How to involve medical history taking effectively in LSP teaching

Katalin Eklicsné Lepenye, Ágnes Koppán and Tímea Németh

Abstract: The Department of Languages for Specific Purposes at the University of Pécs, Medical School (UPMS) has started to develop innovative practices; modernized blended-learning methods and tools in the field of medical communication (history taking).

Educational material is worked out, communication courses are involved in pilot experimentation, and digitally available educational material assist our foreign students in acquiring practical communication skills in medical Hungarian. Authenticity is ensured by internists and language teachers who collect and record doctor–patient conversations in our mother tongue while taking past medical history. Following the recording, the conversations are transcribed, segmented and according to EU standards texts of A1, A2, B1 (B2 as future intention) levels are worked out, as foreign medical students arrive with no or very basic Hungarian. Video-recording of the history-taking scenes has been carried out with professional actors to prevent violation of privacy rights. As a next step task-based case studies, as well as check lists, have been designed to provide at professional perspective and to ensure the use of appropriate communication and linguistic tools.

The pilot experiments are conducted in blended-learning university courses applying peer-assisted learning. The video-recorded conversations may be used in early beginning phases of language acquisition to enhance motivation, accelerate vocabulary expansion as well as raise diverse cultural awareness of the Hungarian doctor–patient communication that may be very different from the norms of the students' home country.

Provision of behavioural and communicational samples, pronunciation exercises, self-tests and keys enable personal learning, and equip the future doctors with the patient-centred conversational strategies for interviewing the 21st century patients of different ages, sex, background and race.

Key words: communication skills, effective history taking, blended-learning, peer-assisted learning, case reports

Abstrakt: Das Institut für Medizinische Fachsprachen und Kommunikation an der Medizinischen Fakultät der Universität von Pécs hat innovative Lehr- und Lernmethoden im Bereich der medizinischen Fachkommunikation entwickelt. Der Fokus liegt auf dem erfolgreichen Erlernen der Anamneseerhebung auf Ungarisch.

Für die Medizinstudenten im englischen und deutschen Programm wird eine webbasierte Lernplattform zur interaktiven Vermittlung klinisch-praktischer Fertigkeiten der Arzt-Patienten-Kommunikation in der ungarischen medizinischen Fachsprache ausgearbeitet. Dabei werden Pilotstudie-Kommunikationskurse in einbezogen, die sich mit dem Anamnesegespräch als Kommunikationsbasis beschäftigen. Das Konzept von diesen Anamnesekursen ist das sogenannte "peer-assisted learning" (PAL) oder peer-gestütztes Lernen mit ungarischen studentischen Tutoren und die Arbeit mit echten Patienten. Eine Pécser Besonderheit: ein

Lerntandem oder eine Peer-Gruppe setzt sich aus je einem älteren ungarischen studentischen Tutor und Studierenden des deutschen oder englischen Studienganges, d.h. Studierenden aus verschiedenen Herkunftsländern zusammen. Dieses innovative Lehrkonzept trägt also zur interkulturellen Sensibilisierung von Studierenden und zur Gestaltung eines internationalisierten Lernraums bei.

Die Grundlage der neuen Lernplattform bilden videobasierte E-Learning-Materialien, die unter der Supervision von Internisten zusammengestellt wurden.

Authentische Arzt-Patient-Gespräche wurden in der Klinik gefilmt. Die Aufzeichnungen der Dialoge wurden nachbearbeitet: gemäß Kommunikationszwecken aufgeteilt und so gestaltet, dass sie dem Niveau des Lernenden entsprechen. Die Texte werden den Sprachlevels A1, A2, B1 (B2 als zukünftiges Ziel) entsprechend modifiziert, eventuell vereinfacht, da die meisten internationalen Medizinstudenten ihr Studium mit keinem oder sehr geringem Basiswissen in Ungarisch beginnen. Die Anamneseerhebung wurde mit professionellen Schauspielern durchgeführt, um Verletzung privater Rechte vorzubeugen.

Im nächsten Schritt werden Aufgaben-orientierte Fallstudien sowie Checklisten erstellt werden, um einen professionellen Blickwinkel zu bieten und die Anwendung geeigneter Kommunikation und sprachlicher Werkzeuge sicherzustellen.

