## Definitions and Conceptual Models of Quality of Life in Cancer Patients

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### **Abstract**

**Background:** Quality of life is an important aspect of the cancer patient care. Cancer is a very common disease and many new cases are appeared annually worldwide. Cancer and its treatment can create difficulties in fulfilling family roles social such as the ability to work or participating in common social activities. The purpose of this review article is to review all existing definitions about quality of life in cancer.

**Method and Material:** The method of this study included bibliography research from both the review and the research literature, in the PubMed that referred to quality of life and cancer patients. The review covered the period 1985-2012.

**Results:** There is no universal accepted definition of quality of life. The existing definitions range from those with emphasis on the social emotional and physical well-being to those that describe the impact of a person's health on daily life. Another existing definition includes quality of life in cancer survivors. The most popular conceptual models that used in cancer patients are Ferrell and Colleagues City of Hope Model and Power QOL Model.

**Conclusions:** The interest of quality of life remains a high priority subject on cancer patients. Oncology nurses have to evaluate the impact of cancer and cancer treatment on quality of life and do researches for strategies to decrease adverse physical, psychological, social, and spiritual effects on the lives of cancer patients.

Keywords: Quality of life; Cancer; Definition; Concept; Theoretical models

#### Introduction

Quality of life is an important aspect of the cancer patient care. Cancer is a very common disease and many new cases are appeared annually worldwide [1]. Cancer and its treatment can create difficulties in fulfilling family and social roles such as the ability to work or participating in common social activities [2].

Although the early detection and new treatments decline cancer and offer better prognoses, cancer is a chronic illness. Toxicities and adverse effects, affected the quality of life in cancer patients. Quality of life (QOL) is popular in nursing research and in recent years there is an increasing interest.

The purpose of this review article is to review all existing definitions about quality of life in cancer.

### **Evolution of Quality of Life**

In recent years there was a great interest in nursing and others healthcare research for the quality of life in cancer patients. National and international activities stressed the great importance of it. The United States Food and Drug Administration assessed QOL in the process of approving new anti-cancer drugs [3]. It is referred that national and international groups advocating QOL assessment in clinical trials research have recognized its importance [4,5].

Also the World Health Organization created a global cancer control program based on knowledge that had a possibility to reduce cancer morbidity and mortality worldwide. The main focus of this program is palliative care and its impacts on quality of life of cancer patients [5].

Furthermore, there were many international professional societies that they have profounded their interest in quality of life. The International Society for Quality of Life research (ISOQOL) was founded in 1994 in order to promote the exchange of information about QOL and its evaluation throughout the world [5]. Nowadays it is known that the mission of the International Society for Quality of Life research (ISOQOL) is to advance the scientific study of health related to quality of life and other patients centered outcomes to identify effective intervention, enhance the quality of health care and promote population's health [6].

Over 30 years ago it was created the EORTC quality of life group in order to develop Health Related Quality of Life measures that could be used in cancer clinical trials. Later a quality department may have created at EORTC headquarters to provide administrative practical and scientific support for implementing the above mentioned measures in EORTC trials [2]. Also, it was created EORTC questionnaire in order to evaluate QOL in cancer patient [7]. The subsequent version of the core questionnaire has been in use since December 1997 and it has been translated and validated into 81 languages and languages. Nowadays, this is used in more than 3000 studies worldwide [8].

### **Defining Quality of Life**

There is no universal accepted definition of quality of life. The existing definitions range from those with emphasis on the social emotional and physical well-being to those that describe the impact of a person's health on daily life [9]. In the literature, the concept of quality and health related quality of life emerged in 1920 [10]. In the past, researchers used only one dimension of a quality life, such as physical function, economic concern, or sexual function. Later researcher used broader definitions of QOL [5].

Numerous authors have discussed many definitions for quality of life. These were a variety of definitions but there was no general acceptance for their use [11].

In 1982, van Knippenberg and de Haes in their article, have discussed about the psychometric properties of instrument assess the quality of life in cancer patients. These two authors reported that quality of life "is the subjective evaluation of the goal and satisfactory character of life as a whole" [11]. Two years later, Calman tried to define quality of life and to create a model for theoretical models for quality of life. He supported that QOL is a gap between reality and hoping dreams and ambitions. Also, he stressed to promote the quality of life as a necessity to connect the gap between hopes and aspiration and actual happens [11]. In 1990, Spilker described quality of life assessment through three levels that include overall assessments of well-being broad domains (i.e. physical, psychological, economic, spiritual and social) and the components each domain [5].

Schumacher et al. defined it as "an individual's overall satisfaction with life and general sense of personal well-being" [11] and Cella referred "quality of life as the patient's appraisal of and satisfaction with their current level of functioning compared with that they perceive to be possible or ideal. The greater the gap

between the actual and the ideal situation, the lower a persons' quality of life will be" [11].

