

The Correlation between Family Functioning and Quality of Life among Family Caregiver of Cervical Cancer Patients

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Abstract— The manner in which a family functions in its daily activities becomes vital when family units are required to handle certain serious situations such as a member being diagnosed and treated for cervical cancer. Both patients and the family members who provide care for them can experience stress in such circumstances, and the family unit is pivotal to the maintenance of their condition and of the quality of their lives. Nonetheless, in contrast to studies conducted abroad, the results of similar studies conducted in Indonesia, a country with a strong culture of familial bonding, evince no relationship between the functioning of families and the quality of life. Therefore, this study aims to examine the correlation between family functioning and quality of life among family members who are also caregivers for cervical cancer patients. The research is based on the hypothesis that there exists a correlation between family functioning and the quality of life of family members who serve as caregivers for cervical cancer patients. This investigation employed the Family Assessment Device (FAD) developed by Epstein, Bishop, and Levin (1978) as the measuring instrument. FAD posits six dimensions of family functioning in accordance with the McMaster Model of Family Functioning and one general functioning scale. WHOQOL-BREF was used to quantify the quality of life of the respondents. This tool was developed by the World Health Organization (WHO) in 1996. 30 literate adults, currently living in JABODETABEK, and aged between 20–65 years comprised the respondents of this study. The minimum stipulated duration of caregiving was set at 3 months. The results of the Pearson correlation analysis evinced the association between family functioning and quality of life in family members who served as caregivers for cervical cancer patients in the dimensions of role ($\alpha = 0,469$, $p < 0,05$), affective responsiveness ($\alpha = 0,406$, $p < 0,05$), and behavior control ($\alpha = 0,385$, $p < 0,05$). The findings also reveal that family members who are caregivers for cervical cancer patients may be classified as experiencing good or very good quality of life.

Keywords: family functioning, quality of life, family caregiver, cervical cancer

Introduction

A family is the first unit within which a person experiences growth. Two or more people who live in a single household because of blood relationship, marriage, or adoption may be defined as a family. The members of a family interact with each other, discharge specific functions, create and maintain cultural values, and improve the physical, mental, emotional, and social growth of the unit as a whole (Bailon & Maglaya, 1978; Duval & Logan, 1986; Efendi & Makhfudli, 2009).

In the process of its development, a family undergoes diverse situations that involve varied interactions and engagements such as problem solving, affective responsiveness, and behavior control (Epstein et al., 1978). These circumstances can exert positive or negative impact on the

family unit and its members. The manner in which a family functions displays the positive or negative impact of the circumstances faced by the unit. Good family functioning may be gauged through the ways in which each member of the family is involved in handling a situation or in helping the family unit by making it capable of dealing with pressure during a particular life phase (David, 1978). Efendi (2009) as well as Golics, Basra, Salek, and Finlay (2013) have stated that all problems, especially health issues, can affect the quality of life of each family member in the form of social problems, physical difficulties, or psychological distress.

For example, family functioning may be noted when a family member is diagnosed with a chronic disease. Family members exhibit their involvement by playing specific roles in determining the nursing care required by the individual who is ill (Efendi, 2009). Family involvement and support wield a positive impact. They can help the patient negotiate the denial phase of the disease and can expedite the healing process (Yaman & Ayaz, 2016). In addition, the involvement of family members with each other also ensures that every family member takes on a balanced responsibility, especially in instances of chronic illness (Epstein et al., 1978).

Cancer is one such chronic disease. According to Cooper (2000), cancer is a malignant tumor that has the ability to attack other cells and can spread throughout the body. The World Health Organization (WHO, 2017) has stated that cancer is one of the main causes of death in the world, with as many as 18.8 million deaths recorded in 2015. In 2013, Departemen Kesehatan (2013) has affirmed that among all other types of cancer, incidences of breast and cervical cancer are the highest in prevalence in Indonesia, and that Indonesia is ranked second in the world in the number of cervical cancer cases (Ramadhan, 2017).

