

# Medical knowledge about communicating bad news: a survey study

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## Abstract

When communicating bad news, the lack of adequate techniques can compromise effectiveness. The objective was to evaluate the knowledge and experience of medical residents regarding the communication of bad news. This is a survey study involving 2,418 physicians from clinical and surgical specialties. The comparison between groups was performed using the Chi-square test, paired difference, and analysis of variance, with a significance level of  $p < 0.05$ . Overall, 90% of participants do not feel trained to communicate bad news, and 40% have never received specific training. About 29% are unaware of the existence of the SPIKES protocol. In the comparison between groups, candidates for surgical programs consider themselves more skilled in communication and agree more with the circle of silence. Most physicians do not feel skilled in effective communication. Future surgeons showed less ability to deal with emotional situations compared to physicians in clinical specialties.

**Keywords:** Health communication. Education, medical. Internship and residency.

## Resumo

### Conhecimento médico sobre comunicação de más notícias: estudo tipo survey

Na comunicação de má notícia, a ausência de técnicas adequadas pode comprometer a efetividade. Objetivou-se avaliar o conhecimento e experiência de médicos candidatos a residência sobre comunicação de más notícias. Trata-se de estudo tipo *survey* envolvendo 2.418 médicos, de especialidades clínicas e cirúrgicas. A comparação entre grupos foi realizada pelo teste qui-quadrado, de diferença pareada e análise de variância, com nível de significância  $p < 0,05$ . 90% dos participantes não se sentem capacitados em comunicar más notícias, e 40% nunca receberam treinamento específico. Cerca de 29% não conhecem a existência do protocolo SPIKES. Na comparação entre grupos, candidatos a programas cirúrgicos consideram-se mais capacitados em comunicação e compactuam mais com o cerco do silêncio. A maioria dos médicos não se sente capacitada para uma comunicação eficaz. Futuros cirurgiões apresentaram menor capacidade para lidar com situações emocionais em comparação aos médicos de especialidades clínicas.

**Palavras-chave:** Comunicação em saúde. Educação médica. Internato e residência.

## Resumen

### Conocimientos médicos sobre la comunicación de malas noticias: estudio tipo encuesta

En la comunicación de malas noticias, la falta de técnicas adecuadas puede comprometer la eficacia. El objetivo fue evaluar los conocimientos y la experiencia de los médicos candidatos a la residencia sobre la comunicación de malas noticias. Se trata de un estudio tipo *survey* en el que participaron 2.418 médicos de especialidades clínicas y quirúrgicas. La comparación entre grupos se realizó mediante la prueba de chi cuadrado, la prueba de diferencias pareadas y el análisis de varianza, con un nivel de significación  $p < 0,05$ . 90% de los participantes no se sienten capacitados para comunicar malas noticias, y 40% nunca ha recibido formación específica. Alrededor del 29% desconoce la existencia del protocolo SPIKES. En la comparación entre grupos, los candidatos a programas quirúrgicos se consideran más capacitados en comunicación y están más de acuerdo con el cerco del silencio. La mayoría de los médicos no se sienten capacitados para una comunicación eficaz. Los futuros cirujanos mostraron una menor capacidad para manejar situaciones emocionales en comparación con los médicos de especialidades clínicas.

**Palabras clave:** Comunicación en salud. Educación médica. Internado y residencia.

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Communication is a process that can be influenced by linguistic factors, related to information, or paralinguistic factors<sup>1,2</sup>. In medicine, bad news is understood as any information conveyed to a patient or family member that alters their expectations<sup>3</sup>; it can also be characterized as information that causes a drastic and negative change in a person's life and hope for the future<sup>4</sup>.

The aging of the global population has led to an increased number of deaths resulting from complications associated with chronic diseases. According to the World Health Organization (WHO)<sup>5,6</sup>, chronic diseases account for more than 70% of deaths worldwide. In turn, physicians are the professionals generally responsible for delivering the diagnosis, prognosis, and available treatments. The distressing experience, combined with the lack of adequate technical skills, causes uncertainties in professionals and can result in adverse situations during the communicative process and in ineffective transmission of information<sup>7</sup>.

Several protocols, including the SPIKES protocol, have been developed with the objective of supporting physicians in this process, providing a structured model for breaking bad news, addressing aspects such as setting preparation, patient perception, information transmission, and emotional support<sup>8</sup>.