Die Video-aufgezeichneten Konversationen werden möglicherweise in der Anfangsphase des Spracherwerbs angewandt, um die Grundstruktur und den Grundwortschatz der Anamnese so früh wie möglich zu erlernen, die Motivation der Studierenden zu steigern, sowie die Betonung bereits in vorklinischen Semestern auf klinische Bezüge zu legen.

Wir sind überzeugt, dass Verhaltens- und Kommunikationsbeispiele, Ausspracheübungen und Selbsttests sowie Lösungsschlüssel nicht nur das individuelle Lernen ermöglichen, sondern zukünftige Ärzte mit den notwendigen Kommunikationsstrategien ausstatten, die für die Befragung eines Patienten im 21. Jahrhundert von verschiedenem Alter, Geschlecht, Stellung, ethnischer und kultureller Herkunft notwendig sind.

Abstrakt: Katedra jazyků pro specifické účely na Univerzitě v Pécsi, Lékařská škola (UPMS), začala rozvíjet inovativní praxi – zmodernizované metody a nástroje smíšené výuky v oboru lékařské komunikace (získávání lékařské historie). Vypracovali jsme vzdělávací materiál, pilotní experimentování obsahuje kurzy komunikace a digitálně dostupný vzdělávací materiál pomáhá zahraničním studentům získávat praktické komunikační dovednosti v lékařské maďarštině. Autenticita je zajišťována internisty a jazykovými učiteli, kteří při získávání lékařské historie sbírají a zaznamenávají konverzace mezi lékařem a pacientem v našem mateřském jazyce. Následně jsou konverzace přepsány a rozčleněny a podle standardů Evropské unie jsou vypracovány texty na úrovních A1, A2, B1 (B2 je v plánu). Videozáznamy ze získávání lékařské historie, které jsou natáčeny s profesionálními herci, pomáhají studentům rychleji rozvíjet slovní zásobu a zvýšovat povědomí o kulturních normách komunikace mezi lékařem a pacientem v Maďarsku. Jako další krok jsou vytvořeny případové studie s úkoly a kontrolní seznamy, aby byla poskytnuta profesionální perspektiva a zajištěno používání vhodných komunikačních a lingvistických nástrojů. Pilotní pokusy jsou prováděny formou smíšené výuky v univerzitních kurzech, kde si studenti pomáhají navzájem (peer-assisted learning).

Introduction

Regular encounters between medical students and patients, and acquiring clinical skills play an important role in medical training. Therefore, developed communication skills are inevitable and also effective tools for taking the patients' histories, performing physical examinations and conducting further clinical tests. Clinical skills may be fostered by good staff communication based on team work (Abdulmohsen, 2007). Thus, communication skills are a pre-requisite for an appropriate diagnosis, thereby providing a time-and-cost effective treatment. Our innovative approach is designed to improve communication skills in professional settings as well as to promote language learning in international programmes.

As the European student environment is undergoing radical changes, an increasing number of students go to study abroad either through various bilateral agreements, European Union-level mobility programmes or as international, degreeseeking students. Globalization and world-wide migration are also part of the reasons why the scope of higher education has completely changed, thus enabling increased contact of diverse cultures (Németh et al., 2009). Therefore, a well-defined need has emerged over the past few decades for the implementation of international dimensions in the curricula that aims to internationalize higher education worldwide (Knight, 1993; Betlehem et al., 2003).

One of the tools for the internationalization of the curricula is to develop students' intercultural competencies. Although, there is no consensus on what intercultural competence is, it is integrated in the doctor–patient communication.

The University of Pécs, Medical School among other European universities, offers medical training programmes in English and German. Students have a chance to study the core medical subjects thoroughly in these languages; however, the student–patient encounters in an authentic environment (hospital, clinic) can only happen in Hungarian. The reason for that is rather simple. The majority of Hungarian patients do not speak any languages. Therefore, to acquire clinical skills means working on improving professional and language skills at the same time.

A few years ago it was doubted whether history taking skills could be acquired through language and intercultural studies. Now we have evidence for that. Our initiative has two main objectives: firstly, to enable students to practise medical history taking in Hungarian and solve language-related communication problems, as an important part of quality medical training, and secondly, to help overloaded physicians by preparing students for history taking.

Methods

The design of our approach is based on intercultural competencies, language and professional requirements analyses (Koppán, Halász, 2014; Németh, 2014).

