English Education for Medical and Dental Students Language Skills Necessary for Rapport

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Abstract

Advances in information technology and biotechnology - technologies that will support the healthcare sector in the fourth industrial revolution - have made it possible to aggregate and utilize data related to people and medical care. In recent years, the use of AI and robots will further advance the sophistication and remoteness of medical care, and physicians will be required to play a role in connecting medical care and patients. Therefore, we will report and discuss the practice of English education that fosters the formation of rapport with patients at Dokkyo Medical University and Kanagawa Dental University, and discuss the curriculum for the basic year (1st and 2nd year).

Keywords

globalization, rapport, curriculum, medical English, humanity

1 Introduction

The development of communication skills is an essential element for medical students, and the formation of rapport with patients is now considered to be a part of treatment. Dokkyo Medical University, based in Mibumachi, Tochigi Prefecture, is surrounded by Utsunomiya City, Oyama City, and Tochigi City, where 25,000 foreign workers (about half of the foreign population of Tochigi Prefecture) live. On the other hand, Kanagawa Dental University is located in Yokosuka City, which is an international city with about 6,000 foreign residents in Yokosuka alone. Even in this cosmopolitan city, the university and the general hospital are located next to a US military base. Since both universities are located in a cosmopolitan area, rapport in English with patients is essential for hospital training. In this article, we will discuss the practice of English education for students who aim to practice medicine in such a region, focusing on the curriculum of the first and second year.

2 Objectives (The following are the skills required for the objectives)

Philosophy of Kanagawa Dental University Hospital (http://www.kdu.ac.jp/hospital/hospital guide/patient right/)

- (1) We provide safe, gentle, and high-quality medical care to patients.
 - →Cultivate communication skills → Thorough medical ethics
- (2) We contribute to the improvement of health and hygiene in the local community by placing importance on cooperation between doctors and patients.
 - →Fostering English skills
- (3) We promote research and development of advanced medical care.
 - →To develop competent medical personnel with rich humanity.
 - →Cultivate communication skills.
- (4) We nurture competent medical professionals with a rich sense of humanity.
 - →To develop competent medical personnel with rich humanity.
 - →Cultivate communication skills.

Philosophy of Dokkyo Medical University Hospital (https://www.dokkyomed.ac.jp/hosp-m/hospital/overview/philosophy.html)

- (1) Respect the dignity and rights of life, and do our utmost to serve the sick with high ethical standards.
 - →Thorough medical ethics
- (2) In order to provide medical care that seeks the highest potential in the ever-advancing medical field, we strive to improve ourselves tirelessly and provide a high level of knowledge and skills for the benefit of all.
 - →Cultivate English language skills.
- (3) To contribute to society by eradicating disease and seeking the truth for the sake of people's peace and well-being, and to work diligently as a research institution on the path to advanced medical treatment.
 - →Development of English language skills
- (4) To provide highly advanced medical care as a hospital with special functions, and to take pride in being a medical center at the core of the local community, and to build good relationships with other medical institutions in the community.
 - →Cultivate communication skills.
- (5) As an educational institution, the university hospital fosters its students and faculty members to become high-quality medical professionals who can carry out team medicine to confront illnesses with a common understanding and grow to become members of high-quality, safe medical practices.
 - →Cultivation of communication skills and English skills

Takahashi et al. (2020) states, "It is clear that students who will become medical professionals are required to have English skills that enable them to communicate with non-Japanese speakers in multidisciplinary medical care." As mentioned above, communication skills and English skills are related to each of the objectives required by hospitals, so it is necessary to lay the foundation for these in the basic grades.

2.1 Methodology - Syllabus

2.1.1 Kanagawa Dental University

Instead of the conventional two-semester system, we have introduced a five-stage system with one stage lasting seven weeks. The syllabus allows students to study a small number of subjects intensively and complete them steadily. Each subject is planned to be completed in about 7 weeks, and the 7th week includes a subject (module) examination and supplementary education to increase the educational effect by stepping up the support to prevent students from developing weak skills.

