

## KNOWLEDGE, ATTITUDE, AND PRACTICE OF THE PHYSICIAN TOWARD HOW TO BREAK BAD NEWS” SAMPLE FROM MEDICAL CITY

\*<sup>1</sup>Israa Faeq Abdulhameed, <sup>2</sup>Sahar A. Esa Al Shatari and <sup>3</sup>Rasha Yasir Jasim

<sup>1</sup>Al-Anbar Health Directorate, Al-Anbar, Iraq.

<sup>2</sup>Menestory of Health, Baghdad, Iraq.

<sup>3</sup>Baghdad Health Directorate - Al-Karkh, Baghdad, Iraq.

Article Received date: 27 March 2024

Article Revised date: 16 April 2024

Article Accepted date: 06 May 2024



\*Corresponding Author: Israa Faeq Abdulhameed

Al-Anbar Health Directorate, Al-Anbar, Iraq.

### ABSTRACT

**Background:** Technical and scientific skills usually trump communication in medical school. This may have caused doctors' incompetence, avoidance of patient conversation, and treatment without concern for patients' feelings. Despite established protocols for giving terrible news, clinicians are often untrained or unskilled. Study goal: To evaluate physicians' knowledge, attitude, and behavior with conveying bad news in Medical City teaching hospitals in Iraq and determine if demographic characteristics are associated. **Method:** A six-month cross-sectional analytic investigation was done on 201 medical city hospital doctors. The research includes all doctors, regardless of age, sex, or job position, except those without patient interaction. Doctor demographics were collected using an SPIKES-formatted questionnaire. The data was analysed using SPSS 25. The chi-square test was used for statistical analysis. A p-value <0.05 indicates statistical significance. **Results:** In 201 respondents, 65.2% were female, 34.8% were male, 83.6% were board residents, and 80.6% of 30–39-year-olds didn't know about SPIKES protocol components. Only 41.3% of participants had received training in conveying bad news, and 95% said they needed more. (46.8%) had negative experiences with patients following terrible news. Participant sex significantly affected total practice. **Conclusion:** Despite not knowing about SPIKES procedure or other protocols for conveying terrible news, most participants had strong knowledge, optimistic attitude, and good practice.

**KEYWORDS:** Knowledge, Attitude, Practice, Physician, Break Bad News.

### INTRODUCTION

Breaking bad news (BBN) in medicine is defined as delivering information that significantly and adversely affects an individual's view of their future, impacting their mental or physical well-being, lifestyle, or personal autonomy.<sup>[1]</sup> This process involves more than just the initial disclosure of a diagnosis; it also encompasses the ongoing communication about the development or worsening of a chronic condition.<sup>[2]</sup> Since the perception of what constitutes bad news can vary greatly among individuals, predicting the personal impact and potential distress caused by such news is challenging.<sup>[2]</sup> Physicians often struggle with breaking bad news for several reasons. A primary concern is the potential negative impact on the patient, which sometimes leads to withholding information.<sup>[3]</sup> This task is further complicated by the need to tailor the communication style and content to the patient's specific desires or

needs.<sup>[3]</sup> Moreover, physicians face their own emotional hurdles; many find the task unpleasant, fear taking away hope, and are apprehensive about the patient's or family's potential reaction.<sup>[4]</sup> Physicians may also feel unprepared for the emotional intensity involved, perceive themselves as having failed the patient, or become uncertain and uncomfortable, leading to disengagement from such situations.<sup>[5]</sup> Despite these challenges, effectively breaking bad news is crucial. It enables patients to understand their medical condition and treatment options, facilitating informed decision-making.<sup>[6]</sup> This transparency is essential for building trust between patients and healthcare providers, which is fundamental to effective communication and treatment.<sup>[6]</sup> Furthermore, clear and empathetic communication can alleviate anxiety and distress for both patients and their families, ultimately enhancing the quality of care.<sup>[6,7]</sup> To improve the delivery of bad news, healthcare

professionals are trained in sensitive and empathetic communication strategies. The SPIKES protocol is one such structured method designed to aid in this process.<sup>[8]</sup> Additionally, Rabow and McPhee have developed a comprehensive approach encapsulated by the mnemonic ABCDE, standing for Advance Preparation, build a therapeutic environment/relationship, communicate well, Deal with patient and family reactions, and Encourage and validate emotions.<sup>[9]</sup> Given the importance of this communication skill, the objective of the study mentioned was to assess the knowledge, attitudes, and practices (KAP) of physicians regarding breaking bad news at Medical City teaching hospitals in Iraq. The study also aimed to examine the influence of sociodemographic variables on these KAP metrics.

