Journal of

0ctober **2014**

Vol.13 No.3 Medical English Education

Editor's perspectives

Stepping up to the plate

Timothy D. Minton 45

Original articles

Present situation of and future outlook for undergraduate English for medical purposes education in Germany

Daisy Rotzoll, et al 47

Factors dissuading Japanese doctors from presenting more frequently at international conferences: more than just the usual suspect(s)?

Greggory Wroblewski, et al 55

医学英語カリキュラムの今後の可能性と課題:

学生のニーズ分析調査から見えること

野田千ゑ里,渡邉 綾 65

Short communication

Overcoming challenges in a basic history taking course for first-year students at Nihon University School of Medicine

Eric H. Jego, Takayuki Oshimi and James C. Thomas 77

EMP at work

Hamamatsu University School of Medicine

Christine Kuramoto and Minako Nakayasu 80

Guideline proposal

医学教育のグローバルスタンダードに対応するための 医学英語教育ガイドライン (案)

日本医学英語教育学会ガイドライン委員会 84

Writing Tips

Basic formatting Timothy D. Minton 90

The last word Reuben Gerling 92

Journal of Medical English Education

Vol. 13, No. 3, October 2014

Journal of Medical English Education, the official publication of The Japan Society for Medical English Education, was founded in 2000 to promote international exchange of knowledge in the field of English education for medical purposes. Until June 2006 (Vol. 5 No. 2), the registered title of the Journal was Medical English - Journal of Medical English Education; the current title, which was registered in December 2006 (Vol. 6 No. 1), should be used for citation purposes.

Copyright © 2014 by The Japan Society for Medical English Education All rights reserved.

The Japan Society for Medical English Education

c/o Medical View Co., Ltd.

2-30 Ichigaya-hommuracho, Shinjuku-ku, Tokyo 162-0845, Japan

TEL 03–5228–2274 (outside Japan: +81–3–5228–2274) FAX 03–5228–2062 (outside Japan: +81–3–5228–2062)

E-MAIL jasmee@medicalview.co.jp

WEBSITE http://www.medicalview.co.jp/

Distributed by Medical View Co., Ltd.

2–30 Ichigaya–hommuracho, Shinjuku–ku, Tokyo 162–0845, Japan

第18回 日本医学英語教育学会 学術集会 開催案内

日本医学英語教育学会は1988年に第1回医学英語教育研究会が開催され、その後、医学英語に関する研究を 推進し、医学英語教育の向上を図る目的で学会として発展して参りました。現在では400名以上に及ぶ会員を 有しております。

医学英語教育は卒前・卒後・生涯教育として重要であり、医療の国際化、医師国家試験の英語問題導入や医 学英語検定試験など、専門職教育の限られた時間でどのように教育を行うかが課題です。学術集会では例年、 医療系の英語教育に係わる教員・研究者・医療関係者が参加し研究・事例を報告します。平成27年度学術集会 は下記により開催します。日本医学教育学会の委員会に起源をもつ本会に是非ご参加いただき、医学英語教育 について情報を交換していただければと思います。

記

学会名:第18回医学英語教育学会学術集会

日 時:平成27年7月18日(土)~19日(日)

会 長:伊達 勲 (岡山大学大学院 脳神経外科)

会 場: 岡山コンベンションセンター (〒700-0024 岡山県岡山市北区駅元町14-1)

演題募集:平成27年2月1日正午~4月20日正午

(医学英語教育の目標・教育方法・評価,学生評価,語学教育と専門教育の統合,実践力教育,グローバル人材育成,医学・看護学・医療系教育における医学英語教育,英語教員による医学英語教育,医学・看護学・医療系教育者による医学英語教育,医学英語教育におけるシミュレーション教育・ICT活用,教員教育能力開発,医学英語論文指導・校閲・編集,医学論文作成における倫理,国際学会でのスライド作成と発表法,USMLE受験指導,医療通訳,医学英語検定試験,その他の医学英語教育に関連する演題)

*英語・日本語のどちらでも発表できます。学会ホームページよりご登録ください。

*詳細は学会ホームページをご参照ください。

*学会ホームページ: http://www.medicalview.co.jp/JASMEE/gakujutu.shtml

問合せ先:日本医学英語教育学会・事務局

〒162-0845 東京都新宿区市谷本村町2-30 メジカルビュー社内(担当:江口)

TEL 03-5228-2274 FAX 03-5228-2062 E-MAIL jasmee@medicalview.co.jp

First Announcement

The 18th Annual Conference of the Japan Society for Medical English Education

The Japan Society for Medical English Education (JASMEE) held its first meeting as a 'study group' in 1988. Since then, the society has continued to grow in promoting the development of medical English education, supported by over 400 members.

Medical English education has become a significant part of basic, postgraduate and continuing education. With the globalization of medicine and recent changes, such as the introduction of the Examination of Proficiency in English for Medical Purposes (EPEMP), JASMEE has become active not only within the society itself but has also extended its involvement and responsibilities in ways which contribute to society.

The 18th JASMEE academic meeting will include plenary lectures, educational lectures, oral presentations, and symposia workshops. We welcome submissions on various topics related to medical English education such as: educational methods, assessment, student evaluation, integration of language education and specialized education, medical English for nursing and other healthcare related fields, medical English editing, teaching of medical writing, EPEMP, etc.

Date: July 18 (Saturday) to July 19 (Sunday), 2015

Venue: Okayama Convention Center

14-1 Ekimotomachi, Kitaku, Okayama

President: Isao Date

(Neurosurgery, Okayama University School of Medicine)

Call for papers: Proposals for papers on the following subjects should be submitted by the 20th of April, 2015.

- · goals, methods, and assessment of medical English education
- · student evaluation
- · integration of language education and specialized education
- · global human resource development
- · medical English for nursing and other healthcare-related fields
- · ICT/simulation education for EMP
- · faculty development
- · teaching of medical writing
- · medical English editing
- · how to make slides and give presentations at international meetings
- · USMLE preparation
- · medical interpretation
- · EPEMP, etc.

All submissions should be made online. Only submissions by members in good standing of JASMEE can be accepted.

Registration: Please access the JASMEE homepage for details. URL: http://www.medicalview.co.jp/JASMEE/gakujutu.shtml

For inquiries, please contact: The JASMEE Secretariat (c/o Medical View, Attn: Mr. Eguchi)

TEL 03-5228-2274 FAX 03-5228-2062

E-MAIL jasmee@medicalview.co.jp

Journal of Medical English Education

The official journal of the Japan Society for Medical English Education

jasmee@medicalview.co.jp

Executive chair, JASMEE publications

Isao Date, Okayama

Editorial committee

Editor-in-chief

Timothy D. Minton, Tokyo

Associate editor

Clive Langham, Tokyo

Japanese editor

Takaomi Taira, Tokyo

Committee members

Mika Endo, Tokyo

Alan Hauk, Tokyo

Saeko Noda, Tokyo

Executive adviser

Reuben M. Gerling, Tokyo

Editorial executive board

Chiharu Ando, Tochigi

Isao Date, Tokyo

Masahito Hitosugi, Shiga

Clive Langham, Tokyo

Shigeru Nishizawa, Fukuoka

Jeremy Williams, Tokyo

J. Patrick Barron, Tokyo Yoshitaka Fukuzawa, Aichi Masanori Ito, Chiba Timothy D. Minton, Tokyo Minoru Oishi, Tokyo

Toshimasa Yoshioka, Tokyo

Raoul Breugelmans, Tokyo Mitsuko Hirano, Shizuoka Takako Kojima, Tokyo Shigeru Mori, Oita Takayuki Oshimi, Tokyo

Review editors

James Hobbs, Iwate

Takayuki Oshimi, Tokyo

Ruri Ashida, Tokyo Jeremy Williams, Tokyo Eric H. Jego, Tokyo

Former editors-in-chief

Reuben M. Gerling, 2008–2014

Nell L. Kennedy, PhD, 2004-2008

Shizuo Oi, MD, 2000-2004

Executive adviser emeritus

Kenichi Uemura, M.D.

Editor's perspectives

Stepping up to the plate

Reuben Gerling retired as Editor-in-Chief of the Journal of Medical English Education (JMEE) on July 20th this year, having taken up the post jointly with Toshimasa Yoshioka in 2008 to replace the Journal's second editor, Nell Kennedy. Professor Yoshioka became Associate Editor after the Editorial Committee was established in 2011; he retired from this post in April 2013, when he was appointed Chancellor of Tokyo Women's Medical University. I then became Associate Editor, not realising at the time that Reuben was actually grooming me to succeed him. The succession is now complete, but the grooming is not. Reuben has the new role of Executive Advisor, which is certainly not intended as a ceremonial post: along with the rest of the Editorial Committee, I will continue to draw heavily on the expertise his long experience at the helm of this important Journal has given him.

I am also fortunate to be able to count on the expertise and continued support of Clive Langham (the new Associate Editor but by no means new to the Committee), Takaomi Taira (who continues as Japanese Editor) and Saeko Noda (who stays on the Editorial Committee); in addition, I welcome Mika Endo of Tokyo Women's Medical University and Alan Hauk of Toho University School of Medicine as new members.

The lineup of Review Editors remains unchanged, with James Hobbs, Eric Jego and Jeremy Williams in charge of submissions in English, and Ruri Ashida and Takayuki Oshimi on call to arrange reviews of submissions in Japanese. Each manuscript submitted to the Journal is sent initially to one of the Review Editors, who then works together with two other qualified people of his/her choosing to produce a set of recommendations for the Editorial Committee. The time and effort devoted to the review process by the Review Editors and other unnamed reviewers are considerable, and their work is invaluable in maintaining and improving our publication standards for the benefit of authors and readers alike.

As Editor-in-Chief, my first concern will be not to allow standards to slip. With the support of the above team, this should not at first sight be too hard a job. However, the most important factors in maintaining and perhaps raising standards are the quality and quantity of contributions we receive, so I would like to encourage members and non-members of JASMEE alike to share their relevant experiences and insights through our Journal. JMEE is an excellent platform for those involved in medical English education to pass on their know-how to others in the field, and I know how much I would have appreciated such help when I ended up, quite coincidentally and with no background at all in medicine, teaching at a medical college nearly thirty

years ago. Those new to the field can also be inspirational to us veterans in providing fresh ideas and approaches, so they should not hesitate to contribute.

For years, our *Guidelines for Authors* indicated that papers should be submitted in the IMRAD format, which is actually far from ideal for those who want to contribute articles on non-experimental research or practice. I think this stipulation probably had the effect of discouraging many budding authors from contributing – it did me. However, we revised the guidelines earlier this year, and the new version specifically states that it is unnecessary to follow this format. I hope this will lead to an increased number of submissions. At the same time, I hope that all contributors, including those who have published with us before, will take the time to review the updated guidelines (http://www.medicalview.co.jp/jmee/scope/index.shtml).

One of the last decisions the Editorial Board made under Reuben's leadership was to devote one issue of the Journal every two years to a specific topic. The first of these special issues will be Vol. 14 No. 3 (scheduled for publication in October 2015), and the topic we selected is extracurricular activities. What we envisage is a collection of articles detailing the efforts medical and nursing schools across Japan - and perhaps the world - are making to further students' English skills outside their regular curricula. We will welcome articles describing, for example, in-house activities organised by students or staff, collaborative efforts between English teachers and clinicians, or overseas study programmes. This issue will, we hope, serve as a useful resource for those looking for ideas to expand the opportunities they can offer their students to improve their English proficiency in medical settings. A call for papers specifically for this issue will be circulated soon via the mailing list.

Let me conclude with the good news that Patrick Barron, Vice Chair of JASMEE, is this year's recipient of the Swanberg Distinguished Service Award, which is presented by the American Medical Writers Association to people who have "made distinguished contributions to medical communication or rendered unusual and distinguished services to the medical profession" (http://www.amwa.org/swanberg). Patrick is not only the first JASMEE member to have received this award but also the first non-American. I am sure all members of JASMEE and readers of JMEE will join me in congratulating him on this well-deserved recognition of his contributions to our field.

T.D. MintonEditor-in-Chief

Journal of Medical English Education

Present situation of and future outlook for undergraduate English for medical purposes education in Germany

Daisy Rotzoll, Romy Wienhold, Anni Weigel and Robert Wolf LernKlinik Leipzig, Faculty of Medicine, University of Leipzig, Leipzig, Germany

Increasing internationalization and globalization in medicine, with the need to deal with English as the lingua franca in medicine, can be observed worldwide. This trend is obvious in Germany as well, making it necessary for all medical schools to offer structured English for Medical Purposes (EMP) courses in their undergraduate medical curricula. So far, there are no compiled data available as to how EMP is offered at German medical schools for undergraduate medical students. The objectives of this report are to shed light on the current situation of EMP at German medical schools and to give a possible framework for the implementation of longitudinal EMP curricula in undergraduate medical education. A survey including all 36 German medical faculties as well as a scoping review were undertaken to obtain information on the current status of EMP education in this country. An extremely diverse picture of EMP education was found, showing university-associated language centers and diverse departments of medical faculties offering EMP. In the majority of cases, there is no cooperation between language centers and medical faculties. To make a longitudinal EMP curriculum for undergraduate medical students in Germany possible, close cooperation between multiple disciplines, including language specialists and medical personnel seems essential. We propose a framework to accomplish the implementation of a longitudinal EMP curriculum taking into account the necessity of multidisciplinary cooperation.

J Med Eng Educ (2014) 13 (3): 47-54

Keywords undergraduate medical English education, longitudinal English for medical purposes curriculum, framework

1. Introduction

English has long been recognized as a fundamental prerequisite for international medical training ¹ and medical schools in countries thoughout the world are establishing programs in medical education that are fully or partly taught in English. Institutions in some countries include English language examinations as part of their selection procedures

Correspondence to:

Daisy Rotzoll, MD, PhD, MME (Bern)

Medical Director LernKlinik Leipzig

LernKlinik Leipzig, Faculty of Medicine, University of Leipzig,

Liebigstrasse 27,

D-04103 Leipzig, Germany

Tel: +49-341-97-15171

Fax: +49-341-97-15179

 $\hbox{$E$-mail: daisy.rotzoll@medizin.uni-leipzig.de}\\$

Part of the contents of this paper was presented at the 15th Annual Conference of the Japan Society for Medical English Education.

for residency programs.² This is due to the fact that large-scale migration of both health-care providers and their potential patients is taking place, and that clinicians and their colleagues regularly face situations where English is being used as the lingua franca in patient-doctor as well as professional consultations. Furthermore, the need to know English in order to read and write scientific papers is widely recognized as a prerequisite for professionalism in medicine.

This trend can also be observed in Germany, where there are 36 medical faculties with a yearly output of over 10,000 medical school graduates.³ Nonetheless, there is no official requirement for EMP integration into German medical education so far. The last revision of the medical licensure act in 2012⁴ has indeed innovated current curriculum requirements in stressing the importance of implementing communication skills programs longitudinally in German medical curricula. In article 1 (§§ 1, 28), the creation of a longitudinal communication curriculum is required, leaving it up to the individual faculties as to what precise elements this communication curriculum should encompass. Whether

EMP should be part of this longitudinal communication curriculum is not specified. As English in medical education can be utilized as an intercultural approach to teaching not only language, but also ethical values in medicine⁵ as part of a communication curriculum, it is necessary to understand if and how EMP is presently established at German medical schools. The aims of this article were therefore threefold: to obtain an overview of the present situation of EMP in German undergraduate medical education; scoping the field to explore the range, extent and nature of EMP activity in Germany; and finally to suggest a framework which can be used as a guideline when planning and implementing longitudinal EMP curricula, not only in Germany, but also in other countries of the European Union.

2. Methods

2.1. Survey

For an analysis of the current situation of EMP in Germany, a questionnaire was developed and sent to all German medical faculties listed on the website of the "Medizinischer Fakultätentag", 3 the umbrella organization of German medical faculties (n=36), in December 2011. Due to the initially low response rate of 8%, the survey was repeated in 2012 via telephone calls and e-mail contact to the medical deans' offices. By these means, data from 31 of the 36 medical faculties were obtained (final response rate 86%). In four faculties, the contacted personnel could give no information on the questions raised; one medical faculty refused to respond.

The following themes were discussed:

- **2.1.1. Course description:** Does your medical faculty offer courses in "English for Medical Purposes"? If yes, please give a short description of the contents and learning objectives.
- **2.1.2. General conditions:** How many students can participate in this course each semester? How many credit hours does the course have? What level of general medical education is required for participation?
- 2.1.3. Organization: How many staff members are responsible for teaching? What qualifications do these teachers have?
- **2.1.4. Financial aspects:** Are there any costs for the students involved?

2.2. Scoping review

On the basis of the information obtained in the survey, an analysis of the course descriptions published in the official institutional websites was conducted and a scoping review performed. A scoping review is a type of literature review intended to explore the range, extent and nature of data obtainable concerning a certain field of interest.⁶ It may be used to determine the value of a systematic review, identify gaps in the literature, as well as summarize and disseminate findings.⁷

3. Results

3.1. EMP in Germany: the survey

The results of the survey compiled 2011-2012 showed a very heterogeneous picture regarding the courses offered on EMP at German medical faculties.

3.1.1. Course descriptions

When contacting the deans' offices in charge of the medical curricula, it quickly became clear that many German medical faculties did not offer EMP and that courses in this field were largely delegated to language centers, frequently associated with the university, not with the medical faculty. Courses in EMP are therefore frequently integrated into a set of courses covering different disciplines such as law, economics or natural sciences. Of the 31 responding institutions, 22 offered one or more courses in EMP (71%) and 9 had no course offers (29%). Forty-five courses per semester were offered in total, and 16 language centers offered more than one course per semester.

Due to the fact that EMP in Germany is not an obligatory discipline integrated into medical curricula, medical faculties or university language centers structure their courses according to the "needs" of medical students. No official needs assessments of stakeholders were available for the survey. The contents of the courses offered were extremely diverse. Many courses offered for medical students in their preclinical education focused on English medical terminology and abbreviations as well as on preparing students for electives abroad (writing a curriculum vitae, letters of motivation or filling out application forms). Courses for clinical students focused more on communication skills. These courses used various tools such as role playing in patientdoctor encounters, writing a patient history and patient presentation, focusing on reading, listening and speaking skills. No longitudinal curricula in EMP offering courses for all medical students over several years of their medical education exist in Germany so far.

3.1.2. General conditions

In the EMP courses (all elective) evaluated in this survey, the course size had a median of 8-12 participants with a maximum of 30 participants. In 5 courses, the lesson length was 45 minutes. In one of these courses, the lessons were given at the rate of once a week over 14 weeks; in the remaining 4 courses they were given as a block seminar of 14 lessons over 2-4 days. In 18 courses, 90-minute lessons were offered over one semester (14 weeks) and in 20 courses over two semesters (28 weeks). Two courses were more intensive and offered classes of 3 hours per week over 14 weeks.

In 20 courses, medical students of every level of education could participate, while 11 courses were only open to preclinical medical students in their first two years of education; 14 courses were restricted to medical students in their clinical years (3rd to 6th year of medical school).

3.1.3. Organization

In the survey, no course in which more than one teacher was involved in teaching the course could be identified. The qualifications of the teachers were as diverse as the contents of the courses offered. Most teachers recruited had a background in language education. Nine teachers were identified as having a medical background (defined as an education in a health profession), accounting for 26% of the teaching personnel identified in the survey.

3.1.4. Financial aspects

Most EMP courses in Germany are free of charge. Of the language centers offering EMP courses, only 3 offered courses where tuition fees were required, ranging from 30 to 60 Euros per semester.

3.2. EMP in Germany: scoping review results

The following scoping review gives details of the offered courses, including characteristics, similarities, differences and assessment.

Table 1 gives the websites of the courses offered for undergraduate medical students via medical faculties or university-associated language centers in Germany, as of December 2013.

3.2.1. Purposes and aims

The purposes of the EMP courses offered were multifold. Most institutions focused on listening, speaking, reading, and writing skills by teaching mainly English medical terminology in the classroom; very few, however, offered tuition in EMP using complex simulated patient scenarios, for example. Role-play and simulated patient scenarios were rarely used to teach medical skills such as history-taking or physical examination. Preparatory courses for electives in

English-speaking countries as well as the training of presentation skills for medical conferences or ward rounds were offered for improvement of the participants' scientific language skills, as well as their oral and writing skills. Reading and commenting on medical cases and scientific papers, listening to audio scripts and writing short medical reports as well as filling out patient information forms were mentioned. Some courses focused on cultural awareness and competence in health care. Others specifically addressed medical students who are planning to take the United States Medical Licensing Examination USMLE, and offered preparatory courses. One program (Ludwig-Maximilians University -LMU- Munich) actually offers a wide variety of EMP courses and mentioned the following aims explicitly (see **Table 1**):

- "-Prepare LMU students for working in an Englishspeaking clinical environment.
- Provide insights into global medicine and the teaching of medicine abroad.
- Make medical education at LMU more attractive and accessible for international visiting students and scholars.
- Provide information for LMU students interested in taking the United States Medical Licensing Exam (USMLE)."

