

## QUALITY OF LIFE, CANCER AND PALLIATIVE CARE UNITS: A NON-SYSTEMATIC LITERATURE REVIEW

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**Abstract:** This non-systematic review aims to summarize the factors that influence the quality of life (QoL) of patients with advanced cancer in palliative care (PC) in developing countries. Understanding this context in the midst of developing countries is necessary; however, this result is rarely reported. Several factors affect the QoL of patients with cancer in PC. Patients valued the use of CAMs; however, quality and safety aspects must be properly addressed. Important factors that influenced the QOL score were social and spiritual support. While there is a general need to further develop PC strategies, recognition of patient needs must be prioritized in national cancer programs.

**Keywords:** Quality of life, Palliative care, Advanced cancer.

## INTRODUCTION

Cancer remains an important public health problem in the world. By 2040, 16.3 million people are expected to be living with cancer, mostly from low- and middle-income countries. In these countries, the diagnosis of most cancers is often made at advanced stages, when treatment options are limited or inaccessible. Cancer symptoms and treatment negatively affect patients' quality of life (QOL) due to physical discomfort, mental stress, and economic pressure. Thus, in 1990, the World Health Organization (WHO) introduced the palliative care (PC) initiative, which represents medical care focused on improving the quality of life of patients with serious illness through the treatment of symptoms through a interdisciplinary approach. PC improves QoL through the prevention and relief of suffering through assessment, early identification and treatment of pain, helping with physical or psychosocial problems and providing spiritual support. Cancer patients often continue treatments that no longer benefit their health status, rather than aligning

treatment strategies to improve their QOL. An effective PC strategy can provide adequate support and symptom control for cancer patients.

Palliative care (PC) is an approach that improves the quality of life of patients and their families facing the problems associated with a life-threatening illness through the prevention and relief of suffering from early identification and thorough assessment and treatment of pain and other problems (physical, psychosocial and spiritual) (World Health Organization, 2019). The importance of an interdisciplinary approach is highlighted. This definition reflects the central aspects of the modern hospice philosophy founded by Saunders (1978), which emphasizes that pain, in particular, is complex when living with a serious illness. Saunders introduced the concept of “total pain”, which consists of physical, mental, social and spiritual aspects, which are intertwined and cannot be seen separately. She therefore emphasized an interdisciplinary approach and awareness that includes concern for the family. The main objective of the philosophy is to make it easier for patients to live as best they can until death.

Therefore, our non-systematic review aims to summarize evidence from the published literature on factors that influence the QoL of cancer patients in PC settings in developing countries.

## **RESULTS**

### **FACTORS ASSOCIATED WITH QOL IN UBS**

These studies showed that the factors assessed and linked to QOL/QoL domains in developing countries varied in the African and Asian regions.

### **SOCIODEMOGRAPHIC FACTORS**

The age of the patients ranged from 18 to 94 years. Studies from Africa and Asia showed

that older patients (> 65 years) had better QL/QoL domains (psychological, existential and supportive) compared to other age groups, which was related to positive coping mechanisms and family social support and friends. Reported gender proportions varied between studies. While six studies showed that the proportion of male patients was greater than that of female patients, two studies demonstrated the opposite. Six Asian studies reported that female cancer patients had better QL/QoL domains (constipation or dyspnea in symptom function, physical functioning, sexual functioning, support or spirituality clusters) than male patients, while a study in India and one in South Korea found opposite results. Gilen et al. stated that in the Indian tradition, women acted as central caregivers in families. have a disease life-threatening often results in the loss of the caring role in the family and contributes to a more distressing situation for Indian women. In contrast, Taiwanese culture viewed men as providers and decision-makers in the family. Therefore, family members often try to prolong the life of a male patient by sending him to the hospital for further treatment despite his terminal condition. Female cancer patients in Taiwan tended to receive CP at home and experienced a better quality of life compared to male cancer patients. Personality differences between male and female cancer patients were considered a key factor in the observed discrepancy. Women were more expressive in their needs, more willing to seek and receive help from others than men. Consequently, they often received more support, which contributed to a better QOL.

