

# Knowledge of Doctors Regarding Breaking Bad News to Patients

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## Abstract

**Objectives:** To assess the knowledge of doctors with regard delivering bad news to patients and breaking bad news protocols. Identify the knowledge and perspective of doctors towards communicating bad news to patients. Clarify knowledge of doctors about breaking bad news protocols. Identify the preferred protocol by doctors to break bad news.

**Methods:** This is a cross sectional (descriptive study) done in Iraq from first of November 2020 to end of May 2021 involved 500 doctors (periodic resident, senior resident, general practitioner and specialist doctors in different specialties) working in different hospitals, primary health care centers and private clinics in Iraq, they are selected randomly. A self – administered questionnaire design in addition to online data collection, by using modified questionnaire and link sent to different online ways (WhatsApp, Viber, Facebook, Telegram).

**Results:** From 500 respondents doctors there were 329 (65.8%) females, 171 (34.2%) males. Poor knowledge of protocols 315 (63%) did not know any protocol in breaking bad news. The SPIKES protocol is the most preferred protocol by doctors about (75.6%).

**Conclusion:** High percentage of participants doctors (63%) did not know any protocol in breaking bad news and about (43%) of them rated themselves had good ability in delivering bad news. The SPIKES protocol is the preferred protocol by doctors.

**Keywords:** Knowledge, patients, Iraq

## Introduction

Breaking terrible news entails having a difficult talk with a patient in which the doctor must notify him or her that they have a life-threatening, incurable sickness.<sup>1</sup> Clearly, this definition is neither exhaustive or even universally applicable, since the impact of the news on the recipient can vary greatly and depend on a variety of circumstances, including the person's previous experience, life philosophy, spirituality, religious beliefs, age, culture, and education.<sup>1</sup>

**Knowledge** is a collection of ideas, knowledge, and "science." It also refers to one's ability to imagine and perceive things.<sup>2</sup> Knowing that delivering terrible news is one of the occasions in which the doctor's professionalism, critical experience, and ability to build trust are put to the test.<sup>3</sup> A doctor must have not only the necessary experience, but also the necessary knowledge and skills. Proper education and Continuing communication training are critical in developing the ability of doctors to deliver unpleasant news.<sup>4</sup> One of the most major reasons physicians have difficulties breaking terrible news to patients is a lack of information about how to properly communicate bad news to patients and the consequences of doing so.<sup>5</sup>

Some doctors are willing to take on the challenges, while others prefer to avoid them. Most people who avoid difficult situations have good intentions but don't know how to carry them out. They are concerned that if they say something inappropriate, the patient or family would cry or panic out.<sup>6</sup>

In truth, the majority of doctors in clinical practice have never been taught how to deliver terrible news and do not do so on a regular basis. As a result, delivering terrible news is a lonely task. All doctors are aware that this is a part of their responsibilities, and it does not appear to belong to any one discipline in particular.<sup>7</sup>

Delivering bad news is one of the most difficult difficulties that a doctor has in their medical practice,<sup>8</sup> and it is a vital skill

for all physicians, as well as many specialists, who will need to do it multiple times throughout their careers.<sup>9</sup>

The rise in chronic diseases and concerns connected to quality of life, it's more important than ever to understand how bad news affects patients, their families, and clinicians,<sup>10</sup> therefore bad news delivery to patients and their families requires extensive training and practice.<sup>11</sup>

Telling the truth is a difficult endeavor that involves a wide range of communication, comprehension, and empathy abilities. When used in the context of imparting bad news to a patient, it can be distressing and hazardous if done incorrectly,<sup>12</sup> and if patients are not properly communicated with, it can have a significant impact on how they perceive their disease, as well as whether they discontinue or continue medical therapy.<sup>13</sup>

Rasmus and Kozłowska conducted a study in Poland (2017) to investigate knowledge of breaking bad news among medical personnel in emergency medical services. The study found that only a few participants (4.1%) were aware of the SPIKES protocol for breaking bad news.<sup>14</sup>

Iraq has suffered from wars for four decades also suffered from terrorist attacks. All these misfortunes led to violent social shocks and social unrest which negatively affected the Iraqi health situation and increased morbidity and mortality due to the deterioration of health and social infrastructure and the increase in injuries.<sup>15</sup> Sadness enveloped the Iraqi society and thousands of Iraqi families lost their members.<sup>16</sup> In order to find out how the health staff deal with this painful scene and how they deal with the difficult and fatal cases that society faced and is facing so far, the study of knowledge of doctors regarding breaking bad news was chosen.

## Materials and Methods

This is a cross sectional (descriptive study) involved 500 doctors (periodic resident, senior resident, general practitioner

and specialist doctors in different specialties) working in different hospitals, primary health care centers and private clinics in Iraq from first of November 2020 to end of May 2021.

