

Access Family Functioning and Related Factors from the Viewpoints of Male Cancer Patients

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ABSTRACT

Introduction: Assessment of family functioning is essential prior to planning any family-based intervention for cancer patients. In an extensive literature review, any relevant studies related to the functions of Iranian families with cancer patient was not found. Therefore, the aims of present study were to investigate the function of Iranian families with a male cancer patient and its related factors from patients' perspectives.

Methods: This was a descriptive- correlational study in which 101 men with cancer admitted to Tabriz Shahid Ghazi hospital were participated by convenience sampling method. Family assessment device was used for data collection that investigates family functioning in problem solving, communication, roles, affective involvement, affective responsiveness, behavior control, and general functioning domains. Also, demographic characteristics were collected. The higher score indicates better family functioning. Data analyzed by SPSS software version 13 using descriptive and inferential statistics including independent samples t-test, one-way ANOVA and Pearson correlation tests.

Results: Male participants in this study reported inappropriate family functioning in all domains. The lower score was on communication and the higher score was on behavior control domain. There was significant statistical correlation between patients' perception of family functioning with the participants' education level and job, while, there was no significant correlation between patients' score of family functioning with age, life situation, number of children, age of senior child, marriage duration and time passed since diagnosis.

Conclusion: Inappropriate family functioning reported by the male cancer patients indicates importance of providing consultation services for cancer patients and their family.

Introduction

One of the main approaches in community-based interventions is to consider the family as the key component of care. From this perspective, family unit is the first priority in health services and individuals are of secondary importance.¹

Because inappropriate function of each family member can have negative impact on others and this is called as a "Ripple" effect. For example, when one family member experience a sever stressor such as a life-

threatening disease, the entire family will be affected.^{1,2}

The cancer diagnosis, as a life-threatening disease, can strongly influence the whole family functioning. In other word, by the diagnosis of cancer the normal family life can be changed and all members may experience a crisis.³ Also, cancer can negatively affect couple's relationship.⁴ The spouse of cancer patients may be worry about losing their loved ones and about their own also the children's future.^{1,5,6} In addition, this situation

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also negatively affects children, creates new roles, and many psychological problems for children.^{7,8}

Currently it is accepted that cancer patients should be treated inside their families. With diagnosis of cancer, all family members experience disruption in different aspects of their life.⁹ On the other hand, after the diagnosis of cancer all family members try to keep their family functioning and to be a source of support for cancer patient.¹⁰ According to Ports & Hovel family functioning means the ability of adapting to changes over the life time, solving contradictions between members, observing the boundaries between individuals, the implementation of family principles and rules, all to protect the entire family system.¹¹ Consequently, it is necessary to investigate family functioning in cancer patients' families as an indicator of coping with the new situation,⁸ and the integrity of family.²

As the main in charge of the whole family and responsibilities over emotional, moral and economic problems of wife and children, the role of the male partner is of great importance.^{12,13} Especially in Islamic families where males as husbands enjoy a relative strong position in the family, these families can be called "husband oriented families".¹⁴

The study hypothesis is that naturally his suffering from a chronic illness can disrupt family functioning.

The functions of families with cancer patients have been studied previously in Western,^{1,15} and Southeastern Asian countries.^{16,17} The results showed that cancer patients rated the function of their families as intermediate. However, the effects of the diagnosis of cancer on patients and their families depends on the culture.^{17,18} In the extensive literature review, there was no relevant study examining the function of Iranian families with cancer patients. Therefore, the aims of present study were to investigate the function of Iranian families with male cancer patients and its related factors.

Materials and methods

The study has a descriptive- correlational design and conducted in in-patient wards and out-patient clinics of Shahid Ghazi hospital affiliated to Tabriz University of Medical Sciences which is the main center for treatment of cancer patients in East Azerbaijan province, Iran. The study was conducted from summer to winter in 2013.

The study population included all men with definitive diagnosis of cancer referred to receive curative or supportive services at Shahid Ghazi hospital. Inclusion criteria were including: at least 3 months elapsed from diagnosis, awareness of exact disease, being married before diagnosis, educated at least literate, and physical and mental ability to participate in the study. The participants with other familial problems, such as history of infertility or severe mental illnesses were excluded. Based on a pilot study, the sample size was calculated to be 100 patients and finally a total of 101 questionnaires were collected.

