Research article

Breaking bad news to patients with spinal cord injury in Turkey – physiatrists' perspective

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Objective: To explore Turkish physiatrists' experiences and opinions about breaking bad news (BBN) to patients with spinal cord injury (SCI).

Design: A cross sectional study.

Setting: Turkey.

Participants: Sixty-nine physiatrists completed a questionnaire about experiences and opinions regarding BBN and self-assessment of communication skills (CS).

Results: Eleven percent of specialists and 53% of residents were trained on basic CS. All participants believed that physiatrists should play a role in BBN and the majority reported that they delivered the bad news in their clinic. Sixty-seven percent believed that the primary responsibility belongs to physiatrists. Sixty-eight percent reported that the most appropriate time for BBN is during rehabilitation. Self-assessments of CS were considered satisfactory in most steps of SPIKES protocol. Twenty percent told absolute truth to patients while 80% stated that they did so sometimes or partially. Only 41% confirmed that they do not use unrealistic statements to comfort patients. Fewer than 60% stated that they performed the most appropriate and excellent behaviors for items in "empathy" section.

Conclusion: Physiatrists had different opinions about the style of BBN. Self-assessments of CS were optimistic, however physiatrists were not fully satisfied with their empathy skills.

Keywords: Spinal cord injuries, Physician-patient relations, Communication, Rehabilitation, Paraplegia, Prognosis

Introduction

Effective communication is a prerequisite for the foundation of trust between physicians and patients and their family members. Effective communication skills reduce anxiety and enhance patient compliance with therapy, especially in chronic illnesses.¹ Effective communication skills also help physicians manage difficult circumstances such as breaking bad news.

Breaking bad news is an important and stressful responsibility for physicians. Refraining from disclosing bad news was recommended for patients' welfare in the past.² Except for a few cases, one of which was postal disclosure of a lethal disease,³ the topic has remained underrepresented in the literature. In the 1980s, the

principles of breaking bad news were acknowledged with a renewed focus on medical training.^{4,5}

Training skills for breaking bad news falls under the subheading of communication skills training. The traditional master-apprentice relationship always serves as a valuable educational opportunity, providing a chance for apprentices to observe their mentors in clinical settings with real patients. However, some physicians may have no opportunity to observe others breaking bad news.⁶ Leaving inexperienced physicians on 'trial and error' practices increases the stress of initial exposures. As a result, unsatisfactory experiences may lead to lack of confidence, which may affect physicians' future perspectives on the subject.

In modern medical education systems, different techniques such as role-play with simulated patients and videotapes with real patients are used to improve the effectiveness of education.^{7,8} Although the interest in

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training techniques for communication skills in breaking bad news is gradually growing^{9,10} it is not routinely included in most of the curricula.¹¹ The majority of research about giving bad news are in oncology, palliative care or emergency medicine fields.^{6,12–18}

There is a noticeable paucity in the literature regarding training and guidance for disclosure of disabilities in rehabilitation medicine. Recommendations for breaking news in spinal cord injury are adapted from previous published recommendations.^{19,20} There are few studies assessing patients' perspectives on spinal cord injury.^{21,22} However data on the physicians' perspective is lacking. These data may differ from those for oncologists for example, since the barriers and needs for breaking bad news differ in patients with spinal cord injury depending on the nature of the medical condition (for example, emergency/chronicity or loss of abilities/life and organization of health care services).¹³

This study aims explore physiatrists' experiences and opinions about breaking bad news to patients with complete spinal cord injury.

Methods

Design

This is a cross-sectional descriptive study. Data were collected between August and November 2010. The study protocol was approved by our University Clinical Research Ethics Committee (No: 25.09.2010/153).

Participants

Sixty-nine physiatrists (37 specialists, 32 residents) were enrolled in this study. Physiatrists were recruited from 3 different vocational meetings held in Ankara. Participants were informed about the objectives and procedure of the study. Confidentiality and consent were maintained and obtained respectively.