Another special program worth mentioning is offered by the Charité, the University Hospital in Berlin, where a fruitful collaboration between language teachers and medical faculty from two countries has evolved. This five-day course is offered to preclinical medical students twice a year and includes topics such as cultural diversity, end-of-life issues, mistakes in medicine, vulnerable populations, and interactions with the pharmaceutical industry. The course gives students the opportunity to apply English as the international language of medicine in speaking and writing, and makes use of a multitude of educational tools such as plenaries, seminars and small-group work.

3.2.2. Course requirements and duration

There was significant variation in the organization of the courses offered, ranging from weekend-long courses, blocks or modules to one or more semester-long courses. One option used frequently by medical students registering for an EMP elective was the so-called "Wahlpflichtfächer". These are mandatory elective courses which require 26 to 28 hours for a credit. Every medical faculty offers a number of such courses, and the students are required to select one during pre-clinical and one during clinical training. Many

Table 1. Scoping review: list of EMP courses for undergraduate medical students in Germany

	Institution	EMP offers	Websites
1)	Aachen (RWTH Aachen University)	Language training (2x45 min.)	http://aixtra.klinikum.rwth-aachen.de/sprachtraining2.php
2)	Berlin (Charite - University of Berlin)	Intensive course (2x2 days)	http://www.charite.de/studium_lehre/international/sprachtraining/wochenendkurse
3)	Bochum (Ruhr University Bochum)	3 Intensive courses on 3 themes (one week each)	http://www.ruhr-uni-bochum.de/imperia/md/content/zfa/sprachen/englisch
4)	Bonn (Rheinische Friedrich-Wilhelms University Bonn)	None	
5)	Dresden (Technical University Dresden)	Longitudinal curriculum (3 x 1.5 h per semester)	http://www.sprachausbildung.tu-dresden.de/templates/tyKursuebersicht.php?topic=spa_kursangebot&sprache=18&fid=29
6)	Duisburg-Essen (University Duisburg-	One-semester course (14 x 1.5	http://campus.uni-due.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=213
	Essen)	h)	818&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung
7)	Düsseldorf (Heinrich-Heine University Düsseldorf)	Multiple one- semester courses $(14 \times 1.5 \text{ h})$	http://www.usz.hhu.de/abt-ii-moderne-fremdsprachen/englischkurse.html#c13435
8) 1	Erlangen-Nürnberg (Friedrich-Alexander	·	http://www.sz.uni-erlangen.de/abteilungen/enghaf/kursangebot/medizin
	University Erlangen-Nürnberg)	(3 x 4.5h)	
9)	Frankfurt am Main (Goethe University Frankfurt am Main)	None	
10)	Freiburg (Albert-Ludwigs University	One-semester course (14 x 2h)	https://www.verwaltung.uni-freiburg.de/lsfserver/rds?state
	Freiburg)		=verpublish&status=init&vmfile=no&publishid=120630&module
			Call=weblnfo&publishConfFile=weblnfo&publishSubDir=veranstaltung
11)	Giessen (Justus-Liebig University Giessen)	Course offer not specified	http://www.uni-giessen.de/cms/fbz/fb11/institute/anatomie/lehre/medengl
12)	Göttingen (Georg-August University Göttingen)	Two electives with 26 h each	http://www.med.uni-goettingen.de/de/content/studium/3745.html
		One-semester course (14 x 3h)	http://www.uni-goettingen.de/de/423445.html
13)	Greifswald (Ernst-Moritz-Arndt University Greifswald)	One-semester course (14 x 1.5 h)	http://kursbuchung.fmz.uni-greifswald.de/spz/sprachen/015/sprache0_html
14)	Halle-Wittenberg (Martin-Luther University Halle-Wittenberg)	One-semester course (14 x 2 h)	http://sprachabteilungen.sprachenzentrum.uni-halle.de/kursangebot_2005_06/englisch/#anchor1951368
15)	Hamburg (Hamburg University)	One-semester (14 x 1.5h)	http://www.uke.de/studierende/downloads/zg-studierende/Info_zur_Anmeldung_zu_ Sprachkursen_in_Stine_MEDIZIN.pdf
16)	Hannover (Medizinische Hochschule Hannover)	None	

German faculties have accepted university-language-center EMP courses as such optional credit courses.

3.2.3. Instructional strategies and format

The descriptions of the EMP courses analyzed clearly suggest that small-group teaching is mainly used in these courses. Lectures, seminars, discussions, self-directed learning as well as preparation of oral or written presentations are the most commonly used instructional methods. Additionally, there were some programs that used simulation (RWTH Aachen University, Leipzig University), peer student-led small-group teaching sessions (Leipzig University), or virtual learning (Friedrich-Alexander University Erlangen-Nürnberg) as an instructional strategy.

3.2.4. Assessment

The optional credit courses at German medical faculties

described in section 3.2.2 require an accepted assessment method at the end of the course. In language-center-based courses, this is often done by using "The Common European Framework of Reference for Languages" to obtain an equivalent of the A1, A2, B1, B2, C1 and C2 levels of language competency on which examinations such as the UNIcert ® are based. For optional credit courses, a wide variety of assessment formats such as essay writing, oral interviews, or unstructured written tests is used.

3.2.5. Staff

From the information retrieved in the scoping review, it was difficult to obtain information on the areas of expertise of the teaching staff. It was observed that a large number of part-time teachers are involved, with mainly linguists or native English-speakers coming from diverse educational backgrounds teaching at university language centers. At the

17)	Heidelberg (Ruperto-Carola University	One-semester course (14 x 3h)	https://lsf.uni-heidelberg.de/qisserver/rds?state = verpublish&status = init&vmfile = no&publish&status = init&status = init&vmfile = no&publish&status = init&status = in
	Heidelberg)		hid = 172314 & module Call = webInfo& publish ConfFile = webInfo& publish SubDir = veranstaltu
			ng
18)	Homburg (Saarland University)	One-semester course (10 x 3h)	$http://www.uniklinikum-saarland.de/de/lehre/dekanat/studiendekanat/sprachkurse_alt/$
			englisch_fuer_mediziner/
19)	Jena (Friedrich-Schiller University	One-semester course (14 x 2h)	https://friedolin.uni-jena.de/qisserver/rds?state=wtree&search=1&trex=step&root120132
	Jena)		=440094 438394 439386&P.vx=kurz
20)	Kiel (Christian-Albrechts University	One-semester course (14 $\rm x$	http://www.medizin.uni-kiel.de/images/stories/documents/CR_Online_Neu.pdf
	Kiel)	1.5h)	
21)	Köln (Köln University)	None	
22)	Leipzig (Leipzig University)	One-semester course (14 $\rm x$	https://student.uniklinikum-leipzig.de/lernklinik/kurse_einschreiben.php?id_kurs=61
		1.5h)	
		4 one- to two-semester courses	http://www.uni-leipzig.de/sprachenzentrum/hi.site,postext,unicert-sprachkurse.html? PHPS
			ESSID=4i107m8ofqse2ejft7205dpbq0qgae5q
23)	Lübeck	None	
24)	Magdeburg (Otto-von-Guericke Uni-	One-semester course (14 x 2h)	http://moodle2.ovgu.de/med-2/course/category.php?id=10
	versity Magdeburg)		
25)	Mainz		
26)	Mannheim		
27)	Marburg		
28)	Munich (Ludwig-Maximilians Universi-	Longitudinal curriculum "Me-	http://www.med.uni-muenchen.de/studium_international/mecum-international/index.html
	ty Munich)	Cum Intenational"	
29)	Munich (Technical University Munich)		
30)	Münster		
31)	Regensburg		
32)	Rostock (Rostock University)	Longitudinal curriculum with 3	http://www.sprachenzentrum.uni-rostock.de/index.php?id=21272
		modules	
33)	Tübingen		
34)	Ulm		
35)	Witten-Herdecke (Witten-Herdecke	None	
	Private University)		
	Würzburg	None	

medical faculties offering EMP courses, mainly doctors working full-time as clinicians or basic scientists were involved as faculty for teaching short EMP sessions. These faculty members have often worked in English-speaking countries themselves for a considerable amount of time and are therefore regarded as sufficiently experienced to teach EMP. Except for the above-mentioned examples in Munich and Berlin, no collaboration was found to exist between teachers of university language centers and medical faculties in the same university town.

4. Discussion

Although it is clear that undergraduate medical curricula will probably be taught mainly in the native language of the country where the future doctor or medical researcher will begin his career, fluency in English as a second language for aspiring health professionals is becoming an essential requirement for two reasons: firstly, the number of foreign patients is increasing, and not only in the urban areas of industrialized countries; secondly, medical research publications are predominantly written in English. This leads to the fact that not only doctors looking for careers in science or academia need a command of EMP, but also doctors involved in routine clinical work need EMP to communicate with foreign patients and to maintain continuous medical education in a world that is constantly becoming more globalized.

The survey and scoping review presented here shed some light on the situation of EMP in Germany and may serve as a benchmark for proposing relevant aspects for implementing or innovating EMP curricula in countries where English is not the native language.

The results of this study lead to the following three discus-

sion points regarding EMP implementation in medical curricula:

- 1) Who are EMP stakeholders?
- 2) What are the attributes of an appropriate EMP teacher?
- 3) Is there a useful framework for EMP implementation in medical curricula?

4.1. Who are EMP stakeholders?

In the course of establishing the Hungarian Proficiency Examination in EMP, PROFEX, Rebek-Nagy et al.¹¹ carried out an extensive needs assessment among professors, students, practicing physicians and allied health workers, and determined a range of needs for EMP, namely history-taking; giving explanations to patients, staff members, and peers; giving and understanding conference presentations; conducting professional conversations with peers and other staff members; writing official letters, reading research articles and hospital documents; and translating EMP texts from and into English and summarizing longer biomedical texts in English.

It may be worth considering that in addition to the stakeholders mentioned in the study above¹¹ (foreign) patients are stakeholders in this context as well and should be heard. For them, the medical skills of history-taking or physical examination cannot be separated from the skill of EMP, but can only be assessed in combination with communication skills, namely the patient-doctor interaction as such.

4.2. What are the attributes of an appropriate EMP teacher?

The survey and scoping review results presented in this paper show that, in Germany, mostly university-associated language centers provide EMP training to German undergraduate medical students, and that most teachers involved do not have a medical background. The question arises whether the language teacher with no educational medical background or the experienced medical professional with no language-training background is best qualified to teach the subject. Benfield and Feak¹² argue that the input from both a language professional and an experienced peer is important and that the language professional should ideally be an academically trained and experienced applied linguist, and the peer a specialist in the subject matter. Two examples from the scoping review results show that this can be achieved: at the Charite University Hospital in Berlin⁸ experts from a variety of fields (medicine, psychology, linguistics) have integrated the course concept of Chicago's Northwestern University Feinberg School of Medicine "Patient, Physician and Society" into the elective curriculum

This course concept is well in line with Skelton's discussion of language and clinical communication.¹³ Skelton is sceptical about a "checklist" approach to teaching communication skills, stressing that a whole-person approach to education is just as necessary as a whole-person approach to medicine. This has been put into practice at the Charite Berlin. In Munich, "MeCum International" has evolved¹⁴ a longitudinal program involving language teachers and medical faculty in offering EMP sessions for medical students of all educational levels. This approach seeks to go beyond teaching communicative fluency and structural language accuracy and focuses on classroom and hospital-based tasks that learners are required to perform as students as well as in their later career.15 It must be kept in mind, though, that only a minuscule portion of all medical students at the two institutions mentioned can participate in these courses; a longitudinal approach in the curriculum to integrate EMP into compulsory sessions and assessments for all medical students is still far from being established at German medical schools.

Best-practice examples for effective cooperation between language and medical professionals in teaching EMP can be found in Japan, where medical schools have founded Departments of International Communication to promote EMP at their faculties such as at Tokyo Medical University, for example. Such organizational efforts show how EMP is valued in certain countries and how effective cooperation between applied linguists and medical staff can be achieved.

4.3. Is there a useful framework for EMP implementation in medical curricula?

Conceptual frameworks in medical education are widely accepted to "illuminate and magnify" 17 and represent ways of thinking about a problem or a study. Frameworks encompass a group of categories to reflect the educational goals by which a trainee's level of competence or progress can be measured. The need for supranational longitudinal EMP curricula is evident: the Hungarian Proficiency Exam¹¹ based on the Common European Framework for Languages9 is an example of trying to establish a European exam for EMP on the language level. Furthermore, the necessity of standardized EMP curricula as well as national and international EMP goals has been formulated in Japan. 18 Keeping in mind the needs assessments for EMP as well as the necessity to integrate EMP into medical curricula as a whole, the concept of Azer et al., "Enhancing learning approaches: Practical tips for students and teachers," 19 may serve as an

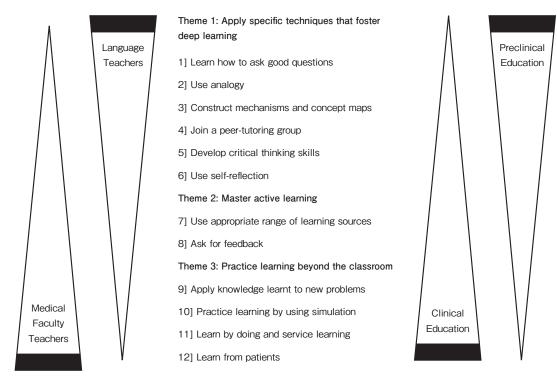


Figure 1. Framework by Azer et al. on enhancing learning approaches set in the context of EMP education in medical curricula and EMP teaching personnel.

excellent framework for an integrated EMP curriculum. Within this framework, 12 tips are organized under three themes to provide students with concrete tools to achieve deep learning. Active learning and application of learning beyond the classroom as well as service learning settings are described to ultimately serve the community and real-life patients. **Figure 1** summarizes the themes and tips given and relates them to the teaching personnel involved in EMP teaching in Germany or elsewhere in the world, as well as to where in the preclinical and clinical curriculum the themes and tips can optimally be placed.

While the application of specific techniques that foster deep learning is an integral part of problem- and task-based learning approaches in modern medical education,20 the tools mentioned under theme 1 can ideally be integrated into EMP classroom settings with language teachers as the main personnel involved. Learning how to ask good questions (tip 1), using an analogy to engage in thoughtful discussions (tip 2) and synthesising mechanisms into a master diagram (tip 3) are tools that do not require teachers with an in-depth medical training and can be accomplished in PBL or TBL sessions ideally by language educationalists and should be integrated into the first years of a medical curriculum. Joining a peer-tutoring group (tip 4) is an educatinal tool widely used in German skills labs,21 where medical students are employed and trained to lead small-group training sessions as student tutors. Tips 1 to 4 are all basic requirements a medical student should encounter to proceed effectively in further medical training. Developing critical thinking skills and using self-reflection (tips 5 and 6) as well as the mastery of active learning using EMP as a tool requires an interdisciplinary networking approach among medical educationalists, medical staff and language experts. Tip 10, practising learning by using simulation, should be considered in the light of increased interest worldwide in the use of simulation in undergraduate medical education as an excellent tool for interdisciplinary learning early on.²² Here, the foundation should be laid for learning beyond the classroom, where medical experts, language experts and foreign patients themselves take over the teaching of EMP. Using this framework, we suggest that a guideline unique to each medical school can effectively be formed for ultimate EMP integration into a longitudinal EMP curriculum.

Acknowledgements

The corresponding author wishes to thank Professor Emiritus J. Patrick Barron of Tokyo Medical University for his constant support and advice in making this manuscript possible. Great thanks are also extended to Professor Kevin Eva, University of British Columbia, Vancouver, and the Editor-in-Chief of Medical Education for their valuable suggestions in completing this work.

References

 Maher J. 1987. English as an international language of medicine. Med Educ 21:283–284.

- 2. Breugelmans R, Barron JP, Yamamoto K. 2004. Introduction of English to the National Licensing Examination. *J Med Eng Educ* **5**(1): 12-16.
- 3. Official website of the "Medizinischer Fakultätentag", www.mftonline.de
- 4. Official website of the German "Bundestag": www. bundesgesetzblatt.de. Erste Verordnung zur Änderung der Approbationsordnung für Ärzte vom 17. Juli 2012. Bundesgesetzblatt 2012, Teil 1, Nr.34.
- Lu PY, Corbett J. 2012. English in Medical Education. An Intercultural Approach to Teaching Language and Values. Multilingual Matters, Bristol, Buffalo, Toronto.
- Levac D, Colquhoun H, O'Brien KK. 2010. Scoping studies: Advancing methodology. *Implement Sci* 5: 69-77.
- Williams CK, Hui Y, Borschel D, Carnahan H. 2013. A scoping review of undergraduate ambulatory care education. *Med Teach* 35: 444-453.
- Tillmanns RW, Ringwelski A, Kretschmann J, et al. 2007. The profession of medicine: a joint US-German collaborative project in medical education. *Med Teach* 29: e269–e275.
- Council of Europe. Common European Framework of Reference for Languages: learning, teaching, assessment. Available at: http://www.coe.int/t/dg4/linguistic/Cadre1_en.asp. Accessed on Dec.29, 2013.
- Busch-Lauer I. 1998. On the training and assessment of LSP knowledge in foreign languages - analysis of tests towards UNI-CERT II by medical students. Fachsprache 20(1-2): 51-68.
- Rebek-Nagy G, Warta V, Barron JP. 2008. Development of International Standards for Medical Communications in English. Chest 134 (3):661-662.

- Benfield JR, Feak CB. 2006. How authors can cope with the burden of English as an international language. *Chest* 129:1728-1730.
- Skelton J. 2008. Language and Clinical Communication. This Bright Babylon. Oxford and New York, Radcliffe.
- 14. Pinilla S, Berchthold C, Bernatowicz R, et al. 2010. MeCuM International - Eine Bedarfsanalyse zu englischsprachiger Ausbildung an der medizinischen Fakultät der LMU (Poster) http://www.egms.de/static/de/meetings/gma2010/10gma175.shtml
- Kumaravadivelu B. 2006. TESOL methods: Changing tracks, challenging trends. TESOL Quarterly 40(1): 59-81.
- 16. Official website at: http://www.tokyo-med.ac.jp/dimc
- Bordage G. 2009. Conceptual frameworks to illuminate and magnify. Med Educ 43: 312-319.
- 18. Barron JP, Breugelmans R, Ashida R. 2009. A Fundamental Approach to Radically Improve English Education in Japanese Medical Schools. *J Med Ed Soc* **40**(2): 113-115.
- Azer SA, Guerrero APS, Walsh A. 2013. Enhancing learning approaches: practical tips for students and teachers. *Medical Teach* 35: 433-443.
- Anti Z, Spasi D. 2012. Project-based learning in English for medicine. Acta Medica Medianae 51(2):50-55.
- 21. Segarra LM, Schwedler A, Hahn WG, Schmidt A. 2008. Clinical skills labs in medical education in Germany, Austria and German-speaking Switzerland. GMS Zeitschrift für Medizinische Ausbildung 25(2), ISSN 1860-3572.
- 22. Okuda Y, Bryson EO, DeMaria Jr S, et al. 2009. The utility of simulation in medical education: What is the evidence? *Mt Sinai J Med* $\bf 76$ (4): 330-343.

Factors dissuading Japanese doctors from presenting more frequently at international conferences: more than just the usual suspect(s)?

Greggory Wroblewski,¹ Junko Wroblewski,² Takashi Matsumoto,³ Isao Nozaki,⁴ Toshiharu Kamura,⁵ Ryukichi Kumashiro,⁶ and Koh Shinoda¹

- ¹Yamaguchi University School of Medicine, Department of Neuroscience
- ² National Hospital Organization Kokura Medical Center, Department of Obstetrics and Gynecology
- ³ Ehime University School of Medicine, Department of Obstetrics and Gynecology
- ⁴Shikoku Cancer Center, Department of Surgery
- ⁵Yanagawa Hospital, Medical Care and Education Research Foundation
- ⁶ Kurume University School of Medicine, Department of Medical Education

Despite the quantity and quality of the country's biomedical research and innovation, Japanese doctors seem to present their findings infrequently via poster and oral presentations at international conferences. While anecdotal accounts suggest that self-consciousness over their English ability may lead to reticence in presenting, until now a study to examine the veracity of this claim has been lacking. For this reason, 200 staff at three separate medical facilities in Western Japan were surveyed by paper questionnaire to identify factors that precluded more frequent participation. Here, results indicated that lack of confidence in their ability to communicate their findings and field questions in English seemed to be the strongest precluding factor, but it was not the only one. Travel costs and job-related time constraints were also strong factors overall, with men and those respondents over 40 identifying both at higher rates than their female counterparts and those under 40, respectively. Additionally, surgeons were more likely than their non-surgeon and "lab work focus" colleagues to implicate excessive work as a factor. The overall findings suggest that varied educational and cultural considerations must be considered concurrently in any attempt to increase the number of presentations by Japanese doctors at international conferences. As implications for English instructors specifically, providing increased exposure to the target context through English journal clubs and similar contexts is a feasible short-term goal for addressing this issue with Japanese medical students and physician–researchers interested in sharing their research with an international audience.

