

# ASSESSMENT OF KNOWLEDGE REGARDING BREAKING BAD NEWS AMONG NURSES IN A GOVERNMENT HOSPITAL, LAHORE, PAKISTAN

*Original Research*

Faheema Naz<sup>1\*</sup>, Aqsa Hafeez<sup>1</sup>, Nadia Shoukat<sup>1</sup>, Sajjal Kainat<sup>1</sup>, Hafsa Majid<sup>2</sup>, Shamaila Naz<sup>3</sup>

<sup>1</sup>College of Nursing, Allama Iqbal Medical College, Lahore, Pakistan.

<sup>2</sup>Al-Razi Institute, Saeed Park, Lahore, Pakistan.

<sup>3</sup>Ittefaq Hospital Trust, Lahore, Pakistan.

**Corresponding Author:** Faheema Naz, College of Nursing, Allama Iqbal Medical College, Lahore, Pakistan, [mariafawad20@gmail.com](mailto:mariafawad20@gmail.com)

**Acknowledgement:** The authors express sincere gratitude to the nursing staff of Jinnah Hospital for their cooperation in data collection.

Conflict of Interest: None

Grant Support & Financial Support: None

## ABSTRACT

**Background:** Breaking bad news (BBN) is an emotionally charged and ethically significant task that healthcare providers frequently encounter. The quality of this communication can profoundly influence the therapeutic alliance, patient satisfaction, and coping mechanisms. Nurses often play a central role in this process, yet in many healthcare settings, their training in structured communication models remains limited. Given the emotional weight of such conversations, it is essential to assess nurses' readiness and identify educational gaps to improve patient-centered care.

**Objective:** To evaluate the knowledge, experience, and preparedness of postgraduate nurses regarding breaking bad news in a tertiary care setting.

**Methods:** A descriptive cross-sectional study was conducted from October to December 2021 at College of Nursing, Allama Iqbal Medical College, Lahore, targeting registered postgraduate nurses at Jinnah Hospital. A total of 179 nurses were recruited using purposive sampling. Data were collected using a pre-validated, structured questionnaire incorporating elements of the SPIKES model (Setting, Perception, Invitation, Knowledge, Empathy, Summarizing). Responses were analyzed using SPSS version 22. Descriptive statistics, chi-square tests, and percentage scores were used to quantify knowledge, attitude, and training needs.

**Results:** Among 179 respondents, 97.8% were female and the mean age was  $23 \pm 2.55$  years. While 54 nurses (29.3%) reported feeling comfortable in breaking bad news, 130 (65%) expressed a strong desire for formal training. Only 41 (22.3%) followed any recognized guideline, and 110 (59.8%) had not received prior training. Knowledge of structured protocols like SPIKES and BREAKS was limited, with only 82 (45.1%) and 69 (37.0%) respondents respectively identifying them correctly. Overall awareness levels were statistically insignificant across demographic variables ( $p > 0.05$ ).

**Conclusion:** Most nurses demonstrated limited confidence and insufficient knowledge regarding structured BBN communication. Targeted educational interventions are necessary to enhance their competence in this critical skill.

**Keywords:** Communication, Cross-Sectional Studies, Empathy, Nurse-Patient Relations, Nursing Education, Patient-Centered Care, SPIKES Protocol.

## INTRODUCTION

Breaking bad news (BBN) to patients and their families remains one of the most emotionally demanding and ethically sensitive responsibilities within the healthcare profession. Defined as any information that significantly alters an individual's view of their future in a negative direction (1), the delivery of such news can either strengthen or strain the patient-provider relationship. Physicians and nurses alike frequently encounter this task, yet the ability to communicate distressing information with clarity, compassion, and empathy often lacks formal emphasis in training, particularly in many developing healthcare systems. Nurses, especially those working in tertiary care settings, are often directly or indirectly involved in these conversations and play a pivotal role in preparing patients to receive life-altering news (2,3). The method and manner in which bad news is delivered carry profound implications. Avoiding disclosure or delivering it inappropriately may result in eroded trust, increased anxiety, and disrupted communication between healthcare professionals and patients (4). Studies suggest that patients often vividly recall the moment bad news was shared and the demeanor of the individual conveying it, underscoring the emotional and psychological weight such moments hold (4,5). Despite its recognized importance, structured training in communication for breaking bad news remains sparse across many medical curricula. While literature from high-income countries such as the United Kingdom and the United States emphasizes the need for formalized instruction in this domain (6), in low-resource settings, healthcare providers frequently learn this skill through observation and experience rather than systematic education (7). This gap results in considerable variation in approach, quality, and emotional handling of such conversations. Moreover, a shift in the physician-patient dynamic over recent decades has further accentuated the need for patient-centered care and shared decision-making, moving away from paternalistic models toward collaborative dialogue (8).

