

## Medical ESP Intensive Course Design for Improved Bedside Manner

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### Abstract

During intercultural interactions, medical professionals might be unable to communicate effectively with a patient in Japanese only. In this scenario, practitioners should feel confident that they can adequately communicate well enough in English to relieve patient anxiety by showing that they can listen carefully, understand and explain conditions and modes of treatment. Suggested content and activities for an intensive medical ESP course aim to develop the bedside manner of medical trainees in Japan. There is discussion about the nature of doctor-patient interaction, noting cultural and linguistic features of such discourse. Specific course content focuses on describing the dimensions of pain and coughs with data compiled from the Corpus of Contemporary American English (COCA) (Davies, 2008). An important activity for the ESP course is to practice using the frequent vocabulary from this corpus in various doctor-patient role-plays. Furthermore, to support language acquisition and production, there are suggestions how learners can create their own perpetual English language resources. The intended purpose of these materials is for use in future professional practice with non-Japanese patients whose level of Japanese language proficiency is insufficient for meaningful communication in medical settings.

### 1. Introduction

The intended learning outcomes of this intensive ESP course design are to foster more effective communication strategies and empathy in intercultural interactions between medical practitioners in Japan and their non-Japanese patients. Overall aims include developing socio-pragmatic skills through an awareness of aspects of discourse specific to doctor-patient interactions in various medical contexts. The topics and practice within the course are arranged to develop a medical trainee's intangible, personal touch in patient interaction, highlighting the 'care' in 'health care'. Learners are required to think about the definition of the idiomatic expression 'bedside manner' shown in the Cambridge Dictionary as 'the way in which a doctor treats people who are ill, especially showing kind, friendly and understanding behaviour' and in American English, 'the way a doctor behaves toward people being treated to make them feel comfortable' (Bedside manner, 2018). The suggested course content is not limited to English language learners who are training to become doctors, but is pertinent across a spectrum of Japanese medical practitioners, for instance nurses, dentists, physical therapists and other medical occupations where a practitioner needs to communicate in English with a patient who lacks sufficient Japanese language proficiency for effective medical discourse.

Noting that the suggested course is intensive and therefore relatively short, perhaps 30 or so hours in duration, the content of this paper comprises four main areas of doctor-patient interaction. In the initial phase of the course, there should be some wide-ranging discussion about the nature of medical discourse, practitioner and patient roles in such discourse, as well as perceived and desired functions and outcomes in intercultural

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medical interactions. The second, main section, elaborates on describing aspects of pain. Following this, the description of coughs is the focus, with the content for these sections compiled from the COCA (Davies, 2008). The fourth area of content suggests how Japanese medical trainees can create their own English reference materials. Some advantages of producing these include decreasing the pressure for learners to remember English lexis, syntax, colloquial and idiomatic language. The materials can also help to enhance doctor-patient interaction by reducing time and effort spent trying to communicate meaning. Overall, the course primarily aims to increase confidence in speaking skills and strategies to aid comprehension in conversation, with selective, topic-focused vocabulary instruction and discussion about verbal and non-verbal communication. In addition, course content readily allows a TESOL instructor to raise learner awareness of cultural differences in discourse styles and also expectations that non-Japanese patients might have about the way that doctors communicate with them. Practical methods to help achieve this could include developing and analysing doctor-patient dialogues and through learner role-plays, for instance. A vital component of the course activities is for learners to practice lexical flexibility in order to develop their skills of paraphrase so that they might communicate their intended meaning more clearly to achieve desired outcomes of communication and health care. Essentially, learners will need to think about the evolution of their own bedside manner and practice a wide range of communicative strategies for effective patient interaction in English.

## 2. Contexts of medical interaction

### 2.1 Location

Medical context can include the location of interaction, such as clinics for dentistry, rehabilitation, sports massage, and also local medical clinics, inpatient and outpatient sections of hospitals. More specifically, the context can be in a doctor's office, a section, unit, department or ward of a medical premises. Particular fields of interaction, for example pediatrics, gynecology, oncology and osteopathy will feature their own frames of medical discourse.

