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Validity and Reliability Study of the Questionnaire on Communicating Bad News for Healthcare Professionals Adapted into Turkish

Türkçe'ye Uyarlanan Sağlık Profesyonelleri için Kötü Haber Verme Ölçeğinin Geçerlik ve Güvenirlik Çalışması

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ABSTRACT

Objective: In this study, it was aimed to make a validity and reliability study by adapting the questionnaire on communicating bad news to be used to evaluate the knowledge and skills of nurses and midwives in breaking bad news.

Methods: The questionnaire adaptation study was carried out in a gynecology and obstetrics hospital between 15/05/2022 and 15/12/2022. The questionnaire was translated into Turkish and then expert opinion was obtained. Cronbach's alpha coefficient was used for the reliability of the questionnaire. The stability of the questionnaire over time was evaluated by test-retest. For the purpose of construct validity of the questionnaire, exploratory factor analysis was used. SPSS 17.00 and AMOS programs were used for the validity and reliability analyzes of the questionnaire.

Results: The Cronbach Alpha value of the 21-items final version of the questionnaire (n=262) was 0.87. Intraclass Correlation Coefficient value was 0.95 (n=21) and Cronbach's alpha coefficient was 0.97 (P<.001). Five components were obtained, which explained 53.631% of the variance of the questionnaire. Total score obtained from the questionnaire was 55.10 ±5.53 (min=35, max=63).

Conclusion: As a result of the evaluation of multiple the fit indices, it showed that the Communicating Bad News Questionnaire was statistically significant, valid and reliable for nurses and midwives.

Keywords: Nurse, Midwives, Bad news, Communication

ÖZ

Amaç : Bu çalışmada hemşire ve ebelerin kötü haber verme konusundaki bilgi ve becerilerini değerlendirmek amacıyla kullanılabilecek olan kötü haber verme anketinin geçerlik ve güvenirlik çalışması yapılması amaçlanmıştır.

Yöntemler : Anket uyarlama çalışması 15/05/2022 ile 15/12/2022 tarihleri arasında bir kadın hastalıkları ve doğum hastanesinde gerçekleştirilmiştir. Anketin Türkçe'ye çevirisi yapılmış, daha sonra uzman görüşü alınmıştır. Anketin güvenirliği belirlemek için Cronbach alfa katsayısı kullanılmıştır. Anketin zaman içinde kararlılığı test-tekrar test ile değerlendirilmiştir. Anketin yapı geçerliğini sağlamak amacıyla açımlayıcı faktör analizi kullanılmıştır. Anketin geçerlik ve güvenirlik analizlerinde SPSS 17.00 ve AMOS programları kullanılmıştır.

Bulgular : Anketin 21 maddelik son versiyonunun (n=262) Cronbach Alpha değeri 0,87'dir. Grup içi korelasyon katsayısı değeri 0,95 (n=21) ve Cronbach alfa katsayısı 0,97'dir (P<,001). Beş bileşen elde edilmiş ve bu da anketin varyansının %53,631'ini açıklamıştır. Anketten alınan toplam puan 55,10±5,53 (min=35, max=63)'dir.

Sonuç : Çoklu uyum indekslerinin değerlendirilmesi sonucunda Kötü Haber Verme Anketi'nin hemşire ve ebeler için istatistiksel olarak anlamlı, geçerli ve güvenilir olduğu saptanmıştır.

Anahtar Kelimeler: Hemşire, Ebe, Kötü haber, İletişim

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INTRODUCTION

Communication with the patient and his family is an essential component of health services.[1] Healthcare professionals can often be faced with the task of delivering bad news.[2] The concept of "bad news", which is most accepted by health professionals, is defined by Buckman as "one that will seriously or negatively change patients' perspective on the future".[3] While breaking bad news puts emotional stress and can result in emotionally unstable situations on health care professionals, receiving bad news can cause different emotional distress for the patient and their family.[4,5] It is stated that the psychophysiological stress response experienced when breaking bad news can lead to increased anxiety, burnout, and alienation from the situation and the patient.[6]

Health teams have difficulties in breaking bad news and the main reason why they avoid the task of breaking bad news is their lack of skills.[4] A study conducted in Pakistan found that failure to deliver bad news in a timely and appropriate manner resulted in violence against healthcare professionals.[7] Although the content of bad news is important and unavoidanable situation, it is possible to reduce its impact by improving the communication skills of healthcare professionals. For this reason, it is of great importance for healthcare professionals to improve their competencies required for this difficult task.[8]