Study sample is simple random sample includes 500 doctors of different job descriptions. Who belong to Iraqi governmental or private health sector.

All of the subjects volunteered to participate in the study, they received simply worded, a self – administered questionnaire written in Arabic, with a covering letter explaining the project and the objectives of the study. In addition to online data collection questionnaire filled manually by direct interview with doctors in different Iraqi governorate. In particular, a questionnaire design to elect information of doctors knowledge regarding the delivery of bad news to patients and breaking bad news protocols. Doctors have been received questionnaire online. Data collected by using modified questionnaire and link sent to different online ways (WhatsApp, Viber, Facebook, Telegram) after the corrections and modification of the questionnaires, which were done online after the pilot study, data collection was began on 1st January 2021 to end of March 2021. Criteria for inclusion are age more than 25 years old, sex, clinical position, specialty, years of experience, work place. Also questions to assess the knowledge consist of five questions with answers yes or no. An initial draft of the questionnaire was piloted on 50 participant (equivalent to 10% of the total sample size) and this followed by modification of unclear items before the preparation of the final structured questionnaire. It was understandable and appropriate for the proposed study population.

Agreement to conduct the study was obtained from the Iraqi scientific council of family and community medicine in medical college of Tikrit University and approved by the ministry of higher education and scientific research. All participants informed about this study and their agreement were obtained.

## Result

### Sociodemographic Features of Participants in Relation to Gender, Age and Job

Figure 1 shows the frequency of males and females participants. There were 329 (65.8%) females, but 171 (34.2%) males participated in the study.

Regarding the age groups of doctors who participated in the study, the results found that the more frequent age group was (35–<45) years old about 215 (43%), while less frequent age group was 55 years and more about 26 (5.2%) Table 1.

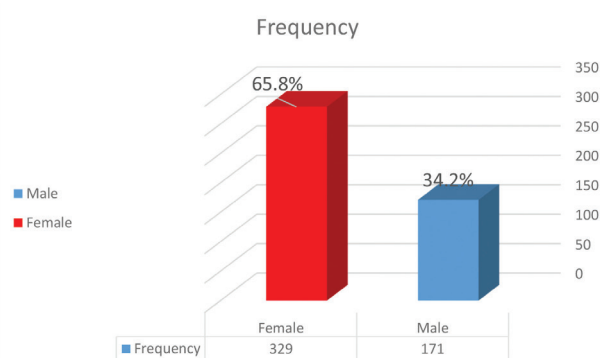


Fig. 1 Frequency of participants according to gender.

Table 1. Age groups classification of participants doctors in relation to gender

Age (years)	Male	Female	Total
25 –	32 (18.7%)	166 (50.5%)	198 (39.6%)
35 –	93 (54.4%)	122 (37.1%)	215 (43%)
45 –	31 (18.1%)	30 (9.1%)	61 (12.2%)
≥55	15 (8.8%)	11 (3.3%)	26 (5.2%)
Total	171 (100%)	329 (100%)	500 (100%)

Table 2. Job information of participant doctors

		Frequency	%
Job description	Specialist	263	52.6%
	General practitioner	93	18.6%
	Senior resident	91	18.2%
	Periodic resident	53	10.6%
Total		500	100%
Work place	Government general hospital	312	62.4%
	Primary health care center	113	22.6%
	Private clinic	61	12.2%
	Private hospital	14	2.8%
Total		500	100%
Years of experience (service)	1 –	106	21.2%
	5 –	84	16.8%
	10 –	134	26.8%
	15 –	127	25.4%
	20 –	31	6.2%
	≥25	18	3.6%
Total		500	100%

The results revealed that high percentage of the participants were specialists 263 (52.6%), but lowest percentage periodic residents 53 (10.6%). Higher participation were from doctors who work in government public hospitals 312 (62.4%), then primary health care centers 113 (22.6%), private clinics 61 (12.2%) and least were from doctors who work in private hospitals 14 (2.8%). Other job related information is years of experience, the study found that more frequent about 134 (26.8%) of participant doctors had (10–<15) years, but less frequent 18 (3.6%) of doctors had experience about 25 years and more (Table 2).

Table 3 represents the frequency of participants specialization, family medicine doctors were the more frequent participants 49 (18.6%), followed by pediatricians 41 (15.6%), then community medicine doctors 36 (13.7%), and basic specialization were less frequent as anatomy, biochemistry, and pharmacology 1 (0.4%), 2 (0.8%), and 1 (0.4%) respectively.

### Knowledge of Doctors About Patients

The result found that 243 (48.6%) of doctors often had in depth knowledge of the patient problem before starting the discussion. Also 193 (38.6%) of doctors often had knowledge of educational, cultural and social background of the patient, as in Table 4.

