Introduction

Bad news is defined as “any news that has a bad and severe effect on individuals’ perceptions of their future.”[1] However, in medical practice, the disclosure of bad news is inevitable and is one of the most important duties of doctors and other health-care providers.

There are a number of skills and strategies to provide bad news so that the doctors can consider patient and their families concerns when giving bad news to them.

However, small differences in the methods of presenting bad news alter the interpretation of the patient or family and affect their outlooks and attitudes. It has also been shown that patients’ perspective on their illness largely depends on how bad news is presented to them.[3]

Cancer is a serious illness and oncologists often break cancer news to cancer patients and their families.[3] Informing about the diagnosis of cancer is difficult for doctors, patients, and also their families.[3] Most of these patients tend that oncologists’ doctors develop their compassion and understanding to help them control their situation more. Some of the features that oncologists should have include honesty, compassion, care, and optimism.[4]

Satisfaction and understanding of patients from getting bad news are investigated. There is evidence that a good relationship between health-care providers and patients can improve the patient’s ability to accept treatment and emotional adaptation.[5,6]

Evaluation of physicians’ skills in breaking bad news to cancer patients

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ABSTRACT

Background: Delivering bad news to patients is one of the most difficult tasks of physicians that play a big role in the process of treatment and cooperation of patients. The objective of this study is to evaluate the ability and skills of physicians in delivery bad news to cancer patients. Methods: This study is a cross-sectional study performed on 70 specialist physicians in two hospitals of Mashhad in 2016. Data were collected by Persian questionnaire of SPIKES included 16 questions and were analyzed by SPSS software. Results: In this study, among the questionnaire items, the most prevalent item was not giving the bad news by phone (100%) and the least prevalent item was putting the hand on the shoulder (24.3%). This study showed that 81.4% of doctors agreed on giving the bad news in private, 72.9% agreed on giving relative hope to patients and 67.1% agreed on evaluating patients knowledge of his/her disease when giving bad news. Conclusion: The results of this study show that the ability of physicians in giving bad news is not enough in some aspects. Therefore, holding educational courses during physicians’ education and after graduation are recommended to increase patients’ trust and decreasing worries and inconvenience of physicians in difficult situations of delivering bad news.

Keywords: Cancer patient, delivering bad news, physicians, skill
Among these techniques, the SPIKES Protocol describes six phases of communication.[18] The first step is S or setting up phase that points to the preparation of the medical environment, which should preferably be a private, reserved, and pleasant site. This moment is a good time to establish a good relationship between the doctor and the patient. The second step is p or perception; it is an opportunity to find what the patient knows about his illness through open questions. The third stage is I or invitation is opportunity to analyze the patient’s willingness rate to resolve his doubts about his disease. The fourth stage is the K or knowledge that everything in relation to the diagnosis must be revealed, At this point, it is important to use easy terms and free of technical words to convey information. The fifth stage is the E or emotion, which is the time to express empathy, recognize the patient's emotions, and provide support. The last step, but not least, is the s or phase of strategy and summary that is the moment to propose treatment and prognosis of the disease, as well as sum up everything that has been said.[1,8-11]

Providing news on cancer disease is often unpleasant, and due to the nature of bad news, doctors and other staff in the treatment sector are suffer from psychological stress to convey these news. Part of this psychological stress is due to a shortage of communication skills among doctors and the treatment staff in bad news reporting.[13] For over the 40 years, the importance of physician communication skills has been increasingly highlighted for bad news, and there is evidence that this skill has been upgraded, but revealing bad news is still a complex communication and physicians do not have the necessary clinical skills in transferring bad news.[12,13] Although there are a number of recommendations and guidelines for transmitting bad news to assist clinicians disclose the diagnosis and prognosis of the disease,[1] a high proportion of cancer patients still receive inadequate information about their illness.[18] The perception of doctors is often controversial with the patient's preferences and, for each region, the region's unique model must be designed with respect to the existing cultural differences,[15] so we conducted the present study to assess physicians’ skills in breaking bad news to cancer patients which may lead to provide a clinical guidance of how giving bad news to patients in Iran.

Methods

This is a cross-sectional study conducted during 2016, at two academic hospitals in Mashhad, Iran. The inclusion criterion for the patients was that they should be physicians working in any sector of the academic hospitals and having the experience of informing bad news to patients about the disease more than once during their work. The following were excluded: physicians who did not have any contact with patients (radiologists, pathologists, and laboratory workers) and those who did not sign the informed consent statement. The potential sample comprised the entire clinical staff of the hospital, including both residents and more senior doctors.

Seventy eligible physicians were entered to our study by convenience sampling method. Sample size was calculated based on Ghaffarinejad et al. study[16] using the estimating ratio formula in which $P$ of 54.5% was the frequency of always and often answers to the question of “keeping phone conversations when presenting bad news,” $\alpha = 0.05$ and $d = P/4$.