It has been reported that nurses' role in communicating bad news (CBN) is largely unrecognized and undervalued, and nurses feel they are not trained enough to break bad news.[9] Çevik et al. report that nurses do not communicate with the patient because they do not know what to talk about a negative situation and think that it would be more appropriate for physicians to talk.[10] There are studies that consider breaking bad news as the duty of the doctor rather than the nurse, and that the main responsibility for breaking bad news lies with the doctor.[5,11] However, nurses play an important role in this regard by providing information, preparing patients for the situation, and supporting them to understand and cope with bad news.[9] In the healthcare system, nurses are a professional group that is in constant communication with patients/healthy individuals,[12] and interventions to improve communication will improve the quality of interpersonal relationships and care provided to the patient.

Studies highlight the need to create a tool that evaluates how bad news is delivered.[1] In the international literature, different models such as SPIKES, ABCDE, PEWTER, BREAK, TALK have been developed regarding bad news.[13] The SPIKES is a valid and reliable questionnaire administered to medical residents by Farokh Yar.[14] The Breaking Bad News Attitudes Scale (BBNAS) is another scale that has been applied to doctors and its validity and reliability have been established.[15] These scales are not specific to nursing, but have also been used to measure nurses' skills in breaking bad news.[16,17] Health professionals who have intense communication and interaction with the patient are nurses and midwives. Determining the communicative competencies of nurses and midwives will direct the communication training to be given to nurses/midwives. In our country, there is no questionnaire related to breaking bad news.

AIM

In this study, it was aimed to make a validity and reliability study by adapting a valid and reliable tool in our country to evaluate the knowledge and skills of nurses and midwives in breaking bad news. In addition, it was aimed to determine the necessary areas of need by evaluating the knowledge and skills of healthcare professionals in breaking bad news to patients.

METHODS

Study design

This methodological study was a questionnaire adaptation and validity and reliability study.

Sample

This study was carried out in a gynecology and obstetrics hospital between 15/05/2022 and 15/12/2022.The population of the study consists of nurse/midwife group health professionals. Since the generally accepted approach is that the number of items should be at least 10 times,[18] the sample was taken in the study with an average of 10 times the number of 25-items questionnaire items (262 nurses/midwives).

Health professionals (nurses/midwives) who agreed to participate in the study and worked in the institution for at least one year were included in the study. Health workers (nurses/midwives) who did not accept participation and did not complete their 1-year working period were excluded from the study.

Data Collection Tools

The data collection form prepared for the collection of research data consists of two parts. In the first part, there was sociodemographic data about the participant. In the second part, there was the “CBN questionnaire”.

CBN Questionnaire was developed by González-Cabrera et al in 2020 and its pilot study was applied to a group of nurses in order to identify possible deficiencies in the knowledge and skills of healthcare professionals in CBN to patients. Cronbach's alpha of CBN questionnaire was 0.82. Principal component analysis supported a four-

dimensional structure. It was found that this questionnaire is a valid and reliable tool with high internal consistency for evaluating the knowledge and skills of nursing professionals in reporting bad news, and it was suggested by the author to investigate its validity in other healthcare professionals. The questionnaire has a 4-point Likert type rating as “never”, “sometimes”, “always” and “I have no idea”. In this pilot study, no scoring or cut-off point was specified on the questionnaire.[8]

Data Collection

After the participants were informed about the face-to-face study and their consent was obtained, they filled out the data collection form themselves. There was an average of 15 minutes of response time.

Since it was determined in the preliminary application of our study with 10 nurses/midwives that the options were frequently marked as "I have no idea", the questionnaire was applied on a 3-point Likert type and graded as "never", "sometimes" and "always". The questions were scored on a Likert scale ranging from 1 to 3. [1 (never), 2 (sometimes), 3 (always)]. With this scoring, a high score indicated good communication skills in breaking bad news. Total score was 21-63.

