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Styles of providing negative information by doctors on the basis of the analysis of the Breaking Bad News Skills questionnaire

Style przekazywania trudnych diagnoz na podstawie analizy Kwestionariusza Przekazywania Złych Wiadomości

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Abstract

Aim of the study: Identification of factors which determine effective communication between a doctor and a patient. Development of a tool for the evaluation of doctors' skills of breaking bad news to patients' relatives. **Material and methods:** The study was conducted with the survey method, and covered a group of 94 doctors of medicine from three hospitals in the Małopolska region in Poland. The Breaking Bad News Skills questionnaire, developed by Wioletta Szwed-Łopata and Jakub Lickiewicz, describes a doctor's behaviour in contact with a patient's family. **Results:** Exploratory factor analysis was conducted to establish the factor structure of Breaking Bad News Skills questionnaire. The scree plot was used prior to determining the number of factors. Internal consistency was evaluated with Kaiser–Meyer–Olkin (KMO) measure, which should be above 0.6, and Bartlett's test of sphericity. The factor analysis identified five factors referring to the most characteristic types of doctors' behaviour. These are: Communication (COM), Emotional Barriers (EMO), Partnership (PAR), Support (SUP) as well as Empathy and Compassion (EMP). The first of the constructed factors (8 items) focuses on statements concerning a doctor's communication with a patient (COM), while the second factor (8 items) pertains to statements connected with the emotional context of breaking bad news by the physician (EMO). Next factor (5 items) includes statements about partnership (PAR). The fourth factor (5 items) concerns the ability to build a supportive environment (SUP). The last factor (8 items) comprises statements concerning partnership, refers to building a supportive environment and the doctor's empathy and compassion (SUP). **Conclusions:** Results of the Breaking Bad News Skills tool analyses indicate that it should be recommended for further scientific research and used in many areas of psychological and social practice.

Keywords: breaking bad news, exploratory factor analysis, parallel analysis

Streszczenie

Celem pracy jest identyfikacja czynników determinujących efektywną komunikację pomiędzy lekarzem i pacjentem, a także stworzenie narzędzia oceniającego umiejętności lekarzy w zakresie przekazywania złych wiadomości rodzinie pacjenta. **Materiał i metody:** W badaniu zastosowano metody kwestionariuszowe w grupie 94 lekarzy z trzech szpitali w Małopolsce. Kwestionariusz Przekazywania Złych Wiadomości (Breaking Bad News Skills, BBNS), autorstwa Wioletty Szwed-Łopaty i Jakuba Lickiewicza, opisuje zachowanie lekarza w kontakcie z rodziną pacjenta. **Wyniki:** W celu określenia struktury czynników Kwestionariusza Przekazywania Złych Wiadomości zastosowano eksploracyjną analizę czynnikową. Do określenia liczby czynników użyto kryterium wykresu osypiska. Do oceny adekwatności doboru próby do badania wykorzystano miarę Kaisera–Mayera–Olkina (KMO) oraz test sferyczności Bartletta. Analiza czynnikowa wykazała pięć czynników odwołujących się do najbardziej typowych zachowań lekarzy. Są to: Komunikacja (COM), Bariera Emocjonalna (EMO), Partnerstwo (PAR), Wsparcie (SUP) oraz Empatia i Współczucie (EMP). Pierwszy z utworzonych czynników (8 pytań) skupia twierdzenie dotyczące komunikacji lekarza z pacjentem (COM), drugi (8 pytań) koncentruje się bardziej na twierdzeniach związanych z kontekstem emocjonalnym, jaki towarzyszy lekarzowi w czasie przekazywania złych wiadomości (EMO). Kolejny czynnik (5 pytań) obejmuje twierdzenie dotyczące kontekstu o charakterze partnerskim (PAR). Czwarty czynnik (5 pytań) dotyczy budowania środowiska wspierającego (SUP). Ostatni czynnik obejmuje 4 pytania związane z empatią i współczuciem lekarza (EMP). **Wnioski:** Wyniki analiz statystycznych wskazują, że Kwestionariusz Przekazywania Złych Wiadomości powinien być używany w dalszych badaniach naukowych, jak również może być zastosowany w wielu obszarach praktyki psychologicznej.

