# The Effectiveness of Communication Skills Training on Nurses' Skills and Participation in the Breaking Bad News

### Abstract

Background: Nurses have an important role in the process of providing information and helping patients prepare for and receive bad news and understand and cope with the bad news they have been given. This study was conducted to evaluate the effect of communication skills training on the level of skill and participation of nurses in breaking bad news. Materials and Methods: This semiexperimental study was performed on 60 nurses working in educational hospitals of Birjand, Iran in 2019. Convenience sampling was performed and the participants were randomly assigned to the two groups of intervention and control. For the experimental group, an integrated workshop on communication skills was held. Before and after the intervention, the Setting, Patient Perception, Invitation, Knowledge, Empathy, and Strategy (SPIKES) SPIKES questionnaire (breaking bad news skills) and the questionnaire of participation in breaking bad news were completed. The collected data were analyzed using descriptive and inferential statistics (independent t-test) in SPSS software. Results: The mean (SD) of breaking bad news skills after the intervention was 57.42 (10.13) in the control group and 65.12 (5.68) in the experimental group and the between-group difference was statistically significant ( $t_{59.41} = 3.93$ , p < 0.001). After the intervention, the mean (SD) of nurses' participation in delivering bad news was 21.17 (5.21) in the control group and 25.77 (4.96) in the experimental group and the between-group difference was statistically significant ( $t_{75.48} = 3.94$ , p < 0.001). Conclusions: It seems that to increase the ability of nurses in the process of breaking bad news, it is necessary to teach them communication skills.

Keywords: Communication, Iran, nurses, truth disclosure

# Introduction

There are often situations in which health care professionals and consequently nurses face the difficult responsibility of communicating bad news.<sup>[1]</sup> This bad news consists of any unpleasant information about the patient that is passed on to him or her by the family or health care provider and makes a significant difference in his or her future health outlook or prognosis.<sup>[2]</sup> Communicating bad news can be challenging for any member of the health care team for several reasons, ranging from personal beliefs to feelings of inadequacy or blame. Some studies suggest that delivering bad news should be a collaborative process, just as good news is delivered when all team members are ready.[3] The nurse is an effective factor in communicating with patients and their families<sup>[4]</sup> and after the physician conveys the bad news to the patients and their relatives, the nurses play a key role in supporting and educating them.<sup>[5]</sup>

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One study found that a nurse's role in communicating bad news includes providing information about the news, preparing patients for the news, supporting them, and helping them adapt to the news. They can set aside time for the patient and his/her family to make sure they understand the discussion.<sup>[6]</sup> It is understood that the nurse is autonomous and works in parallel with other health professionals when delivering bad news and is an essential care specialist in the communication process that involves patients and their families. Communication skills are the basic competencies for which these health professionals require training.<sup>[7]</sup> Research has also shown that there is a strong relationship between communication skills and patients' perceptions of their diagnosis and treatment.<sup>[5]</sup> Therefore, it can be concluded that the ideal presentation of bad news requires skillful communication and team support.[8] Effective communication

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as well as timing should be appropriate for each patient, as it allows for the necessary trust to be established between the nurse and the patient. Recognition of this has led to advanced communication courses for all health professionals to take advantage of.<sup>[5]</sup>

Nevertheless, nursing students are not provided with the basic rules about suitable communication with patients and the delivery of bad news; thus, they have problems in this regard after completing their education.<sup>[9]</sup> Based on the above-mentioned findings, it can be concluded that despite the importance of the delivery of bad news, this subject has not received much attention. Moreover, researchers' experiences with patients in clinical wards indicate that patients believe that their legal needs, such as provision of information and diagnosis and treatment of diseases are not appropriately met by the health care team. Therefore, this study was developed and implemented with the aim to assess how educational programs on communication skills affect patient-nurse cooperation and nurses' skills in the process of delivering bad news.

# **Materials and Methods**

This semiexperimental study was performed on 60 nurses working in educational hospitals in Birjand, Iran in 2019. The study was conducted from November 2019 to March 2020. The number of the subjects required to conduct the study was an estimated 26 people in each group based on the sample size formula, a pilot study, and a comparison of means, with a 95% Confidence Interval (CI) power of 90%, effect size 1.18 and the number of variables. To reduce potential problems in the research process such as the possibility of sample loss and to increase the statistical accuracy, the sample size was considered as 30 nurses in each group.