The research instrument used was a questionnaire structured into two parts. The first part consisted of eight personal questions (age, sex, marital status, specialty, length of time since graduation, disease experience in doctor or his favorite person, the person receiving the news, and the average time to deliver bad news). The second part consisted of 16 questions on bad news in two main areas including the psychological and environmental domains. Each question was based on the SPIKES protocol. This questionnaire has been internationally validated in Iran.[17] The answer to each question has Likert scale with five options including always, often, sometimes, rarely, and never. In this study, for most questions, always and often options considered as favorite response and others considered as undesirable. In questions 4, 8, 13, and 14 of the questionnaire, rarely and never combined and considered the preferred option.

This study approved by the research ethics committee of Mashhad University of Medical Sciences. All doctors answered the questionnaire and signed the consent statement within a 15-min period at the hospital during their work time.

The data were analyzed by means of the IBM SPSS Statistics for Windows, Version 20.0. (Armonk, NY, IBM Corp.). Descriptive statistics were applied to describe the pattern of the data. To evaluate the independent effect of each independent variable on the answer of the questions, logistic regression test was used. All tests were two-tailed and $P = 0.05$ was the accepted level of significance during the study.

Results

In this study, 70 physicians working in two hospitals in Mashhad were evaluated for their ability to provide bad news to cancer patients using a Persian questionnaire based on SPIKES protocol. Demographic information is shown in Table 1.

Our findings showed that among the different questionnaire skills, the item of not giving the bad news by phone (100%) was the most prevalent skill and the least prevalent item was putting the hand on the shoulder (24.3%). This study showed that 81.4% of doctors agreed on giving the bad news in private, 72.9% agreed on giving relative hope to patients, and 67.1% agreed on evaluating patients knowledge of his/her disease when giving bad
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Table 1: Demographic characteristics of physicians

| Quantitative variable, mean (SD) |  |
|-------------------------------|---|
| Age (year)                    | 45 (6.59) |
| Length of time since graduation (year) | 15.01 (9.45) |
| Time to deliver bad news      | 14.47 (7.56) |

| Qualitative variable, n (%)   |  |
|-------------------------------|---|
| Sex                           |  |
| Male                          | 42 (60) |
| Female                        | 28 (40) |
| Marital status                |  |
| Married                       | 65 (92.9) |
| Single                        | 3 (4.3) |
| Divorced                      | 2 (2.9) |
| Specialty                     |  |
| Internal medicine             | 13 (18.6) |
| Surgery                       | 16 (22.9) |
| Oncology                      | 12 (17.1) |
| Gynecology                    | 9 (12.9) |
| Urology                       | 8 (11.4) |
| Dermatology                   | 3 (4.3) |
| Pediatric                     | 3 (4.3) |
| Neonatology                   | 1 (1.4) |
| Neural surgery                | 4 (5.7) |
| Endocrinology                 | 1 (1.4) |
| Serious disease experience in the doctor or his/her first degree relatives |  |
| Yes                           | 52 (74.3) |
| No                            | 18 (25.7) |
| Person receiving the bad news |  |
| Patient                       | 2 (2.9) |
| Patient companion             | 68 (97.1) |

SD: Standard deviation

news. Frequency percentage of different skills that were used by physicians for breaking bad news depicts in Chart 1.

- Q1: Saying the bad news in a private and peaceful environment
- Q2: To determine the bad news and to comfort the relatives of the patient, I will specify a certain time
- Q3: When I say bad news to the patient, I try to sit next to him
- Q4: When I say bad news to a patient, I wear a medical gown
- Q5: After telling the patient about his disease, I introduce him to a supportive team
- Q6: When talking to patient and telling bad news, I tell the clinic secretary that does not connect the phone during a conversation with the patient
- Q7: If I have a cell phone or a pager I will turn it off when I say the unpleasant news to the patient
- Q8: I inform the patient about the bad news on the phone
- Q9: If I am in same sex with my patient, I will put my hand on his shoulder to comfort him
- Q10: When I say the unpleasant news, I give a relative and logical hope to the patient
- Q11: Before informing the patient about the details, I inform him from seriousness of his disease
- Q12: I tell the bad news to the patient, after evaluating the patient’s knowledge about the disease

In the logistic regression analysis, to evaluate the independent effect of each of the variables such as age, sex, marital status, length of time since graduation, type of specialization, and the history of a serious illness in himself or his close relatives on each of the questions, the results of the questionnaire were as follows (Female gender and oncology specialties were considered as reference groups).

The variable of experiencing a serious illness in their own or close relatives of physicians has been statistically correlated with examining the patient’s knowledge of the disease before breaking the bad news ($P = 0.032$, odds ratio [OR] = 3.49, Question 12).

There is a significant relationship between the experience of dangerous illness in physicians or their close relatives and presenting bad news in a private and confidential environment ($P < 0.001$, OR = 23.36, Question 1).

Sex variable has a statistically significant correlation with no making phone calls when presenting bad news ($P = 0.04$, OR = 3.52, Question 6) and introducing the patient to a supportive team after breaking this news ($P = 0.01$, OR = 6.82, Question 5).