Słowa kluczowe: przekazywanie złych wiadomości, eksploracyjna analiza czynnikowa, równania strukturalne

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INTRODUCTION

In the process of communication between a doctor and a patient sharing bad news is a difficult experience both for the providing and the receiving person (Aitini and Aleotti, 2006; Azzopardi et al., 2017). Bad news is defined as any information which significantly and negatively influences the patient's or their family's perception of the patient's future (Buckman, 1984, 1986, 2005; Ptacek et al., 2001; Zeppetella, 2012). Negative information imparted by the doctor can change the patient's vision of life prospects, frequently arousing strong emotions of despair, fear of the future or of giving up the fight against the disease (Seifart et al., 2014). Thus, such information has severe consequences for patients and their families. Bad news can concern recurrence and spread of the disease, failure of medical treatment, irreversible side effects, disability etc. (Zeppetella, 2012). Bad news can involve modification of the patient's previous lifestyle, e.g. a change of appearance or necessity to quit their job.

A frequent problem observed among doctors is a fear of inflicting pain on the patient, feeling of helplessness, or even resorting to a lie in the name of the patient's good. Clinicians argue that a patient does not want to know the truth, that bad news is bound to cause harm and truth should not be told because it is never entirely certain (Dunning and Laidlaw, 2015; Rogiewicz and Buczkowski, 2000). These rationalisations can lead to undesirable behaviour of the doctor towards the patient. In order to escape the necessity of informing the patient about a poor prognosis, the doctor avoids eye contact with the interlocutor e.g. by hiding behind medical documentation and/or using medical jargon which is totally incomprehensible for the patient. Furthermore, an analysis of the literature of the subject reveals that doctors tend to isolate themselves from patients after breaking bad news (Fields and Johnson, 2012). The reasons for such behaviour can include a sense of being unprepared, expectation of the patient's or their family members' negative reaction, not knowing how exactly and when to impart negative information as well as not enough time for a calm conversation with the patient and/or their family. Other examples of inappropriate behaviour include focusing only on symptoms and outcomes of medical tests, not addressing the patient's emotions. It is a mistake to console the patient superficially or insincerely, to calm down someone who has just received bad news, or make important decisions for the patient.

Adequate preparation plays a major role in providing negative information to the patient (Dunning and Laidlaw, 2015). Literature of the subject (Becze, 2010; Buckman, 2005; Ptacek et al., 1999, 2001; Warren, 2015) suggests certain rules of breaking bad news in a proper manner. It is understood as a process which should consist of successive stages. First of all, before deciding to share the bad news, the doctor should get acquainted in detail with the patient's situation, learn what the patient already knows, estimate whether the patient is able to accept negative information, and check whether the family agrees to such a conversation. If the doctor notices the patient's interest, they should use the so-called "warning shot:" "I'm afraid it looks quite serious!" (Seifart et al., 2014). At this stage, the clinician's task is to watch carefully how the patient reacts to this message. If the patient's reaction is too emotional, the physician should give them time to adapt to the new situation. However, if the patient is calm and asks more questions, the doctor is obliged to tell them all the grave news, and provide all possible explanations. There is a rule that at the moment the patient stops asking questions, the physicians stops providing information, and that difficult conversations should always end with an element of rational hope (Seifart et al., 2014). It is recommended to conclude the conversation with a summary and a plan of therapy, along with an offer of help and support for the patient and their family. Important elements of correct communication in the circumstances of breaking bad news are patience and tact. News ought to be given in such a way as not to hurt the patient. It should be remembered that often this information dramatically and drastically changes the patient's vision of the future. Therefore, the message should by no means be aggressive. It requires an appropriate form, suited to the gravity of the situation and individual qualities of the person, which is not easy for clinicians. As reported by Fallowfield, the manner of breaking bad news by the physician influences not only the patient's emotions, their attitude or opinions, but also personal vision of future life (Dunning and Laidlaw, 2015). Another key skill is providing information about a patient's death. Informing the family about a loved person's death is one of the most difficult tasks and duties of practising physicians (Sobczak, 2013) and an extremely stressful experience (Langewitz, 2017; Naik, 2013). Doctors are frequently afraid of negative attitudes of people who are about to go into mourning. During their medical studies, physicians are taught how to keep patients healthy and how to combat diseases, whilst receiving little or no training in the skills of talking to patients nearing death and their families. As Callahan rightly observes, in a society isolated from the subject of death, clinicians encounter many difficulties in a situation when there is a need to talk to the family of a person who is dying or has just expired. However, irrespective of the medical specialisation selected, practically all physicians at some point during their practice will have to face dying patients. Currently, in many European countries, including Poland, most deaths occur in a hospital setting (Więckowska, 2002). Hence, we can talk about the phenomenon of institutionalisation and medicalisation of death and dying. It means that physicians need to acquire skills of imparting information about a patient's death. "It is observed that information strategies preferred by doctors seem to reflect their own attitudes and psychological abilities of talking about death, more than their estimation of a family's readiness to accept news in a particular form" (Więckowska, 2002).