### 2.2 Temporal

Temporal context includes the moments at which interaction occurs, from an initial, to repeat consultations, hospital admission procedures, pre and post-surgical discussions and ongoing care and rehabilitation while a patient endures or (ideally) recovers from an illness or injury. Medical interactions are often time-critical. Consultations are often short. Important, perhaps life-saving decisions sometimes need to be made quickly. There might not be sufficient time to adequately check that doctors or patients fully understand the content, expectations or outcomes of some discussions. Within a short period of time, a patient can experience multiple interactions with staff of differing occupations and specialties, performing different roles, at a range of locations within a medical facility.

### 2.3 Sociocultural

The complexities of sociocultural factors cannot be underestimated or ignored. They can dramatically affect the way in which two speakers from different cultural backgrounds perceive themselves and the other speaker, their status and role during

interaction. Some of these include gender, age, ethnicity and previous experience in medical settings. It is vital in the context of an initial consultation in Japan, for medical staff to quickly gauge the degree to which a patient can communicate within a medical genre. Patients also need to understand the way they are processed within a medical facility, for example, dealing with their health insurance card and understanding how to pay for and receive consultation and medication.

### 3. Initial ESP course planning

One of the major differences between planning an ESP course for, say, engineering students or medical students is the nature of the content. To generalise, most people do not have a need to converse with engineers and discourse related to engineering is most likely to occur among engineers. It is possible throughout our life never to consult an engineer or to understand the terminology, materials and methods they use, for example to design, construct and maintain structures. However, everyone needs medical attention, and this generally occurs throughout our life, from vaccinations as babies and early childhood visits to dentists, to medical attention we need in other phases of life. Although some people have long, healthy lives with little medical consultation, to generalise, it is part of the final phase of our life. Although effective communication is a two-way street when it comes to desired health outcomes, this becomes much more complex when the interlocutors do not speak the same native language.

A common belief might be that an initial step in planning an ESP course requires an instructor to compile frequent vocabulary, so that by learning these, students can understand most of the spoken and written content of their specialty. To refute this knee-jerk reaction to ESP course planning, an instructor suitably qualified in TESOL could provide numerous reasons why this perspective is quite misguided and skewed to the extent that they would comprise their own paper. Vocabulary learning is not by and of itself a fundamental aim or exercise for either meaningful SLA or the ESP course content suggested here. Instructors and learners need to step back and consider a much wider perspective of communication and what it entails, particularly in the contexts of intercultural interaction. Sociocultural norms, paralinguistic cues and discourse styles between native and non-native speakers of any *lingua franca* can be potentially confronting and confusing. When either speaker wishes to understand or be understood by the other, it becomes necessary to consciously and actively employ flexible communicative strategies. Added to this is the crucial nature of effective and accurate communication in medical settings, given that a patient's greatest asset, their health, is at stake.

Content for an initial phase of intensive instruction can focus on overall contexts of communication; how and why we communicate. The obvious, verbal component of communication should not be assumed as the most important or predominant for the most effective communication in most contexts. One of an instructor's vital roles as 'cultural facilitator' is to help raise learner awareness of non-verbal communication, its variety, extent and how it contributes to convey the meaning of utterances. More specifically, learners need to be aware of how deixis, touch, gesture, eye contact, attitude and silence factor in the conveyed content of communication. These will differ between and within cultures according to such variables as gender, age, ethnicity, geographical location and experience of previous medical discourse related or unrelated to the reason at hand to interact with a medical professional.

Essentially, an intensive ESP course such as the one suggested requires learners not only to primarily think about how they can communicate better with non-Japanese, but also to realise, analyse and possibly modify their own professional discourse style with Japanese patients. The assumed scenario throughout this course is that the patient lacks the Japanese proficiency to effectively communicate in a medical genre and so the onus is on the medical practitioner to communicate in English. A fundamental course aim is for learners to think about and develop their own bedside manner throughout all phases of patient interaction in English, including consultation, diagnosis, reporting results, prescribing medication and treatment.

### 3.1 Doctor and patient roles

Generally-speaking, the roles of medical practitioners are similar across cultures in many ways. In fact, besides allopathic (western) medicine, these roles can apply to a wide range of medical practices, including Ayurveda (Sri Lanka and India) and traditional Chinese medicine. In this ESP course, learners should aim to communicate in English well enough for a patient to feel (more than) satisfied that their condition is well-understood by a practitioner and that the level of attention they receive can help them achieve the best outcome for their healthcare.