In medical school, training on approaches to symptom control and patient management in palliative and end-of-life care still seems scarce; therefore, strategies to develop these skills and the ability to convey information appropriately have become increasingly necessary. Thus, there is evident need for medical school curricula including training in breaking bad news, as this skill is fundamental for professional practice and the promotion of humanized care<sup>7,9</sup>.

The present study aimed to assess the knowledge of physicians applying for residency programs in clinical and surgical specialties on breaking bad news.

## Method

This is a cross-sectional survey study, which involved the application of a questionnaire on

breaking bad news to 3,850 physicians applying for residency programs at a federal university in São Paulo, who took an exam to enter the programs in November 2016. On the day of the entrance exam, a team of collaborators gathered four hours before the exam began to separate the material into envelopes according to the capacity of each room. The questionnaires were handed out and the participants were briefed one hour before the start of the exam.

The participants were informed about the research topic and objectives and subsequently signed the informed consent form (ICF); those who agreed to participate received a copy of the form. All questionnaires were returned before the start of the exam and placed in randomly numbered boxes.

Participants who answered 90% or more of the 28 questionnaire items were included in the study. Questionnaires with incorrect completion, smudges, incompleteness, or from candidates who did not sign the ICF were excluded.

The instrument used was developed by a team of specialists—composed of a physician, two psychologists, and two physical therapists – so it could be self-administered in up to 15 minutes. Initially, similar studies were presented as a basis for defining the questions, with subsequent team analysis for suggestions for improvements. After three in-person meetings, the final version was approved by all members.

After approval, we conducted a pilot study with application in two groups of ten residents in clinical medicine, at different times, in order to check the average completion time and eliminate any drafting errors of the instrument. The average completion time was found to be less than ten minutes.

The instrument questions aim to obtain from participants personal and demographic data, information about knowledge on “breaking bad news,” previous experiences in palliative care and training in breaking bad news, as well as about the SPIKES protocol.

Questionnaires were separated and numbered, and their results were tabulated and stored in Excel spreadsheets for later analysis in SPSS-23 software. Mean and standard deviation were calculated for continuous variables. Frequency and proportion were used for categorical variables. The comparison of categorical variables

between groups used the chi-square test. When necessary, the paired difference test was used. The comparison of continuous variables between groups used analysis of variance (ANOVA). A *p*-value below 0.05 was considered significant.

To analyze which factors influenced knowledge, the sample was divided by a group of professionals who agreed on this characterization: 1. Clinical group: composed of 1,625 physicians who chose specialties with characteristics of non-invasive or minimally invasive procedures; and 2. Surgical group: composed of 745 physicians applying for specialties with more invasive or surgical procedures.

## Results

Of the 3,850 applicants (100%), 1,213 returned a blank questionnaire and 219 responded incompletely or invalidly. A total of 2,418 applicants (62.9%) were included in the study, targeting 72 distinct programs. The specialty with the highest number of respondents was clinical medicine (11%), followed by general surgery (7.49%), pediatrics (7.03%), dermatology (5.13%), and neurology (4.71%).

Regarding sociodemographic data, the sample was predominantly composed of young subjects (mean age of 27 years ± 2.94), female (60.7%), and single (87.9%). The predominant religion was Catholicism (56.9%), followed by the agnostic doctrine (14.2%), Spiritism (12.8%), and Evangelicalism (9.6%).

Regarding the participants' university education, 1,159 (48.7%) were from public institutions and 1,223

(51.3%) from private institutions. Approximately 898 participants (37.5%) had already completed another residency program.

Regarding previous experience in communication training, 61.2% of the sample (n=1,481) reported having received classes on breaking bad news during their undergraduate program, while 61.8% (n=1,498) stated they had participated in specific training on the subject during that period. Approximately 92% of the participants consider that they have not completed the training with satisfactory communicative skills. Furthermore, 88 individuals (3.6%) stated they had never communicated bad news. Most of the sample, 970 participants (40.4%), reported having experience in conducting one to five communications.

Regarding the appropriate setting for breaking bad news, 97.3% of the sample (n=2,343) understands the need for a private setting, and 2.7% (n=66) do not believe it is necessary or is indifferent to the setting.

