RESEARCH COMMUNICATION

Quality of Life of Women Undergoing Chemotherapy for a Gynaecological Oncological Disease in Turkey

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Abstract

Aim: Studies have shown effects of surgery, radiation and chemotherapy on quality of life in cases of gynaecological cancer. Very few studies are available examining the quality of life of individuals in Turkey who have been diagnosed with gynaecological cancer and undergoing treatment. Method: This study was performed to evaluate the quality of life of such patients using the EORTC-QLQ-C30 Quality of Life Index. Chi-square Yates, Mann-Whitney-U tests and variance analysis used for statistical analyzing. Results: The EORTC-QLQ-C30 Quality of Life Index mean points for “general well-being and quality of life” of the patients were found to be 60.5±25.0. In the sub-groups of the Quality of Life Index determined fatigue (60.1±24.8), economic difficulties (46.9±33.3), pain and loss of appetite (42.9±27.8; 42.9±34.0) and insomnia (40.1±34.0) were the symptoms most reported to have a negative effect on quality of life. Statistical significance was noted for marital status and income status (p<0.05) but not educational level. Conclusion: Determination of quality of life of women with a diagnosis of gynaecological oncological disease who are undergoing chemotherapy enables provision of a more comprehensive and higher quality of care.

Keywords: Quality of life - gynaecological cancer - adverse effects of therapy - Turkey

Introduction

Quality of life is a multi-dimensional concept which defines physical, mental and social well-being. The physical dimension includes daily life activities and symptoms arising from the disease and the treatment (Caplan, 1987). Cancer patients experience problems such as dyspnea, coughing, hemoptysis, pain, lethargy, fatigue, insomnia, loss of appetite, nausea, vomiting, diarrhea, constipation, weight loss, changes in urinary habits, anxiety, fear, depression, changes in body image, and impaired family and social relationships, all of which have a negative impact on quality of life (Greenlee et al., 2000, Chan et al., 2001, Jemal et al., 2003). In literature there has been an increase in studies directed towards problems affecting quality of life for cancer patients (Schipper et al., 1984; Cell & Tlusky, 1990; Costantini et al., 2000; Chan et al., 2001). Studies have shown the effects of surgery, radiation and chemotherapy on quality of life in cases of gynaecological cancer (Portenoy et al., 1994; Kornblith et al., 1995; Thaler et al., 2000; McQuellon et al., 2001; Özaras & Özyurda, 2010). The perception of quality of life changes according to social environment and differences in country’s cultures. It is important to assess gynecologic cancer cases in a Turkish population and compare the results with literature. Very few studies are available examining the quality of life of individuals in Turkey who have been diagnosed with gynaecological cancer and have undergone treatment (Reis et al., 2006; Pinar et al., 2008; Özaras & Özyurda, 2010; Reis et al., 2010; Goker et al., 2011). By evaluating topics such as family and social relationships, daily life activities, perceptions of health and expectations of individuals undergoing chemotherapy for gynaecological disease, what is felt to be necessary physically, psychologically and socially is revealed and thus quality of life can be improved.

This study was planned to evaluate the quality of life of patients undergoing chemotherapy due to a diagnosis of gynaecological oncological disease.

Materials and Methods

Study General Details

The study was carried out at the chemotherapy unit of Baskent University Ankara Hospital Gynaecologic Oncology Service. The study included 49 women undergoing treatment at the chemotherapy unit of Baskent University Ankara Hospital Gynaecologic Oncology Service between 10 June and 20 August 2010. The research was performed as descriptive and cross-sectional.

Data Collection

To collect data related to socio-demographic characteristics, a questionnaire developed by the researcher and the EORTC-QLQ-C30 Quality of Life Index, a measure developed by EORTC and the Department of Nursing and Health Services, Faculty of Health Sciences, Baskent University, Ankara, Turkey For correspondence: gulcihanakkuzu@yahoo.com

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The data obtained were evaluated by SPSS (Statistical Package for Social Sciences) for Windows 11.0 packet program. In the data evaluation using Chi-square test and Fisher exact chi-square test, in the case of any frequency observed < 25 from a four-way observation, the Yates test and Mann-Whitney-U test and chi-square significance test were used in the comparison of quality of life variance analysis with socio-demographic variables.

