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## Acquisition of medical register through the communicative act of speaking

### ABSTRACT

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The study explores the role of speaking skills in the acquisition of medical register by international students learning Bulgarian as a foreign language in their preparatory year at the Medical University – Varna. Speaking as a productive language skill is particularly effective for the acquisition of the medical terminology that is most common, appears in speech with high frequency, and is typical mainly for the low and middle register. Although the study examines some of the challenges that the students experience specifically with Bulgarian oral speech (intonation, stress, pausing, clarity of articulation), it bears implications for the theory and practice of teaching the host country's tongue to international students of medicine or medical interns. It concludes that the objectives of language courses for international students cannot be limited to the students' acquisition of medical register for academic purposes, but inevitably ought to address their needs as future interns who will interact with patients and medical staff with different language and culture.

### Introduction

The present paper focuses on the productive skill of *speaking* as part of the communicative process in the teaching of medicine. The reason we chose this topic lies in our daily work with international students in the course of their study of Bulgarian language, as well as in the fact that the issue has not been thoroughly researched. We regard speaking as an interactive process, i. e. simultaneously as the ability for individual expression through which oral verbal communication takes place and as the potential for understanding a foreign language. The successful realization of the

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communicative act of speaking is associated with the foreign language learner's ability to understand and make utterances adequate to the particular area of social interaction, subject matter and situation. The objective of this study is to explore the role of speaking skills in the acquisition of medical register by international students.

## Methods

Our task was to examine how international students of medicine master certain peculiarities of Bulgarian language, as well as the use of Bulgarian in the professional communication between physicians, physicians and patients, and physicians and medical personnel. A second direction of research featured the acquisition of specific vocabulary in view of its use by international students in different medical registers. Considering these tasks, we registered by means of a portable recorder and analyzed the speech performances of 30 internationals on a given topic. The conversation topics were taken from the syllabus for the final examination in specialized language (Bulgarian as a foreign language for medical specialties). In their monologic speech, students were facilitated by visual stimuli (diagrams, pictures).

**Substitution.** Substitution refers to the age and personal characteristics of informants. The informants were selected by nationality (Turks – 20 and Greeks –10), sex (male – 26 and female – 14) and age (18 – 23 years).

## Results

1. The recordings of the students' speech show that the degree in which they master medical terminology depends primarily on their personal qualities and motivation rather than on their nationality.
2. Regarding the acquisition of the peculiarities of Bulgarian in terms of phonetics (articulation of vocals and consonants) and intonation of interrogative sentences, it was established that students from different nationalities experience dissimilar difficulties.

Greek students, for example, make mistakes in shaping the intonation of interrogative sentences. Most often, they erroneously apply rising intonation at the end of the sentence, while Bulgarian intonation patterns require falling intonation in interrogative sentences with question words such as *какво* (*what*), *кой* (*who*), *колко* (*how many*), etc.

Incorrect intonation	Correct intonation
Какво Ви боли? ↗	Какво Ви боли? ↘
От какво се оплаквате? ↗	От какво се оплаквате? ↘
От колко дни имате температура? ↗	От колко дни имате температура? ↘

- The lack of the sound *ç* /tsə/ in Turkish leads to its replacement in spoken and written language with *mc* /tə'sə'/ or *c* /sə/: *свят* instead of *цвят*; *функция* instead of *функция*;
- In Turkish, *л* /lə/ is softer than in Bulgarian, and is comparable to the soft Bulgarian *л* /l'/. This phonetic discrepancy causes errors such as *съединител'на* instead of *съединителна тъкан*.
- Metathesis.** Replacement of a fricative with a plausive consonant. The lack of a separate sound *б* /bə/ in Greek and the expression of *б* by means of a diphthong brings about errors like *Вулгария* instead of *България*.
- Elision.** Omission of the plausive consonant *т* /tə/ by Turkish students: *косна* instead of *костна система*.
- Fricative *x* is pronounced as a guttural sound.
- Regarding the articulation of vowels by Greek and Turkish students, mistakes are identical:
  - The Turkish vowel /ə/ is not identical to the Bulgarian *ъ*. It is articulated in Turkish as an open vowel. This divergence between the two tongues also leads to a common error pattern: *клетачен* instead of *клетъчен*; *белтаци* instead of *белтъци*;
  - Greek students tend to replace the vowel *ъ* /ə/ with *у* /u/. This is explained with the fact that in Greek the vowel /ə/ is absent.

In modern Bulgarian, no phonetic rules exist for determining the place of stress in words. This confuses the students from Turkey since in Turkish the stress patterns are regular, with the main stress falling on the last syllable (Zimmer, Orgun 1999: 154-158). It is therefore important that instructors of Bulgarian make their Turkish students learn and reinforce the new vocabulary through listening and pronunciation. The correction and prevention of incorrect stress placement is imperative in the case with words with a main and secondary stress or with two main stresses. The reason is that much of medical terminology consists of compound nouns and adjectives that belong to these stress types: *кръвоснабден* /,krəvosnab'den/,

дванадесетопръстник /dva'nadeseto'prəstnik/, съединителнотъканна /sædə'nitelno'təkənnə/ (Dobrev 2011:368).<sup>1</sup>

How do international students try to cope with the challenge of Bulgarian stress patterns? Most frequently, when uncertain of where to place the stress, they divide words into syllables by means of breaks: *неправилна форма* /nepra'-vilna 'forma/, *кръст/овата кост* /'krəst-ovata 'kost/. For comparison, students recur to intonation pauses when thinking over the logical arrangement of their statements. This occurs when the informants are not sufficiently prepared on the topic. The informants do not speak at the same pace. Those who feel more prepared for the task demonstrate a greater speech flow. With the deceleration of speech flow, repetitions in the informants' utterances are observed: *рамениѝа поас/ рамениѝа поѝас е изграден от* /'ra:menija 'pōas/ 'ra:menija 'pōas e 'izgra'den ot/.