Type of specialty of the physician (OR = 13.3, $P = 0.031$) and experiencing a dangerous illness in physicians or their close relatives (OR = 8.4, $P = 0.003$) were statistically significant with relative relief to patients when reporting their disease (Question 10).

The variables of the type of specialty of the physician have a statistically significant relationship with encouraging the patient to express their inner feelings after hearing bad news ($P = 0.04$, OR = 4.35, Question 16).
Discussion

The aim of this study was to investigate the ability of physicians to telling bad news to patients with cancer. Breaking bad news to cancer patients is one of the most difficult duties of doctors, and in the field of medical education; there is little preparation for the doctors to learn this item.

Our findings showed that 73.4% of physicians experienced a dangerous disease in own self or their relatives and it was statistically significant with giving more relief and support to patients when reporting their disease. In Farber et al. study, 63% of physicians had experienced a dangerous disease in their relatives and 17% had a personal experience of a serious disease. The results of this study showed that the personal experience of life-threatening illness had a significant relationship with increased emotional support.14 In Ghaffarinejad et al. study, the experience of having a dangerous illness in himself or his close relatives had a significant statistical relationship with increasing mental support when reporting bad news.15

The reason for the association of bad news experiences with presenting news in a confidential environment can be due to the experience of similar stressful situations in a person and increased sense of support and relief in them.

In the present study, there were no significant correlations between the variables and introducing the patients to the specialist and support team after presenting bad news. In the study of Ghaffarinejad et al., less than half of the physicians participating in the study introducing their patients to supporting groups. This can be due to the lack of proper education, the absence of known active support centers, and even lack of attention to psychological support from doctors.16 In the study of Farber et al., only 38% of doctors described patients to supportive groups and most doctors did not do this.18 The Harandi study found that one of the most important problems for cancer patients is the lack of associations and institutions to support them.19 Studies show that cancer patients who are supported by expert teams are more efficient to cope with cancer.20 Therefore, information about the benefits of the availability of support groups should be published for doctors.

In our study, 60% of participating physicians claimed that they did not answer the phone when giving bad news. In Ghaffarinejad et al. study, most respondents said they turn off their mobile phones to prevent disturbing in breaking the bad news, but few doctors wanted their secretary to hold their phones and their conversations, which could interfere with the patient’s communication effectively.21 In Farber et al. study, most physicians did not hang up any phone calls while giving bad news.18

In our study and the study of Farber et al.18 and Ghaffarinejad et al.,19 there was no significant statistical relationship between variables and giving bad news by telephone. In this study, none of the doctors told the patient bad news on the phone. In one study, 92% of doctors did not tell the bad news to the patient on the phone, and there was no significant relationship with other variables.14

In our study, 52.9% of physicians turned their pager off while giving bad news and no significant statistical relationship was found between switching off the pager while giving bad news and variables of the study. In another study, 35% of the participants turned their pager off when they presented bad news.19

In the present study, no variables were statistically significant with informing the patient about the seriousness of the condition before presenting the details of the report. Despite the need for patient awareness, studies show that doctors do not provide patients with complete information in many cases.24 Fortunately, in our study, 94.3% of physicians agreed to inform patients about the seriousness of their illness. The study of Larizadeh et al. in Kerman in 2007 revealed that patients’ knowledge of their diagnosis was unsatisfactory.25

In our study, 35.7% of doctors agreed to encourage the patient to express their inner feelings and there was no meaningful relationship between variables of study and encouraging the patient to express her inner feelings after giving bad news like Ghaffarinejad et al. study.14 Perhaps, lack of encouragement for patient’s to express her/his own inner feelings is due to the inability of physicians to respond properly to the feelings of patients after telling the news.

In our study, 67.1% of physicians agreed that the patient’s survival time would not be told to them. In the Larizade study, only 7.3% of cancer patients were aware of the prognosis and duration of their survival.26 It seems that most physicians prefer to hide information about the patient's lifespan because they are worried about hurting the patients’ life expectancy. In other study, most physicians did not provide accurate data on patients’ survival, while in the Farber et al. study, only 16% of physicians always or often prevented patients from providing survival data, and most of them provided accurate data on the probability of survival. It seems that the cause of physicians’ knowledge about their survival is the different cultures of the community and can lead to help patients better understand their current situation and improve their quality of life, as well as help them better measure the benefits and disadvantages of methods. While many sources suggest that a range of longevity be set out in place of the exact survival rates, since the exact duration of life and death for individuals cannot be determined, and the specified time can be reduced or increased.18

Among the limitations of this study, it can be said that this research was conducted on physicians working at academic hospitals and cannot be generalized to all doctors and the other is that the used questionnaire reflects the opinions of physicians, and it does not show their performance when it comes to break bad news. People do not necessarily do what they believe.
Conclusion

The results of this study show that the ability of physicians in giving bad news is not enough in some aspects. Therefore, holding educational courses during physicians' education and after graduation are recommended to increase patients trust and decreasing worries and inconvenience of physicians in difficult situations of delivering bad news.

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Conflicts of interest
There are no conflicts of interest.

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