The aim of this study was to identify scales referring to the most characteristic and frequent types of behaviour of doctors used when imparting negative information, on the basis of the Breaking Bad News Skills questionnaire. Another aim was to assess the impact of personality traits on the style of breaking bad news.

MATERIAL AND METHODS

BBNS Questionnaire

The new survey tool, named the Breaking Bad News Skills (BBNS) questionnaire, was proposed by Wioletta Szwed-Łopata and Jakub Lickiewicz for the evaluation of the ways in which doctors provide negative information to patients and/or their families. The instrument is a self-administrated questionnaire consisting of doctors' demographic data (i.e. age, sex, place of work, years of practice) and 40 self-descriptive statements presented in Tab. 1. Every statement was given a Likert-type scale of responses ranging from "never" (coded as 1) to "always" (coded as 5). The tool was compiled on the basis of selected publications

concerning the provision of negative information (Bennett and Campbell, 1992; Buckman, 2005; Dyer, 2001; Fields and Johnson, 2012; Jankowska, 2014; Sobczak, 2013). The questionnaire covers the most frequent styles of informing patients and/or their families about negative consequences of a disease as well as guidelines helping doctors to cope better with breaking bad news, available in protocols, i.e. the S–P–I–K–E–S strategy, NURSE, ABCDE, EMPATHY and "In Person, In Time..." (Buckman, 2005; Fields and Johnson, 2012; Jankowska, 2014; Marschollek et al., 2018; Rogiewicz and Buczkowski, 2000; Sobczak, 2013). Moreover, the questionnaire comprises statements connected with subjective feelings of doctors experienced in breaking bad news.

NEO-FFI Questionnaire

All participants completed also the 60-item NEO-FFI (NEO Five-Factory Inventory) self-descriptive questionnaire (24–25). This measure consists of five 12-item scales which measure the traits of Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A) and Conscientiousness (C). The responses are recorded on

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1. I feel helpless while breaking bad news.
2. I feel guilty while breaking bad news.
3. I break bad news personally.*
4. I avoid "in-depth" conversations with the family of the deceased patient.
5. I break bad news in the company of another person from the medical staff.*
6. I appoint another person to inform a family about the death of their relative.*
7. I stand when I tell bad news.*
8. I encourage the recipient of difficult information to ask questions.
9. I feel fear, anxiety etc. while breaking bad news.
10. I provide information as quickly as possible.*
11. I encourage the recipient of bad news to express his or her feelings.#
12. I feel confident while breaking bad news.#
13. I try to express compassion for the deceased patient's family.*
14. I put off the moment of breaking bad news.*
15. I have difficulty with breaking bad news.
16. I embrace the recipient of bad news (if I see that he or she needs it).#
17. I give information about possible and available forms of support for the recipient (psychologist, priest, medication, etc.).#
18. I reassure the recipient that his or her reactions are normal in this situation.#
19. I adjust the pace of speaking to the recipient of bad news.
20. I avoid medical jargon while informing family.
21. I show respect for emotions expressed by the recipient (anger, aggression, crying, shouting, etc.).
22. I avoid artificial barriers (desk, medical equipment, etc.) during conversation.
23. I try to understand what the recipient feels in this difficult moment.
24. I do not stick tightly to a conversation plan, instead I allow the recipient to direct the interaction process.*
25. During conversation I think about my own needs (e.g. about a meal, a break, personal problems, etc.).*
26. I give information in a quiet and calm place.*
27. I try to provide negative information in a warm and protective way.
28. I sit close to the recipient.#
29. I choose my words carefully when I break bad news.
30. I try not to hurry in difficult conversations.*
31. I use simple and comprehensible language.
32. I impart bad news in a specially allocated room.*
33. I try to be direct when breaking bad news.*
34. I inform selected family members (e.g. the least nervous person).*
35. I am afraid to be blamed by the bad news recipient.
36. I have talked before with other experienced colleagues about how to best impart negative information.*
37. After giving information about a patient's death, I ponder over life and death for a long time.*
38. After a difficult conversation with the patient's family, I talk to my colleagues about the emotions aroused in me by this situation.#
39. I inform the patient's family about the patient's death by phone.*
40. I make sure beforehand whether the bad news recipient has any support (is accompanied by someone while receiving information by phone).*
* Items deleted at the next stages of the statistical analysis.
# Items with reversed scoring.

