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Impact of Parents Cancer on Family Communication Models from Adolescents' Perspective

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Abstract

Background: Cancer is a common and fatal disease that affects family members, especially adolescents, and causes changes in family communication patterns

Objectives: To investigate the impact of parental cancer on family communication patterns from the adolescents' perspective.

Methods: The present study was a descriptive correlational study conducted on one hundred adolescents with parents with cancer who were selected by available sampling method. The research instruments were a demographic questionnaire and a revised standard questionnaire of the Ritchie and Fitzpatrick family communication model. The information was analysed using S.P.S.S. version 16 software and descriptive statistics, analysis of variance, and correlation coefficient.

Results: The proportion of consensual communication in the family was lowest (3%) and the proportion of laissez-faire communication in the family was highest (58%). The correlation is inverse in the number of children and in the range of treatment level, and a significant direct correlation is observed in the range of family communication pattern and child rank, but in other cases, the correlation coefficient shows no significant communication (p< 0/05).

Conclusion: From the adolescents' perspective, most families whose parents have cancer move toward a laissez-faire family. In these families, there is a low level of conversation and harmony, there is little interaction between family members, and usually only a limited number of topics are discussed. Therefore, the importance of family communication during this time, especially with adolescents, should be emphasized through appropriate education of families whose parents have cancer.

Keywords: Adolescent, Cancer, Family communication model

1. Background

Cancer is one of the greatest health challenges in the developing countries. About half (51%) of cancers occurred in developing countries in 1975. In 2018, this proportion was 55% in 2018 and is projected to reach 61% in 2050(1). Overall, cancer is the second leading cause of death in the world and is estimated to be the cause of 9.6 million deaths, or one in six deaths in 2018 (2).

According to World Health Organization statistics, there were 110,115 cancer cases and 55,785 cancer deaths in Iran in 2019, with breast and lung cancer having the highest number of patients in Iran (3).

Diagnosis of cancer is a very unpleasant and incomprehensible experience for everyone. Cancer affects the workplace, socioeconomic status, and family life, and leads to the death of the patient. These effects mainly affect various aspects of the patient's quality of life, including mental, psychological, socioeconomic status and sexual function (4).

Cancer-related stress is like a stone thrown into a pond and spreads from the patient to the whole family. Family members caring for a cancer patient report similar and sometimes more severe symptoms than the patient does. even if cancer is not present in family members, it is present in their lives and can affect all aspects of the family's quality of life (5).

When a parent has cancer, it can be very frustrating for children living at home with him or her. Adolescents may be more vulnerable than other children (6). Researchers have found that adolescents and young adults have more problems coping with their parents' cancer than younger children. For example, anxiety and depression are more common in adolescents and young adults than in younger children (7). During adolescence, the adolescent faces two main problems: he must review and rebuild communication with parents, adults, and society, and he must recognize and rebuild himself as an independent individual. Behavior during this period is sometimes childish and sometimes adult-like. During this time, there is usually a conflict between these two roles of the individual (8).

The news that a family member has been diagnosed with cancer can have serious psychological and physical effects on adolescents, such as sadness, depression, anxiety, anger, fatigue, weight loss, or insomnia (9).

Children from different cultural backgrounds respond differently to a parent's cancer (10). The impact of a parent's cancer on children depends on factors such as the age and sex of the child, sex of the parent with cancer, family type, and family

communication patterns (11).

Basically, the concept of family communication patterns or family communication schemas is the scientific structure of the family's external world defined on the basis of family members' relationship with each other, members' statements and actions towards each other, and the meaning of this communication. In the original model of family communication patterns, Koerner and Fitzpatrick introduced two dimensions: social orientation and conceptual orientation, which were renamed in the revised form (Ritchie and Fitzpatrick (1990) and Koerner and Fitzpatrick (2002), into two dimensions: conversational orientation and conformity orientation (12).

Conversational orientation refers to situations in which the family encourages its members to participate freely and easily in interactions and conversations in a variety of contexts. Family members interact freely, continuously, and spontaneously with each other and have the opportunity to address a wide range of topics without time constraints; these families spend a great deal of time exchanging ideas and discussing various topics.

Conformity orientation is the extent to which family communication emphasizes the conditions of similarity of attitudes, values, and beliefs. Their interactions are based on conformity, conflict avoidance, and family interdependence; and members of such families are encouraged to define themselves by their family membership.

The combination of the two dimensions of talk orientation and conformity orientation forms the quadrant of the family communication schema, which comprises family communication patterns. Each pattern describes a particular type of family. These four types of patterns or four family types result from the combination of more or less situations on the two-dimensional continuums of talk orientation and conformity orientation, namely: the consensus family, the pluralistic family, the protective family, and the laissez-faire family (13) (Figure 1).

