Abstract: Cancer is on the rise in Nepal but existing research lacks the exact data to estimate its burden on society and the psychosocial suffering of the patients. Cancer patients are being treated using varieties of medical treatment in Nepal but growing literatures indicate that a single medical treatment approach is not adequate. The importance of assessing the psychosocial factors both positive and negative in assuring the quality of life of cancer patients may generate awareness of the inner world and understanding of the patient, the nature and level of social support, the enhancement of coping strategies and facilitating re-adjustment. We studied the association of selected psychosocial variables with their quality of life among the cancer patients in Nepal. A methodological triangulation approach was used to assess the demographics, disease characteristics and psychosocial factors; and their relation with quality of life (QoL). The present study was conducted among 300 Nepalese adult cancer patients from hospitals as well as from their own residence. The study revealed that majority of research participants had less than one fourth of psychosocial adjustment factors such as perceived high level of social support, self-esteem and coping. The majority of the respondents were suffering from anxiety (67.1%) and depression (70.9%). There was significant statistical association between social support, but it was negatively correlated with QoL that means that even with high level of social support, the quality of life of the cancer patients was low or vice versa. However, 18 (90%) of the 20 research participants of the qualitative study expressed that strong social support has a vital role in maintaining quality of life but the attitude of the care providers needed to be helpful. The greater the WHOQOL-BREF score of the quality of life, the lower the cancer patient’s self-esteem was, and vice versa. Qualitative study revealed that out of 20 research participants, 16 (80%) were not satisfied with their life. Whereas, 4 (20%) of them stated ‘will power’ to be an important key in the maintenance of quality of life. Anxiety and depression was inversely correlated with environment domain of QoL among cancer patients. This study concluded that psycho-social factors determine the QoL of the cancer patients. Social support and coping were proved as strong predictors for QoL.

Keywords: quality of life, psychosocial factors, cancer, Nepal

Introduction

Each year, more than 11 million new cases of cancer are diagnosed; and more than 7 million people die of cancer, out of which over 70% are from low and middle-income countries. The current trend continues, then, in the year 2020, new cases will increase to 16 million per year and more than 10 million people will die due to cancer. In Nepal, approximately 50 thousand people are noted as suffering from the cancer and most common cancers include uterine cervix, lung, breast; and head and neck cancer (Baduwal, 2009).
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The duration of diagnosis and treatment cause significant psychological distress, which can have both direct and indirect effects on health (Ganz & Belin, 2002). Cancer is an experience that touches all aspects of a person’s existence. It causes one to questions one’s life and threatens to disintegrate it (Liu, 2005). Cancer contributes a large part to the global mortality (>13%) and total global burden [almost 6%] of disease (Nicolai & Petro, 2007). Psychiatric morbidity associated with cancer treatment ranges from 18 to 40% according to the type of treatment (Vyas & Tyagi, 2000). Quality of Life (QoL) becomes an issue related to the survival of the cancer patients.

Psychosocial factors are recognized as a crucial issue of cancer patients during their treatment and rehabilitation. But there is a lack of evidence regarding the role of psychosocial factors in relation to quality of life among the cancer patients in Nepal. Therefore, this study aims to investigate the association between major psychosocial factors and the quality of life among cancer patients in Nepal.

Psychosocial factors refer to those factors which influence an individual’s thinking, behavior and adaptation towards having diagnosis and treatment of cancer. In this study, psychosocial factors include perceived level of anxiety, depression, self-esteem, coping and degree of social support received after having been diagnosed with cancer.

Methods

A methodological triangulation approach was used to assess demographics, disease characteristics and psychosocial factors to answer the research questions and uncover a relation with quality of life. Three hundred adult respondents were enrolled through a purposive sampling method. Out of 300 respondents, 280 samples were utilized for quantitative analysis; data were collected from B. P. Koirala Memorial Cancer Hospital (BPKMCH) and Bhaktapur Cancer Hospitals (BCH); and 20 samples for qualitative analysis from both hospitals and community settings (door steps). Standardized tools were used to measure psychosocial and quality of life variables for the quantitative part of the study, whereas in-depth interview guideline was used for the qualitative segment. Face-to-face interview was done to secure information. Both parametric and non-parametric statistical tests were used to analyze the data and draw conclusions. Figure 1 depicts the factors associated with quality of life among cancer patients in Nepal.