Physiatrists were included from 18 different institutions of Turkey. Rehabilitation following spinal cord injury begins in only few acute care settings in Turkey due to the shortage of specialized rehabilitation teams. Comprehensive multidisciplinary rehabilitation is typically delivered via inpatient hospital stays in several rehabilitation facilities. Public rehabilitation facilities include government-funded training and research rehabilitation hospitals and rehabilitation clinics in university, state or military hospitals. Although there is a comprehensive public healthcare system in Turkey, utilization of private insurance and health services are increasingly recognized due the overcrowding and prolonged waiting periods in public hospitals.

Participants were divided into three groups according to their clinical experience expressed in terms of the number of patients with spinal cord injury they followed (A: <10 patients, B: 10–50 patients, C: >50 patients).

Measures

The physiatrists were asked to fill out a questionnaire about their experiences and opinions on breaking bad news to patients with complete spinal cord injury. Data were anonymous. Items of the questionnaire were developed based on the interviews of 6 experts and review of the existing literature.

The questionnaire consisted of 4 self-survey sections : i) demographic information (age, sex, years of specialty, training in communication skills including breaking bad news), ii) experiences on breaking bad news, iii) opinions regarding when, where and by whom bad news should be delivered, iv) self-assessment of communication skills while delivering the bad news. The questionnaire aimed to gather information regarding experiences, opinions and needs regarding breaking bad news.

Self-assessments of participants were categorized and evaluated according to steps of SPIKES protocol. SPIKES is an acronym for Setting, Perception, Invitation, Knowledge, Empathy, and Summary, a system developed for specifically for bad news delivery⁶. Items used in the questionnaire to investigate each step of SPIKES are listed in Table 4. 'Setting' refers to the first step, the preparation for the interview such as making connection with the patient (maintaining eye contact, calling by name). 'Perception' is the step to assess the patient's perception of his medical condition (both emotionally and intellectually). 'Invitation' step requires the physician to ask and understand the willingness and preparedness to learn about his own medical situation. 'Knowledge' gives importance to use nontechnical words for easy comprehension of the patient. 'Empathy' is the appropriate response and statements to the patient's emotional reactions. 'Summary' is a check for patient's understanding and discussion of the future treatment plan.

Data analysis

Data were analyzed using the SPSS 16.0 statistical program (SPSS Inc., Chicago, IL, USA). Descriptive statistics were performed for demographic variables and responses to closed-ended questions. Physiatrists were divided according to their clinical experience, with the number of relevant patients treated serving as the measure of clinical experience (Groups A, B or C). Demographic differences among groups were analyzed using Kruskal-Wallis H and Mann-Whitney U test,

Table 1 Demographic features, clinical and educational background of physiatrists

Variables	Residents (N = 32)	Specialists (N = 37)	P-value
Age (years), median (min-max)	27 (25–31)	35 (27–64)	<0.001
Sex, female (%)	20 (63)	28 (76)	0.298
Clinical experience (years), median (min-max)	3 (1–8)	12 (3–41)	<0.001
Training (%)			
Basic communication skills	17 (53)	4 (11)	<0.001
Stress management	9 (28)	2 (5)	0.01
Problem solving	2 (6)	0 (0)	0.211
Sexual communication skills	2 (6)	2 (5)	1.000
Breaking bad news	9 (28)	2 (5)	0.018
Number of patients with SCI followed, (%)			
<10	12 (38)	4 (11)	
10–50	10 (31)	12 (32)	0.021
>50	10 (31)	21 (57)	
Experience of breaking bad news to patients with SCI, (%)	20 (63)	33 (89)	0.011

SD: standard deviation, SCI: spinal cord injury

where appropriate. For categorical variables, χ^2 test was applied. Differences were considered significant if the P values were ≤ 0.05 .

