

▪ **Basic Research**

Effect of using the "SPIKE" protocol on feelings, attitudes, and practices of critical care nurses for breaking bad news

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Abstract:

Background: Information that awfully significantly changes the patient's life is referred to as "bad news." Breaking bad news requires skillful communication and is by no means simple. For most nurses, breaking bad news is a handicap caused by inadequate training. When delivering bad news, the six-step SPIKE procedure is frequently employed.

Aim of the study: The study's objective was to evaluate how the "SPIKE" protocol affected critical care nurses' attitudes, practices, and feelings for breaking bad news.

Materials and Method: Research Design: For this study, a quasi-experimental research design was adopted. **Setting:** This study was conducted at the 16-bed general adult intensive care unit (ICU) of Al-Rahmaneah Central Hospital, which is divided between Hall A and Hall B.

Sample: A convenience sample of 50 nurses was recruited for the current study. **Instruments:** two tools were used in the current study to collect data. Tool one was a questionnaire, which consisted of three parts. Part I: focused on the socio-demographics and characteristics of critical care nurses. Part II: It was composed of 12 statements to assess the feelings of nurses toward breaking bad news. Part III: It was composed of 17 statements to assess nurses' attitudes. Tool II: was composed of the SPIKE' protocol checklist.

Method: Nurses interviewed individually to fulfill parts I and II, and the researcher recorded their responses using tool I. Nurses was observed, while they were breaking bad news the researcher recorded their practices by using the SPIKE protocol checklist (tool II). An educational program was conducted to teach nurses how to break bad news through three educational methods. Nurses were re- interviewed individually to fulfill tool I and observed to reassess their practices during breaking bad news by using tool II.

Conclusion: the current study concluded that the hypothesis of nurses who were subjected to the "SPIKE" protocol had positive feelings, attitudes, and practices for breaking bad news was accepted .

Key words: SPIKE protocol, feelings, attitudes, practices, breaking bad news, critical care nurses

Introduction:

For healthcare providers, one of the most challenging things they do is deliver bad news (BBN). Furthermore, delivering bad news to individuals and healthcare providers can be stressful. Among all medical professionals, nurses have a crucial role in conveying unfavorable news. Critical care nurses' good communication skills help patients better understand their health status and experience less stress because the critical care units (CCUs) are stressful and complex environments that can lead to high levels of emotional exhaustion, stress, and anxiety for patients and their families^(1,2).

Breaking bad news requires professionalism, patience, and energy. It also requires appropriate, friendly words and well-structured terminology. A secondary task is to assess how patients and families will react to this distress. Breaking bad news is one of the most difficult communication tasks. It involves more than just the verbal part of actually delivering the bad news. It also requires other skills such as responding to patients' emotional reactions, involving patients in decision-making, coping with the stress of patients' expectations of cure, having multiple family members involved, and the challenge of how to provide hope when the news is grim. The complexity of this interaction can sometimes lead to misunderstandings. For example, patients may not understand the prognosis for the illness or the purpose of care.^(3,4)

Providing bad news does not necessarily lead to harmful or wholly negative responses in patients. It may, in fact, improve the patient's health and their relationships with the medical team⁽⁵⁾. Bad news doesn't always have a negative impact on patients. In fact, it may actually improve their health and their relationship with the medical team. Poor communication can increase stress levels and reduce patients' comprehension of information about their health⁽⁶⁾. While there is a link between length of service and poor communication skills, many senior practitioners and practitioners feel the need to receive communication training for better management⁽⁷⁾.

