Original Research Article

Quality of life of cervical cancer patient with support from nuclear family and extended family in Dr. Sardjito general hospital, Yogyakarta Indonesia: a comparative study

Heru Pradjatmo[1], Wenny Artanty Nisman[1], Yayuk Fatmawati[2]*

[1]Department of Medicine, Gadjah Mada University and Dr. Sardjito General Hospital, Yogyakarta Indonesia
[2]Department of Obstetrics and Gynecology, Gadjah Mada University and Dr. Sardjito General Hospital, Yogyakarta Indonesia

*Correspondence:
Dr. Yayuk Fatmawati,
E-mail: yayukf80@yahoo.co.id

ABSTRACT

Background: Nature of the disease, side effect from treatments such as surgery, chemotherapy, and chemo radiation reduce the patient's quality of life. Thus, the family support is substantial in cancer patient treatment. Aim of this study was comparing the quality of life of patients with cervical cancer in support of the nuclear family and extended family at Dr. Sardjito hospital Yogyakarta, Indonesia.

Methods: The study population were all cervical cancer patients treated with chemotherapy in Dr. Sardjito general hospital, Yogyakarta, Indonesia from October to November 2016. Samples were collected using purposive sampling to obtain 62 respondents, 30 respondents for nuclear family group and 32 for extended family group. The study instruments were family support questionnaire, EORTC QLQ-C30 Indonesian version, and EORTC QLQ-C24 were translated to Indonesian. The quality of life was assessed during chemotherapy.

Results: Quality of life for cervical cancer patient from supportive family had mean >50. The respective mean of general health status for patients from supportive nuclear and extended family were 76.28±21.434 and 67.82±22.017. Nearly all items in symptom, multi-item and single-item scales had mean <50, except item financial problem. Meanwhile, quality of life for cervical cancer patient from unsupportive family had mean >50. The respective mean of general health status for patients from unsupportive nuclear and extended family were 70.83±20.972 and 75.00±8.33. Nearly all items in symptom, multi-item and single-item scales had mean <50, except items fatigue and sore. Several items of quality of life had p<0.05, which were constipation (p=0.049), and financial problem (p=0.045).

Conclusions: There was no significant difference between quality of life of cervical cancer patients with support from nuclear and extended families. However, in 'financial problem' item, nuclear family had better quality of life while in contrast, extended family had better quality of life in 'constipation' item. Family education program needed because several domains of quality of life is still low and requires family involvement in treatment.

Keywords: Cervical cancer, Extended family, Family support, Nuclear family, Quality of life

INTRODUCTION

Condition and management of cancer patient could induce stress that affects patient's physiological and psychological condition. The physiological effects include lack of appetite, sore, weight loss, hair loss, and others. Meanwhile, the psychological effects include fear, disability, dependency, stress from loss of role function and facing financial problems. Cervical cancer is the second leading cause of death after breast cancer, with

529,409 new cases around the world that 89% of them occurs in developing countries.[1] America estimates that there are 12,900 cervical cancer patients in 2015, with 4,100 of them has high probability of death.[2] In developing countries such as Indonesia, the prevalence is 40,000 new cases annually. This is the second leading cause of death in Indonesia after breast cancer with the respective prevalence and number of incidents and deaths are 59, 107, 20, 928 and 9, 498 respectively.[1]

Psychological support is substantial for cancer patients, particularly from their family, as the family members often are the main social supporter of patient with severe disease. Family's roles and responsibilities in cancer treatment cover preparing patient examination schedule and accommodation, ensuring treatment adherence, management of occurring symptoms, providing social and financial support, preparing food, and taking care of the house.[3,4]