**Research Ethics**

Permission for the research was granted by Baskent University Medical and Health Sciences Research Committee. Informed consent was obtained from all the women included in the study.

**Results**

The mean age of the women in the study was 54.3 years (range 29-85 years). The education level of the women undergoing chemotherapy was 30.6% having completed primary school and 65.3% were defined as having income equal to outgoings (Table 1.a.). The mean time since diagnosis was 2 years, 67.3% had a diagnosis of ovarian cancer and 24.5% were receiving reatment having income equal to outgoings (Table 1.a.). The mean time since diagnosis was 2 years, 67.3% had a diagnosis of ovarian cancer and 24.5% were receiving reatment having income equal to outgoings (Table 1.a.). The mean time since diagnosis was 2 years, 67.3% had a diagnosis of ovarian cancer and 24.5% were receiving reatment having income equal to outgoings (Table 1.a.). The mean time since diagnosis was 2 years, 67.3% had a diagnosis of ovarian cancer and 24.5% were receiving reatment having income equal to outgoings (Table 1.a.). 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Table 3. Effect of Daily Life Activities of Symptoms

| Symptom          | N   | %    |
|------------------|-----|------|
| Standing comfortably | 63.3|      |
| Speaking         | 91.8|      |
| Eating           | 83.7|      |
| Doing household tasks | 81.6|      |
| Reading and writing | 77.6|      |
| Lifting more than 5 kg. | 73.5|      |
| Walking slow     | 71.4|      |
| Wearing and undressing | 71.4|      |
| Stair-climbing   | 69.4|      |
| Standing comfortably | 63.3|      |
| Bathing          | 63.3|      |
| Descending stairs | 55.1|      |
| Using the toilet | 3.7 |      |

Table 4. EORTC-QLQ-C30 Quality of Life Index General and Subscales Points

| Subscales Points: | Items | Mean ± SD |
|-------------------|-------|-----------|
| General Status    |       |           |
| Physical functions| 1, 2, 3, 4, 5 | 54.15 ± 27.51 |
| Role functions    | 6, 7  | 61.56 ± 33.19 |
| Emotional functions| 21, 22, 23 | 62.59 ± 27.01 |
| Cognitive functions| 20, 25 | 72.10 ± 22.66 |
| Social functions  | 26, 27| 72.11 ± 22.67 |
| Economic difficulties | 28  | 46.93 ± 33.27 |

on daily life activities are shown in Table 3. The most frequently reported effects were 91.8% speech difficulties, 83.7% eating problems and 81.6% inability to perform housework. Although not shown in the Table, the level of social support factors together with chemotherapy were listed as a good level of support from children (77%), spouse (73.5%), friends (63.3%), relatives (55.1%) and neighbours (53.1%).

The EORTC-QLQ-C30 Quality of Life Index mean points for “general well-being and quality of life” of the patients were found to be 60.54±24.98. Within functional status, a deterioration was determined in the areas of physical (54.15±27.51), emotional (62.59±27.01), role (61.56±33.19), social (72.11±22.67) and cognitive (72.10±22.66). In the sub-group of symptoms of the Quality of Life Index, fatigue (60.09±24.83), economic difficulties (46.93±33.27), pain and loss of appetite (42.85±27.84; 42.86±34.02) and sleeplessness (40.14±34.01) were the symptoms most reported to have a negative effect on quality of life (Table 4).

Examination of the distribution of mean points in the sub-groups of the Quality of Life Index determined no statistical significance related to educational level. When marital status was examined, the mean physical function points of widowed/divorced/separated patients (36.41±31.11 p<0.05) were determined as low compared to those of married and single patients. The mean economic difficulties points of the group with income lower than outgoings (20.00±44.72 p<0.05) were determined as low compared to the other groups.

Discussion

The results obtained showed that according to the mean points of the EORTC-QLQ-C30 Quality of Life Index (60.54±24.98), the most frequent symptoms experienced by the patients were fatigue/lathergy, nausea, vomiting and pain, and due to the disease and the treatment applied, difficulties were experienced in performing some daily life activities (housework, climbing stairs etc).