In 1992, Gotay et al., in their article discussed important issues about quality of life. Finally, they define QOL as the state of well-being that is combination of two components, the ability to perform everyday activities that reflect physical psychological requirements and social well-being and satisfaction with levels of functioning and control of the disease [11].

The World Health Organization defines quality of life "as individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals expectations standards and concern". This definition is broad and includes domains such as physical health psychological state level of independence social relationships personal beliefs [12].

Another existing definition includes quality of life in cancer survivors. Ferrell and Dow have explained the domain for cancer survivors with four parameters:

- Physical well-being is the control or relief of symptoms and the ability to have physical independence and capable of doing all the basic functions.
- Psychological well-being is to sustain a sense of control in the face of life against illness characterized by altered life priorities, emotional distress, and fear of the unknown as well as positive life change.
- Social well-being is adjusted by the impact of cancer on individuals, their roles and relationships and how good they can deal with those factors.
- Spiritual well-being is depended on how good an individual can control uncertainty that is created by the hope and derive from the cancer experience [13].

In addition without to, we must take into consideration that the perception of a person's quality of life is differed between individuals. This means that people with different expectation will report a different quality of life, even when they have the same health status. Therefore, insight into a patient's quality of life can only be obtained by asking a patient's perspective.

### Theoretical Models Used in Quality of Life Research for Cancer Patients

The most popular conceptual models that used in cancer patients are Ferrell and Colleagues City of Hope Model and Ferrans Power QOL Model [14,15].

First of all, Ferrell and colleagues' used as theoretical basis the Padilla's of Grant's as conceptual basis. Padilla & Grant considered quality of life as a multidimensional concept that measured the dimensions of psychological well-being physical well-being body image responses to diagnosis or treatment and social cancers [15]. In 1989, Ferrel Wisdom and Wenzl used Padilla and Grant model as a conceptual framework in order to develop and test a quality of life instrument. After this, the instrument was revised and used to gather data about the relationship between pain and QOL [15].

From these two studies a conceptual model emerged and referred as City of Hope Model. This model illustrated the influence of pain on the dimension of quality of life. The Model supports that quality of life has four dimensions: physical well-being and symptoms, psychological well-being, social well-being and spiritual well-being. In this model it was demonstrated that pain is an experience that influences all dimensions of QOL [16]. Later it was demonstrated that fatigue is a variable that influence all four dimensions of QOL [17].

Ferrans, in his conceptual model described four major domains of QOL: health and functioning socioeconomic psychological/spiritual and family [15,18]. The four domains include 35 aspects of life conveying the multi-dimensionality of the concept. Ferrans's framework was based on literature review and statistical analysis using data from patients undergoing hemodialysis. These studies used the Quality of Life Index in order to measure quality of life [14]. The initial QLI was modified and tested with a population of clients with cancer. Ferrans in his paper supported that "the model was developed based on the adoption of an individualistic ideology, which recognizes that quality of life depends on the unique experience of life for each person. Individuals are the only proper judge of their quality of life, because people differ

in what they value. Consistent with this ideology, quality of life was defined in terms of satisfaction with the aspects of life that is important to the individual" [18].

### **Conclusions**

Quality of life is a concept relevant to the discipline of nursing. With instrument development and population description oncology nurses have improved the quality of life in cancer patients. There are many research opportunities and challenges to overpass thus it are a fertile area for continued work.

Nurses in cooperation with doctors and other health professionals, they made research and clinical practice in order to expand knowledge regarding the impact of cancer and cancer treatment on quality of life.

Nurses will continue to be actively involved locally, regionally, nationally and internationally because the interest of quality of life remains a high priority subject on cancer patients. Oncology nurses will continue to evaluate the impact of cancer and cancer treatment on quality of life and do researches for strategies to decrease adverse physical, psychological, social, and spiritual effects on the lives of cancer patients.

#### References

- 1 American cancer Society (2013) Cancer Facts & Figures 2013.
- 2 www.groups.eortc.be/qol/quality-life.
- 3 Johnson JR, Temple R (1985) Food and Drug Administration requirements for approval of new anticancer drugs. Cancer Treat Rep 69: 1155-1159.
- 4 Osoba D (1992) The Quality of Life Committee of the Clinical Trials Group of the National Cancer Institute of Canada: organization and functions. Qual Life Res 1: 211-218.
- 5 Grant MM, Rivera LM (1998) Quality of life: From nursing and patient perspectives. Theory-Research–Practice: Evolution of quality of life in oncology and oncology nursing. Jones and Bartlett Publishers, Sudbury, Massachusetts.
- 6 www.isoqol.org.
- 7 Aaronson NK, Ahmedzai S, Bergman B, Bullinger M, Cull A, et al. (1993) The European Organization for Research and Treatment of Cancer QLQ-C30: a quality-of-life instrument for use in international clinical trials in oncology. J Natl Cancer Inst 85: 365-376.
- 8 www.groups.eortc.be/qol/eortc-qlq-c30.
- 9 Carr A, Higginson IJ (2001) Are quality of life measures patient centred? BMJ 322: 1357-1360.
- 10 Wood-Dauphinee S (1999) Assessing quality of life in clinical

