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Research Article

Disclosure of cancer diagnosis to the patient: A cross-sectional assessment of public point-of-view in Saudi Arabia

Abstract

Cancer is still the most difficult diagnosis that the physicians encountered and found themselves facing the issue of announcement and disclosure of a diagnosis for both families and patients.

Aim: The aim of this study is to assess the attitudes of the public people toward the disclosure of cancer diagnosis to patients in Saudi Arabia.

Material and methods: This study was cross-sectional study. The data were collected randomly using simple random sampling method from 510 participants from general population; one tool was used based on the previous studies. It contains two parts; the first was the sociodemographic data of the participants and questions related to cancer information and attitude toward disclosure of cancer diagnosis.

Results: Majority of participants preferred to inform the patients with a rational to help in treatment, also significant correlations were found between the demographic characteristics and various responses of the cancer information.

Conclusion: Majority of participants prefer to inform the patients about cancer diagnosis to help in treatment and prepare their life.

Introduction

Cancer is a stressful and complex term composed of six–letters that commonly arouse vision of disability, despair and death. It is a pervasive cluster of diseases touching the lives of many individuals and families. It can occur in persons of all ages, sexes and all socioeconomic groups, culture and geographic areas. In addition, cancer is the most feared of all disease known to man, regardless of one's intellectual, educational background, or social standard. No other diagnosis is capable of producing the terror–stricken response that cancer evokes. It is the most common death leading disease worldwide, accounting for about 8.8 million deaths in 2015 [1].

Cancer still the most confusing disease till now, beside its tragic meaning and nature to all people, It is still the most difficult diagnosis that the physicians encountered and found themselves facing the issue of announcement and disclosure of a diagnosis for both families and patients [2].

The disclosure of cancer diagnosis and prognosis has an important but still unresolved issue in cancer management

and care in Middle East and other parts of the world. No one can deny that cancer treatment is a complicated expensive, and time –consuming process which necessitates full cooperation between patients, families, physicians, nurses and other health care professionals [3]. In spite of that, families requests for non –disclosure of diagnosis and prognosis to the patient which put the physician in the most contradicting, at the same time the most difficult situation of clear contradiction between what they have learned as the respectable ethics of medicine and what they have and what the public attitude dictates [4].

Many people believe that telling truth about the nature and prognosis of the cancer can result in anxiety and hopelessness in the patients and it will negatively affect the treatment processes and make it more complicated and difficult [5]. Despite of this rational many researches [5,6], and evidence found that lack of information can increase uncertainty, anxiety and dissatisfaction, and good communication has been reported to be associated with better emotional adjustment and higher levels of satisfactions with symptoms management.

There are many researches, concerned with this issue [4-6], which support the right of the patient to disclosure even

with frightening disease like cancer but with the advanced technology in both diagnosis and treatment, there is also scary increasing in cancer prevalence among people, which may affect or change the attitudes of people toward this issue.

In a multi-nationalities country like Saudi Arabia where there are many Non-Saudi who live and work there in many sectors as health care settings like physicians and nurses So, there is a cross cultural differences in many issues one of them is the cancer disclosure to the patients as a basic element of ethics in medicine which is patient's autonomy, the western countries usually accept the concept of disclosure but in eastern countries whether to tell truth to the patient or not represent a dilemma for the health care professional. There are many factors that could affect the principles of autonomy in Saudi country since the relatives of cancer patients want to protect the patients from harmful and bad news and demean the right of patients to know the truth.

During the daily clinic practice, physicians occasionally find themselves confronted with situation of clear contradiction between what they have to do in relation to ethics of medicine and what the public attitudes dictates. In most of this situation the family request for non-disclosure of both diagnosis and prognosis to the patient. So to deal with such attitude physicians and all health care team need to deeply understand the sociocultural back ground.

Therefore, this study was conducted to assess the point of views of public people toward the disclosure of cancer diagnosis to patients in Saudi Arabia.