Some of the doctor's roles are systematic, meaning that they have a fairly predictable line of questioning during a consultation, whereas other roles are intangible. To begin interacting, a doctor should greet a patient. To a non-Japanese patient, it can appear blunt, rude or intimidating for a doctor to start a consultation by asking 「どうした？」 or 「なにがあった？」 as this is not a conventional greeting. It is more appropriate to ease a patient into a consultation with a conventional greeting like 「こんにちは。」. By greeting with eye contact, the doctor can begin to establish rapport with a patient and start to reduce their anxiety. Next, the doctor can proceed to ask the patient about their Japanese language proficiency. Doctors should avoid asking such dichotomous questions as 「日本語は大丈夫ですか。」 because language proficiency is gradable and varies among the genre of interaction. The patient should be free to describe their level of Japanese proficiency and ask the doctor to speak simply and clearly whether they speak in Japanese or in English. It is appropriate for a doctor to say something such as “I'll speak/explain to you in simple Japanese. If you don't understand, please tell me and I'll try to explain it for you in English”. It would no doubt help the doctor-patient relationship if both speakers tried to communicate in the others' language.

Seven strategies for clear communication in medical settings are outlined by Kripalani & Weiss, (2006, p. 889). These are similar to the explanation here of sequential phases of a medical consultation. A doctor needs to gather accurate information from a patient, who might be feeling tired, worried and in pain from their physical condition and also anxious about their inability to communicate clearly. In this early phase of interaction, a non-Japanese patient might start to explain the whole sequence of events that led them to seek medical help. At this time, the doctor should listen carefully and take notes, rather than limiting a patient to answering a sequence of focused questions. A patient might provide more information than a doctor asks for, to help fill in details of their overall condition. At each phase of the consultation, the doctor should repeat or paraphrase information with the patient to clarify the accuracy of comprehension. Based on the patient's information and perhaps also a physical examination, the doctor then considers



how to make a diagnosis, possibly also arranging an additional medical test or course of treatment.

The doctor should explain their medical opinion and diagnosis in ways that the patient can understand easily and then check that the patient has understood. Then the doctor can suggest options for healing and rehabilitation and also ask the patient if they have any drug allergies or have had any reactions to medication. There should be a clear explanation of how to take any prescribed medication, its function, possible side-effects and the duration of prescription. The patient should be allowed to ask any questions to clarify the type and strength of medication and how it might impact their daily activities.

Medical practitioners with a good bedside manner will show the patient a noticeable level of attention, including eye contact, and empathy. At the start of a consultation and throughout, they will try to reduce patient concern and anxiety. They will not make the patient feel that the consultation is rushed. They will listen carefully to gather the details they need to help make an accurate diagnosis. There might be less eye contact between a Japanese doctor and a Japanese patient than between a doctor and patient in other cultures. As another example of cultural variation in discourse styles, there are differences in the way that speakers indicate listening. For instance, Japanese utterances such as 「はい。」 and 「わかりました。」 might not necessarily mean ‘Yes’, or ‘I understand’. Rather, they are often discourse markers to indicate that one speaker is listening to another. Demonstrating a good bedside manner also means explaining information clearly and simply without condescension and to allow the patient to ask questions for more information and clarification to their satisfaction.

#### 4. Measures of pathology and symptoms

##### 4.1 Describing pain

Some of the commonly used descriptors around the world for measures of pain in alert and oriented (A&O) adults can be pictorial, numerical, or verbal (Hawker, Mian, Kendzerska & French, 2011). Among these are the Visual Analog Scale for Pain (VAS Pain), Numeric Rating Scale for Pain (NRS Pain), McGill Pain Questionnaire (MPQ), Short - Form McGill Pain Questionnaire (SF -MPQ), Chronic Pain Grade Scale (CPGS), Short Form -36 Bodily Pain Scale (SF -36 BPS), Measure of Intermittent and Constant Osteoarthritis Pain (ICOAP) and Face Pain Scale (FPS) (see also Kniola, 2016). Another common descriptor is the Wong-Baker FACES pain scale, which can show the vocabulary for different pain intensities written in various languages below large cartoon-like faces. The validity of some measures has been reaffirmed by the use of translated versions, such as Ferreira-Valente, Pais-Ribeiro and Jensen, (2011) in Portuguese, Van Giang, Chiu, Thai, Kuo and Tsai, (2015) in Vietnamese, Ketovuori & Pöntinen, (1981) in Finnish, and Radvila, Adler, Galeazzi, Vorkauf, (1987) in German.

