



Research Article

Bad News in Cancer Diagnostics: An Intercultural Comparison

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Abstract

Objective: This study examines cultural differences in how bad news is delivered by physicians in Western (German) and traditional family-oriented (Turkish) contexts. It also evaluates the current level of training in this area and identifies the need for further specialized training. **Method:** A cross-cultural survey was conducted using a questionnaire translated and adapted for use in Germany and Turkey. Responses were collected from 49 German and 37 Turkish physicians working in oncology departments. Descriptive analysis was performed to compare attitudes and practices, while ensuring methodological rigor through backtranslation and expert review. **Results:** German physicians were more likely to deliver bad news directly to patients (96%) compared to their Turkish counterparts (46%), who often informed family members first. German physicians reported higher confidence in their ability to deliver bad news, despite similar deficits in formal training (30% in both countries). Turkish physicians expressed a greater need for additional training. Differences were also observed in decision-making authority, with Turkish physicians favouring a paternalistic approach (68%), while most German physicians (77%) supported shared decision-making. **Conclusions:** The study highlights distinct cultural variations in the delivery of bad news and emphasizes the importance of culturally tailored training programs. These programs should address decision-making approaches, the role of family members, and patient preferences to enhance communication and improve the delivery of bad news in diverse cultural settings.

Keywords: Doctor-Patient relationship; Cultural differences; Breaking bad news; Cancer diagnosis; Communication Training in Healthcare

Introduction

Cultural background significantly shapes the perception of illness, the doctor-patient relationship [1], and medical decision-making [2]. Cultural values influence the nature, progression, and participation in decision-making processes, particularly in terms of information disclosure and the involvement of third parties [2,3].

In Western countries, bad news is typically communicated directly [4]. In contrast, many non-Western countries often employ indirect methods or involve family members in the communication process [3,5-7]. This preference arises from the perception that delivering

bad news directly may be considered disrespectful or impolite. Physicians in such contexts also express concerns about causing unnecessary emotional distress to patients [7,8]. Indirect methods include non-verbal cues [1], euphemisms (e.g., using terms like “condition” instead of “cancer”) [9], and a greater reliance on communication through family members.

Physicians have traditionally held a high social standing, but their role in the doctor-patient relationship has evolved over time [4]. Paternalistic decision-making processes [10] have been increasingly replaced by a preference for active patient involvement, supported by advancements in communication techniques and a heightened focus on patients’ perspectives [11]. However, this paradigm shift introduces new challenges, particularly in delivering bad news [11].

Studies indicate that receiving bad news can profoundly impact patients, often eliciting psychological reactions such as shock, anxiety, helplessness, anger, and depression [12]. Bad news is generally defined as information that significantly alters a patient's expectations about their future [13]. The manner in which such news is conveyed critically affects patients' psychological well-being [12], their trust in treatment, and their decisions regarding the continuation of therapy [14].

Physicians, in turn, often find delivering bad news to be a difficult and emotionally taxing task. They may fear causing harm to patients, inducing psychological strain, or feel uncertain about their communication skills [4,15,16]. This challenge is particularly pronounced for inexperienced physicians, who may experience heightened stress reactions, impaired communication abilities, and an increased risk of burnout [16].

Despite the frequency with which physicians are required to deliver bad news, many receive no formal training in this area [15,17,18]. The lack of training negatively impacts not only physicians but also patients [12,14,16]. Studies highlight the benefits of acquiring relevant communication skills [17]. Furthermore, cultural differences in handling bad news remain a critical consideration [3,5].

Research conducted in Turkey, Iran, and Saudi Arabia demonstrates that physicians often disclose diagnoses in only half of the cases or avoid sharing the full truth [18-20]. In many instances, patients deduce their condition from the nature of their treatment or its side effects [21], or they learn about their diagnosis through family members or friends [6]. Notably, disclosure is more likely for cancers with higher chances of recovery, such as breast cancer [21]. However, studies also reveal that many patients in traditional family-oriented societies desire greater transparency [5,7,8,15,20].

Globalization and improved access to information are fostering a shift in such societies toward greater openness in delivering bad news and respecting patients' rights to be informed and involved in decision-making. Nevertheless, these practices are not yet consistently established [1,7,22].