Results

The demographic features, clinical and educational backgrounds of 69 physiatrists (37 specialist, 32 residents) working in 18 different institutions, mainly university hospitals, state hospitals, training and research

hospitals are given in Table 1. Specialists were older and had more experience in terms of clinical years, number of patients treated and breaking bad news compared to residents. Half of residents were trained in basic communication skills and approximately one fourth of residents were trained in breaking bad news. However the number of specialists trained in basic communication skills, stress management and breaking bad news was lower than that of residents. Educational

Table 2 Experiences of physiatrists regarding breaking bad news

Variables /Questions	Group A (<10 patients with SCI) (N = 16)	Group B (10–50 patients with SCI) (N = 22)	Group C (50< patients with SCI) (N = 31)	P-value
Age (years), Median (min-max)	27 (25–34)	31 (25–59)	34 (26–64)	0.062
Sex: Female (%)	12 (75)	13 (59)	23 (74)	0.432
Resident (%)	12 (75)	10 (46)	10 (32)	0.021
Clinical experience (years), Median (min-max)	4 (1–10)	9.5 (1–36)	10.5 (2–41)	0.097
Experience of breaking bad news ^a	2 (12.5)	22 (100)	29 (94)	<0.001
Inform the patient on admission ^b				
Yes	7	12	22	0.112
Sometimes/partially	8	10	7	
No	1	-	2	
Who breaks bad news in your clinic? ^c	(N = 4*)	(N = 20*)	(N = 31)	
Senior physiatrist	1	5	13	
Junior physiatrist	-	3	4	0.460
Both senior, junior physiatrist	3	12	14	
Surgeon	-	2	-	0.290
Involvement of others?				
Psychiatrist involved	-	5	4	0.289
Allied health professionals**	-	4	5	0.723
Other***	-	2	7	0.250

SCI: spinal cord injury.

*: Results of physiatrists that responded to this question. (12 participants from group 1 and 2 participants from group 2 did not respond to this question.)

** : nurse, physiotherapist, psychologist.

***: family member, friend, another patient.

^a: χ^2 test was run after 2nd and 3rd groups were combined.

^b: χ^2 test was run between "yes" and "sometimes/partially" replies with "no" reply ignored.

^c: χ^2 test was run between 2nd and 3rd groups (1st group ignored).

background of participants was diverse; 69 physiatrists had graduate training in 16 different medical schools and 37 specialists had postgraduate training in 13 different institutions.

Experiences of physiatrists about breaking bad news were compared among 3 groups divided according to clinical experience (Table 2). Physiatrists with <10 patients delivered bad news to fewer patients than

physiatrists that followed more patients. All participants reported that physiatrists break bad news in their clinic. Thirteen percent of physiatrists indicated involvement of psychiatrists, and another 13% indicated involvement of allied health professionals in their routine practice. Others such as family members and friends were reported to take part in delivery of bad news by only 13% of physiatrists. Only 2 physiatrists reported

Table 3 Opinions regarding when, how and by whom bad news should be broken

Answers to Questions, n (%)	Total (N = 66)	Group A (<10 patients with SCI) (N = 15)	Group B (10–50 patients with SCI) (N = 21)	Group C (50+ patients with SCI) (N = 30)	P- value
Do you think bad news should be broken? ^a					
Yes	34 (52)	10 (67)	13 (62)	11 (37)	0.115
Sometimes/partially	28 (42)	4 (27)	6 (28)	18 (60)	
No	2 (3)	—	1 (5)	1 (3)	
Uncertain	2 (3)	1 (6)	1 (5)	—	
Do you think breaking bad news affects participation to rehabilitation? ^b					
Positive	24 (36)	5 (33)	6 (29)	13 (44)	0.565
No effect	2 (3)	—	1 (4)	1 (3)	
Depends on patient	6 (9)	2 (13)	—	4 (13)	
Negative	13 (20)	1 (7)	8 (38)	4 (13)	
Uncertain	21 (32)	7 (47)	6 (29)	8 (27)	
Do you think “.....” should be involved in BBB? ^c					
“Physiatrist”	66 (100)	15 (100)	21 (100)	30 (100)	—
“Surgeon”	24 (36)	7 (47)	7 (33)	10 (33)	0.641
“Psychiatrist”	30 (45)	4 (27)	9 (43)	17 (57)	0.156
“Allied health professionals”*	5 (8)	—	4 (19)	1 (3)	—
“Others”**	2 (3)	—	—	2 (7)	—
Who do you think should primarily break bad news? ^d					
Senior physiatrist	42 (64)	8 (54)	15 (71)	19 (63)	0.833
Junior physiatrist	2 (3)	2 (13)	—	—	
Surgeon	16 (24)	3 (20)	5 (24)	8 (27)	
Psychiatrist	6 (9)	2 (13)	1 (5)	3 (10)	
Allied health professionals	—	—	—	—	
Others	—	—	—	—	
What time do you think is most appropriate to break bad news? ^e					
After injury	3 (5)	1 (7)	1 (5)	1 (3)	0.745
After surgery	16 (24)	3 (20)	4 (19)	9 (29)	
On admission to rehab	4 (6)	2 (13)	2 (10)	—	
During rehab	37 (56)	8 (53)	12 (57)	17 (57)	
At rehab discharge	4 (6)	1 (7)	2 (10)	1 (3)	
Patient ready	2 (3)	—	—	2 (7)	
How do you think bad news should be broken? ^f					
In a planned meeting	52 (79)	15 (100)	15 (71)	22 (73)	0.028
In a rehab team meeting	6 (9)	—	4 (19)	2 (7)	
In a psychiatrist consultation	8 (12)	—	2 (10)	6 (20)	