One of the many models that can be useful when breaking bad news is the SPIKES protocol, which can be adhered to when doing so. SPIKES is a six-step process for breaking bad news to a patient: S for interview setup; P for patient perception assessment; I for getting the patient's invitation; K for providing the patient with information and knowledge; E for responding to the patient's emotions in an empathic manner; and S for strategy and summary^(8,9). Empathy, trust, and effective communication are necessary for a successful BBN process. Each organization should include a communication-training program in its curriculum before allowing someone to work in the clinical setting. Additionally, they recommend training healthcare professionals with behavioral and cognitive coping strategies to handle any negative responses from patients or their families through training programs^(10,11). Furthermore, it was reported by Lin et al. in 2017⁽¹²⁾ that

nurses' perspectives during patient communication are adversely affected by a lack of communication training.

The body of literature demonstrates that the nursing profession lacks understanding of BBN. Imanipour et al. (2016) ⁽¹³⁾ reported that a mere 16.2% of nurses possess adequate knowledge on how to deliver bad news. Consequently, training programs ought to incorporate both theoretical and practical elements to enhance nurses' performance in this domain. The emotional health of patients and their capacity to meet therapy objectives may both benefit from nurses' positive attitudes toward breaking bad news ⁽¹⁴⁾. Determining the impact of the SBIKE protocol on the attitudes, practices, and feelings of critical care nurses when delivering bad news is therefore crucial.

Aim of the study:

The aim of the study was to evaluate the effect of using the "SPIKE" protocol on the feelings, attitudes, and practices of critical care nurses for breaking bad news.

Research hypothesis:

Nurses who were subjected to the "SPIKE" protocol had positive feelings, attitudes, and practices for breaking bad news.

Materials and Method: Materials:

Research design:

A quasi-experimental research design was used to conduct this study. Pre-test post-test design.

Settings:

This study was conducted in the 16-bed general adult intensive care unit (ICU) of Al-Rahmaneah Central Hospital, which is divided between Hall A and Hall B.

Subjects:

The study included a convenience sample of all critical care nurses hired in the ICU mentioned earlier. Using the Epi-Info software and the power analysis, the following parameters were applied: number of people: 50 50% is the expected frequency, 5% is the acceptable error, and 97% of the data is confident.

Tools:

Two tools were used to collect the necessary data for this study. These tools were developed by the researcher after reviewing related literature ^(9, 10, 15).

Tool I: it was questionnaire that consisted of five parts.

Part I: focused on the socio-demographics and characteristics of critical care nurses. **Part II:** It was composed of 7 statements to assess the frequency of engagement in breaking bad news, and the answer was scored on a 3- point Likert scale with each item scored as (0) for always, (1) for usually, and (3) for occasionally.

Part III: It evaluated nurses' reactions to receiving unfavorable news. The response was

given on a 3-point Likert scale, with (0) denoting disagree, (1) neither agree nor disagree, and (3) agreeing. The question had twelve statements. The scores for questions 11 and 12 were mixed up.

Part IV: It consisted of 17 statements designed to evaluate the attitudes of nurses. In addition, the response was graded using a three-point Likert scale, where (0) denoted disagreement, (1) neither agreement nor disagreement, and (3) agreement. The scores for questions 3, 6, and 7 were flipped.

Tool II: SPIKE's protocol checklist: it was composed of six main categories: setting, perception, invitation, knowledge, emotions and empathy, strategy, and summary. Every item in each category was given a score of 0 for not done, 1 for partially done, and 3 for done on a 3-point Likert scale. A higher score on the SPIKE protocol checklist denoted a higher degree of score. The total score of the protocol ranged from 36 (minimum) to 108 (maximum).

Methods:

- The data collection started at the beginning of September 2021 till the end February 2022.
- Approval from the ethical committee, Faculty of Nursing Damanhour University on December 16, 2021(No. 51-D) was obtained.
- After outlining the purpose of the study, an official letter authorizing its conduct was obtained from the Faculty of Nursing and forwarded to the hospital's administrative authorities.
- The hospital administration officially approved the study's conduct, allowing researchers to gather the required data from the chosen settings.
- A panel of seven critical experts reviewed the study tool to determine its content validity. The appropriate adjustments were made as a result.
- To determine the viability of the study and the tool's applicability, a pilot study involving five nurses, or 10% of the total number of nurses, was carried out. These nurses were excluded from the study. The appropriate adjustments were made as a result.
- Reliability of the study tool was measured by using Cronbach and the result was 0.88.