Stressful experiences through a variety of processes from the first examination to the diagnosis to the treatment protocols are common for people suffering from cancer. The diagnosis of cervical cancer is, further, a threat to a woman's femininity because this form of the disease attacks the uterus (Laganà, La Rosa, Rapisarda, Platania, & Vitale, 2017). Laganà et al., (2017) elucidate that women who suffer from cervical cancer usually assume that children are symbolic of life and that the opportunity to give birth and to be a mother is very valuable. Hence, the loss of fertility because of cervical cancer is devastating for most women who are diagnosed with this disease.

The loss of the ability to bear children makes cervical cancer patients prone to psychological complications such as depression, anxiety, suicidal ideation, feelings of anger and shame, lower self-esteem, and a poorer quality of life (Yaman & Ayaz, 2016). Also, because the human papillomavirus (HPV) can be transmitted through sexual intercourse, the diagnosis of cervical cancer can also create stigma and make some women afraid of being socially judged or disgraced (Hyde & Else-Quest, 2012). These psychological problems may result in social isolation for cervical cancer sufferers. Such patients need caregivers not merely for treatment related instrumental assistance but also for emotional support through the period of diagnosis and treatment.

Family members who care for other sick family members are called family caregivers. Indonesia's prevailing cultural ethos is collectivist (Pharr, Dodge Francis, Terry, & Clark, 2014) and it mandates that family members are involved in caregiving activities for sick relatives (Effendy, Vernooij-Dassen, Setiyarini, Kristanti, Tejawinata, Vissers, & Engels, 2015). The maintenance of a harmonious relationship is important in collectivist cultures, and the refusal to perform socially determined roles is unacceptable because it constitutes a rejection, neglect, and insult to the social harmony within the family structure.

The quality of life of the caregiving family members of cervical cancer sufferers is also affected by psychological problems (Page & Adler, 2008). According to Pohan and Sukarlan (2012), each disease exerts different demands on patients and affects the condition of the caregivers. In the early days after obtaining a diagnosis, families of cervical cancer patients may exhibit emotional reactions such as anger, hatred, guilt, or express acceptance or rejection of the disease. The social stigmatizing of cervical cancer as a shameful and deadly disease (Woźniak & Iżycki, 2014; Gu, Chen, Zhang, Chow, Wu, Tao, & Chan, 2017) further problematizes the effects of this disease on the close relatives of the patient. Additionally, this condition can affect the manner in which the family functions to fulfill its daily duties because of changes in familial roles and responsibilities which include modifications in family involvement, communication patterns, and rules of behavior that apply within the family.

In families with a member who is diagnosed with cervical cancer, changes in family involvement may be observed when family members begin the initial screening for cervical cancer. Family caregivers start accompanying and assisting patients to doctor's appointments and for initial treatment. Since the first examination, the family caregiver experiences certain transformations in varied ways: they must sacrifice some part of their private time, give up working outside the home for a while, etc.

Changes in roles and responsibilities also begin to occur after a family member is diagnosed with cervical cancer: perhaps the patient can no longer work outside the home; or perhaps her usual household chores have to be accomplished by another family member after her diagnosis. During the ensuing treatment period, a patient may have to undergo a range of medical actions including surgery, radiotherapy, chemotherapy, and targeted therapy (National Cancer Institute, 2018) and family caregivers are required to drastically modify their own routines to help the patient through the long treatment period.

Family caregivers must extend a lot of assistance during the treatment period such as helping with the administration of the medical treatment; the provision of emotional support; taking care of the patient's personal needs including the feeding, cleaning, bathing, and helping in the toilet, and so on (Horowitz, 1985). Family caregivers also sometimes supply additional services that are not directly related to medical treatment: driving the patient from one place to another, cooking, tidying up the house, and other supporting acts (Reinhard, Given, Petlick, & Bemis, 2008; Roth, Fredman, & Haley, 2015).

