

## A comparative investigation of clients' attitudes toward breaking bad news to patients with cancer

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### Abstract

**Background:** Truth disclosure is one of the major challenges for physicians with cancer patients. The attitude toward breaking news adopted by individuals depends on their cultural background. The present study was conducted at Ardabil University of Medical sciences, Ardabil, Iran, to investigate the attitudes of Turkish-speaking patients with cancer and their families to the disclosure of bad news.

**Materials and Methods:** The present descriptive cross-sectional study used convenience sampling to select 62 patients, 76 family members of young and 58 children. The mean age of the patients was 37.29 years, and their majorities were 32-42 years old. The data were collected using the questionnaire proposed by Managheb et al., which included six dimensions, i.e., suitability of the person, suitability of the time, the place, factors affecting the delivery of bad news, amount of disclosed information, and acceptance.

**Results:** Despite the insignificant differences in the total score of attitude between the groups ( $P=0.23$ ), significant differences were found in terms of suitability of the time ( $P=0.017$ ) and affecting factors ( $P=0.007$ ) between children's families. Also, in parents of children, employment made truth acceptance better ( $p=0.04$ ). The acuteness of the disease increased the total attitude score in all the participants ( $P=0.047$ ). Significant relationships were also observed between age and accepting truth ( $P=0.045$ ), male gender and place of disclosing the truth ( $P=0.004$ ), male gender and amount of disclosed information ( $P=0.043$ ), as well as owning a house and accepting truth ( $P=0.002$ ). Moreover, education was negatively related to the person for truth disclosing ( $P=0.036$ ) and factors affecting the truth disclosing ( $P=0.015$ ).

**Conclusion:** There are different circumstances and economic impacts in children's families on their tolerance. Given the difficulty of disclosing the truth to the employee and highly-educated individuals, it is recommended that health workers consider individual conditions in these circumstances.

**Keywords:** Family, Neoplasm, Patients, Truth, Disclosure

### Introduction

As a medical team's responsibility, disclosure of the truth to patients and their families can significantly affect their lives (1). According to a paternalistic approach, doctors avoided informing patients of their diagnosis. The bad news was defined in the 1980s, and truth disclosure was described as a difficult and essential task (2). Buckman (1984) defined bad news as any information that negatively and significantly changes the attitude of the recipient of the news toward the future (3). Bad news can cause despair and threaten psychophysical health (4). In contrast to the right bestowed to patients in western

countries to be informed of their remaining lifetime, the truth was concealed from patients by doctors and their families in the East to avoid potential damage to their health (5). According to the Code of Medical Ethics, patients have the right to be informed about their health by medical teams. (3). Evidence suggests properly truth disclosure to patients simplifies their treatment, enhances their satisfaction, and lowers their anxiety (7). The burden of truth can be overcome by conveying inappropriate socio-emotional settings while establishing a rational rapport with patients and their relatives (3). Patients normally expect to be accurately informed

of their diagnosis, treatment, and prognosis of their disease (8). Truth disclosure to patients is differently perceived in different cultures and communities. As a principle, the right to choose appears to have disclosed truth to patients acceptable in the West. In eastern communities, hiding the truth is common due to family constraints and the priority of avoiding damage to patient health (9). According to Kakoei et al., deterrents to disclosing truth in the Iranian culture include the insistence of the patient's close relatives that the truth should be concealed from the patient, the doctor's preference for hiding the truth from end-stage and old patients, and the family's acquaintance with the spiritual status of the patient (10). A review of the literature suggests certain misconceptions about cancer in the Middle East, given the tendency of caregivers and families to conceal the disease (11). Similarly, a study in Iran reported concern for both patients and their families in this regard (12). A study in Japan also reported a tendency to receive comprehensive information about their diagnosis in 86.1% of patients (13). The outcomes obtained from direct truth disclosing to Asian women compared to non-disclosure included greater satisfaction and lower uncertainty and anxiety (14). Given the wide range of information in ICUs and emergency departments, nurses are required to be trained to convey information (4). Given the involvement of nurses in Northern England hospitals in truth disclosing at different care provision stages, communication with patients and their families and unforeseen events provide them with the context to provide appropriate care (15). Despite the key role of disclosing the truth about patient health, this difficult task has rarely been addressed in the literature. Identifying the beliefs and attitudes of patients and their families can help overcome the burden of truth disclosing, assist them in adapting to the status quo and increase the life expectancy of patients. How to convey news also depends on socio-cultural factors. It is

recommended to propose and implement instructions in some countries to facilitate the disclosure of truth be followed in Iran. Extensive research should be conducted in this country to determine the attitudes of patients with incurable diseases and their families, and comprehensive laws should be enacted to help medical staff make appropriate decisions in these cases. The present research was performed in 2018-19 to investigate the attitudes of patients and their families towards the disclosure of truth by medical personnel in the oncology wards of Ardabil hospitals.