Tab. 1. BBNS Questionnaire

a five-point scale ranging from "strongly disagree" (1) to "strongly agree" (5). All scales had satisfactory internal reliabilities ranging from 0.68 to 0.86 (Zawadzki et al., 1998).

Study population

The study covered 94 physicians, including 47 (50%) women and 47 (50%) men. The average age of the surveyed respondents was 39.86 ± 11.14 years (range between 25 and 74 years). The mean years of practice was 14.10 ± 11.41 years (range between 1 month and 50 years). Among the respondents, 43 (45.7%) individuals worked in hospitals in Krakow, 22 (23.4%) in Wadowice, and the remaining 29 (30.9%) worked in a hospital in Sucha Beskidzka. The study was conducted in a total of 13 hospital departments. Most respondents worked in Intensive Care Unit (29 physicians), Surgical Department (20 physicians), Emergency Department (14 physicians), Internal Diseases Department (10 physicians) and Cardiology Department (7 physicians).

Statistical analyses

The study used a cross-sectional survey sample approach. Exploratory factor analysis was conducted to establish the factor structure of BBNS questionnaire. Internal consistency was evaluated with Kaiser–Meyer–Olkin (KMO) measure, which should be above 0.6, and Bartlett's test of sphericity, which must be significant (Tabachnick and Fidell, 2006). Principal component analysis (PCA) was used to determine the number of factors to retain. Multiple criteria were used to achieve this goal (Cattell, 1966; Kaiser, 1960; Osborne and Costello, 2009; Thompson and Daniel, 1996; Williams et al., 2012; Zwick and Velicer, 1986). Rules such as Kaiser's criteria: eigenvalues greater than 1 (Kaiser, 1960), scree plot (Cattell, 1966), parallel analysis with cut-off percentile set to 95th and interpretability of the structure of retained factors (Osborne and Costello, 2009) were taken into account. Parallel analysis was conducted based on O'Connor's macro (Osborne and Costello, 2009) using PCA and permutations of the raw data utilizing 5,000 parallel data sets. In this analysis, actual eigenvalues are compared with random order eigenvalues. Factors are retained when actual eigenvalues surpass random ordered eigenvalues. Principal factor analysis (PFA) was used as a factor extraction method. It was assumed that the obtained factors might be correlated, so oblique rotation was performed with the Oblimin method (delta = 0). An item was considered complex if loaded at 0.32 or higher on two or more factors (cross-loading), and the minimum acceptable item loading was set to 0.32, which equates to approximately 10% of variance overlap between the variable and the factor (Tabachnick and Fidell, 2006). Items which did not meet those criteria were excluded from the analysis because of a lack of a clear substantive relation with other questions included in the factor. Items with communalities

(after extraction), which indicate the amount of variance in each item that is accounted for by the factor, below 0.25 were also removed from the study.

The internal consistency of the constructed factors was evaluated on the basis of Cronbach's alpha, which summarizes the correlation of all items on a scale. The higher the coefficient, the more consistent the scale. A Cronbach's alpha of 0.7 or higher was considered to indicate relevant internal consistency of the scale (Cronbach, 1946).

Correlation between two continuous variables was assessed based on Pearson or Spearman coefficient. The multivariate linear regression was employed to verify the impact of selected predictors on ADAMTS13:Ag and ADAMTS13:act. Normality was verified by means of the Shapiro–Wilk test. Statistical analyses were carried out using the SPSS v24 and AMOS (IBM Corp., USA) software.