## METHOD

This cross-sectional study with analytic components was conducted over six months, from January 1st to June 30th, with data collection spanning two months, from April 1st to May 30th. The study focused on the knowledge, attitudes, and practices (KAP) of physicians regarding breaking bad news (BBN) at four Medical City teaching hospitals in Iraq: Baghdad Teaching Hospital, Oncology Teaching Hospital, Ghazi Al Hariri Teaching Hospital, and Pediatric Welfare Teaching Hospital. The sample comprised 201 participants out of 250 doctors who received the questionnaire, yielding a response rate of 80.4%. The inclusion criteria were any doctors working at these hospitals who were willing to participate, excluding those without direct patient contact or who refused to participate. Demographic variables captured in the questionnaire included age, sex, marital status, educational level, years of experience, and job title. Questions were structured to assess knowledge (with answers scored from 1 for incorrect to 3 for correct), attitudes (scored from 1 for disagree to 3 for agree, with reverse scoring for certain questions), and practices (scored from 1 for never to 3 for always). A

pilot study was conducted with ten doctors to test the reliability of the study instruments. This helped ensure clarity and adequacy of the questionnaire, estimate the required time for responses (10-15 minutes), and determine the instrument's reliability. Ethical approval was obtained from the Arab Board of Health Specializations in Iraq. Participants were informed about the study's significance and assured of their privacy through a note included with the questionnaire. Data were entered into SPSS version 25 for analysis. Descriptive statistics were presented as numbers, percentages, means, standard deviations, and ranges. Inferential statistics were conducted using the Chi-square test, with significance set at a p-value of less than 0.05. The study faced limitations, including non-cooperative participants, missing questionnaires, and lack of interest from some doctors, which might have influenced the findings. Despite these challenges, the study aimed to provide valuable insights into the current practices and challenges faced by physicians in delivering bad news, with the goal of enhancing patient care through improved communication strategies.

## RESULTS

The study revealed that the majority of doctors that took part in this research were in the Age group (30-39y) were (74.6%) of doctors. Regarding sex: the female participants were (65.2%), and the male was (34.8%). Marital status: (53.2%) were married and, (44.8%) were single, (2%) were divorced. Education level: (83.6%) were board residents, (11.9%) had bachelor, and (4.5%) were specialists. Years of experience: between (5-10y) were 150 doctors (74.6%), less than five years were (21.9%) and (11-15y) were seven doctors (3.5%). For job title, the highest rate of participants was from internal medicine specialty, which consisted of 45 doctors (22.4%), pediatrics 22(10.9%), 17 (8.5%) were rotators, and the others were on different 18 specialties as in table (1).

**Table (1): Distribution of the sample according to their demographic features.**

		Frequency N=201	Percent 100%
Age	<30 y	45	22.4
	30-39 y	150	74.6
	40-49 y	6	3.0
Sex	Male	70	34.8
	Female	131	65.2
Marital status	Single	90	44.8
	Married	107	53.2
	Divorce	4	2.0
Education level	Bachelor	24	11.9
	board resident	168	83.6
	Specialist	9	4.5
Years of experience	<5 y	44	21.9
	5-10 y	150	74.6
	11-15 y	7	3.5
Job Title	Pediatric medicine	22	10.9
	General surgery	15	7.5
	Medicine	45	22.4

	Neuromedicine	4	2.0
	Hematology	11	5.5
	Obs/Gyn	10	5.0
	Oncology	15	7.5
	Rheumatology	5	2.5
	Dermatology	12	6.0
	Urology	2	1.0
	Family medicine	15	7.5
	Neurosurgery	2	1.0
	ENT	3	1.5
	Ophthalmology	3	1.5
	Cardiovascular surgery	2	1.0
	Orthopedic surgery	6	3.0
	Bachelor	17	8.5
	maxillofacial surgery	5	2.5
	plastic surgery	1	.5
	emergency medicine	3	1.5
	Anesthesia	3	1.5

Table (2) below show the distribution of participants according to overall knowledge; the majority show good knowledge (77.1%). Regarding participants' overall

attitude; (56.7%) show positive attitude. Regarding practice; (82.6%) show a good practice.