METHODS

This was an analytical descriptive study with cross-sectional approach by comparing the support from nuclear family and extended family. This study was conducted to all cervical cancer patients who were treated in Dr. Sarjito general hospital, Yogyakarta, Indonesia from October to November 2016. The inclusion criteria were diagnosed with cervical cancer, treating with chemotherapy, and living with family. Samples were collected using purposive sampling to obtain 62 respondents, 30 respondents for nuclear group and 32 for extended group. Ethical clearance was granted by ethics committee of faculty of medicine, Universitas Gadjah Mada. Instruments used in purposive sampling were (1) EORTC QLQ CX-30 questionnaire that consisted of global health status, function scale (physical function, role function, emotional function, cognitive function, social function) and symptom scale (fatigue, nauseous and vomiting, sore, dyspnea, insomnia, loss of appetite, constipation, diarrhea, financial problem); (2) EORTC QLQ CX-24 questionnaire that consisted of multi-item scale (symptom experience, body image, sexual and vaginal function) and single-item scale (lymphedema, peripheral neuropathy, early menopause, sexual concerns, sexual activities, sexual pleasure); and (3) family support questionnaire that consisted of emotional support, instrumental support, information support, appreciation support, and social network support. Data was analyzed using Mann-Whitney for bivariate analysis.

RESULTS

Respondents' characteristics, half of respondents in nuclear and extended families aged <50 years old while the other half aged >50 years old. The dominant number of respondents in nuclear and extended families were married, with the number reached 24 (80%) and 25 (78.1%), respectively. Nearly all of respondents in nuclear and extended families had low education, with the respective number reached 29 (96.7%) and 30 (93.8%). Majority of respondents in nuclear and extended families were in the final cycle of chemotherapy, with the number reached 17 (56.7%) and 17 (53.1%), respectively. Most of the respondents in nuclear family were employed, with the number reached 16 (53.3%).
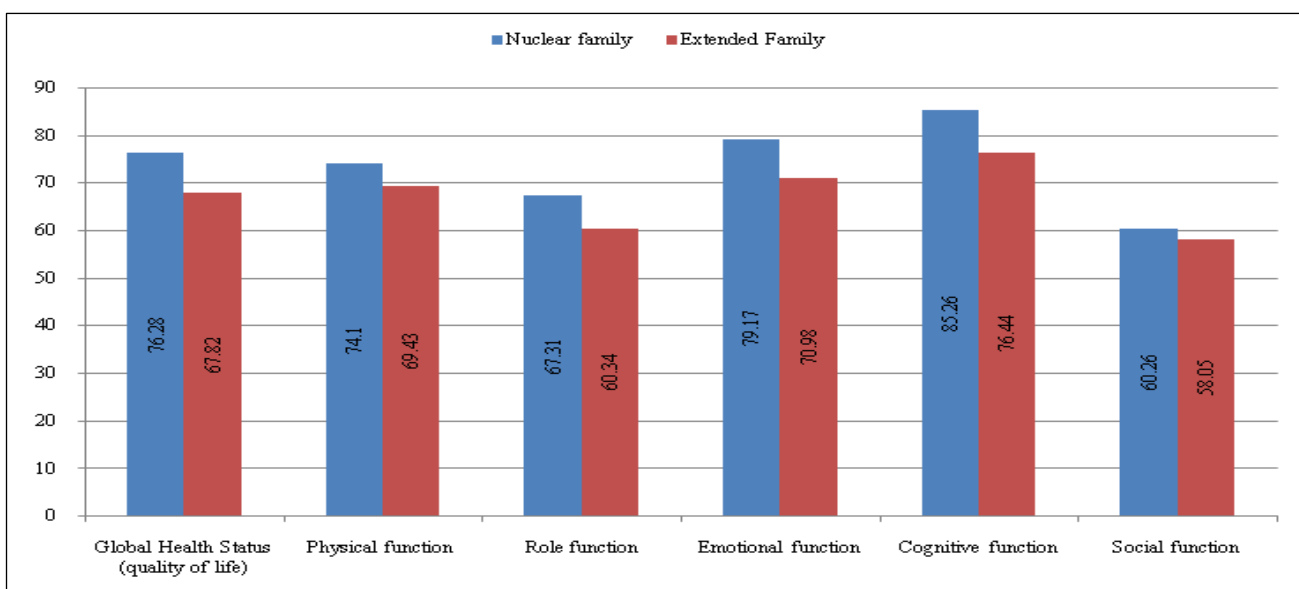

Figure 1: Global health scale and function scale.