Results and discussions

The present study revealed that the perceived level of coping in Nepalese cancer patients is positively associated with quality of life. The perceived level of social support and self-esteem, however, is negatively associated with quality of life. This study also revealed that the perceived level of anxiety and depression among Nepalese cancer patients is negatively associated with quality of life in an
environmental domain. Age, education, economic status, gender, marital status is negatively associated with quality of life among cancer patients in the context of Nepal. Progression of cancer and duration of diagnosis is negatively associated with quality of life. Facing financial problem during treatment is positively associated with quality of life among Nepalese cancer patients. Role of the cancer patients in their family and modality of treatment is not associated with quality of life among cancer patients in the context of Nepal.

Besides the association between independent variables and quality of life, this study also revealed psychosocial problems and generally low quality of life among cancer patients in Nepal. Researcher strongly suggests that these are cues for intervention in terms of psycho-education and psychosocial care services to improve quality of life of cancer patients in Nepal.

*Figure 1. Conceptual Framework Based on Factors Associated with Quality of Life Among Cancer Patients in Nepal*
Despite the major medical advances made in diagnosis and treatment of cancer, it continues to be viewed with dread, a great deal of emotion, fear, apprehension and uncertainty attached to survival of the cancer patients. Living with cancer is not easy, even it is mentioned in the literatures that ‘cancer is not just a six letters word’; as it gives terrible experiences after diagnosis. Dealing with loss of function, changes in capabilities, and modifications in life style that accompany the diagnosis and treatment of cancer has valence for many individuals. Yet, life management goals vary widely and may be influenced by each individual’s developmental level, life experiences, and personality characteristics. Psychosocial factors will certainly make it easier to cope with treatment and improve the quality of life (Allen, 2002). Social support in the face of a diagnosis regarded as a life crisis can impact the course of the disease.

As far as the demographic characteristics of the cancer patients is concerned, the quantitative result of this study indicates that more than half (54.6%) of the samples belonged to 40 to 59 years of age. Mean age with standard deviation was 52.2 ± 12.9 years. A majority of the cancer patients was female (63.9%), Hindu (86.5%) by religion and belonged to a joint family (60.7%). More than one third (36.1%) of the research participants belonged to upper caste groups (castes & ethnicity classification, 2007) as categorized by Government of Nepal. The majority (66.1%) of the sample were of illiterate and most (83.2%) of them were married. More than two thirds of the research participants belonged to low socio-economic status, and more than half (56.4%) of them were dependent members for their family. The qualitative study also revealed similar demographic characteristics of the research participants.

The disease variables of cancer patients in the quantitative result of this study indicates equal percentage (25%) from each site covered such as head and neck, lung, breast and uterine cervix. A majority (71.4%) of the research participants were diagnosed as stage III and IV cancer and most (86.8%) had been diagnosed with cancer for last one year. A majority (69.6%) of the cancer patients were receiving multiple modalities of treatment, and 62.5% were facing financial problem during treatment. The qualitative study also revealed similar disease characteristics, except for the duration of cancer diagnosis.

As far as psychosocial factors of the cancer patients are concerned, the quantitative results of this study point out that less than one fourth (22.1%) of the research participants perceived high level of coping. The study revealed that less than one fourth (23.6%) of the research participants felt they received high level of social support. Only one of the five research participants (20%) perceived a high level of self-esteem.
This study revealed that more than two third (67.1%) of the research participants were suffering from anxiety. Anxiety seems to be a natural reaction among the cancer patients both as an attempt to face their health situation and as a consequence of the failure to use adequate coping strategies. The present study also revealed that more than two third (70.9%) participants had severe depression. There are similar findings in other studies; psychosocial and emotional distress, which is often experienced in the form of depression or other adjustment difficulties, was a significant problem for up to half of all cancer patients (Carlson & Bultz, 2004). Both quantitative and qualitative studies results revealed that in Nepalese context the probability of males being depressed is more than females, which could be due to the stress of not being able to shoulder their role and responsibility of their families and societies. On the contrary, women have higher risk of depression as compared to men (Stagno et al., 2005).

Non-linear correlation revealed that social support was negatively correlated with quality of life including all its domains among the research participants (Table 1). MOS social support survey scale was used to measure the level of social support, which constituted four sub-scales namely emotional/informational, tangible/instrumental, affective and positive social interaction. On comparing the obtained scores of four sub-scales, tangible support had highest and emotional support had lowest scores. Yet, qualitative study result revealed that social support is the most important factor to maintain the quality of life after suffering from cancer, but the attitude of the helper and type of social support play a vital role. The present study result is consistent with other studies; higher social support was associated with better quality of life on all domains (Erika et al., 2010).