Doctors can expect to hear a range of adjectives and expressions when patients describe their pain in English. Doctors should understand differences between pain that is variously described as severe, excruciating, terrible, sharp, dull, comes and goes, or is throbbing, for example. A patient might be able to use gesture to indicate a painful area on their body, as for appendicitis, but it is not as easy to describe headaches this way. In Japanese, pain is often described using onomatopoeia, such as ズキズキ, シクシク and チクチク (Kurahone, Kurahone, & Kurahone, 2010; Pasion, 2016). Therefore, doctors need to be familiar with how these types of pain can be described in English. This can be one of the activities for learners to develop their own language materials.

#### 4.2 Pain collocation from COCA

Table 1 presents the twenty most frequent lexical items immediately preceding the word *pain* compiled from the COCA, (Davies, 2008). More specifically, the data comes from the COCA spoken corpus which comprised 116,748,578 words. The table shows the results of an [adjective + *pain*] search, indicating three other part of speech exceptions. An MI score threshold of 3.0 or higher indicates a reasonable semantic strength of a collocated lexical concept (Panocová, 2017, p. 44). Not all of the most frequent lemmas specifically relate to medical contexts. Searches of much longer lexical sequences before and after a key word are advisable to further clarify contextual meaning and usage. For example, the use and meaning of rank #3, *much*, differs considerably between ‘Does your [body part] have much pain?’ and ‘Economic policies have caused much pain’. This is similar to rank #12, where the expression *great pain* can mean hardship, or difficulties, not physical pain. Likewise, rank #15, *emotional*, can also be a general reference to stressful situations. Rank #11, *real*, is part of a common idiomatic expression ‘It’s a real pain [to do something]’, which is similar to the ‘medicalised English’ terms discussed by Alami (2017).

Table 1. *The Twenty Most Frequent Words Immediately Preceding the Word ‘Pain’*.

Rank	Lexical item	Frequency	All	%	MI
1	back	1064	707985	0.15	3.98
2	chronic	694	12625	5.50	9.17
3	much	606	520680	0.12	3.61
4	chest	566	31093	1.82	7.58
5	physical	393	73630	0.53	5.81
6	abdominal	343	2038	16.83	10.79
7	feel*	304	193360	0.16	4.04
8	severe	286	21421	1.34	7.13
9	sharp	266	24346	1.09	6.84
10	joint	245	23318	1.05	6.79
11	real	234	174	0.13	3.81
12	great	224	266832	0.08	3.14
13	excruciating	212	1214	17.46	10.84
14	without**	205	243693	0.08	3.14
15	emotional	199	322	0.62	6.02
16	less	184	202548	0.09	3.25
17	cause*	166	71128	0.23	4.61
18	postoperative	151	1699	8.89	9.87
19	terrible	145	26583	0.55	5.84
20	muscle	140	15613	0.90	6.56

Note. \*Verb \*\*Preposition

#### 4.3 Dimensions of pain

It is not only necessary to consider the ranking of vocabulary frequency, but also the categories they exemplify. Furthermore, it is not enough to teach or learn the

vocabulary *chronic pain* simply because this collocation is frequent, but how its meaning is conveyed by and to a patient. Table 2 shows six dimensions encompassing the description of pain (Price, Fogh, Glynn, Krasner, Osterbrink & Sibbald, 2007). This table indicates the number of lexical items clearly representative of each dimension in the 100 most frequent words immediately preceding the word *pain* in the COCA (Davies, 2008). In addition, there are some common questions to exemplify each pain dimension that a doctor might ask a patient; refer table 2. As the topic of pain is one of the most frequent in doctor-patient interactions, it is obviously vital that medical professionals should be able to ask the (type of) questions shown in English. It is important to understand the overlap between the last two categories. Talking to a patient about their quality of life includes how they feel about enduring pain. In a Japanese (language) context, this could be described as *gaman suru* 「我慢する」 – the degree to which a patient can put up with the level of pain they experience. In addition, impact on daily activities refers to how well a patient is able to sleep, work, or engage in activities for leisure and enjoyment. This directly relates to the things that a patient can do comfortably enough by themselves, such as washing, getting dressed, or walking. It also indicates the extent to which they need assistance to do such activities on a daily basis. These categories are important for medical practitioners to consider because of the impact that pain can also have on the mental health of patients and their carers/family, how pain impacts their work, overall physical mobility and independence. Such complexities underscore the importance of prescribing sufficient and effective pain treatment and also considering the (side)effects of prescribed (or contraindicated) medication or surgery.