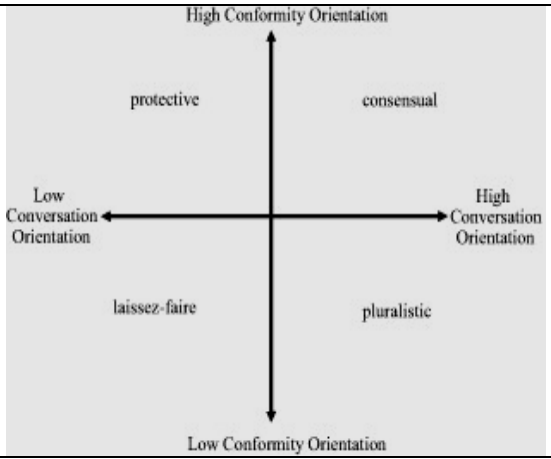

Figure 1. Family Types Based on Conversation and Conformity Orientations

The consensus families exhibited a high degree of conversation and conformity. Pluralistic families have a high degree of conversation and little conformity. They are characterized by open and unrestricted interaction. Protective families have low conversation and high conformity. In these families, the emphasis is on following authority (of parents) and not much importance is given to thinking, reasoning, and open communication, and finally, laissez-faire families have low conversation and low conformity (14).

Since there is sincere communication and strong emotional dependencies between children and parents in Iranian families, the impact of parental cancer diagnosis and treatment on children can be more severe and in different forms than in other communities and is definitely one of the problems. The basic principles of parents and children in our society are dealing with cancer, its treatment and its complications. These effects depend on various factors, including family structure and community culture, and need to be studied in more detail depending on the specific circumstances of each community, which can be done through research.

2. Objectives

Therefore, the aim of this study was to examine the imapct of parental cancer on family communication patterns from the point of view of adolescents.

3. Methods

This is a descriptive correlation study. Ethics committee approval was obtained at the beginning of the research with code IR.IAU.NAJAFABAD.REC.1397.059.

One hundred adolescents aged 11 to 20 years in Isfahan who had a parent with cancer, knew about their parent's illness, lived in the same house with the parent, had no obligation to directly care for the parent, with their own permission or the parent's permission (depending on the age of the sample) and had no specific illness or mental illness, participated in the study. The samples were selected using available methods from hospitals and clinics that admit cancer patients. After explaining the purpose of the study and obtaining informed consent from the patients and their parents, they completed the questionnaire in self-report.

The questionnaire consisted of two parts. The first part was a demographic questionnaire. The second part was the revised standard of the family communication model, a self-assessment questionnaire developed by Ritchie and Fitzpatrick (1990) (15) and the respondents agreement or disagreement with 26 items about their family communication status on a 5 point Likert scale. The first 15 items relate to the conversational orientation

dimension and the next 11 items relate to the conformity orientation dimension. Each respondent receives two scores from this instrument. A higher score on each scale means that the subject perceives more conversation or conformity in his or her family. Kouroshnia and Latifian (2007) used factor analysis, internal consistency, and criterion validity to determine the validity of this instrument. The correlation coefficient of the conversation orientation and attention scales of the parent-child attachment instrument of Parker, Teppling, and Brown (1979) is 0.74 (p = 0.0005), and the correlation coefficient of the conformity orientation and excessive support or control scales of this instrument is the same. It was reported to be 0.49 (p = 0.005) indicating criterion validity of the revised instrument of family communication model instrument. The Cronbach's alpha coefficient for the conversational orientation and conformity orientation subscales was reported to be 0.87 and 0.81, respectively (16). Data were analyzed with S.P.S.S statistical software version 16 using descriptive statistical tests, one-way analysis of variance, and correlation coefficients.

4. Results

The results of this study showed that most of subjects studied were male (52%), 20 years old (18%), had high school education (27%), had two siblings (28%), first child rank (44%) had a parent with breast cancer (17%) at the stage of diagnosis (34%) (Table 1).

In the present study, the consensual family had the lowest proportion (3%) and the laissez-faire family had the highest proportion (58%) of families. The protective family with 23% and the pluralistic family with 16% of families (Table 2).

The Pearson correlation coefficient in the study of different family communication patterns and demographic variables also showed that there is a significant relationship between the number of children and the age of the parents and the conversational orientation. There is a significant direct correlation in the area of family communication model and children's rank, but in other cases, the correlation coefficient does not show significant communication (Table 3).

