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Attitude about cancer disclosure and quality of life of patients with cancer

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ABSTRACT

Detection of cancer is often equal to facing with a crisis by the patients. Traditionally it is believed that cancer diagnosis should not be told to the patients. The aim of this study was to compare the attitudes towards the disclosure of cancer diagnosis in patients with cancer and control group included healthy people. This cross-sectional study was carried out in 2015 with a total of 531 people. We used three questionnaires to collect data. The first one was EORTC QLQ-C30 to assess quality of life of patients with cancer. The second one included items to assess the patients' willingness for detection of the cancer diagnosis. Finally, the third one was the DUREL to evaluate religiosity. Five hundred and thirty one subjects including 216 patients with cancer and 315 healthy people were studied. Mean age of participants was 44 ± 15.7, 50.5% were female. Overall, 63% of patients with cancer were informed of their disease status and 37% uninformed. A significant association was seen between the awareness of cancer with physical and social functioning of quality of life. There was a positive significant association between the tendency for being informed of the diagnosis and non-organizational religious activity in participants without cancer. Global health status and all dimensions of religious were correlated in patients significantly. We found the majority of subjects tend to be aware of the disclosure of diagnosis. The physical and social functioning of quality of life were better in uninformed patients than informed patients.

Keywords: Attitude, Cancer, Diagnosis disclosure, Religious commitment, Quality of life

INTRODUCTION

Cancer is a leading cause of mortality in human history that accounts for 12% of deaths around the world each year. More than 70% of the cancer related deaths occur in moderate to low income countries. About 11 million people a year are diagnosed with cancer and it is predicted that the new incidences of cancer will reach to 16 million cases by the 2020 with 60% occurring in developing countries [19].

Currently the cancer is a complicated disease, which in many cultures is considered incurable [10]. Cancer is also the issue that is accompanied by concerns about life and death and of course, uncertain future [14]. According to the popular belief that bad news will lead to psychological distress, sadness and anxiety, some families in order to protect the patient, require concealment of medical information and non-disclosure of cancer diagnosis by the physicians [12].

It is believed traditionally that the patient should not be made informed of his/ her cancer. However respect for the autonomy of the patient has gained significant weight in clinical decision making by the last quarter of the century [20]. On the other hand the issue of truthfulness is considered an important issue in physician-patient relationship [2]. Given that the understatement of the information causes legal issues in addition to the ethical aspects, the correct practice in dealing with the problem is highly important especially concerning such diseases as the cancer. Presenting the patient with the required information currently in many societies is considered an undisputed and legal right of the patient. But given the cultural differences in various countries in East and West of the world, how to present facts about the disease, especially when patients with serious and life-threatening complications, the subject is discussed [23]. Mitchell et al in their review study documented the differences between the cultures in which disclosure of information on the disease is prevalent like Australia and Northern Europe where openly speaking about the cancer diagnosis is valued and the cultures in which the non-disclosure is common like in Japan and some Eastern and southern European countries. The “individual authority” principle has made telling the truth about the illness to the patient acceptable in western societies, while in the Eastern societies, the principle of "no harm" has priority over the "individual authority" and given the centrality of family in these communities, understatement is something common [3]. One of the variables affecting the disclosure of diagnosis is the family members and relatives [17]. who affect the patient's autonomy and lead the disclosure of the diagnosis towards the family-oriented model for deciding on medical interventions. In addition to cultural differences regarding the attitudes to the diagnosis disclosure policy, the reviews of the awareness of cancer relationship and quality of life in different communities have led to various results [16]. For example, a study conducted on the issue in Japan (where an Eastern culture rules) showed that the prevalence of psychiatric disorders in uninformed patients with cancer compared to informed patients was less [8]. In contrast, investigations on the relationship between the awareness about the advanced cancer diagnosis in UK indicated that such awareness could not by itself bring about depression in the patient; that is, being informed and tendency to awareness of the diagnosis is independent of the Psychological distress [1]. Considering that awareness of the cancer diagnosis constitutes one of factors affecting the quality of life of patients with cancer [12] , the current approach-sharing the truth with the patient- in the Western and Eastern cultures is a controversial issue [23]. In addition to such cultural differences, the physicians and patients' views differ in many cases, so that the whole set of these factors has led to ambiguity in terms of truthfulness towards the patients. Considering the challenges set forth above, the present paper is aimed at examining the attitudes of a number of patients in relation to awareness of the cancer diagnosis compared with control group as well as the factors effective in the patients' attitudes.