## **Materials and Methods**

The present research is a descriptive cross-sectional study. The study population comprised young and pediatric patients admitted to the oncology wards of Imam and Bu-Ali hospitals in Ardabil as well as their families. Eligible candidates were selected using convenience sampling. The inclusion criteria included admission to the oncology ward, willingness to participate, at least 18 years of age, absence of psychological disorders such as psychosis, and appropriate physical status. The exclusion criteria comprised the patient's worsening condition during the study and unwillingness to participate. The sample size was estimated at 196 after performing a pilot study by recruiting 20 patients. Out of 200 patients ultimately selected, four were excluded owing to their deteriorated condition while completing the questionnaire. Sixty-two young patients and 76 family members of the young patients, and 58 family members of pediatric patients completed the questionnaire. The present descriptive cross-sectional study was conducted from December 2018 to April 2019. The data were collected using a two-part questionnaire. The first part included demographic details such as age, gender, type of the disease (acute/chronic), education level, and marital status. In the second part, twenty-eight items on attitude were adopted from a questionnaire

proposed by Managheb et al. (2011). These authors confirmed the validity and reliability of this questionnaire by calculating a Cronbach's alpha of 0.73 at a significance level of 0.0001. This questionnaire was used to evaluate the attitudes of patients and their families toward how truth was disclosed. The items were scored on a five-point Likert scale, including totally agree, agree, no comments, disagree, and totally disagree. The six subscales of this questionnaire included eight items on the suitability of the person, two items on the suitability of the time, three on the suitability of the place for truth disclosure, five on the amount of disclosed information, three on accepting the truth, and seven on the factors affecting the truth disclosure. The reliability of this questionnaire was confirmed by calculating a Cronbach's alpha of 0.71. The willing participants signed informed consent forms. The questionnaire was completed through interviews in case of illiteracy of the subject.

### Statistical analysis

To analyze the scores and relationships of the variables, the collected data were analyzed in SPSS-23.0 using descriptive statistics, i.e., frequency and mean± standard deviation. Non-parametric tests such as the Kruskal-Wallis and Mann-Whitney U tests were employed to analyze attitude scores and their relationships with the variables. One-way ANOVA was also performed to analyze the total score of attitude.

### Ethical considerations

The Ethics Committee approved of Ardabil University of Medical Sciences the present study (IR.ARUMS.REC.1397.079).

### Results

Out of the 196 participants, 62 were patients, and the rest were family members. The mean age of the participants was 37.29 years, and the majority of them were 32-42 years old. Table I details the demographic

information of the participants. One-way ANOVA revealed no significant differences in the total score of attitude between the groups ( $P=0.23$ ). No significant differences were also observed between the three groups in terms of the scores of appropriate place ( $P=0.21$ ), appropriate person ( $P=0.39$ ), amount of disclosed provided ( $P=0.78$ ), and acceptance of truth ( $P=0.76$ ). Attitude differences were, however, observed between the three groups in terms of suitability of the time ( $P=0.017$ ) and factors affecting the truth disclosure ( $p=0.007$ ) (Table II). Comparing the total attitude score with the demographic variables showed that the main demographic characteristics of the participants included employment (Mann-Whitney,  $P=0.03$ ) and acuteness of the disease (Mann-Whitney,  $p=0.047$ ). In fact, the total attitude score decreased with employment and increased with the acuteness of the disease. In all the participants, age, male sex, and house ownership improved their attitude, whereas education was mostly related to bad attitudes in specific dimensions. Significant relationships were found between age and truth acceptance (Kruskal-Wallis,  $P=0.045$ ), male gender and place of truth disclosure (Mann-Whitney,  $P=0.004$ ) and also amount of disclosed information ( $P=0.043$ ), house ownership, and truth acceptance (Mann-Whitney,  $P=0.002$ ). These characteristics, therefore, improved the attitude in the cited dimensions, whereas education (Kruskal-Wallis) was negatively related to the suitability of the person ( $P=0.036$ ) and factors affecting the truth disclosure ( $P=0.015$ ). Comparing the three groups found employment of the family members of the children to ease truth acceptance (Mann-Whitney,  $P=0.04$ ). Table III compares certain attitude dimensions with demographic characteristics.