Table 2. *Dimensions of Pain Description.*

Pain dimension	Number of lexical items	Example questions
Location	27	Where does it hurt [most]? Where do you feel the [most/worst] pain?
Intensity	25	How [much/badly] does it hurt? How severe is the pain? What kind of pain is it? Does anything (you try) relieve the pain?
Duration	7	How long have you had the pain? When did the pain start? Is the pain constant? Does the pain last long?
Frequency	3	How often do you get the pain? Does the pain come and go? Does it hurt [before eating/when you sit/ stand]?
Quality of life	5	Can you sleep normally? How well can you [stand/put up with] the pain? Are you able to work?/Can you do your job?
Impact on daily activities		Can you [wash/cook/dress/drive] by yourself? Do you need help to [wash/cook/get dressed]? Is there someone to help you with [cleaning/cooking/washing]?

When using corpora for the focused design of genre-specific vocabulary, the meaning of lexical sequences in which the words appear must be examined. The importance of discussing a patient’s quality of life and the impact of pain on their daily activities is not revealed much in table 2, with only five lexical items clearly indicated for these overlapping dimensions. This is because the corpus search was restricted to just one lexical item (adjective) preceding the word *pain*. Hence, idioms and expressions are not easily realised from the data in table 1 and table 2. An intensive medical ESP course needs to include focused awareness and practice of such types of language and also various discourse strategies to confirm accurate comprehension by the patient and the doctor. Learners need to understand how vital it is to strive for active and accurate comprehension. To help avoid patient misunderstanding, it is not advisable for a Japanese doctor to simply listen to a patient and then say, ‘I see’, in the same way that they might say 「わかりました。」 to a Japanese patient. Even if the doctor does understand the patient’s intended meaning, it is appropriate for the doctor to check and confirm information with the patient so that they know the doctor has understood. Learners need to practice how to ask for more information and to clarify and paraphrase information exchanged with a patient. They need to understand that they are not losing face if they don’t understand an English speaker’s lexical choice or pronunciation, or need to ask an English speaker to repeat what they said.

Example dialogues A and B in Table 3 demonstrate how lexical choice can affect the interpretation of intended meaning. It is worth noting that frequently, the verb *hurt*

Table 3. *Conversation Strategies to Clarify Meaning.*

Example dialogue	Conversation strategies
<p>Dialogue A</p> <p>Doctor: Tell me about your pain.                      Patient: I can’t stand it.                      Doctor: You can’t stand? Stand up?                      Patient: No, I can stand and walk. I mean I can’t bear the pain. It’s too much.                      Doctor: So, it’s very bad pain?                      Patient: Yes, it’s really bad all the time.</p>	<p>Doctor repeats what they hear to confirm if the patient has pain when standing up. Patient clarifies the expression ‘can’t stand’ and paraphrases with an idiom ‘I can’t bear’. From the expression ‘too much’, the doctor clarifies that the pain is bad. This meaning is confirmed by the patient.</p>
<p>Dialogue B</p> <p>Doctor: When do you have the most pain?                      Patient: In the morning. It’s a real pain to get out of bed.                      Doctor: Oh? Does it hurt most when you get out of bed?                      Patient: No, it hurts all the time. I just notice it most in the morning.                      Doctor: OK, so you always have about the same level of pain. Right?                      Patient: Yes, nothing I’ve tried relieves it. It never goes away. It’s always painful.</p>	<p>Doctor repeats what they hear to confirm if the patient has pain when getting out of bed. Patient clarifies the meaning by stating ‘No’ and changing expression to ‘hurts all the time’. From this expression, the doctor uses paraphrase to clarify that the pain remains about the same level and asks the patient to confirm by asking ‘Right?’ This meaning is confirmed by the patient.</p>



and not the noun *pain* is used in conversation. Considering the discussion of discourse styles so far, it is useful to exemplify speaking strategies by both a doctor and a patient so that learners can practice ways to clarify miscomprehension.

