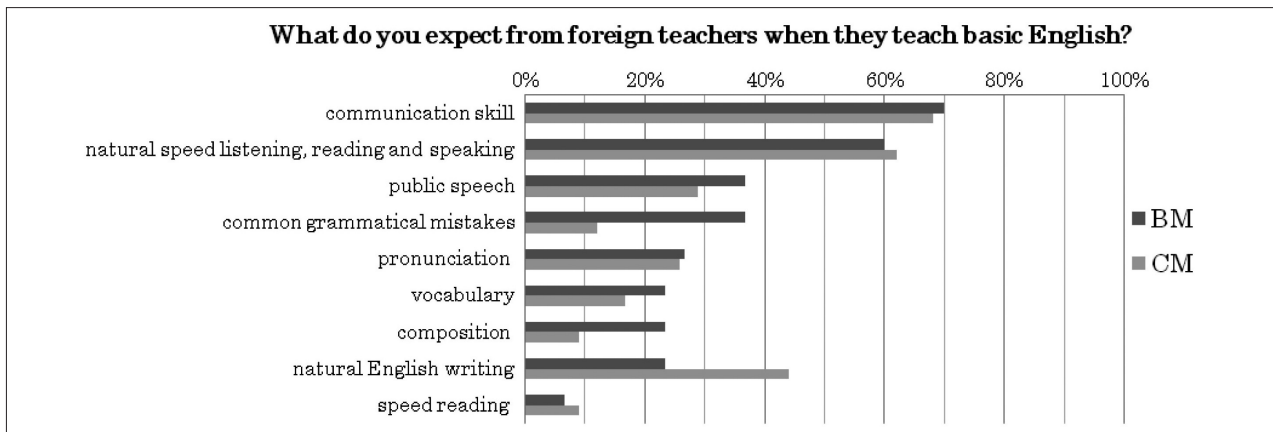**What do you expect from foreign teachers when they teach basic English?**

Fig. 2. Questionnaire results from Basic Medicine doctors and researchers (BM) and Clinical Medicine doctors and researchers (CM) for the question: What do you expect from foreign teachers when they teach basic English?

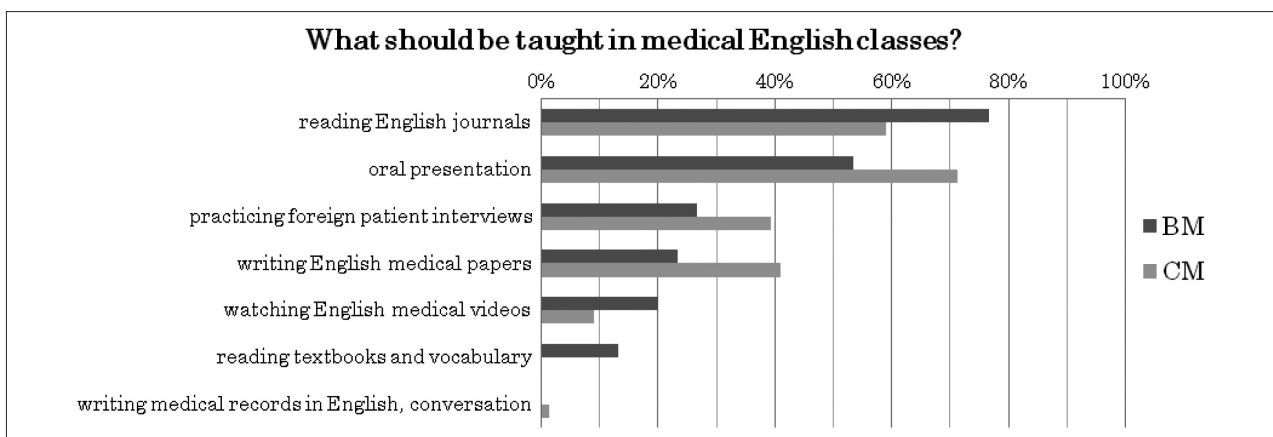**What should be taught in medical English classes?**

Fig. 3. Questionnaire results from Basic Medicine doctors and researchers (BM) and Clinical Medicine doctors and researchers (CM) for the question: What should be taught in medical English classes?

researchers.