The largest portion of participants, 66.5% (n=1,597), disagrees with the statement that "the communication of death to a family member can be delivered by any member of the multiprofessional team." In turn, 83.9% of the sample (n=2,013) agree that the communication of bad news should involve other professionals in addition to physicians. For 45.9% of the participants, physicians are the professionals who best communicate bad news, followed by psychologists (34.9%) and nurses (0.9%).

Table 1 presents the questions and respective answers on ethical conduct related to breaking bad news and professional behavior towards family members and patients.

**Table 1.** Answers on ethical conduct related to breaking bad news and professional behavior towards family members and patients

Question	n	%	Total
<b>1. Do you believe the patient always has the right to know about their current and future condition?</b>			
Yes	2.308	95.81%	
No	70	2.90%	2.409
I don't have an opinion	31	1.29%	

continues...



**Table 1.** Continuation

Question	n	%	Total
<b>2. In your opinion, which family member is it most difficult to inform about a sudden death?</b>			
Mother/father	2.104	87.38%	2.408
Daughter/son	172	7.14%	
Wife/husband	105	4.36%	
Grandfather/grandmother	19	0.79%	
Brother/sister	8	0.33%	
<b>3. What type of communication of bad news do you consider most difficult to deliver?</b>			
Death	1.389	57.80%	2.403
Prognosis	571	23.76%	
Palliative care	307	12.78%	
Diagnosis	136	5.66%	
<b>4. In your opinion, in a hospital setting, should the communication of bad news be delivered objectively, all at once, in order to spare the patient from further suffering?</b>			
Yes	817	34.00%	2.404
No	1.474	61.30%	
Indifferent	113	4.70%	
<b>5. When breaking bad news, we should avoid silence and frequent pauses, and the physician should focus on what needs to be communicated to the patient.</b>			
I agree	671	27.90%	2.409
I disagree	1.632	67.70%	
I don't know	106	4.40%	
<b>6. The physician should focus solely on the patient when breaking bad news, and the interference of family members in this process is not desirable.</b>			
I agree	89	3.69%	2.413
I disagree	2.255	93.45%	
I don't know	69	2.86%	
<b>7. It is desirable that the physician cooperates with the family when they wish to spare the patient from a bad diagnosis or prognosis, in order to preserve a good relationship with the family and avoid conflicts during the process.</b>			
I agree	789	32.89%	2.399
I disagree	1.285	53.56%	
I don't know	325	13.55%	
<b>8. It is more important that the physician focuses on the verbal content that should be communicated with the goal of maintaining concentration on the communication and avoiding distraction by other non-verbal stimuli.</b>			
I agree	554	23.20%	2.389
I disagree	1.702	71.25%	
I don't know	133	5.57%	

continues...

**Table 1.** Continuation

Question	n	%	Total
<b>9. When investigating the level of knowledge a patient has about their disease, it is desirable to use open-ended and non-directive questions.</b>			
I agree	1.415	59.20%	
I disagree	848	35.48%	2.391
I don't know	128	5.36%	
<b>10. Do you think the family's spirituality can minimize the impact of the communication of bad news?</b>			
Yes	2.247	93.89%	
No	69	2.88%	2.393
Indifferent	77	3.22%	
<b>11. Do you think the cultural and social level facilitates the communication of bad news?</b>			
Yes	1.900	79.56%	
No	264	11.06%	2.389
Indifferent	225	9.42%	
<b>12. If you were the patient, would you like the news about your disease to be delivered directly to:</b>			
Only you	829	34.64%	
A relative	26	1.09%	2.394
You along with a family member	1.539	64.29%	
<b>13. If you were the patient, would you like the communication of bad news to be:</b>			
Complete	2.183	91.26%	
In parts	209	8.74%	2.392
<b>14. Do you think it is wrong for a professional to cry when breaking bad news?</b>			
Yes	621	26.03%	
No	1.488	62.37%	2.386
Indifferent	277	11.61%	
<b>15. Do you think it is appropriate to hug a family member when breaking bad news?</b>			
Yes	1.596	66.65%	
No	420	17.54%	2.395
Indifferent	379	15.82%	
<b>16. How would you react if you were verbally abused after breaking bad news?</b>			
I would react aggressively, trying to contain the situation	13	0.54%	
I would stay silent until the abuser stopped speaking	783	32.48%	
I would try to ask for calm to continue the conversation	825	34.22%	2.411
I would request support from a psychologist	161	6.68%	
I would not ask for calm and would calmly try to continue the conversation	629	26.09%	

n: number of individuals; %: percentage

Regarding the SPIKES protocol, the letter E (emotions), which corresponds to the stage where family members express their emotions during the communication of bad news, was considered the most complex, followed by K (knowledge), in which doctors convey all the technical information considered difficult to deliver.