Steps of educational programs:

Step I: preparation of educational materials: three educational methods were used in this study

- 1- Theoretical lecture
- 2- Simulation through a video
- 3- Role play.

- The researchers prepared and translated content of theoretical lecture after reviewing related literature^(9, 10, 15).
- The researchers navigated the internet to select the most suitable translated video.
- The researchers trained 5 nurses out of the selected settings by using the previously prepared lecture and video to evaluate the efficacy of them. Then, the necessary

notifications were done.

Step II: implementation of educational programs:

- Before starting the educational program the researchers assessed nurses' practice of breaking bad news during shifts using an observational SPIKE' s checklist. In addition, the researchers observed the reaction of the nurse to various bad news situations before starting the study.

-Secondly, the researcher interviewed an average of 3-5 nurses per/day to fulfill the first four parts of the study tool.

- Before collecting any data, the researcher gave them a written consent form and explained the purpose of the study at the start of the interview.

- Next, questionnaire was distributed to all nurses individually. So, they could answer question privately after that, the researcher discussed their answers in focus group to explain the answers of the questions.

- Ten groups of five nurses each were formed from the nurses. Every nurse answered questions of parts IV and V of questionnaire to assess her/his feelings and attitude toward breaking bad news.

- The educational program was reached with two sessions a day for each group. The first session consisted of a theoretical lecture, followed by a demonstration of video at morning shift. It took about 30 minutes for both followed by a 10 minutes break.

- Role play was done during second session it took almost 25-30 minutes.

Step III: evaluation of nurses' practice

- Nurses,s feelings and attitude toward breaking bad news were reassessed in this step by using parts IV and V of the questionnaire .

- Nurses' practice regarding breaking bad news was evaluated by using SPIKE' protocol checklist (Tool II).

- **Data analysis:** collected data was analyzed with an appropriate statistical test to find out if the nurses' feelings and attitude toward breaking bad news was changed.

Results:

The distribution of critical care nurses based on demographic information is shown in **table I**. This table illustrates the gender distribution of the study sample, revealing that 78% of the participants were female nurses. It is noteworthy that critical care nurses had an average age of 27.06 ± 4.85 years. Furthermore, almost 75% of them were older than 25. About half of the study sample (48%) had a bachelor's degree, and more than half (56%) had less than five years of experience. With regard to prior training, it should be mentioned that 92% of the study sample did not offer any courses on how to deliver bad news.

Table II shows that 42% of the nurses who were studied always offer support to patients or family members after breaking bad news, and they are present when the doctor

breaks bad news to the patient or family member. Furthermore, approximately 75% of them occasionally inform patients or family members of bad news, and 68% of them prepare patients or family members for bad news. Additionally, over half of them provide a platform for patients or family members to discuss the bad news (56%), assist patients or family members in coping with the news over time (58%), and address the news when patients or family members have questions (52%).

Table III shows those nurses' attitudes toward breaking bad news improved more favorably prior to intervention than following it for every statement. Additionally, after taking part in the intervention, their feelings about being able to start conversations with patients or family members about bad news, having effective coping mechanisms for dealing with emotional reactions when involved in BBN, feeling that engagement in BBN has harmed their relationships with patients or relatives, and trying to avoid being involved in BBN because it is challenging more than doubled. However, compared to 20% of the nurses in the study, 80% of the nurses disagreed that their place of employment had a strong system of support for nurses involved in BBN after intervention.

