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

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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.

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

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-

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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 facility⁸⁻¹² 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

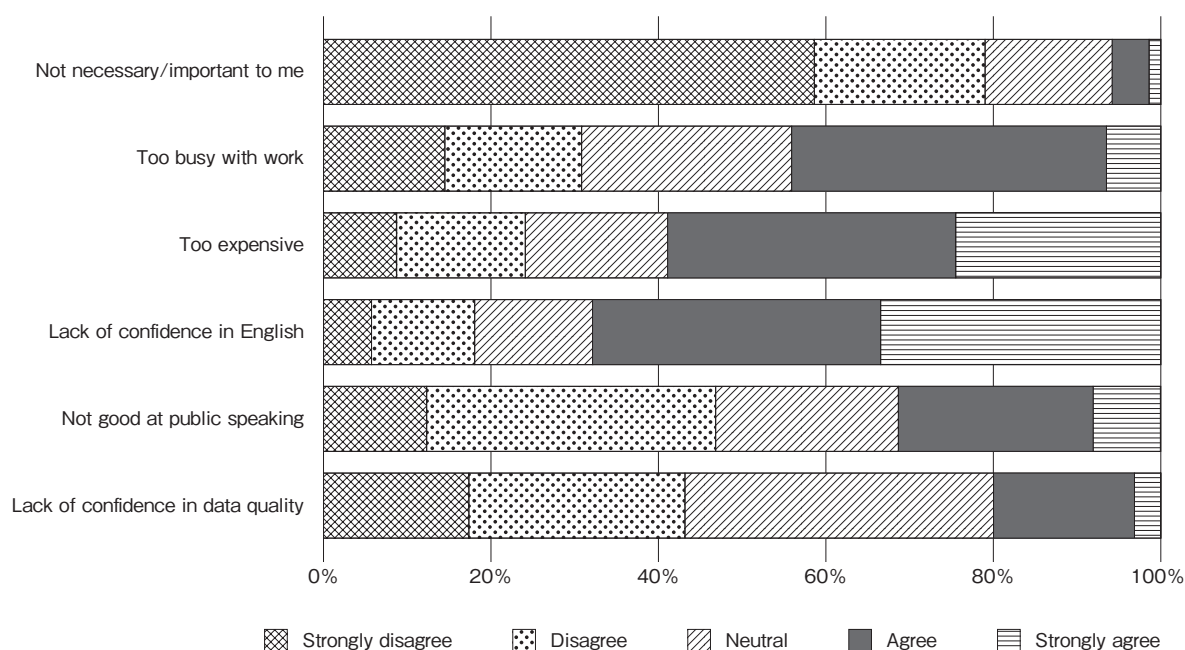


Figure 1. Factors Precluding More Frequent Presentations (N = 200)

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 co-workers 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 were 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,¹³ 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.^{19,20} 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.¹³ 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 partici-

pate 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 post-docs 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.

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References

1. 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).
2. 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]
4. 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).
6. 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.asian-efl-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.
8. 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]
10. 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]
12. 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%20anxiety.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).
16. Nakatani A. 2006. The emergence of 'nurturing fathers': Discourses and practices of fatherhood in contemporary Japan. In: M. Rebeck, 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://ssj.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 Research* **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

Date: _____

Questionnaire on giving oral presentations at international conferences

Department: _____ Age: _____ Gender: _____

1. Have you ever given an oral presentation at an international conference?
☐ Yes ☐ No
2. If "yes," how many times have you done so?
☐ 1 – 3 ☐ 4 – 6 ☐ 7 – 9 ☐ 10 or more
3. Have you ever taken an "English Presentation Skills" type course?
☐ Yes ☐ No
4. Which factors might prevent you from giving oral presentations at international meetings more frequently? For each of the statements below, rate your level of agreement according to the following scale:

1 =	Strongly disagree	4 =	Agree
2 =	Disagree	5 =	Strongly agree
3 =	Neutral		

- | | |
|--|-------|
| A) I don't think presenting at international conferences is necessary/important. | _____ |
| B) I'm too busy with work and job responsibilities to attend such conferences | _____ |
| C) Associated expenses (airfare, lodging, etc.) are too high (i.e. exceed research budgets). | _____ |
| D) I'm not confident in my ability to communicate my results/field questions in English. | _____ |
| E) I'm not good at speaking in front of an audience. | _____ |
| F) I don't think the quality of my data is high enough to present. | _____ |
| G) Other (Please be specific) | _____ |

Appendix 2. Japanese survey as distributed

国際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: _____

1. これまでに国際学会で発表したことがありますか。 ☐ Yes ☐ No
2. 「Yes」でしたら、何度発表しましたか。 ☐ 1-3 ☐ 4-6 ☐ 7-9 ☐ 10以上
3. 以前に学術講演のための英語コースを受けたことがありますか。 ☐ Yes ☐ No
4. あなたが国際学会で、口演やポスター発表をもっと頻回に行う事を妨げているものは何ですか。

以下の項目についてgradingして下さい。

1 = 全く関係ない 2 = 関係ない 3 = どちらともいえない 4 = 関係ある 5 = 非常に関係ある

- A) 国際学会での発表は必要だと思わない。 _____
- B) 仕事や役職業務が忙し過ぎて国際学会に参加できない。 _____
- C) 出張費（航空料金、宿泊費）などが高すぎる（制限されている）。 _____
- D) 英語での口演やディスカッションに自信がない。 _____
- E) 人々の前で発表するのが苦手である。 _____
- F) 自分のリサーチデータは重要度が低いと思う。 _____
- G) その他（理由を挙げてください） _____

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.”