It should be noted that by the end of the study, there was no loss of subjects. The participants were selected using convenience sampling method and based on the inclusion criteria from among nurses working in two educational hospitals in Birjand. To this purpose and based on the estimated sample size (60 nurses), we enrolled volunteer nurses, and then, divided them into two groups using simple random allocation. To allocate participants randomly to the intervention and control groups, we used a lottery method. The exclusion criteria included using other alternative methods of breaking bad news during the study, any psychological diseases, and absence from one meeting during the study. We wrote "the intervention group" on a sheet of paper and "the control group" on another. Then, we put them in a box and asked each of the nurses to take a sheet of paper from inside the box and read it. Subjects entered the intervention and control groups based on the chosen paper.

In this study, the instrument used was a three-part questionnaire that included a demographic characteristics questionnaire, the Breaking Bad News Skills Questionnaire, and the Questionnaire of Participation in Breaking Bad News. The demographic information questionnaire included questions on age, gender, and marital status. The Breaking Bad News Skills Questionnaire was introduced in 2014 by Farokhyar *et al.* in Iran.<sup>[10]</sup> This questionnaire is based on the Setting, Patient Perception, Invitation, Knowledge, Empathy, and Strategy (SPIKES) protocol and has 16 questions. The face validity, content validity, and structure of this questionnaire were confirmed and its reliability was reported as 0.7 and 0.9 using Cronbach's alpha and test–retest, respectively.<sup>[10]</sup> In the present study, its reliability was found to be 0.87 using Cronbach's alpha coefficient. The questions were scored on a Likert scale ranging from 1 to 5 [1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (always)].<sup>[10]</sup>

The Questionnaire of Participation in Breaking Bad News was introduced in 2015 by Karim *et al.* in Iran.<sup>[11]</sup> It includes questions about the level of participation of nurses in the process of delivering bad news in the form of activities. A score of 2 is assigned to option always and a score of 1 to option never. In the study by Karim *et al.*, the validity and reliability of the questionnaire were confirmed through content and survey method by experts in medical ethics, psychiatry, special nursing, and psychiatric nursing. Its reliability was also confirmed using a pilot study on the nurses working in intensive care and emergency departments using the Pearson correlation coefficient of 0.96.<sup>[11]</sup> In the present study, its reliability was confirmed by a Cronbach's alpha coefficient of 0.72.

We explained the purpose of the study to the nurses, and then, a written consent form was obtained from each of them. Subsequently, the questionnaires were filled by all the participants. Next, in the experimental group, we held a communication skills workshop (principles of communication, communication process, purpose of communication, types of communication, barriers to effective communication, models of communication and strategies of improving communication, and guidelines for successful therapeutic interactions) in the hospital.

Our teaching method was a combination of lecture, question and answer, group discussion, role-playing, and film presentation. At the beginning of the course, we asked participants to recall a memory about delivering bad news to their patients or their families. We asked them to describe and analyze their performance in those conditions. Then, we taught them the right skills using questions and answers, lecture, and film. Finally, we summarized the educational content using the role-playing method. In this method, based on a pre-designed scenario, a situation is defined in which the nurse must inform the patient of a cancer diagnosis. One participant acted as a patient and the other acted as a nurse. It should be noted that the content of the sessions was provided by an experienced nurse accompanied by a psychologist and that this study was a single blind study. The design and protocol of the study are shown in Figure 1.

In general, each session lasted 2 h, with a total of four sessions in 2 weeks (twice a week). Researcher-made educational posters were installed, and educational booklets were placed in the hospitals for other participants 4 weeks after the intervention. Questionnaires were completed by the subjects before the intervention and 4 weeks after the intervention. The normality of data was evaluated using the Kolmogorov–Smirnov test. Data were analyzed using descriptive statistics, independent t-test, and Chi-square test in SPSS software (version 16; SPSS Inc., Chicago, IL, USA).

# **Ethical considerations**

The present study was approved by the ethics committee of Birjand University of Medical Sciences (IR.Bums. REC.1398.175) and the relevant authorities. We explained the purpose of the study to the nurses, and then, written consent forms were obtained from them all. Moreover, they were assured that they could withdraw from the study at any time. They were also assured of the confidentiality of data.