Most respondents (71.3%; n=1,697) disagreed with the statement that there are no protocols or guidelines for communication of bad news in the literature and that the communication should only be based on the physician's experience. On the other hand, 20.13% (n=479) agreed with this statement, while 8.57% (n=204) reported not knowing.

In total, 65.14% (n=1,566) of participants stated they knew the SPIKES protocol, while 34.86% (n=838) did not know this structured tool for communicating bad news. When asked which SPIKES protocol stage they found most challenging, most participants indicated the "emotion (E)" phase (29.20%; n=447), followed by "knowledge (K)" (22.86%; n=350) and "invitation (I)" (21.88%; n=335). The other stages were mentioned less frequently: "perception (P)" (11.69%; n=179), "setting up (S)" (6.73%; n=103), and "strategy and summary (S)" (7.64%; n=117).

### Comparison between clinical × surgical programs

In the analysis of demographic data, comparing professionals who applied for clinical and surgical specialties, it is observed that in surgical specialties physicians have a lower mean age (26.78±2.88, *p*-value=0.0089), are predominantly male (51.9%, *p*-value=0.0001) and single (90.7%, *p*-value=0.0346), predominantly from public universities (53.6%, *p*-value=0.0072), and most have not previously completed residency (28.6%, *p*-value<0.0001).

Respondents classified as "clinical specialties" had a higher mean age (27.12±2.96, *p*-value=0.0089), were predominantly female (66.7%, *p*-value=0.0001) and single (87.8%, *p*-value=0.0346), predominantly from private universities (53.5%, *p*-value=0.0072), and most had previously completed residency (28.6%, *p*-value<0.0001).

A larger number of professionals who applied for surgical specialties reported having had classes on breaking bad news during their undergraduate programs (65.5%) compared to clinical specialties (59.3%) (*p*-value=0.0036). As in the communication training aspect, 62.2% of participants in surgical specialties report having undergone communication training, compared to 61.6% of participants in clinical specialties (*p*-value=0.7925).

For surgical specialties, 3.7% of the sample state having never communicated bad news, 42.8% state having delivered 1 to 5 communications, 18.2% state having delivered 5 to 10 communications, and 35.3% state having delivered more than 10 communications.

As for clinical specialties, 3.6% of the sample state having never communicated bad news, 39.5% state having delivered 1 to 5 communications, 19.4% state having delivered 5 to 10 communications, and 37.5% state having delivered more than 10 communications (*p*-value=0.7925).

For clinical specialties, only 6.7% of the sample (n=111) believe that "physicians graduate with a good ability to communicate bad news." For surgical specialties, only 10.7% of the sample (n=81) agree with the statement (*p*-value=0.0008).

Regarding the setting considered adequate for breaking bad news, 97.6% of the clinical group understands the need for a private setting, compared to 96.5% of the surgical group (*p*-value=0.3254).

**Table 2.** Answers on ethical conduct related to communicating bad news and professional behavior toward family members and patients, in the comparison between clinical and surgical specialties