Aim of the Study

The aim of this study is to assess the point of views of the public people toward the disclosure of cancer diagnosis to patients in Saudi Arabia.

Methodology

This study was designed as cross-sectional study. The data were collected randomly using simple random sampling method from 510 participants from general population aged 20 years and above, According to world metric information the median age of Saudi population in year 2016 - 2017 was 28.6 year [7] and also from both sexes. There was no restriction or exclusion criteria which prevent participant from the involvement in the study except if he had a previous experience with cancer in his social life because there was a possibility that his responses would be affected by his experiences. Willingness to participate in the study was an inevitable.

One tool was used in this study; it was developed by the researchers based on the previous studies and literatures [8-10]. It consisted of two parts, the first was the sociodemographic data of the participants as: age, sex, nationality, occupation, residency & education. The second consisted of nine multiple choices questions related to cancer information and the sources of this information question 1-3 and the attitude of the participants toward cancer disclosure to the patients and the rational for their choices in question 4-9 those questions which formed the used questionnaire were selected because it was more relevant to the research aim.

The questionnaire was concise and contain limited numbers of questions (only 9 questions) to encourage people to participate specially data was collected in a public places and the too long questionnaire usually discourage the participants to participate.

The validity of the questionnaire was tested by having the questionnaire reviewed by a panel of 3 expert in nursing who are holding a PhD in nursing to test the tool for its clarity, organization and relevance.

Pilot study was carried out on 10 participants to test the clarity and relevance of the tool. According to the results of pilot study, necessary modifications in the questionnaire were done and these 10 participants were not added to the actual sample size.

The researcher mailed 305 questionnaires in November 2016 and received 205 with a response rate of 67.2%, and collect 305 questionnaires through direct, individualized interviews with public population in different public places like hypermarkets, Malls, healthy clubs, universities in Riyadh, data collection started November 2016 until January 2017.

Consent was taken from the participant either written or verbal. The purpose of the study was explained to each participant before starting the interview to gain his confidence, cooperation and to alleviate any doubts. The pertinent research and ethical committees and all the legal guardians of the participants approved the study protocol. Either verbally or written permission was obtained from every one before participating in the study. No hazards were present. Participants were assured of confidentiality. Data were only available to the researchers and all participants were informed that they have the right to withdraw from the study at any time.

Data analysis

All responses gathered from the questionnaire were entered utilizing the Statistical Package for Social Science (SPSS) software program. Demographic characteristics were presented in frequencies and percentages (%). Chi-square test was applied for categorical data, while for continuous data, the Pearson-R was applied. One way Anova was applied for both categorical and continuous data determining significant differences.

Demographic data

Table 1 reflects the demographic characteristics of the studied sample consisting of varied profile from a total of 510 invited participants. From among the respondents, a majority (59.6%) are aged 20-29. More than half (57.8%) are females. Almost all (83.7%) are of Saudi nationality. Nearly half (40.8%) from among the participants are students. Most of the respondents (74.3%) have a higher educational level. A larger number (89.2%) resides in the rural area.

Cancer information

The responses of the participants regarding various questions on cancer information are shown in table 2. A majority (86.5%) affirmed to have information about cancer. Greatly

(58.6%) from media sources. Furthermore, nearly one hundred percent of the participants believe that it is possible to recover from cancer (93.3%). A significant number (82.5%) prefers that the patient is told about the disease. Reflecting that nearly half (37.8%) believes this will help in the course of treatment. Whereas, a lesser number (16.9%) of the participants have a negative response on disclosure. Only a total of 83 from 510 (16.3%) of the respondents reasoned disclosure is not preferred because knowing the truth has a negative effect. More than half (51.6%) expressed that fear is the hardest. Moreover, almost all (82.2%) confirmed that indeed faith plays a role in accepting the disease. The most common reaction when hearing the truth about cancer is fear, representing 405 (79.4%) responses from 510 participants. In addition, it is revealed that support of friends and family, relation between physician and family, relation between patient and nursing staff, faith, quality of treatment and knowing that the patient will be cured is important and helpful in accepting cancer as a disease (32.4%). Nearly 100 % of the responses revealed that it is necessary to give patients information about their illness and the results of tests and treatment (87.8%). Almost all (90.6%) expressed that it is easier to deal with the patients if they know about the disease.