Translation and content validity of the questionnaire

Turkish translation and cultural adaptation of the questionnaire was carried out according to the International Pharmaceutical Economics and Outcomes Research Association guideline. (ISPOR).[19] Permission was received via e-mail from the author who developed the questionnaire. The translation from English to Turkish was made by one researcher and two person who work in the health field and have language proficiency. It was then evaluated and organized by the researchers. It was then translated back from Turkish to English by a native speaker of both languages who works in the healthcare field. The statements of the questionnaire prepared by the researchers in both languages were sent to ten person who are experts in their fields (two master's degree nurses, 1 doctoral degree nurses, 2 doctoral degree nursing instructors, two associate professor nursing instructors, three obstetricians) and they were asked to evaluate the expressions in the questionnaire within the scope of wording, comprehension, relevance ve global assessment dimensions for content validity. In order to determine the degree of consensus among experts, a descriptive analysis of the data was made and the median value was evaluated in terms of wording, comprehension, relevance ve global assessment. A 5-point Likert-type scale was used to evaluate the items (Interquartile range 1=maximum agreement and 5=minimum agreement). The questionnaire was finalized after minor corrections were made on the questionnaire according to expert opinions.

The reliability of the questionnaire

The reliability of the questionnaire was evaluated with Cronbach Alpha. The Cronbach's alpha reliability coefficient was used to analyze internal consistency. The stability of the questionnaire was evaluated by test-retest at 20-day intervals.

The construct validity of the questionnaire

For the construct validity of the questionnaire, confirmatory factor analysis (CFA) was used to confirm the factor structure of the original form in Turkish health professionals (nurse/midwife). Since CFA could not be verified, exploratory factor analysis (EFA) was performed to reveal the structure of the original form of the questionnaire on Turkish health professionals. Multiple fit indices were used to determine the adequacy of the model tested in EFA. Chi-Square ($\chi 2$), Goodness-of Fit Index (GFI), Comparative Fit Index (CFI), Normed Fit Index (NFI), Relative Fit Index (RFI), Incremental Fit Index (IFI), Root Mean Squared Residual (RMR) and Root Mean Square Error of Approximation (RMSEA) fit indices were used. As with the fit indices, it is >.90 for GFI, CFI, NFI, RFI and IFI, and <.05 for RMSEA and RMR.[20] Item-total correlation was used in item analysis.

Data analysis

SPSS 17.00 and AMOS programs were used for analysis. The characteristics of the nurses/midwives were analyzed using number, percentage, mean, standard deviation, minimum, maximum, and median. For the validity analyses of the questionnaire, content and construct validity were performed. ICC and Cronbach’s alpha analyses were performed for reliability. The difference between the participants' variables and the total score of the questionnaire was evaluated using the Mann-Whitney U test and the Kruskal Wallis Test. Correlation was done with Spearman correlation analysis. The significance level was used as $P<.05$.

Ethical Considerations

Permission was received via e-mail from the author who developed the questionnaire. Ethical approval was obtained from “Etlik Zübeyde Hanım Kadın Hastalıkları Eğitim ve Araştırma Hastanesi” Clinical Research Ethics Committee (Date: 11.05.2022, Number: 2022/65). Informed consent was obtained from the volunteers. The principles of the Declaration of Helsinki were followed at all stages of the research.

RESULTS

The mean age of nurses and midwives was 31.68 ± 8.16 (24-58). 55% of the study group were married, 43.1% were single and 1.9% were separated. There was a university education level of 85.1% in the research group. Looking at the professions of the group, it was 61.8% nurses and 38.1% midwives. Working period was determined as 32.1% 1 year and above-3 years, 21.4% 0-1 years, 19.1% 10 years and above-20 years, 11.8% 20 years and above. The workplace was 44.7% clinic, 28.5% other, 14.5% delivery room, 11.8% emergency, 0.8% polyclinic. According to expert opinions, the content validity of the questionnaire showed a high degree of agreement on Wording, Comprehension, Relevance and Global Assessment for all items. The median score of consensus regarding the adequacy of the items was found to be for each between one and two points (Table 1)

Table 1. **Evaluation of the Communicating Bad News Questionnaire Items by the Experts (n=10)**