Numerous physical and psychological diagnoses necessitate the breaking of bad news, including malignancies, advanced organ failure, amputations, or irreversible neurological conditions. Ethically, patients have a right to be informed about their condition to make autonomous decisions regarding their care. Yet, healthcare professionals may experience personal discomfort, feelings of inadequacy, or moral distress when navigating these conversations (9). Literature increasingly recommends that BBN be approached as a multidisciplinary responsibility, ensuring consistency, emotional support, and coordinated messaging (10). Several communication frameworks have been developed to guide healthcare providers in delivering bad news with sensitivity and structure. These include the BREAKS, ABCDE, and the widely adopted SPIKES model, which incorporates essential components such as setting the environment, assessing patient perception, inviting information disclosure, sharing knowledge, empathizing with emotional responses, and strategizing for follow-up (11). Among these, the SPIKES protocol is most commonly integrated into clinical practice owing to its comprehensive nature. Nurses, as frontline healthcare providers, contribute not only to the delivery of information but also to the emotional processing and support of patients following disclosure. Their involvement ensures continuity of care and strengthens the therapeutic alliance (12). A study highlighted that communication skills training significantly enhances nurses' confidence and participation in BBN scenarios, reinforcing the value of educational interventions in this domain (13). Furthermore, focused training programs have been shown to improve both patient satisfaction and healthcare providers' emotional resilience and effectiveness in delivering distressing information (11,12).

Effective BBN also requires an understanding of patients' psychological states and readiness. Contrary to common fears, several studies suggest that disclosure does not necessarily worsen emotional outcomes such as anxiety or depression, and in many cases, leads to improved trust, decision-making, and coping mechanisms (13,14). Nevertheless, in practice, many clinicians remain hesitant due to anticipated emotional reactions and their own communication insecurities (15). Hence, capacity-building efforts through structured communication training are essential. Local data from Pakistan reveal a concerning lack of preparedness among healthcare professionals. A study found that 40% of physicians in palliative care settings struggled with proper BBN delivery (16), while another reported that 85% of participants expressed discomfort in performing this task (17). This reveals a critical need for targeted interventions within the local healthcare system to bridge this gap. In view of these considerations, the present study was conducted to assess the knowledge, attitude, and practices related to breaking bad news among postgraduate nurses working in a tertiary care setting, with the aim of identifying educational gaps and proposing informed strategies for improvement.

## METHODS

A descriptive cross-sectional study was carried out to assess the knowledge, attitude, and practices of registered nurses regarding the communication of bad news in a tertiary care setting. The research was conducted at Jinnah Hospital, a large public-sector tertiary hospital in Pakistan. The study population included registered nurses with a minimum of one year of professional experience who provided informed written consent to participate. Nurses on rotation, those not on permanent duty, student nurses, and those in managerial positions were excluded to ensure that the sample consisted only of actively practicing bedside nurses. The sample size was calculated from a finite population using the Yamane formula with a total nursing population of 500, a confidence interval of 95%, and a 6% margin of error. The resulting sample size was 179 nurses. A structured questionnaire was developed to gather data, incorporating a scoring system that assigned values to responses using a three-point Likert-type scale: "Yes" (3 points), "No" (2 points), and "I don't know/Not applicable" (1 point). The scoring system enabled the quantification of awareness and attitudes, with each participant's total score converted into a percentage. Awareness was then categorized as low (0–50%), average (51–75%), or high (76–100%). Data collection was conducted through in-person surveys between December 1, 2021, and February 28, 2022. All educational levels and both genders were represented in the sample. To ensure anonymity, a numeric coding system identifiable only to the researcher was used. The questionnaires were personally administered by the researcher, allowing real-time clarification of any ambiguities, thus enhancing the accuracy and reliability of responses. Participants were assured that the information gathered would remain confidential and be used solely for research purposes. The objectives, importance, and benefits of the study were clearly communicated, and voluntary participation was emphasized.

