

Breaking Bad News: Awareness and Practice among Medical Doctors in Rwanda

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Abstract

Background

Breaking bad news (BBN) is a critical clinical skill, yet many physicians, particularly in low- and middle-income countries, feel underprepared to deliver difficult diagnoses or prognostic information. In Rwanda, little is known about physicians' knowledge, attitudes, and practices regarding BBN or how frequently structured models such as the SPIKES protocol are used. Understanding practice patterns and challenges will inform training and improve care.

Methods

We conducted a quantitative cross-sectional study among 120 medical doctors practicing in district, level two teaching, and tertiary hospitals across Rwanda. Stratified quota sampling was used. Data were collected using a self-administered online questionnaire adapted from validated tools, assessing demographics, knowledge, and attitudes toward BBN; perceived barriers; and adherence to the SPIKES protocol. Descriptive statistics were used for analysis.

Results

Median participant age was 30 years (IQR 27–34); 61.7% were male and 97.5% practiced in public hospitals. Seventy percent had received some form of formal BBN training, primarily through medical school or residency lectures ($n = 72$, 86.7%). While nearly all respondents (99.2%) agreed that BBN is an essential clinical skill and 97.5% emphasized the need for training, only about half (49.2%) felt confident managing patients' emotional reactions. Less than half (38.3%) were familiar with the SPIKES protocol. Reported barriers to providing quality BBN included lack of privacy (42.0%), insufficient time (37.0%), and lack of institutional guidelines (18.5%). Reported adherence to SPIKES components was generally high: clear diagnostic information (86.5%), summarizing treatment options (83.3%), demonstrating empathy (77.5%), maintaining privacy (75.9%), and assessing patient understanding (75.0%). However, only 50.8% elicited patient preferences regarding information disclosure or family involvement.

Conclusion

Rwandan physicians recognize the importance of BBN yet face significant challenges, including limited confidence, inconsistent familiarity with SPIKES, and structural barriers such as lack of time and privacy. Although adherence to several SPIKES steps is strong, low performance in assessing patients' informational preferences highlights a key area for improvement. These findings underscore the need for structured, context-specific communication training, clearer hospital protocols, and supportive

institutional environments to strengthen compassionate and patient-centered disclosure practices in Rwanda.

Background

Effective communication of bad news is a fundamental component of clinical practice, particularly when discussing serious diagnoses and other life-altering health conditions (1). Bad news has been defined as “any news that drastically and negatively alters the patient’s view of his or her future” (2). Breaking bad news (BBN) requires not only clinical knowledge, but also empathy, honesty, and the ability to communicate information in a clear and supportive manner (3). The quality of these conversations can significantly influence patients’ emotional well-being, understanding of illness, trust in healthcare providers, treatment adherence, and satisfaction with care (1, 4). Despite its importance, many healthcare professionals report feeling insufficiently prepared, often citing emotional discomfort, uncertainty, and limited formal communication training (4).

Breaking bad news is inherently complex and emotionally demanding. Clinicians should communicate information accurately while responding to patients’ emotional reactions, maintaining hope, involving family members appropriately, and supporting shared decision-making (5, 6). These conversations are often further complicated by sociocultural and religious factors that influence how illness-related information is perceived and communicated (7). In many African settings, family-centered decision-making, stigma surrounding serious illnesses, and differing expectations regarding disclosure may shape both physician practices and patient preferences (6, 8). Structural barriers within healthcare systems, including heavy workloads, insufficient consultation time, lack of privacy, and limited mentorship, may also hinder effective communication (9).

To support healthcare professionals during difficult conversations, several structured communication frameworks have been developed, including the ABCDE, BREAKS, and SPIKES protocols (10, 11). Among these, the SPIKES protocol is the most widely used and evaluated, emphasizing preparation of the clinical setting, assessment of patient understanding and preferences, clear communication of information, empathetic responses to emotions, and discussion of treatment strategies and follow-up plans (12). Studies suggest that structured communication protocols improve physician confidence, communication skills, empathy, and patient satisfaction while reducing stress associated with difficult conversations (12, 13). However, awareness and implementation of these frameworks remain inconsistent, especially in low-resource settings where communication skills training is often limited or inconsistently integrated into medical education (14).