RESULTS

Only four missing data were reported, which is less than 0.1% of the whole data set (4/3,970) taken into account in the factor analysis. They were replaced by the mean of the item with missing value. Bartlett's test of sphericity was highly significant ($p < 0.001$) and the initial (based on all 40 items) KMO measure of sampling adequacy showed a value of 0.633. Kaiser's criteria indicated 13 factors to retain, scree plot 5 factors, whereas the parallel analysis showed only 3 factors to retain. Fig. 1A presents eigenvalues calculated from the raw data, 50th and 95th percentile of all eigenvalues generated by PCA of random data sets. Taking into account that Kaiser's rule and the scree plot tend to overestimate the number of factors to retain (Thompson and Daniel, 1996; Zwick and Velicer, 1986), the parallel analysis seems to be a much more accurate procedure (Dinno, 2009; Hayton et al., 2004).

During successive stages of factor analysis, 18 items were deleted due to their complexity, cross-loading and very low communalities after extraction to obtain clear and interpretable factors. Furthermore, several questions with reversed scoring were distinguished. As a result, the factor analysis was performed with 22 items of the BBNS questionnaire. KMO measure of sampling adequacy was 0.779, whereas the results of Bartlett's test of sphericity indicated that the null hypothesis of identity correlation matrix should be rejected ($p < 0.001$). The three-factors solution (eigenvalues: 5.04, 3.79 and 1.83 corresponding to initial variance accounted for each factor: 22.93%, 17.21% and 8.31%, in total 48.45%) was presented in Tab. 2. Correlation coefficient between the first and the second factor of −0.125, between the second and the third factor of −0.187 and between the first and the third factor of −0.334 support the hypothesis about correlated factors. All Cronbach's alpha coefficients exceeded the minimum value of 0.8 indicating high internal consistency. Clarity of retained structure is presented in the factor plot in rotated factor space (Fig. 1B).
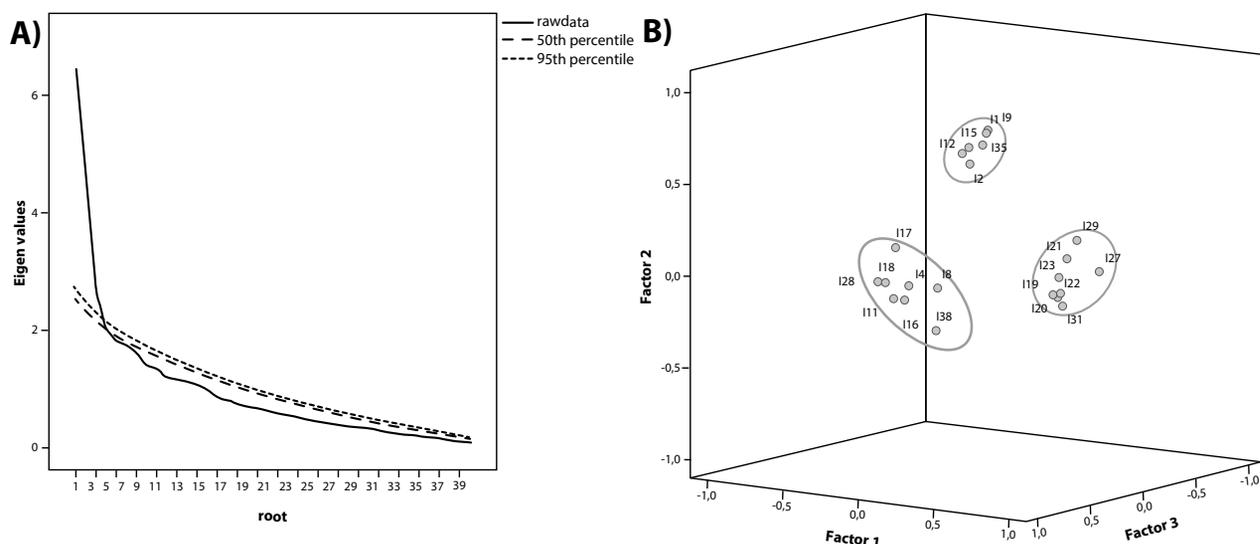
*Fig. 1. Scree plot with the results of parallel analysis based on all items (**A**), factor plot in rotated factor space based on 22 items (**B**)*