**Table 2: The distribution of participants according to their overall knowledge, overall attitude, and overall practice.**

		Frequency N=201	Percent 100%
Overall knowledge	Fair knowledge (44-61)	46	22.9
	Good knowledge (62-78)	155	77.1
Overall attitude	Negative attitude (10-16)	1	0.5
	Neutral attitude (17-23)	86	42.8
	Positive attitude (24-30)	114	56.7
Overall practice	Fair practice (34-47)	35	17.4
	Good practice (48-60)	166	82.6

The study shows that there is no significant association between overall knowledge with the age of participants,

sex, marital status, education level, years of service, or job title as the (p-value > 0.05) as in table (3).

**Table 3: Association between studied variables and their overall knowledge.**

		Overall knowledge		Total	P- value
		Fair N=46	Good N=155		
Age	<30 y	16	29	45	0.071
	30-39 y	29	121	150	
	40-49 y	1	5	6	
Sex	Male	20	50	70	0.161
	Female	26	105	131	
marital status	Single	22	68	90	0.516
	Married	24	83	107	
	Divorce	0	4	4	
education level	Bachelor	5	19	24	0.655
	board resident	40	128	168	
	Specialist	1	8	9	
years of service	<5 y	8	36	44	0.573
	5-15 y	37	113	150	
	11-15 y	1	6	7	
Job Title	Pediatric medicine	3	19	22	0.080
	General surgery	1	14	15	

	Medicine	7	38	45
	Neuromedicine	1	3	4
	Heamatology	5	6	11
	Obs/Gyn	1	9	10
	Oncology	3	12	15
	Rheumatology	2	3	5
	Dermatology	6	6	12
	Urology	1	1	2
	Family medicine	4	11	15
	Neurosurgery	0	2	2
	ENT	0	3	3
	Ophthalmology	1	2	3
	Cardiovascular surgery	1	1	2
	Orthopedic surgery	4	2	6
	Bachelor	3	14	17
	maxillofacial surgery	1	4	5
	plastic surgery	1	0	1
	emergency medicine	0	3	3
	Anesthesia	1	2	3

Table (4) show that there is no significant association between participants' overall attitude and their demographic features.

**Table 4: Association between participant's demographic & work conditions and their overall attitude.**

		Overall attitude			Total	p-value
		Negative N=1	Neutral N=86	Positive N=114		
Age	<30 y	0	21	24	45	0.682
	30-39 y	1	64	85	150	
	40-49 y	0	1	5	6	
Sex	Male	1	29	40	70	0.383
	Female	0	57	74	131	
marital status	Single	0	40	50	90	0.889
	Married	1	44	62	107	
	Divorce	0	2	2	4	
education level	Bachelor	0	13	11	24	0.763
	board resident	1	70	97	168	
	Specialist	0	3	6	9	
years of service	<5 y	1	17	26	44	0.165
	5-15 y	0	68	82	150	
	11-15 y	0	1	6	7	
Job Title	Pediatric medicine	0	13	9	22	0.495
	General surgery	0	3	12	15	
	Medicine	1	17	27	45	
	Neuromedicine	0	1	3	4	
	Hematology	0	8	3	11	
	Obs/Gyn	0	2	8	10	
	Oncology	0	11	4	15	
	Rheumatology	0	1	4	5	
	Dermatology	0	3	9	12	
	Urology	0	2	0	2	
	Family medicine	0	5	10	15	
	Neurosurgery	0	1	1	2	
	ENT	0	2	1	3	
	Ophthalmology	0	0	3	3	
	Cardiovascular surgery	0	2	0	2	
Orthopedic surgery	0	4	2	6		

	Bachelor	0	6	11	17
	maxillofacial surgery	0	3	2	5
	plastic surgery	0	1	0	1
	emergency medicine	0	0	3	3
	Anesthesia	0	1	2	3

The current study as shown in table (5) revealed no significant association between overall practice and age, marital status, education level, years of service and job

title. But there is significant association between the overall practice and the sex of the participants (p-value =0.000).