Data were verified prior to entry and analyzed using IBM SPSS Statistics version 25. Descriptive statistics, including means, standard deviations, frequencies, and percentages, were used to interpret the responses. Hypothesis testing was performed using the chi-square test, with a significance level set at  $p < 0.05$ . Analysis was carried out in two stages: the first stage computed overall awareness scores and classified them into predefined categories; the second stage evaluated individual questionnaire items to identify specific areas of knowledge deficiency. Independent variables included demographic characteristics such as age, sex, marital status, number of children, prior educational qualifications, and years of clinical experience. The primary dependent variable was defined as the use and perception of electronic-based learning (e-learning) in communication training. The validity and reliability of the questionnaire were pre-assessed prior to administration to ensure the instrument accurately measured the intended constructs and produced consistent results. Ethical approval for the study was obtained from the institutional review board (IRB) of Jinnah Hospital. Informed written consent was obtained from all participants prior to data collection, and participants were made aware of their right to withdraw at any stage.

## RESULTS

A total of 180 nurses participated in the study. The majority of respondents (28.8%) were aged 30–35 years, followed by 25–30 years (22.8%), and 20–25 years (13.0%), while 12.5% were above 40 years. Nearly all participants were female (97.8%). Most were married (67.9%), with 33.7% having two children and 25.5% having three. A significant portion (77.7%) resided in urban areas. Regarding academic background, 39.1% had a bachelor's degree, 19.6% had a diploma, and only 4.9% had completed intermediate education. The most common professional experience bracket was 10–20 years (59.2%), with 20.1% having 5–10 years of experience. In terms of knowledge and training on breaking bad news (BBN), only 29.3% of nurses reported feeling comfortable performing this task, while 68.5% felt uncomfortable. Merely 22.3% followed any formal guidelines, and 59.8% had not received prior training. Nevertheless, 58.2% expressed interest in receiving future training. Awareness of structured communication protocols was limited, with only 45.1% recognizing the SPIKES model and 37.0% familiar with the BREAKS framework. The assessment of practice-related behaviors revealed that BBN was most commonly delivered at the bedside, with 36.4% stating it "usually" occurred there and 28.8% reporting it happened "always." Only 9.2% noted that BBN was "always" delivered in a doctor's office maintaining privacy, whereas 45.1% said it was "usually" done so. Nearly half of the participants (48.4%) indicated they always maintained eye contact with patients during BBN, and 51.1% reported always having in-depth knowledge of the patient's condition before initiating the conversation. Half of the nurses (50.5%) consistently considered the patient's cultural and ethnic background.

With regard to professional conduct, 53.8% of respondents reported always switching off their mobile phones during BBN, and 49.5% stated they usually avoided interruptions. Establishing rapport was practiced "usually" by 33.2% and "always" by 23.9%. Exploring the patient's prior understanding of their disease was a common behavior, with 42.4% doing so consistently. However, only 3.3% reported always breaking bad news directly to the patient, while 38.0% said they rarely did so. Conversely, 47.3% stated they mostly

communicated BBN to attendants only, and 51.1% admitted they rarely involved both the patient and attendant together. Regarding ethical considerations, 40.2% of nurses reported usually seeking permission before initiating BBN, while 23.9% always did. Alarming, 46.7% admitted they always withheld complete prognostic information, and 17.9% reported that family pressure frequently influenced their communication. Emotional support was less frequently provided, with only 15.2% always allowing time for patients to express feelings. Nonetheless, 72.8% of participants stated they consistently empathized with the patient, and 73.9% always ensured that the patient understood the information conveyed.

**Table 1: Demographic Characteristics of Postgraduate Nurses Participating in the Study**

Demographic Factor	Category	Frequency	Percentage
Age (years)	20 – 25	24	13.0 %
	25 – 30	42	22.8 %
	30 – 35	53	28.8 %
	35 – 40	38	20.7 %
	> 40 / Others	23	12.5 %
Sex	Female	180	97.8 %
Marital status	Single	33	17.9 %
	Married	125	67.9 %
	Divorced	15	8.2 %
	Widow	7	3.8 %
Number of children	0	42	22.8 %
	2	62	33.7 %
	3	47	25.5 %
	> 3	29	15.8 %
Area of residence	Rural	36	19.6 %
	Urban	143	77.7 %
Previous qualification	Matric	23	12.5 %
	Intermediate	9	4.9 %
	Diploma	36	19.6 %
	Bachelor's	72	39.1 %
	Other	40	21.7 %
Years of experience	< 5	21	11.4 %
	5 – 10	37	20.1 %
	10 – 20	109	59.2 %
	> 20	11	6.0 %