Table I: Frequency distribution of the demographic characteristics of the participants

Variable	Frequency	Variable	Frequency
<b>Age (year)</b>		<b>Education</b>	
<b>20-30</b>	27	Illiterate	32
<b>31-40</b>	67	Elementary & Junior high school	97
<b>41-50</b>	56	High school diploma & Associate diploma	52
<b>51-60</b>	24	Bachelor's and Master's degrees	14
<b>61-70</b>	18	PhD	1
<b>71-80</b>	4		
<b>sex</b>		<b>Occupational status</b>	
<b>Female</b>	126	employed	44
<b>Male</b>	70	Unemployed & Housewife	152
<b>Marital status</b>		<b>Residential status</b>	
<b>Married</b>	186	Homeowner	147
<b>Single &amp; Widowed</b>	10	Tenant	49
<b>Income level</b>		<b>Type of the disease</b>	
<b>Low</b>	59	Acute	39
<b>Moderate</b>	116	Chronic	157
<b>High</b>	21		

Table II: The result of attitude differences and the average of total attitude scores in three groups

Attitude score in different dimensions	Suitability of the person	Suitability of the time	Suitability of the place	Amount of information	Acceptance of truth bad news	Factors affecting truth disclosure	Total attitude score
Total score Form completing group	Out of 40	Out of 10	Out of 15	Out of 25	Out of 15	Out of 35	Out of 140
<b>Young patients</b>	31.2	8.8	13.6	21.6	11.4	31	118
<b>Family members of young patients</b>	26.5	8.57	14.85	21.28	11	30.28	112.5
<b>Family members of paediatric patients</b>	30	9.1	14.2	21.8	10.8	28.2	114
<b>Average in all the groups</b>	29.4	8.92	14.29	21.62	10.96	29.4	114
<b>Significance of differences in attitudes between the three groups</b>	none	Family members of children were better (one-way ANOVA, 0.017)	none	none	none	Family member of children were worse (one-way ANOVA, 0.007)	

*Table III: Comparing attitude of young patients, families of pediatric patients and family of young patients with demographic characteristics.*

Group	Demographic characteristic	Attitude	P
<b>All the patients &amp; family members</b>	Age↑	Truth acceptance ↑	0.045
	Male gender	Place of truth disclosure ↑	0.004
	Male gender	Amount of disclosed information↑	0.043
	Education↑	Person for truth disclosure↓	0.036
		Factors affecting the truth disclosure ↓	0.015
	Employment	Total attitude score in truth disclosure ↓	0.03
		Person for truth disclosure ↓	0.002
	House ownership	Truth acceptance ↑	0.002
<b>Young patients</b>	Acuteness of the disease	Total attitude score in truth disclosure ↑	0.047
	Female gender	Place of truth disclosure ↓	0.046
<b>Family member of young patients</b>	House ownership	Time of truth disclosure ↑	0.02
	Education↑	Person for truth disclosure ↓	0.009
	Income↑	Time of truth disclosure ↑	0.046
	House ownership	Place of truth disclosure ↑	0.043
		Amount of disclosed information↑	0.043
	Acuteness of the disease	Amount of disclosed information↑	0.033
<b>Family members of paediatric patients</b>	Employment	Truth acceptance ↑	0.04

## Discussion

The present study was conducted to investigate patients' attitudes with cancer and their families towards truth disclosure. The mean age of the participants was 37.29 years, 39% had an undergraduate level of education, 20% were employed, the rest were housewives and unemployed, and 36% were male. Significant differences were observed in terms of two dimensions of attitude between the family members of the children with cancer and the young patients and their family members. There were some differences in groups in comparison with certain demographic variables.

Family members of the pediatric patients differed from the young patients and their

family members in terms of the time and the factors affecting the truth disclosure. The analyses showed positive attitudes toward the time of truth disclosure in the family members of the pediatric patients with cancer. They were insensitive to be informed about the truth at any stage of their child's disease, and it did not matter to them if truth disclosing coincided with teaching medical students. Fujimori et al. found Japanese patients not to care about disclosure of truth in the presence of healthcare staff other than their doctor (16). Poor attitudes were observed in the family members of the pediatric patients in terms of the effective factors, which suggest the role of psychological factors in conveying information. In other words, the socio-

economic background of the recipient should be considered when conveying information to them. Truth should also be conveyed to these family members while avoiding disturbing their psychological status. Jooybari et al. reported that nurses cheered up patients and their families when delivering information (17). Manageb et al. also reported the need for psychiatric and religious counselors when truth disclosing to patients (10).