Items	Wording Median	Comprehension Median	Relevance Median	Global Assessment Median
Item 1	1 (min.1 max:2)	1 (min.1 max:2)	1 (min.1 max:2)	1 (min.1 max:2)
Item 2	1.5 (min:1 max:2)	1.5 (min:1 max:2)	1 (min:1 max:2)	1.5 (min:1 max:2)
Item 3	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)
Item 4	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)
Item 5	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)
Item 6	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)
Item 7	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)
Item 8	2 (min:1 max:2)	2 (min:1 max:2)	2 (min:1 max:2)	2 (min:1 max:2)
Item 9	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)
Item 10	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)
Item 11	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)
Item 12	2 (min:2 max:3)	2 (min:2 max:3)	2 (min:2 max:3)	2 (min:2 max:3)
Item 13	1 (min:1 max:3)	1 (min:1 max:2)	1 (min:1 max:1)	1 (min:1 max:2)
Item 14	1 (min:1 max:3)	1 (min:1 max:3)	1 (min:1 max:3)	1 (min:1 max:3)
Item 15	2 (min:1 max:2)	2 (min:1 max:3)	1.5 (min:1 max:2)	1 (min:1 max:2)
Item 16	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)
Item 17	2 (min.1 max:2)	2 (min.1 max:2)	2 (min.1 max:2)	2 (min.1 max:2)
Item 18	1 (min:1 max:2)	1 (min:1 max:1)	1 (min:1 max:2)	1 (min:1 max:2)
Item 19	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)
Item 20	1 (min:1 max:2)	1 (min:1 max:3)	1 (min:1 max:2)	1.5 (min:1 max:2)
Item 21	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:1)
Item 22	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)	1 (min:1 max:2)
Item 23	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)	2 (min:1 max:3)
Item 24	2 (min:1 max:3)	2 (min:1 max:2)	2 (min:1 max:3)	2 (min:2 max:3)
Item 25	1 (min:1 max:2)	2 (min:1 max:3)	2 (min:1 max:2)	1.5 (min:1 max:2)

IQR: Interquartile range. Wording (1 point: Very well written; 2 points: Well written; 3 points: Acceptable; 4 points: Poorly written; 5 points: Very poorly written). Comprehension (1 point: Good; 2 points: Sufficient; 3 points: Ok; 4 points: Poor; 5 points: Very poor). Relevance (1 point: Very relevant; 2 points: Quite relevant; 3 points: Relevant; 4 points: Not very relevant; 5 points: Not relevant). Global assessment (1 point: Very good; 2 points: Good; 3 points: Ok; 4 points: Poor; 5 points: Very poor).

The Cronbach Alpha value of the 25-items questionnaire was determined to be 0.89 in the nurse/midwife group (n=262). To determine the validity of the structure of the questionnaire, firstly, CFA with a 4-factor structure suitable for the original questionnaire was conducted. According to the model obtained as a result of CFA; χ2/df (363.234/113)=3.214, RMSEA=0.096, GFI=0.844, CFI=0.881, NFI=0.838, RFI=0.805 and IFI=0.883. RMSEA and χ2/sd values are within acceptable values, but other goodness-of-fit indices were found to be below acceptable values.[20-22] It was concluded that the revisions made in line with the modification suggestions did not ensure sufficient correction in goodness of fit.

In this reason, EFA was performed to determine the construct validity of the questionnaire, whose construct validity could not be determined by CFA. In the EFA analysis, the results of the KMO test and Bartlett's sphericity test (KMO=0.88 and Bartlett's χ2=2057.0, df=300, *P*<.001) were considered good.[23] In the test used to evaluate the stability of the questionnaire through test-