**Table (5): Association between participants’ demographic & work conditions and their overall practice.**

		Overall practice		Total	P-value
		Fair N=35	Good N=166		
Age	<30 y	12	33	45	0.111
	30-39 y	23	127	150	
	40-49 y	0	6	6	
Sex	Male	23	47	70	0.000
	Female	12	119	131	
marital status	Single	17	73	90	0.170
	Married	16	91	107	
	Divorce	2	2	4	
education level	Bachelor	5	19	24	0.347
	board resident	30	138	168	
	Specialist	0	9	9	
years of service	<5 y	11	33	44	0.179
	5-15 y	24	126	150	
	11-15 y	0	7	7	
Job Title	Pediatric medicine	3	19	22	0.377
	General surgery	4	11	15	
	Medicine	11	34	45	
	Neuromedicine	1	3	4	
	Hematology	1	10	11	
	Obs/Gyn	0	10	10	
	Oncology	1	14	15	
	Rheumatology	2	3	5	
	Dermatology	1	11	12	
	Urology	1	1	2	
	Family medicine	1	14	15	
	Neurosurgery	0	2	2	
	ENT	0	3	3	
	Ophthalmology	0	3	3	
	Cardiovascular surgery	1	1	2	
	Orthopedic surgery	3	3	6	
	Bachelor	4	13	17	
	maxillofacial surgery	1	4	5	
	plastic surgery	0	1	1	
emergency medicine	0	3	3		
Anesthesia	0	3	3		

**DISCUSSION**

This study conducted across four Medical City teaching hospitals in Iraq aimed to assess the knowledge, attitudes, and practices (KAP) of 201 doctors towards breaking bad news (BBN), focusing on those who encounter complex cases and discuss death-related diseases daily. Knowledge of Doctors about Breaking Bad News: The study found that a majority of the

participants had good knowledge about BBN, comparable to similar studies in Ethiopia (2021) and Nigeria (2013), showing no significant association between knowledge levels and demographic variables like age, sex, or education.<sup>[10,11]</sup> However, awareness of the SPIKES protocol was low, aligning with findings from Ethiopia (2020) but contrasting with studies from Sudan, Korea, and Brazil where adherence was higher.<sup>[12-</sup>

<sup>15]</sup> Attitude of Doctors towards Breaking Bad News: Most doctors recognized the need for training to develop BBN skills, echoing sentiments from studies in Ethiopia (2021) and Portugal (2017). While nearly half of the participants preferred not to disclose health information to the family first, this contrasts with practices in Sudan and Egypt where there is a stronger preference to engage families directly.<sup>[13,16]</sup> The importance of respecting patient autonomy was highlighted, consistent with findings from Saudi Arabia (2013) and Sudan (2020).<sup>[13,17]</sup> Practice and Training of Doctors for Breaking Bad News: Although most participants demonstrated correct BBN practices, over half reported receiving no formal training, similar to observations in Ethiopia (2020) and Nigeria (2013). This lack of training contrasts with studies from Saudi Arabia and Egypt, where formal education significantly improved BBN skills.<sup>[10,18,19]</sup> Despite low training levels, there was a significant association between gender and practice quality, with female doctors exhibiting better practices, possibly due to societal dynamics affecting their interaction with patients.<sup>[12]</sup> Challenges and Recommendations: Many doctors had experienced difficulties with BBN, with variations in negative experiences akin to those reported in Sudan, Nigeria, and Korea.<sup>[10,13,15]</sup> The study suggests a need for enhanced training and protocols to improve BBN competencies among physicians, particularly given the critical role of cultural, scientific, and social contexts in patient interactions.<sup>[12,20,21]</sup>

## CONCLUSION

The majority of participants knew how to convey terrible news, but not the SPIKES procedure. Most participants were ambivalent about negative news, although they believed that training is important to enhance abilities. Most participants were experienced at conveying terrible news, but fewer than half had BBN training. Females had a greater rate of good practice than males.

Age and general practice were not significantly associated. When giving terrible news, over half of participants had an unpleasant experience with patients.