Table 1: Respondents' characteristics of cervical cancer patient (n=62).

Respondents' characteristics	Nuclear family, n=30 (%)	Extended family, n= 32 (%)	P
Age (28-79 years)			
≤50	15 (50%)	16 (50%)	1.000
>50	15 (50%)	16 (50%)	
Marital status			
Married	24 (80%)	25 (78.1%)	0.856
Not married	6 (20%	7 (21.9%)	
Education			
High (> university)	1 (3.3%)	2 (6.3%)	1.000
Low (uneducated-high school)	29 (96.7%)	30 (93.8%)	
Employment			
Unemployed	14 (46.7%)	17 (53.1%)	0.611
Employed	16 (53.3%)	15 (46.9%)	
Cervical cancer stage			
Early (I-IIA)	13 (43.3%)	5 (15.6%)	0.016*
Advanced (IIB-IV)	17 (56.7%)	27 (84.4%)	
Chemotherapy cycle			
Early (2,3)	13 (43.3%)	15 (46.9%)	0.779
Final (4,5,6)	17 (56.7%)	17 (53.1%)	

Note: statistically significant.

Table 2: Family support of cervical cancer patient (n=62).

Family support	Nuclear family	Extended family	P
Supportive	26 (86.6%)	29 (90.6%)	
Emotional	26 (86.7%)	30 (93.8%)	
Tangible	26 (86.7%)	29 (90.6%)	
Information	25 (83.3%)	28 (87.5%)	
Appraisal	22 (73.3%)	28 (87.5%)	
Social network	19 (63.3%)	21 (65.6%)	
Non-supportive	4 (13.3%)	3 (9.4%)	0,703
Emotional	4 (13.3%)	2 (6.3%)	
Tangible	4 (13.3%)	3 (9.4%)	
Information	5 (16.7%)	4 (12.5%)	
Appraisal	8 (26.7%)	4 (12.5%)	
Social network	30 (36.7%)	22 (34.4%)	

In contrast, 17 respondents (53.1%) in extended family were unemployed. Majority of respondents in nuclear and extended families were in the advanced stage of cancer with the respective number reached 27 (84.4%) and 17 (56.7%).

Nearly all of respondents in nuclear and extended families had supportive family, with the number reached 26 (86.6%) and 29 (90.6%), respectively.

Figures 1, 2 and 3 show that the global health scale (quality of life) and all items in functional scale had mean >50 in supportive and unsupportive families (nuclear and extended). Most items in symptom, multi-item and single-item scales in QLQ-C24 had mean lower than 50, except for item financial problem in patient with supportive family (mean = 63.22±41.159) and items fatigue (85.19±6.415), sore (72.22±25.459) and financial problem (75.00±50.000) in patient with unsupportive family.