Factor	No.	Item	Factor loadings	Communalities	Cronbach's alpha
1 (COM)	29	I choose my words carefully when I break bad news	0.831	0.609	0.801
	27	I try to provide negative information in a warm and protective way	0.654	0.588	
	19	I adjust the pace of speaking to the recipient of bad news	0.581	0.347	
	21	I show respect for emotions expressed by the recipient (anger, aggression, crying, shouting, etc.)	0.544	0.336	
	31	I talk in a simple and comprehensible language	0.531	0.356	
	22	I avoid artificial barriers (desk, medical equipment, etc.) during conversation	0.520	0.310	
	20	I avoid medical jargon while informing family	0.503	0.281	
	23	I try to understand what the recipient feels in this difficult moment	0.380	0.273	
2 (EMO)	1	I feel helpless while breaking bad news	0.752		0.821
	9	I feel fear, anxiety etc. while breaking bad news	0.710		
	15	I have difficulty with breaking bad news	0.668		
	35	I am afraid to be blamed by the bad news recipient	0.653		
	12#	I feel confident while breaking bad news	0.621		
	2	I feel guilty while breaking bad news	0.529		
3 (SUP)	11#	I encourage the recipient of bad news to express his or her feelings	0.803		0.802
	8#	I encourage the recipient of difficult information to ask questions	0.600		
	28#	I sit close to the recipient	0.588		
	4	I avoid "in-depth" conversations with the family of the deceased patient	0.585		
	17#	I give information about possible and available forms of support for the recipient (psychologist, priest, pharmacological medications, etc.)	0.520		
	18#	I reassure the recipient that his or her reactions are normal in this situation	0.461		
	38#	After a difficult conversation with the patient's family, I talk to my colleagues about emotions aroused in me by this situation	0.409		
	16#	I embrace the recipient of bad news (if I see that he or she needs it)	0.351		

Questions with reversed scoring.
COM – Communication; **EMO** – Emotional Barriers; **PAR** – Partnership; **SUP** – Support; **EMP** – Empathy and Compassion.

Tab. 2. BBNS factors with items, factor loadings, communalities (after extraction) and Cronbach's alpha

The first of the constructed factors (8 items) focuses on statements concerning the doctor's communication with the patient (COM), while the second factor (6 items) pertains to statements connected with the emotional context of breaking bad news by the physician (EMO). The last factor (8 items) comprises statements concerning partnership, refers to building a supportive environment and the doctor's empathy and compassion (SUP). A detailed description of scales is presented in Tab. 3. Furthermore, Tab. 4 provides descriptive specifications of scales created for the BBNS questionnaire.

CONCLUSIONS

The objective of the study was to identify factors which determine effective communication between a doctor and a patient in a situation when negative information must be provided. In order to achieve this goal, a specially compiled

Scale I – Communication (COM)
This scale, comprising 8 statements, is connected with the way the doctor adjusts their terminology to the interlocutor's level, avoiding medical jargon. The point is to speak at the same linguistic level as the interlocutor. The COM scale comprises also the ability to choose words carefully in order to be understood by the patient's family members. Using a simple and comprehensible language is also related to the skill of breaking bad news, and is associated with showing respect for another person. Adjusting the pace of conversation to the recipient's capabilities is another important element of the COM factor. Moreover, this factor is connected with the ability to show respect for emotions expressed by recipients of bad news, frequently anger, annoyance, shouting or crying. This is the ability and readiness to reassure the patient's family members that their reactions are normal in this situation, which minimizes their feelings of embarrassment, as well as their sense of being isolated and not understood by the medical staff. This factor is strongly associated with patience and tact of physicians, which combined with a warm and protective way of providing information can give the family a sense that the doctor cares about them. An important element of the COM factor is avoiding artificial physical barriers, such as a desk or medical equipment, and imparting information directly but slowly and in separate sentences, that is without a visible rush on the part of the physician.

Scale II – Emotional Barriers (EMO)
The scale contains 8 statements strongly connected with deep emotional context of breaking bad news to a patient. This emotional background comprises emotions both of the patient and the doctor. This factor includes two types of obstacles enumerated by Buckman (1986) which make provision of negative information difficult for doctors. The first group includes personal fears and anxieties, while the second group comprises factors which tend to make doctors feel responsible for bad news.
The EMO factor concerns primarily a sense of fear of inflicting pain on family members. It is connected with a sense of uncertainty in a situation of imparting information about the patient's death and an associated feeling of anxiety. This factor is also related to the fear of being blamed by the recipient of bad news, fear of disease and death, as well as fear of medical treatment failure (the patient's death as an unfulfilled task of saving life). The EMO factor is coupled with having difficulty in breaking bad news and willingness to put off the moment of disclosing negative information. It can be connected with personal anxieties, that is the fear of the unknown, or a sense of being incompetent in situations for which the doctor has not been trained. A reason can also be the fear of releasing emotional reactions both of oneself and of family members. It is connected with the doctor's sense of disappointing the patient's family, helplessness and confusion. Thus, it is strongly correlated with a sense of guilt. The EMO factor comprises also deliberations on life and death following the provision of information about the patient's death.