### Knowledge of Doctors About Protocols

Figure 2 shows the answers of doctors regarding their knowledge about specific protocol in breaking bad news 315 (63%) did not know any protocol in breaking bad news while 185 (37%) had knowledge about protocols in breaking bad news.

Regarding doctors knowledge about breaking bad news protocols, there were 185 (37%) had knowledge as in Figure 2, and the higher protocol type known by them was BREAKS protocol 69 (13.8%) as in Figure 3.

### Ability of Doctors to Break Bad News

In this study, participant doctors assess their ability to break bad news. Figure 4 shows that 215 (43%) of participants had good ability.

### The Preferred Protocol for Breaking Bad News by Doctors

Regarding the preferred protocol to participant doctors were the SPIKES protocol 378 (75.6%) then ABCDE protocol 89 (17.8%) and BREAKS protocol 33 (6.6%) as in Figure 5.

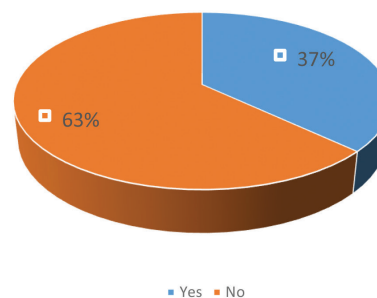


Fig. 2 Doctors knowledge about breaking bad news protocols.

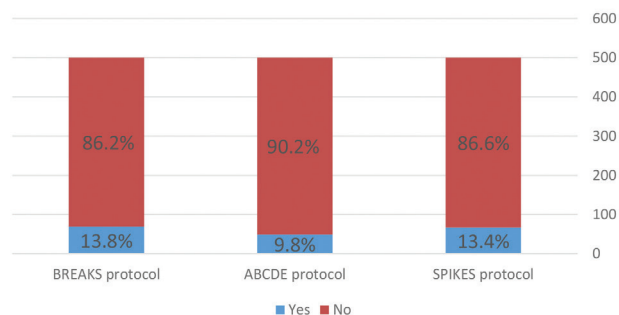


Fig. 3 Knowledge of doctors about specific type of protocol in breaking bad news.

Table 3. Specialties of the participants

Specialization	Frequency	%
Family medicine	49	18.6%
Pediatric	41	15.6%
Community medicine	36	13.7%
Surgery	22	8.4%
Gynecology and Obstetric	20	7.6%
Medicine	16	6.1%
Radiology	14	5.3%
Dermatology	11	4.2%
ENT	10	3.8%
Rheumatology	8	3%
Oncology	7	2.7%
Anesthesia	7	2.7%
Hematology	4	1.5%
Ophthalmology	4	1.5%
Physiology	4	1.5%
Orthopedic	3	1%
Biochemistry	2	0.8%
Pathology	2	0.8%
Anatomy and Histopathology	1	0.4%
Medical microbiology	1	0.4%
Pharmacology	1	0.4%
Total	263	100%

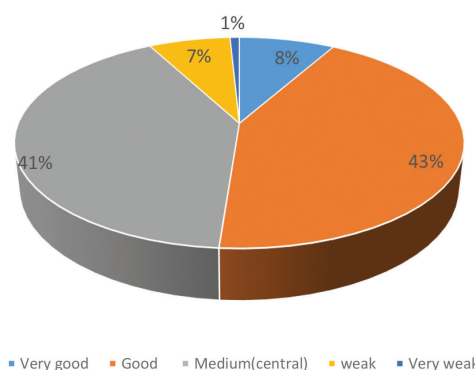


Fig. 4 Ability of doctors in breaking bad news.

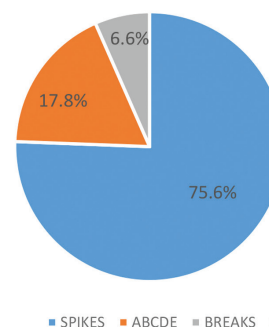


Fig. 5 Doctors preferred protocol.

Table 4. Knowledge of doctors about patients, background

Items	Always	Often	Sometimes	Rarely	Never	Total
Do you have in depth knowledge of the patient problem before starting the discussion?	182 (36.4%)	243 (48.6%)	71 (14.2%)	3 (0.6%)	1 (0.2%)	500 (100%)
Do you have knowledge of educational, cultural and social background of the patient?	82 (16.4%)	193 (38.6%)	181 (36.2%)	35 (7%)	9 (1.8%)	500 (100%)

## Discussion

In clinical treatment, breaking bad news or sharing critical news is a standard communication task.<sup>17</sup> Bad news can relate to death<sup>18</sup> as well as diagnoses that force a patient's life to change.<sup>19</sup> This study is one of the few that assesses Iraqi doctors' knowledge when it comes to imparting terrible news to patients and breaking bad news protocols.

