# ORIGINAL ARTICLE/PRACA ORYGINALNA

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# Evaluation of communication skills among students of the final year of medical faculty Medical University of Warsaw in area of bad news transmission

Ocena umiejętności komunikacyjnych studentów ostatniego roku kierunku lekarskiego Warszawskiego Uniwersytetu Medycznego w zakresie przekazywania niepomyślnych informacji

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# **Abstract**

**Introduction.** An important element of general medical skills is the ability to deliver bad news in an effective and emotionally burdensome manner for medical personnel as doctors usually are. Preparing graduates for such a challenge is to familiarize them with the elements of the SPIKES protocol, referring to the 6 elements of the interview that should be included during the giving information.

Material and methods. The study has been conducted among the last-year students of the Faculty of Medicine, Medical University of Warsaw, participating in classes at the Medical Simulation Centre (MSC) as part of the "Specialty chosen by the student" block. As a part of that course was the participation of students in a scenario assuming the need to deliver bad news to the family of a patient who has died due to cardiac arrest. Students worked in four-person therapeutic teams, in which 1 student acted as the head of the therapeutic team, 3 other students acted as team member. A previously trained person played the role of a family member. The students' behaviour was assessed by an independent observer based on audiovisual recordings.

Results. Out of 369 students participating in the simulation classes described above at the MSC, 148 people making up 37 Emergency Medical Team (EMT) agreed to an audiovisual recording enabling the study to be carried out. 86% of those speaking with the simulated patient playing the role of the patient's family ensured a sufficiently long conversation time related to the needs of the family. About 2/3 of the respondents (68.5%) reflected the emotions of the interlocutor and was able to name them and reacted on an ongoing basis to the patient's reactions in terms of the bad news delivered (63%). Less than half of the respondents (48.5%) took care to maintain intimacy during the conversation. 20% of students provided preliminary information about the incident to introduce them to the interview, and less than 10% of the respondents summed up the interview and suggested further proceedings.

**Conclusions.** The analysis of last year Faculty of Medicine students behaviour showed that practically all elements of the SPIKES protocol require a lot of attention and thorough discussion in the education of subsequent years of students of the medical faculty. Teaching the ability to communicate unfavourable information should take place both at the stage of undergraduate education and its completion in postgraduate education.

Key words: bad news, SPIKES protocol, communication, education

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### Introduction

An important element of general medical skills is the ability to deliver bad news [1]. The unique situation of communicating news that is difficult for a patient or their family to receive and accept is undoubtedly an emotional burden for the physician. To reduce the uncertainty accompanying the delivery of bad news, curb the related stress and prepare the best possible skills of factual and empathic communication of bad news, classes preparing graduates for such challenges should be conducted already at the stage of graduate training. One method is to introduce students to the elements of the SPIKES protocol.

The acronym SPIKES refers to 6 conversation elements that should be included when delivering bad news [2]. These are:

- S setting appropriate setting and timing of the conversation:
- P perception perceiving what the patient knows;
- I invitation an invitation to talk;
- K knowledge providing the knowledge:
- E emotions and empathy;
- S strategy and summary.

This protocol is used to structure a conversation to deliver bad news. It can be helpful, especially for those who do not have much experience in having such conversations. It also makes it easier to prepare for a talk that is often emotionally difficult for patients and doctors. By including all the elements of the SPIKES protocol in the conversation, it is possible to prepare the patient to hear bad news, communicate it most effectively, show empathy and inform the patient about further measures that can be taken in each situation.

# Materials and methods

The study group consisted of sixth-year medical students of the Medical University of Warsaw (MUW) participating in classes conducted at the MUW Medical Simulation Centre (MUW MSC) under a six-week module: "Specialty chosen by the student". A detailed description of the study group was presented in an earlier paper [3]. The classes were compulsory, and their subject was devoted mainly to medical communication in relation to the roles played in simulated conditions in three general-medical scenarios considering clinical settings involving medical personnel [3]. Before practising the practical skills, a short seminar was conducted in which the instructors discussed basic communication skills (including SPI-KES, among others) and their importance in medical practice. The aim of the scenarios played out during the classes was: informing a patient with advanced testicular cancer about an unfavourable prognosis, doctor's refusal to admit a patient to the hospital after the loss of consciousness, management during cardiac arrest, according to the current guidelines, including the ability to communicate with other team members and deliver bad news to the patient's family. This last scenario given to the students, related to the assessment of the ability to break bad news, is the subject of the present study. Before playing out the scenario, the students were asked to create a Emergency Medical Team (EMT) consisting of four persons: a team leader (TL) and team members (TMs).

