Delivering bad news to patients from the perspective of medical students

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Abstract

The objective of this study is to verify if medical students acquired knowledge about delivering bad news to patients during their undergraduate clinical courses. A questionnaire was applied to two groups: Group 1, which had not studied the theme and Group 2, which had already studied it. 29.41% of Group 1 knew about the Spikes Protocol and 100% of Group 2 (p=0.0001) knew about it. 25.88% of Group 1 and 81.01% of Group 2 (p=0.0001) were partially prepared for communication. 17.65% of Group 1 and 83.54% of Group 2 (p=0.0001) felt more secure after the study. 90.59% of Group 1 attributed a maximum grade to the importance of learning and 87.34% of Group 2 (p=0.8166) did the same. It was concluded that all students recognized the importance of learning about delivering bad news and the wide difference of knowledge in favor of Group 2 highlights the effectiveness of its approach during undergraduation.

Keywords: Health communication. Truth disclosure. Physician-patient relations. Learning. Bioethics.

Resumo

Comunicação de más notícias a pacientes na perspectiva de estudantes de medicina

O objetivo deste estudo foi verificar se estudantes de medicina adquiriram conhecimento sobre comunicação de más notícias aos pacientes durante a graduação. Aplicou-se questionário para dois grupos: Grupo 1, que não havia cursado disciplinas sobre o tema, e Grupo 2, que já as havia cursado. Conheciam o protocolo Spikes 29,41% do Grupo 1 e 100% do Grupo 2 (p=0,0001). Consideraram-se parcialmente preparados para a comunicação 25,88% do Grupo 1 e 81,01% do Grupo 2 (p=0,0001). Sentiam-se mais seguros após o estudo 17,65% do Grupo 1 e 83,54% do Grupo 2 (p=0,0001). Atribuíram nota máxima à importância do aprendizado 90,59% do Grupo 1 e 87,34% do Grupo 2 (p=0,8166). Concluiu-se que todos reconheciam a relevância do ensino sobre comunicação de más notícias. Além disso, a ampla diferença de conhecimento do Grupo 2 destaca a eficácia da abordagem ao tema na graduação.

Palavras-chave: Comunicação em saúde. Revelação da verdade. Relações médico-paciente. Aprendizagem. Bioética.

Resumen

Comunicación de malas noticias a los pacientes desde la perspectiva de estudiantes de medicina

El objetivo de este estudio fue verificar si los estudiantes de medicina adquirieron conocimiento sobre comunicación de malas noticias a los pacientes durante el ciclo clínico de la carrera de grado en la universidad. Se aplicó un cuestionario a dos grupos: Grupo 1, que no había cursado disciplinas sobre el tema, y Grupo 2, que ya las había cursado. Conocían el Protocolo Spikes el 29,41% del Grupo 1 y el 100% del Grupo 2 (p=0,0001). Se consideraron parcialmente preparados para la comunicación el 25,88% del Grupo 1 y el 81,01% del Grupo 2 (p=0,0001). Se sentían más seguros después del estudio el 17,65% del Grupo 1 y el 83,54% del Grupo 2 (p=0,0001). Atribuyeron nota máxima a la importancia del aprendizaje el 90,59% del Grupo 1 y el 87,34% del Grupo 2 (p=0,8166). Se concluyó que todos reconocían la relevancia de la enseñanza de la comunicación de malas noticias. Además, la amplia diferencia de conocimiento del Grupo 2 destaca la eficacia del abordaje del tema durante la carrera de grado.

Palabras clave: Comunicación en salud. Revelación de la verdad. Relaciones médico-paciente. Aprendizaje. Bioética.

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Bad news in the field of health is information that can worsen the patient's future prospects, depending on his/her personality, beliefs and social support ^{1,2}. The term "comunicação de más notícias" (breaking bad news), adopted in this work because it is widely established in literature, is not always translated this way into Portuguese - the Instituto Nacional do Câncer - INCA (Brazilian National Cancer Institute), for example, has adopted the term "comunicação de notícias difíceis" (communication of difficult news)³.