First Year Foreign Language I

One to four stages (module examinations in the seventh week)

stage	1 stage	2 stage	3 stage	4 stage
listening		2 week	2 week	2 week
speaking	6 week	2 week	2 week	2 week
writing		2 week	2 week	2 week

Second Year Foreign Language II

One to three stages (module examinations in the seventh week)

stage	1 stage	2 stage	3 stage
listening speaking	2 week	2 week	2 week
writing	2 week	2 week	2 week
medical English	2 week	2 week	2 week

About 100 students are divided into three classes, and three teachers are in charge of each stage twice a year. In the first year, a teacher changes every two weeks, and in the second year, a teacher changes every week for two rotations.

2.1.2 Dokkyo Medical University

Dokkyo Medical University has a three-semester system. The three-semester system allows students to study many subjects intensively. English is important for both research and clinical practice for medical students, and many students aim to study abroad. Therefore, in the first and second years, students study medical English and General English comprehensively, with the aim of laying the foundation for medical English in the third and fourth years and overseas training in the fifth and sixth years.

First Year

1st semester Medical English I (9 classes) General English A (14 classes) General English B (9 classes)

2nd semester Medical English I (9 classes) General English A (14 classes)

3rd semester General English A (14 classes)

Electives: Speech Clinic, Intercultural Communication, TOEFL Writing, etc.

Second Year

1st semester English IIL (7 classes) English IIR (6 classes)

2nd semester Medical English II (5 classes) English IIL (4 classes) English IIR (5 classes)

3rd semester Medical English II (5 classes), English IIL (8 classes), English IIR (5 classes)

Third Year

1st semester Medical English III (10 classes)

Electives: Overseas Training Program (Philippines)

Fourth Year

1st semester Medical English IV (6 classes)

Electives: English Special Study (5 classes)

Overseas Training Program (Philippines)

Fifth Year

Electives: Overseas Training Program (Germany, USA)

Sixth Year

Electives: Advanced Overseas Training Program (Germany, USA)



(https://www.dokkyomed.ac.jp/dmucn/schoollife/campus-map.html)

In addition, an English Community Lounge has been set up for all grades throughout the year, where native English speaking teachers are stationed to help students and faculty of the School of Medicine and Nursing learn English.

In Dokkyo Medical University, flipped classroom teaching, active learning, and quizzes have been introduced to all classes since this year, and students are required to watch a 15-minute video as a pre-class assignment and study for the quiz. As a result, the class time is still in a state of trial and error to enable active learning activities to take place.

In Medical English I, the class is divided into two classes of about 120 students, and two teachers take turns teaching the class, one for nine classes in the first semester and the other for nine classes in the second semester, one to practice speaking medical English using consecutive interpretation and to discuss English newspaper articles. The other is teaching listening, reading, and vocabulary using ALC Net Academy Next's medical English course. In Medical English I, the class focuses on output, and the students learn the basics to communicate smoothly in English with other medical professionals, patients and their families as future doctors. In these classes, students practice not only English, but also posture, voice, eye contact, and other communication skills that will lead to rapport building.

In General English A, three native English teachers (two from the UK and one from Canada) are in charge of the class, which is divided into three classes of about 40 students. All classes are designed to develop communication skills in English.

In General English B, three Japanese English teachers are in charge of reading and listening classes. The purpose of this course is to deepen students' understanding of environmental issues, racial diversity, and other topics that are difficult to discuss in English.

In addition, students can take elective courses such as Speech Clinic, Intercultural Communication, and TOEFL Writing, and they can choose courses according to their interests and motivations. In this way, the curriculum for the first and second years is designed to comprehensively cultivate the English communication skills for rapport building.

2.2 Goals of Basic Education

The objectives of this course are to develop communication skills to become humanistic and competent medical professionals, and to improve English skills to contribute to the improvement of health and hygiene in the community.

2.3 Evaluation

Evaluation will be based on a combination of three measures: activities, unit examinations, and module examinations. The activity is the history of activities in the class of the day, the unit examination is the assignment of the class day, and the module examination is the assignment at the end of the stage. It will be necessary in university education to evaluate the three elements of academic ability required by the Common Test for University Entrance - "knowledge and skills," "ability to think, judge, and express," and "attitude toward independent learning. In particular, "multifaceted and comprehensive evaluation" for evaluating independence corresponds to "activities," and this standard must be further clarified.