Scale III – Support (SUP)
The scale comprises 8 statements referring to partnership-based contact in which communication becomes a two-sided process, which is reflected by showing interest and encouraging interlocutors to express accumulating emotions instead of trying to suppress them. The point is to encourage family members' emotions and to validate them. The interest shown by medical staff provides relatives of the deceased person with an opportunity to release emotions and feelings which they were previously hesitant to disclose. This factor includes also the condition of intellectual and emotional interest. This factor involves also encouraging family members to ask questions connected with the situation and the doctor listening to family's fears with a calm and polite attitude. Partnership enables family members to direct the interaction process during conversation. Moreover, this factor is associated with the readiness to hold in-depth conversations with family members, resulting in their sense of being understood and cared about by the doctor.
This factor is directly associated with providing the deceased patient's family with support: informational, emotional and pharmacological. It pertains mainly to emotional support for the family, or suggestion of available forms of assistance, e.g. a psychologist or a support group. The aim of support is to help families regain control over their lives. It can also be informational assistance. This factor is also coupled with the practitioner's ability to search for support among other members of medical staff, e.g. older and more experienced physicians etc. This support can consist in consultation concerning the ways of breaking bad news. Support received from colleagues and close family enables the physician to deal with the situation of breaking sad news about the patient's death in a professional and humane way.
The SUP factors refer also to the doctor's physical position (standing or sitting) while giving information. The point is to maintain eye contact on the same level, which additionally contributes to strengthening the relationship between the interlocutors. Moreover, the SUP factor is connected with informing the family by phone about the death of their relative and making sure that the recipient of bad news has someone close by who can provide support. This implies that the informing person is ready to meet the recipient of bad news and encourages them to do it.

Tab. 3. Discussion of the scales of the BBNS questionnaire

Factor	Mean ± *SD*	Me (Q₁–Q₃)	Min–Max
1 (COM)	34.23 ± 3.93	34 (32–38)	23–40
2 (EMO)	20.26 ± 5.17	20 (17–23)	8–34
3 (PAR)	15.14 ± 3.77	15 (12–18)	7–23
4 (SUP)	14.24 ± 4.00	14 (11–17)	7–24
5 (EMP)	14.57 ± 2.70	15 (13–16.25)	6–20

COM – Communication; **EMO** – Emotional Barriers; **PAR** – Partnership; **SUP** – Support; **EMP** – Empathy and Compassion; *SD* – standard deviation.

Tab. 4. Descriptive specifications of scales for the BBNS questionnaire

tool was used, that is the Breaking Bad News Skills (BBNS) questionnaire.
The study demonstrates that the task of breaking bad news is not easy, which seems to be consistent with previous theoretical deliberations. The knowledge of proper ways of breaking bad news (BBN) can help medical personnel in these stressful circumstances (Bennett and Campbell, 1992). This information is very significant from the perspective of mutual satisfaction with doctor–patient relationship. Training in this area should become an indispensable element of the medical studies curriculum. Consequently, doctors would feel more confident in tackling this difficult but very important aspect of clinical medicine.

As a result of the analyses carried out, a 30-item version of the tool was compiled, whose structure is based on the following five factors: the first factor is Communication, the second factor is connected with Emotional Barriers, the third factor refers to Partnership, the fourth factor deals with Support, and the last, fifth, factor is associated with showing Empathy and Compassion. The psychometric results obtained, that is factor loadings and Cronbach's alpha coefficients, confirm the high reliability of the tool. A considerable limitation of the study is the small number of the surveyed respondents in comparison to the number of questions contained in the BBNS questionnaire (94 people/40 questions = 2.35 people/question). Nevertheless, the results of the BBNS tool analyses testify to its relevance for further scientific research and usefulness in many areas of psychological and social practice. Hence, these issues should be further explored, and the surveyed group ought to be extended to include a bigger population.

Conflict of interest

The authors do not report any financial or personal connections with other persons or organisations that might negatively affect the content of this publication and claim rights thereto.

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