J Med Eng Educ (2014) 13(3): 55–64

Keywords English for medical purposes (EMP), Japanese doctors, international conferences, oral presentation, poster presentation, survey

Corresponding author:

Greggory Wroblewski

MA in TESOL

Yamaguchi University School of Medicine

Department of Neuroscience

Minami Kogushi 1-1-1

Ube, Yamaguchi 755-8505

 $\hbox{E-mail: greggory@yamaguchi-u.ac.jp}\\$

Tel: 080-4280-0865 Fax: 0836-22-2205

1. Introduction, Background, and Objectives

Despite being near the top of world rankings in several indicators demonstrating quantity and quality of contributions to global medicine, 1.2 and despite the many benefits of presenting one's data orally via poster or presentation, statistics suggest that Japanese doctors are disproportionately absent when it comes to doing so at international conferences, *i.e.* in English.³

A lack of English proficiency is often cited as a reason Japanese researchers are at a competitive disadvantage on the global stage, 4-6 and in one study of medical doctors, sig-

nificant performance anxiety over presentations specifically was reported.7 However, it is unclear whether perceived English inadequacy in and of itself is enough to dissuade them from doing so; quite possibly, there are other unrelated factors involved in their low participation frequency at international meetings. Until now, no detailed survey of the factors that discourage them from presenting more frequently has been undertaken. Thus, the present study was designed to test the hypothesis that Japanese doctors limit their participation in such events due to feelings of self-consciousness or inadequacy with regard to their English communication skills. Additionally, we also set out to identify any significant differences by gender, age, or department category. Validating their perceptions and identifying weak points in their presentation skills were not goals of the present study

A questionnaire was distributed to 200 doctors from three separate facilities in Western Japan in November and December 2012 with the aim of clarifying the factors that influence their decisions about presenting at international conferences. Findings could help to inform future English education at Japanese medical schools and/or provide suggestions for hospital and university administrators on how to maximize support for physician—researchers who want to collaborate with overseas colleagues and advance their careers through poster and oral presentations.

2. Methods

2.1. Participants

An anonymous survey on factors precluding more frequent presentations at international conferences was taken of medical doctors from the following facilities: Kokura Medical Center (KMC), Kitakyushu (N = 40), Kurume University School of Medicine and University Hospital (KU), Kurume (N = 118), and Shikoku Cancer Center (SCC), Matsuyama (N = 42). Selected background statistics for each facility^{8–12} can be found in **Appendix 3**. These particular hospitals were chosen A) because of professional associations between staff members and the authors and B) to enable responses from diverse facility types (a general hospital, university hospital, and cancer center, respectively). All of the participants surveyed were medical doctors (MDs) or MD/PhDs.

The survey itself was formulated in English (Appendix 1) and then translated into Japanese for distribution (Appendix 2) by one of the authors at each respective facility. At KMC and SCC, hard copies were printed and made available at a monthly hospital-wide staff meeting. At KU, the ques-

tionnaire was forwarded via e-mail to all departments, and each department head was asked to distribute a hard copy questionnaire at his/her respective regular staff meeting if possible. Completed forms were collected at the end of each meeting.

2.2. Materials

The survey was divided into two sections. The first section deals with the number of presentation experiences and the existence of any previous English presentation skills training. The second section consisted of six items requiring "level of agreement" responses using a Likert 5-point scale. Survey items were based on implications from the existing literature, *e.g.* educational and cultural factors as well as mundane considerations such as travel expenses and workload that might affect the decision to attend and present at an international conference. An "Other" line allowed for open-ended responses to the question of precluding factors. Items for age, gender, and department were also included to allow for comparative analysis between groups.

2.3. Data analysis

For comparative analysis, data were analyzed according to A) respondent population overall, B) gender, C) age group (those under the median age and those above), and D) "department category." The department category groupings used were surgical (patient care including surgery, e.g. obstetrics & gynecology or orthopedics), non-surgical (patient care without performing surgery, e.g. internal medicine or psychiatry), and $lab\ work\ focus$ (rarely seeing patients, e.g. physiology or hematology). Statistical analysis was performed via the chi-square test and results with p < 0.05 were deemed statistically significant.

3. Results

Selected data can be found in **Appendix 3**, and for simplicity's sake, the median age of 39.5 will be rounded to "40" from this point forward. Particularly relevant findings are outlined below:

- a) The majority of those surveyed had little to no experience presenting to an international audience, with 36% having never done so and 66% having presented 3 times or less. When asked if they had ever taken an English presentation skills-type course in preparation for a career in research, only 6% responded in the affirmative. For both categories, there were no significant differences between groups.
- b) When asked which factors discouraged more frequent

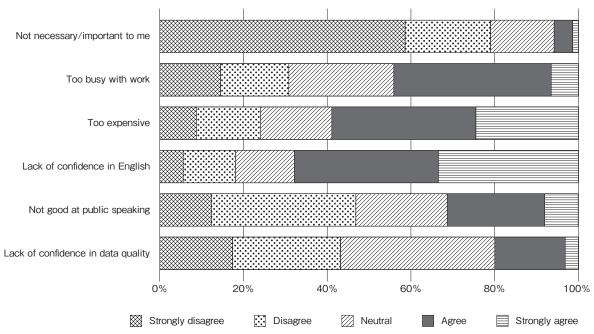


Figure 1. Factors Precluding More Frequent Presentations (N = 200)

delivery of poster or oral presentations at international conferences (see Figure 1), the lowest level of agreement was in response to the statement "I don't think presenting at international conferences is necessary/important," with only 6% showing any level of agreement.

- c) As a whole, the greatest level of agreement was to the statement "I'm not confident in my ability to communicate/field questions in English," with 68% expressing some level of agreement and 34% strongly agreeing. There was also a significant difference by age group, with 82% of those under 40 expressing some level of agreement, but only 61% of those over 40 (P = 0.003).
- d) For the general population, there was also a high level of agreement to the statement "Associated expenses (airfare, lodging, etc.) are too high (*i.e.* exceed research budgets)" (58%). There was a significant difference by gender, with 67% of males expressing some level of agreement compared to 31% of females (P = 0.0003), and those over 40 were more likely to agree than those under 40 (66% and 54%, respectively, P = 0.04).
- e) Forty-four percent of those surveyed also expressed some level of agreement with the statement "I'm too busy with work and job responsibilities to attend such conferences," and there were significant differences by gender (M = 49%, F = 22%, P = 0.001), department category (surgical = 74%, non-surgical = 57%, lab work focus = 44%, P = 0.008), and age (>40=51%, <40=36%, P = 0.04).
- f) In response to the statement "I'm not good at speaking

in front of an audience," 31% expressed some level of agreement, and 22% expressed some level of agreement to the statement "I don't think the quality of my data is high enough to present." There were no significant differences by group.

In addition, a number of respondents indicated "Other" factors; their responses were translated into English and included in Appendix 4.

4. Discussion

4.1. Prior experience and coursework

Prior experience items indicated that roughly two-thirds of those surveyed had presented at international conferences 3 times or less over the course of their entire careers. The relative lack of presentations agrees with the findings of a survey of nearly 3,000 doctors in which roughly three-quarters of respondents did so "only once every several years" or "almost never" did.3 And while one might reasonably expect that younger, less experienced doctors be disproportionately represented in this category simply because their older colleagues had had more opportunities over the years, in the current study this was not the case. There was no significant difference between those above and below 40. As a preliminary finding, this seems to suggest that factors other than age were responsible for limiting presentations at international conferences.

The fact that only 6% of total respondents reported having taken an English presentation skills course in the past dovetails with observations by those such as Pribyl *et al.*

suggesting a relative lack of English presentation skills university courses in general, and especially for medical researchers historically in Japan.¹³ This does, however, seem to be slowly changing as indicators exist that teaching presentation skills in English for specific purposes classes is on the increase at Japanese universities as educators recognize the need for applying those skills in both educational and workplace contexts.¹⁴

4.2 Major precluding factors

4.2.1. Perceived importance to one's career: A disconnect between theory and practice

In the current survey, the lowest level of agreement was in response to the statement "I don't think presenting at international conferences is necessary/important," with only 6% expressing any agreement whatsoever. This finding seems to reflect the importance of presenting in the minds of the Japanese medical establishment at large, as demonstrated in a survey of nearly 3,000 doctors in which roughly three-quarters of them considered that including English for Scientific Presentation courses in medical school curricula was "important" or "extremely important." ³ By implication, this most likely means that the application of said training at international meetings is also considered to be highly valued by the Japanese medical establishment. However, as described in 4.1, roughly two-thirds of those surveyed in the current study had presented 3 times or less. At least for this sample, there appears to be a striking disconnect between theory and practice. Consequently, it seems unlikely that low participation frequency is a function of any perceived irrelevance in the minds of Japanese doctors.

4.2.2. Lack of confidence in English ability

While there have been some accounts suggesting Japanese doctors experience language-related anxiety when presenting their research in English,⁷ this appears to be the first study demonstrating how such a lack of confidence in a sizable and varied sample group could be the most significant factor when many of them decide whether or not to present.

While the source of this hesitation is still unclear, one possibility is the basic framework of English education in Japanese medical schools. For example, Kawagoe's broad survey on the current state of English education in medical and nursing schools around Japan revealed that only around 20% of English study overall was spent on "speech/presentation" or "English conversation (medical)." These numbers seem comparatively small, especially in light of the fact

that nearly one-third of class time was still being spent on general English conversation and listening skills work. Furthermore, according to the same study, shortages of English teachers in general and English-speaking foreign staff were reported, with almost half of those universities surveyed reporting a complete lack of field-specific English staff. And in contexts where they were indeed present, nearly 40% of staff were native Japanese speakers (Japanese L1) only.³ These data suggest that many Japanese medical schools may lack the specialist staff necessary to prepare medical students to engage in data presentation and discussion in English with confidence.

While age did not seem to play a role in presentation frequency (see 4.1), comparative analysis did yield a significant difference by age group, with doctors under 40 being less confident than those over 40 in presenting data and fielding questions in English. This could be at least partially attributable to the fact that older doctors have likely been speaking English and engaging in public speaking longer, with the corresponding confidence and desensitization that often accompanies repetition. For this reason, it would seem even more crucial that medical students receive as much practice as possible in English presentation before their careers truly begin and they become comparatively busy.

4.2.3. Economic, cultural, and sociological factors

While perceived lack of English skills may have been the strongest precluding factor, it was not the only one, and this multiplicity demonstrates the complex background that must be considered when examining the low participation rate of Japanese doctors in presentations at international conferences.

For example, a substantial number of total respondents expressed concern over the cost of attending and presenting at international conferences. According to one doctor, all three of the facilities surveyed provide some form of monetary assistance for travel expenses related to giving a presentation – whether through direct reimbursement or through individual research grants. However, when taking into account annual membership fees to the medical associations themselves, meals, and the requisite souvenirs for coworkers left behind, there can still be a significant out-of-pocket expenditure for the doctor involved (personal communication, June 4, 2014), possibly dissuading some from making such a trip.

In addition to a substantial concern expressed on the whole, there were also significant differences between groups. Interestingly, male doctors were more than twice as likely to report monetary concerns than females. In light of the strict gender roles that are said to still prevail in many Japanese families, ^{15 - 17} it is possible that female doctors who are married are more likely to belong to dual income households – and presumably less concerned with supplementing travel and conference costs out-of-pocket – than male doctors who are married. Also, the increasing age of marriage that has been reported for women in Japan in recent years ^{16,17} could also mean more expendable income for a longer period for single female doctors.

Those over 40 were also more inclined to worry about expense than their younger counterparts. While data is currently lacking, this could be attributed to the fact that doctors over 40 are more likely to be married and/or have children with the ensuing financial burden that entails, leaving less money to cover conference-related expenses that exceed their research budgets.

Perceptions of being too busy to prepare for and attend such conferences differed by gender, departmental category, and age, with males, surgeons, and those over 40 feeling comparatively constrained. First regarding a difference by gender, the aforementioned perception is at least partially substantiated in a recent study by Nakamura in which male physicians in Japan on average where shown to work roughly 4.5 hours longer per week than their female colleagues (47.5 and 43.0 per week, respectively). 18 When considering differences by department category, one of those surveyed suggested that surgeons may indeed be busier than their colleagues, since multiple doctors are required to care for a single patient during surgeries that can often last hours (personal communication, March 20, 2013). Finally, regarding a difference by age, the discrepancy could be explained by the fact that the older the doctor, the more likely s/he is to be married and/or have children, limiting the amount of time after work available for writing abstracts, preparing slides, and so on.

Admittedly, economic, cultural, and sociological considerations are probably outside the purview of pedagogically-minded English for medical purposes (EMP) professionals. Nevertheless, these findings do demonstrate the complex background against which Japanese doctors have to make their decisions.

4.2.4. Other affective factors

While ranking lower than English proficiency, expense, and time considerations on the level of agreement scale, a number of respondents nonetheless agreed that both a lack of interesting data and public speaking itself were also concerns when it came to presenting more. First regarding the former, the level of agreement (22%) in itself is not overly

striking, especially when compared to the aforementioned factors more commonly agreed with by participants. However, this seemingly low level of concern over inability to assemble worthwhile data, combined with the fact that there was no significant difference between department categories for this item, suggests that reticence to present internationally likely was not based simply on an inability to conduct research due to one department's relative emphasis on "research" over "patient care" compared to another. This result implies that, for the current study at least, one's department category is less responsible for dissuading would-be presenters than other factors.

Public-speaking anxiety in Japan has been well-documented, and the findings of the present study (31% agreement) dovetail with past research. Historically, the Japanese educational system is said to have underemphasized public speaking in general, and the act of speaking in front of an audience is thought to be one of the most feared context-based apprehensions in Japan, even when done in Japanese. Specifically, said anxiety could be attributed to fewer opportunities to learn and practice presentation skills in high school and college than in countries like the U.S. These studies as well as the current findings suggest that any attempt to increase the number of English presentations by Japanese physician—researchers should consider affective obstacles as well as linguistic.

5. Implications and Conclusions

Since the sample size for the current study is admittedly small (N = 200) and each facility is representative of a distinct geographic location with its own unique circumstances, extrapolating to a national scale must be done cautiously. Additionally, though tracking age, the current survey made no provision for respondents' position title. Further research may benefit from comparative analysis between professors and assistant professors, doctors and senior doctors, etc. Finally, while just under half of the doctors at KMC and SCC took the survey, less than one-quarter did at KU. This is most likely due to the fact that distribution and collection at KU was conducted separately by dozens of department heads, all with varying responsibilities and varying levels of free time available for conducting a voluntary survey. For this reason, future questionnaires might benefit from expanded and effective distribution through web-based tools such as SoGoSurvey that can send e-mail invitations for an online survey from an imported list of e-mail addresses,21 thus ensuring that each doctor receives an invitation and can make a personal choice of whether or not to participate in the survey.

Regardless of its limitations, the major finding of this study – that lack of confidence in English seems to dissuade potential presenters from giving oral presentations at international conferences more than any other factor – has several implications for EMP professionals in Japan and curriculum planners at Japanese medical schools. Admittedly, changes to the basic framework of English language education in Japan or revised curricula can be seen as long-term goals at best. However, in light of the fact that so few of those surveyed have had regular chances to give presentations, there are a few steps that any instructor who works with medical students or physician–researchers could use now to increase the experience and confidence level of one such learner:

- 1. As is the case here at our institution, graduate schools of medicine often employ graduate students or postdocs from outside of Japan who speak English as a second or foreign language and use it as a lingua franca while doing research. These researchers frequently present their findings in on-campus seminars or PhD dissertation defenses, and medical students at the same campus can be encouraged to attend their lectures. While the level of English will almost certainly be high, providing our students with the researcher's written work in advance may serve to activate schema to facilitate the comprehension process. Attendance at these events can be viewed as part of a slow acclimatization process to "presentation language" as well as the kinds of questions that are asked in an English oral presentation setting. As an added bonus, such foreign researchers can serve as role models who have demonstrated ability to advocate for their research successfully using English despite it not being their L1.
- 2. Since medical school students may have few real-world opportunities to present their research in English, EMP teachers and administrators should encourage or organize the formation of "English Journal Clubs" or similar outlets that meet once a week and simulate the experience of a biomedical presentation context in English. Besides providing further occasion to read journal articles in English and become familiar with their writing conventions, repeated attempts at presenting might also serve to further desensitize students to any generalized public-speaking anxiety. Even if students mainly participate during the first three years of their education while they are comparatively free, such an outlet would provide numerous opportunities for practice

- over a six-year program.
- 3. For those of us who serve as advisors to hospital clinical research departments or work with basic researchers, there are also ways to address this issue for those who have already begun their medical careers. For example, journal clubs likely already exist in some form in hospital departments or graduate schools of medicine, albeit in Japanese. Even if one weekly meeting per month was devoted to an English presentation instead, opportunities to practice oral presentation in English would add up considerably over a doctor's career.

Presentations, and the personal interactions that follow, provide unique opportunities for a researcher. These include enhanced ability to communicate through the use of gestures, intonation, and other methods of non-verbal communication, the convenience of being able to answer questions or address concerns on the spot,22 opportunities for immediate feedback from the audience after the presentation, and chances to present data regardless of their stage in the development process.23 Additionally, networking opportunities frequently present themselves after the presentation when the presenter has a chance to mingle with the audience, potential collaborators, or even potential employers. Finally, conference presentations are evidence of an ongoing and active interest in research, and their inclusion can greatly enhance a CV and lead to career growth.24 When taken into account together with Japan's relative lack of poster and oral presentations at international biomedical conferences despite world-class research, these factors should serve as strong motivation to improve the preparation of medical school students and doctors - both linguistically and affectively – for presenting their research findings orally to an expanded audience going forward.

Acknowledgements

We thank Eiko Kawagoe for guidance and two anonymous reviewers for helpful suggestions that strengthened this paper. No funding was used for this research.

References

- ScienceWatch. 2006. The 10 most-cited countries in clinical medicine, 1996-April 30, 2006. http://www.in-cites.com/countries/top10cli.html (Accessed November, 2012).
- US Patent and Trademark Office. 2010. Patent counts by country/state and by year: utility patents January 1, 1963 December 31, 2009. US Patent and Trademark Office: Alexandria, Virginia.

- 3. Kawagoe E. 2004. A systematic study of actual conditions and the future: A survey of ESP education in medical schools and nursing schools. Kobe: Kobe City College of Nursing. [In Japanese]
- Fujii Y. 2007. Making the most of search engines for Japanese to English translation: Benefits and challenges. *Asian EFL Journal* 23: 1-36. www.asian-efl-journal.com (Accessed October, 2012).
- 5. Okamura A. 2006. How do Japanese researchers cope with language difficulties and succeed in scientific discourse in English?: Interviews with Japanese research article writers. *The Economic Journal of Takasaki City University of Economics* 48 (3): 61-78. http://www1.tcue.ac.jp/home1/k-gakkai/ronsyuu/ronsyuukeisai/48_3/okamura.pdf (Accessed January, 2013).
- Rodis OMM, Kariya N, Nishimura M, Matsumura S, and Tamamura R. 2011. Needs analysis: Dental English for Japanese dental students. *Asian EFL Journal* 55: 1-20. http://www.asianefl-journal.com (Accessed October, 2012).
- 7. Guest M. 2013. Japanese doctors at international conferences: Why the worry? *Journal of Medical English Education* **12** (3): 47-55.
- National Hospital Organization Kokura Medical Center. 2014.
 Kokura Medical Center Homepage. Kitakyushu, Japan. http://www.kokura-hp.jp/index.html (Accessed June, 2014). [In Japanese]
- 9. Kurume University Hospital. 2014. Kurume University Hospital Homepage. Kurume, Japan. http://www.hosp.kurume-u.ac.jp (Accessed June, 2014). [In Japanese]
- National Hospital Organization Shikoku Cancer Center. 2014.
 Shikoku Cancer Center Homepage. Matsuyama, Japan. http://www.shikoku-cc.go.jp (Accessed June, 2014). [In Japanese]
- 11. Medical*Online. 2014. Medical*Online Homepage. Tokyo, Japan. http://www.medicalonline.jp (Accessed June, 2014). [In Japanese]
- National Center for Biotechnology Information. 2014. Pubmed Homepage. Bethesda, Maryland. http://www.ncbi.nlm.nih.gov/pubmed (Accessed June, 2014).
- 13. Pribyl CB, Keaten J, and Sakamoto M. 2001. The effectiveness of a skills-based program in reducing public speaking anxiety. Japanese Psychological Research 43 (3): 148-155. http://www.unco.edu/keaten/Reducing%20public%20speaking%20 anxiety.pdf> (Accessed January, 2013).