In addition to the above mentioned, changes in responsibilities, many adjustments are required in the patriarchal family structure of Indonesian households when the caregivers are the male partners of women who suffer from a serious disease such as cervical cancer. In the usual course, caregiving activities are part of the women's domain in Indonesia but when wives suffer from cervical cancer changes in social structure and familial roles and responsibilities are inevitable because the husband must act as caregiver (Morgan, Small, Donovan, Overcash, & McMillan, 2011; Otis Green & Juarez, 2012). In such instances, the husband must play the dual role of main breadwinner and caregiver for his sick partner. In addition, cervical cancer takes away from women their functions of wife and mother (Kusumaningrum, Pradanie, Yunitasari, & Kinanti, 2016) so the husband must also adjust his role further to fulfill the mother's role for any children in the family.

On the other hand, a child who functions as a caregiver for a parent must accommodate this role within the primary role of student. Conversely, a caregiving parent of a sick child may be need to stop working to care for the child.

The support and involvement of all family members is needed because of the myriad challenges that must be faced and adjustments that must be made by the family, which acts as an instrument of achieving a balance between chronic illness and the quality of life of all family members. The quality of life of a caregiver is thus related to the manner in which families interact in positive ways, respond appropriately, and solve problems to maintain the stability of the family dynamics related to physical health, mental wellbeing, social relations, and the living environment of family caregivers (Power, 2004).

Families that function well according to Epstein et al., (1978) have a clear division of roles. This aspect is related to the quality of life of a family caregiver because it can minimize excessive responsibilities and can help the caregiver obtain some private time to maintain other dimensions of the quality of life such as social relationships with others.

Also, because of Indonesian cultural mores that interpret complaints or expressions of fatigue as a rejection of the assigned family role, changes in a family's communication patterns may be noted when stressful interactions sometimes occur in families with cervical cancer. Such occasions may occur, for example, when caregivers feel they cannot express their needs to their partners, when their feelings about the caregiving activities are not articulated to other family members, or when there is a family debate to determine the care to be given to the patients.

Caregivers may be unable to ask for help from the family because of such changes in communication patterns and the resulting distress becomes a factor associated with the quality of life of the family caregiver both in terms of the physical and mental health dimensions (Rodríguez-Sánchez, Pérez-Peñaranda, Losada-Baltar, Pérez-Arechaederra, Gómez-Marcos, Patino-Alonso, & García-Ortiz, 2011; Bevans & Sternberg, 2012; Effendy et al., 2015; Nissen, Trevino, Lange, & Prigerson, 2016; Wittenberg, Borneman, Koczywas, Del Ferraro, & Ferrell, 2017). The caregivers must often perform all the tasks alone, and have to deal with

fatigue, sleep disturbances, physical aches and soreness, and back pain (Lee, Park, Matthews, & Hsieh, 2017; Wittenberg et al., 2017). The social aspect is also affected for caregivers, with a worsening of family relationships and tensions in marriage. Problems with interpersonal interaction in a family environment also cause communication difficulties, influence affective responsiveness, and hinder the problem-solving dimensions of family functioning.

The absence of support from the family also exerts an impact on the quality of life of caregivers. The feeling of being ignored by the family, or even by the spouse can make caregivers more anxious, frustrated, angry, guilty, disappointed, confused, upset, stressed, and lonely (Golics et al., 2013). In addition, family caregivers may also experience depression symptoms (Weitzner, McMillan, & Jacobsen, 1999; Palma, Simonetti, Franchelli, Pavone, & Cicolini, 2012; Gorji, Bouzar, Haghshenas, Kasaeeyan, Sadeghi, & Ardebil, 2012). Psychological problems experienced by caregivers are also indicators of the deteriorating quality of life of caregivers.