Table 1. dependence of gender and dimensions of family communication pattern

Sample	Boys				Girls				Total				Indipendent T		
Dimention	low	High	mean	s.d	low	high	mean	s.d	low	high	mean	s.d	t	df	sig
Conversation	12	40	24/44	6/775	11	42	26/21	7/092	11	42	25/29	6/950	-1/273	98	0/206
Conformity	11	35	20/50	4/881	11	31	20/15	5/065	11	35	20/33	4/948	0/356	98	0/723
Total	27	64	44/94	6/482	28	61	46/35	7/967	27	64	45/62	7/230	-0/975	98	0/332

Table 2. Types of family communication patterns according to two dimensions of orientation

Dimention		Conversation			
		Low		High	
Conformity	Low	Laissez fair family		Pluralistic family	
		Number	Percent	Number	Percent
		58	58	16	16
	High	Protective family		Consensual family	
		Number	Percent	Number	Percent
		23	23	3	3

Table 3. Correlation of demographic variables with family orientation dimensions and family communication pattern

Variable Dimention		Age	Sex	Edu	Children	Rank	Type of Cancer	Phase
Conversation	Pearson Correlation	0/109	0/128	0/012	-0/166*	-0/006	0/130	0/185*
	Sig. (1 Tailed)	0/139	0/103	0/182	0/050	0/478	0/099	0/033
	N	100	100	100	100	100	100	100
Conformmity	Pearson Correlation	-0/131	-0/036	-0/137	0/000	-0/138	-0/008	-0/088
	Sig. (1 Tailed)	0/097	0/361	0/087	0/497	0/086	0/470	0/199
	N	100	100	100	100	100	100	100
Total	Pearson Correlation	0/016	0/098	-0/006	-0/160	-0/100	-0/120	-0/117
	Sig. (1 Tailed)	0439	0/166	0/478	0/056	0/162	0/118	0/123
	N	100	100	100	100	100	100	100
Family Communication Pattern	Pearson Correlation	0/090	-0/030	0/076	0/154	0/206*	-0/125	0/046
	Sig. (1 Tailed)	0/188	0/422	0/226	0/062	0/020	0/118	0/323
	N	100	100	100	100	100	100	100

* At the level of.05 is significant

5. Discussion

When examining the dimensions of the family communication model, it can be seen despite the fact that boys seem to have a lower average than girls in the dimension of conversation and the sum of scores of the family communication model, but by examining the independent t-test, in the dimensions of

conversational and conformity orientation and the sum of scores of the family communication model, between the mean scores of girls and boys were no statistically significant differences. In a study conducted by Bahrami and Khoshbakht (2015), no significant difference was found between the mean scores of the conversational orientation and conformity dimension and the total score of the family communication pattern in boys and girls (17), bbut other studies did not address gender and family communication patterns. The researcher hypothesized that the pattern of family communication related to conversation might have better dimensions in girls, and the initial apparent results showed the same, but this difference was not statistically significant, which could be due to cancer and a decrease in family communication during this period. In a 2014 study conducted by a researcher on adolescents with a parent with cancer, it was found that the family tends to disperse and reduce communication during the parent's cancer (18), which may be due to the pattern of family communication. It has also been shown to be effective, but to confirm this, further research is needed to investigate the extent of communication.

The present study showed that there is no significant relationship between the demographic variables and the dimensions of conversational orientation and conformity orientation and family communication pattern. In the research of Nakhaei et al. (2017) it is pointed out that there is no significant difference between the dimensions of the family communication model with variables such as age and education and the number of children, but these researchers in their discussion with reference to Supreme Research et al. (2011) and Fatemi et al. (2008) state that some studies have reported a significant communication between age and education and the number of children and relate this point to the number of samples and diseases included in the study (19). In a study conducted by Samek and Reuters (2011), they point out the effectiveness of variables such as age and rank of the child and education of the parents on the pattern of family communication and believe that girls in childhood have more effective communication with parents with higher education (20) and Schmitz (2012) also points out the effects of gender and age in relation to family communication in his article, which contradicts the results of the present study (21). Since the present study was conducted when the parents were diagnosed with cancer, and since research has shown that family communication changes when a parent is diagnosed with cancer, this may have affected the communication pattern, so this point may have affected the communication pattern and changed these effects.

The study also showed that families were at a low level in the dimension of conversational orientation (81%), in the dimension of conformity orientation (74%), and in the dimension of the overall pattern of family communication (83%). In the studies of Seidi Saroei et al. (2013) (22), Rashidi, Sharifi and Naghshineh (2017) (23), Weber et al. (2019) (24), the absence of family communication patterns in the dimensions of orientations was pointed out, which is consistent with the present study. Since, few studies have investigated the pattern of family communication in diseases, no articles were found to counter this problem, and it seems logical that when the family faces illness, especially terminal illness i, the pattern of family communication is affected and family communication is reduced, problem solving usually resorts to authoritarian methods, then the dimensions of conformity in families are also reduced, but how these dimensions change, and how communication changes during illness, requires a qualitative study that examines this in depth.