The aim of this study is to compare the approaches to delivering bad news among physicians in Western (German) and traditional family-oriented (Turkish) contexts. Furthermore, it seeks to evaluate the level of training and the need for specialized further training in this area.

Methods

Study Design

Attitudes toward delivering bad news were assessed using a questionnaire that was translated into German and Turkish with precision through the backtranslation technique by professional interpreters. The cultural equivalence [23] of the instrument was verified, and relevant items were selected.

Data collection took place among physicians from various hospitals in Germany and Turkey who had experience working with cancer patients and were familiar with delivering bad news. The selection of hospitals and participants was based on accessibility. Data collection in both countries was conducted by local trained psychologists.

Instrument

The "Questionnaire for Assessing Medical Personnel's Perspective on Communicating a Diagnosis" [19] was used, despite the absence of prior validation for cross-country comparison. However, it is the only known instrument developed in Iran to investigate physicians' attitudes toward delivering bad news. Following translation and backtranslation, the questionnaire items were reviewed by an Iranian physician and psychologist. Adjustments to the translations were made with the assistance of psychologists and physicians from the respective countries, resulting in the finalized versions of the questionnaire.

Data Collection

In Germany, hospitals with departments of internal medicine, surgery, gynaecology, and urology located in the regions of Freiburg, Villingen, and Reutlingen were contacted. Subsequently, the questionnaires and an information sheet about the study were distributed to the physicians. The physicians completed the questionnaire independently and returned it anonymously. Data collection took place from late July to late September 2018.

Sample

The study included 49 German (79%) and 37 Turkish (67%) physicians. Two incomplete questionnaires from Germany were excluded. Among the remaining participants, 28 (60%) in Germany and 20 (54%) in Turkey were male, with no significant gender differences ($p > .05$). However, the frequency distribution of professions differed significantly ($\chi^2 = 10.87$, $p = .01$). Table 1 provides an overview of the distribution by gender and specialization.

	Germany	Turkey			
	Frequency (in %)	Frequency (in %)	χ^2	df	p
Gender					
Male	28 (60)	20 (54)	0.26	1	0.61
Female	19 (40)	17 (46)			
Specialization					
Assistant Physician	28 (60)	17 (46)	10.87 ¹		0.01
Attending Physician	6 (13)	16 (43)			
Senior Physician	11 (23)	4 (11)			
Chief Physician	2 (4)				
Note: ¹ since the conditions for the χ^2 -test (number of degrees of freedom, df=1), calculation as per Fisher's exact test, OR=Odds Ratio.					

Table 1: Frequency Distribution of Gender and Professional Specializations by Country.

The average age of physicians is 38.17 years (SD=10.42) in Germany and 38.92 years (SD=8.82) in Turkey, with no significant difference ($p>.05$). German physicians have significantly more experience in oncology practice ($M=8.31$, $SD=8.99$) compared to their Turkish colleagues ($M= 4.68$, $SD= 4.09$) ($t(67.05)=2.47$, $p=.02$). The means, standard deviations, and test statistics for age and duration of occupation in cancer department are presented in Table 2.

	Germany	Turkey			
	Mean (SD)	Mean (SD)	t	df	p
Age	38.17 (10.42)	38.92 (8.82)	-0.35	82	0.73
Duration of Professional Occupation in Cancer Therapy	8.31 (8.99)	4.68 (4.09)	2.47 ¹	67.05	0.02
Note: ¹ t-Test for unequal variances.					

Table 2: Means and Standard Deviations for Age and Duration of Professional Occupation in Cancer Therapy by Country.

Statistical Analysis

The descriptive data from the questionnaire were analyzed separately for both countries, without testing for significant differences to avoid alpha error inflation [24]. The results follow the order of the questionnaire items and include the corrected part-whole item-total correlations and item difficulties.

Item-total correlation ($R_i \geq 0.4$) and item difficulty (P_i) were used to assess item quality [25]. Missing values were handled through pairwise case exclusion. The overall distribution of these item characteristics (not the individual values) was compared between the two countries.

The reliability of the questionnaire was evaluated using internal consistency (Cronbach's Alpha), and exploratory factor analyses were conducted to examine construct equivalence [26], as the questionnaire does not have an established factor structure. For factor analysis, and strictly speaking, for the calculation of item-total correlations and reliability, variables are required to be interval-scaled, normally distributed, or dichotomous [24].