Correlation analysis between demographic characteristics and respondents choices

As shown in table 3, using both statistical treatment, the correlation matrix reflects the significant relationship between the demographic characteristics and the responses the participants selected. Disparity is seen in the chosen responses among the majority of the respondents when compared to their

Table 1: Demographic characteristics of study sample.

Characteristics	Frequencies N = 510	
	No.	%
Age Group		
20-29	304	59.6
30-39	134	26.3
40-49	50	9.8
50 and more	19	3.7
No answer	3	.6
Sex		
Male	215	42.2
Female	295	57.8
Nationality		
Saudi	427	83.7
Other	83	16.3
Employment Status of the Respondents		
Governmental	136	26.7
Private	74	14.5
Retired	10	2.0
Student	208	40.8
Not Working	78	15.3
No Answer	4	.8
Education		
Illiterate	2	.4
Read and write	7	1.4
Primary/intermediate	9	1.8
Secondary	113	22.2
University/higher	379	74.3
Residency		
Rural	455	89.2
Urban	55	10.8

Table 2: Cancer Information.

No.	Items		Frequencies N = 510	
			No	%
1	Respondents have information about cancer			
		yes	441	86.5
		no	69	13.5
	Sources of information			
		media	299	58.6
		physician	56	11.0
		nurse	13	2.5
		personal experience	108	21.2
		No Answer	34	6.7
2	Possible to recover from cancer			
		yes	476	93.3
		no	29	5.7
		No Answer	5	1.0
3	Preferred that the patient be told about the cancer			
		yes	421	82.5
		no	86	16.9
	Rationale			
		to better organize his life	142	27.8
		to help the course of treatment	193	37.8
		to improve the relationship with family	14	2.7
		to avoid living in illusion	3+	5.9
		to obtain several medical opinions	38	7.5
4	The hardest for cancer disease			
		pain	176	34.5
		fear	263	51.6
		pity of others	68	13.3
		No Answer	3	.6
5	Faith plays a role in accepting the disease			
		yes	419	82.2
		no	32	6.3
		Don't know	57	11.2
		No Answer	2	.4
6	Most common reactions when hearing the truth			
		anger	25	4.9
		fear	405	79.4
		perplexity	53	10.4
		acceptance	24	4.7
7	Factors important and helpful to accept the disease			
		support of friends and family	40	8.0
		relation between physician and family	26	5.1
		relation between patient and nursing staff	23	4.5
		faith	49	9.6
		quality of treatment	8	1.6
		knowing that the patient will be cured	126	24.7
		all of the above	165	32.4
8	Necessary to give patients information about their illness and the results of tests and treatment			
		yes	448	87.8
		no	33	6.5
		Don't know	25	4.9
		No Answer	4	.8
9	Easier to deal with patients who know or who do not know about their disease			
		Know	462	90.6
		does not know	45	8.8
		No Answer	3	.6

individual demographic characteristics. There was a significant correlation between age and the responses on the possibility to recover from cancer (p =.146), preference to tell the patient about cancer (p=.102), opinion on what is the hardest for a cancer patient (p=.152) and religious faith playing a role in accepting the disease (p=.120).

However, responses differed when compared with sex characteristics. Statements on the possibility of recovering from cancer (p=.159), opinion on what is the hardest for a cancer patient (p= 121) and religious faith playing a role in accepting the disease (p=.136) are significantly related to the sex characteristics of the respondents. Moreover, demographic predictor specific to nationality of the participants revealed a significant relationship on the responses pertaining to rationale on negative preference to tell the patient he has cancer (p=.541) and the opinion on the most common reaction of the patient when hearing the truth (p=.114).