Although breaking bad news has been widely studied in high-income countries, evidence from sub-Saharan Africa remains limited, and there are currently no published data describing how physicians in Rwanda perceive, practice, and experience breaking bad news. Existing studies from the region suggest that many healthcare providers receive limited formal training and often face important institutional and cultural barriers when communicating difficult information to patients and families (15–17).

Understanding physicians' knowledge, attitudes, practices, and perceived barriers in Rwanda is important for informing communication training, strengthening institutional support, and improving patient-centered care. Therefore, this study aimed to evaluate Rwandan physicians' knowledge of and adherence to the SPIKES protocol, attitudes toward breaking bad news, and barriers to effective communication.

Methods

Study setting, design, and sample

We conducted a quantitative cross-sectional survey of practicing physicians in Rwanda between 1st July and 30th September 2025.

Eligible participants included all medical doctors registered with the Rwanda Medical and Dental Council at the time of data collection, including interns, general practitioners, residents, and specialists working in public and private sectors, teaching and tertiary hospitals.

The sampling frame was obtained from the Rwanda Medical and Dental Council registry updated in March 2025 and included 2,586 registered physicians. A non-probability sampling approach was used.

Participants were recruited through professional networks, institutional email lists, and peer-sharing within clinical networks. The survey was administered electronically using REDCap. Reminder messages were periodically disseminated through email and professional communication platforms during the study period to encourage participation.

Data collection tool

Data was collected using a self-administered online questionnaire adapted from previously published studies assessing physicians' attitudes, practices, barriers, and communication skills related to breaking bad news and the SPIKES protocol (18). The questionnaire consisted of three sections.

Section A collected socio-demographic and professional information including age, sex, level of training, years of clinical experience, type of hospital, country of medical training, and prior exposure to communication skills training.

Section B contained 18-items assessing physicians' perceptions and attitudes (six items), confidence, training experiences (eight items), and perceived barriers (four items) related to breaking bad news. The tool was adapted from studies in low- and middle-income settings (16, 19). Responses were measured using a five-point Likert scale ranging from "strongly disagree" to "strongly agree."

Section C included six items evaluating self-reported adherence to components of the SPIKES protocol, including setting, perception, invitation, knowledge sharing, emotional response, and strategy/summary.

Participants reported the frequency with which they performed each component using response options of “never,” “sometimes,” “often,” and “always.”

The questionnaire was reviewed by members of the research team for clarity, relevance, and contextual appropriateness prior to dissemination.

Key measures

The study assessed three main domains:

1. Knowledge, perceptions, and practices related to breaking bad news: the results were categorized into two groups: 1) percentage of choosing “strongly agree” and “agree” and 2) percentage of choosing “strongly disagree” with “disagree”.
2. Perceived barriers to breaking bad news: the results were categorized into two groups: 1) percentage of choosing “strongly agree” and “agree” and 2) percentage of choosing “strongly disagree” with “disagree”.
3. Self-reported adherence to the SPIKES protocol: percentages of “never,” “sometimes,” “often,” and “always.” Compliance was defined as responding either “often” or “always”.

Data analysis

Data was exported from REDCap and analyzed using IBM SPSS Statistics, SPSS Version 24. Descriptive statistics were used to summarize participant characteristics and key measures

Ethics

Ethical approval

for the study was obtained from the University of Global Health Equity Institutional Review Board (Protocol’s reference number: UGHE-IRB/2025/439). Participation was voluntary, and informed consent was obtained electronically before participants accessed the survey. No identifiable personal information was collected, and all responses were anonymous and confidential.

Results

A total of 120 physicians completed the survey with a median age of 30 years (interquartile range [IQR] 27–34). Among them 74 (61.7%) were male, (60 (50%) practiced in level two teaching hospitals, 31 (25.8%) in tertiary hospitals, and 29 (24.2%) in district hospitals; nearly all (97.5%) worked in the public sector. Most completed medical school in Rwanda (82.5%), had less than five years of clinical experience (72.5%), and reported at least one episode of BBN per month (95.8%), with 75 (62.5%) estimating 1–5 episodes per month. Among the 84 (70%) who had received formal education or training

in BBN, 72 (86.7%) received the training in medical school or residency lectures, while 25 (30.1%) had simulation-based training. (Table 1)

Table 1
Demographic characteristics of the study participants (N = 120)