In dialogue B, the idiomatic expression ‘It’s a pain [to do something]’ or ‘something is a pain [to do]’ does not indicate physical pain, but means that something is troublesome, complex, or difficult. A patient might avoid using such an idiom, but if not, a doctor needs to clarify meaning. Hoekje (2007, p. 337), suggested that international medical graduates (IMGs) needed to become familiar with the language of the patient community as well as institutional-specific discourse. However, as Dahm (2011) and Hoekje, (2007) pointed out, IMGs might not be able to effectively tell whether the medical terms they use are understood by a patient. In addition, Dahm (2011) found that IMGs neglected to explain terminology because they were not aware of a need to provide more information. In other words, they didn’t know that the patient didn’t know. This is certainly a communication conundrum, compounded in intercultural interactions. Trainees need to learn the kind of language that patients use when they ask the doctor for more information, clarification and explanation. Doctors need to be aware that non-Japanese patients might ask them more questions than Japanese patients, as revealed by a comparative study of Japan and the United States (Ohtaki, Ohtaki, & Fetters, 2003).

#### 4.4 COCA Cough collocation

Another common symptom to discuss in medical interactions is a cough/coughing. This symptom can be an indication of conditions such as the common cold, influenza, bronchitis, asthma, cancer, HIV infection, post-nasal drip, allergies, gastroesophageal reflux disease (GERD), chronic obstructive pulmonary disease (COPD), pneumonia, or whooping cough (see Levine, 2015).

The research of Vernon, Kline Leidy, Nacson and Nelson (2009) discussed three dimensions of coughing: frequency; intensity; and disruptiveness. They noted that patients can describe single coughs or multiple coughs occurring as uncontrollable paroxysms, which might be referred to as fits, bouts, spells or episodes. Table 4 shows the twenty most frequent lemmas from a COCA [adjective + *cough*] search (Davies, 2008). From the one hundred highest-frequency lemmas, forty-seven are clearly associated with the following three dimensions of coughing: intensity (14); feeling/quality (22); and duration (11).

The frequency data shown in table 4 and of the most frequent 100 adjectives preceding *cough*, does not reflect accurate overall ranking in a number of ways. TESOL instructors/ ESP course planners preparing vocabulary exercises based on lexical frequency should use corpora with caution if claiming the veracity of their statistical reliability. From the data in Table 4, rank #22, *whopping*, a relatively odd collocation, might have the intended spelling/meaning of rank #1, *whooping*. Another example with possible confusion of spelling and meaning is that of rank #11, *racking* and rank #17, *wracking*. Some lexical items can have different forms, but the same meaning. For instance, the conventional medical term *nonproductive* at rank #20 has the same meaning as the unconventional rank #49, *unproductive*. A third comment relates to the usage of full or abbreviated forms, for example, the interchangeable word choice *flu* or *influenza*. Rank #8, *over-the-counter*, is also abbreviated to *OTC* at rank #31, although these do not refer to coughs per se. They are components of multi-adjectival nouns, where *cough* is an

Table 4. *The Twenty Most Frequent Adjectives Immediately Preceding the Word ‘Cough’.*

Rank	Lexical item	Frequency	All	%	MI
1	whooping	255	804	31.72	15.47
2	chronic	85	12625	0.67	9.91
3	hacking	58	2331	0.67	9.91
4	persistent	51	6705	0.76	10.09
5	dry	50	37662	0.13	7.57
6	bad	30	123676	0.02	5.12
7	little	30	401783	0.01	3.42
8	over-the-counter	21	1367	1.54	11.10
9	deep	19	72827	0.03	5.22
10	productive	18	9641	0.19	8.06
11	racking	16	578	2.77	11.95
12	occasional	11	11258	0.10	7.13
13	phlegmy	10	65	15.38	14.43
14	slight	10	11396	0.09	6.97
15	wet	10	21739	0.05	6.04
16	WTC	9	205	4.39	12.62
17	wracking	8	130	6.15	13.11
18	rasping	8	341	2.35	11.71
19	cherry	8	7950	0.10	7.17
20	nonproductive	7	89	7.87	13.46