Meanwhile, employment status presents a correlation on the affirmation that information from cancer are sourced from the media (p=.106) and that it is easier to deal with patients who know about their disease (p=.135) In addition, there was a significant relationship between the educational level and the chosen responses on what is the hardest for a cancer patient (p=.156) and religious faith playing a role in accepting the disease (p=.226) Furthermore, the place of residency of the participants shows that correlation that is significant in reference to their choices are on the possibility of recovering from cancer (p=.155), what is the common reaction of the patient when hearing the truth (p=-098) and that it is necessary to give patients information about their illness and the results of tests and treatment (p=.149).

Differences between responses according to their profile

Table 4 reflects the differences between responses according to the demographic characteristics of the studied sample. These results were taken using one way Anova. There are distinct differences in some of the responses between groups according to their demographic profile.

In the age characteristics, significant differences are found. The younger adults (20-29 years old) prefers to tell the patient about cancer (f= 6.578, p=.002),affirms that fear is hardest for cancer disease (f=4.957,p=.007), that indeed faith plays a role (f =4.746, p=.000) and that support of friends and family, relations between physician and family, relations between patient and nursing staff, faith, quality of treatment, knowing that the patient will be cured are factors that are important and helpful to accept the disease (f = 8.900, p=.009) as compared to their older counterparts.

Table 3: Correlation Matrix of demographic characteristics of the studied group and their choices.

No.			Age		Sex		Nationality		Employment Status		Education		Residency	
			Computed R value	Slg	Computed R value	Slg	Computed R value	Slg	Computed R value	Slg	Computed R value	Slg	Computed R value	Slg
1	Respondents have information about cancer		.020	.648	.070	.116	.051	.251	.083	.063	.022	.622	.081	.067
		Yes, from whom did it come	.071	.123	.015	.751	.037	.423	.106*	020	.056	.218	.060	.186
2	Possible to recover from cancer		.146**	.001	.159**	.000	.002	.964	.007	.871	.070	.116	.155**	.000
3	Preferred that the patient be told about the cancer		.102*	.021	.042	.349	.056	.209	.022	.625	.063	.154	.056	.205
		Yes, why	Did not Compute as there are response with multiple choices											
		No, why	.033	.737	.177	.070	.541**	.000	.067	.500	.047	.635	.087	.378
4	The hardest for cancer disease		.152**	.001	.121**	.006	.067	.134	.055	.217	.156**	.000	.073	.100
5	Faith plays a role		.120**	.007	.136**	.002	.009	.845	.037	404	.226**	.000	.044	.317
6	Most common reactions when hearing the truth		.077	.082	.007	.873	.114*	.010	.074	.099	.025	.579	.098*	.028
7	Factors important and helpful to accept the disease		Did not Compute as there are response with multiple choices											
8	Necessary to give patients information about their illness and the results of tests and treatment		.061	.171	.053	.231	.049	.273	.053	.231	.024	.596	.149**	.001
9	Easier to deal with patients who know or who do not know about their disease		.036	.421	.042	.347	.028	.533	.135**	.002	.058	.189	.061	.173

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Table 4: Differences between Responses According to their Profile.