In a study by Pınar et al. (2008) of gynaecological cancer patients with a mean duration since diagnosis of 36 months, using the same measurements, the mean points of the EORTC-QLQ-C30 Quality of Life Index were found to be 51.54±22.20. The higher quality of life points obtained in the current study may be due to the study group consisting of individuals with a mean duration of treatment of 2 years. In a study by Reis et al. (2010) of gynaecological cancer patients diagnosed at mean 29 months previously, using the Quality of Life-Cancer Survivors (QOL-CS) measurement, general quality of life was found to be moderately low. Similarly, Reis N (2001) reported quality of life to be moderately poor at the level X=4.83±1.09 using the Quality of Life Scale/Cancer Patient measurement to examine the quality of life of individuals with gynaecological cancer. In the other study from Turkey (Goker et al., 2011) used same scale, mean of global health QoL score was determined as 59.4±24.2. When the subdimensions of the functional status scale were evaluated, the mean of cognitive score (81.6±23.1) was found higher than other dimensions. In contrast, Le et al. (2004) obtained findings of increased quality of life with chemotherapy in individuals with ovarian cancer and recommended randomised controlled studies to clarify these findings.

Recovery from treatment for gynecological cancer has a positive effect upon QoL. Tahmasebi et al. (2007) stated that social, emotional and functional well-being was significantly better after treatment. According Goker et al. (2011) recovery after surgery was more rapid while the effect of chemoradiotherapy persisted; thus this might explain their effect on the patients QoL.

In the Goker et al. (2011) subdimensions of the functional status scale were evaluated, the mean of cognitive score was found higher and emotional score was found the lowest in women with gynecological cancer. Similarly, Pinar et al.’s 2008 study, which evaluated QoL of women using EORTC QLQ-C30 scale, stated that emotional (49.55±32.42) aspects of QoL were mostly affected among the functional parameters and cognitive function (66.33±27.45) was found higher.

In the physical area, the most difficulty was reported in managing housework (81.6%) and during chemotherapy it was seen to be necessary to share the responsibility for...
housework attributed to women. This result is thought to be supported by the finding that the physical area mean points of the married patients were higher than those of widowed/divorced/separated patients, who take on the responsibility for the household alone. Reis et al. (2010) determined that gender role was an important area affecting individuals with gynaecological cancer. Goker et al. (2011) also found that role function score was lower in single women than married women but emotional and social score higher in single women.

The second area where problems were most frequently experienced after the physical area was the emotional area, which conformed with literature (Chan et al., 2001; Reis et al., 2006, 2010). A longitudinal study by Chan et al determined that psychosocial support for women with gynaecological cancer has the effect of improving quality of life. It is important that nurses and other healthcare personnel direct women undergoing chemotherapy and at that stage of the disease towards available support services. However, it is noticeable that only 1 woman in the study took psychological support. It is thought that the necessity for psychosocial support is tried to be met by the family from the finding that a high percentage of the women in this study received support from their spouse and children and expressed the quality of the support as 'good'. Similarly, Pinar et al. (2008) determined that spouse and children were the primary source of support. In a study by Reis et al. (2010) parental, familial, and friends’ support was at quite a high level as these are characteristics of Turkish social life, thus making an immense contribution to the improvement of social well-being.

In our study, the mean physical function points of widowed/divorced/separated patients were determined as low compared to those of married and single patients. In contrast Goker et al. (2011) found that patients, who are living alone or have low social activity in the first place obtain higher scores.

Pinar et al. (2008) determined that young, married working women with a high level of education had a higher quality of life, whereas those undergoing chemotherapy and radiotherapy, those with additional health problems and those with insufficient information about the diseases had low general well-being and quality of life. In the current study, as no relationship was found between level of education and quality of life, a similarity is shown with the findings of Reis et al. (2006).

In conclusion, quality of life is a significant measurement in the evaluation of health status and the efficacy of treatment. It is thought that the determination of quality of life of women with a diagnosis of gynaecological oncological disease who are undergoing chemotherapy enables the provision of a more comprehensive and higher quality of care for the patients.

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