With regard to **Table 4**, it is evident that nurses' attitudes toward breaking bad news improved more favorably prior to intervention than following it. Additionally, compared to 38% of the nurses after intervention, more than three-fifths of the study's nurses agreed that breaking bad news during a medical teaching tour was appropriate prior to intervention. Furthermore, compared to the majority of them (90%) after intervention, more than three-fifths of them agreed that a private room is appropriate for breaking bad news prior to intervention. Nonetheless, compared to 12% after intervention, nearly half of the nurses in the study agreed that the hospital corridor is a good place to break bad news. Furthermore, nurses' perceptions of that doctor as the best person to deliver bad news remained unchanged. Nurses' attitudes toward BBN improved from 39.82 to 44.54 on the overall mean score, with a significant difference ($p < 0.00$).

From table 5, it can be observed that mean percent scores for using the SPIKE protocol increased after intervention for all categories, including setting, perception, invitation, knowledge, emotion and empathy, and strategy and summary . As the mean percent score related to setting increased from 24 % to 64.75%, it increased related to perception from 33% to 76 %, related to invitation increased from 27 % to 71.5%, related to knowledge increased from 40.7% to 78.7%, related to emotion and empathy increased from 48.3% to 75.6%, related to items of strategy and summary increased from 33.7 % to 58.2% with significant difference while $p < 0.001$ for all categories. Moreover, the total percent score increased from 36.83 to 71.42 with a significant difference $p < 0.001$.

Table 5 shows that all categories (setting, perception, invitation, knowledge, emotion and empathy, strategy, and summary) had mean percent scores for using the SPIKE protocol

rise after the intervention. Setting saw an increase in mean percent score from 24% to 64.75%, perception saw an increase from 33% to 76%, invitation saw an increase from 27% to 71.5%, knowledge saw an increase from 40.7% to 78.7%, emotion and empathy saw an increase from 48.3% to 75.6%, and strategy and summary items saw an increase from 33.7% to 58.2% with significant differences while $p < 0.001$ for all categories. Moreover, there was a significant difference ($p < 0.001$) in the total percent score, which rose from 36.83 to 71.42.

**Table (1) Distribution of the studied nurses according to nurse characteristics
(n = 50)**

characteristics	No.	%
Gender		
Male	11	22
Female	39	78
Age (years)		
<25	14	28
≥25	36	72
Min. – Max.	20.0 – 45.0	
Mean ± SD.	27.06 ± 4.85	
Level of education		
Bachelor's degree	24	48
Technical health institute	23	46
Secondary school	3	6
Years of experience		
<5	28	56
5–<10	16	32
≥10	6	12
Min. – Max.	1.0 – 22.0	
Mean ± SD.	5.02 ± 4.05	
Previous training		
No	46	92
Yes	4	8

SD: Standard deviation

Table (2): Distribution of the studied nurses according to types and frequency of their engagement in BBN (n = 50):

Frequency of nurses engagement in BBN	Rarely		Sometimes		Always	
	No.	%	No.	%	No.	%
Breaking bad news to patients or relatives	2	4	35	70	13	26
Providing support to patients or relatives after telling them bad news	3	6	26	52	21	42
Giving patients or relatives an opportunity to talk about the bad news	4	8	28	56	18	36
Helping patients or relatives deal with the effects of bad news over time	4	8	29	58	17	34
Be present when doctor informs the patients or relatives of bad news.	1	2	28	56	21	42
Discussing bad news when patients or relatives ask questions	5	10	26	52	19	38
Preparing patients or relatives for bad news.	4	8	34	68	12	24

Table (3): Distribution of nurses according to their feelings toward breaking bad news pre- and post- intervention:

Nurses' feelings toward breaking bad news	Pre intervention			Post intervention		
	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree
	No. %	No. %	No. %	No. %	No. %	No. %
- Involving in BBN can prepare patients or relatives for future.	1 2	5 10	44 88	1 2	3 6	46 92
- Involving in BBN strengthened my relationship with patient or relative.	4 8	7 14	39 78	0 0	6 12	44 88
- Involving BBN encouraged me to reflect positively on my own priorities	5 10	7 14	38 76	0 0	6 12	44 88
- Involving BBN allowed me to share in important life changing moments with patient or relative.	2 4	11 22	37 74	0 0	6 12	44 88
- Feeling be able to initiate discussions with patient or relatives relating to bad news.	16 32	14 28	20 40	0 0	10 20	40 80
- Having good strategies for coping with emotional reactions when involved in BBN.	9 18	23 46	18 36	0 0	15 30	35 70
- Feeling confident in my skills in relation to breaking bad news.	15 30	21 42	14 28	0 0	30 60	20 40
- Area of work had a good system of support for nurses involved in BBN.	10 20	13 26	27 54	40 80	3 6	7 14
- Feeling be able to support patients or relatives from different cultural backgrounds in relation to BBN.	10 20	20 40	20 40	3 6	13 26	34 68
- It is difficult to deal with patient's or relative's emotional reactions to bad news.	10 20	17 34	23 46	0 0	17 34	33 66
- Involving in BBN had a negative effect on my relationship with a patient or relative.	11 22	16 32	23 46	0 0	16 32	6 12
- Trying to avoid being involved in BBN because it is difficult.	12 24	18 36	20 40	6 12	35 70	9 18
Total Score (12 – 36)						
Mean ± SD.	27.68 ± 2.71			28.96 ± 2.51		
% Score (Mean ± SD.)	65.33 ± 11.28			70.67 ± 10.48		
t (p)				2.39*(0.02*)		

Table (4): Distribution of nurses according to their attitudes toward breaking bad news pre- and post- intervention:

Nurses' attitudes toward BBN	Pre intervention			Post intervention		
	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree
	No.	No.	No.	No.	No.	No.
- Patient must be informed of his medical condition.	14	2	34	12	3	35
- Patient's family must be informed of patient's medical condition	28	4	68	24	6	70
- Doctor is the most appropriate person to break bad news	9	6	35	7	3	40
- It is better for patient's relatives to break bad news	18	12	70	14	6	80
- It is better for nurses to break bad news	10	3	37	10	3	37
- It is best for nurses to break bad news	20	6	74	20	6	74
- Giving bad news during medical teaching tour is appropriate	25	4	21	5	2	43
- Hospital corridor is a good place to give bad news	50	8	42	10	4	86
- Private room is suitable for breaking bad news.	14	6	30	7	4	39
- It is best to reveal bad news immediately after it is confirmed	28	12	60	14	8	78
- It is better for nurses to know how much patients know about illness than it makes BBN easier	12	4	34	20	11	19
- The impartial treatment skill of nurses influences compliance with receiving bad news	24	8	68	40	22	38
- Awareness of medical condition positively affects continuation of medical treatment	27	0	23	7	37	6
- It is better to educate nurses on how to break bad news	54	0	46	14	74	12
- Taking into account the psychological state of patients when breaking bad news	14	3	33	3	2	45
- Nurses must consider patients' religious beliefs	28	6	66	6	4	90
- Nurses impartially BBN make patients pessimistic about their treatments	12	7	31	7	2	41
- Patient and his family has the right to know everything about his condition	24	14	62	14	4	82
	12	1	37	1	0	49
	24	2	74	2	0	98
	11	4	35	1	0	49
	22	8	70	2	0	98
	9	5	36	1	0	49
	18	10	72	2	0	98
	5	5	40	1	0	49
	10	10	80	2	0	98
	5	3	42	1	0	49
	10	6	84	2	0	98
	3	2	45	1	0	49
	6	4	90	2	0	98
	15	5	30	3	2	45
	30	10	60	6	4	90
	7	3	40	3	2	45
	14	6	80	6	4	90
Total Score (17 – 51)						
Mean ± SD.	39.82 ± 5.49			44.54 ± 3.58		
% Score (Mean ± SD.)	67.12 ± 16.15			81 ± 10.53		
t (p)	4.97* (<0.00*)					

Table (5): Comparison between mean score of categories of breaking bad news SPIKE protocol pre and post intervention:

Categories of breaking bad news SPIKE protocol	Pre-intervention	Post-intervention	Percent change	t	p
Setting: Score (4 – 12)					
Mean ± SD.	5.92 ± 1.01	9.18 ± 1.21	40.8	14.9*	<0.001*
% Score (Mean ± SD.)	24 ± 12.59	64.75 ± 15.09			
Perception: Score (4 – 12)					
Mean ± SD.	6.64 ± 1.52	10.08 ± 1.26	43	12.2*	<0.001*
% Score (Mean ± SD.)	33 ± 19.03	76 ± 15.74			
Invitation: Score (4 – 12)					
Mean ± SD.	6.16 ± 1.54	9.72 ± 1.41	44.5	13.1*	<0.001*
% Score (Mean ± SD.)	27 ± 19.29	71.5 ± 17.68			
Knowledge: Score (9 – 27)					
Mean ± SD.	16.34 ± 2.10	23.18 ± 2.07	38	16.5*	<0.001*
% Score (Mean ± SD.)	40.78 ± 11.64	78.78 ± 11.48			
Emotions and empathy: Score (8 – 24)					
Mean ± SD.	15.74 ± 1.70	20.10 ± 2.19	27.3	13.4*	<0.001*
% Score (Mean ± SD.)	48.37 ± 10.63	75.63 ± 13.67			
Strategy and summary: Score (7 – 21)					
Mean ± SD.	11.72 ± 1.87	15.16 ± 1.93	24.6	8.4*	<0.001*
% Score (Mean ± SD.)	33.71 ± 13.39	58.29 ± 13.79			
Overall Score (36 – 108)					
Mean ± SD.	62.52 ± 4.99	87.42 ± 4.39	34.6	28.6*	<0.001*
% Score (Mean ± SD.)	36.83 ± 6.93	71.42 ± 6.10			

SD: Standard deviation, t: Paired t-test, p: p value for comparing between Pre and Post

*: Statistically significant at $p \leq 0.05$

Discussion

The hardest thing for healthcare professionals to do is break bad news. Using efficient communication channels to increase patients' comprehension of their health status and reduce stress, nurses play a significant role in the BBN process⁽¹⁵⁾. Studies have indicated that poor communication abilities are thought to be the main obstacle when breaking bad news. On the other hand, poor communication causes misinterpretation of the information provided and raises stress levels. In addition, half of the patients in intensive care units lament insufficient communication with nurses⁽¹⁶⁾.

The study's objective was to assess how the "SPIKE" protocol affected critical care nurses' attitudes, behaviors, and feelings when they had to deliver bad news. Nearly three quarters of the study sample were female nurses, and over three quarters were over the age of twenty-five, according to the study's findings. More than half of the study sample had less than five years of experience and nearly half had bachelor's degrees. Furthermore, the majority of the study sample reported no training in effective ways to deliver bad news. They were unable to deliver bad news as a result. Moreover, developing a nurse's capacity to break bad news requires adequate education and ongoing communication training. Lack of knowledge about how to effectively inform patients of bad news and the consequences of doing so is one of the main reasons health care providers struggle to break bad news to patients⁽⁹⁾.

According to the current study, the majority of the nurses under investigation were involved in breaking bad news to family members. These activities included alerting relatives to the patient's declining health or death, outlining the specifics of challenging treatments, updating family members on a daily basis when the patient's condition did not improve, and talking about the significance and effects of changes in the patient's care. The earlier results are consistent with those of **Rayan et al.**⁽¹⁴⁾ who verified that nurses' average mean engagement score in the BBNs process was 2.70 out of 4. Moreover, Imanipour et al. (2016)⁽¹³⁾ and Alkhawaldeh (2018)⁽¹⁾ found that while half of critical care nurses are constantly involved in offering support to patients and their families, the majority of these nurses also break bad news to patients and their relatives. However, a small percentage of nurses actually practice this. Preparing patients and assisting them in receiving and adjusting to negative news is the role that participants least frequently identified.