SCI: spinal cord injury, BBB: breaking bad news.

*: nurse, physiotherapist, psychologist, **: family member, friend, patient.

^a: χ^2 test was run between “yes” and other (sometimes/partially + no + uncertain) replies.

^b: χ^2 test was run between “positive + no effect” and “depends on patient + negative” replies with “uncertain” reply ignored.

^c: statistics was not computed since many cells contain less than 5.

^d: χ^2 test was run between “physiatrists” and “other (surgeons + psychiatrists + others)”.

^e: “after injury” and “after surgery” were combined under “acute care” heading and the rest were combined under “rehabilitation” heading.

^f: “Planned meeting” and others were compared between Group A and Group B + C.

that surgeons were also involved in the delivery of bad news.

Thoughts and opinions of physiatrists regarding when, where and by whom bad news should be delivered are shown in Table 3. Among all physiatrists, 52% completely and 42% sometimes/partially agreed that bad news should be delivered to patients. More physiatrists in Group A and B agreed completely on delivering bad news than Group C, however this trend did not reach statistical significance ($P = 0.115$). Opinions on the effects of bad news in rehabilitation participation differed in the three groups without any significant difference.

Physiatrists' beliefs about the necessity of delivering bad news were not influenced by previous training on basic communication skills, breaking bad news, being resident or by the opinions of impact of receiving bad news on rehabilitation participation.

All participants reported that physiatrists should play a role in breaking bad news. However 67% of all reported that primary responsibility should belong to physiatrists, whereas 24% and 9% thought that surgeons and psychiatrists should be primarily responsible, respectively. Physiatrists who 'partially agreed' that bad news should be given rated psychiatrists as primarily responsible for delivering bad news ($P = 0.013$). An even higher number of participants indicated that involvement of psychiatrists (45%) and surgeons (36%) is required in the process. Physiatrists indicating the involvement of allied health professionals and family members were fewer in number (Table 3).

Among all participants, 56% reported that the most appropriate time for breaking bad news is during rehabilitation while for 29% of physiatrists, it should be during acute care. Seventy-four percent of physiatrists who preferred acute care and 42% of physiatrists who preferred the rehabilitation stage respectively reported that they agreed completely that bad news should be delivered to patients ($P = 0.03$). Physiatrists who preferred that breaking bad news should be performed in the acute care setting thought that attending surgeons should be responsible for this task. This preference was not influenced by the previous communication skills training or belief regarding the impact of receiving bad news on rehabilitation participation.

Seventy nine percent of physiatrists suggested that bad news should be delivered in a planned meeting (Fig. 1). The number of physiatrists in Group B and C preferring a team meeting or psychiatric consultation was higher than the number of physiatrists in Group A preferring the same ($P = 0.028$).