Variable		n (%)
Median age (IQR)		30 (27–34)
Sex	Male	74 (61.7%)
	Female	46 (38.3%)
Primary location of practice	District Hospital	29 (24.2%)
	Level II Teaching Hospital	60 (50.0%)
	Tertiary Hospital	31 (25.8%)
Primary type of hospital	Public	117 (97.5%)
	Private	3 (2.5%)
Clinical position	Intern doctor	29 (24.2%)
	General practitioner	41 (34.2%)
	Clinical resident	27 (22.5%)
	Specialist	23 (19.2%)
Years of experience (years)	0–5	87 (72.5%)
	6–10	15 (12.5%)
	11 and above	14 (11.7%)
	Missing data	4 (3.3%)
Medical School Training Location	Rwanda	99 (82.5%)
	Outside Rwanda	21 (17.5%)

Variable		n (%)
Residency/Fellowship location of Training	Rwanda	43 (86.0%)
	Outside Rwanda	7 (14.0%)
Language of Practice (select all that apply)	Kinyarwanda	119 (99.2%)
	English	106 (88.3%)
	French	50 (41.7%)
	Other	8 (6.7%)
Religious Affiliation	Christian	114 (95%)
	Muslim	4 (3.3%)
	Not Religious	2 (1.7%)
Received prior formal breaking bad news training	Yes	84 (70%)
	No	36 (30%)
Prior breaking bad news training methodology (n = 84) (select all that apply)	Medical School or Residency lectures	72 (86.7%)
	Workshops or seminars	18 (21.7%)
	Simulation-based training	25 (30.1%)
	Mentorship or observation	21 (25.3%)
Estimated breaking bad news episodes per month	0	5 (4.2%)
	1–2	38 (31.7%)
	3–5	37 (30.8%)
	6–10	19 (15.8%)
	> 10	21 (17.5%)

IQR: Interquartile range; BBN: Breaking bad news

Over 90% agreed that: 1) breaking bad news is an important skill for all doctors (99.2%); 2) training is essential for developing adequate skills (97.5%); and 3) patients should be fully informed of their diagnosis (91.7%) (Table 2). Six items had less than 40% agreement: 1) their workplace had clear policies or protocols on how to deliver bad news (18.5%); 2) breaking bad news to patients is not challenging (30.8%); 3) clinical environments provide sufficient privacy (32.8%); 4) I can manage the emotional demands of BBN (35.8%); 5) they had sufficient time to deliver bad news adequately (37%); and 6) familiarity with the SPIKES protocol (38.3%). (Table 2)

Table 2
Perception, practice, and barriers in breaking bad news.

Item	Strongly disagree/disagree	Neutral	strongly agree/agree
Perceptions/attitudes			
I found it not challenging to break the bad news to patients	71 (59.2%)	12 (10%)	37 (30.8%)
Breaking bad news is an important skill for all doctors	1 (0.8%)	0 (0%)	118 (99.2%)
Doctor is the most appropriate person to deliver bad news to a patient	9 (7.5%)	11 (9.2%)	100 (83.3%)
Bad news should be delivered directly to the patient	18 (15%)	28 (23.3%)	74 (61.7%)
Patients should always be fully informed of their diagnosis	3 (2.5%)	7 (5.8%)	110 (91.7%)
Training is necessary for adequate skill development in delivering bad news	2 (1.7%)	1 (0.8%)	117 (97.5%)
Practices/self-reported competences			
I am confident in handling patients' emotional reactions to bad news	31 (25.8%)	30 (25%)	59 (49.2%)
I need training in breaking bad news	8 (6.7%)	15 (12.5%)	97 (80.8%)
I am familiar with SPIKES protocol	53 (44.2%)	21 (17.5%)	46 (38.3%)
I can manage the emotional demands of BBN	36 (30%)	41 (34.2%)	43 (35.8%)
I have language proficiency to BBN to my patients	30 (25%)	31 (25.8%)	59 (49.2%)
I am comfortable navigating cultural differences when communicating bad news to patients	35 (29.2%)	33 (27.5%)	52 (43.3%)
I can communicate bad news within legal boundaries	19 (15.8%)	48 (40%)	53 (44.2%)
I am certain about patient diagnosis or prognosis when BBN	16 (13.4%)	27 (22.7%)	76 (63.9%)
Barriers/facilitators			
I have sufficient time with patients to BBN to them	44 (37%)	31 (26.1%)	44 (37%)