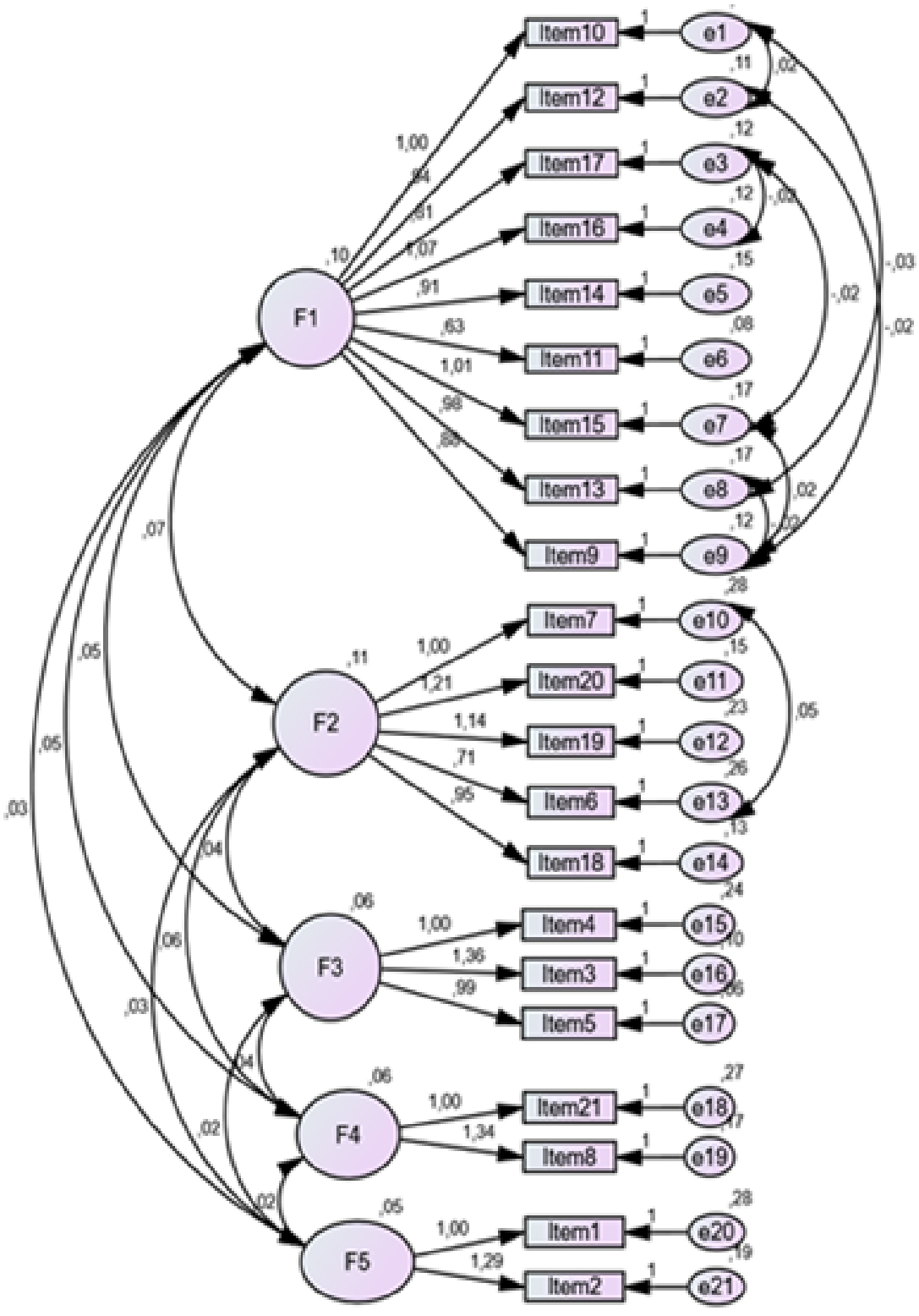
retest, the Intraclass Correlation Coefficient (ICC) value of the 25-item form of the questionnaire was found to be 0.94 (n=21), *P*<.001, and Cronbach's alpha value was 0.97. Seven components with eigenvalues greater than one were obtained, explaining 59.21% of the variance of the questionnaire. In the resulting component matrix, the weights of each item in the seven components were tested and varimax rotation was performed to facilitate interpretation. Item total correlation values were between 0.215-0.613. In general, it is stated that items with item-total correlations below 0.20 should not be included in the test.[24] Since it is recommended that item factor loadings be at least 0.30,[25] factor loadings above this value were taken. Since it was recommended to remove items with an item factor load difference of less than 0.10 among the four items,[26] four ıtems were removed from the questionnaire respectively, starting with the smallest difference (items 14, 15,7 and 3).

Table 2.Total Explained Variance of Communicating Bad News Questionnaire (Final Version with 21 Items)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.279	29.898	29.898	6.279	29.898	29.898
2	1.526	7.265	37.163	1.526	7.265	37.163
3	1.234	5.878	43.041	1.234	5.878	43.041
4	1.185	5.644	48.685	1.185	5.644	48.685
5	1.039	4.945	53.631	1.039	4.945	53.631
6	.994	4.733	58.364			
7	.946	4.506	62.869			
8	.876	4.171	67.041			
9	.810	3.859	70.900			
10	.758	3.608	74.508			
11	.676	3.217	77.725			
12	.634	3.018	80.743			
13	.604	2.878	83.621			
14	.563	2.680	86.301			
15	.545	2.595	88.896			
16	.467	2.223	91.119			
17	.434	2.064	93.184			
18	.413	1.965	95.149			
19	.383	1.823	96.972			
20	.332	1.580	98.552			
21	.304	1.448	100.000			

After removing the items, the Cronbach Alpha value of the remaining 21-items (n=262) was determined as 0.87. KMO test was 0.87 and Bartlett's test of sphericity was $\chi 2$=1588.28, df=210, *P*<.001. Five components with eigenvalues greater than one were obtained, explaining 53.631% of the variance of the questionnaire (Table 2). While varimax rotation and Principal Component Analysis were used. Item factor loadings were found to be between 0.464-0.793. The factors were classified as the first factor empathy and support, the second factor individual care, the third factor positive communication, the fourth factor respect and the fifth factor communication environment (Table 3). The ICC value of the 21-items final version of the questionnaire was found to be 0.95 (n=21), and Cronbach's alpha coefficient was 0.97 (*P*<.001).