These studies verify that, even in situations where no accountability is necessary, nurses in a variety of roles participate in breaking bad news. Delivering bad news in critical care units is a difficult task that may call for nurses to play a variety of roles and contribute at every point of the inpatient pathway, from diagnosis through rehabilitation and treatment to death. Additionally, this has to do with the critical care units' lack of privacy, knowledge, and time as well as their poor communication skills when breaking bad news to patients and their families. The process of breaking bad news to patients may also be impacted by fear, particularly if they have never participated in any prior training programs or lack experience.

According to the current study, after intervention, nurses' attitudes toward breaking bad news improved more favorably. Additionally, after taking part in the intervention, their feelings about being able to start conversations with patients or family members about bad news, having effective coping mechanisms for dealing with emotional reactions when involved in BBN, feeling that engagement in BBN has harmed their relationships with patients or relatives, and trying to avoid being involved in BBN because it is

challenging more than doubled. Nevertheless, 80% of the nurses who were part of the study disagreed that there was a strong support structure in place at work for nurses who were involved in BBN following intervention. In the same way, Alkhaldeh **2018**⁽¹⁾ and **Gold 2018**⁽¹⁷⁾ revealed that medical professionals have a bad attitude when they have to deliver bad news, and that participation in this process had improved participants' relationships with patients and family the least. The study showed that, compared to after intervention, nurses' attitudes toward breaking bad news improved more favorably before intervention. **Elashiry et al. 2022**⁽¹⁸⁾ also noted that healthcare professionals have a bad attitude and sentiment when they have to deliver bad news.

It was noted that the SPIKE protocol's mean percent scores for breaking bad news increased following the intervention in all categories (setting, perception, invitation, knowledge, emotion and empathy, strategy, and summary). In keeping with this conclusion, **Gold 2018**⁽¹⁷⁾ demonstrated that participants view training in the area of breaking bad news as significant and as having an impact on the recipient of the bad news, irrespective of years of professional experience. They believe training can enhance this capacity. Furthermore, it was confirmed by **Anwar et al. 2020**⁽¹⁹⁾ and **Abdulrahman 2021**⁽²⁰⁾ that every participant had described BBN as a challenging task. They had varying degrees of bad to very bad experiences. Additionally, **Rasmus and Kozłowska 2020**⁽²¹⁾ carried out a study in Poland to find out how well emergency medical services staff members knew how to break bad news. According to the study, just 4.1% of participants knew about the SPIKES protocol for breaking bad news. Furthermore, a 3-hour teaching session based on the SPIKES-NURSE protocol was linked to a significant improvement in student performance and comfort in breaking bad news, according to a previous study. According to the study's findings, teaching BBN in a more standardized manner can greatly raise students' comfort levels with carrying out this crucial task⁽²²⁾.

The SPIKE protocol should be combined with other models, such as the PEWTER model (prepare, evaluate, warn, tell, emotional, and regrouping preparation), despite the study's findings to the contrary. To make sure the patient understands the new information, it's also critical to assess the patient's emotional reaction. Therefore, when breaking bad news, it was advised to combine more than one model^(22, 23). Furthermore, it was stated that, in the absence of adequate data to support the case, the interim solution might be to use protocols like SPIKES as a framework for bad news education, stressing the individual and the relationship in addition to the six steps⁽²³⁾.

Furthermore, in a prior study conducted by **Seifart C et al. (2013)**⁽²⁴⁾, it was suggested that certain additions to the SPIKES protocol be taken into account. These additions include the idea of delivering bad news in two steps, the regular reassurance that listeners understand the constant availability of questions, and respect for prearrangement needs. Finally, nurses have a difficult time breaking bad news to others. Administrators

should therefore encourage nurses to share bad news and support them by providing them with education and training ⁽²⁵⁾.