Item	Strongly disagree/disagree	Neutral	strongly agree/agree
Perceptions/attitudes			
There is sufficient privacy in the clinical environment to BBN	50 (42%)	30 (25.2%)	39 (32.8%)
My workplace has clear policies or protocol on how to BBN	59 (49.6%)	38 (31.1%)	22 (18.5%)
I have support from colleagues/supervisors in BBN	35 (29.2%)	31 (25.8%)	54 (45%)

BBN: Breaking bad news

The compliance to SPIKE protocol items in descending order was: 1) provided clear diagnostic information (86.5%); 2) explained treatment options or prognosis afterward (83.3%); 3) assessed emotional reactions empathetically (77.5%); 4) ensured privacy before delivering bad news (75.9%); 5) assessed patients' understanding and expectations beforehand (75%); and 6) asked about patients' preferences for information disclosure or family involvement (50.9%). (Table 3)

Table 3
Adherence to SPIKES protocol

Item	Never	Sometimes	Often	Always
I make specific efforts to ensure the patient feels comfortable and that privacy is maintained before delivering bad news? (Setting)	2 (1.7%)	27 (22.5%)	62 (51.7%)	29 (24.2%)
I assess the patient's current understanding of their condition and expectations before delivering bad news (Perception)	5 (4.2%)	25 (20.8%)	62 (51.7%)	28 (23.3%)
I ask the patient how much information they wish to receive and whether they prefer to receive it alone or with family members (Invitation)	15 (12.5%)	44 (36.7%)	37 (30.9%)	24 (20.0%)
I provide the patient with clear, understandable information about their diagnosis (Knowledge)	2 (1.7%)	14 (11.8%)	53 (44.5%)	50 (42.0%)
I assess the patient's emotional reactions and respond empathetically (Empathy)	1 (0.8%)	46 (21.7%)	44 (36.7%)	49 (40.8%)
I explain to the patient their treatment options and prognosis after delivering bad news (Summarize)	3 (2.5%)	17 (14.2%)	39 (32.5%)	61 (50.8%)

Discussion

We found that Rwandan physicians widely recognized breaking bad news as an essential clinical skill and strongly supported the need for formal training, yet many still reported limited confidence and significant institutional barriers. Although most participants agreed that patients should be fully informed of their diagnosis, fewer believed that bad news should always be communicated directly to the patient, suggesting variability in disclosure practices. In addition, fewer than half of respondents reported familiarity with the SPIKES protocol, while many described insufficient time, limited privacy, and lack of institutional guidance for conducting difficult conversations.

The strong support for formal training is consistent with findings from other low- and middle-income settings, where physicians frequently report that communication skills training during medical education is insufficient (6, 7). Similar studies in Ethiopia and Kenya have shown that clinicians often feel underprepared for difficult conversations despite recognizing their importance in patient care (7, 20). In our study, although 70% of respondents reported some prior exposure to training in breaking bad news, fewer than half reported familiarity with the SPIKES protocol. This may reflect variability in the type, depth, or structure of communication training received, rather than complete absence of training. It is also possible that clinicians were exposed to alternative communication approaches outside of SPIKES. Nonetheless, the findings suggest that structured communication frameworks are not yet consistently integrated into physician training or practice in Rwanda. Similar observations have been reported in Mozambique, where clinicians recommended greater incorporation of communication skills training into undergraduate and postgraduate medical education (6).

Our findings also highlight important institutional barriers to effective communication. Many physicians reported inadequate time and insufficient privacy for conducting difficult conversations, while only a small proportion indicated that their workplaces had clear policies or protocols for breaking bad news. Similar structural challenges have been described across sub-Saharan Africa, where high patient volumes, workforce shortages, and limited consultation space often constrain patient-centered communication (21–23). These barriers are important because communication practices are shaped not only by a clinician's skills, but also by the clinical environment in which conversations occur. In our study, physicians generally expressed positive attitudes toward breaking bad news, yet many still reported difficulties in practice, suggesting that favorable attitudes alone may not be sufficient when institutional support is limited.