**Table 2: Respondents' Knowledge and Training Needs Regarding Breaking Bad News**

Respondent's Knowledge	Frequency	Percentage
1. Do you feel comfortable in breaking bad news?		
Yes	54	29.3%
No	125	68.5%
2. Do you follow any guidelines for breaking bad news?		
Yes	41	22.3%
No	138	75.5%
3. Have you received any training of breaking bad news?		
Yes	69	37.0%
No	110	59.8%
4. Do you want to have any training regarding breaking bad news skills?		
Yes	106	58.2%

Respondent's Knowledge	Frequency	Percentage
No	73	39.7%
5. Do you know what SPIKES means?		
Yes	82	45.1%
No	97	52.7%
6. Do you know what BREAKS means?		
Yes	69	37.0%
No	110	59.8%

**Table 3: Practices and Attitudes of Nurses Regarding Breaking Bad News in Clinical Settings**

Question	Response	Frequency	Percentage (%)
Bad news was broken at bedside?	Always	53	28.8
	Usually	67	36.4
	Rarely	40	21.7
	Mostly	8	4.3
	Never	11	6.0
Bad news was broken in doctor's office keeping patient privacy?	Always	17	9.2
	Usually	83	45.1
	Rarely	60	32.6
	Mostly	19	10.3
	Never	1	0.5
Is eye contact with patient necessary while breaking bad news?	Always	89	48.4
	Usually	46	25.0
	Rarely	29	15.8
	Mostly	15	8.2
	Never	1	0.5
Do you have in-depth knowledge of the patient's problem before discussion?	Always	94	51.1
	Usually	33	17.9
	Rarely	36	19.6
	Mostly	13	7.1
	Never	4	2.2
Do you have knowledge of the patient's cultural and ethnic background?	Always	93	50.5
	Usually	37	20.1
	Rarely	28	15.2
	Mostly	18	9.8
	Never	4	2.2
Do you switch off your phone during conversation?	Always	99	53.8
	Usually	41	22.3
	Rarely	26	14.1
	Mostly	9	4.9
	Never	5	2.7
Do you avoid interruptions while breaking bad news?	Always	44	23.9
	Usually	91	49.5
	Rarely	23	12.5
	Mostly	12	6.5
	Never	10	5.4
Do you establish rapport before conversation?	Always	44	23.9
	Usually	61	33.2

Question	Response	Frequency	Percentage (%)
	Rarely	46	25.0
	Mostly	26	14.1
	Never	3	1.6
Do you explore what patient already knows?	Always	78	42.4
	Usually	14	7.6
	Rarely	44	23.9
	Mostly	28	15.2
	Never	16	8.7
Do you break bad news with the patient only?	Always	6	3.3
	Usually	35	19.0
	Rarely	70	38.0
	Mostly	24	13.0
	Never	45	24.5
Do you break bad news with the attendants only?	Always	12	6.5
	Usually	10	5.4
	Rarely	33	17.9
	Mostly	87	47.3
	Never	38	20.7
Do you break bad news with patient in presence of attendants?	Always	8	4.3
	Usually	32	17.4
	Rarely	94	51.1
	Mostly	32	17.4
	Never	14	7.6
Do you take permission before breaking bad news?	Always	44	23.9
	Usually	74	40.2
	Rarely	31	16.8
	Mostly	20	10.9
	Never	11	6.0
Do you avoid giving full prognosis details?	Always	86	46.7
	Usually	25	13.6
	Rarely	42	22.8
	Mostly	13	7.1
	Never	14	7.6
Do you withhold information due to family pressure?	Always	17	9.2
	Usually	9	4.9
	Rarely	109	59.2
	Mostly	33	17.9
	Never	12	6.5
Do you give time to patient to express emotions?	Always	28	15.2
	Usually	32	17.4
	Rarely	94	51.1
	Mostly	12	6.5
	Never	14	7.6
Do you empathize with the patient during conversation?	Always	134	72.8
	Usually	12	6.5
	Rarely	21	11.4
	Mostly	11	6.0



Question	Response	Frequency	Percentage (%)
Do you make sure the patient has understood the message?	Never	2	1.1
	Always	136	73.9
	Usually	14	7.6
	Rarely	16	8.7
	Mostly	10	5.4
	Never	4	2.2