- 14. Fellner T. 2011. Developing an ESP presentation course for graduate students of science and engineering. *Daigaku Kyōiku* Nenpō 7: 1-16. http://www.crdhe.saga-u.ac.jp/SJHE_No.07_Fellner.pdf (Accessed March, 2014).
- 15. Ministry of Health, Labor, and Welfare. 2010. Introduction to the revised Child Care and Family Care Leave Law. http://www.mhlw.go.jp/english/policy/affairs/dl/05.pdf (Accessed June, 2011).
- Nakatani A. 2006. The emergence of 'nurturing fathers': Discourses and practices of fatherhood in contemporary Japan. <u>In</u>:
 M. Rebick, A. Takenaka (eds). 2006. *The Changing Japanese Family*. New York: Routledge. pp. 94-108.
- 17. North S. 2009. Negotiating what's 'natural': Persistent domestic gender role inequality in Japan. *Social Science Japan Journal* 12 (1): 23-44 http://ssjj.oxfordjournals.org (Accessed February, 2011).
- 18. Nakamura A. 2012. The Determinants of Working Hours of Japanese Female Physicians: The Effects of Family Structures and Transitions into Part-time Status. Shakai Kagaku Kenkyu 64 (1): 45-68. http://jww.iss.u-tokyo.ac.jp/jss/pdf/jss6401_045068. pdf> (Accessed June, 2014). [In Japanese]
- 19. Nishida T. 1988. Communication apprehension among Japanese college students. *Kokusaikenkyu Nihon Daigaku* **8**: 171-183. [In Japanese]
- 20. Pribyl C, Keaten J, Sakamoto M, and Koshikawa F. 1998. Assessing the cross-cultural content validity of the Personal Report of Communication Apprehension scale (PRCA-24). *Japanese Psychological Researcher* 40 (1): 47-53. http://www.unco.edu/keaten/Content%20Validity%20Study.pdf (Accessed June, 2014).
- 21. SoGoSurvey. 2014. SoGoSurvey Homepage. Herndon, Virginia. http://www.sogosurvey.com (Accessed March, 2014).
- 22. Graves R. 2007. Oral presentations: Advice and tips. University of Western Ontario. http://publish.uwo.ca/~rgraves3/oralpres.pdf (Accessed October, 2012).
- 23. Dunn K. 2008. Why It's Important For You To Present Your Data at Scientific Conferences. Washington, D.C.: American Psychological Association. http://www.apa.org/science/about/psa/2007/11/student-council-1.aspx (Accessed March, 2014).
- 24. Wallwork A. 2010. English for Presentations at International Conferences. New York: Springer. http://www.springer.com (Accessed January, 2013).

Appendix 1. English version of survey

Questionnaire on giving	oral presentations at i	nternatio	nal conferences	D	ate:
	•			Gender:	
1. Have you ever give	en an oral presentation a	t an interr	national conference?		
	Yes	No			
2. If "yes," how many	y times have you done so	?			
$\Box 1-3$	$\square 4-6$ $\square 7$	- 9	\square 10 or more		
3. Have you ever take	en an "English Presentat	tion Skills"	type course?		
	Yes \square	No			
4. Which factors mig	ht prevent you from giv	ing oral p	resentations at intern	ational meetings mo	re frequently? For
each of the statem	ents below, rate your lev	vel of agree	ement according to th	e following scale:	
1 =	Strongly disagree	4 =	Agree		
2 =	Disagree	5 =	Strongly agree		
3 =	Neutral				
A) I don't think presenting	g at international confere	ences is ne	ecessary/important.		
-	and job responsibilities				
C) Associated expenses (airfare, lodging, etc.) are	e too high	(i.e. exceed research	budgets).	
D) I'm not confident in my	ıglish.				
E) I'm not good at speakir	ng in front of an audience	2.			
F) I don't think the quality	y of my data is high enou	igh to pres	sent.		
G) Other (Please be speci	ific)				

Appendix 2. Japanese survey as distributed

国際学会での発表参加に関す	祭学会での発表参加に関するアンケート Date:				
所属科:	年齢:	性別:			
	ましたか。 コースを受けたことがありますか ポスター発表をもっと頻回に行う	□ Yes □ No □ 1-3 □ 4-6 □ 7-9 □ 10以上 い。 □ Yes □ No i 事を妨げているものは何ですか。			
以下の項目についてgrading し 1 = 全く関係ない 2 = 関係 A) 国際学会での発表は必要だと B) 仕事や役職業務が忙し過ぎて	ない 3 = どちらともいえない 思わない。	・ 4 = 関係ある 5 = 非常に関係ある 			
 C) 出張費(航空料金、宿泊費) D) 英語での口演やディスカッシ E) 人々の前で発表するのが苦手 F) 自分のリサーチデータは重要 G) その他(理由を挙げてくださ) 	ョンに自信がない。 である。 度が低いと思う。)。			

Α	Appendix 3. Selected background data and survey results			
	a. Institutional statistics			
	Total doctors: $KMC = 81$, $KU = 541$, $SCC = 90$			
	2013 research output (MedicalOnline*): KMC = 32, KU = 403, SCC = 94			
	2013 research output (Pubmed**): KMC = 3, KU = 242, SCC = 26			
	b. Survey: General			
	Total respondents: 200			
	Respondents by gender: $M = 145$, $F = 38$, unspecified = 17			
	Age: average = 41.2, mean = 39.5			
	Respondents by category: surgical = 60, non-surgical = 85, basic research = 40, unspecified = 17			
	Number of career presentations: $0 = 36\%$, $1-3 = 30\%$, $4-6 = 16\%$, $7-9 = 7\%$, $10+ = 13\%$			
	Respondents having taken an English presentation skills course: 6%			
	c. Agreement with statements describing precluding factors (avg. out of 5)			
	I don't think presenting at international conferences is necessary / important: 1.7			
	I'm too busy with work and job responsibilities to attend such conferences: 3.1			
	Associated expenses (airfare, lodging, etc.) are too high (i.e. exceed research budgets): 3.5			
	I'm not confident in my ability to communicate my results / field questions in English: 3.8			
I'm not good at speaking in front of an audience: 2.8				
	I don't think the quality of my data is high enough to present: 3.1			
	* Includes both journal articles and conference abstracts in Japanese.			
	** Includes journal articles in English. Does not include conference abstracts.			

Appendix 4. "Other" factors precluding more frequent oral presentations

- "Believe it or not, going to international meetings doesn't always come across in a positive light. I think sometimes it's perceived as nothing more than an opportunity to get away from the pressures of work and go sightseeing. For me, if going didn't have this kind of baggage attached to it, I'd probably try to go and present two or three times next year."
- "For the same expense, presenting at domestic meetings the same number of times is looked upon more favorably by your co-workers, other departments, and hospital administration."
- "I don't feel right leaving behind patients in the middle of ambulatory care, especially the bad ones, for the other doctors to have to tend to."
- "I don't have any chances to interact with foreign doctors on a regular basis."
- · "I don't really have any opportunity to do so."
- · "If given the chance, I'd like to present more often."
- "I haven't been accepted to present yet."
- "I know that it'd be much easier for me personally if my employer helped more with business trip expenses. I do think though that presenting at international meetings boils down to how motivated you are, but if you're not good at the sort of discussion with foreign doctors that's required, it's a real chore."
- "It is difficult for us Japanese to understand Indian doctors' talk at international meetings in Asia. However, we need to understand them because they will have a substantial power in the future."
- · "Because of obligations with domestic conferences, it's hard to fit them into my schedule."
- · "Leaving means saddling my co-workers with extra work."
- · "My going entails more work for the people I leave behind."
- · "Not only is the travel expensive, but so are the annual membership fees for professional associations."
- · "Personal reasons"
- "The data I'd like to present just doesn't seem to be coming together."
- · "There are already too many domestic conferences I have to attend."
- · "Time and money constraints, etc."
- "To me, the current rate at which I present is good enough."
- "We have a shortage of staff for handling outpatient treatment."
- "With the economy being what it is, paying for sightseeing and eating out after the meetings is not as easy as it used to be."

医学英語カリキュラムの今後の可能性と課題: 学生のニーズ分析調査から見えること

Future directions for curriculum development in English for medical purposes: a closer look at student needs

野田 千ゑ里 Chieri Noda*, 渡邉 綾 Aya Watanabe**

- *ロンドン大学バークベック校応用言語・コミュニケーション学科
- Department of Applied Linguistics and Communication, Birkbeck, University of London, London, UK
- **福井大学語学センター Language Center, University of Fukui, Fukui

Needs analysis plays an important role in curriculum development and reform. To gain a better understanding of the English language needs of the students at Tokyo Medical University, we collected information from students using questionnaires and interviews. A total of 239 third and fourth year students responded to a questionnaire on the English for Medical Purposes course they had completed and on their opinion of what topics should be taught in what year. A total of 14 sixth year students who had participated in a one-month overseas clinical clerkship program were interviewed to obtain their views on what they would like to see included in an English for Medical Purposes program in light of their experiences abroad. Both the questionnaire and interview results indicated that students endorsed the intensive medical vocabulary lessons in the first year, but felt that more opportunities should be created for retaining the vocabulary thereafter. The surveys also revealed that students wanted the Japanese clinical courses and the English for Medical Purposes courses to be linked more closely so as to reinforce both courses. The surveys also identified topics which students thought should be taught, in which year they should be taught, and the reasons for their preference. The sixth year interviewees emphasized the need for developing communicative competence as well as the importance of building a working medical vocabulary in English. The surveys provide salient points and suggestions for developing a curriculum for English for Medical Purposes based on student needs.

J Med Eng Educ (2014) 13(3): 65-74

Keywords English for medical purposes, English for specific purposes, needs analysis, overseas clinical clerkship

Corresponding author:

渡邉 綾

〒910-1193 福井県吉田郡永平寺町松岡下合月23-3

福井大学語学センター助教

Tel: 0776-61-8848 (内線 2467) E-mail: ayawatan@u-fukui.ac.jp

本研究は平成24年度まで東京医科大学で行われていた医学英語 カリキュラムを基に実施した調査である。同大学の医学英語カリ キュラムは平成26年度に刷新されている。

Chieri Noda was senior lecturer in the Department of International Medical Communications at Tokyo Medical University until August 2013. She is now a PhD student at Birkbeck, University of London. Aya Watanabe was research assistant in the same department at Tokyo Medical University until March 2013.

1. はじめに

教育プログラムのカリキュラムを考える際に、カリキュラム担当者は、どういった学習内容を、いつ(何学年で)、どのように教えるのか(教育法)、どのくらい教えるのか(何時間)、それらをどのように評価するのか(評価方法)、といった疑問に対する答えを考えることになる。これまで、教育の到達目標、学習項目、教科内容、教授法、評価方法などは、大学側やカリキュラム担当者の経験や直感などから決定されることが多かった。しかしながら、今日の医学教育では、カリキュラムをデザインする上で、学習者からのインプットの重要性が叫ばれている。医学教育におけるカリキュラム開発・改革を進める重要なステップとして、ニーズ分析が最初のステップとして取りあげられている。1 ニーズ分析は、学習者が何を望み、何を必要としているかを明らかにするだけでなく、現状把握を可能にし、今後の課題も明確にすることができる。2 学習者のニーズ

を正確に知ることで、ニーズを考慮したコース作りやカリ キュラムの軌道修正が可能となる。

東京医科大学で医学英語カリキュラムの英語名称を English for Medical Purposes (EMP) としているのは、広義 の英語教育の中においてEMPはEnglish for Specific Purposes/Language for Specific Purposes (ESP/LSP)に分類さ れるからである。1960年代、ESP/LSPという概念が生ま れた背景には、カリキュラムを開発する際に学習アウトカ ムや達成目標を明確にし、社会への説明責任(アカウンタ ビリティー)を果たすためにニーズ分析が盛んに行われる ようになったことがある。2 語学教育の分野では、言語の 構造を基に学習プログラムを組み立てるのがそれまで主流 だった。しかしながら、ニーズ分析が行われるようになっ てからは、学習者が専門分野・職業のコミュニティーの一 員として活躍できるような実践的な語学力の習得を目的と するESP/LSPプログラムを開発するためには,該当分野の 言語分析(target situation analysis)とともにニーズ分析を プログラム開発の中心に据える必要があるという考えが広 まった。²⁻⁴ Belcher³も述べている通り、ESPについての考 え方は多様であるが、該当分野の言語分析とニーズ分析の 2つはESPに必要不可欠な要素として挙げられる。当初は 実際に該当分野で使用される英語を分析することに重きが 置かれたが、その後学習者の英語力とその分析を比較し、 欠如している部分を補う教材・教授法を打ち出すことに力 がそそがれた。しかし1980年代以降、そのような言語的 ニーズだけではなく、学習項目や学習方法決定の際、学習 者の視点(自分をどう見ているか,将来の目標,授業に求 めるものは何かなど)を考慮することで、効果的なプログ ラム開発や学習者のモチベーション向上にも繋がると考え られるようになった。3

また、ESPのニーズ分析は3つの領域に分けて考えることもできる。5 ①コミュニティーのニーズ、②教師や大学のニーズ、③学習者のニーズである。どの領域のニーズ分析を行うかによって、その目的や調査を行う対象者も変わってくる。まず初めに①コミュニティーのニーズ調査は、将来学生が踏み入れる専門領域の集団のニーズ、つまり医学英語の場合は医師や研究者など、医療関係者から成る集団のニーズを指し、調査対象は主に医師や看護師、コメディカルスタッフとなる。次に②教師や大学のニーズ調査は、大学や教員の教育方針などに沿ったニーズを指し、対象者は大学のカリキュラム責任者や教員自身である。最後に③学習者のニーズ調査は学習者が持つニーズを指し、調査対象はプログラムやコースに関わる学生やこれまで関わった学生や卒業生が対象である。

ニーズ分析は、プログラム開発段階だけではなくプログラム改善の一環として行われ、コースや教材開発、教授法、学習法、評価方法と密接に関係するものであるとDudley-Evans and St John⁴は述べており、医学英語教育関連の研究でも様々な手法でニーズ分析が実施されている。

主に学習者の言語的ニーズを明確化するための調査には, 試験による英語力の評価6やベッドサイド実習の分析,7 実際の医療現場で必要とされる表現の分析,8,9 論文執筆 に必要な表現の分析10などがある。さらに、学習者の視点 をESPプログラム開発に取り入れようとするものには、学 生11や教員と学生12-16を対象として、医師が必要とする英 語力や医学英語を学ぶ必要性などについての質問紙調査が 多く取り入れられている。台湾の中山医学大学では, Chia¹⁵が学生と教員を対象とした質問紙調査を行い言語的 ニーズと学生の視点をまとめている。中山医学大学のプロ グラム実施約10年後、Hwang¹⁶が同様の調査を行い導入さ れたプログラム評価を基に学生のニーズを報告している。 オーストラリアの大学の薬学部に在学中のマレーシア人留 学生を対象としたHussinの研究17では、シミュレーション 学習をビデオ収録し、学生の振り返りインタビューを基に ニーズを分析している。Mazdayasna and Tahririan¹⁸が実施 したイランの7つの医科大学の看護・助産学科で現行の英 語講義受講中と受講後に学生を対象として実施された質問 紙とインタビュー調査では,人数や教授法,試験方法など に対する不満があることを報告している。この調査では. 臨床教員と語学教員両方からも意見を聞いており、臨床講 義を担当する教員から語学授業に導入可能なアクティビテ ィーなども聞き出している。

本研究では、東京医科大学で実施されていた医学英語プ ログラムを受講した学生を対象に行った質問紙調査と,海 外臨床実習に参加した学生を対象に行ったインタビュー調 査を基に,平成24年度の医学英語カリキュラムに対する 評価とともに医学英語に関する様々な学習者のニーズを調 査した。同大学の医学英語教育は、医学分野で必要とされ る英語のコミュニケーション能力の習得を目標としてい る。英語教室が担当する1・2年次では、広く英語力の向 上を図る一般英語とともに、基礎的な医学英語の習得を目 指し、国際医学情報学講座が担当する3・4年次では、日 本語での臓器別臨床講義内容に沿って、臨床現場や研究活 動において必要となるより実践的医学英語の習得を目標と している(平成24年度までの医学英語プログラムについ てはJMEE Vol. 11, No. 1のEMP at Workを参照)。19 医学英 語Iとして1年次に実施している集中的な医学英単語の講 義で使用している教材は文部科学省現代的教育ニーズ取組 支援プログラムの助成金 (平成16年~平成20年)を得て 国際医学情報学講座が作成したものである。3・4年次の 医学英語プログラムである医学英語IIIとIVで平成25年度 に使用している教材も同助成金を得て国際医学情報学講座 が中心となり、東京医科大学病院臨床医の協力を得て臨床 科目に沿ったリーディング教材とビデオ教材をオンライン 教材(www.emp-tmu.net)として作成したもので、平成18 年度から使用している。リーディング教材は、臓器別講義 に沿って臨床医が医学英語用に執筆した文章を英訳したも のとNew England Journal of Medicineに掲載された原著

論文の緒言を許可を得て採用したものがある。さらに、 ビ デオ教材は、英国で実際の医療面接を収録したビデオを基 に開発したものを使用している。いずれも独自に開発した 教材であるため著作権の問題などが生じることなく、平成 23年から導入された同大学のeラーニングのサイトにもア ップロードしている。これらの教材・カリキュラム開発に あたっては、主に臨床医と国際医学情報学講座の経験を基 に①コミュニティーのニーズと②教師や大学のニーズを考 慮した。教材導入後も授業内容については常に改善してお り、論文にみられる思考の展開や医師患者間のコミュニケ ーションにおける重要な要素などについての教材に度々修 正を加えながら、よりわかりやすい授業を目指した。しか し③学習者のニーズについては、包括的にとらえるまでに 至っていなかった。そこで学生のニーズをより正確に把握 し、学習者の意見も考慮した医学英語教育プログラムを作 成していくために、同大学の医学英語プログラムを受講し た学生によるプログラム評価や医学英語に対する要望から 学習者のニーズを把握し、結果をまとめる必要があると考 えた。また、平成24年度から導入された海外での選択実 習制度を利用して24年度と25年度に海外で臨床実習を受 けた6年生は学習者であると同時にメディカル・コミュニ ティーの一員として海外で臨床実習に参加しており、これ ら実習生の意見も医学英語教育を改善する上で参考になる と考えた。

本研究では、医学英語IIIを受講し終えた3年生と医学英語IVを受講し終えた4年生を対象とした質問紙調査、および海外選択臨床実習に参加した6年生を対象としたインタビュー調査の結果から今後の医学英語教育強化に示唆できるものを紹介したい。

2. 調査概要

2.1. 医学英語 IIIとIVの終了時質問紙調査

平成24年度医学英語III(後期のみ,90分授業×9回)を受講した医学科3年生と医学英語IV(前期後期,90分授業×17回)を受講した4年生を対象に後期期末試験実施直後に質問紙を配布し,5分ほどの記入時間を設けて,その場で回収した。限られた時間で有益な情報を収集するために質問紙は,2部構成にしてA4用紙1ページにまとめた。質問紙の前半(質問1~6)では受講した医学英語の評価について,後半(質問7~11)では5つの項目について理想的導入時期とその理由について聞いた。

2.1.1. 医学英語の評価(有益度・満足度)

質問1~5については6段階のスケールへの記入を求めた。質問1~4は1を「とても有益」、6を「全く有益ではなかった」とし、質問5については1を「とても満足」、6を「全く満足ではなかった」とした。

3年生を対象とした質問紙(付録1参照)の前半では医学

英語IIIの以下の授業内容について聞いた:

- 1) Clinical Concepts (臓器別カリキュラムに沿った英語 リーディング・テキスト)
- 2) Questions for the Clinician (臨床医への質問)
- 3) Medical Interview (ワークシート)
- 4) Medical Interview (英語ビデオ教材)
- 5) 医学英語IIIに対する満足度

4年生を対象とした質問紙の構成は3年生の質問紙と同じであったが、授業評価に関する前半では2年間にわたり医学英語IIIとIVで行った以下の授業内容について聞いた:

- 1) Clinical Concepts (臓器別カリキュラムに沿った英語 リーディング・テキスト)
- 2) Questions for the Clinician (臨床医への質問)
- Selected Readings (論文の緒言を使用した英語リーディング・テキスト)
- 4) Medical Interview (英語ビデオ教材)
- 5) 医学英語IIIとIVに対する満足度

2.1.2. 医学英語の評価(自由記述)

質問6は、医学英語についての自由記述とし、3年生に は医学英語IIIについて以下の通り聞いた。

6) 1学期間の医学英語を振り返り、授業やカリキュラム に関するコメントや改善点などあれば、ぜひお聞か せください。

4年生には、以下の通り聞いた。

6) 4年間の医学英語を振り返り、授業やカリキュラムに 関するコメントや改善点などあれば、ぜひお聞かせ ください。

2.1.3. 学習項目の導入時期について

質問紙後半(質問7~11)は3年4年ともに以下の項目について、導入時期と理由について聞いた:

- 7) 医療面接
- 8) 研究論文
- 9) 口頭発表
- 10) 症例報告
- 11) 医学用語

導入時期は1~2年次,3~4年次,5~6年次,1~6年通 して,必要なしの5つの選択肢を設けた。理由は自由記述 とした。

2.2. 海外臨床実習生を対象とした調査

平成24年度と25年度に海外での臨床実習を受けた学生を対象に実習中の英語使用状況について質問紙に自由記述欄をもうけて同大学の医学英語プログラムについての意見も求めた。平成24年度は質問紙を配布し、各自記入後に提出を求めた。25年度は同じ内容の質問紙調査をオンラインで実施した。インタビュー調査は、質問紙の調査結果に沿って行われた。実習生の要望に応じて単独または同じ

施設で実習を受けた2~3名で実施した。まず最初にインタビューの趣旨を説明し、録音の可否について確認してから同意書にサインを得た後にインタビューを実施した。平成24年度実習生のインタビュー調査は本研究の著者である野田、渡邉の2名で、平成25年度は野田1名で行った。録音した内容は、後に書き起こして質的に分析した。

3. 調査結果

3.1. 医学英語ⅢとⅣ終了時質問紙調査結果

医学英語IIIの試験出席者全員113名および医学英語IVの 試験出席者127中126名,合計239名の学生から回答を得 た。

3.1.1 医学英語の評価 (有益度・満足度)の結果

3年生による授業内容の評価結果は**図1**に示す。医学英語の中心的テキスト1) Clinical Concepts (臓器別カリキュラムに沿った英語リーディング・テキスト)の評価では「とても有益」から「全く有益ではなかった」の6段階スケールで有益である方の評価を示す1~3の合計が83%で最も高かった。2) Questions for the Clinician (臨床医への質問)の評価では、1~3の合計は63%であった。3) Medical Interview (ワークシート)の評価では、1~3の合計は80%であった。4) Medical Interview (英語ビデオ教材)では、1~3の合計は62%であった。

4年生による授業内容の評価結果は**図2**に示す。1) Clinical Conceptsでは、1~3の合計が71%と3年生の評価より低かった。2) Questions for the Clinicianも、1~3の合計は55%と3年生の評価より低かった。3) Selected Readingsでは、1~3の合計は66%であった。4) Medical Interview (英語ビデオ教材)の1~3の合計は62%であった。

全体的満足度を聞いた質問5の結果は**図3**に示す。3年生では6段階スケールで満足である方の評価を示す $1\sim3$ の合計が81%で,最も多い回答は3の40%であった。4年生では $1\sim3$ の合計が66%で,最も多い回答は3の37%であった。4年生では, $4\sim6$ の満足でない方の回答がいずれも3年生より高く,6の「全く満足ではなかった」も4%あった。

3.1.2. 医学英語の評価 (自由記述)の結果

113名中34名(30%)の3年生が自由記述欄に記入した。 Medical Interviewに言及するコメントが7つと最も多く、 そのうち6つはビデオ教材の聞き取りにくさ(イギリス英 語に不慣れ、患者と医師の発言が重なるなど)を指摘する ものであった。残り1つはMedical Interviewを増やしてほ しいとの要望であった。

授業の進め方については、「なるべく英語で話そうとする授業が良かったです」と学生自身の英語使用については評価する声もあったが、教師が英語のみ使用することについては「英語だけで授業を進められると、何の作業をすれば良いのかよくわからないことが多くあった」と問題を指摘するものもあった。その他、授業運営については、「授業中、友人が話しかけてくることで授業が聞きにくかったので、もう少し厳しくして頂いてかまいません」という要望もみられた。

平成23年度より同大学に導入されたeラーニングに関する6つのコメントのうち、3つは教材をeラーニングに載せたことを高く評価するものであったが、2つはビデオの不具合を指摘するもので、残り1つは「e-learning をより良くしてください」との要望であった。

臨床授業と連動していることを好意的に評価するコメントが2つあったが、「もう少し臨床の授業とマッチしてい

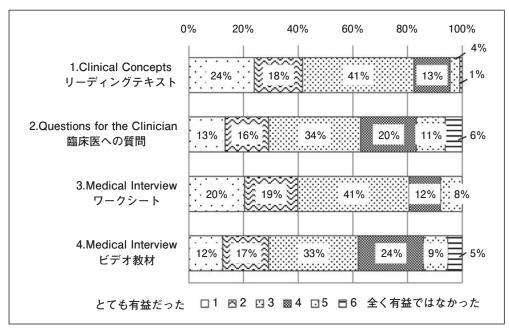


図1 医学英語授業内容の評価(有益度) -3年生の回答

いのでは?」とより密接なリンクを求める意見もみられた。授業中に行う,臨床医とのQ&AセッションであるQuestions for the Clinicianについても「臨床医の先生への質問だけもう少し後で考えられると助かります。(各教科の授業開始前に考えることになるので。)」と臨床授業のタイミングの改善を望むものがあった。また,この項目について,「(臨床の先生の)日本語での解答が多かったのが少し残念でした」という意見も2つ見られた。その他の要望としては,「単語の小テストがあればよかった」や「希望者用のUSMLE対策講座などを作ってほしい」などがあった。

126名中50名(40%)の4年生が自由記述欄に記入した。医学英語IIIとIVの授業全体についての感想が多く見受けられ、そのうち「先生によって授業内容があまりにも違うことが気になりました」など、クラス間のばらつきについてのコメントが最も多かった。また、臨床授業とのより密接なリンクを求める意見があった。授業中、教師による英語のみの使用についてのコメントがあったが、教師の英語について行けなかったとの意見と英語使用の徹底を望むものに分かれた。

教材に関する具体的なコメントでは Clinical Conceptsについての意見が最も

多く, テキストの方向性のばらつきを指摘するものなど, いずれも教材内容の改善を要望するものであった。

Medical Interviewについての意見はあったが、リスニングの難易度が高すぎたという意見や医療面接の練習の機会を望むものであった。「1,2年のときにせっかくやった英単語を忘れてしまっていたので残念」というコメントもあった。スピーキングの充実化を望む意見もあった。

3.1.3. 学習項目の導入時期についての結果

質問紙の後半,医学英語に導入すべき項目と時期についての結果は**図4**と**図5**に示す。3年生,4年生ともに英語医療面接の授業は、「3~4年」での導入が最も望ましいと回答した。医療面接について4年生では、「3~4年」とした理由の中にはOSCEを意識したコメントが特に多かった。「1~2年」とした理由で目立ったのは、医学的知識を必要としないからとの意見が多かった。

英語研究論文の読解については、3年生では「3~4年」と「5~6年」が27%と28%と意見が割れたのに対して、4年生では「3~4年」が37%と群を抜いて多く、「5~6年」は18%に留まった。医学的知識を要するため、高学

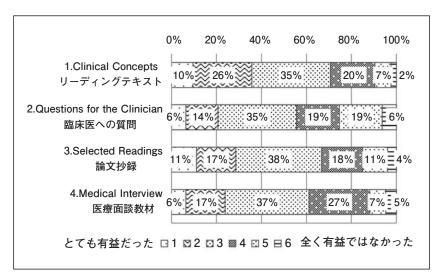


図2 医学英語授業内容の評価(有益度)―4年生の回答

スケールにない値3.5の記入については、3に繰り下げた。

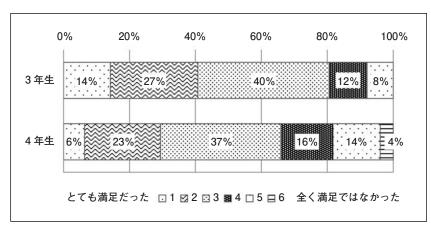


図3 医学英語3年生と4年生の全体的満足度の比較

年でやった方が良いとの意見が多くみられた。その一方、研究論文を「1~2年」でやるべきと回答も、3年生では15%、4年生では16%あった。理由としては、1・2年次には時間的余裕、英語力があることなどを挙げている。

英語での口頭発表については、3年生では「 $1\sim2$ 年」が 37% と最も多く、「 $3\sim4$ 年」が23% と次に多かった。4年 生では「 $1\sim2$ 年」が31%、「 $3\sim4$ 年」が42% と順位が逆 転していた。4年生では、「 $1\sim2$ 年」とした理由には、時間的に余裕があるとするものが多く、トピックによって は、「 $1\sim2$ 年」でやることも可能だとの意見も見られた。

英語の症例報告については、3年生では「5~6年」に導入するのが理想的と答えた学生が40%と最も多く、次いで多かったのが「3~4年」の28%であった。4年生では順位が逆転して「3~4年」35%が「5~6年」31%を上回った。4年生では、「3~4年」とした理由に、医学の知識が必要だという意見が多く、ポリクリに併せて高学年でやった方がよいという意見が見られた。

最後に、英語の医学用語については3・4年生ともに「1~2年」でやるべきだという意見が3年生では40%、4年生では47%で、群を抜いて多かった。次に多かったのは、

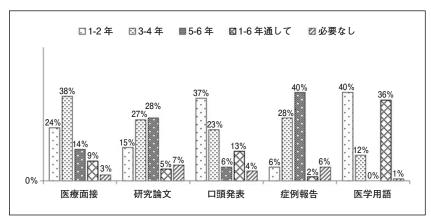


図4 学習項目導入時期-3年生の回答

選択肢以外の回答はグラフから除外した。

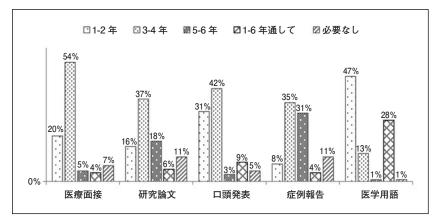


図5 学習項目導入時期-4年生の回答

選択肢以外の回答はグラフから除外した。

「1~6年通して」で、3年生では36%、4年生では28%であった。

医学英語でこれらの項目を学ぶ必要なしとの回答も少数ではあったが見受けられた。必要ないとの回答が最も多かった項目は、研究論文と症例報告であった。3年生では研究論文が7%、症例報告が6%。4年生では研究論文、症例報告ともに11%であった。必要なしの理由は専門的すぎる、英語の授業だけでは時間が足りない、まずは日本語で理解することが必要など、多様な回答がみられた。

3.2. 海外臨床実習生の調査結果

6年生の海外臨床実習生を対象に行ったインタビューには、24年度は8名、25年度は6名、合計14名が応じた。このインタビューの主たる目的は、海外臨床実習中の英語の使用状況の調査であり、質問紙の回答を基に行われたが、同時に実習経験を踏まえた上で医学英語に対する要望・提案を得ることも目的としていた。本稿では、特に医学英語教育に参考になるコメントを報告する(学習内容についての感想と提案を表1にまとめた)。

1年次の医学英語Iで集中的に医学英単語を学んだことを 評価する声が聞かれたが、その後その知識を発揮する場が ないとの指摘もあった。6年次まで継続的に医学英単語の 小テストを行うことや、3~4年次の臨床科目ごとのテストに英単語テストを組み込むなどの具体的提案もあった。医学英語IVの口頭発表を高く評価する意見もあり、同様の機会をより多く設けることを望む声が多かった。

大半の実習生は、医学英語でスピーキングの練習を拡充することを希望したが、中には学生全員が将来必要とするであろう医学用語や論文読解に特化すべきとの声もあった。英語力別やニーズ・興味別(症例発表、症例についてのディスカッション、論文読解、医学英単語など)にクラス分けをする方が学生のモチベーション向上に繋がるとの意見も目立った。

医学英語の講義が少ないとの意見や論文読解や医学的内容のスピーキングを少人数制のセミナー形式で行うことを望む声もあった。全般的な英語力を測る試験であるTOEICやTOEFL、さらに医学英語検定試験の活用を提案する意見も聞かれた。

USMLE対策のセミナーに対する要望 もあった。同大学在学中の留学生との交 流などを通し英語を使う機会を増やして ほしいとの声も聞かれた。

4. 考察

本調査により、6年間の医学教育の中で、医学英語に関して、学習者はどの学年でどういった内容について学びたいのか、学習内容の選択や課題がより明らかになった。いずれの調査からも、医学英単語の学習を早期に始め、継続的に行うことを望んでいることがわかった。3・4年生の調査では、現在臨床講義と連動していることを評価する一方、単に同時期に同様の科目を英語で学習するということに留まらず、臨床講義で学んだことを医学英語の授業で活かせるような授業が求められていることが確認された。海外臨床実習を体験した6年生からは医学英単語習得の重要性に加えて、医師間のコミュニケーションに必要な会話力の強化を求める声が聞かれた。

3年生と4年生の調査結果から、医学英語を充実するための改善点がいくつか明らかになった。教材面ではリーディング教材であるClinical Conceptsに関して、4年生からテキストの方向性のばらつきがあるとの厳しい指摘があり、改良の余地があることを示唆している。このことが4年生の医学英語に対する全体的な満足度を下げた一因と考えられる。学内の臨床医の協力を基に臨床科目に沿って作

成された英語リーディング教材であるが、内容の方向性を 極力揃えるなど、独自に教材を作成するときには配慮が必 要であることが示された。

Questions for the Clinicianの評価が3・4年生ともに低かったことは、反省すべき点である。低評価の主たる理由は、臨床の授業の前にその科について英語の質問の準備をしなければならず、内容的に深い質問ができなかったということにあった。これは、現在医学英語の授業の中心に据えているClinical Conceptsを臨床講義の日程に合わせているため、予習を必要とするQuestions for the Clinicianは、まだ臨床授業で学んでいないことを英語で自習することになる場合が多かったことによる。今後、医学英語で扱う科目は、臨床科目を追うようにする方が学生にとって臨床講義の内容を医学英語で復習できることにもなり、より高い学習効果が期待できると考えられる。

Medical Interviewについて、3年生では新しく作成したワークシートとビデオ教材について別々の質問を設けたところ、ワークシートは1~3の好意的な評価が80%であったのに対して、ビデオ教科の方は62%と大きな差があった。使用しているビデオは、実際の診療を英国で録画したもので、「本物」の医療面接を観ることができるのが特徴であるが、実際の会話だけに、学生からの指摘にもあるように言葉が重なったり、発音が不明瞭であったりする。また、学習者に覚えて欲しい構文や語彙を盛り込んでいるわ

けではないので、限られた時間で使用する語学教材としては不向きな面があることも事実である。そのため、以前から英語が早くて難しすぎるなど、否定的な意見が多かった。その対策として新しくワークシートを作成し、医療面接の際に重要なコミュニケーションの要素などを盛り込んだ。今回の調査結果ではそのワークシートが高く評価され、Medical Interview全体を評価する書き込みも見られた。今後は、現在リスニングの練習に留まっているものを、学生からも要望の多かったスピーキング練習としてロールプレイングなどを取り入れて充実化を図るなどの可能性を考慮することが求められている。

クラス運営の面でも反省点が浮かび上がった。少人数教育を実施するために、レッスン・プランを用いて6つのクラスの授業の統一を図ってきたが、学生のコメントからはクラス間で授業の進め方にかなり差があり、それが不公平感に繋がっていることが明らかになった。この点については、各レッスンの目標やアウトカムを明確化し、教員間で共有することが重要であろう。

質問紙の後半は、医学英語に取り入れる5つの項目について聞いた。単に必要かどうかを問うのではなく、いつ必要かを問うことでカリキュラム開発にとって有益な情報を得られるとの指摘4,20があることを考慮し、導入時期を選択する形式をとった結果、学生がいつどのように取り組んでいきたいのかが明確になった。最も顕著だった意見は、

表1 海外臨床実習生を対象としたインタビューからの抜粋

項目	実習中の英語使用についての感想	医学英語に対する要望・提案
医学英単語	・医学用語はやっぱり言い換えがきかないので重要。	・1年から6年まで継続的に医学英単語のテストを実施。
	・診察でよく使う症状,病態についての単語が必要。	・3・4年の臨床科目のテストに,英単語テストも組みこむ
	・疾患名よりも,病院で使われる実践的表現が不十分と感	・学んだ知識を活かせるような場所とか,後は定期的な試
	じた。例えば,feverは知っていてもintermittent feverが出て	験があったら一番いいと
	こなかった。	・書けても発音が分からないこともがあったので、発音練
		習を。
症例報告	・一番事前にもっと知りたかったのは症例発表やカルテの	・現在医学英語ではやっていないが、3・4年でも臨床問題
	読み方。	は解けるので3・4年でもできると思う。
	・海外実習では,症状などについて話す時の表現力が足り	・目標別や興味別にクラスを分けるのがいい。例えば医学
	なかった。「なんでそれが出てきて,どの程度出るのか」	英単語中心にやるクラスや留学希望者には症例発表や
	などの表現を学習する必要が」ある	ディスカッションするクラス等。
コミュニケーション	・簡単な表現の方が通じることも。例えばobserve よりCan I	・4年の医学英語でプレゼンを行う機会があったのはよかっ
能力	see the operation.	たのでもっと多くあるといい。
	・最初の2週間は自分の発音のためか、言ったことがなか	・グループでのプレゼンも,一人一人の精神的負担が軽く
	なか通じず苦労した。	いい場合もある。
	・最も重要なのはコミュニケーション能力。院内,日常生	・クラス内外で英語をしゃべる機会を多く作ってほしい。
	活上の問題解決も全て自分で行うので。	・実践的医学英語を学ぶための少人数セミナーに月に1回
	・アジアの人の英語は聞き慣れていなかったので,苦労し	でもいいので開く
	た。	・論文を読んだ後にグループで要点をまとめて発表する。
	・積極的に発言することを求められた。	
論文	・症例発表の準備のため、最新の知識を仕入れるために	・英語論文に接する機会がポリクリの前にあるといい
	PubMedで検索して調べた。	・医学英語では,将来全員が必要になる論文読解や用語理
	・論文の文法はむずかしくない。	解に重点をおく。
その他	・低学年の時から海外臨床実習制度の存在を知っていたら	・USMLE対策セミナーがあればいい。
	もっと準備ができた。	・TOEFLやTOEIC,医英検を活用。

医学英単語の学習を早期に始め、継続的に行うということが重要との意見であった。実習生からも同様の意見があった。1年次の集中的な医学英単語学習は評価されているようだが、それ以降も継続することを望む声が多かったことは、3~4年次の学習で1年次に習得した語彙を使用する機会がないと感じていることを反映している。3~4年次の授業の中に医学英語単語学習を取り入れることはもちろんだが、学習者のニーズに応じて自主的に学習できるようなeラーニング教材を開発することも検討する価値があると考えられる。単語演習などは特にeラーニング教材に向いていると思われる。

医療面接については、ある程度臨床知識を備えてから「3~4年」に希望する学生が「1~2年」に希望する学生を上回った。4年生がこれまでの4年間を振り返り、英語医療面接は「3~4年」に実施する方が良いという理由には医学的知識を得てからの方が効果的との答えが多くみられた。「1~2年」に希望する理由には時間的余裕を挙げるものが多かった。コミュニケーションと日常の英語表現習得を目的とする授業として1~2年次に効果的に取り入れることも可能であろう。さらに、3~4年次でも日本語の医療面接試験であるOSCEと連動した形で取り入れていく可能性も考えられる。

研究論文については3年生では「3~4年」で導入すべきという意見が「5~6年」とほぼ同じだったのに対して4年生では「3~4年」での導入を希望するものが圧倒的に多かったことは、医学英語で既に研究論文の授業を体験している4年生が「3~4年」でもできるという実感があったからと思われる。限られた時間で、読む論文の本数を増やすことは難しいが、実習生からの提案にもあったように研究論文の要約など内容をまとめて授業中に発表させるなど一工夫することにより英語論文読解能力の向上を図ることは可能であろう。

口頭発表の重要性を訴えるコメントは、3・4年生同様、 実習生にもみられたことを考えると、スライドの作成方法 や発表時の英語表現などのスキルを磨くことができるよう なトレーニングの機会を設けることが求められる。4年生 の後期に学生全員が5分程度の発表を各1回行う機会を設 けているが、今後は医療面接や研究論文の授業にも短いプ レゼンテーションなどを盛り込み、学生に発表する機会を より多く設けることが重要であろう。

症例報告については、3年生の多くが「5~6年」での導入が望ましいと回答しているのに対して、4年生ではわずかではあるが「3~4年」が「5~6年」を上回っていた。少なくとも4年生の3分の1は症例報告を取り入れた授業を「3~4年」で実施することが望ましいと考えていることがわかり、実習生からも症例報告で使用される英語表現を医学英語で学びたかったとの意見もあった。