### **IMPORTANT FACTORS IN THE CLINICAL SETTING**

Patients who underwent medical treatment, such as chemotherapy cycles, palliative radiotherapy, and symptom control

therapy, particularly for pain and fatigue, had a positive association between these factors and QOL/QOL Domains. For example, an Indian cohort study reported that the short-course palliative radiotherapy regimen for inoperable head and neck cancer patients, which tended to improve social well-being, was viewed favorably compared to the conventional single course of radiation. In addition, a Brazilian study, which evaluated the change in QOL in four chemotherapy cycles, showed that QOL/physical functioning improved in patients with advanced lung cancer. Furthermore, Avelino et al. stated that chemotherapy in the initial evaluation can improve QOL (small changes), physical and cognitive functioning. Likewise, Mehta et al. emphasized that despite the limited sample size that made the comparison between regimens low-potency, their study indicated that a combination of external-beam radiotherapy with intraluminal brachytherapy in advanced esophageal cancer resulted in prolonged palliation of symptoms and better QoL compared to with external radiation therapy alone.

### **COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM)**

Six studies evaluated the use of CAM to treat cancer patients on PC in Asia and the LAC region. One study reported that 16% of cancer patients received Chinese medicine and 14% reported taking alternative therapy in addition to standard cancer care, but no association with quality of life was found. Two studies found the use of traditional medicines such as indigenous Malay complementary therapies, and Chinese medicine showed a better QOL/existential subscale, or physical symptom score. Chaiviboontham stated that nearly 63% of cancer patients tend to use a combination of pharmacological and non-pharmacological PC strategies, eg psychosocial care, mind-

body intervention, and spiritual assistance; physical management; and traditional medicine, herbs and diet management to treat your ailments. This was associated with the effectiveness of CP, with improvements in symptom relief and spiritual well-being. Likewise, Pokpalagon et al. reported that non-pharmacological PC strategies based on the use of herbal medicines showed a better overall quality of life and well-being compared to standard medical therapy alone. In contrast, Alfano et al. found few CAM modalities, for example, mind-body intervention and dietary supplements, that negatively affected QOL domains. For example, cancer patients who used mind-body interventions demonstrated worse cognitive function compared to nonusers. However, the same patients also reported greater sexual pleasure and a positive perception of the future.

### **SPIRITUALITY/RELIGIOSITY**

Despite the limited number of studies evaluating spirituality/religiosity, several religions have been reported, for example Buddhism, Protestantism, Catholicism, Evangelicalism and Hinduism. Two studies reported that some patients had no religious affiliation. Four Asian studies and one Brazilian study stated that spirituality/religiosity was associated with better scores for the QL/QL domains. For example, the Brazilian study indicated that about 95% of patients believe that spirituality/religiosity helps them in stressful situations, supports them during cancer treatment, is a useful coping mechanism, and is an important aspect for evaluation by healthcare professionals. health.

### **DIAGNOSTIC AWARENESS**

Awareness of diagnosis was assessed by five Asian studies. Overall, the proportion

of patients' knowledge of the diagnosis was low, ranging from 17.5 to 50%, with only two studies showing a higher proportion. There are inconsistent reports whether knowledge of the diagnosis is associated with better QL/QL domains. For example, a South Korean study found a positive association between awareness of diagnosis and QOL, role, emotional and social functioning. Despite the positive association, Lee et al. emphasized that his result must be interpreted with care. In contrast, three studies reported opposite results. Patients who were unaware of their diagnosis were more likely to have better physical and emotional functioning and better overall QOL compared to those who knew their diagnosis. Fan et al. reported that non-disclosure of information gave patients a more hopeful outlook, and increased the spirit of fighting the disease. Cultural aspects would probably play an important role in this non-disclosure. In some Asian cultures, the diagnosis of cancer is a taboo concept, and patients often feel stigmatized and ashamed of their health condition; therefore, the lack of knowledge about the diagnosis could be attributed to better physical and emotional functioning.

## **DEPRESSION AND ANXIETY**

Five included studies showed that a high score for depression/anxiety is associated with low QOL, physical well-being, emotional well-being, and functional well-being. In our review, the proportion of patients with advanced cancer who felt depressed and anxious ranged from 21.1 to 62%. This condition can diminish hope and peace, lead to increased physical pain, risk of suicide and poor quality of life. Chan et al. stated that other psychological domains of QOL, for example, being afraid of the future, feeling sad and feeling a burden to others, can be intertwined with depression

and anxiety. Likewise, Kim et al. emphasized that depression is strongly associated with hopelessness, which negatively influences physical and psycho-spiritual well-being and the immune system.

## **COMMON FACTORS BETWEEN REGIONS**

Some factors were found only in a specific region, while some commonly appeared in two or even all three regions. For example, included studies from the African region primarily explored sociodemographic factors, e.g. occupation, income, age and education, while the LAC studies provided information on factors in clinical settings and only one sociodemographic factor (patient perception of diagnosis and treatment). Studies included in the Asian region contributed to several factors in both the clinical setting and sociodemographic aspects. The only common factor shared by all regions was specific additional care within the UBS, e.g. management of pain and fatigue symptoms, spirituality/religiosity, psychosocial counseling, basic skills training for family caregivers, or exposure to integrated care management.