When the style of bad news delivery is considered, the answer 'yes' indicated the most appropriate and most relevant behavior in terms of the question asked. 'Yes' responses to items in settings, perception and invitation steps were 70% or higher (Table 4). Seventy-six percent of physiatrists reported that they paid attention to allow the patient to speak without interruption. For the "invitation" step, 70% stated that they tried to learn how much patients want to know.

Only 20% reported that they told absolute truth to patients while 80% stated that they did so sometimes/

Figure 1. Distributions of opinions of all physiatrists regarding by whom, when and where bad news should be broken

Table 4 Style of breaking bad news of experienced physiatrists categorized according to SPIKES protocol steps

Items	Group B (10–50 patients with SCI) (N= 21)	Group C (50< patients with SCI) (N= 29)	Total (10< patients with SCI) (N= 50)	P- value
S – “Setting”				
Do you call patients by their names while speaking to them?				
Yes	18 (86)	28 (97)	46 (92)	0.386
Sometimes/partially	3 (14)	1 (3)	4 (8)	
No	—	—	—	
Do you maintain eye contact during the conversation?				
Yes	21 (100)	28 (97)	49 (98)	1.000
Sometimes/partially	—	1 (3)	1 (2)	
No	—	—	—	
Do you pay attention to allow a patient to speak without interruption?				
Yes	14 (67)	24 (83)	38 (76)	0.314
Sometimes/partially	7 (33)	5 (17)	12 (24)	
No	—	—	—	
P – “Patient’s perception”				
Do you try to learn patient’s current knowledge and thoughts about his/her medical situation?				
Yes	15 (71)	23 (79)	38 (76)	0.738
Sometimes/partially	6 (29)	6 (21)	12 (24)	
No	—	—	—	
Do you try to understand patient’s emotional state before disclosing prognosis?				
Yes	13 (62)	22 (76)	35 (71)	0.524
Sometimes/partially	7 (33)	7 (24)	14 (29)	
No	—	—	—	
I – “Invitation”				
Did you ever hear a patient seeks information about his/her medical situation from other team members?				
Yes	13 (62)	23 (79)	36 (72)	0.257
Sometimes/partially	7 (33)	4 (14)	11 (22)	
No	1 (5)	2 (7)	3 (6)	
Do you try to understand how much patients want to know about their medical situation before breaking bad news?				
Yes	14 (67)	21 (72)	35 (70)	0.486
Sometimes/partially	6 (28)	8 (28)	14 (28)	
No	1 (5)	—	1 (2)	
K – “Knowledge”				
Do you use understandable language (nonmedical terms) while talking to patients?				
Yes	20 (95)	27 (93)	47 (94)	1.000
Sometimes/partially	1 (5)	2 (7)	2 (6)	
No	—	—	—	
Do you tell absolute truth regarding prognosis to patients?				
Yes	3 (14)	7 (24)	10 (20)	0.488
Sometimes/partially	18 (86)	22 (76)	40 (80)	
No	—	—	—	
Do you use unrealistic statements to comfort patients?				
Yes	—	6 (21)	6 (12)	0.054
Sometimes/partially	13 (62)	11 (38)	11 (38)	
No	8 (38)	12 (41)	12 (41)	
E – “Exploring/Empathy”				
Do you think you listen to patients sufficiently?				
Yes	14 (67)	24 (83)	38 (76)	0.314
Sometimes/partially	7 (33)	5 (17)	12 (24)	
No	—	—	—	
Do you feel that you can empathize with patients?				
Yes	11 (52)	16 (55)	27 (54)	0.654
Sometimes/partially	10 (48)	12 (41)	22 (44)	