Between September and November of 2014 a survey was carried out at the Medical School of the University of Pécs to find out how to increase intercultural competencies of medical students. One tool to increase these competencies is to participate in various mobility programmes for longer or shorter periods of time. However, data suggest that only 1% of the Hungarian student population and less than 0.5% of Hungarian medical students are mobile (Tempus, 2014), mainly due to language and financial problems. Thus, the aim of the survey was to investigate other means to help students to increase their intercultural competencies necessary for their future jobs as doctors working in multicultural settings.

The survey involved three target groups: students (both Hungarian and international), doctors (both working locally and abroad) and Hungarian lecturers of UPMS. Sixty five responses were received from the student sample (average age between 18 and 25), 21 from doctors, (average age between 36 and 45) and 24 from lecturers (average age between 36 and 45).

The survey found that the importance of mobility programmes and experience abroad has to be highlighted. However, non-mobile medical students' intercultural competencies need to be developed locally, and alternative methods and classes should be incorporated into the curricula. These involve tandem or peer-assisted classes, besides classes on cultural/multicultural issues within medical care. With the introduction of these innovative methods authors believe that medical students and also lecturers will be better equipped to meet the challenges of the 21st century education.

The evaluation of language and professional requirements revealed that foreign students need Hungarian Language skills primarily for taking a patient's past medical history, and carrying out a patient examination (in a Hungarian hospital). Co-operation with clinicians made the medical field's needs explicit: students have to take the patient's history in Hungarian without assistance due to time limitations and other responsibilities of the doctors. Then, they may give the Hungarian physician the case reports in English or German. Thus, updating the educational material seemed inevitable.

When the relevant data has been collected, we began searching for methods to meet the present's generation requirements. That is how we found blended-learning. However, we soon realized, that using different audio-visual and digitally available aids would not be an effective solution, so we created a special peer-tutoring system and introduced it into teaching. Blended learning, as we will see later, combines classroom and internet-based learning (with video-recorded doctor-patient interviews and relevant exercises).

Peer-tutoring, detailed below, in our interpretation, adds an innovative element to the approach, since acquisition of history taking happens through teaching medical Hungarian to international students. They – peer-assisted by Hungarian students in their senior years – practise medical communication with patients in an authentic clinical environment while developing medical interviewing techniques. Skills and professional awareness are further improved by watching and evaluating video-recorded doctor-patient conversations in the classroom. We believe that our approach is innovative, as peer-tutoring does not occur in Hungarian higher education, and also because it integrates language and professional skills, ensuring authentic setting and participants like hospital staff and patients.

Peer-tutoring

Since the 1980's peer assisted learning of clinical skills has become recognized and widely accepted. For example, in Germany (Krautter et al, 2014) the University of Heidelberg's model is called PAL (peer assisted learning). The university's senior medical students help their junior fellows in studying history-taking.

The English 'peer' has more interpretations in the Hungarian professional literature, one of which is 'fellow-sufferer' (Rácz, 2008). It highlights the shared and/or mutual status between partners similar in age that can be considered a key factor in building trust and genuine reliability. The work accomplished by peers is based on agreement and motivation to achieve a mutual aim.

The concept of shared status appears also in Boud's reciprocal peer learning (2001), emphasizing the mutual benefit from studying together.

Nestel and Kidd (2003) alike find peer learning a determining factor in developing clinical skills when taking medical history in a patient-centred approach.

Gwee (2003) contributes to the above mentioned by arguing that peer learning, in small groups in particular, facilitates the improvement of self-directed learning skills, like critical thinking and problem-solving skills; communication, interpersonal and teamwork skills; and enablespeer-assessment and critical reflection.

Blended learning

At present our department is working on developing a responsive interface to update materials for practising. The design of our website aims to enhance motivation. The new educational materials are available and regularly updated.

The website facilitates students from their first year of studying Hungarian. In the first year students are prepared for history taking from a linguistic perspective: vocabulary expansion, pronunciation, and practising grammar. In the second year, there is a shift in focus to listening comprehension skills, and also intercultural and situational awareness conversation based on authentic doctor--patient interviews in the field of internal medicine.

Film-applications are used as the basis for the new educational materials including check-ups and testing: the objective is to encourage students to follow the examples and complete a history taking task at their own level. The videos thematically follow the courses in the curriculum of the medical training with focus on internal medicine as a basic field, then other specialties.