The premise of the scenario was to analyse the management during irreversible cardiac arrest, regardless of the actions taken by the students, with the need to decide to stop resuscitation and declare death and break the bad news to the patient's family. The scenario assumed that the EMT would decide to terminate resuscitation due to its ineffectiveness. Between 1 and 2 minutes passed from the time resuscitation was abandoned until the simulated patient, who played the role of the deceased patient's daughter or son, arrived in the A&E room. The role of family member was played by technicians working in the MSC who are professionally active healthcare workers (nurses, paramedics), having daily contact with situations requiring delivering bad news and having experience in how it is received. The task of the team was to delegate the person responsible for breaking the news about the death of a patient.

The study included students who consented to participate, including an audiovisual recording, which was assessed by one instructor regarding the adherence of the participating students to the elements included in the SPIKES protocol. The Bioethics Committee of MUW acknowledged the study [4].

The following elements were analysed in terms of the subjects' ability to deliver bad news according to the SPI-KES protocol:

- ensuring intimacy during the news delivery;
- asking if the patient needs the support of a loved one;
- gathering information about the knowledge on the health status of a loved one;
- the manner of delivering bad news;
- the response to the patient's family reaction (avoiding aggressive behaviour, showing understanding and willingness to help);
- confirming that the recipient understood the news delivered:
- ensuring that the message is sincere and authentic;
- summarising the conversation and suggesting further management.

The above elements of the SPIKES protocol were evaluated according to the guidelines of Baile et al. [5], with the authors' modification described above.

#### Results

Of the 369 students participating in the simulation classes described above at MUW MSC, 148 students forming 37 EMTs consented to the audiovisual recording.

When delivering bad news, most subjects (86%) talking to the trained person playing the role of the patient's family ensured that the conversation time was appropriately long and tailored to the family's needs. More than two-thirds of subjects (68.5%) reflected the emotions of the interlocutor and were able to name them and respond to the patient's reactions to the bad news (63%). Less than half of subjects (48.5%) took care to maintain intimacy during the delivery of bad news — they moved to a deliberately prepared place in the corner of the simulation room, away from the resuscitation area and intended to give the impression of intimacy. The ability to convey information concisely and understandably during the scenario analysed was demonstrated by 46% of subjects. Making sure that the information delivered was understood and encouraging the interlocutor to ask questions was found in 31% and 37% of subjects, respectively. Furthermore, 20% of the participating students provided introductory information about the event to introduce the conversation, and less than 10% summarised the conversation and suggested further management.

Table 1 shows the number and percentage of talks during which the SPIKES protocol elements were used.

# **Discussion**

One of the unique areas in a physician's work is communicating with patients and their families. It requires informed consent and cooperation regarding the information provided and management [6]. The ability to communicate properly plays a huge role in special situations such as the death of a loved one. It is of great importance at a time when good two-way communication between doctor and patient gradually deteriorates [7]. It is reasonable to assume that the ability to deliver bad news to the patient's family also deteriorates. It is associated with civilisation, social or economic changes. Undoubtedly, the reasons for this state of affairs should be found, among others, in the rapid development of information technologies, which, on the one hand, is supposed to improve communication and information exchange, and on the other hand, leads to deepening isolationism in interpersonal contacts. The coronavirus disease 2019 (COVID-19) epidemic and the rapid changes that followed made very clear the disconnect between the expectations and needs of those seeking help and the systemically limited healthcare offerings, including in the doctor-patient communication space. Difficulties in conversations during which the doctor's task is to break bad news may also result from social and

**Table 1.** The number and percentage of Emergency Medical Teams whose members used the SPIKES protocol elements during the simulation

SPIKES protocol elements	N [%]
S — appropriate setting and timing of the conversation	
Ensuring intimacy	17 (48.5%)
Using non-verbal communication	8 (23%)
${f P}-$ perceiving the interlocutor's knowledge	
Gathering information about the knowledge on a loved one's illness	7 (20%)
I — an invitation to talk	
Asking if the patient wants a loved one present during the conversation	6 (17%)
Asking if there is a need to detail information about the event	13 (37%)
<b>K</b> — providing the knowledge	
Provide initial information about the event	7 (20%)
Communicate information in a concise and understandable manner	16 (46%)
Confirming the recipient's understanding of the news delivered	11 (31%)
E — emotions and empathy	
Ensuring enough time for the conversation	30 (86%)
Correctly identifying the emotions of the inter- locutor	24 (68.5%)
S — summarising the conversation and suggesting further management	3 (8.5%)

cultural changes. This is well illustrated by the issue of death. Death has settled for good in virtual reality, and in the era of globalisation and the world of fast information, it has taken on a new, different character. The online archives include not only very personal confessions of terminally ill people waiting for their suffering to end but also sites describing or even advertising euthanasia options in selected European countries. On the other hand, death is a taboo subject rarely discussed in public. Even in private conversations, it makes many people uncomfortable. People used to die at home in the past, and now, it usually happens in hospitals or hospices. Children and young people are often separated from the elderly and the sick and dying in an unjustified concern to shelter them from suffering too much due to a loved one's death. As a result, young people are unfamiliar with death, which they often have not encountered before [8]. It is worth noting that the students participating in the study rated their ability to deliver bad news very low, which means that they are aware of their deficiencies in this area. This is undoubtedly a clear signal for academic teachers and

specialisation supervisors to put more emphasis on this area during the didactic process.