Continued

Table 4 *Continued*

Items	Group B (10–50 patients with SCI) (N= 21)	Group C (50< patients with SCI) (N= 29)	Total (10< patients with SCI) (N= 50)	P- value
No	—	1 (3)	1 (2)	
Do you respond to patient's emotional reactions verbally or using body language?				
Yes	9 (43)	21 (72)	30 (60)	
Sometimes/partially	12 (57)	8 (28)	20 (40)	0.045
No	—	—	—	
Do you find yourself competent in handling patient's dismal emotions?				
Yes	2 (10)	8 (28)	10 (20)	
Sometimes/partially	16 (76)	12 (41)	28 (56)	0.049
No	3 (14)	9 (31)	12 (24)	
Are you able to cope with the difficulties encountered during the meeting?				
Yes	6 (29)	15 (52)	21 (42)	
Sometimes/partially	15 (71)	14 (48)	29 (58)	0.148
No	—	—	—	
S – “Strategy/Summary”				
Do you allow patients to ask questions?				
Yes	21 (100)	29 (100)	50 (100)	
Sometimes/partially	—	—	—	—
No	—	—	—	
Do you encourage patients to ask questions?				
Yes	12 (57)	24 (83)	36 (72)	
Sometimes/partially	9 (43)	5 (17)	14 (28)	0.048
No	—	—	—	
Do you promptly and directly reply to patient's questions?				
Yes	11 (52)	13 (46)	24 (49)	
Sometimes/partially	10 (48)	15 (54)	25 (51)	0.776
No	—	—	—	
Do you discuss short and long term treatment plans with patients?				
Yes	14 (67)	17 (61)	31 (63)	
Sometimes/partially	6 (28)	9 (32)	15 (31)	0.892
No	1 (5)	2 (7)	3 (6)	

—: statistics was not computed.

partially. Only 41% agreed that they do not use unrealistic statements to comfort patients.

Physiatrists replying ‘Yes’ to items in the “empathy” section (except for listening skills) were fewer than 60%. Physiatrists that responded to patients’ emotional reactions and that found themselves incompetent in handling negative emotions were higher in Group C than Group B ($P = 0.045$, and $P = 0.049$, respectively).

All physiatrists indicated that they encouraged patients to ask questions, but ‘sometimes/partially’ responses were higher in Group B than Group C ($P = 0.048$). Ninety-four percent of physiatrists reported that they discussed future treatment plans, however 31% of them reported that this conversation was rarely performed.

Discussion

This study shows that training in basic communication skills and breaking bad news is not prevalent in our

country. The task is important and higher rates of training are desirable. Only half of the physiatrists completely believed in the necessity of breaking bad news to patients with complete spinal cord injury while others were not totally convinced. Training on communication skills did not change this belief. These results pose some questions about adequacy and quality of training as well as the cultural background of our society. In a survey among Turkish oncologists, very few physicians reported that they usually tell the truth to cancer patients because of “Do not tell” requests from relatives. In contrast to the current study, presence of training in breaking bad news had an impact on physicians’ truth telling practice.²³

In the present study, although all participants reported that the deliverer of bad news were physiatrists in their clinical practice, who also believed that this was one of their duties, one third suggested that surgeons or psychiatrists should be primarily responsible for this

task. As patients with traumatic spinal cord injury are usually transferred to rehabilitation clinics from emergency and surgery clinics for the care continuum, there is more than one primary physician for each patient. This is consistent with physiatrists' opinions in terms of the timing of breaking news, as nearly one third suggested that bad news should be given in the acute care setting by the surgeon.

The physician disclosing bad news should be able to give detailed information about the motor recovery and functional prognosis and answer patients' questions on the subject.²⁰ It is recommended that the most experienced physician involved in the management of the patient should disclose the bad news.²⁰ In the present study, 9% of physiatrists claimed psychiatrists to be primarily responsible for delivering bad news. These physiatrists also believed that bad news should not necessarily be broken to patients. Feeling incompetent in empathizing, responding and handling the emotional reactions or fear of damaging the physician-patient relationship might cause withdrawal from disclosing bad news thus conveying this task to psychiatrists who they think more competent in handling patients' emotional distress.

Nearly half of the experienced physiatrists reported that allied health professionals, family members and other patients were also involved in delivering bad news in their clinical practice. However, fewer believed that they should be involved in the process. Negligence in delivery of bad news might result in obtrusive intervention of other health professionals for this mission.