Facing with the diagnosis of cancer is not a rare situation, and despite significant progress in the treatment of cancer, still it is accompanied with the concept of death [18]. Facing death will entail the outbreak of a terrible shock for people, especially for cancer diagnosis, and more specifically if the affected is young and active, or for any reason he is not prepared mentally to face with it [6]. Given the importance of the issue and understanding the effective factors, it would be possible to plan adequate policies for improving the service delivery and enhancing the quality of life of the cancer patients. The aim of current study was to compare the attitudes towards the disclosure of cancer diagnosis in patients with cancer (informed and uninformed subgroups) and control group included healthy people.

MATERIALS AND METHODS

Setting and sample

Using a cross sectional study data of the attitudes towards the disclosure of cancer diagnosis among without cancer people and patients with cancer was gathered between June and Sep 2015. Two hundred and sixteen inpatients admitted to oncology department of Firoozgar hospital or outpatients clinic of oncology were selected using a convenience sampling method. We also selected 216 subjects without cancer and 99 physician from the same hospital as a control group. The patients with cancer were divided into two groups of the informed and uninformed patients concerning their cancer diagnosis. The majority of subjects in control group were patients accompanies. The inclusion criteria included any patients with cancer, over 18 years of age, lack of psychiatric disorders and

willingness to cooperate. The inclusion criteria for control group was the same as cases just for having cancer. Participants who did not complete their questionnaire for any reason were excluded. Data on demographic characteristics (age, gender, educational status, marital status and occupation), the quality of life, the religious index and clinical data consisting of type of cancer were extracted from case records. All interviews were carried out with patients' permissions.

Measures

Three questionnaires were used to collect data. The first questionnaire was the willingness of patient. The second questionnaire was EORTC QLQ-C30 (life quality questionnaire). The third questionnaire was the duke university religion index (DUREL). In using the above questionnaires, the EORTC questionnaire was used to collect data from patients with cancer (cases) and the two others (Duke University religion index and patient Tendency survey questionnaire), were offered the without cancerous group. Before asking any questions, the patients were given information about the study, and their consent was obtained.

Willingness of Patient

The first questionnaire used in this study was Willingness of Patient questionnaire. The Persian version of willingness of patient questionnaire, was used in the study. This questionnaire contains 17 questions, which was divided into two categories. First category consists of 7 questions. In which patients were asked demographic information. The second category consists of 10 questions is another, that willingness of patients to be informed of the diagnosis.

Asked whether participant, ((Are informed of their disease?)), If the answer was positive, second part of the questionnaire was completed.

After obtaining verbal consent was given to the patients, then after it was collected. If overall health was not good and did not want to respond to the questions were not studied. At the end, from 531 participants, 451questionnaires were completed. Because 80 participants were uninformed of their condition, they were excluded from this part of the study. A questionnaire was prepared according to previous studies, and its validity was confirmed in Lashkarizadeh et al. studies [12] by content validity.

EORTC QLQ-C30

The second questionnaire was EORTC QLQ-C30 (life quality questionnaire) issued by European organization for research and treatment of cancer, used to investigate the quality of life of cancer patients. The EORTC QLQ-C30 is a well-known instrument for measuring quality of life in patients with cancer and contains 30 items that measures five functional scales, global quality of life and several cancer related symptoms. Socio-demographic data included age, sex, marital status, education level, and employment status. Clinical variables included disease stage, weight loss, nature and schedule of treatment and ratings.