Question	Clinical		Surgical		Total	p-value
	n	%	n	%		
<b>1. Do you believe the patient always has the right to know about their current and future condition?</b>						
Yes	1,589	96.35%	714	94.57%	2,303	
No	44	2.67%	26	3.44%	70	0.0675
I don't have an opinion	16	0.97%	15	1.99%	31	
<b>2. In your opinion, which family member is it most difficult to inform about a sudden death?</b>						
Mother/father	1,448	86.70%	652	86.03%	2,100	0.3619
Daughter/son	109	6.60%	63	8.31%	172	0.1231
Wife/husband	74	4.50%	31	4.09%	105	0.6763
Grandfather/grandmother	12	0.70%	7	0.92%	19	0.606
Brother/sister	2	0.10%	5	0.66%	7	0.0347*
<b>3. What type of communication of bad news do you consider most difficult to deliver?</b>						
Death	954	58.06%	431	57.11%	1,385	0.7299
Prognosis	376	22.85%	194	25.69%	570	0.1203
Palliative care	230	14.02%	77	10.21%	307	0.0106
Diagnosis	83	5.06%	53	7.02%	136	0.0501
<b>4. In your opinion, in a hospital setting, should the communication of bad news be delivered objectively, all at once, in order to spare the patient from further suffering?</b>						
Yes	541	32.89%	274	36.33%	815	
No	1,040	63.26%	431	57.15%	1,471	0.0021
Indifferent	64	3.89%	49	6.50%	113	
<b>5. When breaking bad news, we should avoid silence and frequent pauses, and the physician should focus on what needs to be communicated to the patient.</b>						
I agree	453	27.47%	215	28.47%	668	
I disagree	1,120	67.86%	510	67.47%	1,630	0.7142
I don't know	76	4.61%	30	3.97%	106	
<b>6. The physician should focus solely on the patient when breaking bad news, and the interference of family members in this process is not desirable.</b>						
I agree	55	3.33%	34	4.51%	89	
I disagree	1,555	94.01%	695	92.15%	2,250	0.2313
I don't know	44	2.66%	25	3.31%	69	
<b>7. It is desirable that the physician cooperates with the family when they wish to spare the patient from a bad diagnosis or prognosis, in order to preserve a good relationship with the family and avoid conflicts during the process.</b>						
I agree	510	31.03%	275	36.74%	785	
I disagree	899	54.69%	385	51.45%	1,284	0.0147
I don't know	236	14.36%	89	11.89%	325	

continues...

**Table 2.** Continuation

Question	Clinical		Surgical		Total	p-value
	n	%	n	%		
<b>8. It is more important that the physician focuses on the verbal content that should be communicated with the goal of maintaining concentration on the communication and avoiding distraction by other non-verbal stimuli.</b>						
I agree	373	22.78%	180	24.12%	553	
I disagree	1,176	71.75%	523	69.98%	1,699	0.6489
I don't know	88	5.37%	44	5.90%	132	
<b>9. When investigating the level of knowledge a patient has about their disease, it is desirable to use open-ended and non-directive questions.</b>						
I agree	978	59.64%	436	58.47%	1,414	
I disagree	572	34.91%	272	36.47%	844	0.7283
I don't know	90	5.49%	38	5.09%	128	
<b>10. Do you think the family's spirituality can minimize the impact of the communication of bad news?</b>						
Yes	1,552	94.64%	690	92.26%	2,242	
No	42	2.56%	27	3.61%	69	0.0771
Indifferent	46	2.80%	31	4.15%	77	
<b>11. Do you think the cultural and social level facilitates the communication of bad news?</b>						
Yes	1,281	78.28%	614	82.10%	1,895	
No	199	12.16%	65	8.69%	264	0.0374
Indifferent	156	9.53%	69	9.23%	225	
<b>12. If you were the patient, would you like the news about your disease to be delivered directly to:</b>						
Only you	552	33.72%	276	36.80%	828	
A relative	21	1.28%	5	0.67%	26	0.1545
You along with a family member	1,066	65.00%	469	62.53%	1,535	
<b>13. If you were the patient, would you like the communication of bad news to be:</b>						
Complete	1,488	90.80%	690	92.10%	2,178	
In parts	150	9.20%	59	7.90%	209	0.3044
<b>14. Do you think it is wrong for a professional to cry when breaking bad news?</b>						
Yes	401	24.59%	219	29.27%	620	
No	1,048	64.24%	437	58.34%	1,485	0.0205
Indifferent	183	11.21%	93	12.43%	276	
<b>15. Do you think it is appropriate to hug a family member when breaking bad news?</b>						
Yes	1,126	68.64%	466	62.13%	1,592	
No	274	16.73%	146	19.47%	420	0.0063
Indifferent	240	14.63%	138	18.40%	378	
<b>16. How would you react if you were verbally abused after breaking bad news?</b>						
I would react aggressively, trying to contain the situation	6	0.36%	7	0.91%	13	0.1289*
I would stay silent until the abuser stopped speaking	540	32.31%	241	31.34%	781	0.6692
I would try to ask for calm to continue the conversation	571	34.24%	252	33.78%	823	0.5313
I would request support from a psychologist	115	6.89%	46	5.98%	161	0.4169
I would not ask for calm and would calmly try to continue the conversation	419	25.10%	210	27.28%	629	0.2209