The form and content of transmission of this news to the infirm have varied in the course of human history. In ancient times, the physician had an autonomous attitude, and the truth was possibly omitted so that the patient would not divert his/her attention from the treatment. However, the other information was given cheerfully, serenely and with encouragement⁴.

Some changes occurred in the following centuries⁴, but the vigorous emphasis on human autonomy in the last decades contributed decisively to greater social concern for the patient's well-being. This was reflected in the content of international and national documents, including the Código de Ética Médica - CEM (Brazilian Code of Medical Ethics), in which article 34 states that the physician has the duty to disclose to the patient the diagnosis, prognosis, as well as the treatment risks and objectives⁵, provided that this information does not cause harm.

Communication during health care has become as important to the patient as their treatment and, when appropriate, favors adherence to treatment, acceptance of therapeutics and satisfaction with care^{6,7}. Usually, the professional learns to break bad news by trial and error or by the observation of more experienced colleagues, but this does not guarantee effective communication without mishaps or undesirable consequences, nor is there sufficient evidence that the professional's ability will evolve over time without specific training v⁸.

On the one hand, breaking bad news, especially when it comes to diagnosis of incurable disease, is something delicate for professionals, since the emotions manifested by the patient can often be difficult to get around. On the other hand, the ability to deal with such a situation is neither innate nor a divine gift, but can be acquired with information and training, so that negative consequences for patients are minimized¹. For this purpose, it is necessary to adjust the curricula of medical courses to the study of communication, especially when directed at critically ill patients¹. However, there are divergent opinions. For example, a Brazilian study, whose objective was to determine evidence regarding the efficacy of training physicians and medical students on how to break bad news, did not arrive at any certainty as to its efficiency, since there are many forms of communication between people from different cultures and further research with the control group would be necessary to prove the hypothesis⁹.

Among the various clinical competencies essential for successful health work, communication between doctor and patient has a prominent place, since it favors reciprocal reception, dialogue and understanding¹⁰. One of the most widespread strategies to reveal the diagnosis of cancer is the Spikes protocol, a didactic guide that presents six steps to conduct the process and which can also be used for other diseases¹¹.

In this context, it is presumed that schools currently provide sufficient information and training to medical graduates on breaking bad news. Thus, the present study aimed to verify how the students of a medical school self-evaluate their knowledge about this communication before and after studying the disciplines that deal with the subject during the clinical cycle.

Methodology

The research was conducted between the 22nd and 28th November 2016, at the medical school of the Universidade do Oeste de Santa Catarina (University of Western Santa Catarina). The study sample consisted of 164 students divided into two groups: Group 1, composed of students from the first, second and third phases of the medical course, who had not yet studied the subjects Ethics and Society (Bioethics) and Medical Ethics in which the content regarding breaking bad news to patients is offered; and Group 2, composed of eighth, ninth and tenth phase students who had recently completed their respective disciplines. The exclusion criterion was not consenting to participate in the study or the incomplete answering of the questionnaire. The students from the fourth to the seventh phases were excluded from the study because it is the (clinical) cycle in which the two disciplines dealing specifically with the subject of this research are offered.

As a data collection instrument, a selfadministered questionnaire was used with three general questions relating to sociodemographic characterization, and thirteen specific questions with binary, multiple choice and staggered alternatives. Students were approached in the classroom with prior authorization from the responsible lecturer. One of the researchers presented himself, explained the objective and purpose of the study, and assured students of the confidentiality and anonymity of the collected information. After acceptance, the informed consent form (ICF) was made available to the participant and signed in duplicate: one for the researcher and one for the participant.

After obtaining the data from the questionnaires, it was tabulated and calculated in absolute numbers and percentages. Statistical analysis was performed with the Statistica 7.0 system (StatSoft). Fisher's exact test and Pearson's chi-square test were applied, depending on the arrangement of the comparisons between the variables performed. The level of significance was set at p≤0.05. The course's board of directors was contacted prior to authorization of the research, which only started after the approval of the Institutional Research Ethics Committee.