## **DISCUSSION**

This review indicates that, in developing countries, cancer patients in PC who were older (> 65 years), married/already married, had a high educational level, used CAM, and engaged in spiritual/religious activities were more likely to have higher scores. QL/QL domains. However, for patients with other characteristics, for example younger patients, UBS must be able to recognize and provide services that meet their needs. Our review provides a broad perspective in terms of cancer types, geographic area, and factors that influence the QoL of PC patients. A previously published review focused on a

similar quality of life context, but was limited to the Asian region only, not CP, and female breast cancer survivors. Our findings are in agreement with this study that individual and cultural perspectives such as the use of CAMs and spiritual/religious practices were key factors for a better QOL in cancer patients.

Advanced cancer patients experience a range of symptoms for which standard medical treatments may not provide sufficient relief. Consequently, patients seek out and use CAM as an addition to standard cancer care. Our review showed that the modalities of CAM positively influence the QL/QL domains of cancer patients in PC. There are several possible explanations for this finding. First, in most developing countries, standard cancer treatment options are limited, while CAM is available, affordable, and affordable. An African study stated that the majority of the population in Africa live in rural areas where standard healthcare services are limited. This results in CAM being your main source of health care. Second, the influence of cultural and historical factors is very important. Despite well-established healthcare services in Singapore and South Korea, around 80% of their patients reported using CAM. Furthermore, most developing nations have their own traditional forms of healing stemming from their culture and history. Lastly, as indicated by a British study, due to failure of standard medical care or experiencing adverse effects from previous medical cancer treatment, patients are choosing CAM in developed countries as well. As the demand for CAM increases across the world, safety and quality aspects remain an unaddressed issue. CAM are considered natural products and therefore very safe, which is not necessarily true. Some CAMs can have a negative effect on patients and reduce the effectiveness of anticancer

treatment. Therefore, WHO encourages CAM to be integrated and regulated by health service systems, especially in PC, and evaluated with methods similar to standard care, such as clinical trials, to increase their quality and safety.

To have a terminal illness is a highly depressing and anxiety-inducing condition. Our findings suggest that spirituality/religiosity positively affects cancer patients' ability to cope. This can be explained by various mechanisms, for example encouraging healthy behaviors, providing social support, providing a belief system, providing a coping mechanism, and influencing neuroendocrine and neuroimmunological pathways. Spirituality/religiosity also provides social support, facilitating faster adaptation to stressors. A previous review of nearly 300 studies worldwide evaluating the association between spirituality/religiosity and anxiety reported that about 50% of studies on this topic showed an inverse co-relation. A meta-analysis found that spirituality/religiosity-based interventions in developed countries had a positive effect on anxiety, stress levels, decreased alcohol use, and delayed onset of depression. According to an American longitudinal study, spirituality/religiosity is considered cost-effective, and helps make sense of patients' suffering and helps them find hope. Therefore, it is necessary to recognize the spirituality/religiosity needs of cancer patients in UBS by health professionals.

Several individual characteristics such as age, sex, SES and education are known to be linked to QOL domains, as reported by previous studies from the US, Turkey and Asian countries. However, there were some inconsistent findings, for example regarding knowledge of the diagnosis. This inconsistency may be due to cultural differences between regions. In many

countries, disclosure of diagnostic and prognostic information for cancer patients is prohibited by family or caregivers. This situation occurs mainly because caregivers and/or health professionals assume that the dissemination of information about near death is harmful to the psychological well-being of patients. However, patient acceptance after diagnosis can positively influence their QOL. For example, traditional cultural values place a strong emphasis on concepts such as Buddhist and Confucian beliefs of enduring suffering. Culture and ethnicity influence patients' perspectives and experiences of health and illness; therefore, it is highly recommended to assess QOL domains especially related to acceptance of the disease state.

## FINAL CONSIDERATIONS

In developing countries, the sociodemographic characteristics of cancer patients (age, sex, marital status and education) and cultural perspectives (use of CAM, spirituality/religiosity) were the main factors that influenced the scores of the QOL/QL domains in the PC. Although CAM strategies and spiritual/religious practices have been used and valued by cancer patients, their quality and safety aspects must be addressed with care. An adequate biological assessment. Therefore, each country must recognize the needs of patients with further PC research and implement locally adapted strategies. Our narrative review must be interpreted as a guideline for stakeholders on which factors must be prioritized.

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