Opinions about the timing for bad news delivery were not consistent among physicians; more than half preferred a schedule during rehabilitation and nearly one third preferred the acute care setting. The management of spinal cord injury, after stabilization of traumatic impacts, does not require instant decision making for the patient and rehabilitation team. This provides freedom in scheduling of bad news delivery process, which is distinct from what is encountered in oncology and emergency situations. While adequate time is needed for both the patient and the physician to be ready to talk about the issue, a long delay may pose an obstacle by fostering hopes in the patient and increasing hesitancy to not destroy these hopes by the physician's delivery of bad news. These result in a range of diverse scheduling, as observed in the current study. The timing of delivery may depend on specific factors, such as patients' perceptions, spontaneous events patients experienced in the rehabilitation setting and physicians' previous experiences, training and skills.

The fear of unfavorable impact of bad news on rehabilitation influenced neither the attitude of the physiatrists nor the timing of bad news delivery.

Breaking bad news in a setting other than a planned meeting such as a team meeting shows the difference in the organization of rehabilitation services from that of other medical services. A place where all team members are present was considered appropriate by some physiatrists. This private team meeting provides a supportive environment to the patient by team members with which a trustful rapport has already been established during rehabilitation. We observed that as physiatrists' clinical experience increased, preference of breaking bad news in a team meeting or psychiatric consultation increased. This may be related to the infrequent communication skills training in the experienced physiatrists who participated in this study.

Self-ratings of physicians were remarkably optimistic regarding communication skills except for providing knowledge and empathic communication in this study. Using direct words seems to be a difficult behavioral skill to attain without training. In a study assessing oncologists, it was demonstrated that the use of the word 'cancer' word increased after an educational workshop from 16% to 54%.⁹ Lack of self-confidence in handling emotional reactions and maintaining control was also found to be a barrier to breaking bad news among residents in another study.^{13,14} Breaking bad news brings about an emotional load that continues after the meeting.²⁴ After the training, making appropriate emotional statements and response was also increased by 50%.⁹

Patients mention the need for a hopeful but realistic approach during bad news disclosure.^{20,25} To meet the patients' needs and to reduce the physician stress, training for breaking bad news should be given to physicians dealing with such patients.

Limitations and strengths of the study

The sample size of the study is not large. However, this study constitutes a considerable representation of graduate and residency education of Turkish physiatrists since participants' educational background is diverse due to different education systems in different institutions.¹¹

Conclusion

This is the first study regarding physician's perspectives on breaking bad news in spinal cord injury. Self-survey results presented in this study reveal that the percentage of training on communication skills is low among practicing physiatrists. All participants believed that the primary responsibility of breaking bad news belongs to

a physician. However, there were different opinions regarding which physician (physiatrist, surgeon or psychiatrist) and when bad news should be delivered.

Most of the physiatrists reported that they delivered bad news in clinical practice and assessed self-communication skills as satisfactory in many aspects. On the other hand, they were not fully satisfied with their skills in providing direct knowledge and empathic response. It is believed that training about breaking bad news should be emphasized during communication skill training for both medical students and residents.

Author contributions

Dr Ozyemisci-Taskiran takes the responsibility for the integrity of the work as a whole.

Dr Ozyemisci-Taskiran contributed to study design, collection, acquisition, analysis, and interpretation of the data, and was responsible for the drafting, review and final approval of the manuscript.

Dr Budakoglu contributed to study design, the analysis of the results, review and approval of the manuscript.

Dr Coskun contributed to review and approval of the manuscript.

Dr Demirsoy contributed to study design, data collection, analysis, and interpretation of the data, review and approval of the manuscript.