The QLQ-C30 is composed of both multi-item scales and single-item measures. These include five functional scales, three symptom scales, a global health status / QOL scale, and six single items. Each of the multi-item scales includes a different set of items - no item occurs in more than one scale.

All of the scales and single-item measures range in score from 0 to 100. A high scale score represents a higher response level. Thus a high score for a functional scale represents a high / healthy level of functioning, a high score for the global health status / QOL represents a high QOL, but a high score for a symptom scale / item represents a high level of symptomatology / problems [5]. This questionnaire is translated and validated in Persian by Montazeri et al. and the Cronbach`s alpha for multi-item scales ranged from 0.48 (social functioning) to 0.95 (global quality of life) at pre-diagnosis and from 0.51 (cognitive functioning) to 0.98 (global quality of life) at follow-up assessments Persians version [15]. This questionnaire was completed for 216 patients with cancer.

Duke University Religion Index

The third questionnaire, Duke University Religion Index (DUREL) was developed in English by Koenig et al [11]. This is a 5-item questionnaire that consists of 3 parts. The first part is a one-item measure of organizational religiosity that assesses frequency of attendance at religious meetings. The second part includes a single question that assesses non-organizational or private religiosity. The last part includes 3 items assessing intrinsic religiosity, which assesses religious beliefs and experiences. The score of each part should be calculated separately, and

computing a total score is not recommended. This questionnaire was completed for all participant.This questionnaire is translated and validated in Persian by Saffari, et al [21]. The Cronbach`s alpha reported by Saffari, et al. was between 0.86 to 0.92 for the Persians version. The Persian version of DUREL was used in the study.

Statistical analysis

In Willingness questionnaire, information gathered by the questionnaire might be divided into two groups: 1) demographic information, 2) information regarding attitudes toward the disclosure of the diagnosis to patients with terminal illness. The method of scoring for each question was to determine the frequency.

In accordance with procedures recommended by the EORTC, score were linearly converted to a scale ranging from 0 and 100 for each patient. For the functional and global quality of life scales, higher scores represent a better level of functioning. For the symptoms scales, higher scores represent worse conditions.

In accordance DUREL scoring, the score of each part should be calculated separately, and computing a total score is not recommended. This scale is a well-known and widely used religiosity scale with strong psychometric properties across medical and community samples.

Descriptive statistics are reported as mean ± SD for continuous, and frequency (%) for categorical variables. Normality of data were examined by Kolmogorov –Smirnov test. The test results show that data distribution for demographic variables were abnormal.

Continuous and categorical variables were compared between cases and controls, measured factors and outcome, using nonparametric (Mann–Whitney U test and Spearman's rank correlation coefficient) statistics. The level of significant was considered at 0.05. Data was described and analyzed by SPSS version 20.

RESULTS

The socio-demographic and individual characteristics of the study sample are shown in Table 1. Overall, 531 people, included 216 (40.7%) patients with cancer (136 informed and 80 uninformed about their cancer) and 315 (59.3%) subjects as control group were entered into the study.

The mean age of patients with cancer was 50.6 (SD=15.4) years; most were married (88.4%), and have illiterate level of education (28.2%). Fifty five point six percent of the patients with cancer were female and 44.4 % were male, also the highest patients were unemployed (48.2%). Sixty three percent of patients with cancer, were informed of their disease status and 37% uninformed. The most common cancers were gastrointestinal (74 patients, 34.3%) and others were as follows: Breast (29 patients, 13.4%), Hematologic (21 patients, 9.7%), lymphoma (19 patients, 7.8%), lung (16 patients, 7.4%), Ovarian (10 patients, 4.6%) and other type cancer (44 patients, 21.8%). Willingness questionnaire was completed for 451 subjects (except for 80 uninformed patients with cancer). Overall, 88.7 % (400 participant) tend to be informed of the disease by a physician as having cancer, and 11.3 % (51 participant) had no desire to know the course of the disease. Ninety four point nine percent (428 participant) of the understudy samples tend to be informed of the disease progress course, and 5.1% (23 participant) had no desire to know the progress course of the disease. Ninety five point three percent (430 participant) of the understudy samples tended to be informed of the side effects of cancer treatment, and 4.7% (21 participant) did not feel a need to be informed of the treatment side effects.