Question 8 asked, " What do you expect from a foreign teacher when they teach basic English for 1-2 grade students?" (Fig. 2) The most popular answers were *communication skill with non-Japanese* (70), and *natural speed listening, reading and speaking* (60). BM doctors and researchers felt much more strongly about teaching about common grammatical mistakes while CM doctors felt teaching natural English writing was much more important than BM doctors and researchers did.

Question 11 asked, " What should be taught in medical English classes?" (Fig. 3) Top answers were *reading English journals* and *oral presentation*. BM doctors and researchers emphasized reading English journals and CM doctors emphasized oral presentations. CM doctors also felt more strongly than BM doctors and researchers that more emphasis should be given to practicing foreign patient interviews and writing English medical papers.

We also received 80 questionnaires from 2nd year medical students of Shimane University, School of Medicine. Several questions not applicable to students were deleted from the questionnaire for doctors and researchers.

Question 8 asked, " What do you expect from a foreign teacher when they teach basic English for 1-2 grade students?" (Fig. 4) What they most expected from foreign teachers in 1st and 2nd grade basic English classes was *communication skill with non-Japanese* (70), followed by pronunciation and natural speed listening, speaking and reading (51 each), natural English writing (34), public speech (26), vocabulary and common grammatical mistakes for Japanese people (18 each), speed reading (15), composition (6).

Question 9 asked, " When should students start studying medical English?" Seventy-eight percent of students thought 1st grade was the best time to should start studying medical English, followed by 13 who said 2nd grade, 3 said 3rd grade, 4 said 4th grade, 3 said

What do you expect from foreign teachers in basic English classes?

communication skill
pronunciation and natural speed listening
speaking and reading
natural English writing
public speech
vocabulary and common grammatical mistakes
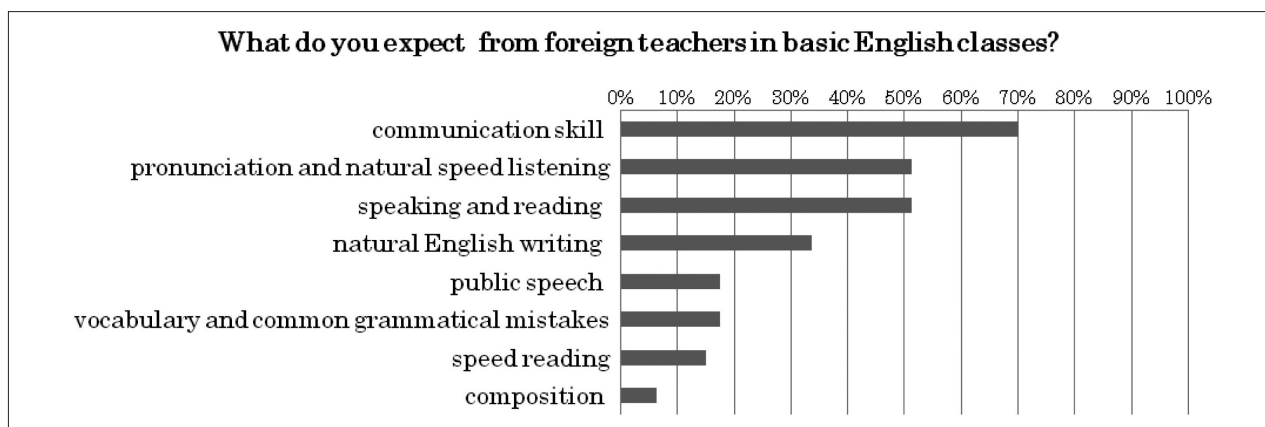speed reading
composition