An instrument used for this study consisted of two parts. The first part was a researcher-made checklist including some demographic and disease related characteristics of cancer patients. The second part was a Family Assessment Device (FAD) designed by Epstein in 1960.¹⁹ This scale consisted of 60 items in 7 domains including problem solving (6 items), communication (7 items), roles (9 items), affective responsiveness (8 items), affective involvement (8 items), behavior control (9 items), and general functioning (13 items). Responses to each item were scored on a 4-item Likert scale from 1 (strongly disagree) to 4 (strongly agree). Then, minimum and maximum scores for each dimension were calculated. The negative statements were scored reversely. The final score of FAD was from 60 to 240. The FAD has no determined cut of point and further score indicated better perception of family functioning. It should be noted that FAD has been standardized in Iran

by Najarian. The internal consistency (α coefficient) for subscales was reported from 0.72 to 0.92 and all subscales showed acceptable pretest-posttest correlation. Also, Najarian reported the good construct validity for all subscales.²⁰ This tool has been validated in Iran by Mohammadi and Malek Khosravi and the overall Cronbach's alpha for the total scale was 0.94.²¹ So, the validity and reliability of the questionnaire was not assessed in present study.

This study was approved by regional ethics committee at Tabriz University of Medical Sciences. The permission to data collection was obtained from the hospital authorities. Then, one of the authors attended in Shahid Ghazi hospital and invited potential patients to participate in the study. Awareness of exact diagnosis is one of the main inclusion criteria for participants. To determine the awareness of exact diagnosis, the nurses and family members were asked about it and this information was confirmed by private interview with the patients. This method was approved by the regional ethics committee. At that moment, the questionnaire was distributed among the participants and the researcher explained how to complete it. Within 9 months of data collection a total of 130 male patients were invited to participate to the study from which 101 ones completed the questionnaire (response rate= 78%).

Data was analyzed using SPSS (version 13) (SPSS Inc., Chicago, IL). Descriptive statistics (including frequency, percent, mean, standard deviation) was used to describe some demographic and disease-related characteristics and the perception of participants regarding family functioning. Independent samples t-test was used for examine the relation between life situation (dichotomous qualitative variable) and general family functioning; Pearson correlation tests was used for examine the relationship between quantitative variables (such as age) and general family functioning; and one-way ANOVA was used to examine the relation between the qualitative variables

(more than two groups) with patients' viewpoints about family functioning. Tukey's Post Hoc test was used when the result of one-way ANOVA was meaningful.

Results

Some demographic and disease-related characteristics of participants are summarized in table 1.

Male patients' perceptions of family functioning after diagnosis of cancer are reported in table 2. As evident in this table, participants reported inappropriate family functioning in all domains of FAD. In all domains, the scores reported by participants was less than 50 (based on score 100). Furthermore, the worst and the best family functioning were reported to be in, respectively, communication 39.3 (7.1) and behavior control 48.9 (5.7) domains.

Table 3 reported the findings about the relationship between some demographic and disease-related characteristics and general family functioning reported by male cancer patients. This table indicates significant relationship between education level ($P=0.01$) and job ($P=0.001$) of the subject and general functioning. However, other variables did not show such a relation. The Tukey's Post Hoc test revealed regarding education level there was significant difference between patients with primary education and patients with secondary and university education level. Similarly, the level of family functioning of unemployed patients was significantly inappropriate comparing to employed ones.

Discussion

To our knowledge, this is the first study evaluating the family functioning from the viewpoint of Iranian male cancer patients.

Considering findings of the present study, Iranian male cancer patients perceived their family functioning as inappropriate. Similar researches have been conducted in other countries using Family Assessment Device

Table 1. Some demographic characteristics of men with cancer admitted to Tabriz Shahid Ghazi hospital

Variable	N (%)	95% CI**
Education		
Primary	30 (29.7)	19.82, 40.41
Diploma degree	32 (31.7)	21.80, 41.64
University degree	39 (38.6)	28.73, 48.50
Job		
Staff	54 (53.5)	43.66, 63.43
Unemployed	16 (15.8)	8.92, 14.82
Worker	31 (30.7)	22.81, 39.64
Life situation		
With spouse	23 (22.8)	15.42, 30.71
With spouse and children	78 (77.2)	69.35, 84.67
Age in year*	47.3 (11.02)	45.12, 50.00
Number of children*	2.4 (1.6)	2.06, 2.77
Age of older child in year*	18.7 (13.3)	15.95, 21.445
Marriage age in year*	20.7 (13.0)	18.07, 23.42
Time since diagnosis in month*	11.3 (11.3)	9.47, 13.63

*mean (SD), SD = Standard deviation; ** CI = Confidence interval

Table 2. Family function reported by male cancer patients admitted to Tabriz Shahid Ghazi hospital

Dimensions	Mean (SD)*	95% CI**	Mean based on 100 (SD)	95% CI**
General family function	24.3 (3.8)	23.5, 24.9	46.9 (7.3)	45.46, 48.36
Problem solving	10.3 (2.0)	9.9, 10.7	43.3 (8.7)	41.59, 45.03
Communication	11.0 (2.0)	10.5, 11.3	39.3 (7.1)	37.90, 40.70
Roles	16.5 (1.8)	16.1, 16.7	45.8 (5.1)	44.83, 46.86
Affective responsiveness	14.0 (2.2)	13.6, 14.4	43.8 (7.1)	42.46, 45.28
Behavior control	17.6 (2.0)	17.1, 17.9	48.9 (5.7)	47.85, 50.10
Affective involvement	13.5 (1.8)	13.1, 13.9	42.3 (5.8)	41.16, 43.48