Qualitative research on quality of life was conducted by Golics et al., (2013) with 133 family members. This investigation demonstrated that some families facing a situation of a member suffering from a chronic illness felt that the unfortunate circumstances actually exerted a positive impact on the functioning of the family and on its quality of life. They asserted that such a situation caused more intimacy, increased emotional support, and enhanced family relationships. According to these respondents, family relationships improved because of the presence of the chronic disease because each member extended support to the other. Some previous studies mentioned above also assert a relationship between family functioning and the quality of life of a family caregiver.

On the other hand, the investigation conducted by Choi, Hwang, Hwang, Lee, Kim, Kim, Chang, Hong, and Koh (2016) concluded that the family functioning factor does not correlate significantly with the quality of life of family caregivers for cancer patients. This study focused on factors associated with quality of life in 299 family caregivers for cancer patients in Korea, a country with a culture similar to Indonesia in that family members are largely expected to accomplish the caregiving for their relatives. Another scholarly investigation related to family caregivers of cancer patients was conducted in 2015 by Effendy et al., (2015) with Indonesians, who display very strong family bonding characteristics as a population. The results of this study also did not find that any family functioning factors were related to the quality of life of caregivers. However, other factors including psychological problems and lack of experience, which were related to the quality of life of family caregivers were discovered.

Thus, there are differences with regard to the correlation between family functioning and quality of life in results obtained by previous studies. In addition, the results of the research conducted in Indonesia do not display family functioning as a factor related to the caregiver's quality of life even as the collectivist culture of Indonesia certainly does expect family involvement in caregiving activities (Rochmawati, Wiechula, & Cameron, 2014). Also, research on the correlation between family functioning and quality of life of caregivers for

cancer patients is also still minimal. This deficiency is particularly pronounced for cervical cancer, which is the second largest incidence of the disease in Indonesia.

There exists, further, a stigma about cervical cancer being an infectious disease which is caused by the sufferer's own sins (Ashing-Giwa, Kagawa-Singer, Padilla, Tejero, Hsiao, Chhabra, Martinez, Tucker, 2004; Nyblade, Stockton, Travasso, & Krishnan, 2017). This perception causes the community at large and even family members besides caregivers to reject and isolate both the patients of cervical cancer and their caregivers. Family functioning is therefore affected because family roles are not fulfilled, and because patient care should be jointly performed but is often taken on only by one person. The family unit is vital as the main source of support for healing patients (Ashing-Giwa et al., 2004). However, families tend to pay less attention to the sincere caregivers, who are often inclined to ignore their own quality of life. In fact, the neglect of the quality of life of caregivers actually affects in the quality of the care they provide.

These features underline the importance of investigating the correlation between family functioning and the quality of life of caregivers for cervical cancer patients in Indonesia. This study purposed to determine this correlation and to obtain an overview of the quality of life of the family caregivers of cervical cancer patients.

Theory, Material, and Methods

A. Theory

Two variables were studied during this investigation: family functioning and quality of life. Family functioning describes the manner in which a family responds to shared tasks, including essential, hazardous, and development work required for the benefit of the entire unit (Epstein et al., 1978). World Health Organization (WHO, 1996) defines quality of life as an individual's perception of the person's circumstances in the context of the cultural and value systems of the living environment and in relation to personal goals, expectations, standards, and interests.

McMaster's family functioning theory posits six dimensions including problem solving, communication, roles, affective responsiveness, affective involvement, and behavior control. The problem-solving dimension scrutinizes a family's ability to solve problems in order to maintain effective family functioning (Epstein et al., 1978). The communication dimension assesses the manner in which families exchange information, focusing on the verbal exchange of family information (Epstein et al., 1978). The roles dimension examines the roles performed by each family member, or the repetitive behavior patterns displayed by each individual to fulfill the activities of family functioning (Epstein et al., 1978). The affective responsiveness dimension measures a family's ability to respond to various stimuli with the appropriate quality and quantity of feelings (Miller, Ryan, Keitner, Bishop, & Epstein, 2000). Affective involvement evaluates the degree of interest and respect shown by the family unit for the activities and pursuits of individual members. Finally, the dimension of control behavior attends to the patterns adopted by the family to control behavior in three specific

situations: physically dangerous circumstances; conditions that involve the fulfillment or expression of psychological and biological needs and impulses; and occurrences both within and outside the family unit that require socialization behavior (Epstein et al., 1978).