Results

Professional Competencies in Delivering Bad News

The average frequency of delivering bad news per month (Item 7) is 8.71 (SD= 8.83) in Germany and 4.73 (SD= 1.63) in Turkey. Training in delivering bad news has been received by 30% of German and 32% of Turkish physicians (Item 8). The need for further training (Item 9) is rated with a mean of 3.00 (SD= 0.93) in Germany and 3.73 (SD= 1.05) in Turkey. Self-assessment of the ability to deliver bad news (Item 10) has a mean of 2.57 (SD= 0.77) in Germany and 3.51 (SD= 1.15) in Turkey. The handling of bad diagnoses (Item 11) is rated with a mean of 3.57 (SD= 0.58) in Germany and 2.32 (SD= 1.08) in Turkey. The means and standard deviations for Items 7, 9, 10, and 11 are presented in Table 3.

	Germany	Turkey
Items	M (SD) n=47	M (SD) n=37
7. Average frequency of delivering bad news in a month. (frequency per month)	8.71 (8.83)	4.73 (1.63)
9. Do you feel the need for further training in delivering bad news? (5 = very strong, 4 = strong, 3 = average, 2 = low, 1 = very low)	3.00 (0.93)	3.73 (1.05)
10. How do you evaluate your own ability to deliver bad news? (1 = very good, 2 = good, 3 = average, 4 = rather poor, 5 = very poor)	2.57 (0.77)	3.51 (1.15)
11. How do you deal with a bad diagnosis? (You deliver it: 1 = not at all, 2 = rarely, 3 = often, 4 = always)	3.57 (0.58)	2.32 (1.08)

Note: The coding of response options is provided in parentheses.

Table 3: Professional Competencies in Delivering Bad News. Means and Standard Deviations for Items 7, 9, 10, and 11 by Country.

Circumstances for (Not)Disclosing Bad Diagnoses

Item 12 examines the circumstances influencing the decision to disclose a bad diagnosis. In Germany, 35 physicians (75%) selected multiple response options, with the most frequently chosen being f) (79%).

Other common responses were c) (72%) and h) (51%) (Table 4). Open-ended responses under i) were categorized as either “The diagnosis must always be disclosed” or “Patients’ cognitive limitations”. In Turkey, all respondents selected only one response option, with h) (46%) being the most frequent, while some options (e.g., b), f), g), i)) were not selected at all.

Item 13 captures the circumstances relevant when physicians decide not to disclose a bad diagnosis. In Germany, 22 physicians (47%) selected more than one response, with a) (57%) being the most frequently cited, followed by b) (28%) and e) (26%). Open-ended responses under f) included categories such as “The diagnosis must always be disclosed” and “Patient request.” In the Turkish sample, physicians selected only one response option. The most common were b) (35%) and c) (32%), while f) was not selected. The frequency distributions for Items 8, 12, and 13 are presented in Table 4.

Question/ Response	Germany M (SD) n=47	Turkey M (SD) n=37
Item 8. Training for the delivery of bad news		
Yes	14 (30)	12 (32)
Item 12. What circumstances are relevant to the decision to communicate a negative diagnosis?	17 (36)	3 (8)
a) Age of the patient	4 (9)	–
b) Gender of the patient	34 (72)	7 (19)
c) Mental state of the patient	8 (17)	5 (14)
d) Religious beliefs of the patient	16 (34)	5 (14)
e) Relatives of the patient	37 (79)	–
f) Wishes of the patient	9 (19)	–
g) Medical knowledge of the patients	24 (51)	17 (46)
h) Prognosis of the disease	3 (6)	–
i) Other circumstances (please specify briefly)	1 (2)	–
None of these circumstances are relevant ¹		
Item 13. What circumstances play a role if you decide not to deliver bad news?	27 (57)	6 (16)
a) Mental state and fears of the patient	13 (28)	13 (35)
b) Wishes of the patient's relatives	1 (2)	12 (32)
c) Inability to answer the patient's questions	1 (2)	1 (3)
d) Fear of a negative reaction from the patient toward the medical staff	12 (26)	5 (14)
e) No necessity (the patient is already informed)	8 (17)	–
f) Other circumstances	5 (11)	–
None of these circumstances are relevant ¹		
Note. In Germany, multiple response options were often selected for Items 12 and 13, resulting in cum % > 100. ¹ This category was subsequently added for those who did not select any of the response options.		