The result shows that between tendency for awareness of cancer diagnosis and the residential place, marital status and employment status of the patients with cancer is no significant statistical relationship, in informed patients with cancer. The average age of the participant unwilling to know about their cancer diagnosis was significantly more than the participant willing to know about their own cancer diagnosis (P=0.023). No statistically significant relationship was seen between the tendency for awareness of cancer disclosure and the gender of patients with cancer (P=0.912). A significant relationship was seen between the tendency for awareness of cancer disclosure and the education level of patients with cancer (P=0.013). Comparison of willingness and unwillingness of cancer disclosure among the informed and uninformed patients with cancer was 80.88% and 19.12% respectively (P<0.001).

Overall, the tendency for awareness of cancer diagnosis among the all people understudy was, 88.7% (400 participant) and without cancer participants, was 92% (290 participant).

Comparison of life quality scores in two willing and unwilling informed patients with cancer groups showed that, not significant statistical relationship (P>0.05) was observed between the attitude towards being informed of the cancer diagnosis (Table 2).

The Comparison of the mean and standard deviation of the different dimensions of life quality scores shows in two informed and uninformed patients with cancer groups. There was a significant statistical relationship between the awareness of cancer diagnosis and their quality of life score in terms of physical and social functioning (P<0.001). There was no significant statistical relationship between awareness of cancer diagnosis among the understudy patients and their quality of life score in the role functioning, emotional functioning, cognitive functioning and global health status (P>0.05).

Table 4 shows, the relationship between religious dimensions scores and tendency for being informed of the diagnosis in control group. A statistically significant relationship was observed between, the tendency for being informed of the diagnosis in without patient, and the non-organizational religious activity (P=0.047). The average scores of organizational religious activity, intrinsic religiosity and total religion among the participants willing to be informed of their cancer diagnosis and unwilling samples showed, no significant difference (P>0.05). No statistically significant relationship was seen between religious dimensions among the informed patients and uninformed patients (P>0.05). Also the average scores of religious dimensions among patients with willingness to disclose cancer and patients with unwillingness to disclose cancer showed, no significant difference (P>0.05).
Spearman's rank correlation coefficient between religious and life quality dimensions on the patients with cancer showed that a significant positive correlation was between global health status and all religious dimensions (organizational religious activity (0.53=r), non-organizational religious activity (0.56=r), intrinsic religiosity (0.50=r) and total religiosity score (0.65=r)) and functional scales (role functioning (0.59=r), physical functioning (0.62=r), emotional functioning (0.73=r),cognitive functioning (0.68=r), social functioning (0.64=r)) and a significant negative correlation was between global health status and symptom scales (fatigue (-0.66=r), nausea and vomiting (-0.56=r), pain (-0.26=r)) the understudy cancer patients.

DISCUSSION

From among the patients with cancer demographic data, only the education level and the age were significant with willingness to disclose, so that with the increase in the level of education the tendency to disclose the cancer was increased. Also the average age (50.2 years) of the patients who were willing to divulge the cancer diagnosis was less than that of those reluctant to disclose such information about themselves (age= 58.6 years); this finding was contrary to Lashkarizadeh et al. findings (4). Such differences could have arisen from the differences in the residential place and the life style of the participants in the study. One other result of this study was that 93.4% patients with cancer and 95.5% of controls had a desire to know about the progress and symptoms of the disease, and preferred to be informed of their diagnosis in their presence.