## **Results**

Most of the nurses in the experimental and control groups were women (26 and 29 nurses, respectively). The means (SD) of nurses' age in the experimental and control groups were 31.85 (5.22) and 29.82 (4.11) years, respectively. The Chi-square test showed no significant differences between the groups in terms of the nurses' working ward. According to the findings presented in Table 1, there were no significant differences between the groups in demographic (marital status and gender) variables before the intervention.

According to results presented in Table 2, the mean (SD) of breaking bad news skills before the intervention was 53.27 (10.5) in the experimental group and 55.37 (10.08) in the control group. The results of t-test showed that the

groups were homogeneous in terms of this variable before the intervention (p = 0.21).

Furthermore, before the intervention, the mean (SD) of the level of participation of nurses in breaking bad news was 19.85 (5.41) in the experimental group and 20.20 (4.50) in the control group. The results of t-test showed that the two groups were homogeneous in terms of this variable before the intervention (p = 0.62) [Table 2].

After the intervention, the mean (SD) of nurses' skills in delivering bad news increased in both groups. The mean (SD) of this variable in the experimental group was 65.12 (5.68) and in the control group was 57.42 (10.13). Independent t-test showed a significant difference between the two groups in the mean (SD) of breaking bad news skills after the intervention ( $t_{59,41} = 3.93$ ; p < 0.001). In addition, according to paired t-test results, this increase was statistically significant only in the intervention group [Table 2]. Furthermore, after the intervention, the mean score of nurses' participations in delivering bad news increased in both groups. The mean (SD) of this score in the experimental group was 25.77 (4.96)

# Table 1: Individual characteristics of the participants in<br/>terms of frequency distribution and percentage

Chi square Test					
Variable	Control group <i>n</i> (%)	Experimental group <i>n</i> (%)	Chi square Test		
Marital status					
Single	7 (23.30)	12 (40.00)	0.82	0.36	
Married	23 (76.70)	12 (60.00)			
Gender					
Male	1 (3.30)	4 (13.80)	2.66	0.10	
Female	29 (96.70)	26 (86.20)			

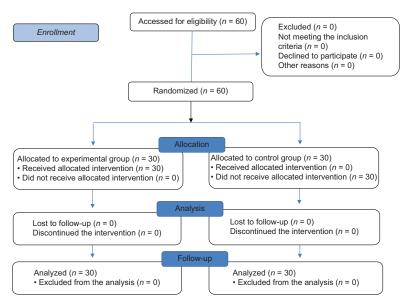


Figure 1: Diagram of the design and protocol of the study

and after the intervention						
Group	Breaking Bad News Skill		Participation In Breaking Bad News			
	Before Mean (SD)	After Mean (SD)	Before Mean (SD)	After Mean (SD)		
Experimental	53.27 (10.55)	65.12 (5.68)	19.85 (5.41)	25.77 (4.96)		
Control	55.37 (10.08)	57.42 (10.13)	20.20 (4.50)	21.17 (5.21)		
Independent t-test	-1.24	3.93	-0.48	3.94		
р	0.21	< 0.001	0.62	< 0.001		

Table 2: Comparison of the mean scores of breaking bad news skill and participation between the two groups before				
and after the intervention				

and in the control group was 21.17 (5.21). Independent t-test showed that there was a significant difference between the two groups in terms of the mean score of nurses' participations in delivering bad news after the intervention ( $t_{75,48} = 3.94$ ; p < 0.001). According to paired t-test results, this increase was statistically significant only in the intervention group [Table 2].

### Discussion

The aim of this study was to evaluate the effect of communication skills training on nurses' skills and participation in the process of delivering bad news. A significant difference was observed in the mean score of nurses' skills and participation in the process of delivering bad news between the two groups. Due to the homogeneity of the research units in the two groups before the intervention, it can be stated that communication skills training increased the skills of nurses in giving bad news. Dias et al. implemented communication skills workshops in order to educate residents regarding skills for the delivery of bad news and confirmed the impacts of education on residents.<sup>[12]</sup> They stated: "the aim of educating communication skills is to reduce the negative effect of bad news not only on the patients but also on the doctors."[12] Nevertheless, the findings of this study do not correspond with the findings of Setubal et al.[13] They evaluated the effects of an educational program designed according to the SPIKES protocol on the improvement in the skills of delivering bad news among residents working in the neonatal intensive care unit. Their results contradict the results of this study; their results did not show a statistically significant effect on students' performance in the process of delivering bad news.<sup>[13]</sup>