- research: from where have we come and where are we going? J Clin Epidemiol 52: 355-363.
- 11 Bottomley A (2002) The cancer patient and quality of life. Oncologist 7: 120-125.
- 12 WHOQOL (1993) Study protocol for the World Health Organization project to develop a Quality of Life Assessment instrument. Qual Life Res 2: 153: 159.
- 13 Ferrell BR, Hassey Dow K (1997) Quality of life among long-term cancer survivors. Oncology (Williston Park) 11: 565-568, 571.
- 14 Vallerand AH, Breckenridge DM, Hodgson NA (1998) Quality of life: From nursing and patient perspectives. Theory-Research-Practice: Theories and conceptual Models to guide Quality of life related research. Jones and Bartlett Publishers, Sudbury, Massachusetts.
- 15 Adamakidou T, Kalokerinou A (2011) Quality of Life and cancer patient (Part I): meaning and concept. Hellenic J Nurs Science 5: 7-15.
- 16 Chopra I, Kamal KM (2012) A systematic review of quality of life instruments in long-term breast cancer survivors. Health Qual Life Outcomes 10: 14.
- 17 Ferrell B, Grant M, Dean G, Funk B, Ly J (1996) Bone tired: the experience of fatigue and its impact on quality of life. Oncol Nurs Forum 23: 1539-1547.
- 18 Moons P, Budts W, De Geest S (2006) Critique on the conceptualisation of quality of life: a review and evaluation of different conceptual approaches. Int J Nurs Stud 43: 891-901.

#### References

- 1 Papyrus Larousse Britannica (1996) Family. Papyrus, Athens
- 2 Tsardakis D (1993) The birth of social human. Papazisi, Athens.
- 3 Sapountzi-Krepia D, Vehvilainen-Julkunen K (2006) Maternity care in Greece. Nossileftiki 45: 160-168.
- 4 www.elinyae.gr.
- 5 www.elinyae.gr.
- 6 www.elinyae.gr.
- 7 Leontari M (1995) Maternity protection. Logistis 11: 518.
- 8 Chatterji P, Markowitz S (2012) Family leave after childbirth and the mental health of new mothers. J Ment Health Policy Econ 15: 61-76.
- 9 Heather D (2012) Hill Welfare as Maternity Leave? Exemptions from Welfare Work Requirements and Maternal Employment. Soc Serv Rev 86: 37-67.
- 10 Ministry of Health and Welfare (2013) Plan for horizontial net and cooperation between Services and Welfare Services.
- OECD (2004) Social Expenditure Database (SOCX), 1980–2001. Organisation for Economic Co-operation and Development, Paris.
- 12 www.nsk.gov.gr.
- 13 Tsitsis N (2013) Social Welfare. Alexander Technological Educational Institute, Thessaloniki.
- 14 Economic and Social Council, United Nations Children's Fund Executive Board (2008) UNICEF Child Protection Strategy.
- 15 Fagernäs S, Odame J (2013) Birth registration and access to health care: an assessment of Ghana's campaign success. Bull World Health Organ 91: 459–464.

- 16 UNICEF (2013) Child protection from violence, exploitation and abuse.
- 17 Aragão Ade S, Ferriani Md, Vendruscollo TS, Souza Sde L, Gomes R (2013) Primary care nurses' approach to cases of violence against children. Rev Lat Am Enfermagem 21: 172-179.
- 18 Devries KM, Allen E, Child JC, Walakira E, Parkes J, et al. (2013) The Good Schools Toolkit to prevent violence against children in Ugandan primary schools: study protocol for a cluster randomised controlled trial. Trials 14: 232.
- 19 Jones L, Bellis MA, Wood S, Hughes K, McCoy E, et al. (2012) Prevalence and risk of violence against children with disabilities: a systematic review and meta-analysis of observational studies. Lancet 380: 899-907.
- 20 Perron L, Senikas V, Burnett M, Davis V (2013) Social Sexual Issues Committee. Female genital cutting. J Obstet Gynaecol Can 35: 1028-1045.
- 21 UNICEF (2011) State of the world's Children. 2011. Division of Communication, New York.
- 22 Sabbe A, Oulami H, Zekraoui W, Hikmat H, Temmerman M (2013) Determinants of child and forced marriage in Morocco: stakeholder perspectives on health, policies and human rights. BMC Int Health Hum Rights 13: 43.
- 23 Nour N (2009) Child marriage: a silent health and human rights issue. Rev Obstet Gynecol 2: 51-56.
- 24 Nour NM (2006) Health consequences of child marriage in Africa. Emerg Infect Dis 12: 1644-1649.
- 25 www.nsk.gov.gr.
- 26 www.hellenicparliament.gr.