3. Achievement Goals (at graduation)

1)Kanagawa Dental University Curriculum Policy

In order to comprehensively acquire the knowledge, skills, and attitudes listed in the Diploma Policy, the university systematically organizes all liberal arts, basic, and clinical subjects into four courses: "Dental Occlusal Medicine," "Life Science and Oral Pathology," "Society and Dental Medicine," and "Kanagawa Dental College Specific Subjects," each of which offers an appropriate combination of lectures, exercises, and practical training.

→There is a need to promote language learning as inherent in this curriculum policy.

Knowledge

The curriculum is designed to provide students with a progressive curriculum throughout the school year, from basic medical knowledge to specialized knowledge, and to enable them to acquire independent learning.

Skills

The curriculum is designed to enable students to acquire the comprehensive skills necessary for dentistry by organizing education in communication skills and medical techniques in stages.

Attitude

The curriculum is designed to provide progressive education in ethics and professionalism, and to enable students to practice medicine in a sincere manner with patients.

Diploma Policy (Degree Awarding Policy)

- 1) To have the knowledge, education, and integrity necessary to be a member of society, and to have the ability to respond to an increasingly diverse age.
- (1) To have the ability to conduct independent study in order to gain a wide range of knowledge and education. (Knowledge)
- (2) Communication skills for smooth human relations. (Skills)
- (3) Possess a sense of ethics and integrity as a member of society. (Attitude)
- 2) Possess a spirit of love (with reverence for life) and the ability to find and solve problems as a medical professional.
- (1)Possess the knowledge necessary for a dentist regarding basic medicine and adjacent medicine. (Knowledge)
- (2) Possess the communication skills necessary for good information sharing with patients and medical staff. (Skills)
- (3) Have an attitude of respect for others (patients and staff) and the ability to gather and analyze information to understand social needs for medical care. (Attitude)
- 3) Have a systematic understanding of clinical dentistry necessary for a dentist and the ability to develop a high level of professional knowledge.
- (1)Possess the specialized knowledge necessary for dental health care. (Knowledge)
- (2) Possess the skills necessary for dental health care based on scientific evidence. (Skills)
- (3) Professionalism to respond appropriately to the situation. (Attitude)

In order to open the door to students from a wide range of fields, the Kanagawa Dental College requires only two subjects for the General Admission Examination. For this reason, there are a considerable number of humanities students who have not taken science courses among the new students. In the first year of education,

students learn basic knowledge at the high school level. However, there is a big difference in academic ability between students who have taken science courses before entering the university and those who have not. Therefore, from this year on, it will be necessary to set up an English curriculum with an emphasis on science subjects for students who have taken humanities courses, unlike the conventional education.

2) Dokkyo Medical University

By graduation, the students of our university must have the necessary abilities in each of the following:

Things to understand as basic knowledge

- Normal development and structure of the human mind and body, its functions and abnormalities.
- Knowledge of the pathogenesis, pathology, and diagnosis of as well as the treatments for major diseases.
- Knowledge of the social aspects medical care, as well as disease prevention, rehabilitation, and the patient's QOL (Quality of Life).
- From an international viewpoint, a wide range of information on the study of medicine and medical information.

Basic attitudes that must be possessed

- Ability to enlighten oneself throughout life based on an active leaning attitude.
- Work on the study of medicine, medical care, and healthcare encompassing humanism.
- Develop a habit of building a good physician-patient relationship to solve patients' problems.
- Be aware of the social responsibilities as a doctor while recognizing the limits of one's abilities, and having the attitude to humbly accept an expert's advice.
- Attach importance to cooperation as a member of the medical team, and at the same time be prepared mentally to take a leadership attitude.

Fundamental skills that should be acquired

- Ability to acquire basic treatment skills and to be able to differentiate between normal and abnormal.
- Ability to comprehensively identify the problems and assess the solutions.
- Ability to acquire information through the medical interview and the examination, then grasp an accurate diagnosis and disease condition, and fully explain it to the patient and family.
- Ability to diagnose a critical condition and implement emergency treatment.
- Basic Skills necessary for medical research.