There were significant differences in symptom scale of items sore (p=0.028) and financial problem (p=0.049 and p=0.045) in patient with supportive family.
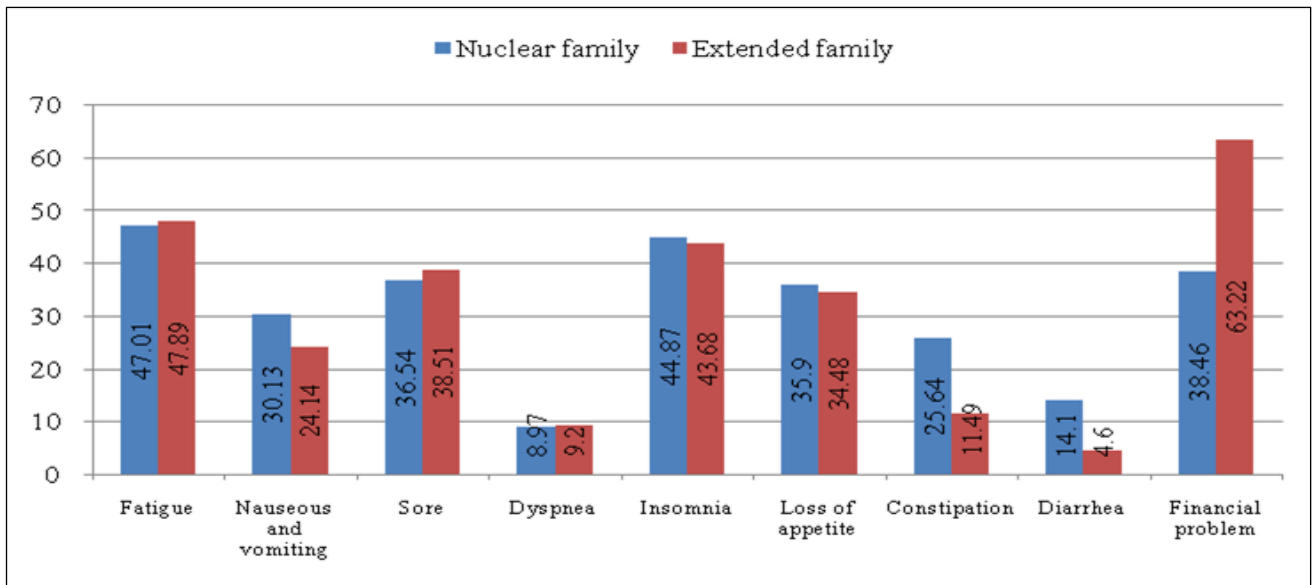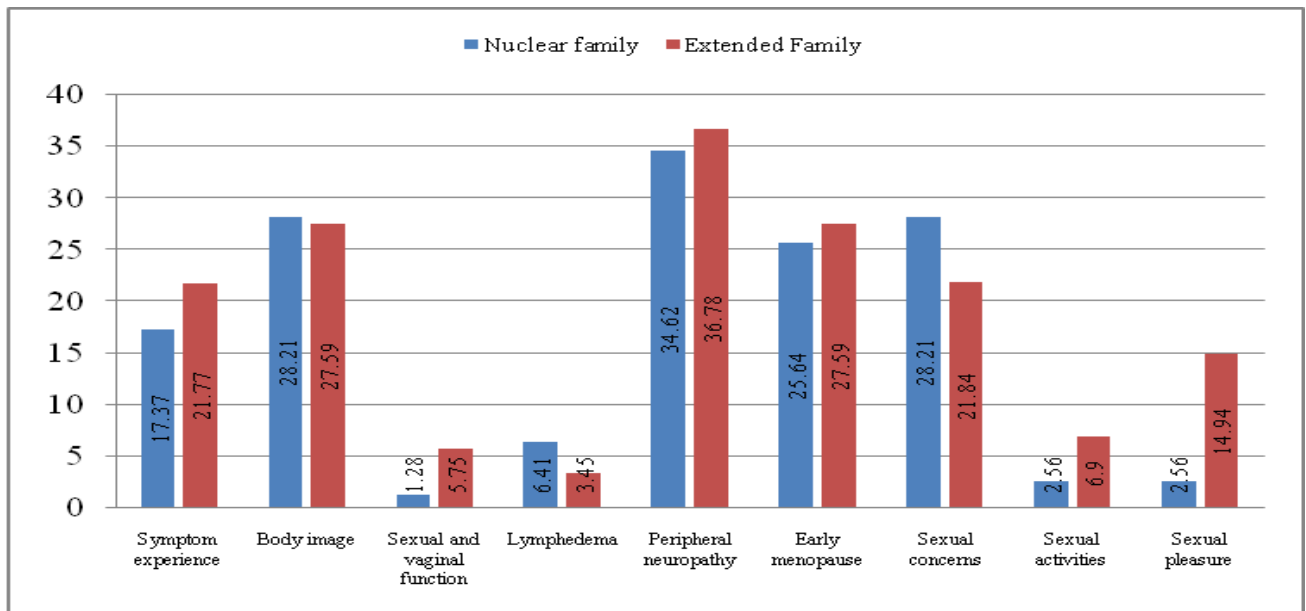
Figure 2: Symptom scale.