Most participant (88.7%) preferred to immediately, be informed of the cancer diagnosis, which is similar to the results achieved in China [9] and Korea [13]. Compare the results of this study with the results of similar studies shows that in Iran, the doctors' willingness to tell the truth is on the rise[22]. Other variable effective in the patients' awareness is the relatives that can affect the patients' willingness, leading the physician's decision making towards the family-oriented model [17]. Findings of the study showed that most patients (80.8%) tended to be informed of their diagnosis, which was consistent with the findings of the studies previously conducted in Iran [12]. (4), Butow et al. [4], UK[7], South Korea[4], China [9], Saudi Arabia [13] and Nepal [8]. So it can be assumed that most patients with cancer have a positive attitude towards the disclosure of cancer diagnosis. Similarly, the majority of without cancer samples (92%) were willing to disclose the cancer diagnosis which was similar to the studies carried out in the USA and contrary to the existing statistics in Japan [17]. Probably Social differences and the dominance of Western culture in the society can explain these results.

The comparison of patients and controls (in willingness to diagnosis disclosure) showed a significant difference between the two groups (p<0.001). It seems like that this difference suggests the cancer as an independent variable in the level of desire to disclose the diagnosis of cancer, and that the individuals' attitude before being affected by the cancer cannot be considered a criterion for deciding on the disclosure of information regarding cancer in patients.

Comparison of life quality scores in two willing and unwilling informed patients with cancer groups showed that, no significant statistical relationship was observed between the attitude towards being informed of the cancer diagnosis in the informed patients and their quality of life score.

Comparison of the mean and standard deviation of the different dimensions of life quality scores in two informed and uninformed patients with cancer groups showed, from among the quality of life dimensions, there were a significant differences between the physical and social performances among the two groups of informed and uninformed patients, so that the average physical and social performances of the uninformed group was more than that of the patients group which was consistent with Tavoli and Lheureux study results [13,23]. These researchers had revealed that the physical, functional, emotional and social performances of the patient will drop by the patient being informed of his/her cancer diagnosis. The argument of the above researchers in relation to the functional performance drop was the patient's hospitalization after the diagnosis and the following limited daily works and activities.

The results showed, variable on the global health status, quality of life, between informed and uninformed patients concerning, not major difference.

The average scores of religious dimensions among patients with willingness to disclose cancer and patients with unwillingness to disclose cancer, showed no significant difference. A statistically significant relationship was observed between, the tendency for being informed of the diagnosis in without patients samples and the non-organizational religious activity. Hence it can be said that religious commitment improves the quality of life of people with cancer.

Table 1. Socio-demographic and individual characteristics of the study sample

Characteristics	All people (n=531)		All Patient (n=216)		Patients with cancer			
					Informed patients (n=136)		Uninformed Patients (n=80)	
	n	%	n	%	n	%	n	%
Gender								
Female	268	50.5	120	55.6	75	54.6	45	56.3
Male	263	49.5	96	44.4	61	45.4	35	43.8
Total	531		216				80	
Educational level								
Illiterate	72	13.6	61	28.2	38	34.9	23	28.8
Primary	39	7.3	35	16.2	22	17.35	13	16.3
Middle School	54	10.2	26	12	16	8.7	10	12.5
High school	133	25	55	25	36	26.6	19	23.8
University/college	233	43	39	18.1	24	12.4	15	18.8
Marital status								
Single	117	22	25	11.6	17	12.1	8	10
Married	414	78	191	88.4	119	87.9	72	90
Employment status								
Employed	146	27.5	51	23.6	33	20.9	18	22.5
Unemployed	159	29.9	104	48.2	62	47.25	42	52.5
Physician	99	18.6	-		0	0	0	
Other	127	23.9	61	28.2	41	31.85	20	25
Place of residence								
Tehran	353	66.5	99	45.8	66	46.15	33	41
City	153	28.8	104	48.1	61	49.85	43	54
Rural	25	4.7	13	6	49	4	4	5
Age Mean (SD) Range	44 (15.7) 19-93		50.6 (15.4) 20-93		51.7 (16.7) 20-93		48.6 (12.9) 22-80	

Spearman’s rank correlation coefficient between religious and life quality dimensions on the patients with cancer showed that a significant positive correlation was between all the studied variables in terms of religious dimensions, global health status and functional scales the understudy cancer patients. Also a signification negative correlation was between symptom scales with religious dimensions, global health status and functional scales. On the other hand a significant positive correlation was between global health status, all the studied terms religious dimensions, and functional scales (role, physical, emotional, cognitive, social functioning) and a significant negative correlation

was between global health status and symptom scales (fatigue, nausea and vomiting, pain) the understudy patients with cancer.