At Dokkyo Medical University, the general entrance examination consists of four subjects: English, mathematics, and two subjects selected from physics, chemistry, and biology. After entering the university, students are required to take elective courses in physics, chemistry, and biology that they have not taken in high school. In the first year English class, students can learn not only medical English, but also general English, including ethics, science, and communication.

3) Summary of Achievement Goals

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) has the following to say about the state of university hospitals. "The progress of internationalization has reached university hospitals as well, and it is necessary to take into consideration how to deal with foreign patients and participate in international medical cooperation in terms of medical treatment, and how to educate foreign students in terms of education." In order to respond to these demands, foreign language education in medical universities must take a further leap forward from the conventional language education, and the curriculum must be structured from the perspective of improving humanity toward the internationalization of medical and dental professionals.

Medical and Dental universities have the characteristic of being a place for medical and dental treatment as well as a place for education of medical and dental personnel, and it is necessary to obtain the cooperation of patients in some aspects. For this reason, it is necessary for medical and dental universities to perform the functions of education and research as they are indispensable for the development of future medical and dental professionals and the progress of medicine and medical and dental treatment in Japan. In addition to fully explaining this to individual patients, it is necessary to conduct a variety of public relations activities, including the use of information technologies, so that the public can gain a broader understanding.

4. Challenges and Prospects

The Kanagawa Dental University has introduced a five-stage system of learning for first through fourth year students, dividing the year into five stages, prior to the practical training at the affiliated hospital for fifth year students who will engage in treatment as student doctors. The five-stage system consists of a unique curriculum that allows students to steadily acquire credits by studying a small number of subjects every two months. In addition, all classes are recorded and students can freely repeat the lessons as many times as they want. We were one of the first universities to respond to the Ministry of Education, Culture, Sports, Science and Technology's "University Reform Action Plan" and are implementing a completely new educational program to train new dentists who will be the engine of a super-aging society. For English, three faculty members take turns teaching classes at the same stage, focusing on the skills that each faculty member specializes in. By receiving instruction in listening and speaking from teachers at Yokosuka Air Base, students are able to acquire the attitudes and postures necessary for communication, and by receiving instruction in writing from a former teacher at a nearby international high school, students are able to compose English essays using the grammar they learned in high school. They will be able to write English essays using the grammar they learned in high school. It is expected that these skills will not be concentrated in any one stage, but will be well-balanced and useful for hospital practice in the upper grades. As for challenges, as Mituhiro Morita (2020) points out, there is a criticism that "the quarter system tends to reduce the content of the classes than the semester system," and this criticism will also apply to the five-stage system. In order to maintain the same amount of content as the semester system, it will be important to improve the syllabus and hand it over to the next year.

Dokkyo Medical University has introduced a one-year hospital training program for fifth-year students as student doctors, which provides opportunities to come into contact with patients from abroad. So our university aims to foster medical professionals with an international perspective, and many patients who communicate in English visit the university hospital. Therefore, the Medical University aims to train doctors who can conduct medical interviews in English, present at conferences, and write papers. In the first and second years, students learn basic general English and the rudiments of medical English, and English classes are provided until the fourth year. In the fifth and sixth years, students can choose to participate in overseas training programs. In this way, the curriculum is designed so that students can learn English at all grade levels. One of the challenges is to cultivate and nurture the students' ability to continue to learn, as class time alone is not sufficient to master general English and medical English. So students are expected to take advantage of opportunities for self study, such as the English Community Lounge, and develop an active learning attitude that will lead to the acquisition of communicative English to build rapport with patients and their families.

5. Conclusion

Both Kanagawa Dental College and Dokkyo Medical University, as hospitals accepting patients from abroad, require students to acquire sufficient English skills and communication skills to form rapports. In a medical school with a vast number of learning items, English education is required to teach English effectively and to encourage students to study autonomously. We would like to continue to improve the curriculum and course content to foster medical professionals with an international perspective.

Note

Complementary education means that all classes are videotaped, and if a student is absent, he or she must make up the class using the video and report it to the instructor. If you miss a class, you have to make up the class by video and report it to the teacher in charge. Also, you can check the part of the class that was unclear in the live class by video. 2.

After the remote class, there are activities such as using the chat function to respond to the questions asked by the teacher in Zoom by writing an English essay immediately.

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