The World Health Organization (WHO) divides quality of life into four dimensions: physical health, psychological wellbeing, social relationships, and environment. The physical health dimension includes daily activities, dependence on drugs, the levels of energy or fatigue, mobility, pain and discomfort, sleep and rest time, and work capacity. The psychological dimension comprises body image and appearance, negative and positive feelings, self-esteem, spirituality or religion, personal beliefs, and the processes of thinking, learning, and concentration. The dimension of social relations consists of personal relationships, social support, and sexual activity. Finally, the environment dimension includes eight items that include financial resources, freedom, physical security and quality, health and social care: ease of access and quality, home environment, the opportunity to obtain information and skills, participation and opportunities for recreation or leisure activities, physical environment (pollution or noise or traffic or climate), and transportation (World Health Organization, 1996).

B. Material

This quantitative investigation aimed to examine the correlation between family functioning and quality of life. The Family Assessment Device by Epstein, Baldwin, and Bishop (1983) was employed as the measuring instrument by this study to assess family function and WHOQOL-BREF (WHO, 1996) was utilized to determine quality of life. Both these questionnaires were adapted to Bahasa Indonesia. FAD comprises 60 questions representing the six dimensions of the McMaster family function theory as outlined above. 12 questions gauged family functioning in general. Each dimension was represented by 6-12 questions and consisted of four answer choices: “very appropriate,” “appropriate,” “inappropriate,” and “very inappropriate.” Individual responses were calculated on a Likert Scale of 1 to 4. Higher scores indicated problems in family functioning.

The WHOQOL-BREF measuring instrument consists of 26 questions that measure the four domains of quality of life as stated above. For this scale, WHO provides five response options that vary according to the quality of life domain that is being measured. The scores pertaining to each domain evince a positive direction: the higher the score, the better the quality of life.

C. Participant Characteristic and Procedure

The respondents for this investigation were literate individuals who were capable of reading and understanding the questionnaire, who were currently living in the JABODETABEK area and were aged between 20 and 65. They were family members who performed as caregivers for cervical cancer patients, and who had been providing this service for at least three months to a relative who was undergoing outpatient treatment. 30 people comprised the sample, which was obtained through the non-probability sampling technique of convenience sampling (Gravetter & Forzano, 2012). Data retrieval was conducted directly and personally through

the use of a questionnaire and via an informal interview conducted at the family accommodations, hospitals, and at the home of a friend’s relative. Researchers approached respondents in the waiting room of radiotherapy units and / or polyclinics. At the outset, researchers explained the research design and objectives and obtained informed consent from the respondents if they wanted to participate in the investigation by filling in the questionnaires and by being informally interviewed. Further, the data were processed using descriptive statistics to determine the details of the distribution of respondents based on the demographic data of and on the Pearson correlation analysis.

Results

A. Demography

The results of the investigation revealed that 56.6% of respondents were between 20 and 40 years old, 53.3% were male, and 76.7% were Muslim. Further, the highest educational qualification of 46.7% of the respondents was passing their high school board examinations, 66.7% were married, 90% were parents of children aged between 0–3, and 30% were husbands of the patients. As many as 83.3% of respondents lived with the patient, 53.3% lived with 2–4 family members, and 76.6% had cared for patients who were being treated for 3–12 months.

In addition, 66.7% of the respondents also worked outside the house, 40% incurred expenditures of Rp1,500,000.00–Rp3,000,000.00 per month, 83.3% were not sick, and 63.3% evinced no complaints or health problems.