The analysis of the behaviour of final-year medical students showed that practically all elements of the SPIKES protocol require great attention and thorough discussion in the next years education. It should be noted that even in areas in which a large group of students were able to observe the principles of proper communication, every third student could not reflect the emotions of the interlocutor and correctly name them. Furthermore, more than every second did not know how to respond to the patient's reaction to bad news in real-time.

It is worth noting that the element of the SPIKES protocol, which was assessed the worst during the analysis of conversations, was the further management strategy. Undoubtedly the element that made this task challenging for the students was that in the situation assumed in the scenario, it was difficult to plan a strategy because the patient died, which precluded the possibility of proposing further medical management. The subjects were faced with an extremely difficult situation that undoubtedly created serious emotional challenge. Scenario participants could ask about the well-being of the person receiving the news, the possible need for psychological support or

assistance from a social worker with, for example, activities related to the collection of relevant documents. At this point, the subject's task was to focus on supporting the patient's loved one and providing guidance on how to proceed after the death of a family member. It was more about administrative procedures and showing empathy than medical intervention. Notably, the study results indicate a high risk that individuals who enter the healthcare system as medical professionals will soon be faced with difficult situations involving the need to deliver bad news and are not skilled enough to navigate both the administrative and emotional sides smoothly. Such a situation may not only cause problems related to inadequate communication and disturb the possibility of building a mutually satisfying doctor-patient or doctor-patient family relationship but also increase the risk of frustration and burnout among medical professionals [9].

The results of this study indicate the need for education on the ability to deliver bad news both at the pre-graduate stage and its supplementation in post-graduate education.

#### Conflict of interest

None declared.

# Streszczenie

Wstęp. Ważnym elementem umiejętności ogólnomedycznych jest umiejętność przekazywania niepomyślnych informacji w sposób skuteczny i jak najmniej obciążający emocjonalnie dla przedstawicieli personelu medycznego, jakimi zwykle są lekarze. Przygotowaniem absolwentów do takiego wyzwania jest ich zapoznanie z elementami protokołu SPIKES odnoszącego się do 6 elementów rozmowy, które powinny zostać uwzględnione przy przekazywaniu niepomyślnych informacji.

Materiał i metody. Badanie przeprowadzono wśród studentów ostatniego roku kierunku lekarskiego Warszawskiego Uniwersytetu Medycznego biorących udział w zajęciach w Centrum Symulacji Medcznych (CSM WUM) w ramach bloku "Specjalność wybrana przez studenta". Jednym z elementów zajęć był udział studentów w scenariuszu zakładającym konieczność przekazania niepomyślnych informacji rodzinie pacjenta, który zmarł w wyniku zatrzymania krążenia. Studenci pracowali w czteroosobwych zespołach terapeutycznych, w których jeden student pełnił rolę szefa zespołu terapeutycznego, a pozostali 3 studenci — role członków zespołu. Przeszkolona wcześniej osoba odgrywała rolę rodziny pacjenta. Ocenę zachowań studentów przeprowadził niezależny obserwator na podstawie nagrań audiowizualnych.

Wyniki. Spośród 369 studentów biorących udział w opisanych wyżej zajęciach symulacyjnych w CSM WUM 148 osób tworzących 37 zespołów terapeutycznych (ZT) wyraziło zgodę na nagranie audiowizualne umożliwiające przeprowadzenie badania. Osiemdziesiąt sześć procent ZT zadbało o odpowiednio długi, dostosowany do oczekiwań rodziny czas rozmowy. Około 2/3 badanych (68,5%) odzwierciedliło emocje rozmówcy i potrafiło je nazwać oraz reagowało na bieżąco na reakcje pacjenta przy przekazywaniu niepomyślnych informacji (63%). Niespełna połowa badanych (48,5%) zadbała o zachowanie intymności w trakcie prowadzenia rozmowy. Dwadzieścia procent studentów przekazało informację wstępną na temat zdarzenia w celu wprowadzenia do rozmowy, a mniej niż 10% badanych podsumowało rozmowę i zaproponowało dalsze postępowanie.

Wnioski. Analiza zachowań studentów ostatniego roku kierunku lekarskiego pokazała, że praktycznie wszystkie elementy protokołu SPIKES wymagają dużej uwagi i gruntownego omówienia w kształceniu kolejnych roczników słuchaczy kierunku lekarskiego. Nauczanie umiejętności przekazywania niepomyślnych informacji powinno się odbywać zarówno na etapie edukacji przeddyplomowej, jak i jej uzupełniania w kształceniu podyplomowym.

Słowa kluczowe: niepomyślne informacje, protokół SPIKES, komunikacja, kształcenie

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