Fig. 4. Questionnaire results from 2nd year medical students for the question: What do you expect from foreign teachers when they teach basic English?
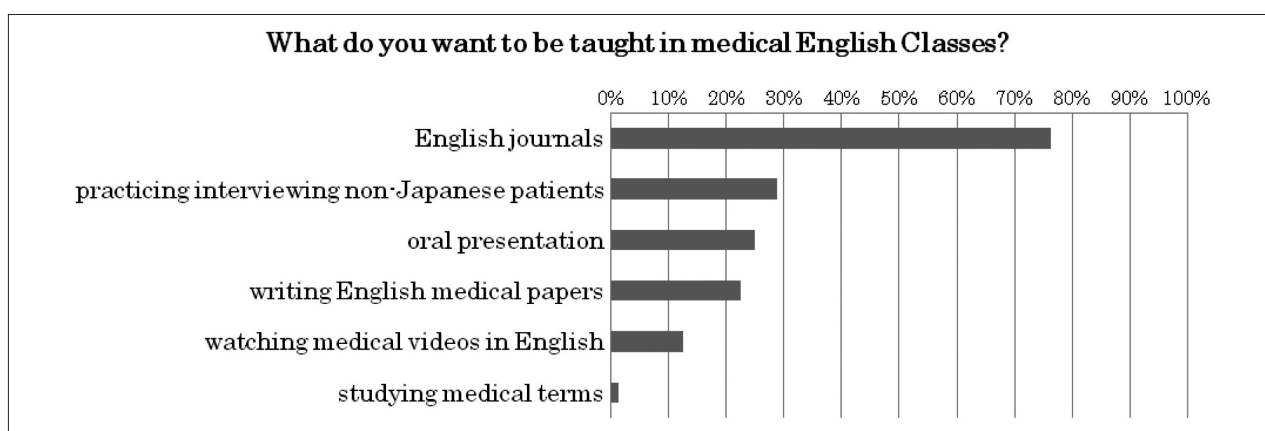
What do you want to be taught in medical English Classes?

English journals
practicing interviewing non-Japanese patients
oral presentation
writing English medical papers
watching medical videos in English
studying medical terms

Fig. 5. Questionnaire results from 2nd year medical students for the question: What do you want to be taught in medical English classes?

What do you expect from foreign teachers in medial English classes?

reading English journals
writing English medical papers
foreign interview practice
oral English presentations
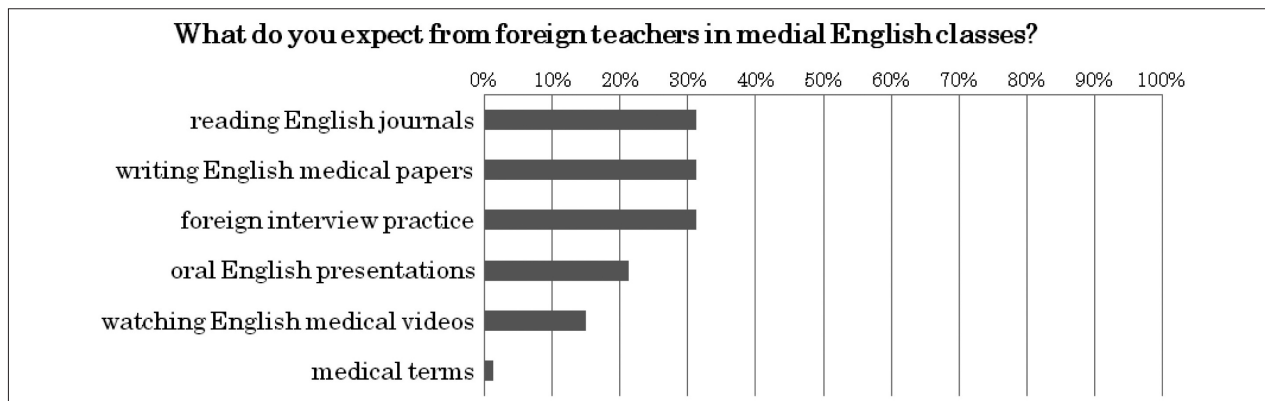watching English medical videos
medical terms

Fig. 6. Questionnaire results from 2nd year medical students for the question: What do you expect from foreign teachers in medical English classes?

5th grade and 1　said 6th grade.

Question 10 asked,“ Who is ideal to teach medical English to medical university students？” Six percent of students said only Japanese English teachers, 8　said only non-Japanese English teachers, 31　said only doctors, 23　said either Japanese English teachers or doctors, 31　said either non-Japanese English teachers or doctors.