*SD = Standard deviation; ** CI = Confidence interval

Table 3. The relationship between perception of general family function and some characteristics of male cancer patients admitted to Tabriz Shahid Ghazi hospital

Variable	Mean (SD)*	Statistical indicators
Education		
Primary	22.3 (3.40)	F= 0.1, df= 6 P= 0.01
Diploma degree	25.1 (3.80)	
University degree	25.3 (4.20)	
Job		
Staff	25.1 (3.80)	F= 1.85,df= 6 P= 0.001
Unemployed	21.2 (3.40)	
Worker	24.7 (3.00)	
Life situation		
With spouse	23.5 (2.80)	t= -1.19, df= 99 P= 0.23
With spouse and children	24.6 (4.00)	
Age in year	47.3 (11.02)	r= -0.34, P= 0.73
Number of children	2.4 (1.60)	r= -0.01, P= 0.90
Age of older child in year	18.7 (13.30)	r= -0.00, P= 0.94
Marriage age in year	20.7 (13.00)	r= -0.06, P= 0.95
Time since diagnosis in month	11.3 (11.30)	r= -0.08, P= 0.44

*SD = Standard deviation

and reported moderate level of family functioning in Japan,^{16,17} United State,¹⁵ and several European countries.²²

Therefore, the family functioning among Iranian families with male cancer patients is lower than other previous studies. In comprehensive literature review no study was found to measuring family functioning of Iranian patients with cancer. However, Khanjari et al., reported that physical, psychological and social function of the families with cancer patient was reported to be low.²³ It should be noted that in the previous studies family functioning of both male and female cancer patients have been investigated and there is no study investigated the family functioning of those with male cancer members. But, one study reported that male and female cancer patients reported significant statistically difference only in affective responsiveness domain of FAD.¹⁵

Iranian male cancer patients participated in this study reported that communication domain was the worst aspect of their family functioning. Whereas communication and problem solving are the most important aspects of family functioning.²⁴ In this regard, according to some Iranian studies, cancer diagnosis can disrupt communication between all family members mainly because of fear of disclosure of cancer diagnosis and prognosis and this fear remains even after the patient becomes aware of the exact diagnosis.²⁵ Results of different studies imply the significant association between communication as the main family functioning domain with patient's anxiety. When cancer occurs, patients may experience impaired communication and higher level of anxiety.²⁴ Such similar findings

were also reported for family members of the cancer patients in other Middle Eastern countries^{26,27} and other countries²⁸, also assessing confounding factors in the patient judgments toward breast cancer, showed impaired communication which is associated with the hopelessness in these women.¹⁶

The results of present study showed that unemployed and low educated patients reported lower family functioning. This can be due to the lower socioeconomic status of this group. This is consistent with the results of other studies indicated that financial problems may negatively affect cancer patients and their family members.²⁹

The findings of present study have some implications for family-centered care of Iranian families with male cancer patients. The results indicated inappropriate family functioning of Iranian families with male cancer patients. Yet, there is no organized supportive service for cancer patients and their families.³⁰ So, there is urgent need for implementation of supportive and psychological services for Iranian families with cancer patients. The priority should especially be given to the cancer patients with lower education and poor economic status.

In cancer nursing, nurses act as a bridge between the patient and his family.³¹ The main roles of nurses in these situations are helping families to use their abilities to accelerate the healing process in patients and improve family functioning. So we should describe the impact of cancer on families' functions, identified learning gaps and needs in these families and detect the nurse's role as the greatest supporter of family health, to discuss the challenges ahead in this

type of nursing intervention.

Nurses and other health care professionals should devote attention not only to the patient but also to other family members and intervene to promote appropriate communication patterns among the family members.

This study has some limitations. First, in this study only the function of families with male cancer patients were evaluated, therefore, the findings were not generalizable to those with female cancer member. Second, only literate people were enrolled in the study. Third, in this research sampling was conducted only in one medical center. Due to the possible difference between the patients refer to hospitals and private clinics the authors stress that the findings should be interpreted with caution. Therefore, it is suggested to investigate family functioning of the families with female patients and patients with other socio-demographic characteristics. It is also recommended to conduct studies to compare family functioning of the families with cancer member and the ones with no cancer history or other chronic diseases.

Conclusion

Cancer patients reported that their family functioning was inappropriate. Because the family is the primary source of care and support for cancer patients, there is need to consider the whole family as the client, in providing family-centered care and support to cancer patients.

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Ethical issues

None to be declared.

Conflict of interest

The authors report no conflict of interest. The authors alone are responsible for the content and writing of the article.

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