No.			Age		Sex		Nationality		Employment Status		Education		Residency	
			F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.	F	Sig.
1	Respondents have information about cancer		**1.257**	**.285**	**1.257**	**.285**	**.683**	**.505**	**2.383**	**.051**	**.841**	**.499**	**1.732**	**.178**
		Yes, from whom did it come	.325	.723	.325	.723	.338	.713	2.140	.075	.551	.699	.896	.409
2	Possible to recover from cancer		**6.578***	**.002**	**6.578***	**.002**	.063	.939	**5.308***	**.000**	.888	.471	**7.756**	**.000**
3	Preferred that the patient be told about the cancer													
		Yes, why	.486	.615	.486	.615	.814	.444	.938	.442	2.205	.067	1.289	.276
		No, why	3.348	.070	3.348	.007	**43.004***	**.000**	1.384	.245	1.182	.320	.705	.378
4	The hardest for cancer disease		**4.957***	**.007**	**4.957***	**.007**	1.122	.326	**3.229***	**.012**	**3.263***	**.012**	1.533	.217
5	Faith plays a role		**4.746***	**.009**	**4.746***	**.009**	1.223	.295	.771	.544	**8.708***	**.000**	.902	.406
6	Most common reactions when hearing the truth		1.743	.176	1.743	.176	**4.614***	**.010**	**3.315***	**.011**	**2.589***	**.036**	3.004	.050
7	Factors important and helpful to accept the disease		**8.900***	**.000**	**8.900***	**.000**	1.765	.172	**8.151***	**.000**	**3.781***	**.005**	**12.429**	**.001**
8	Necessary to give patients information about their illness and the results of tests and treatment		**5.832***	**.003**	**5.832***	**.003**	.606	.546	1.121	.346	**5.138***	**.000**	**7.506**	**.001**
9	Easier to deal with patients who know or who do not know about their disease		.461	.631	**.461***	**.631**	2.099	.124	**3.127***	**.015**	.589	.671	**.959**	**.384**

Meanwhile, in relation to the sex profile, the females believes that there is a possibility to recover from cancer (f = 6.578, p=.002), fear is the hardest for cancer (f = 4.957, p=.007), faith plays a role (4.746, p =.009), Support of friends and family, relations between physician and family, relations between patient and nursing staff, faith, quality of treatment, knowing that the patient will be cured are factors that are important and helpful to accept the disease (f = 8.900,p=.000) and that it is necessary to give patients information about their illness and the results of tests and treatment (f=5.832,p=.003) and it is easier to deal with patients who know about their disease (f=.461, p=.631) rather than the male respondents.

In the same vein, responses between Saudi and other nationality varies differently. Saudis preferred to tell the patient about cancer (f=43.0004, p=.001), and believes that fear is the most common reaction when hearing the truth (f=4.614, p.010) compared to other nationalities.

Whereas, variations in responses are noticeable according to the employment status of the studied sample. Students have more information about cancer (f=2.383, p =.285), believes that it is possible to recover from cancer (f=5.308, p=.000), fear is the hardest for cancer disease (f=3.229, p -.012), fear is the most common reaction when hearing the truth (f=3.315,p=.011), support of friends and family, relations between physician and family, relations between patient and nursing staff, faith, quality of treatment, knowing that the patient will be cured are factors that are important and helpful to accept the disease (f=8.151, p =.000), and it is easier to deal with patients who know about their disease (f=8.151, p =.000) than the government and non-government employees, retired individuals and the non- working group.

Significantly, education plays a role in the responses of the studied sample. Respondents who attained a university/ higher level of education confirm that fear is the hardest for cancer disease (f=3.263, p =.012), faith plays a role (f=8.708, p =.000), the most common reaction when hearing the truth is fear (f= 2.858, f=.036), support of friends and family, relations between physician and family, relations between patient and nursing staff, faith, quality of treatment, knowing that the patient will be cured are factors that are important and helpful to accept the disease (f=3.781, f =.005), and it is necessary to give patients information about their illness and the results of tests and treatment (f=5.138, p =.008) than those who are illiterate, knows only how to read and write and groups who are in the primary/intermediate and secondary level.

Lastly, the residency characteristic attributes significantly to the variance in the responses of the group. Respondents who lives in the rural areas sustain that it is possible to recover from cancer (f=7.756, f=.000), fear is the most common reaction when hearing the truth (f=3.004, p=.050), support of friends and family, relations between physician and family, relations between patient and nursing staff, faith, quality of treatment, knowing that the patient will be cured are factors that are important and helpful to accept the disease (f=12.429, p=.001) and it is necessary to give patients information about their illness and the results of tests and treatment (f=7.506, p=.001) in contrast to the respondents residing in the urban area.