\* Fisher's exact test

**Table 3.** Knowledge about the existence of protocols for communication of bad news, in the comparison between clinical and surgical specialties

Question	Clinical		Surgical		Total	p-value
	n	%	n	%		
<b>1. There are no protocols or guidelines in the literature for communication of bad news; physicians should use their experience and observation to perform this task as best as possible.</b>						
I agree	321	19.64%	157	21.22%	478	0.6577
I disagree	1,174	71.74%	519	70.14%	1,693	
I don't know	140	8.57%	64	8.65%	204	
<b>2. Do you know the SPIKES protocol?</b>						
Yes	1,068	64.92%	496	65.89%	1,564	0.6383
No	578	35.08%	257	34.11%	835	
<b>3. Which part of the protocol do you consider most difficult in a communication of bad news?</b>						
Setting up (S)	67	6.44%	35	7.16%	102	0.6213
Perception (P)	127	12.20%	52	10.64%	179	0.351
Invitation (I)	217	20.90%	118	24.14%	335	0.1666
Knowledge (K)	239	22.98%	110	22.51%	349	0.7883
Emotion (E)	313	30.10%	134	27.39%	447	0.2512
Strategy and summary (S)	77	7.42%	40	8.18%	117	0.6159

## Discussion

In the present study, 61.2% of participants reported not having training on the subject, and 92% believe that physicians complete their training without good communication skills. Furthermore, a large portion of the sample stated they had delivered at most ten communications of bad news throughout their professional careers, which indicates limited practical experience.

These findings are consistent with other studies. One with residents from 19 medical specialties showed that 95% of participants did not receive specific training on communication of bad news during their undergraduate education<sup>10</sup>. Similarly, Tavakol and collaborators<sup>11</sup> observed that only 8.6% of residents had attended communication improvement courses during that period. Even among those who received further training, few reported feeling prepared to conduct good communication. Muneer and collaborators<sup>12</sup> observed that, although 51% of the professionals in their sample had received some type of training in communication of bad news, more than half (52%) still adopted their own improvised approaches when dealing with this situation.

The present study had predominant participation of young physicians, recently graduated or with a few years of professional experience. This scope differs from similar studies, such as Silveira, Botelho, and Valadão<sup>13</sup>, which evaluated 120 physicians from a Brazilian hospital, and Mostafavian and Shaye<sup>14</sup>, which analyzed 70 physicians from different sectors in two university hospitals. Although these studies did not consider prior experience or training time, they found significant deficits in communication skills. Furthermore, both studies concluded that the implementation of training strategies can contribute to the improvement of these skills.

Regarding information about the current and future conditions of patients, information is often transmitted inadequately<sup>13</sup>. Regarding the family aspect, over 87% of the sample state that they consider the patient's parents as the most difficult family members to communicate with and death as the most complex subject to inform about. The high frequency of these responses may be associated with sociocultural conceptions according to which the death of offspring is an "unnatural" event, that is, an inversion of the natural order of life. Furthermore, the loss of a

child is often perceived as particularly unfair, with arguments that they “had little time to live” or that they “never did anyone any harm.” Thus, informing parents of children’s deaths makes the task of communicating even more difficult<sup>15</sup>.

Brouwer and collaborators<sup>15</sup> found that there are communication barriers between physicians and parents and assessed the main difficulties reported by parents during the conversations, such as not requesting information about the child from the parents, leaving the meeting with little information due to lack of clarity, excessive use of technical terms, and the presence of many people during meetings, in addition to the parents’ concern about conveying bad news to their own children without medical guidance or support.

The present study observed that, when questioned about agreement as to withholding information from the patient at the family’s request, over 30% of physicians stated they supported this practice, while approximately 15% reported “not knowing how to act.” These values are higher than those in a similar study<sup>12</sup>, in which 20.4% of physicians agreed as to not disclosing to the patient information about their condition. This discrepancy may be related to the higher heterogeneity of the sample in the aforementioned study, which included physicians with more training time and clinical experience, factors that influence perceptions and behaviors in communicating bad news.