Now there is a fortunate collaboration between clinicians and language teachers; clinicians collect data of common diseases in the field, then within each course the recordings are based on those common diseases. The setting is history taking at the patient's bedside exclusively (the doctor asks the patient about their past medical conditions, and present illness, followed by a physical examination). Recordings are evaluated and processed.

Language processing focuses on the patients' answers in reference to frequent misunderstanding. Applying a communicative approach, we do not modify doctors' questions. In the follow-up exercises designed for the videos we highlight interviewing strategies, linguistic tools of politeness and emphasis, short responses as comprehension markers and the structure of the conversation. In the classroom there is a preparatory phase for the hospital scene, when the above are practised in the form of pair-work. Following classroom activities, mobile learning tools enable the conversion of the study material making it available for rehearsing for history taking in peer-assisted learning.

Tutoring

We consider motivation of potential tutors a significant step in our innovative practice, especially senior Hungarian students, who have already developed professional skills and understand how assisting behaviour can help their peers cope with language and communication requirements. Hungarian students also learn from this experience; since assessing one another's language mistakes may seem to be difficult, and embarrassing. Nevertheless, they should understand it is beneficial to the participants. Through tutoring they learn that effective conversational interruption needs confidence, good communication skills and empathy.

Results and Discussion

Our innovative programme already has results due to its popularity among students. We have replaced the traditional communicative language teaching with authentic doctor–patient dialogue-based communication development in real conversations with patients in clinical settings.

Therefore, international students practise with Hungarian tutors and improve medical communication competencies while taking patients' medical histories together. The foreign student is assisted by both a language tutor and a professional tutor – a senior Hungarian student – who helps in structuring medical questions to meet professional protocols in order to provide a proper assessment and an appropriate diagnosis.

For Hungarian students tutoring activities have awareness – raising features in the fields of professional and communicative development. They only have a medical communication course in the first year of their training with no opportunity to evaluate patients; furthermore, at that stage the students are heavily involved with absorbing the core subjects then, i.e., anatomy and physiology. Without successfully completing these principle subject courses, medical communication cannot play a significant role.

In the Hungarian students' curriculum, clinical subjects are introduced in the third year similarly to the English and the German programmes, thus enabling encounters with patients at the bedside, and acquisition of essential interviewing skills and performing physical examinations. Unfortunately, the skills developed during the first-year doctor-patient communication courses are barely active by that time; therefore, essential conversational techniques should be improved in the courses of the clinical subjects. However, lack of time and opportunity for practising the interviewing skills with patients during clinical practices does not help fostering the necessary interviewing strategies. Understandably, this is the ideal time to develop a deep interest in the chosen medical specialty, as well as empathy toward the patients, and awareness of patient-centred medicine.

Activities outside the classroom – tutoring foreign students during history taking – facilitate the Hungarian medics to prepare for their future careers. At the bedside they realize the importance of a well-structured doctor–patient interview that ideally ensures a proper diagnosis and appropriate treatment. So, peer-tutoring in history-taking groups creates an optimal opportunity for professional practice while internalizing the interviewing procedures. Explaining to the international students 'what, how and why in the specific way we inquire in Hungarian' raises their professional, intercultural and language awareness.

The comparative analysis of the languages used is inevitable, our medical students need to comprehend differences and similarities between the cultures as well as history taking techniques of each other.

Acquisition of the above is important for both the Hungarian and international students, since as we mentioned before, more and more students accomplish their medical training in Hungary, thereby the basic skills of doctor-patient communication should be acquired at our university. This responsibility enables us, colleagues of languages for specific purposes, to prepare our students for history taking and language-related physical examination, and to increase awareness of

clinic-based doctor-patient communication in their own languages and also Hungarian.

Not only oral communication, but written skills are also improved, as we ask the students to write case reports based on notes taken at the clinic. After the patient bedside interviews there is an in-class session, where students pair up to discuss and assess the information elicited from the patients. It is followed by a plenary format task in which they present their experience of the dialogue, the patient's attitude towards cooperation, unusual and/or interesting information and a possible diagnosis.

The dialogues and case reports should be written down in the target language (in Hungarian for the foreign students, in German or English for the Hungarian students), then corrected by the peers, via e-mail or social media. The final version is sent to the teacher, who collects and sends case reports to the clinician for professional assessment. Therefore, the new approach incorporating peer-assisted learning into history taking language classes contributes to practiscing oral and written communication and professional competencies.