## REFERENCES

- Mitchell A. How to break bad news. *Emergency Nurse*, 2023 May 2; 31(3).
- Tranberg M, Brodin EM. Physicians' Lived Experience of Breaking Bad News in Clinical Practice: Five Essentials of a Relational Process. *Qual Health Res*, 2023; 33(14): 1349-1359. doi:10.1177/10497323231197534
- Ayalew EA, Mphuthi DD, Matlhaba KL. Patients' preferences for delivering bad news in palliative care in Ethiopia: a qualitative study. *BMC Palliative Care*, 2023 Nov 3; 22(1): 170.
- Brouwer MA, Maecelberghe EL, van der Heide A, Hein IM, Verhagen EA. Breaking bad news: what parents would like you to know. *Archives of disease in childhood*, 2021 Mar 1; 106(3): 276-81.
- Theys L, Wermuth C, Hsieh E, Krystallidou D, Pype P, Salaets H. Doctors, patients, and interpreters' views on the co-construction of empathic communication in interpreter-mediated consultations: A qualitative content analysis of video stimulated recall interviews. *Qualitative Health Research*, 2022 Oct; 32(12): 1843-57.
- Basol M, Roozenbeek J, Van der Linden S. Good news about bad news: Gamified inoculation boosts confidence and cognitive immunity against fake news. *Journal of cognition*, 2020; 3(1).
- Mansoursamaei M, Ghanbari Jolfaei A, Zandi M, Mansoursamaei A, Salehian R. Self-assessment of residents in breaking bad news; skills and barriers. *BMC Medical Education*, 2023 Oct 6; 23(1): 740.
- Warrier V, Pradhan A. A narrative review of interventions to teach medical students how to break bad news. *Medical science educator*, 2020 Sep; 30: 1299-312.
- MacLaine TD, Lowe N, Dale J. The use of simulation in medical student education on the topic of breaking bad news: A systematic review. *Patient Education and Counseling*, 2021 Nov 1; 104(11): 2670-81.
- Adebayo PB, Abayomi O, Johnson PO, Oloyede T, Oyelekan AA. Breaking bad news in clinical setting-health professionals' experience and perceived competence in southwestern Nigeria: A cross sectional study. *Annals of African medicine*, 2013 Oct 1; 12(4): 205.
- Mitiku, Tilahun. Breaking Bad News Knowledge and Attitude of Junior Physician Practicing at Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia. Retrieved online at; <http://etd.aau.edu.et/handle/123456789/30209>
- Ferreira da Silveira FJ, Botelho CC, Valadão CC. Breaking bad news: doctors' skills in communicating with patients. *Sao Paulo Medical Journal*, 2017 May 29; 135: 323-31.
- Dafallah MA, Ragab EA, Salih MH, Osman WN, Mohammed RO, Osman M, Taha MH, Ahmed MH. Breaking bad news: Awareness and practice among Sudanese doctors. *AIMS Public Health*, 2020; 7(4): 758.
- Fisseha H, Mulugeta W, Kassu RA, Geleta T, Desalegn H. Perspectives of protocol based breaking bad news among medical patients and physicians in a teaching hospital, Ethiopia. *Ethiopian journal of health sciences*, 2020 Nov 1; 30(6).
- Lee HR, Yi SY. Delivering bad news to a patient: a survey of residents and fellows on attitude and awareness. *Korean Journal of Medical Education*, 2013 Dec; 25(4): 317.
- Elashiry A, Abdel Wahed WY, Elhady GW. Assessing Physicians' Knowledge, Attitude, and Practice towards Breaking Bad News: A Multicenter Study in Egypt. *The Egyptian Journal of Hospital Medicine*, 2022 Oct 1; 89(2): 6305-12.

17. Al-Mohaimed AA, Sharaf FK. Breaking bad news issues: a survey among physicians. *Oman medical journal*, 2013 Jan; 28(1): 20.
18. Competence of Primary Healthcare Physicians in Breaking Bad News in Eastern Province Capital of Saudi Arabia. *International Journal of Science and Research (IJSR)*, 2017; 6: 1931–1935.
19. Ahmed SA, Ashry SK, Widdershoven G. Effectiveness of online teaching for development of resident beliefs and understandings: a study on breaking bad news to patients. *Health Professions Education*, 2019 Mar 1; 5(1): 30-8.
20. Naseem S. “Breaking breast cancer news” with ethnic minority: a UK experience. *Journal of Multidisciplinary Healthcare*, 2018 Jul 4; 317-22.
21. Taha MH. Assessing patient satisfaction with Sudanese doctors. *Journal of Advances in Medical Education & Professionalism*, 2019 Apr 1; 7(2): 106-7.