The “conspiracy of silence” consists in an agreement, explicit or not, among members of a group to keep secret information that, if exposed, could be harmful to the group, its interests, or its associates. Due to communication failures, lack of bioethical knowledge, fear of losing the person, stress, prognostic uncertainty, among other causes, the withholding of information can lead to consequences such as lost autonomy, impaired decision-making, and worse quality of life. Therefore, it should be avoided, in favor of communication based on progressive truth<sup>16</sup>.

Studies on patient preference as to receiving news about their health condition found that over 90% would like to know everything about their diagnosis, prognosis, and treatment<sup>17,18</sup>. However, another study observed that some information provided to cancer patients, such as the possible

side effects of treatments, is considered dispensable by approximately one-third of those evaluated<sup>19</sup>. Therefore, it is fundamental to ask the patient about what news they wish to receive<sup>16</sup>.

A higher level of spirituality of the patient and family members was considered by respondents as an important factor in mitigating the impact of bad news. The family’s sociocultural level is another factor that can facilitate understanding and acceptance of the patient’s conditions. When asked to put themselves in the situation of patients with advanced diseases, practically 99% of participants responded that they would like the news to be delivered directly to them, alone or with a family member, and over 90% would like the information to be delivered complete.

Regarding the technical aspects of how to communicate bad news, most participants responded that doing it in a private setting is important. However, a study with pediatric residents observed that 90% of the professionals do not worry about ensuring a private setting during meetings with the family<sup>20</sup>. Moreover, approximately 35% excluded family members from this conversation. A study in Portugal with 159 physicians showed that, for this same question, 93% stated they would like to know everything about their diagnosis and 83% would like to know about their prognosis<sup>21</sup>.

A portion (28.7%) of participants do not know the existence of any communication protocols, and over 35% do not know the SPIKES protocol, which is the most used for this task<sup>22,23</sup>. Those who knew the protocol were asked which stage was considered the most difficult to execute, and the most frequent answer was E, for emotions, which corroborates findings from other studies and shows that physicians often do not feel confident and comfortable to deal with the emotions that may arise during a meeting with the family<sup>6,24</sup>.

Regarding the expression of empathy and feelings during the communication of bad news, one part states that they consider wrong the physician hugging the patient or family members (17.5%) or crying (26%) during the meeting. It is possible to relate this information to the greater difficulty found in conducting the SPIKES protocol. Crying or expressing empathy and affection can be perceived as a demonstration of weakness or lack

of control over the situation, even though patients expect physicians to show feelings in a meeting and that they are supporting the family<sup>17,24</sup>.

When asked if the communication of bad news should involve other professionals of the multidisciplinary team, 16.1% of respondents considered it indifferent or answered negatively. The participation of other professionals can be fundamental, as the physician is unaware of details of the care provided by other professionals, information which can be fundamental for care planning<sup>25</sup>. This seems contradictory to the fact that almost 35% of the sample states that the professional who best delivers bad news is the psychologist, 18.5% responded that the professional is indifferent, and less than half stated that the physician is the professional with the best ability to communicate bad news.

News referring to diagnoses or prognoses should be conveyed by physicians, and the multidisciplinary team can be an important support in this process, as shown by a study with post-stroke patients who had the participation of the entire health care team during meetings with the family. The study concluded that the participation of the other professionals increased the physicians' confidence in breaking bad news due to the team's collaborative consultation process<sup>25</sup>.

### Clinical specialties \* surgical specialties

When comparing the groups, we observed differences such as the predominance of males and a lower mean age in the surgical specialties group, with a majority from public schools and with a lower percentage of professionals who had previously completed residency programs.

Eason, Crosby, and Librach<sup>26</sup> analyzed the main books on surgical techniques in the United States and observed that they provide little information on communication of bad news, the dying process, the effects of decision-making on the family, and symptom treatment or management. Despite that, the authors suggest that, due to the frequency of deaths resulting from surgical procedures, it would be appropriate that more information on the questions analyzed be included in surgical textbooks<sup>26</sup>.