Figure 3: Multi-item scale and single item scale.

Figures 1, 2, 3. Mean of cervical cancer patients' quality of life from EORTC QLQ-CX30 and EORTC QLQ-CX24 with family support (n=55).

DISCUSSION

Family support

In this study, nearly all cervical cancer patient in nuclear and extended families had supportive family, with the percentage reached 86.6% and 90.6%, respectively. The strong family support is a general trend for Indonesian, whether for people who live in nuclear or extended family. The strong bond in the family influences strong cooperation among family members.[5] Family member is often the first side who provides social support for the other members with severe disease or problem.[6]

Quality of life of cervical cancer patient with supportive family

The global health scale (quality of life) and all items in functional scale had mean >50 for patient in supportive family (nuclear and extended) and mean <50 for most of the items in symptom scale, other than financial problem.

This result is in line other study in about quality of life in Indonesia and other country studies where all means of global health status were >50 in their studies.[7,8] The high mean of quality of life is explained in several studies. They state that the low quality of life is significantly related to low social support.[9-11] The main provider of social support that could influence patient psychological adjustment is family.[12,13]

In symptom scale, item financial problem had the highest mean that was larger than 50. Study found similar result, where respondents in Indonesia were more prone to financial problem than respondents in Netherlands as patients in Indonesia paid higher expenses and suffered more income loss due to their disease.[14] The financial problem faced by cervical cancer patient also contributes to his quality of life (Tadele Niguse, 2015).[15]

The high mean of global health scale for nuclear and extended family (76.28±21.434 versus 67.82±22.017), high mean of financial problem' item in symptom scale (63.22±41.159) for extended family, and the low mean of 'sexual activity' item (2.56±9.058 versus 6.90±16.377) and 'sexual pleasure' item (2.56±9.058 versus 14.94±34.024) in single-item scale indicated that Indonesian people, particularly Japanese, are people with tendency of accepting their condition without complaining and satisfied with their life even though they had high mean of symptom domain and low sexual activity and sexual pleasure.[16] This pattern is like what was observed in a study in Korea.[17] Furthermore, study in Iran states that global health scale has significant relation with social function, nauseous and vomiting, dyspnea, insomnia, loss of appetite, financial problem, peripheral neuropathy, and menopausal symptoms.[18] All of these three studies has similar pattern where sexual activity and sexual pleasure decrease significantly.

Quality of life of cervical cancer patient with unsupportive family, in this study, sore is a symptom that occurred in p=0.028. That results in in line with study that social support is not only related to the severity of the disease, but also could reduce the sore and improve the hope for full recovery, as social support has considerable influence on psychological condition on cervical cancer patients.[19,20]

Every family has their own strength and weakness. The plan of one family to fulfil their basic functions is not necessarily suitable to be applied in another family. In several studies that compare family forms, it is difficult to distinguish the effect of family form from other influencing variables, such as socioeconomically factors, family development stage, and children care plan. The family label and type only function as reference of family plan and main group network, every effort must be intended to comprehend the strength and uniqueness of each family. The most important aspect is the quality of relationship inside the family, not the structure where the relationship appears.[21]

CONCLUSION

Morphometric features of transverse and sigmoid sinus with other superficial landmarks is essential during posterolateral approaches to the posterior cranial fossa. The measurements of assertion with other bony landmarks provide database for the clinical-surgical practice and for forensic and anthropological application.

ACKNOWLEDGEMENTS

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