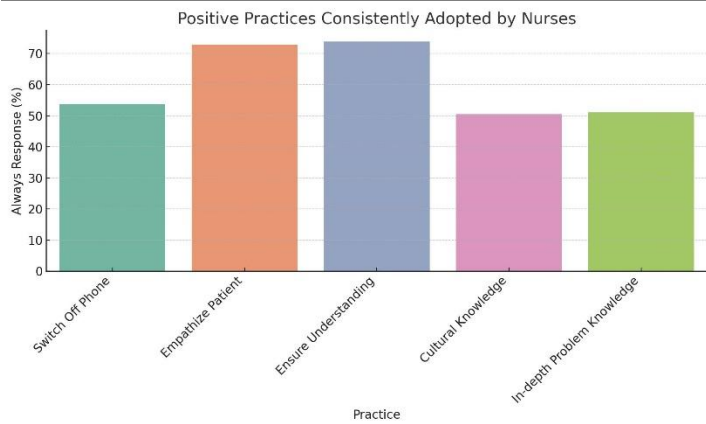


Figure 2 Positive Practice Consistently Adopted by Nurses

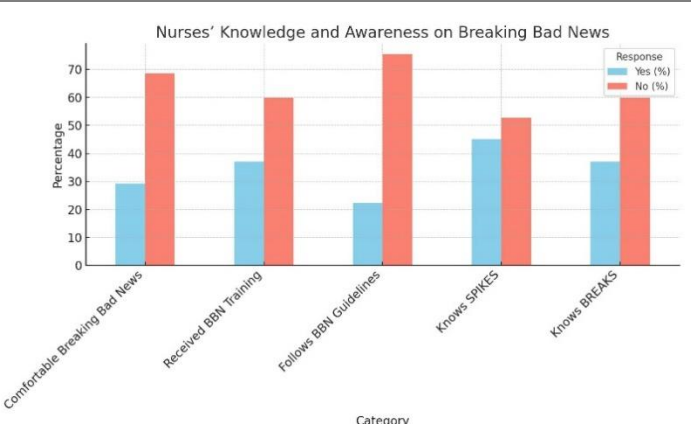


Figure 1 Nurses, s Knowledge and Awareness on Breaking Bad News

DISCUSSION

The present study explored the knowledge, preparedness, and practices of nurses in delivering bad news to patients and their families, highlighting both the strengths and gaps in communication approaches within a tertiary care setting. Findings revealed that a substantial number of nurses were uncomfortable with breaking bad news, lacked formal training, and were unfamiliar with structured communication models such as SPIKES and BREAKS. Despite these limitations, a notable proportion of participants expressed interest in receiving formal training, indicating a willingness to improve their skills in this essential aspect of clinical care. These results align with prior literature suggesting that while nurses frequently participate in delivering bad news, most have not received adequate training in effective communication frameworks. Much of the existing literature and educational curricula regarding BBN primarily target physicians and medical residents, with limited focus on nurses' roles (14,15). However, nurses often serve as crucial mediators between physicians and patients, translating complex medical information into more digestible language and providing ongoing emotional support. This reinforces the need for structured training programs tailored to the nursing profession that emphasize collaboration, empathy, and clarity in communication. The study also underscores the importance of nurse involvement in multidisciplinary teams during BBN scenarios (16,17). Poor coordination between nurses and physicians has been shown to lead to fragmented or contradictory messaging, which may cause confusion and emotional distress for patients and their families. The findings support a collaborative model in which nurses work alongside physicians to ensure that communication is consistent, culturally sensitive, and ethically grounded. Notably, cultural competence remains a vital component of BBN, as nurses often care for patients from diverse backgrounds, each with unique beliefs and expectations about receiving distressing health information (18,19).