Discussion

A diagnosis of cancer often imposes a crisis with the person having to confront the illness and treatment because he has to deal with the issues regarding uncertainty over future, unmet

goal of life and death [11]. In the past, it was believed that, the patient shouldn't informed about his cancer diagnosis [12]. But nowadays, there are many health professionals prefer to inform their patients about their cancer [13] in fact the issue of disclosure about bad and sad information to the patient has been addressed for a long time in the most aspects of studied literature communication [14], and many guidelines for the processes of disclosing processes has been established in the western countries [15] therefore this study was conducted to assess the attitudes of public people toward the disclosure of cancer diagnosis in Saudi Arabia.

This study revealed that majority of the participants affirmed to have information about cancer from media, also most of them believed that cancer is a curable disease, this can be justified by the data obtained from the media usually does not resemble the facts because the approach of media usually tend to push some hope for the unhappy news.

Also, the study showed that most of the participants prefer to tell the patients the truth about their cancer disease with a rational this will help in the course of treatment, this comes in line with Zamanzadeh 2013 [16], who stated that lack of information about the diagnosis of cancer can increase anxiety, dissatisfaction and uncertainty which will negatively affect the processes of treatment, in congruence to this findings Montazari 2009 [17], found that, patients who did not informed about their cancer diagnosis had better physical, social and emotional quality of life than those who were informed. In addition, Nakajima 2013 [18], stated that withholding the truth of cancer diagnosis has a beneficial effect on the patients because it helps them lives more hopefully and less anxiety, Moreover, half of the participants expressed that fear is the hardest feeling that the patients can feel if they were informed about their diagnosis with respect to the Verinten 2015 [19], who stated that cancer is the greatest health fear. From the participants point of view faith was found to play an important role in acceptance the disease, it can be clarified by the nature of the Saudi culture, religion and Islamic faith which direct and guide the Muslim people to accept the fate because it happened according to the God's will, Parker –Pop 2010 [20], comes in line with this result when he said that faith positively impact on physical wellness, moreover National Comprehensive Cancer Network 2017 [21], stated that, patients who rely on their faith tend to experience increased hope and optimism freedom from regret, with higher satisfaction with life and feeling of inner peace. Regarding the dealing with cancer patient, majority of the participants revealed that, it is easier to deal with the patients who is confirmed with their cancer than the patients who did not informed, It is logically accepted because dealing with those patients will be without restriction, limitations and fear of mistakes which may inform or denote the patient about the truth.

Finally current study showed a significant correlation between age of the participants and their attitude toward recover from cancer, preference to tell the patient, the hardest feeling for a cancer patients and the religious faith as a role in accepting the disease, it can be justified by the fact that there is a direct relation between attitudes and age because attitude form directly as a result of experience which will be acquired through aging process, In addition a significant correlation was noticed between sex, nationality and employment status regarding to the recovering from cancer, Disclosure of the disease, the role of faith in acceptance of the disease this also may be due to the effect of demographic predictor on the experience of the person which in turn will affect his attitude regarding the issues run around him.

The results of this study denoted significant differences are found between age, sex, education, employment status and residency in their responses, it showed young adult, female, highly educated and rural residency prefers to tell the patient about cancer (f= 6.578, p=.002),affirms that fear is hardest for cancer disease (f=4.957,p=.007), that indeed faith plays a role (f =4.746, p=.000) and that support of friends and family, relations between physician and family, relations between patient and nursing staff, faith, quality of treatment, knowing that the patient will be cured are factors that are important and helpful to accept the disease as compared to older, male, urban residency, and people with intermediate or lower educational level, it can be justified by the majority of the participants were female and young in addition, the partial cultural openness due to communication revolution and world globalization which lead to changing in sociocultural atmosphere in Saudi Arabia.

Conclusion

Disclosure of cancer diagnosis to the patients is preferred from the perspective and point of view of Saudi population participate in the current study, in order to help in the course of treatment.

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