### **Sociodemographic Features of Participants in Relation to Gender, Age and Job**

In this study there were predominance of females than males among respondent doctors (65.8%) because females had account in different programs of social media, more participant in online social groups and more cooperative in filling out the questionnaire. In general age group (35–<45) was (43%) then age group (25–<35) was (39.6%) because the elderly do not have Facebook or other sites in the social media or because they were neglect these activities or they do not have enough time.

In this study, more than half of the respondents were specialists (52.6%), and the more frequent specialty were family medicine (18.6%) then pediatric (15.6%), then community medicine and surgery (13.7%), (8.4%) followed by other specialties, and many of them (62.4%) were work in government public hospitals, this agreed with other study in Saudi Arabia (2013) that included (458) doctors, and more common specialty were family medicine (40.2%) then pediatrics (11.6%) then surgery (8.3%), and (63.1%) of them working in hospitals while (36.9%) of them were work in primary health care centers.<sup>20</sup> In public hospitals there are a lot of patients and therefore the diversity of cases and doctors face problems related to breaking bad news, which increase their enthusiasm to fill out the form. Another study in Brazil (2017) major participant doctors about (75%) were specialists then senior residents doctors then periodic residents.<sup>21</sup>

Also (26.8%) of doctors depend on their experience in breaking bad news which was (10–<15) years especially if they did not know breaking bad news protocols from their college, and heard about it through their openness into the world via the internet or online training courses. While (3.6%) of them had experience for 25 years and more. Other study was included (159) doctors in Northern Portugal (2017), and (68%) of them were females, years of experience  $\leq 10$  year (33%) doctors.<sup>22</sup>

### **Knowledge of Doctors About Breaking Bad News**

Near half of the respondents (48.6%) often had knowledge of the patient problem before starting the discussion, and low frequency of them (38.6%) often had knowledge of educational, cultural and social background of the patients. A study in Pakistan (2019) found that (36.6%) of doctors always had knowledge of patient problem before starting the conversation, while (34.8%) usually had been know the cultural, ethnic background of patient.<sup>23</sup> It is preferable for the doctor who will deliver bad news to go over the case with the patient, including prior treatment and results, to get a sense of how much the patient already knows about his health and his expectations. Mental preparation, scripting, and anticipating uncomfortable questions concerning prognosis and treatment failure are all recommended ways to get ready for the session.<sup>24</sup> The doctor

should also respect the patient's educational level, cultural background, and social background, because the patient's and relatives' thinking and reactions are influenced by their backgrounds.

Regarding knowledge of participant doctors in this study, the level of knowledge of doctors about protocols is generally low and inadequate about (63%) did not know any protocol, but only (13.8%) of doctors know BREAKS protocol. This results agreed with other study in Southern Nigeria (2013) showed that majority of doctors (79.6%) did not have knowledge of protocols or guidelines of breaking bad news and only (7.1%) respondents had knowledge of breaking bad news protocols in the hospitals in which they worked and most of them rated their ability level in breaking bad news is high.<sup>25</sup> These findings could also be due to a lack of education or training on breaking bad news protocols throughout undergraduate or postgraduate years, resulting in a lack of awareness of breaking bad news and a reliance on personal experience when breaking terrible news.

Recent results found about (43%) of participants doctors were rate themselves they were good ability in breaking bad news regarding this study, compared to Nigerian study that revealed most of doctors rated their ability level in breaking bad news is high.<sup>25</sup>

In present study (75.6%) of doctors preferred SPIKES protocol, this results agreed with another Korean study included 101 doctors (80%) of them prefer SPIKES protocol.<sup>26</sup> This may be because this protocol more practical, applicable and understandable.

## Limitations of the Study

1. There is no previous similar and comprehensive study.
2. There is lack of cooperation of many doctors in filling out the questionnaire.
3. Data collection was electronic in addition to direct collection, and this reduces the accuracy of the answers if the question is interpreted subjectively.

## Conclusion

The study concluded:-

1. High percentage of participants doctors 63% have poor knowledge about protocols of breaking bad news.
2. High percentage of doctors (75.6%) prefer SPIKES protocol.

## Recommendations

The study recommended:-

To Ministry of Higher Education and Scientific Research in Iraq:-

1. More researches regarded breaking bad news should be done by researchers in Iraq due to its rarity.
2. Medical students should be educated and trained in the period from beginning of clinical stage till graduation regarding breaking bad news protocols and acquired skills to be able to break bad news to patients in right way and to keep their safety.



## To Ministry of Health:-

1. Providence of guidelines regarding breaking bad news from professional organizations.
2. Frequent continuing training for doctors is required to develop their skills to be able and confident in breaking bad news for better health care delivery.

3. Efforts should be made in hospitals to arrange communication skills courses organized by professional trainers.

**Conflict of Interest**

None. ■

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