Conclusion

The current study concluded that the hypotheses of nurses who were subjected to the "SPIKE" protocol had positive feelings, attitudes, and practices for breaking bad news was accepted.

Recommendations

Passed on finding the study recommended that:

- 1- Enhance the role of nurses in the BBN process by expanding their knowledge base and honing their communication abilities.
- 2- From the start of the clinical stage until graduation, nursing students should receive instruction and training on breaking bad news protocols and acquired skills to enable them to break bad news to patients in an appropriate manner.
- 3- It is imperative to motivate policy makers to create training curricula and protocols for critical care nurses concerning the BBN process.
- 4- Conduct further researches comparing SPIKE protocol with other protocols like BREAKS or ABCDE for breaking bad news.

Limitation of the study:

- There should be a lot more research done on breaking bad news using a lot of samples.
- Work overload was a great barrier for nurses training in this study.

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الملخص العربي:

عنوان البحث: تأثير استخدام بروتوكول "سبايك" على المشاعر والمواقف وممارسات ممرضات الرعاية الحرجة للأخبار السيئة العاجلة.

المقدمة: يطلق على المعلومات التي تغير حياة المريض بشكل جذري اسم «الأخبار السيئة». إن نقل الأخبار السيئة هو اتصال ماهر، وليس بالأمر السهل على الإطلاق. و يعد نقص التدريب الكافي على نقل الأخبار السيئة العاجلة عائقًا لمعظم الممرضات. و يستخدم بروتوكول سبايك المكون من ست خطوات على نطاق واسع للأخبار السيئة العاجلة.

هدف البحث: كان الهدف من الدراسة هو تقييم تأثير استخدام بروتوكول "سبايك" على مشاعر ومواقف وممارسات ممرضات الرعاية الحرجة للأخبار السيئة العاجلة.

المواد والطريقة:

تصميم البحث: تم استخدام تصميم بحثي شبه تجريبي لإنجاز هذه الدراسة.

مكان إجراء البحث: أجريت هذه الدراسة في وحدة العناية المركزة العامة للبالغين في مستشفى الرحمانية المركزي، والتي تحتوي على 16 سريرًا مقسمًا بين القاعة أ والقاعة ب.

العينة: تم تعيين عينة ملائمة من 50 ممرضة للدراسة الحالية.

الأدوات: استخدمت أداتان في الدراسة الحالية لجمع البيانات. وكانت الأداة الأولى عبارة عن استبيان يتألف من ثلاثة أجزاء. ركز الجزء الأول على التركيبة الاجتماعية والديموغرافية وخصائص ممرضات الرعاية الحرجة. الجزء الثاني: يتكون من بيانات 12 لتقييم مشاعر الممرضات تجاه الأخبار السيئة العاجلة. الجزء الثالث: يتألف من بيانات 17 لتقييم الممرضات والمواقف. تتألف الأداة الثانية من القائمة المرجعية لبروتوكول سبايك.

الطريقة: تمت مقابلة الممرضات بشكل فردي للوفاء بالجزأين الأول والثاني، وسجل الباحث ردودهم باستخدام الأداة الأولى. لوحظت الممرضات و هي تعطى الأخبار السيئة العاجلة، سجل الباحث ممارساتهم باستخدام قائمة التحقق من بروتوكول سبايك (الأداة الثانية). تم إجراء برنامج تعليمي لتعليم الممرضات كيفية نشر الأخبار السيئة من خلال ثلاث طرق تعليمية. تمت مقابلة الممرضات بشكل فردي لتحقيق الأداة الأولى ولاحظوا إعادة تقييم ممارساتهم أثناء الأخبار السيئة العاجلة باستخدام الأداة الثانية.

الاستنتاج: خلصت الدراسة الحالية إلى أن الممرضات اللاتي خضعن لبروتوكول سبايك لديها مشاعر إيجابية ومواقف وممارسات مقبولة للأخبار السيئة العاجلة.