海外での臨床実習を受けた6年生は、学習者であると同時にメディカル・コミュニティーの一員として海外臨床実

習に参加しており、その体験を基に同大学で受けた医学英 語について様々な要望や提案があった。これら実習生は、 モチベーションの高い学生であり、彼らの意見をそのまま 学生全員に当てはめて考えることは出来ない。しかし臨床 現場で英語を使用した彼らの体験を参考に授業内容を考え ることは有意義である。海外臨床実習で必要な英語を医学 英語で教えることで、近い将来体験するかもしれない医療 現場に備えているという意識が学習効果にも繋がるとも考 えられる。教えるべき項目については派遣先施設や科によ って体験が異なるため多様であったが、症例発表や医学的 内容のディスカッションなど医師間の対話に必要な表現力 をつけることを重要視する意見が多かった。しかし同時 に,一般会話力を養うことの重要性を訴える声も聞かれ た。これは、Jenkins²¹やHouse²²の報告にもある通り、特 に双方にとって英語が外国語で互いの発音や表現に慣れて いない場合、コミュニケーションを円滑にするには、わか らなかったときに丁寧に聞き返すことや自分が言ったこと を言い換えるなど相手や状況を考慮した対応能力が求めら れることを反映していると考えられる。いずれも非英語圏 への施設で研修を受けているため、英語話者の患者と接す る機会が少なく、英語医療面接を学ぶ必要性を訴える声は なかったが、今後英語圏の施設で実習があった場合、患者 とのコミュニケーションに必要な英語力も重要視されるで あろう。

英語力別やニーズ・興味別にクラス分けや論文や症例発表などに特化したセミナーを望む声が目立ったが、これは無作為に振り分けられたクラスでは英語力ややる気にばらつきがあり授業に悪影響を及ぼしたと学生が感じたためと推察される。やる気別のクラス分けはモチベーションが高い学生、低い学生のいずれにも高い学習効果があるとの報告23もあることを考えるとクラス編成については注意深く検討する必要があると考えられる。

さらに、海外臨床実習制度を1年生から積極的に紹介することが英語学習意欲向上にもなるとの声が聞かれた。国際医学情報学講座では、同大学臨床医ならびに海外臨床実習生のビデオ・メッセージを収録し、医学英語IIIのオリエンテーションで使用するなどしてきたが、今後様々な手法で実習生の体験談などを紹介するのも医学英語学習の動機づけになると考えられる。学習者にとってより身近なロール・モデルの存在は、モチベーション向上に効果的であり、24特にこれから同大学が海外選択臨床実習を推進していく上で重要だと考えられる。また、将来の職場(同大学学生の場合は医療現場)での実践的な英語コミュニケーション力の習熟度を評価することが学生のモチベーション力の間表を指摘されている。今後コミュニケーション力の伸長を目的とする授業を行う場合は、公平かつ効果的な評価方法を考案する必要がある。

5. まとめ

いずれの調査結果も、1・2年次に習得した医学英単語 を3・4年で使う機会を増やすことが肝要であることを示 していた。医学生全員が将来必要とする研究論文読解力と ともに、将来留学や学術発表をする際にも力を発揮できる ようにコミュニケーション能力の強化を図ることも重要で ある。限られた時間でこれらを網羅することはむずかしい ため、少人数クラスを活かして、医療面接や症例報告、論 文の授業にもスピーキングの練習を取り入れるなどの工夫 が必要であろう。その際、臨床医のインプットをより効果 的に活かせる授業を目指すことで学生が自分たちの将来像 を思い描けるようにできれば、より充実したカリキュラム の実現が望めると考える。さらに、現在、医学英語の試験 は、主に英文読解力と聴解力を評価するに留まっている が、今後、実践的な英語コミュニケーション能力の習熟度 を評価していくことにより学生のモチベーションの向上に も繋がると考える。

本報告では、学生のニーズに焦点を絞ったが、今後は 様々な職場で活躍している卒業生などの現状調査を通し て、学生が将来就くであろう医療現場におけるコミュニテ ィーのニーズに応え得る医学英語教育プログラムを開発す ることが望まれる。また、現在多くの大学が世界医学教育 連盟策定のグローバルスタンダードに準拠したカリキュラ ム改編を行っている。2012年に医学教育学会により発表 された日本版医学教育の基準でも「教員と学生からのフィ ードバックを系統的に求め、分析し、対応しなければなら ない」とあり、学生のフィードバックを積極的に取り入れ ることが、教育の質的向上に繋がると言及している。 2014年には医学英語教育学会からも、「医学教育のグロー バルスタンダードに対応するための医学英語教育ガイドラ イン」の中間報告がされている。これらのスタンダードや ガイドラインは教師や大学のニーズだけではなくコミュニ ティーのニーズも反映して提案されている。教育目標を明 確に打ち出し、それを達成しあらゆる面からその都度評価 していくことで、カリキュラムが評価される今、グローバ ル化推進と社会へのアカウンタビリティを考える上でも. ニーズ分析で得られる結果を活用した、より包括的な医学 英語プログラムの開発が各大学で求められている。

謝辞

本調査に協力してくれた学生の皆様ならびに医学英語III とIVの講師の視点から常時貴重なフィードバックをくださった J. P. バロン先生, R. ブルーヘルマンス先生, E. バロガ先生, 阿部一幸先生, 高橋和子先生, 森田直美先生に感謝致します。本稿を査読し貴重なご意見をお寄せいただいた匿名の査読者の先生方ならびに編集委員の平孝臣先生に篤く御礼を申し上げます。

参考文献

- 1. Kern DE, Thomas PA, Hughes MT, eds. 2010. Curriculum development for medical education: a six-step approach. JHU Press.
- Richards JC. 2001. Curriculum develpment in lanugage teaching. Cambridge: Cambridge University Press.
- Belcher DD. 2006. English for Specific Purposes: Teaching to perceived needs and imagined futures in worlds of work, study, and everyday life. TESOL quarterly 40:133-56.
- 4. Dudley-Evans T, St John MJ. 1998. Developments in English for specific purposes: A multi-disciplinary approach. Cambridge Univesity Press.
- 深山晶子(編),野口ジュディー(総監修). 2000. ESPの理論 と実践. 三修社.
- Hirano M, Hishida H. 2009. Reevaluation of first-year nursing students' English proficiency in expressing body movements and activities of daily living. *Journal of Medical Engish Educa*tion 8(1):26-34.
- Shi L, Corcos R, Storey A. 2001. Using student performance data to develop an English course for clinical training. *English* for Specific Purposes 20(3):267-291.
- Hung H, Chen P-C, Tsai J-J. 2012. Rhetorical structure and linguistic features of case presentations in case reports in Taiwanese and international medical journals. *Journal of English for Academic Purposes* 11(3):220-8.
- Pryor E, Woodward-Kron R. 2014. International medical graduate doctor to doctor telephone communication: A genre perspective. English for Specific Purposes 35:41-53.
- Zhao J, Wu T. 2013. A genre analysis of medical abstracts by Chinese and English native speakers. *Journal of Medical Colleg*es of PLA 28(1):60-4.
- 11. 杉山明枝. 2010. 医学英語に対する理学・作業療法士学生のニーズ. Journal of Medical Engish Education **9**(1):39-47.
- 12. 横山彰三. 2005. 九州沖縄地区大学におけるニーズ分析 宮崎 大学医学部編. ESP教授法に基づく大学専門英語教育のための効 果的シラバスと教材開発の研究―平成15年度~平成16年度科学 研究費補助金 (基盤研究 ©)研究成果報告書 研究究課題番号 15520362. 〈http://ir.lib.miyazaki-u.ac.jp/dspace/bitstream/10458/1901/1/15520362.pdf〉(Accessed April 17, 2014)
- 13. 川北直子、2005. 九州沖縄地区大学におけるESPニーズ分析 宮崎県立看護大学看護学部における事例。ESP教授法に基づく大学専門英語教育のための効果的シラバスと教材開発の研究―平成15年度~平成16年度科学研究費補助金(基盤研究 ◎)研究成果報告書 研究究課題番号15520362. 〈http://ir.lib.miyazaki-u.ac.jp/dspace/bitstream/10458/1901/1/15520362.pdf〉(Accessed April 17, 2014)
- 14. 安浪誠祐. 2005. 九州沖縄地区大学におけるニーズ分析 熊本大学医学部医学科編. ESP教授法に基づく大学専門英語教育のための効果的シラバスと教材開発の研究―平成15年度~平成16年度科学研究費補助金(基盤研究 ◎)研究成果報告書 研究究課題番号 15520362. 〈http://ir.lib.miyazaki-u.ac.jp/dspace/bitstream/10458/1901/1/15520362.pdf〉(Accessed April 17, 2014)

- Chia H-U, Johnson R, Chia H-L, Olive F. 1999. English for college students in Taiwan: a study of perceptions of English needs in a medical context. English for Specific Purposes 18(2):107-119
- 16. Hwang Y, Lin S. 2010. A study of medical students' linguistic needs in Taiwan. *The Asian ESP Journal* **6**(1):35-58.
- 17. Hussin V. 2013. Student and teacher reflections on indirectness as a pragmatic feature of pharmacist–patient simulations. *English for Specific Purposes* **32**(2):110-121.
- 18. Mazdayasna G, Tahririan MH. 2008. Developing a profile of the ESP needs of Iranian students: The case of students of nursing and midwifery. *Journal of English for Academic Purposes* 7(4):277-289.
- 19. Ashida R, Noda C. 2012. EMP at work: Tokyo Medical University. Journal of Medical English Education 11(1):23-25.
- 20. 牧かずみ. 2001. 医学英語教育のあり方に関する研究:調査結果

- に見る医学生が期待する医学英語教育. Shinshu Medical Journal **49**(4):199-206.
- 21. Jenkins J. 2000. *The phonology of English as an international language*. Oxford: Oxford University Press.
- 22. House J. 2003. Teaching and learning pragmatic fluency in a foreign language: The case of English as a lingua franca. In: Flor AM, Guerra ABF, Guerra AF (eds). *Pragmatic competence and* foreign language teaching. Universitat Jaume I. p. 133-160.
- 23. Kimura M. 2008. A new willingness-based English curriculum versus the proficiency curriculum. *Journal of Medical English Education* **7**(1):36-45.
- 24. Murphey T. 1997. Motivating with near peer role models. In: Visgatis B (ed). JALT 1997 International Conference on Language Teaching and Learning; Tokyo. JALT. p. 201-205.
- Douglas D. 2000. Assessing language for specific purposes.
 Cambridge University Press.

付録1 3年生を対象とした質問紙

本日は、医学英語**Ⅲ**の試験、お疲れ様でした。医学英語の授業内容改善と平成 26 年度から実施される新カリキュラム策定のために、皆さんのご意見を伺います。アンケートへのご回答をどうぞよろしくお願い致します。 *氏名・学籍番号は記入しないで下さい。

医学英語Ⅲを振り返り、一番自分の気持ちに近いと思う数字に○をしてください。 (例:1-----2---(3--)---4-----6)

◆以下の教材は、あなたにとって医学英語を学習する上でどのくらい有益でしたか。

1. Clinical Concepts—臓器別カリキュラムに沿った英語リーディング・テキスト

とても有益だった 1-----2-----3------6 全く有益ではなかった

2. Questions for the Clinician—上記テキストについての臨床医への質問

3. Medical Interviews—ワークシート (OPQRST 等)

4. Medical Interviews—英語ビデオ教材

とても有益だった 1-----3-----4 全く有益ではなかった

5. 医学英語Ⅲに対するあなたの満足度の高さはどのくらいでしたか。

6. 1 学期間の医学英語を振り返り、授業やカリキュラムに関するコメントや改善点などあれば、ぜひお聞かせください。

(裏面もご利用ください)

◆今後、医学英語に取り入れる項目について伺います。以下の項目(7~11)は、何年次の医学英語に 取り入れるのが理想的ですか。もしよろしければ理由も合わせてご記入ください。

[7~11 の回答→		a. 1~2 年	b. 3~4 年	c. 5~6 年	d. 1~6 年通して	e. 必要なし
		回答欄					
7.	医療面接		_ 理由:				
8.	研究論文		理由:				
9.	口頭発表		理由:				
10).症例報告		理由:				
11	. 医学用語		理由:				

*付録1には、質問6の自由記述書書き込み欄は圧縮して掲載した。

Overcoming challenges in a basic history taking course for first-year students at Nihon University School of Medicine

Eric H. Jego,* Takayuki Oshimi* and James C. Thomas**

- * Division of Medical Education Planning and Development, Nihon University School of Medicine
- ** Center for Medical Education, Keio University School of Medicine

Keywords doctor-patient communication, role-play, 1st-year medical students

J Med Eng Educ (2014) 13 (3): 77-79

1. The problems we faced

At Nihon University School of Medicine, students begin their medical interview English education in their first year in an English oral communications course. Our challenge was to enable our first-year students to acquire the communication and interpersonal skills needed to be able to conduct basic medical history taking. A major problem was getting students to move beyond the rote memorising of patient-directed questions towards effective information gathering and rapport building to lay the foundations for developing clinical reasoning skills in the future.

2. What we tried

To address the challenge, we developed a mandatory 45-hour medical English conversation course. Students are divided into two groups according to student numbers, and the lessons are held during the first and second periods and last for 90 minutes each. The course content is based on a collection of videos of authentic doctor-patient interviews called "English for Medical Purposes" that is available as a free online resource from Tokyo Medical University (www. emp-tmu.net). First-year students have very limited medical training; therefore, the course focuses on communication, interpersonal skills, and rapport building. A major part of the assessment is a final examination interview consisting of a role-play between the student as the doctor and the

Corresponding author:

Takavuki Oshimi MD

Division of Medical Education Planning and Development, Nihon University School of Medicine

30-1 Oyaguchi Kamicho Itabashi-ku, Tokyo, 173-8610 JAPAN Tel: 81-3-3972-8111 (ext2350)

E-mail: oshimi.takayuki@nihon-u.ac.jp

instructor as the patient. We identified our assessment criteria in a detailed rubric that includes points for each appropriate question asked, as well as other components including controlling the conversation, non-verbal communication (including eye contact), and appropriate gestures (refer to **Appendix 1**).

3. What we learned

This full-year course first started in the spring of 1999, and over the past 6 years the course has been progressively modified and refined to address various shortcomings. After 2 years, a number of issues emerged as a result of an analysis of video recordings of students playing the role of doctor in a doctor-patient role-play interview examination. Simply teaching Japanese medical students the key questions used during a medical interview and having them practise roleplays using those questions is insufficient, because students tend to focus only on producing the questions correctly. Video analysis showed that they often disregarded the appropriateness of the questions, neglected reasoning when asking questions, and did not sufficiently comprehend or appropriately respond to their patients. These problems were particularly conspicuous when video footage of those first-year students' final interview examinations was reviewed, showing that students at that time (winter 2010) had very limited active listening abilities.

4. What we changed

Starting the next school year (April 2010), we responded by adding more robust and specific instruction to our first-year classes, emphasising how to overcome communication difficulties quickly. We introduced what we call the "3-second rule". The rule is that when engaged in a conversation,

a pause of 3 seconds or more is not permitted. Students were taught how to effectively use a variety of phrases such as "Please speak more slowly", "Could you use simpler English please?" and "Pardon me" to empower them to resolve difficulties in less than 3 seconds. Video evidence of student performances of this group during the final examination interview revealed many more instances of effective active listening and 3-second rule usage as compared with the previous year's student video performances. We surmise this was a direct result of introducing the 3-second rule. This marked a positive change contributing to improved communicative competence among our students; however, the issue of students not seeming to understand enough of what the patient was saying remained.

Building on the previous year's success, we added a comprehension component with multiple content questions on the final interview examination for 2012 to attempt to address listening comprehension issues. During the course, we reinforced a renewed emphasis on the importance of gathering the correct information from patients by confirming details and using the 3-second rule. We also made it clear to students periodically through the year that a new comprehension component would be added to the evaluation for the first time. This listening comprehension component (see section VI in Appendix 1) required students to answer questions about the content of the interview after the interview was finished.

5. The effect of the changes

Video examination results showed improvements in listening, questioning, information gathering, and confirming details. The assessment, which included a performance-based role-play and a post-interview comprehension component, improved overall student performance dramatically. Video footage of the interviews showed an obvious increase in proficiency compared with the previous year's students. In line with well-established best practices of language testing and communicative competence education, the interview examination attempted to reproduce the real-life language usage situation as closely as possible while considering the relevant aspects of communicative competence (1–3). As such, the added dimension of a comprehension

component at the end of the interview ultimately served as an effective means to make the interview more realistic by providing a consequence for not understanding what the patient said during the interview. In other words, students were compelled to listen carefully, to engage their active listening skills, and apply strategies like the 3-second rule, because they knew they were going to be required to answer questions about the patient interview immediately afterwards. This proved to be a very effective strategy in terms of examination modification to improve student performance. No longer were students able to simply repeat the questions they memorized and ignore all the patient responses—they had to listen and think about appropriate subsequent questions. They also had to use whatever means possible to understand the patient in order to be able to answer the post-interview comprehension questions.

6. Conclusion

A medical English course for first-year students using authentic materials and performance-based assessment can be a key building block for future clinical reasoning skills training. The factors which led to improved performance were the 3-second rule and the inclusion of a post-interview comprehension assessment component. We are currently implementing other assessment strategies, including extensive use of the popular Learning Management System Moodle, and are planning an impact report in the future.

References

- Bachman LF, Palmer AS. 1996. Language testing in practice: designing and developing useful language tests. Oxford applied linguistics.
- Canale M, Swain M. 1980. Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing. Appl Linguist I (1):1–47.
- 3. Bygate M, Swain M, Skehan P. 2013. Researching Pedagogic Tasks: Second Language Learning, Teaching, and Testing. Routledge; 2013. Available at: http://books.google.com/books?id=5otEAgAAQBAJ&pgis=1. Accessed on Aug 28, 2014.
- 4. United States Medical Licensing Examination Step 2 CS (Clinical Skills). Federation of State Medical Boards (FSMB) Examiners, National Board of Medical. 2014. Available at: http://www.usmle. org/step-2-cs/. Accessed on Aug 28, 2014.

Appendix 1

	Name: ID:
	Interview Skills Evaluation (Medical History Taking)
I	Number of Questions (up to 12 pts)
(ICE)	0 pts: Student asked no appropriate or relevant questions
	2-12 pts: 2 pts for each appropriate and relevant question (maximum 12 pts for this section)
II	Non-Verbal Communication (up to 3 pts)
(CIS)	0 pts: Student made no eye contact and/or OFTEN used inappropriate body language
	1 pt: Student made very little eye contact and/or SOMETIMES used inappropriate body language
	2 pts: Student made acceptable eye contact and/or used inappropriate body language only once
	3 pts: Student made excellent eye contact eye contact and NEVER used inappropriate body language
III	Controlling the Conversation (up to 3 pts)
(CIS)	0 pts: Student paused inappropriately for more than 2 seconds more than twice
	and/or showed NO evidence of understanding content or caring about the patient
	1 pt: Student paused inappropriately for more than 2 seconds once or twice
	and/or made LITTLE attempt to show understanding/caring
	2 pts: Student controlled the conversation by attempting to ask for clarification and/or repetition when needed with no long pauses
	3 pts: Student confidently and politely interrupted the patient when necessary and controlled the conversation
	competently and smoothly with no long pauses and/or used active listening cues to effectively show understanding/caring
IV	English Usage (start with 3 pts)
(SEP)	-1 pt for every instance of language usage that would likely interfere with a patient's ability to understand
v	Pronunciation (start with 3 pts)
(SEP)	$\textbf{-1} \ pt \ for \ every \ instance \ of \ pronunciation \ that \ would \ likely \ interfere \ with \ a \ patient's \ ability \ to \ understand$
Aft	er the interview, student will attempt to answer questions about the content of the interview.
VI	Understanding Content (up to 6 pts)
(ICE/	0 pts: Student failed to correctly answer all 3 post-interview content questions and/or failed to identify the chief concern
SEP)	2-6 pts: Student correctly answered 1, 2 or 3 post-interview content questions (2 pts for each correct answer)

			I	II	III	IV	V	VI	
ID	Given Name	Family Name	# of Questions	Non-Verbal Communication	Controlling the Conversation	English Usage	Pronunciation	Understanding Content	TOTAL (30 points)
						2			
					× .	,			
							-		
8						1			
									-
0.									
							,		

Note that (ICE), (CIS), and (SEP) refer to Integrated Clinical Encounter, Communication and Interpersonal Skills, and Spoken English Proficiency respectively as described in the USMLE Step 2 Clinical Skills Scoring (http://www.usmle.org/pdfs/step-2-cs/cs-info-manual.pdf pages 11-12)

 $\label{lem:condition} Adapted from USMLE Step 3 Clinical Skills (CS) Content Description and General Information (http://www.usmle.org/pdfs/step-2-cs/cs-info-manual.pdf) (4)$

Hamamatsu University School of Medicine

浜松医科大学は昭和49年に開学した、静岡県で唯一の医学部を設置する単科大学である。開学して以来、静岡県で唯一の医学部を設置する単科大学として、教育・研究・診療の各方面に貢献してきた。医学科に加え、平成7年には看護学科が設置された。現在では、3名の英語教員が両学科の教育にあたっている。いずれの学科においても、英語の必修科目は大半が1・2年次に開講されている。医学英語に焦点をおいた科目が多く、高いコミュニケーション能力を身につけた医師や看護師になることを目指した教育が行われているのが特色である。

Hamamatsu University School of Medicine has been conducting education, research, and medical care as the one and only medical school in Shizuoka Prefecture since its establishment in 1974. In 1995, the faculty of nursing was added to the university. The English teaching faculty members at HUSM are in charge of English education for both medical and nursing students. Our required English curriculum at HUSM currently takes place mostly in the 1st and 2nd years of study for both medical and nursing students. Most of our English classes focus on English for Medical Purposes with a goal of preparing our students to be competent medical communicators in their future.