According to the results of goodness of fit indices ($\chi 2$/df=1.544, RMSEA=0.046, SRMR=0.012, GFI=0.917, CFI=0.935, IFI=0.937, TLI=0.920, AGFI=0.887, NFI=0.839, RFI=0.802) the model was statistically significant (P<.001). Figure 1 shows the analysis diagram for the five factors determined by EFA.



χ2/df=1.544, RMSEA=0.046, SRMR=0.012, GFI=0.917, CFI=0.935, IFI=0.937, TLI=0.920, AGFI=0.887, NFI=0.839, RFI=0.802, *P*<.001

Figure 1. Analysis diagram for the five factors of the Communicating Bad News Questionnaire determined by EFA

Table 3. Rotated Component Matrix

Factors	Communicating Bad News Questionnaire Items	Component 1	2	3	4	5
Factor 1	Item 9	.550				
"Empathy and Support"	Item 10	.745				
	Item 11	.594				
	Item 12	.668				
	Item13	.561				
	Item 14	.600				
	Item 15	.566				
	Item 16	.609				
	Item 17	.648				
Factor 2	Item 6		.584			
"Individual care"	Item 7		.755			
	Item 18		.484			
	Item 19		.631			
	Item 20		.692			
Factor 3	Item 3			.630		
"Positive communication"	Item 4			.765		
	Item 5			.581		
Factor 4	Item 8				.464	
"Respect"	Item 21				.793	
Factor 5	Item 1					.769
"Communication environment"	Item 2					.637

Extraction Method: Principal Component Analysis Item. Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 7 iteration item.

Table 4. Correlation of Factor Scores with the Total Score Obtained from the Communicating Bad News Questionnaire

	Mean±SD	Med (min-max)	Correlations with Total Communicating Bad News Questionnaire Score
Total Score	55.10±5.53	56 (35-63)	
Factor 1 (empathy and support)	24.52 ±2.77	25 (12-27)	ρ= 0.847 *P*< .001
Factor 2 (individual care)	12.29 ±1.95	12 (7-15)	ρ= 0.831 *P*< .001
Factor 3 (positive communication)	8.31 ±1.03	9 (4-9)	ρ= 0.485 *P*< .001
Factor 4 (respect)	5.02 ±0.87	5 (3-6)	ρ= 0.567 *P*< .001
Factor 5 (communication environment)	4.96 ±0.86	5 (2-6)	ρ= 0.437 *P*< .001

ρ= Spearman's rho

Figure 2 includes the final questionnaire items and the answers given to the items.

Table 4 includes correlation of factor scores with the total score obtained from the CBN questionnaire. It was seen that there was a significant and positive relationship between the total score of the questionnaire and the scores of the factors that make up the questionnaire (*P*<.001). Not stayed in the tables, a negative, weak and statistically significant relationship was found between age and CBN questionnaire total score (ρ= -0.175; *P*=.005). No statistically significant difference was detected between the total score of the questionnaire and variables other than the workplace (education level, marital status, working time, being in the midwifery or nursing profession) (*P*>.05). It was determined that the difference regarding the workplace stemmed from the outpatient clinic unit and that the bad news skills of employees in this unit were lower than those workplaces (x2= 18.463; df= 4; *P*<.001).