The present study also revealed that self-esteem was negatively correlated with quality of life and all its domains (Table 1). The unique association of self-esteem with quality of life suggests that interventions are required to promote self-esteem, which is the influential factor for quality of life. Both qualitative and quantitative result indicated that those cancer patients who are not satisfied with oneself or those who did not recognize themselves, could not definitely appreciate the quality of their lives. The finding of present study is consistent with other studies; self-esteem correlated negatively with quality of life and all sub-scale scores (Dimitra et al., 2005).

This study also revealed through non-linear relationship that coping was positively correlated with quality of life including all domains (Table 1). The qualitative part of this study also revealed that there was higher level of engagement coping among Nepalese cancer patients, which was beneficial for an individual’s quality of life.

Present study result revealed that anxiety is negatively correlated with quality of life in environment domain (Table 1). Other studies have similar results; higher level anxiety scores among cancer patients is associated with decreased quality of life.
Another study also reported that anxiety is negatively correlated with quality of life or it leads to poor quality of life (Redeker et al., 2000). The present study also found that there was no significant correlation between anxiety and quality of life in its physical, psychological and social relationship domains.

Depression was negatively correlated with environmental domain of quality of life. There are consistent results of other studies which the same (Redeker et al., 2000). Depression in physically ill patients has been shown to have a significant impact, with increased symptom burdens, impaired functioning, and reduced quality of life (Ruttley and Reid, 2006). The present study revealed unique indifferent correlation values for physical and psychological domains of quality of life because depression itself is an indicator of low quality of life (Table 1). Qualitative result also revealed that depression is linked with indecisive thoughts, which may be the reason be for not being able to appreciate quality of life (Table 1).

Table 1. Correlation between Psychosocial Variables and Quality of Life (n = 280)

<table>
<thead>
<tr>
<th>Psychosocial Factors</th>
<th>Domains of Quality of Life</th>
<th>Total QOL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical</td>
<td>Psychological</td>
</tr>
<tr>
<td>Social support</td>
<td>-0.383**</td>
<td>-0.210**</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>-0.149*</td>
<td>-0.139*</td>
</tr>
<tr>
<td>Coping</td>
<td>0.303**</td>
<td>0.148*</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0.017^</td>
<td>0.007^</td>
</tr>
<tr>
<td>Depression</td>
<td>0.016^</td>
<td>0.012^</td>
</tr>
</tbody>
</table>

**Spearman’s rank correlation is significant at the 0.01 level (2 tailed), *Correlation is significant at the 0.05 level (2 tailed) ^Correlation is not significant at 2 tailed

Quality of life, according to World Health Organization (WHO), is mainly related to physical, psychological, social, spiritual and environmental health. The definition of quality of life is quite similar to the definition of health given by WHO. The present study outlined that, among the five psychosocial factors (social support, self-esteem, coping, anxiety and depression), social support, self-esteem and coping are related to adjustment factors and the other two, anxiety and depression, are psychological consequences. On the basis of factors analysis, coping and social support proved to be the strongest predictors for determining quality of life. On ranking the psychosocial predictors, coping was found to be the first predictor for total quality of life and its physical, social relationship and environment domains. Social support was found to be the first predictor for psychological domain of quality of life. On the other hand,
self-esteem, anxiety and depression remained indecisive predictors for determining quality of life among the cancer patients in Nepal (Table 2).

Table 2. Hierarchical Multiple Regression for Psychosocial Variables on Quality of Life (n = 280)

<table>
<thead>
<tr>
<th>Psychosocial Factors</th>
<th>Total QOL</th>
<th>Domains of quality of life</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physical</td>
<td>Psychological</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td>18.185**</td>
<td>22.873**</td>
</tr>
<tr>
<td>Social support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social support</td>
<td>20.010**</td>
<td>6.783*</td>
</tr>
<tr>
<td>Coping</td>
<td>14.258**</td>
<td>3.914*</td>
</tr>
</tbody>
</table>

Based on conditional parameter estimates (model if term removed) *p = < 0.05 ** p = < 0.01

Conclusion

On the basis of both qualitative and quantitative results, this study concluded that psychosocial factors determine the quality of life among cancer patients in Nepal. Social support and coping are the strong predictors of quality of life among cancer patients. Self-esteem can be a predictor for quality of life, but it requires psychosocial intervention. Timely management of psychological consequences such as anxiety and depression is needed to enhance quality of life. On the other hand, qualitative data revealed that the emotional support, especially from close persons along with positive attitude of providers, willpower, engagement coping, reduced anxiety and depression are the fundamental components for better quality of life.

Hence, the researcher recommends an inclusion of psychosocial care services for cancer patients, and psycho-education for the care providers or family members of cancer patients to enhance quality of life in Nepal.

References