Question 11 asked,“ What should be taught in medical English classes?” (Fig. 5) The top answer was *reading English journals* （76　）.

Question 12 asked,“ What do you expect most from foreign teachers in medical English classes?” (Fig. 6). *Reading English journals, writing English medical papers* and *practicing interviewing foreign patients* are what they expect most （31　each）, followed by oral English

presentations（21 ），watching medical videos in English （15 ）and medical terms（1 ）.

Question 13 asked," Do you think a specialist is necessary to teach medical English?" We clearly stated that this would be a teacher" who teaches medical English and coordinates systematic medical English education between departments." They responded: very much（21 ）, some（56 ），not so much（21 ）and not at all（3 ）.

DISCUSSION

For medical professionals interested in personal improvement and professional advancement, English proficiency is crucial [ ]. The doctors and researchers at Shimane University felt they needed English most in their professional lives for reading and writing medical articles and attending international conferences. CM and BM doctors basically agreed about when English is necessary, but CM doctors put more emphasis on the necessity of English when treating non-Japanese patients despite the survey result which showed that 82 CM doctors had never treated a non-Japanese patient. In Shimane Prefecture where our school is located, there are non-Japanese patients who are not proficient in the Japanese language. This often makes it incumbent on the CM doctors to communicate in English.

The BM doctors and researchers expect foreign teachers to help students improve their communication skills in English by using natural speed listening, reading and speaking exercises. They also believe teachers should build confidence in students for public speaking. The difference between BM doctors and CM doctors on their expectation from foreign teachers is that BM doctors expect foreign teachers to focus more on grammar and composition while CM doctors expect them to focus on natural writing.

Even experienced teachers often rely on a textbook when teaching. Yet, quality teaching materials are sometimes scarce [ ]. At Faculty of Medicine, Shimane University, we teach oral English presentation in communication classes and we teach reading English journals in medical English classes, however, the majority of CM professionals surveyed did not view the university's medical English education as systematic. Part of this feeling may be due to the fact that since the year 2000, we have had 3 different English professors as well as periods with no English professor. This lack of continuity certainly cannot be beneficial to making the university's English teaching systematic.

Both CM and BM professionals agreed that reading English journals and oral presentation should be taught in medical English classes. CM doctors gave more weight to practicing foreign patient interviews and writing English medical papers. The reason for this probably lies in the fact that CM doctors have encountered more non-Japanese patients and also are more acutely aware of the need to be published in order to advance professionally in a medical yet academic environment.

The students agreed with the doctors and researchers for most questions. The students thought that building communication skills with non-Japanese was their top reason for studying basic English which concurs with both BM and CM thinking.

The students agree with university officials that 1st year is the best time to begin studying medical English. The students at this university must take anatomy in 2nd grade and other important, technically difficult classes in their 3rd year. The students' schedules become so busy and so quickly, it would seem that earlier is better when considering when to begin studying medical English as a classroom subject. If the university can somehow add more medical English teachers in the future, there may be opportunity to add elective medical English reading and conversation classes for the students.

The students and CM respondents basically agreed that doctors and/or non-Japanese English teachers were best suited to teach medical English.

The students thought that reading English journals was easily the most important thing to be taught in medical English classes. BM professionals slightly disagreed with them in that they rated reading English journals only a little more important than oral presentation in English. CM professionals went even further and put oral presentation in English as the most important point to be taught in medical English classes. The major difference was that CM doctors put about twice the weight for writing medical papers as BM doctors did. This difference of opinion is probably related to the doctors and researchers' personal experiences of using English internationally. We assume that the question and answer time after an international presentation may cause some fear for doctors and researchers.

This data is useful to help anyone who teaches medical English at a university in Japan to know the background of Japanese doctors, researchers and students. The data also allows English teachers to know what doctors, researchers and students desire in the area of English education. By properly considering everything about how doctors, researchers and students feel the need for medical English, an English teacher can make better decisions when choosing English textbooks and curriculum to be taught. English is vital for Japanese medical professionals today, and time cannot be wasted, so the information in this paper can help English teachers tailor their curriculum to achieve maximum effect with minimum waste of time or resources, then this can be a step to offering improved English education.

ACKNOWLEDGMENT

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