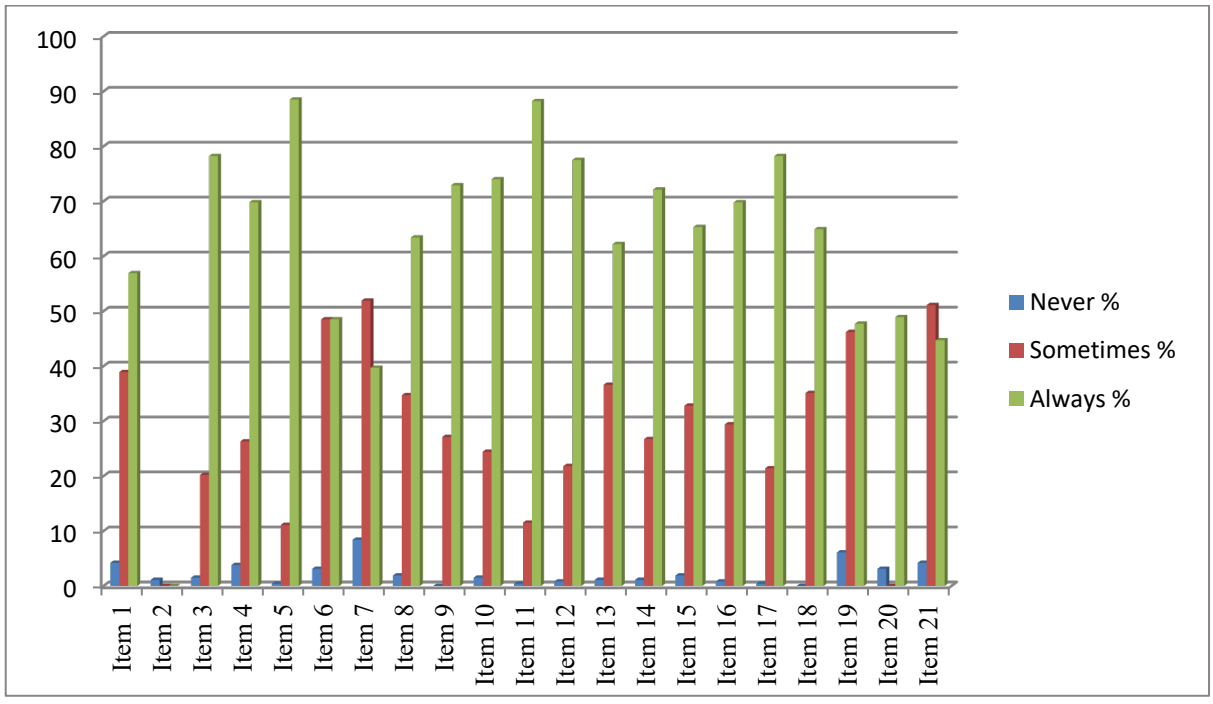


Figure 2. Distribution of answers to Communicating Bad News Questionnaire items (Appendix 1)

DISCUSSION

In this study, CBN-Questionnaire [8] was adapted to Turkish to evaluate midwives and nurses' competence in breaking bad news to patients. It has been tested to be a valid and reliable tool in assessing the knowledge and skills of health professionals in breaking bad news.

According to expert opinions, all of the items of the language validated questionnaire showed a high degree of agreement in terms of Wording, Comprehension, Relevance and Global Assessment, and all of the items were included in the questionnaire.

The Cronbach Alpha value of the final version of the questionnaire (21 items) was determined as 0.866 in the nurse/midwife group. Cronbach's alpha coefficients have been reported to be an acceptable value between 0.70 and 0.95.[27] The five factor components explained 53.631% of the variance of the questionnaire. Çokluk et al.[23] stated that this value being between 40% and 60% is sufficient. In the study of González-Cabrera et al.,[8] the Cronbach alpha value was found to be 0.82 and the percentage of explaining the total variance was 40.32. Since the KMO coefficient values obtained in our study were 0.70-0.80, sample adequacy was considered good.[23] It can be said that the chi-square value in the Bartlett test of sphericity is statistically appropriate. Since it is desired that the factor loadings of the items in a factor be 0.45 and above, it can be interpreted that the items under the relevant factor measure the relevant structure.[24]

As a result of the test-retest of the 21-items final version of the questionnaire, the ICC value was found to be 0.95 and Cronbach's alpha coefficient was 0.97. ICC value >0.90 is reported as excellent and Cronbach's alpha coefficients are reported to be an acceptable value between 0.70 and 0.95.[27,28] For this result, it can be said that the ICC value between the two measurements was at an excellent level. According to the results of the goodness of fit indices, used to evaluate the fit of the model $\chi 2/df$, RMSEA, SRMR were perfect fit, GFI, CFI, IFI, TLI and AGFI were acceptable fit, while NFI and RFI were low fit. In our study, the evaluation of the fit indices according to the literature [29,30] shows that the model was statistically significant and valid.