Table 4: Circumstances for (Not)Disclosing Bad Diagnoses. Means and Standard Deviations for Items 8, 12, and 13 by Country.

Physicians' Views on Delivering Bad News

In the German sample, 60% of physicians consider delivering bad news important (Item 14), while 30% disagree. In the Turkish sample, 27% support delivering bad news, whereas 73% oppose it. For Items 15 to 19, German physicians showed a greater variety in selecting response categories, whereas Turkish physicians mostly selected only one option. When asked who should deliver the news (Item 15), all German physicians selected option a), with 43% choosing multiple categories. In Turkey, option a) was also the most frequently selected (54%), followed by b) (32%) and d) (14%).

For Item 16, which addresses the preferred method of delivering bad news, all German physicians chose option a), with 47% additionally selecting b) and 4% selecting c). In Turkey, 49% preferred option a) and 51% chose b), without selecting additional options. The frequency distributions for Items 14 to 16 are shown in Table 5.

Items	Germany M (SD) n=47	Turkey M (SD) n=37
Item 14. Is it important to you to deliver bad news?		
Yes	28 (60) ¹	10 (27)
Item 15. Who should deliver the bad news?		
a) Treating physicians	47 (100)	20 (54)
b) Psychiatrists	12 (26)	12 (32)
c) Nursing staff	3 (6)	–
d) Family members	11 (23)	5 (14)
e) Friends of the patient	2 (4)	–
f) Other individuals	1 (2)	–
Item 16. Who do you prefer as the recipient of bad news?		
a) The patient themselves	47 (100)	18 (49)
b) Family members	22 (47)	19 (51)
c) Friends of the patient	2 (4)	–
d) Other individuals	–	–
Note: In Germany, multiple response options were selected for Items 15 and 16, resulting in cum % >100. 1 in the German sample, 5 participants (11%) did not provide a response.		

Table 5: Delivering Bad News. Means and Standard Deviations of Responses for Items 14 to 16 by Country.

Furthermore, physicians addressed the question of who should be present when delivering bad news. In Germany, 62% of physicians selected multiple options, with a) patients (62%) and b) family members (75%) being the most frequently chosen. In Turkey, 43% of physicians preferred informing the patient alone, while 57% indicated that family members should also be present.

High levels of agreement were observed for statements regarding physicians' decision-making authority. For instance, most physicians agreed that treatment decisions should be made by the physicians, and that information about medication and potential side effects should also be provided by them. Conversely, there was little support for the statement that knowledge about cancer alone would not benefit patients, nor for the idea of withholding information on life expectancy.

Discussion

The results of the comparison between German and Turkish physicians' approaches confirm the assumption of cultural differences in delivering bad news. In the present sample, German physicians (96%) are more likely to deliver bad news directly to patients compared to Turkish physicians (46%), aligning with findings from previous studies [18,20,21]. In the German sample,

patients were consistently identified as the primary recipients of bad news, whereas approximately half of the Turkish physicians preferred to communicate such information primarily to family members. Around 50% of German physicians also involve family members. The key difference lies in whether the news is delivered exclusively to the family or directly to the patient. Studies confirm the central role of the family in traditional societies [3,5,6].

Clear differences also emerge regarding decision-making authority, with Turkish physicians (68%) more frequently supporting physician authority, whereas the majority of German physicians (77%) reject this concept. Previous research has shown that physician authority is more pronounced in Eastern countries (e.g., Japan) than in Western countries (e.g., the USA) [27].

Regarding training levels, only about 30% of physicians in both countries reported having received specific training in delivering bad news. However, German physicians rate their skills more highly and express a lower need for additional training. This discrepancy may be due to the general communication training included in German medical education (though not specific to delivering bad news), which is reportedly lacking in Turkish medical training [18].