1. Introduction

Hamamatsu University School of Medicine (HUSM) is a national university of medicine in Shizuoka Prefecture that was founded in 1974. There are two undergraduate major areas of study: medicine and nursing. The English teachers at HUSM are members of the Department of Integrated Human Sciences and are responsible for teaching English to both the medical and nursing students.

2. Hamamatsu University School of Medicine English Teaching Faculty

There are three full-time English teachers at HUSM: Professor Minako Nakayasu, Associate Professor Christine Kuramoto, and Foreign Language Instructor Gregory O'Dowd. In addition, there are 4 part-time teachers, who teach 1 or 2 classes per week. The following introduces and explains our current English curriculum.

3. Hamamatsu University School of Medicine English Program

3.1. Objectives

Our English courses focus on improving students' listening, speaking, reading, and writing skills through the integration of individual faculty members' strengths and interests. Our English professor is currently working on a grant project in linguistics; the Associate professor is working on grant projects in active learning, servicelearning, and two grants for simulated-patient education; and our full-time lecturer is working on a grant for problem-based learning research. Our English courses are flexible enough to encourage students to develop a diverse array of interests necessary for professional and personal success. In order to further enhance students' motivation in learning English, we also provide the ALC NetAcademy 2 e-learning program to encourage interactive, self-directed learning outside of the classroom.

3.2. Required Courses

Medical Students

English IA: 1st-year students, 4 groups of approximately 30 students each, 90 minutes x 30 lessons/year. Two full-time instructors teach 2 groups first semester for 15 weeks, and then switch groups for the following 15 weeks in the second semester.

English IB: 1st-year students, 4 groups of approximately 30 students each, 90 minutes x 30 lessons/year. Two instructors (one full-time, one part-time) teach 2 groups first semester for 15 weeks, and then switch groups for the following 15 weeks in the second semester.

English Conversation I: 1st-year students, 2 groups of approximately 60 students each, 90 minutes x 15 lessons/semester. One full-time instructor teaches both groups in the second semester.

English Conversation II: 2nd-year students, 2 groups of approximately 60 students each, 90 minutes x 15 lessons/semester. One full-time instructor teaches both groups in the first semester.

English II: 2nd-year students, 3 groups of approximately 40 students each, 90 minutes x 30 lessons/year. One full-time instructor and 2 part-time instructors teach the 3 groups for 15 classes then change groups for the next 15 classes.

Nursing Students

English I: 1st-year students, 2 groups of approximately 30 students each, 90 minutes x 15 lessons/semester. One full-time instructor teaches both groups in the first semester.

English II: 1st-year students, 2 groups of approximately 30 students each, 90 minutes x 15 lessons/semester. One full-time instructor teaches both groups in the second semester.

English III: 2nd-year students, 2 groups of approximately 30 students each, 90 minutes x 15 lessons/semester. One part-time instructor teaches both groups in the first semester.

English IV: 3rd-year students, 2 groups of approximately 35 students each, including 10 transfer students who entered as medical students in the first semester of the 2nd year, 90





minutes x 15 lessons/semester. Two full-time instructors teach one group each and switch halfway through the semester.

3.2.1 Electives

Medical Students

English Conversation III: 3rd-year students, one small class (fewer than 10, numbers vary), 90 minutes x 30 lessons/year. One full-time instructor teaches the class.

English III: 4th-year students, one small class (fewer than 10, numbers vary), 90 minutes x 15 lessons/semester. One full-time instructor teaches the class in the first semester.

Nursing Students

English Conversation: 1st-year students plus 3rd- or 4th-year transfer students who entered as nursing majors from other universities in the 3rd year, so are eligible to take this 1st-year class if they did not take an equivalent class at their previous institution, one small class (num-

bers vary), 90 minutes x 15 lessons/semester. One full-time instructor teaches the class in the first semester.

Medical and Nursing Students

International Service-Learning (photos A and B): 1st- to 4th- year medical and 1st- and 2nd-year nursing students are eligible for this course. The Associate Professor gives orientation lectures and leads the team of students who are taking the course along with other members joining the team from around Japan to Nicaragua every March to work in rural clinics with a USA-based NPO. The credit for this class is applied to the following school year.

3.3. Evaluation

Grading criteria are determined by the teacher in charge. In addition to individual instructor evaluation criteria, all 1st-year students are required to complete 4 hours of e-learning per semester outside of class time in order to pass English 1A (medical) or English 1 (nursing).

3.4. Content

Although our course titles have remained generic, having been passed down from a previous generation, most of the English courses at HUSM are now focused on medicine and nursing, with the exception of the English 2 classes taught by part-time instructors.

In the first year, medical students have early exposure to Medical English through the use of Tokyo Medical University's EMP systems-based materials. In addition, 1st-year students cover the basics of medical interviews and get the opportunity to do medical interviews in English with English-speaking simulated patients (photo C). In 2nd-year English Conversation 2 class, lessons are focused on doctor/patient communication.

HUSM classes that require textbooks are currently using the following titles.

Medical Students

Healthtalk 3rd edition, Bert McBean: Macmillan Language House, 2014.

Basic steps to writing research papers, David E.



Kluge, M.A. Taylor, Cengage Learning, 2007. Signs and symptoms: True stories by doctor, H. Kinoshita, et al, Nan'un-do, 2014.

Nursing Students

Reading fusion 1, A.E. Bennett, Nan'un-do, 2011.

CLIL health sciences, S. Sasajima et al, Sanshusha, 2013.

Better health for every day, T. Nishihara, et al, Kinseido, 2014.

Nursing 1 (Oxford English for Careers), T. Grice, Oxford University Press, 2007.

4. Other Activities

HUSM offers many opportunities for students to use their English skills outside of the class-room. In addition to the International Service-Learning course listed above, there are several international clerkships available to upperclassmen. In 2014, HUSM students participated in clerkships in Poland, Germany, the USA, and the UK. There are also clerkships available in China, Korea, and Turkey. All clerkships require a high level of English proficiency and are motivating students to continue to improve their English.

5. The Future

HUSM is now making a new curriculum which will be implemented at the beginning of the 2016 academic year. The English courses will also be undergoing some major revisions. As in other medical schools in Japan which are working toward global accreditation, there is a gap

between the number of hours available for teaching and the desired curriculum which would include English throughout the entire education of our medical students. In addition, even if we could schedule English courses throughout the six-year curriculum, there are currently not enough English faculty members at HUSM to take on these classes. We hope to continue to learn from our colleagues at JASMEE as we work to improve the medical English education we are providing to our students.

Christine Kuramoto and Minako Nakayasu

Contact Person: Christine Kuramoto

Associate Professor, Department of Integrated Human Sciences, English

Hamamatsu University School of Medicine

1-20-1 Handayama, Higashi-ku, Hamamatsu City, Shizuoka 431-3192

Tel: +81-53-435-2227

Email: christie@hama-med.ac.jp

日本医学英語教育学会

医学教育のグローバルスタンダードに対応するための 医学英語教育ガイドライン(案)

日本医学英語教育学会 ガイドライン委員会

福沢嘉孝,1一杉正仁,2石井誠一,3亀岡淳一,3建部一夫,4高田 淳,5服部しのぶ,6

廣川慎一郎,7森 茂,8守屋利佳,9Raoul Breugelmans,10吉岡 俊正11

- 1委員長・愛知医科大学医学部医学教育センター、2副委員長・滋賀医科大学社会医学講座、
- ③東北大学大学院医学系研究科医学教育推進センター、4順天堂大学医学部医学教育研究室、5高知大学医学部医学教育創造・推進室、
- ⁶藤田保健衛生大学医療科学部臨床工学科,⁷富山大学大学院医学薬学研究部医学教育学,⁸大分大学医学部応用言語学(英語),
- ◦北里大学医学部医学教育研究開発センター,10東京医科大学医学教育学講座,11東京女子医科大学

従来より、日本の医学教育は世界基準からほど遠く、 'ガラパゴス' 化しているといわれてきたが、2010年以降、漸く "黒船襲来"的な新しい潮流が到来した。これこそが所謂『2023年問題』であり、世界医学教育連盟(WFME)のグローバルスタンダード評価基準に準拠した医学教育を受けている医科大学・医学部の卒業生以外には、米国医師国家試験 (USMLE)の受験資格を認めない方針をECFMG (Educational Commission for Foreign Medical Graduates) が宣言したのである

この新しい流れの中で、日本の医学英語教育もグローバル化の潮流にフレキシブルに対応すべく、変わらざるを得ない状況に直面している。WFME評価基準項目内には、内容的に医学英語教育との密接な関連項目が多数含まれており、各医科大学・医学部においても早急に自己点検・評価を実施し、各々独自性を有している医学英語教育手法がそれに対応しているか否かをチェックし、質の改善・改革を図る必要性がある。

以上の背景を鑑み、本学会としても医学教育のグローバルスタンダードに対応するための医学英語教育のガイドラインを作成・提言すべきではないかとの気運が理事会から高まり、ガイドラインワーキンググループ (WG)が2013年9月に組織された次第である (2014年7月に委員会に改組)。

本ガイドラインは (1) Vocabulary, (2) Reading, (3) Writing, (4) Communicationの4部門から成り, 各々の部門の到達目標を1. Minimum requirement, 2. Advanced requirementの各々2つに分類している。

第17回学術集会においてWGの各部門の代表者(責任者)から中間報告が行われ、参加者との意見交換を経て、今回、広く意見を公募することとした。本案についてのご意見を2014年11月30日(日)まで受け付けるので、下記の学会事務局までお送りいただければ幸いである。

●日本医学英語教育学会事務局

〒162-0845 東京都新宿区市谷本村町2-30 メジカルビュー社内

E-mail: jasmee@medicalview.co.jp, FAX: 03-5228-2062

J Med Eng Educ (2014) 13 (3): 84-88

前文

近年、社会においてはグローバル化が求められているが、それは医学・医療の領域でも例外ではない。現状の教育では、教員は医学用語を日本語だけで指導しがちであり、また医学生は英語版の教科書を見ることもなく学習することが少なくない。その結果として、我が国は他国に比べ、TOEFL-iBTやIELTSの成績が低いという現状を導いている。すなわち、医学英語の運用能力にも支障をきたすことになる。

医学に関する英語は多くの医科大学・医学部等で教育されているが、その教育内容や到達度の目標設定は統一されていない。したがって、十分な教育を受けていない人は、

Corresponding author:

福沢嘉孝

愛知医科大学医学部医学教育センター

〒480-1195 愛知県長久手市岩作雁又1-1

E-mail: jasmee@medicalview.co.jp, yofuku@aichi-med-u.ac.jp

医療現場や医学研究の現場で、十分に医学英語を活用できないことがある。そこで、日本医学英語教育学会(JAS-MEE)では、英語が母語ではない日本の医学生の、医学・医療の現場における、読み・書き・聴き・話すという医学英語能力の向上を目標に、日本における医学英語教育のガイドラインを提案する。

本ガイドラインの作成にあたっては、2013年に日本医学教育学会から提示された『医学教育分野別評価基準日本版 (世界医学教育連盟(WFME)グローバルスタンダード2012年版準拠)』を参考とし、医学教育の国際的基準に合致するために必要な英語運用能力の習得を主眼とした。

この評価基準を参考に、本ガイドラインでは「英語で教科書・論文を読み、理解できる」「患者に英語で面接し診察できる」「学会等において英語で発表討論できる」ということを到達目標とする。その目標達成のために教員は普段から医学英語を講義で使うように心がけることが望まれ、学生は英語ではどう表現するのかを考えながら学習することが望まれる。

本ガイドラインは、医学英語学習における必要最低限の目標を示しているに過ぎず、各教育機関における個々の取り組みを規制するものではない。すでに多数の医科大学・医学部等で独自の取り組みがなされていることを踏まえ、さらなる発展を奨励するものである。また、今後の医学英語教育の発展により本ガイドライン自体が改訂・改良されることが望ましいと考えている。

本ガイドラインにより医学英語教育が発展し、わが国の 医学・医療が国際的に評価されることを願ってやまない。

2014年7月

日本医学英語教育学会 ガイドライン委員会 委員一同

注 *TOEFL-iBTスコアに関する報告はhttps://www.ets.org/で参照可能 *IELTSスコアに関する報告はhttp://www.ielts.org/で参照可能

【本ガイドラインの構成】

本ガイドラインにおいては、英語運用能力を下記の4項目に分類している。

- (1) Vocabulary
- (2) Reading
- (3) Writing
- (4) Communication

学習の到達目標として、医学部卒業時に全員が習得すべき内容をMinimum requirement、全員が習得する必要はないが、さらなる能力向上のために習得が望ましい内容をAdvanced requirementと定義した。そして前記の4運用能力それぞれに対して、学習目標を大別して具体的に示した。

【本ガイドラインと医学教育分野別評価基準との対応】

「医学教育分野別評価基準」は直截的に医学英語教育に関わるものではないが、その内容として医学英語の運用能力が求められるものが少なくない。具体的には下記の各項目が挙げられる。本ガイドラインでは、これらの目標に到達できるために必要な能力の習得を目安としている。

医学教育分野別評価基準の収載項目	必要となる医学英語運用能力
国際保健 (Q 1.1.2): 国際的な健康障害の認識, 不平等や不正による健康への影響	・医学文献のreading能力
などの認識を含む)	・臨床におけるcommunication能力
生涯学習 (B1.1.6):評価,審査,自己報告,または認定された継続専門職教育	・生涯学習を行う上での情報収集のための英文資料の
(continuing professional development: CPD)/医学生涯教育 (continuing medical education:	reading 能力
CME) などの活動を通して、知識と技能を最新の状態で維持する職業上の責務	
社会的責任 (B 1.1.7):地域あるいは国際的な医学の発展に貢献する意思と能力を	・医学文献のreading・writing能力
含む。	・臨床や研究におけるcommunication能力
EBM (科学的根拠に基づく医学) (B 2.2.3)	・医学文献等,種々の情報・資料のreading能力
他教育機関との国内・国際的な協力 (B 6.6.1):適切な資源を提供することによっ	・専門家どうしのcommunication能力
て,教員と学生の国内・国際的な教職員と学生の交流を促進すべきである(Q	
6.6.1)	
全体的な学習成果 (Q 7.1.3): 医師国家試験の成績, ベンチマークの評価, 国際的	・試験に対応するreading・writing能力
試験、職業選択、大学卒業後の業績などから測られる。	

(1) Vocabulary

1. Minimum requirement

- ・身体の部位と機能, 医療・健康に関する基本的な専門用語を理解し使うことができる。
- ・医学英単語を使い、必要な情報を英語テキストや web上で検索できる。

[具体的な日安]

〈基本的な英単語(一般用語と専門用語語彙)〉

- ・「身体の部位と機能」,「症状, 徴候」,「検査,診療行為,診療器具」,「疾患,診断」に関する基本的な専門用語を理解し使うことができる。
- 注 基本的な専門用語:医師国家試験出題基準に記載されている 医学用語に相当する英語表記。

〈英語表現〉

- ・「医療面接」、「身体診察」、「患者への病状説明や指示・ 指導」「医療情報(カルテ、電子カルテ)記載」、「症例プ レゼンテーション」で必要な基本的な英語表現を使うこ とができる。
- ・医学・医療の研究に必要な英単語、英語表現の情報を英語テキストやweb上で検索できる。

2. Advanced requirement

- ・医療・健康に必要な英単語,英語表現を十分に理解 できる。
- ・医学・医療の研究に必要な英単語,英語表現の情報 を十分に利用できる。

[具体的な目安]

〈医学英語用語〉

- ・臨床研修, 診療実践のための医学用語を理解し, 英語で 医療に従事できる。
- ・一般用語と専門用語の語彙を理解し使い分けながら、患者に説明できる。
- ・医学英単語を駆使し、その意味も解説しながら臨床参加 型実習の指導ができる。
- ・医学英単語を駆使し、論文執筆や学会発表・討論ができる。
- ・医学英単語を駆使し、その意味も解説しながら講義やディスカッションができる。

〈医学英語表現〉

・頻繁に辞書を引くことなく, 英語の成書や論文を自由に 使い, 学習することができる。

(2) Reading

1. Minimum requirement

- ・医療・健康に必要な基本的な医学英語が理解できる。
- ・医学・医療の研究の基礎に必要な医学英語が理解で きる。

[具体的な目安]

〈診療〉

- ・基本的な身体機能及び疾患の英語表記を理解できる。
- ・基本的な症状、徴候の英語表記を理解できる。
- ・基本的な診察所見,診療行為,診療器具の英語表記を理解できる。
- ・基本疾患(モデル・コア・カリキュラムに収載されている)について英語の資料を読み、内容を理解できる。

〈研究〉

- ・英語の文献検索を行い、目的とする英語論文のabstract を読んで理解できる。
- ・医学英語論文の基本的な構造を理解できる (abstract, introduction, methods, results, discussion, references)。

2. Advanced requirement

- ・医療・健康に必要な医学英語を十分に理解できる。
- ・医学・医療の研究に必要な医学英語資料を十分に理 解できる。

[具体的な目安]

〈医療・健康〉

・患者の症候や病態をもとに, 英語の資料を利用して問題 点を解決できる。

〈研究〉

- ・英文の症例報告の内容がおおむね理解できる。
- ・最新の医学的知識を英文で理解できる。すなわち、診療 や研究に関する英語資料の内容がおおむね理解できる。

(3) Writing

1. Minimum requirement

- ・テクニカル・ライティングができる。
- ・医学・医療関連のインフォーマルなコミュニケーション英文が書ける。
- ・医学・医療の英文abstractを書ける。

[具体的な目安]

〈テクニカル・ライティング〉

- ・テクニカル・ライティングの存在を知っている。
- ・伝えたい内容を的確にまとめる特殊技術(レトリック)である点
- ・文法・語彙が正しいだけでは不十分である点
- ・日本語でのライティングにも共通の技術である点
- ・パラグラフ・ライティングができる。
- ・各パラグラフに一つだけ論点/主張を置く。その論点を述べる 文をtopic sentenceといい,通常パラグラフの冒頭(または最後) におく。残りの部分は,その論点を補強・拡充するための論証 や例示にあてる。
- ・一貫性(coherence)の保たれた文章を書ける。
 - ・文単位で
 - ・パラグラフ単位で
- ・明確(clear)かつ簡潔(concise)な文章を書ける。
- ・推敲(self-editing)ができる。

〈一般のコミュニケーション英文〉

- ・基本的な文法(punctuationを含む)を知っている。
- ・基本的な語彙(医学用語を含む)を知っている。
- ・応用的な文法・語彙を調べながら運用できる。
 - ・辞書・参考書・インターネット(Googleフレーズ検索・ワイルドカード検索、コーパス等)等を用いて検索できる。
- ・インフォーマル文書(e-mail, etc.)を書ける。

〈医学英語論文 (およびそれに準じたレポート)〉

- ・医学論文に必要な要素を理解している。
 - ・新規性(novelty)と重要性(significance)の2大要素。
 - ・他の論文を参考にして良いが、倫理的に問題(剽窃plagiarism、 捏造fabricationなど)がないこと。
- ・英文abstractを自分で書ける。
 - ・モデルとなりうる英文abstractを検索できる。
 - ・英文abstractの構造(introduction, body, conclusion)に従って書ける。

2. Advanced requirement

- ・医学・医療関連のフォーマルなコミュニケーション 英文が書ける。
- ・医学・医療の英語論文を書ける。

[具体的な目安]

〈医学・医療を含む一般のコミュニケーション英文〉

· 各種 フォーマル 文書 (curriculum vitae, cover letter, reference letter, etc.) のフォーマットを検索して、それに基づいた文書を書ける。

〈医学・医療の英語論文(およびそれに準じたレポート)〉

- ・英語論文を指導のもとに書ける。
 - ・モデルとなりうる英語論文を検索できる。
 - ・英語論文の構造(introduction, methods, results, discussion, references) に従って書ける。

(4) Communication

1. Minimum requirement

- ・英語で患者さんを案内することや良好な関係を築く ことができ、基本的な医療面接を行える。
- ・英語で医学・医療の研究成果の簡単な発表と質疑応 答ができる。
- 注 Minimum requirementは「国内における外国人患者さんへの対応」を前提とする。

[具体的な目安]

〈診療〉

・聴解力

- ・一般的な身体表現、症状を聴き取り、理解できる。
- ・専門用語を使用した医療従事者間の会話を聴き取り, 理解できる。

・発話力

- ・初診患者さんの受付や院内誘導などの案内ができる。
- ・挨拶・患者確認、ならびに基本的な医療面接を行える。
- ・患者さんの診察上必要な説明(体位の変換, 指示など) を行える。