Although there is no cut-off value for the questionnaire score in our study, it can be said that nurses and midwives have good skills in breaking bad news when the mean score was compared to the highest score that can be obtained (55.10±5.53/63). According to the SPIKES questionnaire results of 200 general practitioners, the mean score for breaking bad news skills was determined as 63.56±6.15. Since the total maximum score of the questionnaire was 100, it was stated that the skill levels of the participants were at a relatively desired level.[31]

In addition, in our study, it was found that those whose workplace was a polyclinic had lower levels of CBN skills. In a study, it was determined that 36% of nurses with knowledge about palliative care had received training on breaking bad news/communication skills.[32] In another

study, the mean score of nurses' skills of breaking bad news was 3.5±0.8 out of 5 and there was a significant relationship between the skill of breaking bad news and sex, the work experience, and the workplace.[17] Rosin et al.[16] identified and compared the role of healthcare professionals (51 nurses, 38 doctors, and 26 social workers) in breaking bad news to patients. Physicians achieved higher scores in feeling responsible for breaking bad news, social workers in providing psychological support, and nurses in providing supportive tool. All three groups gave high scores to the emotional exhaustion, sadness and identification this task caused them. Nurses became more afraid of breaking the news of death and made more efforts to avoid this duty.[16] The primary duty of nurses is to meet the physical, psychological and social care needs of individuals. Effective communication is a fundamental component of nursing, an integral part of quality care, and is critical to nursing practice.[33] Nurses should develop skills in addressing patients' concerns, being humane, being sensitive in breaking bad news, actively listening to the patient, being willing to answer the questions of relatives, and guiding family/relatives in preparing for this process.[12]

Limitations

Although the sample size is sufficient, this study is limited to the results obtained from the opinions of midwives and nurses working in the hospital where the research was conducted.

Effective communication between healthcare professionals and patients is essential to improve the quality of individualized healthcare. Since nurses and midwives are in closer and longer communication with patients, they may have to discuss negative situations with patients. They may be faced with the situation of breaking bad news about the patient's condition to them directly or indirectly. Questionnaire to measure nurses'/midwives' competence in breaking bad news are limited. In this study, CBN questionnaire was adapted to measure the competence of nurses/midwives in breaking bad news. This questionnaire was adapted to Turkish and tested to be a valid and reliable tool for evaluating the knowledge and skills of health professionals (nurses/midwives) in breaking bad news. It was concluded that the 21-items CBN questionnaire was valid and reliable for nurses and midwives**.**

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Hasta Onamı: Gönüllülerden bilgilendirilmiş onam alındı.
Hakem Değerlendirmesi: Dış bağımsız.
Yazar Katkıları: Fikir- GKB; Tasarım- GKB; Denetleme-GKB, YEÜ; Kaynaklar-GKB, CK, YEÜ; Veri Toplanması ve/veya İşlemesi-GKB, CK ; Analiz ve/ veya Yorum-GKB, CK; Literatür Taraması- GBK, CK, YEÜ; Yazıyı Yazan- GKB; Eleştirel İnceleme-GKB, CK, YEÜ.
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Appendix 1

Items:

Item 1. Do you choose a quiet and private place beforehand to communicate bad news?

Item 2. Do you ensure that there will be no foreseeable interruption occurring (phone, consult by a colleague, etc.)?

Item 3. Do you introduce yourself to the patient first?

Item 4. Do you call the patient by their name?

Item 5. Do you look at the patients face or in the eyes while you talk or listen?

Item 6.To find out what the patient knows and how much they want to know, do you use questions such as: Before I talk, do you want to tell me anything or ask me something?

Item 7. Before communicating bad news, do you find out in what way the news may affect the patient's personal, social or work life?

Item 8. In the event that the patient is unsure they wish to be informed, do you give the patient time to consider it?

Item 9. Do you tend to facilitate dialog with the patient or let them vent/blow off steam talking?

Item 10. Do you keep in the mind the opinion of the patient?

Item 11. Do you use appropriate language to allow the patient to digest the bad news?

Item 12. In terms of the feelings, fears and worries of the patient, do you verbally express your awareness or responsiveness?.

Item 13. When the patient's response is anxiety, fear, sadness or aggression, do you maintain an attitude of active listening?

Item 14. Do you show support and understanding non-verbally?

Item 15. When you communicate bad news, do you present yourself assertively, expressing your thoughts confidently?

Item 16. If a disagreement with the patient exists, do you wait for their input and find a solution to the problem?

Item 17. Do you observe the emotions that have emerged in the patient following the communication of bad news?

Item 18. Do you ensure that at the end of the conversation the patient has no further doubts or questions?

Item 19. Do you establish, if necessary, a care plan together with the patient to address the new situation?

Item 20. Do you explore the possible occurrence of challenging situations after the communication of bad news and establish a strategy for future action?

Item 21. Do you farewell the patient at the end of the conversation?