The level of training may play an important role in the delivery of bad news. Specific training programs could better prepare physicians for such conversations [5,18]. Recent studies also emphasize the role of technology in supporting communication and training [28,29]. However, challenges exist. The implementation of AI could transform the doctor-patient relationship from a dyadic to a triadic interaction, where AI becomes an additional actor in the decision-making process. This development could challenge the paternalistic model [30] and, if not implemented properly, potentially disrupt communication and trust between physicians and patients [31].

The role of the family may also be relevant, as it can influence the extent to which patients are informed. The level of training could moderate whether physicians inform patients despite familial influence (at their request). The relationship between training and the frequency of disclosure may also be mediated by the decision-making model employed. These relationships should be explored in future studies.

Some studies have shown that physicians find it differently challenging to deliver bad news depending on the subject matter [21,32]. Disclosing a diagnosis for a condition with high recovery prospects, such as breast cancer, is generally easier than delivering news about an illness for which only palliative care remains. Additionally, the aspect of participatory decision-making is often overlooked.

In practice, the transferability of Western bioethical values to traditional cultures remains controversial. The question arises whether the role of autonomy, as an explanatory concept for cultural differences, is helpful. While Surbone argues that Western decision-making models are not universally applicable [22], Guven considers autonomy compatible with traditional cultures [33], as long as the individual needs of patients are respected. Patients should have the ability to decide how much information they want and who should be involved, potentially through a collective autonomy, in which the family plays a role. Conflicts between patients' desire for information and families' wish to withhold it can be resolved through clear communication and empathy [34].

Delivering bad news appropriately and sensitively requires comprehensive training, which is often lacking for both German and Turkish physicians. There is a substantial need for training to enhance physicians' confidence and foster patient acceptance. The SPIKES model by Baile et al. [35], with its six-step protocol, provides clear guidelines for such conversations. Training programs should account for cultural specifics, as decision-making models, the amount of information shared, and communication styles vary across cultures. Physicians should also be provided with guidance, as suggested by Hallenbeck and Arnold, on how to address cultural challenges effectively [34].

Limitations

The assessment of physicians' attitudes was conducted using the questionnaire by Arbabi, et al. [19], which has not been formally evaluated. In terms of content, the questionnaire covers all key communication indicators outlined by Schouten [36], yet it exhibits weaknesses in item selection and -polarity, which complicated statistical analysis.

Methodological limitations, such as non-random sampling and restricting data collection to specific locations (Germany and a university hospital in Istanbul), limit the generalizability of the findings. Voluntary participation may have resulted in a selective sample, and differences in professional experience and specialization may also have influenced the results. German physicians more frequently have extensive experience in cancer treatment and report feeling more confident in delivering bad news. Additionally, the physicians' specializations may play a role, as certain professional groups may handle these tasks more frequently, potentially reflecting differences in training levels. Differences in the distribution of assistant- and senior physicians could also be relevant.

Future studies should include additional contextual variables, such as the motivations of physicians for working in oncology wards, their specific roles within the medical team, and other professional and non-professional stressors. Including nurses, who often provide emotional support [5,15], would also be valuable. Separate questionnaires tailored to the respective areas of responsibility would be beneficial.

Conclusion

This study sheds light on cultural differences in the communication of bad news between German and Turkish physicians. German physicians tend to deliver bad news more directly to patients, while Turkish physicians often involve family members, reflecting distinct cultural norms and decision-making practices in healthcare. The findings also highlight gaps in training for delivering bad news, with only 30% of physicians in both countries reporting formal training. Despite this, German physicians report higher confidence in their communication skills, potentially due to general communication training in their medical education. Tailored training programs that address cultural contexts, patient preferences, and the role of family members in healthcare communication are crucial to improving the delivery of bad news. Future research should incorporate additional contextual factors, such as professional roles, motivations, and stressors, and extend the focus to include other healthcare professionals, such as nurses, who play a key role in providing emotional support to patients.

Declarations

Ethics Approval and Consent to Participate

We confirm that all the research meets the ethical guidelines, including adherence to the legal requirements of the country in the study.

Consent for Publication

Written, informed consent was obtained from the patients for publication of this manuscript and any accompanying information or images.

Competing Interests

The authors declare that they have no competing interests.

Authors' Contributions

JIK examined did the interviews and analyzed the data and wrote the first proposal. ZA helped to analyze the clinical data. JIK and ZA contributed equally to the writing of the manuscript. All authors read and approved the final manuscript.

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