Table 2. Comparison of the different dimensions of life quality scores in two willing and unwilling informed patients with cancer based on EORTC QLQ-C30 scale (n=136)

Variables	Patients with willingness to disclose cancer	Patients with unwillingness to disclose cancer	*P. Value*
	Mean (SD)	Mean (SD)	
Functioning			
Role functioning	63.26 (14.45)	61.33 (14.02)	0.479
Physical functioning	59.09 (14.28)	56.26 (13.61)	0.857
Emotional functioning	64.20 (15.55)	66.66 (16.83)	0.448
Cognitive functioning	80.74 (18.34)	79.33 (21.12)	0.993
Social functioning	73.62 (16.75)	75.33 (19.31)	0.396
Global health status	60.84 (15.07)	62.2 (17.02)	0.465
Symptoms			
Fatigue	28.6 (18.17)	30.66 (21.58)	0.626
Nausea and vomiting	10.84 (15.60)	12.00 (20.13)	0.858
Pain	29.28 (16.41)	25.3 (12.83)	0.1

Table 3. Comparison of the different dimensions of life quality scores between informed and uninformed patients with cancer based on EORTC QLQ-C30 scale (n=216)

Variables	Informed patients	Uninformed Patients	*P. Value*
	Mean (SD)	Mean (SD)	
Functioning			
Role functioning	62.9 (14.37)	60.6 (16.82)	0.482
Physical functioning	58.4 (14.14)	72.3 (16.44)	<0.001
Emotional functioning	64.71 (15.77)	67.8 (13.89)	0.098
Cognitive functioning	80.5 (18.83)	83.1 (20.28)	0.109
Social functioning	73.95 (17.21)	82.08 (19.26)	<0.001
Global health status	61.06 (15.4)	61.87 (17.94)	0.311
Symptoms			
Fatigue	29.08 (18.81)	25 (17.9)	0.095
Nausea and vomiting	11.07 (16.50)	12.1 (18.18)	0.944
pain	29 (15.82)	31.5 (21.87)	0.9

Table 4. The relationship between religious dimensions scores and tendency for being informed of the diagnosis

a. For being informed of the diagnosis in control group (n=315)			
Variables	Participants with willingness to disclose cancer	Participants with unwillingness to disclose cancer	*P. Value*
	Mean (SD)	Mean (SD)	
Organizational religious activity	3.69 (1.48)	3.16 (1.85)	0.089
Non-Organizational religious activity	3.90 (1.72)	3.12 (1.81)	0.047
Intrinsic religiosity	12.56 (2.32)	11.83 (3.57)	0.729
Total religiosity score	20.21 (4.64)	18.12 (6.27)	0.154
b. For patients with cancer (n=216)			
	Informed patients	Uninformed Patients	
	Mean (SD)	Mean (SD)	
Organizational religious activity	4.58 (1.54)	4.28 (1.81)	0.272
Non-Organizational religious activity	4.75 (1.60)	4.38 (1.93)	0.574
Intrinsic religiosity	14.11 (1.39)	13.43 (2.20)	0.079
Total religiosity score	23.42 (3.72)	22.11 (4.97)	0.105
c. For being informed of the diagnosis in patients with cancer (n=136)			
	Patients with willingness to disclose cancer	Patients with unwillingness to disclose cancer	
	Mean (SD)	Mean (SD)	
Organizational religious activity	4.54 (1.50)	4.76 (1.75)	0.252
Non-Organizational religious activity	4.82 (1.50)	4.42 (1.98)	0.704
Intrinsic religiosity	14.08 (1.40)	14.23 (1.42)	0.436
Total religiosity score	23.42 (3.52)	23.42 (4.57)	0.383