The majority of respondents also cared for patients who belonged to the 41–65-year age group. 63.3% looked after stage three patients, and 70% of the patients required radiation treatment. A high 86.7% of respondents also cared for patients who did not have any limitations or disabilities, 83.3% of the patients had been diagnosed in 2017 or 2018, 63.4% had completed their high school education, and 80% were married. Also, 63.3% of the respondents did not have other family members who could help with the patient care.

B. Family Functioning and Quality of Life

Table I. General Description of the Family Functioning of the Respondents

Dimensions	Average Score	Cut-off Score
Problem Solving	3.04	2.2
Communication	2.57	2.2
Roles	2.63	2.3
Affective Responsiveness	2.60	2.2
Affective Involvement	2.69	2.1
Behavior Control	2.59	1.9
General Functioning	2.84	2.0

The figures in Table I show that the average score of the respondents conforms to the cut-off mark for each dimension of family functioning. It can thus be concluded that respondents reported adequately functioning families for each of the dimensions.

Table II. Description of Respondents' Family Functioning Categories

	Categories		
Dimensions	Low (1–2)	Middle (2.01–3)	High (3.01–4)
Problem Solving	0 (0%)	18 (60%)	12 (40%)
Communication	1 (3.3%)	28 (93.3%)	1 (3.3%)
Roles	0 (0%)	28 (93.3%)	2 (6.7%)
Affective Responsiveness	0 (0%)	29 (96.7%)	1 (3.3%)
Affective Involvement	0 (0%)	28 (93.3%)	2 (6.7%)
Behavior Control	0 (0%)	29 (96.7%)	1 (3.3%)
General Functioning	0 (0%)	25 (83.3%)	5 (16.7%)

Table III. General Description of Respondents' Quality of Life

Average Score	Respondents' Percentage	Cut-off Score	Definition
76.80	3.33%	<60	Bad/very bad
	96.7%	≥60	Good/very good

Based on the figures illustrated in the above tables, respondents scored above the cut-off mark on average. 96.7% respondents scored well above the cut-off mark, evincing that in general, respondents felt that their quality of life was either god or very good and only 3.33% of respondents reported that their quality of life was bad or very bad.

Table IV. General Description of Respondents' Quality of Life (For Each Dimensions)

Variable	Max	Min	Mean	SD	Median
Quality of Life	57	100	76.80	9.611	78.00
Physical Health	7	13	10.72	9.611	10.86
Psychological Wellbeing	9	18	12.11	1.926	11.33
Social Relationships	8	16	12.98	1.979	13.33
Environment	7	16	12.10	2.061	12.50

As demonstrated in Table IV, the quality of life variable measured $M = 76.80$, $SD = 9.611$, and $Median = 78.00$. The respondents of this study tended to score below the median in three of the four dimensions of the quality of life: physical health, social relationships, and living environment.

Table V. Correlation Between Family Functioning and Total Score of Quality of Life

Variables	Dimensions	r
Family Functioning	Problem Solving	0.029
	Communication	0.194
	Roles	0.469*
	Affective Responsiveness	0.406*
	Affective Involvement	0.279
	Behavior Control	0.385*
	Quality of Life	1

*Significant at level $p < 0,05$ (2-tailed)

Specifically, the correlation was found between some dimensions of family functioning and the total score of the quality of life of the caregivers. These dimensions were roles ($\alpha = 0.469$, $p < 0.05$), *affective responsiveness* ($\alpha = 0.406$, $p < 0.05$), and *behavior control* ($\alpha = 0.385$, $p < 0.05$). The results show a positive correlation between the three dimensions and the quality of life variable, and signify that the level of family functioning is directly correlated to the caregiver’s quality of life.