Results

The sample had 164 participants, of which 97 (59%) were female and 67 (41%) were male. The average age was 22.4 years with a minimum of 17 and a maximum of 38. Single people were 161 (98.2%), married 2 (1.2%) and 1 (0.6%) widowed. Regarding

the phase of the course, 85 (52%) were between the first and third phase (Group 1) and 79 (48%) between the eighth and tenth phases (Group 2).

The results referring to questions regarding the experiences of the students of Groups 1 and 2 in breaking bad news to patients are presented in Table 1. In the comparison between the two groups, the majority of students in the more advanced phases (Group 2) had seen a physician breaking bad news to a patient, contrasting with the reduced portion found in the initial phases (Group 1). Although none of the students in Group 1 had yet broken bad news to a patient, part of Group 2 had already had this experience at the request of a physician, and the diagnosis of cancer was the most frequent communication.

Table 2 presents data on the learning and knowledge of both groups regarding breaking bad news to patients. Group 2 participants showed more understanding about protocols to inform such news, especially about the Spikes protocol. In addition, they felt more prepared than Group 1 to deal with this matter, the results being significant (p = 0.0001).

The evaluation of the degree of importance of learning (0 to 5) how to break bad news to the patient is shown in Table 3. Almost all participants gave a maximum score. Only two participants in Group 1 scored zero or 1, and none of Group 2 scored less than three.

Table 1. Data on the acquisition of experience in breaking bad news from Groups 1 and 2

Spacific data	Gr	Group 1		roup 2		
Specific data		%	n	%	р	
Witnessed a doctor breaking bad news to a patient						
Yes						
Cancer diagnosis	10	12	56	71	<0.0001	
Diagnosis of another disease	5	6	5	6		
Patient's death	3	3	9	11.5		
No	67	79	9	11.5		
Total	85	100	79	100		
The physician's communication was satisfactory						
Yes	16	19	63	80	<0.0001	
No	3	3.5	8	10		
Non-applicable	66	77.5	8	10		
Total	85	100	79	100		
Has communicated some bad news to a patient						
No	85	100	54	68		
Yes. Which news?						
HIV diagnosis	0	0	1	1.5		

	Group 1		Group 2			
Specific data		%	n	%	p	
Has communicated some bad news to a patient						
Worsening of disease	0	0	4	5		
Cancer diagnosis	0	0	16	20		
Patient's death	0	0	1	1.5	-	
Diagnosis of non-cancer / HIV	0	0	3	4		
Total	85	100	79	100		
Who asked you to do the communication?						
Physician	1	1	20	25		
Nurse	0	0	0	0		
Patient	1	1	2	2.5		
No one	83	98	55	69.5	-	
Relative	0	0	1	1		
Other. Who?	0	0	1	1		
Total	85	100	79	100		
Broke bad news to a patient regarding his/hers health						
No or non-applicable	83	97.64	9	11.39		
Yes. Which?	-	-	52	65.82		
Explained the risks of high blood pressure	1	1.18	0	0.00		
Showed the result of an altered exam	1	1.18	0	0.00		
HIV diagnosis	0	0	2	2.53	<0.0001	
Worsening of disease	0	0	1	1.27	<0.0001	
Cancer diagnosis	0	0	7	8.86		
Diagnosis of non-cancer / HIV	0	0	5	6.33		
Did not mention what news	0	0	3	3.80		
Total	85	100.00	79	100.00		
At what phase of the course did you break bad news?	1					
Did not communicate	83	98	49	62	<0.0001	
1 st	1	1	0	0		
2 nd	0	0	1	1		
3 rd	1	1	0	0		
4 th to 7 th	0	0	7	9		
8 th to 10 th	0	0	22	28		
Total	85	100.00	79	100.00		