It was observed that, despite a higher percentage of the surgical specialties group stating

they had classes on communication of bad news during their undergraduate education, the vast majority of participants consider that physicians do not graduate with adequate training for that. It was observed that, in the clinical specialties group, awareness of limitations in this skill is even higher than in the surgical specialties group.

The most established negative view is that of death as a medical-surgical failure. Surgeons strive for a positive outcome that, traditionally, means recovery from surgical intervention without any significant morbidity. In the clinical specialties group, technical aspects and variables are more frequently related to histories. Patient responses and outcomes are influenced by the context and previous conditions, which requires the clinician to have greater flexibility and resilience in conducting and making decisions in their cases<sup>27</sup>. Both groups agree that parents are the most difficult family members to inform. Talking about death and prognosis was considered more difficult than talking about diagnosis and palliative care; however, a smaller percentage of the surgical specialties group considered the conversation about palliative care more difficult compared to the clinical specialties group.

As observed in the present study, when better communication skills are required, more controversial responses are found in the surgical specialties group than in the clinical specialties group<sup>28,29</sup>.

Regarding technical aspects of the communication of bad news, minimal disagreement was observed, with a higher percentage of the surgical specialties group affirming that bad news should be delivered all at once, to spare from further suffering. Also, more frequently, this group asserted that there should be agreement with the family if they wish to adopt a circle of silence or a conspiracy of silence. The result, beyond reinforcing the pragmatism of this group in relation to the clinical specialties, demonstrates a failure in technical knowledge, as, according to art. 34 of the Code of Medical Ethics, it is forbidden for the physician to fail to *inform the patient about the diagnosis, prognosis, risks, and objectives of the treatment, unless direct communication could cause them harm, in which case the communication must be delivered to their legal representative*<sup>30</sup>. Such conduct can also lead

to negative outcomes and feelings of fear, anxiety, depression, suffering, misunderstanding, and anger, common in palliative care patients facing the silence of their relatives<sup>16</sup>.

When analyzing the responses, the surgical specialties group shows a higher percentage of physicians who state that the sociocultural level can influence communication, that expressions of affection and compassion such as crying or hugging family members are not correct, and that other professionals besides the physician should not be present during a communication. This demonstrates the surgeons' difficulty with the resolution of conflicts that depend on their emotional intelligence and communication skills<sup>29</sup>.

Furthermore, regarding the question of which multidisciplinary team professionals best communicate bad news, a larger portion of the surgical specialties group responded it was the physician, and a smaller portion responded it was the psychologist compared to clinical specialties. This may be due to the less emotionally influenced profile of physicians who choose surgical specialties, which may favor errors in a communication process<sup>29</sup>.

A recent study asked surgical patients: what do I wish my surgeon knows?<sup>31</sup> The collected responses were organized into three groups and, overall, dealt with being treated holistically and with dignity; clear communication and definition of roles; and definition of expectations. Therefore, the responses show that patients miss greater empathy and better communication from surgeons, which are more frequent characteristics in physicians of clinical specialties, as observed. Perhaps this characteristic is personal to these professionals, presented even before they attended surgical residency<sup>29</sup>.

## Final considerations

The findings of the present study reinforce the existence of gaps in medical training as to the communication of bad news, shown by the lack of specific training during undergraduate education and the widespread perception that the professionals do not complete their training adequately prepared for this practice. More than 90% of physicians do not feel prepared for it when they leave university, and about 40% have never received formal training. Despite theoretical knowledge of protocols such as the SPIKES protocol, there are difficulties in applying them in practice, especially when communicating deaths and dealing with parents.

The comparison between clinical and surgical specialties demonstrated differences in the professionals' profiles and approaches. Physicians of surgical specialties demonstrated less emotional preparedness compared to applicants for clinical areas, as well as a greater tendency towards a pragmatic approach with less adherence to the participation of other professionals of the multidisciplinary team.

Furthermore, it was demonstrated that physicians with more time of experience, despite reporting less academic training, demonstrate greater confidence in communication. It was found that stage E (emotions) of the SPIKES protocol is considered the most difficult for the medical team, reflecting the professionals' difficulty with dealing with the expression of emotions during these interactions.

Considering these findings, we note the need to reformulate medical curricula so they include structured training in communication of bad news, addressing both technical and emotional aspects.


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