Carrard et al. also found no meaningful difference between the study groups in terms of the effectiveness of the educational program on skills of delivering bad news.<sup>[14]</sup> Similarly, in the study by Yakhforoshha et al., holding a one-day workshop and using art-based educational strategies did not significantly change the performance of oncology fellows in delivering bad news.<sup>[15]</sup> It seems that the difference in educational content and approach is the reason why these skills are not learned. In some cases, the duration of the educational sessions was extremely short, and this led to the lack of meaningful effectiveness of the intervention because more time and educational sessions are required for people to improve their level of behavioral-cognitive knowledge, and for it to impact their attitudes, awareness, and skills. Moreover, limited content and educational scenarios to describe the cancer diagnosis of a given patient and special situations related to infants and mothers can be mentioned as other factors which can explain the lack of meaningful effectiveness of the education on the students' skills.

Furthermore, one of the nurses' participatory activities is their presence in the process of delivery of bad news by the doctor, and their simple and understandable explanation of situations of great importance.<sup>[16,17]</sup> In the process of delivering bad news, the presence and participation of a nurse who is skillful and educated can facilitate this process and can also resolve any ambiguities.<sup>[18]</sup>

In the present study, the groups were equal in terms of the mean score of participation in delivering bad news before the intervention, but nurses' participation mean score in delivering bad news was significantly higher in the intervention group compared to the control group after the intervention. Thus, it seems that improving communicational skills among nurses leads to more participation in delivering bad news. In accordance with the present study findings, some studies have shown that there is a primary obstacle to delivering bad news, which is nurses' lack of knowledge. Arbabi et al. found that educated doctors and nurses tend to explain cancer diagnosis to their patients and this shows that educating doctors and nurses to announce bad news will improve their communication skills and help them to tell the truth about cancer diagnosis and prognosis.<sup>[19]</sup> They explained that compared to the past, doctors and nurses are more willing to tell their patients about cancer diagnosis.<sup>[19]</sup>

Silva (2012) (quoted by Fontes et al.) says that verbal and nonverbal communication methods are different types of communicating information and the ability to use them effectively in delivering bad news is an important skill for nurses.<sup>[7]</sup> Lack of sufficient communication skills and having concerns about their patients' emotional reactions and how to manage them are the reasons for the unwillingness of nurses and doctors to announce bad news. Therefore, it seems necessary to educate doctors and nurses to communicate with their patients and to find better ways of announcing bad news to their patients.[17,18] Reinke et al. believe that nurses' experience and understanding are important factors and claim that factors, such as education and repeated experiences, in this case, increase their chance of success, and thus, they will be more willing to face such situations and deliver bad news.<sup>[19]</sup>

Therefore, it seems that people learn the skill of delivering bad news and managing situations in an environment similar to real situations. Thus, in the present study, an integrated workshop of communication skills was held using different education methods including a speech, question and answer session, group discussion, role model, and video clips. Westmoreland *et al.* evaluated the effectiveness of an educational workshop that used a role model approach and reported that it was effective on medical students' skills and self-confidence in delivering bad news. They present this teaching method as easy, low-cost, and effective.<sup>[20]</sup> Servotte *et al.* showed that a role model is more effective in improving the skills of delivering bad news in medical students.<sup>[21]</sup>

The strengths of this study included the integration of different methods and creating enthusiasm and motivation for participation in educational workshops. Moreover, using the plan of an experimental study with two groups and applying pretest–posttest will improve the validity and generalizability of the results. Some of the limitations of this study were lack of equal number of nurses of different gender (because of gender combination in the study environment) and different wards. Finally, based on the results obtained in this study, if communication skills are taught to nurses, then it is expected that their skill level and participation in delivering bad news will improve.

# Conclusion

Communication skills education was found to have a significant effect on nurses' participation and skills in the process of delivering bad news; therefore, it is crucial to apply specialized education to improve the skills they require for delivering bad news.

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### **Conflicts of interest**

Nothing to declare.

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