adjective preceding a noun, as in *OTC cough/pain medication/drugs*. In a similar way, rank #19, *cherry*, refers *cherry (flavoured) cough mixture/medicine/syrup*. A final observation is that rank #16, ‘WTC’, reveals a skew in lexical frequency at 4.39%. This refers to World Trade Center Cough Syndrome (WTC Cough Syndrome) (Prezant, 2008) with symptoms of chronic rhinosinusitis, asthma, and/or bronchitis, often complicated by gastroesophageal reflux dysfunction. Of course, the data from an American corpus comprises the lexical items used by American English speakers. In this case, the data is context-specific with reference to a medical condition in the USA.

## 5. Developing medical language resources

### 5.1 Medical corpora

A new medical academic world list (MAVL) was recently developed by Lei and Liu (2016), which differs from the medical academic world list (MAWL) of Wang, Liang, and Ge (2008). It is pertinent to note here, that the vocabulary lists compiled by Lei and Liu (2016) and Yang (2014) focused on *academic* medical word frequency and so their content was most relevant to (reading and writing) medical research articles (RAs). As such, these lists do not necessarily include high frequency vocabulary that might occur in spoken medical interactions. For instance, the word *fever* does appear on the MAVL, but it does not appear on the other lists mentioned. The MAVL (Lei & Liu, 2016) does not include the words *hurt*, *cough*, *phlegm*, *headache*, *fracture*, or *vomit*. The word *bruise* does not appear in the 1751 lemmas of the MAWL compiled by Wang et al., (2008), the

676-word list for nursing (Yang, 2015), or the 819 lemmas of the MAVL (Lei & Liu, 2016).

## 5.2 Medical ESP course activities

The use of medical dictionaries is recommended by Lei & Liu, (2016, pp. 49–50). They might enhance a learner’s lexical range, but not necessarily skills of lexical flexibility. Lexical concepts might not have translation equivalents in another language but require explanation, through paraphrase for example, to convey their meaning. Lists of vocabulary and dictionaries provide a point of reference for study, but they are not in themselves tools for active communication. It is not suggested that students in an intensive course mainly focus on studying vocabulary.

The study of IMGs (Hoekje, 2007) found that not only is a linguistic focus important, but also (and perhaps especially) the manner of delivery/empathy and understanding aspects of culture such as styles of discourse. For trainees to consider what makes an effective bedside manner, an intensive medical ESP course *must* focus on their understanding and development of communication skills regarding intelligibility (prosody), comprehensibility, appropriateness, paralinguistic cues (e.g. eye contact and silence), “face” and attitude. The dimensions of these elements become much more pronounced when speakers engage in intercultural communicative acts and highlighted further still in contexts of delivering healthcare services.

Suggested activities for medical trainees in an intensive ESP course include: translating Japanese terms into English and vice versa; explaining Japanese expressions in English, including the use of paraphrase; comparing the meaning of English and Japanese expressions; doctor-patient role-plays with various themes and focus on phases of interaction; and clarifying, reviewing and analysing communication processes and goals in focused pre-activity and post-activity discussions.

A TESOL instructor should focus on developing activities that encourage students to actively engage with patients and in ways that develop their skills of listening and note-taking. Doctor-patient role-plays should focus on phases of interaction during a consultation to see how discourse patterns and styles change throughout interaction. Learners should practice how to communicate content with the same meaning in different ways (paraphrase). To note a cultural difference in discourse styles, rather than the doctor asking a set routine of questions limited in scope, trainees should learn to get used to the way an English-speaker might explain their condition. Role-plays that limit speaking practice to the doctor asking a specific question followed by a patient giving one brief, focused answer is unrealistic preparation for real-life communication. A patient is likely to include extraneous elements while explaining their condition and the doctor needs to carefully listen for relevant details and make notes, so they can then paraphrase and clarify information with the patient. Vital (linguistic and paralinguistic) communication strategies should be actively taught and practiced throughout a course. Kripalani & Weiss (2006, p. 889) suggest focused 90–120-minute workshops and that health literacy is likely to be more effective if addressed longitudinally through multiple courses than in isolated workshops. Furthermore, Wette & Hawken, (2016, p. 48) detail assessment criteria for medical role-plays in an EMP (English for Medical Purposes) course which exemplify the information in this section.