〈研究〉

・聴解力

- ・(英語を母語としない人たちを対象とした)国際学会発表などのプレゼンテーションの内容をおおむね理解できる。
- ・(英語を母語としない人たちを対象とした)グループディスカッションでの議論の内容をおおむね理解できる。

・医学・医療関連の英語メディアの情報を聴き取りおお むね理解できる。

・発話力

- ・簡単なプレゼンテーションができる。
- ・グループディスカッションで自分の意見を簡単に述べ ることができる。
- ・簡単な質問に答えることができる。

2. Advanced requirement

- ・英語で診察結果(臨床推論を含む)などを患者さんに 説明し、上級医に報告できる。
- ・英語で医学・医療の研究成果の発表・討論,並びに ネットワーク形成ができる。
- 注 Advanced requirementは「国外での医療活動」を前提とする。

[具体的な目安]

〈診療〉

・聴解力

- ・患者さんの社会的背景, 信条などを聴き取り, 理解で きる。
- ・電話での会話,子供の発音,異なる母語の話者の発音 などを聴き取り,理解できる。

・発話力

- ・患者さんに基本的な診察結果・治療方針(臨床推論を 含む)などを説明できる。
- ・患者さんの状態を上級医に報告し、病態についてディスカッションすることができる。
- ・症例プレゼンテーションとそれに伴う質疑応答ができ る。

〈研究〉

・聴解力

- ・国際学会発表などのプレゼンテーションの内容をおお むね理解できる。
- ・医学・医療関連の英語メディアの情報を聴き取り活用 できる。
- ・グループディスカッションでの議論の内容を理解できる。

・発話力

- ・学会・研究会で発表ができる。
- ・他の発表に対して質問ができる。
- ・グループディスカッションで議論に沿って発言し, 説 明できる。
- ・学会・研究会参加者と懇談やネットワーク形成ができ る。

References

(1) Vocabulary

一般用語

- ・『病院で使える イラスト英単語』(メジカルビュー社)
- ・『これだけは知っておきたい医学英語の基本用語と表現 第3版』 (メジカルビュー社)

専門用語

- ・『トップジャーナルの症例集で学ぶ医学英語』(アルク)
- ・『日本医学英語検定試験3・4級教本 改訂2版』(メジカルビュー社)
- ・「医師国家試験出題基準」必須の基本的事項(大項目18 一般教養 的事項,中項目C 診療に必要な一般的な医学英語)
- ・その他、モデル・コア・カリキュラムに収載されている主要36症 候・病態や索引に書かれている語彙

(2) Reading

- ・『医学英語読解15のポイント』(メジカルビュー社)
- ・『すぐに役立つ! 医学論文読み方のコツ』 (メジカルビュー社)

(3) Writing

- ・『アクセプトされる英語医学論文を書こう!』(メジカルビュー社)
- ・『実例による英文診断書・医療書類の書き方 改訂2版』(メジカルビュー社)
- ・『正しく効果的に伝える医師のための英文Eメールの書き方』(メジカルビュー社)
- ・『医学英語活用辞典』(メジカルビュー社)

(4) Communication

- ・『今日から役立つ! 医師のための英会話フレーズ 500 外来診療編 /学会発表編』(メジカルビュー社)
- ・『外国人患者さんが来ても困らない! 英語で伝える病気のあらま し』 (メジカルビュー社)
- ・『診療現場のリアル英会話』(メジカルビュー社)
- ・『医師のための診療英会話』(メジカルビュー社)
- ・『もうプレゼンで困らない! 和英で引ける医学英語フレーズ辞典』 (メジカルビュー社)
- ・『国際学会English—挨拶・口演・発表・質問・座長進行』(医歯薬 出版)

(5) Textbooks

・日本医学英語教育学会(編)『講義録 医学英語I, II, III』 (メジカルビュー社)

(6) Websites

- $\textbf{\cdot UpToDate} \ (\textbf{Wolters Kluwer}) \ \langle \textbf{http://www.uptodate.com/ja/home} \rangle$
- DynaMed (EBSCO Publishing)

\http://www.ebsco.co.jp/medical/dynamed/>

- ・医中誌Web (医学中央雑誌刊行会) 〈http://login.jamas.or.jp/〉
- \cdot **Ovid** (Wolters Kluwer) \langle http://www.ovid.jp/site/index.html \rangle
- Best Practice (BMJ Publishing Group)

 $\langle \text{http://clinicalevidence.bmj.com/x/index.html} \rangle$

- $\textbf{\cdot STAT!Ref} \; (\textbf{Teton Data Systems}) \, \langle \textbf{http://www.statref.com/} \rangle$
- Henry Stewart Talks (Henry Stewart Talks Ltd.) \(\http://hstalks.com/ \rangle \)
- ・プロシージャーズコンサルト・日本版(エルゼビア・ジャパン) 〈http://proceduresconsult.jp/〉
- ・クリニカル・キー (エルゼビア・ジャパン)

 $\langle \text{http://www.clinicalkey.jp/} \rangle$

・今日の臨床サポート (エルゼビア・ジャパン)〈http://clinicalsup.jp/〉

Writing Tips

Basic formatting

Timothy D. Minton

Most writers devote much more attention to content than to format, and quite rightly so. However, many pay so little attention to basic formatting that they end up shooting themselves in the foot, as the writer of a recent letter to *The Independent* (a UK daily) is keen to point out:

This summer I reviewed well over 500 CVs from applicants for the 20 or so graduate positions our fast-growing technology company had on offer. Just over half of those applicants were in the reject pile within one minute of their submissions being opened. Spelling mistakes, typographical errors, random capitalisation and eclectic font use accounted for the majority.

I think it is safe to say that few papers submitted to academic journals reach the reject pile quite that rapidly, but it is probably also safe to say that most journal editors feel sorely tempted to aim many submissions straight at the bin for reasons similar to the ones cited above. I speak not particularly as a JMEE editor, but as someone with years of experience of editing papers submitted to various journals. I am regularly amazed by how little consideration some writers seem to give to the initial impression their submissions are going to make on the editors and reviewers.

There are perhaps three main causes of formatting problems in submissions to academic journals: 1. inattention to the target journal's instructions to authors, 2. poor computer skills, and 3. poor writing skills. There are other less common causes, of course, including amusingly feeble attempts at deception – all veteran editors will have come across excessively long papers trying to look short by means of 0.5-cm margins and tiny fonts, or short papers trying to look long with 6-cm margins, triple line spacing and gigantic fonts!

Instructions to authors

Ignoring instructions to authors does not necessarily lead to the more egregious formatting errors caused by poor computer or writing skills, but it does indicate a somewhat lackadaisical approach on the part of the author. Instructions vary substantially from journal to journal, so contributors need to pay attention to specific requirements on margin settings, fonts and font sizes, line spacing, etc. They also need to be aware that the formatting requirements of particular journals may well be different from the default settings on their computers. This Journal's guidelines for authors stipulate, for example, that margins should be set at 30 mm left and right, and 25 mm top and bottom. I suppose that as Editor-in-Chief I should know the reason for this stipulation. Actually, I do not know of any particularly compelling reason, but I do know that the default margin settings on one of my computers (which runs an English version of MS Word) are slightly different, and that those on another (which operates a Japanese version of MS Word) are more than slightly different. Therefore, regardless of which computer I use, I have to make adjustments to meet JMEE's requirements. Unlike some writers, I feel no urge to rebel!

Maybe those who do rebel feel that instructions on such matters are unimportant, because they know that editors can easily make the necessary adjustments with a few clicks of the mouse. Such arguments are unlikely to impress editors and reviewers, though, who will probably feel that not following instructions shows a lack of respect for the journal and a careless attitude on the part of authors. But the important point is that by not following the journal's instructions, authors are likely to create a bad first impression of their submissions and distract the editors from the far more important issue of consideration of the content.

Poor computer skills

People of my generation and above completed our higher education without the help of computers, and some of us think this constitutes a good excuse for poor computer skills. (It does not, at least in academia, because it is difficult to argue that anyone can really keep up in their field without bothering to learn how to use one of the most powerful research tools ever invented.) At the same time, we tend to assume that young people have good computer skills. Having spent most of my adult life in Japan, I cannot comment fairly on the situation in other countries, but my experience of teaching Japanese university students tells me that this is not a safe assumption. Some are extremely proficient, of course, and the speed with which they can, for example, put together an effective PowerPoint presentation is a marvel to behold. On the other hand, basic English word processing is not, generally speaking, one of their fortes. Few students know, for example, that they should use the tab key, and not the space bar, to indent paragraphs. (Many seem to think that each sentence should start on a new line, which suggests that they do not even know what paragraphs are, let alone how to indent them; but that is another story!) Nor do they know how to do such simple things as change default settings, insert page breaks, get rid of right justification, find symbols in English fonts (rather than Japanese fonts), etc., all of which indicates that Japanese schools offer little if any training in English word processing.

The results of these gaping deficiencies in word-processing skills are often very irritating for those who have to correct them. Dealing with the occasional page break that writers have inserted by repeatedly hitting the return key may not be too much of a burden, but reformatting paragraph indents that have been created with the space bar is much more time consuming. And what of double spacing achieved by hitting the return key twice at the end of each

line? Absurd though it may sound, this kind of thing is not unusual! It is also a great pity that so many writers create a bad first impression of perfectly good papers by presenting them poorly. Learning to use writing software is not particularly challenging, especially when compared with the enormous amount of time and effort required to learn how to write in the first place.

Poor writing skills

Other formatting errors are, like semantic and grammatical mistakes, just evidence of poor writing skills in general. However, formatting is a relatively simple part of a highly complex discipline, and it should be one of the first elements people are taught, along with letter/word formation and basic sentence structure. But almost all of us submit to the very human urge to try to run before we can walk, with the inevitable result that some of the more elementary points are glossed over in the learning process.

One of the most fundamental rules of formatting in English, and in many other languages, is that spaces are required between written words. Yet spacing anomalies are probably among the most common errors in papers submitted to academic journals. Idonotmeanthatpeoplewritelikethis (although it is not completely unknown), but incorrect spacing, often in association with numerals, punctuation marks and abbreviations, is rife. To editors and reviewers, it instantly signals a careless or inept writer. Here are some typical examples:

- 1. Fig.2 (Space required between 1. and Fig., and between Fig. and 2)
- 2. Table3 (Space required between Table and 3)
- 3. Neonates weighing 2kg or less are . . . (Space required between 2 and kg)
- 4. We measured titers of pertussis toxin(PT) and filamentous hemagglutinin(FH) in . . . (Space required before each of the two opening parentheses and after each of the two closing parentheses)
- 5. We measured titers of pertussis toxin (PT) and . . . (No space after the opening parenthesis or before the closing parenthesis)
- 6. On the other hand, basic English . . . (Space required between the comma and basic)
- 7. On the other hand ,basic English . . . (Space required after the comma but not before it)
- 8. Key words: dyspepsia, flatulence, autism, (No space between *words* and the colon, and no comma after the final item in the list)

Two useful rules of thumb: numerals and abbreviations are words, and punctuation marks are not spaces. There are exceptions, of course, as with reference citations (no spaces after commas separating numerals). Also, symbols, as opposed to abbreviations, can behave differently. For example, there should be no space between a numeral and the symbol denoting percent. I do not have space to deal extensively with such matters here, but you should look them up in a style manual if you are unsure.

It is perhaps worth mentioning, for the benefit of Japanese readers, that spacing problems are commonly caused by the use of Japanese fonts. For example, if you type "don't" in MS Mincho, you will get what looks like a space after the apostrophe (don't). I also used MS Mincho for the parentheses, with the result that there appears to be a space before the period, even though I did not insert one; the space before the opening parenthesis is also too wide. It should be obvious that using Japanese fonts to write English is an extremely bad idea, but if you need a concrete reason, this is a very good one!

In many cases, more than one formatting style is possible, unless the journal you are targeting specifies which you should use. For example, it is not considered incorrect to insert two spaces between sentences instead of just one. Why anyone would actually want to do this, I have no idea. There was a valid reason for the practice in the days of typewriters, apparently (something to do with typefaces), but it is generally considered old fashioned these days. A more serious problem, though, is that it is an open invitation to inconsistency: you will easily notice if you have failed to insert one space between two sentences (in fact, Bill Gates will alert you to the fact by means of a red squiggly line if you use his software), but you are very likely to miss the occasional single space where you intended to insert two.

Other formatting inconsistencies are relatively easy to spot, and every effort should be made to correct them before submission: mixed fonts and font sizes, mixed line spacing, mixed spelling and punctuation use (American versus British), inconsistent indent and margin sizes, varying citation styles, and so on, and so on.

Conclusion

A paper submitted to an academic journal is, or at least should be, the result of a significant investment of time and effort on the part of the author(s), so it is senseless to risk rejection by paying insufficient attention to basic formatting. I hope the suggestions below will be helpful in reducing this risk.

- 1. Read the instructions to authors and obey them, however trivial and annoying they may seem. Contact the journal in question if any of the instructions are unclear to you.
- 2. Learn to use word-processing software properly, or at least have your paper edited by someone who does know how to use it.
- 3. Use a style manual to check up on any elements of formatting you are unsure of.
- 4. In the process of reviewing your paper, do not forget to look for formatting errors. Pay attention to the help your computer tries to give you in this: green or red squiggly lines mean it thinks something is amiss; the computer will sometimes be wrong, but you should always check.
- 5. Seek the help of several friends and colleagues in the review process it is easy to miss problems in your own writing that other people, looking at it with fresh eyes, will spot immediately.

The last word

Nell Kennedy became the editor of a journal with two names and no clear direction. There was hardly any attempt to scrutinize submissions or to improve manuscripts. Nell wrote the first Instructions to Authors and created guidelines that put the journal on an academic track. When professor Yoshioka and myself were appointed editors we went to Hokkaido to meet Nell, and she handed over the material she had accumulated and provided a wealth of information based on her long experience.

The material was all in long hand, with comments in different coloured ink. Prof. Yoshioka and myself moved the journal to the electronic age; manuscripts, said our revised instructions, should be submitted on CD. Needless to say, in the latest revision of the instructions penned about half a year ago, there is no mention of CDs, as by now all submissions and correspondence are by e-mail.

We appointed several review editors, and the reviewing process is now well established. As editor, I often marveled at the work of the reviewers, who must have spent a substantial amount of time reading the manuscripts and commenting on them. The result was better submissions from which the readers could benefit. There were, of course, exceptions. One reviewer wrote: 'I did meet the author at a conference, and I think she is a nice person'. Nice, but not very helpful and a good case for deleting a reviewer from any future consideration.

The journal is dedicated to Education and is, therefore, unique. Medical English, as the title has it, or English for Medical Purposes (EMP) as the official name of the profession is, may be quite wide in its applications and have other publications. But the issue of how best to teach it is not seriously addressed. It should be. Medical education tends to deal with outcomes and effectiveness. However, as English is the lingua franca of the field and as, even in English speaking countries the medical student needs to learn how to communicate in this specific language, the effective teaching of EMP does merit more attention.

Most of the works published by the journal are about things done by the authors in their classroom. There is much value to this kind of publication as it allows readers to glean the sort of information that may improve their own classes. At the same time, there is a dearth of information about the effectiveness of these methods. This is an area of growth from which our field can benefit.

Interacting with young graduates and doctors, and learning what kind of language is actually used and needed in the field should be an integral part of the EMP experience. Both teachers and lower-level students need to be involved. This should lead to research about the methods and content of teaching that can actually produce the desired results. In this way, improvements in the performance of the EMP teacher will increase the effectiveness of classes and may possibly also bring the clinicians on board and lead to closer cooperation between them and the EMP professional.

The Journal Symposium in last year's conference exposed a deep gap between the clinicians and

EMP teachers. It also showed us that, whereas the EMP teacher may be familiar with the rudiments of clinical practice and language needs, the clinicians are totally ignorant of what language learning is. Without this understanding, improvement of EMP learning in the medical environment will be close to impossible as the expectations of the professional clinicians will not only differ from the work in the language classroom, but the clinicians will not really be aware of what the EMP classes can deliver. If the ability to explain a list of medical words in Japanese is the desired end the teaching of English classes will have to be changed in a radical manner.

JASMEE is unique in that it is composed of both clinicians and EMP teachers. However, the journal has yet to receive the submissions it needs from the clinicians. This is unfortunate since it probably indicates a lack of interest in the journal and, therefore, a continued disregard for the whole field of EMP. Many clinicians run their own, mostly informal, sessions of EMP. I hope that in the near future they will describe some of these sessions in the journal. This may lead to a time when a third, or even half of the works in the journal will be the results of cooperative efforts by clinicians and EMP teachers.

This article is not yet my obituary. I am working on that at the moment. The job of the editor can be stressful: everyone dislikes the idea of telling people off, nagging and informing a writer that his work needs substantial revision; but it is also rewarding in that one gets to have a first peek at what members of the society are doing. I should like to thank all those who had to suffer from my constant pestering, Mr. Eguchi and all members of the editorial committee, mention the help and support of Professor Yoshioka, God bless! And wish the new Supreme Leader, Tim Minton, the best of luck.

Reuben Gerling

投稿申請書

Submission Form

受付番号

(コピー可)

下記の論文を日本医学英語教育学会会誌 Journal of Medical English Education に投稿します。なお、他誌への類似論文の投稿はいたしません。また、採用された場合、本論文の著作権が日本医学英語教育学会に帰属することに同意いたします。

The undersigned authors submit the manuscript detailed below to the Editorial Board of the *Journal of Medical English Education* and request that it be considered for publication. If the manuscript is accepted, we agree to transfer copyright ownership to the Japan Society for Medical English Education.

		Date 申請日
Title 論文題名		
	=+\/	T)
Manuscript classification 分類(ple		
1. Original article (research) 3. Short communication (research		e (teaching methods) nication (teaching methods)
5. Snort communication (research 5. Letter	4. Short commu	mication (teaching methods)
5. Letter		
Author(s) 著者		
Name 氏名・Affiliation 所属		Signature 署名
		_
		_
Cowsonanding Author 语信英字		
Corresponding Author 通信著者		
—————————————————————————————————————		
Contact Address 連絡先 / 校正紙送付先		
TEL FAX	E-I	MAIL

日本医学英語教育学会

Japan Society for Medical English Education

入会のご案内

- 下記のホームページで入会申し込みが可能です。
 http://www.medicalview.co.jp/JASMEE/ nyukai.shtml>
- 2. ゆうちょ銀行の振替口座 (旧・郵便振替口座) に年 会費を振り込んでください。

[平成 26 年度年会費]

個人会員 ¥9,000

学生会員 ¥1,000

替助会員 ¥35,000

[ゆうちょ銀行振替口座]

口座番号 00120 - 7 - 417619

口座名称 日本医学英語教育学会

- ※ 入会申込書の受領ならびに年会費振込の確認をもって、 入会手続きの完了とします。
- ※ 学生会員の年会費には会誌(年3回発行)の購読料が含まれませんのでご注意ください。学生会員で会誌購入 をご希望の場合は個別にお申し込みいただくことになります(1部2,000円)。
- 3. ご不明な点がございましたら、下記の事務局までお問い合わせください。

[問合せ先]

T 162 - 0845

新宿区市谷本村町 2-30 メジカルビュー社内 日本医学英語教育学会 事務局(担当:江口)

TEL 03-5228-2274

FAX 03-5228-2062

E-MAIL jasmee@medicalview.co.jp

URL http://www.medicalview.co.jp/

JASMEE/index.shtml

1. Prospective members can fill the forms and submit them online at:

http://www.medicalview.co.jp/JASMEE/
nyukai_e.shtml>

2. Please transfer the Membership fee through the Japan Post Bank (post office).

Annual fees are ¥9,000 for individual membersihp, ¥1,000 for student membership and ¥35,000 for supporting membership.

Japan Post Bank

Account No. 00120-7-417619,

Account Name "日本医学英語教育学会".

Please note that individual membership fee includes three issues of the Journal, but that student membership fee does not include the journal which is available at an extra payment of \$2,000 per issue.

3. Inquiries and postal applications, including application forms should be addressed to:

The JASMEE Secretariat (Attn: Mr. Junji Eguchi) c/o Medical View

2-30 Ichigaya-hommuracho, Shinjuku-ku, Tokyo 162-0845, Japan

TEL +81-3-5228-2274

FAX +81-3-5228-2062

E-MAIL jasmee@medicalview.co.jp

URL: http://www.medicalview.co.jp/

JASMEE/index.shtml

Journal of Medical English Education Vol.13 No.3

日本医学英語教育学会会誌 2014年10月1日発行 第13巻 第3号 頒価1部3,000円

編集人 ティモシー・D・ミントン 企画 日本医学英語教育学会

発行所 メジカルビュー社 〒162-0845 東京都新宿区市谷本村町2—30 TEL 03-5228-2274/FAX 03-5228-2062/E-MAIL jasmee@medicalview.co.jp (年会費には本誌の購読料を含む)

印刷 三美印刷株式会社