Technological advances have further complicated the communication landscape. With the rise of telemedicine and virtual consultations, the physical absence of the caregiver during BBN may alter the therapeutic dynamic and diminish emotional connection. Although virtual modalities offer accessibility, they require nurses to develop new competencies in digital empathy and non-verbal communication cues. In such contexts, visual aids and simplified educational materials can be instrumental in helping patients understand complex diagnoses (20,21). However, this study did not assess whether nurses had access to or were trained in using such tools. In palliative care, where discussions often revolve around terminal diagnoses, disease progression, or end-of-life care, nurses play an even more pronounced role. Trust and emotional connection become foundational to patient-centered care. Findings from this study suggest that

nurses not only assist patients in processing difficult news but also uphold the ethical principles of informed consent and autonomy, ensuring that patients have a full understanding of their prognosis and available options (22,23). The ethical challenges associated with BBN—such as whether to disclose directly to the patient or defer to family wishes—require a delicate balance of honesty, compassion, and respect for patient rights. The strength of this study lies in its regional relevance, as it is one of the first to assess the role of nurses in breaking bad news within a local tertiary care setting. It highlights the current attitudes and practices of nursing professionals regarding e-learning as a tool for skill enhancement during and after the COVID-19 pandemic. Many nurses reported moderate levels of preparedness and expressed a positive inclination toward digital platforms for learning communication techniques, which reflects a shift toward technologically supported training environments (24,25).

Nonetheless, the study had several limitations. The sample size was modest and derived from a single-center, which limits the generalizability of findings. The exclusion of male nurses further narrows the scope of applicability. Additionally, the literature review component was limited in breadth, which may have restricted the depth of contextual interpretation. The reliance on self-reported data may have introduced bias, and the absence of a validated tool for awareness categorization further limits the interpretive power of the findings. Future research should consider a multicenter approach involving diverse healthcare institutions and include both male and female participants to enhance generalizability. Expanding the literature base and employing validated tools for evaluating communication competence would strengthen the reliability of subsequent studies. There is also a need for intervention-based research assessing the effectiveness of structured training modules—including e-learning formats—on improving nurses' competence in BBN. Exploring patient perceptions of nurse-led communication in BBN scenarios would add valuable insight into the impact of nursing interventions on patient satisfaction and emotional outcomes. Overall, the study reinforces the critical but often overlooked role of nurses in the emotionally charged process of breaking bad news and advocates for integrated, well-structured, and continuous communication training to enhance their confidence and effectiveness in this domain.

## CONCLUSION

In conclusion, this study highlighted that while nurses recognize the emotional and ethical significance of breaking bad news, many lack the structured communication training necessary to handle such situations confidently and effectively. The findings emphasize the urgent need for targeted educational interventions to build nurses' competence in delivering difficult news with empathy and clarity. Additionally, the shift toward e-learning during the COVID-19 pandemic was met with a generally positive attitude among nursing students, who appreciated its role in sustaining education during crisis. However, the success of digital learning hinges on reliable technical infrastructure and adequate resource availability. Strengthening these areas can enhance both clinical communication skills and the overall quality of nursing education.

## AUTHOR CONTRIBUTION

Author	Contribution
Faheema Naz*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Aqsa Hafeez	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Nadia Shoukat	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Sajjal Kainat	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Hafsa Majid	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Shamaila Naz	Substantial Contribution to study design and Data Analysis Has given Final Approval of the version to be published