In general the present study indicates that awareness level of patients with cancer has dramatically increased and despite the insistence by the family and relatives, the patients' willingness and awareness concerning the cancer is growing. Moreover, the physicians᾽ attitude also on disclosure of cancer diagnosis is effective in the current status. On the other hand the manner by which the patients are informed of their cancer is effective on the patients' level of quality of life.

Table 5. Spearman's rank correlation coefficient between religious and life quality dimensions on the patients with cancer

Variables	Organizational religious activity	Non-Organizational religious activity	Intrinsic religiosity	Total religiosity	Glob. quality of life	Role fun.	Physical fun.	Emotional fun.	Cognitive fun.	Social fun.	Fatigue	Nausea and vomit.	Pain
Organizational religious activity	1.000	.643**	.514**	.843**	.533**	.318**	.292**	.386**	.330**	.292**	-.295**	-.265**	-.219**
Non-Organizational religious activity	.643**	1.000	.523**	.842**	.561**	.283**	.330**	.384**	.387**	.321**	-.328**	-.319**	-.222**
Intrinsic religiosity	.514**	.523**	1.000	.809**	.509**	.341**	.336**	.399**	.405**	.282**	-.308**	-.237**	-.130
Total religiosity	.843**	.842**	.809**	1.000	.653**	.376**	.376**	.474**	.439**	.352**	-.366**	-.329**	-.229**
Glob. quality of life	.533**	.561**	.509**	.653**	1.000	.590**	.626**	.730**	.685**	.647**	-.665**	-.566**	-.260**
Role fun.	.318**	.283**	.341**	.376**	.590**	1.000	.375**	.513**	.530**	.393**	-.470**	-.376**	-.159*
Physical fun.	.292**	.330**	.336**	.376**	.626**	.375**	1.000	.527**	.530**	.555**	-.532**	-.303**	-.032
Emotional fun.	.386**	.384**	.399**	.474**	.730**	.513**	.527**	1.000	.559**	.514**	-.558**	-.387**	-.102
Cognitive fun.	.330**	.387**	.405**	.439**	.685**	.530**	.530**	.559**	1.000	.540**	-.576**	-.378**	-.184**
Social functioning	.292**	.321**	.282**	.352**	.647**	.393**	.555**	.514**	.540**	1.000	-.580**	-.359**	-.195**
Fatigue	-.295**	-.328**	-.308**	-.366**	-.665**	-.470**	-.532**	-.558**	-.576**	-.580**	1.000	.356**	.123
Naus. and vomit.	-.265**	-.319**	-.237**	-.329**	-.566**	-.376**	-.303**	-.387**	-.378**	-.359**	.356**	1.000	.297**
Pain	-.219**	-.222**	-.130	-.229**	-.260**	-.159*	-.032	-.102	-.184**	-.195**	.123	.297**	1.000

*** Correlation is significant at the 0.01 level. * Correlation is significant at the 0.05 level*

CONCLUSION

The study results showed that there was significant difference between the patients with cancer and without cancer individuals. The age, education and religion were found to be effective factors in the issue of cancer diagnosis disclosure. Also the religion showed significant relationship with the quality of life of the patients with cancer. Since the consideration of the patients' requirements as to the information regarding the disease and treatment is a crucial issue following the sincere disclosure of the information. The more expansive studies will therefore be necessary, so that through investigating the patients', physicians' and the relatives' views on the disclosure of cancer diagnosis and

the factors effective in their attitudes as well as further investigating the diagnosis awareness role on the basis of the cancer type, phase and the patients' quality of life, attempts are made in preparing the disclosure policy bylaw, the physicians are provided with more access to the information.

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