Conclusions

We believe that this innovative practice successfully contributes to previous LSP teaching approaches, i.e. general language should be taught first and then can be followed by the specific language. Adjusting to the needs of our medical school, which demands instant results (being able to take medical history), soon after a brief introduction to general language, the students are immersed into situational communication in professional settings where they follow clinical guidelines.

Our approach includes regular needs analysis, collecting all the components of LSP skills, aiming to design valued curricula. The pioneer colleagues have attended clinical courses together with German students in courses such as internal medicine, cardiology, dermatology and neurology to collect information of the professional needs. Thus, we consider ourselves ready to prepare students of our university for history taking and language-related physical examination. Through intercultural encounters we are willing to increase awareness of doctor–patient communication of all participants – as well as ourselves – in the students' own languages and also Hungarian.

References

ABDULMOHSEN, H. AL-ELQ. (2007). Medicine and Clinical Skills Laboratories *J Family Community Med*, 14(2): 59–63. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3410147/

BETLEHEM, J., NÉMETH, T., & GOJÁN, R. (2003). Nemzetköziesedés az ápolóképzésben. *Magyar Felsöoktatás*, 9–10, 18–21.

- BOUD, D. (2001). Introduction: Making the Move to Peer Learning. In *Boud, D., Cohen, R., & Sampson, J.* (ed.) *Peer Learning in Higher Education: Learning From & With Each Other.* London: Kogan Page Ltd, 1–17.
- GWEE MATTHEW C. E. (2003). Peer Learning: Enhancing Student Learner Outcomes. CDTL, 13.
- HALÁSZ, R., & KOPPÁN, Á. (2014). A magyar orvosi kommunikatív szaknyelvi kompetencia fejlesztés lehetőségeinek vizsgálata a szaknyelvhasználati szükségletek és a tanulási szituáció feltérképezése alapján. In Bocz, Z. (ed.) PORTA LINGUA, 311–318.
- KNIGHT, J. (1993). Internationalization: Management Strategies and Issues. *International Education Magazine*, Vol.9, No.1, 21–22.
- Krautter, M., Andreesen, S., Köhl-Hackert, N., Hoffmann, K., Herzog, W., & Nikendei, C. (2014). Cross-year peer tutoring on internal medicine wards: results of a qualitative focus group analysis. *Advances in Medical Education and Practice*, 5: 323–330.
- KSH. Központi Statisztikai Hivatal (Hungarian Central Statistical Office) (2013). Retrieved February 12, 2013, from http://www.ksh.hu/nepszamlalas/tablak_teruletiq_00
- Németh, T., Trócsányı, A., & Sütö, B. (2009). The need for a study to measure the intercultural impact of mobility programmes among health care students in Hungary. In Coudenys, W. (ed.) Whose culture(s)? Liverpool, 175–182.
- Tempus. Statistical data 2014. Retrieved May 15, 2014, from http://www.tpf.hu/pages/content/index.php?page_id=638
- RÁCZ, J. (szerk.) (2008). Az esélyteremtés útjai: kortárs és sorstárs segítéssel szerzett tapasztalataink. Budapest, L'Harmattan Kiadó, 12–108.

http://www.edutopia.org/pdfs/guides/edutopia-mobile-learning-guide.pdf

Bionote

Katalin Eklicsné Dr. Lepenye, e-mail: kata.eklics@aok.pte.hu, Department of Languages for Specific Purposes (LSP), University of Pécs, Medical School, Hungary

Katalin Eklicsné Dr. Lepenye is a senior lecturer in medical English and Hungarian, at the University of Pécs, Medical School, Department of Languages for Specific Purposes, and a member of the Conversation Analysis research group.

Ágnes Dr. Koppán, e-mail: akoppan@gmail.com, Department of Languages for Specific Purposes (LSP), University of Pécs, Medical School, Hungary

Ágnes Dr. Koppán is a senior lecturer in medical German and Hungarian, at the University of Pécs, Medical School, Department of Languages for Specific Purposes, and a member of the Conversation Analysis research group.

Timea Nemeth, e-mail: nemethtimi@yahoo.com, Department of Languages for Specific Purposes (LSP), University of Pécs, Medical School, Hungary

Timea Nemeth has been working at the Department of Languages for Medical Purposes at the Medical School, University of Pécs, Hungary since 2012. Her profile is teaching English and Hungarian for medical purposes. Her PhD research focuses on the role of intercultural competences in medical and healthcare education.