## REFERENCES

1. Cuttini M, Forcella E, Rodrigues C, Draper ES, Martins AF, Lainé A, et al. What drives change in neonatal intensive care units? A qualitative study with physicians and nurses in six European countries. *Pediatr Res*. 2020;88(2):257-64.
2. El Ali M, Licqurish S, O'Neill J, Gillam L. Truth-telling to the seriously ill child - Nurses' experiences, attitudes, and beliefs. *Nurs Ethics*. 2024;31(5):930-50.
3. Conlon D, Raeburn T, Wand T. Risk-Actuated Public Interest Disclosure Practices of Nurses Working in Mental Health, Pertaining to Confidential Information of Patients. *Issues Ment Health Nurs*. 2023;44(6):474-81.
4. Kim Y, Lee E. The relationship between the perception of open disclosure of patient safety incidents, perception of patient safety culture, and ethical awareness in nurses. *BMC Med Ethics*. 2020;21(1):104.
5. Luo C, Lei L, Yu Y, Luo Y. The Perceptions of Patients, Families, Doctors, and Nurses Regarding Malignant Bone Tumor Disclosure in China: A Qualitative Study. *J Transcult Nurs*. 2021;32(6):740-8.
6. Fraiche AM, Matlock DD, Gabriel W, Rapley FA, Kramer DB. Patient and Provider Perspectives on Remote Monitoring of Pacemakers and Implantable Cardioverter-Defibrillators. *Am J Cardiol*. 2021;149:42-6.
7. Saleh AM. Nurses' Perceptions of Prognosis-Related Communication. *Asian Pac J Cancer Prev*. 2022;23(3):775-80.
8. Bubadué RM, Cabral IE, Carnevale F. Nurses' patterns of knowing about HIV disclosure to children. *Rev Bras Enferm*. 2022;75Suppl 2(Suppl 2):e20210103.
9. Newman AR, Linder L, Haglund K. The Nurse's Role in Prognosis-Related Communication in Pediatric Oncology Nursing Practice. *J Pediatr Oncol Nurs*. 2020;37(5):313-20.
10. González-García A, Pinto-Carral A, Pérez-González S, Marqués-Sánchez P. Nurse managers' competencies: A scoping review. *J Nurs Manag*. 2021;29(6):1410-9.
11. Rosenberg K. Minimum nurse-to-patient Ratios Improve Staffing, Patient Outcomes. *Am J Nurs*. 2021;121(9):57.
12. Heyer A, Granberg RE, Rising KL, Binder AF, Gentsch AT, Handley NR. Medical Oncology Professionals' Perceptions of Telehealth Video Visits. *JAMA Netw Open*. 2021;4(1):e2033967.
13. Shanahan T, Cunningham J. Keys to Trust-Building with Patients. *J Christ Nurs*. 2021;38(2):E11-e4.
14. Irani PS, Dehghan M, Mehdipour R. Iranian nurses' attitudes towards the disclosure of patient safety incidents: a qualitative study. *BMJ Open*. 2024;14(3):e076498.
15. Horlait M, De Regge M, Baes S, Eeckloo K, Leys M. Exploring non-physician care professionals' roles in cancer multidisciplinary team meetings: A qualitative study. *PLoS One*. 2022;17(2):e0263611.
16. Dugle G, Akanbang BAA, Abiuro GA. Exploring factors influencing adverse birth outcomes in a regional hospital setting in Ghana: A configuration theoretical perspective. *Women Birth*. 2021;34(2):187-95.
17. Melis P, Galletta M, Aviles Gonzalez CI, Contu P, Jimenez Herrera MF. Experiencing communication related to knowing the cancer diagnosis and prognosis: A multi-perspective interpretative phenomenological study. *Eur J Oncol Nurs*. 2021;51:101904.
18. Bafandeh Zende M, Jasemi M, Hemmati Maslarpak M, Dehghannezhad J. Experience of Nurses about Outcomes of Therapeutic Communication with Patients Suffering from Cancer: A Qualitative Study. *Asian Pac J Cancer Prev*. 2025;26(4):1189-98.
19. Chen SH, Chen SY, Yang SC, Chien RN, Chen SH, Chu TP, et al. Effectiveness of communication skill training on cancer truth-telling for advanced practice nurses in Taiwan: A pilot study. *Psychooncology*. 2021;30(5):765-72.
20. Chen SY, Chen SH, Zhou MX, Hsiao CC, Lin CC, Fang JT, et al. Communication Skills Training to Improve Confidence and Skills in Pediatric Cancer Truth-Telling of Registered Nurses: A Quasi-Experimental Study. *Psychooncology*. 2025;34(7):e70215.
21. Conlon D, Raeburn T, Wand T. Cognitive Continuum Theory: Can it contribute to the examination of confidentiality and risk-actuated disclosure decisions of nurses practising in mental health? *Nurs Inq*. 2023;30(2):e12520.
22. Fabricius PK, Andersen O, Steffensen KD, Kirk JW. The challenge of involving old patients with polypharmacy in their medication during hospitalization in a medical emergency department: An ethnographic study. *PLoS One*. 2021;16(12):e0261525.
23. Cho J, Park YS, Park DJ, Kim S, Lee H, Kim M, et al. Bridging Policy and Service Performance of Hospital-Based Nutrition Support by Healthcare Information Technology. *Nutrients*. 2021;13(2).
24. Abbas, S. H., Abbas, S. Q., Mubeen, S. M., Mubashir, S. M., & Zaman, A. (2023). Breaking bad news: a descriptive study of physicians' perspective of Sindh, Pakistan. *Age (in years)*, 24(35), 35.
25. Yazdanparast, E., Arasteh, A., Ghorbani, S., & Davoudi, M. (2021). The effectiveness of communication skills training on nurses' skills and participation in the breaking bad news. *Iranian Journal of Nursing and Midwifery Research*, 26(4), 337-341.