Table VI. Correlation Between General Functioning and Total Score of Quality of Life

Variables	r
General Functioning	0.487*
Quality of Life	

*Significant at level $p < 0,05$ (2-tailed)

Table VI demonstrates a significant result ($\alpha = 0,487$, $p < 0.05$) for the correlation between general family functioning and quality of life. This finding supports the study’s hypothesis that the family functioning and quality of life of family caregivers of cervical cancer are correlated.

Conclusion

A correlation between family functioning and quality of life was found among family caregivers for cervical cancer patients in the dimensions of roles, affective responsiveness, and behavior control. Of these three variables, the roles dimension evidences the highest correlation with quality of life. The association between the roles dimension and quality of life can be explained because the clear assignment of responsibilities and tasks within the family unit ameliorates the effectiveness of the execution of the tasks, so caregivers can avail

of a degree of flexibility in managing their lives so that their quality of life can be maintained. The correlation between the affective responsiveness dimension and quality of life may be understood by the fact that appropriate supportive responses from family members can decrease the caregiver's stress perception and thus the caregiving routine is not considered a psychologically stressful activity. This change of perception is related to the improvement of the caregiver's quality of life. The correlation between the behavior control dimension and quality of life is reasoned by the existence of behavioral rules within the family unit, which helps members understand the actions to be performed in the handling of certain situations and assists in the fulfillment of their respective roles. It minimizes the possibility of caregivers living in conditions of uncertainty and stress. It may thus be said that overall, the quality of life of family caregivers for cervical cancer patients in Indonesia is good or very good.

Discussion

An effectively functioning family is vital for patients suffering from chronic diseases, especially ailments such as cervical cancer. Family units help to maintain the balance between the conditions faced and the quality of life of each family member, including the patient and the primary caregiver. The results of this study demonstrate a clear correlation between family functioning and the quality of life of the family caregiver for cervical cancer patients. This outcome is consistent with the findings of the investigation conducted by Nissen et al., (2016), which discovered the correlation between family functioning and quality of life in family caregivers for patients with cervical cancer.

This study also found that three dimensions of family functioning are associated with quality of life: roles, affective responsiveness, and behavior control. The roles dimension evinced a positive correlation with quality of life in this study, revealing a directly proportional connection between the roles dimension of family functioning and quality of life. This finding conforms to the results of the study conducted by Kotzampopoulou (2015), which asserted that the clear assignment of responsibilities and tasks enhances the effectiveness of the execution of the requisite chores. Thus, family caregivers can avail of a degree of flexibility in arranging their routines to enable them to maintain the quality of their life.

Affective responsiveness is another dimension found to be correlated to quality of life. This result of the present study is aligned to the findings of the investigation conducted by Moore (2010): when a family is able to respond appropriately to the feelings of the family caregiver it can change the caregiver's perception of the burden. Caring for the cervical cancer patient is then considered to be satisfying, fun, and inspiring. Appropriate affective response to caregivers by the other family members is related to the quality of life because it preserves the psychological wellbeing of caregivers and relieves the stress, they feel from their caregiving activities.

The behavior control dimension was also correlated with quality of life. According to Epstein et al., (1978), this dimension helps to maintain and manage the roles dimension in the

functioning of the family and ensures that each family member fulfills the assigned roles and responsibilities. This type of regulation can reduce the likelihood of the caregiver being relegated to a condition of uncertainty that causes anxiety and can mitigate stressful conditions that affect the quality of life of the caregiver. The results of this study are congruent with those obtained by Wright, Afari, and Zautra (2009), who found that the uncertainty arising from instances of chronic ailments causes psychological distress and results in the decreased quality of life of people who make decisions.

Overall, the outcomes of the present study indicate that respondents reported favorably functioning families on average. It is believed that the families of these respondents were effective in their functioning at the outset, and hence a family member's diagnosis of cervical cancer did not cause the family functions to deteriorate despite the many changes and adjustments that the family was forced to experience. This result is also consistent with the outcomes of the study conducted by Golics et al., (2013), who found that family relationships are closer and that families tend to provide emotional support when a member contracts a chronic illness.

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