Our analysis allows us to conclude that the most common mistakes made by international students in speaking Bulgarian occur:

1. in shaping sentence intonation in dialogic communication.
2. in placing the stress in compound nouns and adjectives, as well as with proper pausing during utterances.
3. in articulating consonants and vowels.

The emphasis in teaching Bulgarian as a foreign language for healthcare specialties falls on the learners' ability to express themselves in direct communication with patients and medical staff during their clinical practice. To this end, future doctors ought to:

- master the peculiarities of Bulgarian and keep mistakes to a minimum.
- be prepared for professional communication in Bulgarian in academic and hospital settings.
- master medical terminology (specific categories, concepts, and phenomena).
- shift medical registers skillfully, in accordance with the communicative situation.

According to leading Bulgarian linguists, *register* includes the means of both written language and oral speech. Thus, Angel Pachev defines register as a relatively closed subsystem of linguistic tools, determined by the parameters of the social situation (Pachev 1993: 217). Similarly, Tacheva and Georgieva regard register as a linguistic phenomenon with specific lexico-syntactic features determined by different factors which vary in kind and importance according to the social and professional sphere

<sup>1</sup> A similar stress pattern for medical terms also occurs in English: *vascularized* ['vaskyulə'raɪzd], *duodenum* [duə'dēnəm].

(Tacheva, Georgieva 1998: 156). In this vein, we term *medical register* the peculiarities of verbal communication among health professionals and, on the other hand, among health professionals and patients.

Conversing and interacting in other ways stands as an important part of physicians' daily work. The physician's communicative competence is a quality of professional significance. According to Wiese, successful communication between physician and patient is contingent upon the physician's ability to make scientific content comprehensible for the patient. (Wiese 1984: 65) As for foreign interns, communication in Bulgarian in a Bulgarian hospital represents a considerable challenge. They need to understand patients of different ages and backgrounds. Some patients even speak a dialect. In their conversations with patients, medical students should be able to:

- ask information about personal data, genetic diseases, health status, and complaints.
- instruct patients and medical personnel about the course of treatment, laboratory testing, diet, etc.
- give explanations to patients about their illnesses in simple language.
- consult with / give or ask advice from colleagues about medical cases.
- inform relatives about patients' condition.

Communication between medical personnel and the respective communicative partners takes place:

- directly (face-to-face contact)
- on the Internet (video conferencing)
- by phone (with a patient, colleague, physician)

A more detailed study of register in healthcare communication has been conducted by Tacheva and Georgieva (Tacheva, Georgieva 1998: 156). They differentiate between three types of medical register:

- high (academic)
- medium
- low

**High (academic) register** is used for the exchange of medical information between professionals. It is incomprehensible and inaccessible for non-professionals. While encountered mostly in written form, elements of the academic register are also present in spoken language if appropriate for the communicative situation.

**Medium register** is intended for communication between medical staff or between medical staff and patients with good health literacy.

**Low register** is observed in the daily communication between medical staff and patients, or between physicians and patients' relatives. It is characterized by a vocabulary that is more accessible and comprehensible for patients. It is encountered mostly in spoken language.

As we already pointed out, *speaking* is understood as a two-way process that involves *both* the ability to make your own utterances and to comprehend the utterances of your interlocutors. By this token, to carry out successful medical communication, the future doctor should be able to speak, but to be a good listener as well. The following factors facilitate the communicative act of *speaking a foreign language*:

- clearly defined focus of the utterance – attainable communicative purpose
- extensive terminological and lexical stock
- logical thinking and adequate knowledge and skills for producing cohesive speech
- lucid enunciation – proper speaking technique that is characteristic of the respective language
- appropriate intonation in phrases and sentences
- clear articulation and diction

## Discussion

Speaking skills are practiced with the help of preparatory speaking exercises. The aims of these exercises are:

- creating situations that approximate real-life professional communication where oral speech is used
- preparing communicators for spontaneous speech in agreement with the register appropriate for the situation

Based on our experience, more specific recommendations about the course content may involve: students can listen and watch dialogues between native speakers in healthcare-related situations. The videos should be accompanied with transcription/translation of the dialogues. Slow-paced dialogues allow students to learn through repetition the characteristics of the native speakers' speech.

## Conclusion

Speaking plays a vital role in the daily work and interactions of medical professionals. The results of our study of international students in classes of Bulgarian for specific purposes at the Medical University – Varna bear implications for the theory

and practice of teaching Bulgarian, as well as for the teaching of the host country's tongue to international students of medicine or medical interns in general. Our observations confirm conclusions from research of multicultural/ multilingual hospital environments that apt choice of speaking exercises allows learners to assimilate "native speaker tonality" (Bloom, Timmerman, Sands 2006: 272). In our view, speaking as a productive language skill is particularly effective for the acquisition of medical terminology that is common, appears in speech with high frequency, and is typical mainly for the low and middle register.

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