An aspect of Japanese communication that is potentially confusing for (all) patients is the use of loan words, known as ‘gairaigo’ 「外来語」. This includes ‘katakana’ 「カタ

カナ語」 such as *care* 「ケア」. Another category is ‘waseieigo’ 「和製英語」, words coined in Japan, like *doctor-stop* (Dokuta-sutoppu, 2015) that refers to ‘doctor’s orders [to stop]’ doing something. Doctors need to be keenly aware that the pronunciation and meaning of loan words will almost certainly differ from similar English words. In fact, might not even come from English. Common medical loan words from German include *x-ray* 「レントゲン」, (*plaster/plastic*) *cast* 「ギプス」 and *medical chart/record* 「カルテ」. Miscomprehension can easily occur when an English-speaker hears Japanese pronunciation of: *allergy* 「アレルギー」, *virus* 「ウイルス」, *catheter* 「カテーテル」 and *gauze* 「ガーゼ」, for example. Another problem is the vast difference in meaning between the English meaning of some loan words and their use in medical settings, such as *shock* 「ショック」 and *terminal* 「ターミナル」. It would be useful to include speaking activities for trainees to develop flexible speaking strategies, such as avoiding loanwords, or when using them, how to explain them carefully. Another strategy is for learners to practice how to check that a patient understands loan word meaning in the communicative context of a consultation.

When describing pain, Japanese speakers should avoid trying to communicate using onomatopoeia, ‘giseigo’ 「擬声語」 because their semantic properties are largely inaccessible to English speakers. As mentioned in section 4.1, Japanese doctors should learn how commonly-used onomatopoeia in Japanese can be explained in English. As yet another example of a cultural difference in discourse style, English usually expresses pain using adjectives and expressions. These can be another focus of speaking activities in an intensive ESP course.

A final recommended activity throughout an intensive medical ESP course is for learners to prepare their own resources for study and future professional practice. They can create various sections in a notebook for fast and easy referral, which would make it a very useful resource during a consultation with an English speaker. The sections can be arranged thematically, such as anatomy, medication, symptoms, treatments, or hospital/clinic-associated vocabulary. Content could be recorded according to Japanese syllabary. Information can feature in English and in Japanese. Some sections could be devoted to just vocabulary, whereas others could have whole sentences, grammar notes, or useful expressions. An example could be ‘Take a deep breath in/out’ 「息を大きく吸って、大きく吐いてください。」. For some topics, it might be useful to have vocabulary or expressions written on cards to show a patient. These should have large, easy to read fonts. An example of such a resource is the Wong-Baker FACES pain scale described in section 4.1. This type of resource is useful for role-plays because learners can practice the logistics of handling materials (ease of access and timing of use) while still paying attention to the patient (some eye contact, not turning their back, and clarifying information).

Learner workbooks should allow plenty of space for future additions, for example, to develop their own active glossary of terms. Based on their experience, doctors can add information for quick reference the next time they encounter a similar topic of communication. Pictures or diagrams can also be added, perhaps with English annotation, to help patients understand key information more quickly and easily about symptoms and treatment. This might be a useful strategy to help explain aspects of internal medicine, reproductive and sexual health, for example, if a doctor feels they need some pictorial support to help discuss these subjects in English.



## 6. Conclusion

A primary aim of an intensive ESP course is for trainees to become acutely aware of the ways they can relate to patients and convey the meaning of what they say in English. An instructor therefore has a vital role of ‘cultural facilitator’, to explain and exemplify differences between discourse features and style in Japanese and in English. Corpora searches, such as that of the COCA, can provide data for vocabulary frequency, which might be useful to incorporate into teaching/learning materials. From data like this, learners can study common collocations and lexical patterns in English. Various focused topics were presented for medical trainees to achieve course goals. When students invest in making their own materials and resources for professional use, they take control of their learning in ways they feel are relevant to them now and in the future. These are not fixed resources but can be developed over time. Objectives of teaching communication strategies include learners acquiring some practical ways to increase their intercultural competence and develop their bedside manner. As learning can only occur through experience, a future goal is that they can apply what they’ve studied and engage in reflective professional practice to become more effective communicators, and not only with non-Japanese patients.

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