Table 1. Continuation

Table 2. Data on the study regarding breaking bad news from the students of Groups 1 and 2

Specific data	Group 1		Gro			
	n	%	n	%	p	
Participated in some breaking bad news event						
No	4	5	8	10		
Academic week of medicine	81	95	65	82.5	0.4020	
Bioethics congress	0	0	2	2.5	0.1829	
Round table	0	0	2	2.5		

Table 2. Continuation

Specific data	Group 1		Gro				
	n	%	n	%	- p		
Participated in some breaking bad news event							
Course	0	0	2	2.5	0.4030		
Total	85	100	79	100	0.1829		
Teaching strategy used for your learning							
Film	22	26	53	67			
Role-playing (simulation)	5	6	40	51			
Educational video	26	31	39	50			
SPIKES protocol	21	25	77	97.5]		
Theory class	50	59	59	75	<0.0001		
Had no strategy	15	18	2	2.5	<0.0001		
Other strategy							
Lecture	7	8	0	0]		
Case report	2	2.5	0	0			
Real situation	0	0	1	1			
Feels more confident to break bad news to patient	s after stu	idying the disc	ipline				
Yes	15	17.65	66	83.54			
No	6	7.06	13	16.46	<0.0001		
Have not yet studied the discipline	64	75.29	0	0.00	<0.0001		
Total	85	100	79	100			
Do you know any communication protocol?			-				
Yes	23	27	79	100			
No	62	73	0	0	<0.0001		
Total	85	100	79	100			
Knows the SPIKES protocol		-					
Yes	25	30	79	100			
No	60	70	0	0.00	< 0.0001		
Total	85	100	79	100	\$0.0001		
How well do you think you are prepared to break bad news to a patient?							
Totally prepared	4	5	0	0			
Partially prepared	18	21	64	81			
Partially unprepared	29	34	15	19	<0.0001		
Totally unprepared	34	40	0	0			
Total	85	100	79	100			

Table 3. Students' score on the importance of learning to break bad news to patients

Degree of importance of learning how to communicate	Group 1		Group 2		2
	n	%	n	%	р
0	1	1	0	0	
1	1	1	0	0	
2	0	0	0	0	
3	2	2.5	2	2.5	0.4330
4	4	5	8	10	
5	77	90.5	69	87.5	
Total	85	100.00	79	100.00	

Discussion

In Group 1, few students had the opportunity to see this type of news being given to patients by a physician, but in Group 2 the majority had already witnessed this situation (Table 1). Communication (verbal and non-verbal) is among the skills and attitudes to be acquired by students, according to the Diretrizes Curriculares Nacionais dos Cursos de Medicina (Brazilian National Curriculum Guidelines for Medical Courses)¹². One of the traditional ways of learning about this aspect is the observation of more experienced physicians, although there are already more effective techniques, such as role-playing, that is, peer training, and the use of simulated patients¹³⁻¹⁵.

The diagnosis of cancer was the most frequently communicated by Group 2 students, at the request of the attending physician, and hypertension was the most common disease explained to patients. Research has found that the information given by medical students is well received by patients who, in turn, interpret the matter as an opportunity to get more clarification about their disease ¹⁶.

Although this practice is well accepted and develops the skills of undergraduates, patients still prefer to receive news of illnesses with unfavorable prognoses from the physician who they trust the most. However, a study done in Brazil found that only 60% of professionals do this personally¹⁷.

Research carried out in Portugal with physicians in their first year of residence identified three deficiencies during the graduation: insufficient learning regarding breaking bad news; premature and disjointed insertion of the topic into the curriculum; and poor preparedness to deal with emotions¹⁸. In these aspects, the provision of this content in the curricular disciplines of the clinical cycle from the course researched has been improving the learning process, according to students' selfassessment, allowing them to report diagnosis directly to patients, under medical supervision, following their graduation.