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References

- Ranjan P, Kumari A, Chakrawarty A. How can Doctors Improve their Communication Skills? *J Clin Diagn Res* 2015;9(3):JE01–4.
- Schoeffl R. Breaking bad news. *Dig Dis* 2008;26(1):56–8.
- Forrester J. Postal diagnosis: breaking the bad news in the 17th century. *BMJ* 1995;311(7021):1694–6.
- Sanson-Fisher R, Maguire P. Should skills in communicating with patients be taught in medical schools? *Lancet* 1980;2(8193):523–6.
- Buckman R. Breaking bad news: why is it still so difficult? *Br Med J (Clin Res Ed)* 1984;288(6430):1597–9.
- Baile WF, Buckman R, Lenzi R, Glober G, Beale EA, Kudelka AP. SPIKES-A six-step protocol for delivering bad news: application to the patient with cancer. *Oncologist* 2000;5(4):302–11.
- Cegala DJ, Lenzmeier Broz S. Physician communication skills training: a review of theoretical backgrounds, objectives and skills. *Med Educ* 2002;36(11):1004–16.
- Rosenbaum ME, Ferguson KJ, Lobas JG. Teaching medical students and residents skills for delivering bad news: a review of strategies. *Acad Med* 2004;79(2):107–17.
- Back AL, Arnold RM, Baile WF, Fryer-Edwards KA, Alexander SC, Barley GE, et al. Efficacy of communication skills training for giving bad news and discussing transitions to palliative care. *Arch Intern Med* 2007;167(5):453–60.
- Bowyer MW, Hanson JL, Pimentel EA, Flanagan AK, Rawn LM, Rizzo AG, et al. Teaching breaking bad news using mixed reality simulation. *J Surg Res* 2010;159(1):462–7.
- Sarikaya O, Civaner M, Kalaca S. The anxieties of medical students related to clinical training. *Int J Clin Pract* 2006;60(11):1414–8.
- Brown R, Dunn S, Byrnes K, Morris R, Heinrich P, Shaw J. Doctors' stress responses and poor communication performance in simulated bad-news consultations. *Acad Med* 2009;84(11):1595–602.
- Dosanjh S, Barnes J, Bhandari M. Barriers to breaking bad news among medical and surgical residents. *Med Educ* 2001;35(3):197–205.
- Friedrichsen M, Milberg A. Concerns about losing control when breaking bad news to terminally ill patients with cancer: physicians' perspective. *J Palliat Med* 2006;9(3):673–82.
- Fujimori M, Oba A, Koike M, Okamura M, Akizuki N, Kamiya M, et al. Communication skills training for Japanese oncologists on how to break bad news. *J Cancer Educ* 2003;18(4):194–201.
- Park I, Gupta A, Mandani K, Haubner L, Peckler B. Breaking bad news education for emergency medicine residents: a novel training module using simulation with the SPIKES protocol. *J Emerg Trauma Shock* 2010;3(4):385–8.
- Girgis A, Sanson-Fisher RW. Breaking bad news: consensus guidelines for medical practitioners. *J Clin Oncol* 1995;13(9):2449–56.
- Davidson PM. Difficult conversations and chronic heart failure: do you talk the talk or walk the walk? *Curr Opin Support Palliat Care* 2007;1(4):274–8.
- Phillips J, Kneebone, II, Taverner B. Breaking bad news in stroke rehabilitation: a consultation with a community stroke team. *Disabil Rehabil* 2013;35(8):694–701.
- Kirshblum S, Fichtenbaum J. Breaking the news in spinal cord injury. *J Spinal Cord Med* 2008;31(1):7–12.
- Kirshblum S, Botticello A, DeSipio GB, Fichtenbaum J, Shah A, Scelza W. Breaking the news: a pilot study on patient perspectives of discussing prognosis after traumatic spinal cord injury. *J Spinal Cord Med* 2016;39(2):155–161.
- Kim HR, Shin HI. When is it appropriate to deliver a prognosis to Korean persons with acute spinal cord injury? *Disabil Rehabil* 2012;34(16):1396–403.
- Ozdogan M, Samur M, Artac M, Yildiz M, Savas B, Bozcuk HS. Factors related to truth-telling practice of physicians treating patients with cancer in Turkey. *J Palliat Med* 2006;9(3):1114–9.
- Ptacek JT, Fries EA, Eberhardt TL, Ptacek JJ. Breaking bad news to patients: physicians' perceptions of the process. *Support Care Cancer* 1999;7(3):113–20.
- Storstein A. Communication and neurology--bad news and how to break them. *Acta Neurol Scand Suppl* 2011;124(Suppl 191):5–11.