According to the results of the present study, the consensual family has the lowest proportion (3%) and the laissez-faire family the highest proportion (58%) of families. The protective family accounts for 23% and the pluralistic family 16%. In a study conducted by Shahraki Sanavi, Navidian, Ansari Moghadam, and Faraji Shui (2011), and it was found that 8.7% of families are laissez-faire 18% are protectionist, 28.7% are pluralist and 34.6% are consensual (25), which is consistent with the finidngs of the present study. The reason for this discrepancy can be attributed to the difference between families in terms of health and exposure to the disease. These researchers studied the pattern of family communication in a healthy family and their adolescents, which shows that most families usually have a lot of conversations and high compatibility with each other, while in our study, considering that when parents are faced with cancer. In both dimensions, the orientation toward conformity and conversation decreases, and most families tend toward a laissez-faire family communication pattern, which, as mentioned earlier, is due to the effects of the disease. The research of Seidi Saroei, Farhand, Amini and Hosseini (2013), who studied the role of resilience in family communication patterns, confirms this point. These researchers indicate that resilience plays a mediating role in family communication patterns, and naturally, families with higher disease resilience also find more appropriate communication patterns (22).

In our results, no relationship was found between the stage of illness and the degree of orientation of the dimensions of the family communication pattern, however, since most of the samples were at the stage of diagnosis and they had only recently been confronted with the disease, and since most families at this stage resort to the psychological response of denial, the fact that the family has lost its effective communication pattern may perhaps be justified.

Weber, Alvariza, Chris Berg, and Sweeney (2019) also corroborate the above findings with the fact that the family's communication pattern has changed despite the illness, and this has a greater effect on children (24). Jokar and Rahimi (2017) point out in their article that happiness and family communication patterns are directly linked. These researchers believe that happiness plays a key role in the plural family communication pattern, in which conversation is high, and this shows that in a state of happiness, people have more verbal communication with each other (26), and this suggests that when the family is facing parental cancer and when the family is in mourning, and happiness in the family is at a minimum, naturally verbal communication is reduced and the direction of the conversation is decreased, and since frustration and anxiety are prevalent in the family in a charged atmosphere.

In the results of the present study, it was pointed out that there is a significant relationship between the number of children and the level of parental involvement and the direction of the conversation. The rank of children shows a significant direct correlation, but in other cases the correlation coefficient does not show a significant correlation. The fact that there is a significant inverse relationship between the number of children and the orientation of the conversation was also mentioned in Bahrami and Khoshbakht (2015) (17), Shahraki et al. (2011)(25), Rodriguez(2018) (27), and Lim and Sean (2018) (28), which could be due to the fact that parents pay more attention to their only children. It seems that in families with multiple children, each member of the family transfers the conversation to another, and this leads to a decrease in communication, but in families with one or two children, this connection between individuals may be greater. However, no specific studies were found on the pattern of family communication and the stage of the disease. As mentioned earlier, the issue of the pattern of familial communication in disease has been less addressed, but depending on the progression of cancer stages, this point may be justified. Azarbarzin (2017) in the study titled "Adolescence made of crystal" addressed the issue of the influence of time on coping with cancer and this researcher states that adolescents cope with parental cancer over time (29). This is also the reason for the level of conversational orientation, because the higher the stage of the disease, the more the family adapts to the cancer and the better the family communicates. Also, the rank of the child is directly related to the communication pattern of the family, which is probably due to the same attention to children that makes the communication pattern more effective.

6. Conclusion

From the above points, it can be concluded that most families whose parents have cancer are moving toward a laissez-faire family from the perspective of the adolescent. Laissez-faire families are characterized by low conversation and conformity. Interactions between family members are few, and usually only a limited number of topics are discussed. Parents in these families believe that all family members should be able to make decisions, but unlike pluralistic families, they are not interested in their children's decisions or in communicating with them. In these families, there is very little communication between parent and child, and the child is left to his or her own devices. For this reason, the children are easily influenced by the external environment. Members of these families speak little to each other and place little value on the existence and identity of the family. Cancer causes the family atmosphere to decrease and the children are left alone, which has many psychological consequences for the adolescents. Research also shows that a greater number of people in the family has a negative effect on communication and leads to the family communicating less, and adolescents in a higher child rank are also at greater risk. Therefore, , when caring for cancer patients, it is recommended to talk with them about family communication and the impact of this communication on the life process of adolescents, as well as to offer special programs for adolescents to express feelings and concerns in dealing with their parents illness, and by educating them about cancer, symptoms, treatments and care, their fears be can be greatly reduced. It is also necessary to teach the adolescent to take care of him and consider his wishes, so that he feels in harmony with the family and maintains his communication with the family.

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Footnotes

Conflicts of Interest: The author has no conflicts of interest to disclose.

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