The present study found employment and acuteness of the disease to constitute effective demographic factors in the total attitude score. The total attitude score decreased with employment, and the employed subjects were pessimistic about the disease and its prognosis as they were in the community and more aware than unemployed individuals. Truth should be therefore disclosed to these individuals more cautiously. Employment (39%), internet access (68%), and education level (68%) were positively associated with information about the onset of the disease (18). In contrast to young patients and their families, a higher attitude toward truth acceptance was observed in employed subjects in the family of pediatric patients, suggesting that unemployed ones got into trouble with the disease. Ehsaniet al. found 12 out of 20 participants to be retired, housewives, or unemployed (8). Given the moderate levels of employment in Iran, diseases are mostly reported in the middle-income stratum, and psychological tolerance of truth is low in these individuals. Mostafavian et al. reported at least 12 years of education in over 70% of mothers and an employed status in almost 80%, suggesting the tendency to be comprehensively informed about their children's disease in their majority (19).

As another demographic characteristic, the acuteness of the disease improved the attitude of the participants. In fact, better attitudes compared to the total attitude score were observed in the family members of the patients with acute diseases,

especially in the amount of information disclosed while truth disclosing.

In line with the present research, a study by Hoof et al. found 11 out of 12 Swedish patients receiving information about the acuteness of their disease to be surprised and require further information (20). Similarly, Fujimori et al. found patients with acute diseases require more information about their disease than those with chronic or recurrent diseases (16). In other words, patients require further information when truth disclosing for the first time or in the early stages of their disease. In chronic conditions, patients and their families reported poor prognosis of the illness and found patients to be hospitalized repeatedly. Therefore, they were exhausted and frustrated and got are no longer curious about new information. Had the patients and their families been well informed about the prognosis from the very beginning, they could have been more properly prepared for receiving information about the disease. Mori et al. investigated patients with incurable recurrent breast cancer. These patients discussed prognosis with their oncologist, and 27% believed that physicians should be encouraged to respect their inclination, and 55% expected their physician to talk about their prognosis (14) explicitly. Fujimori found the tendency to receive information about their life expectancy in 50% of 529 patients, whereas 30% preferred not to acquire this information (16).

The present research found age, sex, and house ownership to positively affect attitude. Positive attitudes were found in all the patients and their families when they accepted truth acceptance. High morale and curiosity in the young and their role and career caused them and their families to need more information and assistance when receiving bad news. Rassin found truth disclosing to old patients easier than telling it to young ones (21). Similarly, FujiMori et al. found young patients more likely than old ones to ask questions (16).

In contrast, Laxmi found age ineffective in the need for information in an Indian population (22), and Richter et al. reported no differences between young and middle-aged patients in the face of bad news (23). The present study reported a poor attitude toward delivering bad news in the female patients as the majority. They were, therefore, more sensitive to the place of truth disclosure and preferred private and quiet places.

In line with the present research and similar studies, nurses in a study by Sereshti et al. argued that a private room in the absence of their infants is required to disclose the truth to mothers, empathize with them, and help them divulge their anger (24)(10,19, 21). FujiMori et al. also found women constituting 49% of the participants, to be more sensitive than men in this regard (16). Therefore, the location and privacy matter when truth disclosing to female patients as they prefer not to receive information in every place.

This study found a better attitude toward truth disclosure in the families of adult patients living in privately-owned houses. The family's income level was positively associated with the attitude toward truth disclosure, and low income made the families sensitive to truth disclosure. This can be explained by the effect of financial concerns on tolerance in individuals, which makes them unable to endure the shock of truth irrespective of its time and location and requires that they are provided with psychosocial support.

The present study reported negative relationships between education level and the attitude to truth disclosing in the families of adult patients. In other words, the higher their education level, the higher their demand for information about the physiopathology of the disease, which requires more effective communication. A total of 78% of participants in a study by Karimirahjerdi et al. preferred to directly disclose the truth of cancer from the doctor (25). Laxmi and Anjumkhan reported significant and negative relationships

between education level and the need for information about their disease in Indian patients with cancer (22). Research suggests that most nurses believe it is doctors' responsibility to disclose the truth (7, 8, 26). Higher education in nurses improved their understanding and communication skills and thus motivated them to disclose the truth (17, 24). It is worth noting that nurses and physicians must acquire the necessary communication skills in the face of reactions from patients and their families who disclose the truth.

## Conclusion

The present research found the families of the pediatric patients to differ from the adult patients and their families in terms of their attitude to truth disclosure. Given the effect of socio-cultural background on the proper manner of disclosing the truth to patients, it is recommended that medical staff consider patients' socioeconomic status, such as their education and social level, when conveying information. Potential emotional reactions to the disclosure of the truth should also be considered by their families.

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## Conflict of Interest

The authors declare that they have no conflicts of interest.

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