The learning process of the present research participants, regarding the subject, occurred during the course of disciplines and in lectures that took place during the Academic Week (Table 2). As for curricular learning, the study of the SPIKES protocol, films, theory classes, dramatizations and didactic videos were the teaching strategies most referred to by participants. Most of them said they felt more confident after the study. The theoretical approach on standardized protocols in theory classes, as well as the participation of simulated patients and roleplaying (peer training) are techniques that can also develop this type of practice in students¹⁹.

Another research (literature review) conducted in 2010 found, in the articles surveyed, that dramatization with simulated patients and roleplaying were more suitable for this learning ¹³. In addition, it is highlighted that films are among the strategies useful for teaching this topic, since they reveal the subjectivity, the patient's point of view, to the spectator ²⁰. In this way, the cinematographic art creates mediations between students and patients, and helps to deal with difficulties and anxiety that arise in the daily life of professionals ²¹.

Regarding protocol knowledge, specifically the Spikes protocol, almost a third of the first phase students and all of the more advanced students reported knowing it. Group 1 students who already knew the topic, became acquainted with the subject matter during an extracurricular course during the academic week. The knowledge of the Spikes protocol revealed by all the participants from (Group 2) students from the phases after the clinical cycle who had studied the disciplines covering this content, shows the effectiveness of the respective study.

In another study, focusing on the Spikes protocol in relation to teaching how to break bad news to medical students, it was concluded that, although some reported that the six steps of the document could restrict the physician's freedom to break bad news, it was considered valid, didactic and adaptable to different situations²². The fact that some students judge the protocol as a limiting factor, may indicate that they have not yet had practical training to better understand the permutations of its use.

One of the last questions posed to the students was how they interpreted their readiness to break bad news to patients, with more positive answers in Group 2, which was already expected (Table 2). However, it is emphasized that no student in this group considered themselves totally prepared or unprepared: most felt partially ready, denoting the perception of the efficacy of the teaching offered.

The effectiveness of specific techniques for learning how to break bad news is questioned by some authors². However, most of the students in both groups of the present study positively evaluated the instruction, assigning a maximum grade to its importance, without there being a significant difference in the responses (Table 3). However, two participants in Group 1 assigned scores of zero and one respectively, but none of Group 2 gave a score lower than 3, signaling that the relevance may not be perceived by some people without proper knowledge, but it develops as training advances, when they become aware of the consequences of bad news for patients.

Physicians may feel anguish and sadness when they realize that they have not communicated satisfactorily, and this experience can generate physical and emotional problems over time²³. In research conducted with professionals who worked directly with people with HIV/AIDS, it was found that, although most of them felt at ease with their way of revealing the diagnosis, some were shaken, sad or distressed. Many have even reported difficulties in dealing with patients' most common reactions, such as aggression, anguish, apathy, shock, guilt, despair, doubt, fear of separation, heartache, denial, revolt, sense of end-of-life, and the need to pray²⁴.

Other research has been more emphatic in affirming the degree of distress of health professionals who break bad news²⁵. The negative consequences that can accrue to them and their patients raise the need to improve the techniques and skills that minimize undesirable effects for both.

Final considerations

The majority of participants considered learning about the topic in question to be important, regardless of whether or not they had already undertaken the disciplines on the subject. The tactics most often pointed out by those who had studied the topic in descending order were: theory classes, didactic videos, films, use of the SPIKES protocol and role playing.

As for the protocols, especially in the case of the Spikes protocol, there was a great difference of knowledge in favor of the Group 2 participants, who had already followed the disciplines and had more opportunities to observe physicians breaking bad news, and to personally communicate diagnoses and explain diseases to patients. With this, compared to Group 1, Group 2 felt more confident and more prepared to break bad news to the infirm.

This difference of knowledge, as well as the feeling of being more prepared and confident manifested by Group 2, highlights, according to the evaluation of its students, the importance of teaching this subject in the medical course covered by this research.

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All analyzed and interpreted the data and wrote the article.

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