Another important finding was the relatively low confidence among physicians in managing patients' emotional reactions. This aligns with prior studies showing that clinicians often experience emotional discomfort and uncertainty during difficult conversations, particularly when they have limited opportunities for supervised practice or mentorship (23, 24). Communication frameworks such as SPIKES were developed partly to provide structure during emotionally challenging encounters and to improve clinician confidence (25, 26). In our study, adherence to some SPIKES-related behaviors, including providing clear diagnostic information, demonstrating empathy, and summarizing treatment options, was relatively high, while other components were less consistently practiced. Similar variability

has been reported in studies from Nigeria and Turkey, where clinicians more consistently applied information-sharing components than exploratory or preparatory aspects of communication (22, 27).

Our findings should also be interpreted within the broader context of communication research in Africa. A recent scoping review on cancer communication in sub-Saharan Africa noted that much of the existing literature focuses primarily on information disclosure rather than broader serious illness communication processes that include patient values, goals, and shared decision-making (28). Emerging work from Rwanda has also emphasized the importance of culturally adapting serious illness communication frameworks to local clinical and social contexts (29). Although our study did not directly assess cultural beliefs or patient preferences regarding disclosure, the variability observed in physicians' attitudes toward direct patient disclosure suggests that communication practices may be influenced by contextual factors that warrant further qualitative exploration.

This study has several limitations. First, the study relied on self-reported responses, which may have been influenced by recall bias and social desirability bias, particularly for questions related to communication practices and adherence to recommended approaches. Physicians may have overreported practices perceived as professionally desirable, such as demonstrating empathy or involving patients in discussions. Second, the relatively low response rate raises the possibility of non-response bias. Physicians with greater interest, prior training, or confidence in communication may have been more likely to participate, potentially leading to overestimation of awareness, perceived competence, or adherence to recommended approaches for breaking bad news.

In addition, the use of a stratified quota-based non-probability sampling approach limits the generalizability of the findings to all physicians practicing in Rwanda. Although participants were recruited nationally, respondents may have disproportionately represented physicians from specific hospitals, training institutions, or professional networks with greater access to electronic communication platforms or stronger engagement in academic activities. As a result, the findings may not fully reflect the experiences and practices of physicians working in more remote or resource-constrained settings.

Another important limitation is that the survey specifically assessed familiarity and adherence to the SPIKES protocol and did not evaluate awareness or use of other communication frameworks for breaking bad news. Therefore, some physicians categorized as unfamiliar with SPIKES may still have been using alternative structured approaches to difficult conversations that were not captured by this study.

Despite these limitations, the study has several strengths. To our knowledge, it is among the first studies to examine physicians' perceptions, practices, and barriers related to breaking bad news in Rwanda across multiple levels of the healthcare system. Participants included intern doctors, general practitioners, residents, and specialists practicing in district, teaching, and tertiary hospitals, providing perspectives from diverse clinical settings. The study also addresses an important evidence gap in the

regional literature and provides preliminary national data that can inform future communication skills training, institutional guidelines, and further research on patient-centered communication in Rwanda.

Overall, this study demonstrates that physicians practicing in Rwanda place high importance on effective communication when breaking bad news but continue to face important training and institutional challenges. The findings support the need for more structured communication training during undergraduate and postgraduate medical education, as well as institutional efforts to improve privacy, mentorship, and practical support for difficult clinical conversations. Future studies incorporating qualitative methods and patient perspectives may further clarify how communication practices can be adapted to the Rwandan healthcare context while supporting patient-centered care.

Declarations

Ethics approval and consent to participate

Ethics approval granted by University of Global Health Equity's Institutional Review Board (Protocol's reference number: UGHE-IRB/2025/439). Written informed consent to participate was obtained from each participant. The research was conducted following standards in accordance with the Declaration of Helsinki.

Consent for publication

Not Applicable

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request

Competing interests

None

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Contributions

HM conceived the study; HM, SK, SBI, and BD designed the work; HM, SK, SBI, and BD acquired the data; HM, SK, SBI, and BD analyzed the data; HM, SK, SBI, BD, RW, and KR interpreted the results, and HM and SK drafted the original manuscript.; HM, SK, SBI, BD, RW, and KR revised the manuscript, approved the submitted version of this manuscript and agreed to be accountable for their contributions.

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