



FACTORS THAT AFFECT THE QUALITY OF LIFE OF THE INDIVIDUAL AND THE ROLE OF NURSE: A CRITICAL REVIEW

Itsios A.¹, Psychos Ch.², Paralikas Th.³

¹Bachelor in Nursing, MSc in Primary Healthcare, General Detention Facility of Grevena - Administration Employee

²BPhEd, MSc., M.B.A.-M.I.S. General Detention Facility of Grevena - Governor

³RN, MPH, PhD, Assistant Professor University of Thessaly

ABSTRACT

Background: Quality of Life (QoL) is an internationally approved framework, which is comprised by various sectors that usually provide subjective evaluations for both positive and negative aspects of life. What makes the measurement of Quality of Life difficult, is that it has different meanings to different groups.

Aim: The main goal of the study was to evaluate the factors that affect the HRQoL of the individual and the role of healthcare/nursing staff. **Methodology:** The study includes critical reviews of bibliography and studies reported since 1999 to 2019. **Results:** Researchers have developed useful techniques that allow us to understand and measure these areas, as well as their correlation. The quality of life should not be confused with health, since the latter is a branch of the first. The Health-Related Quality of Life (HRQoL) allows healthcare providers to evaluate service supply vulnerabilities and results of those interventions. The measurements of HRQoL make it possible to prove scientifically the effect of health on quality of life, which until a few decades ago was limited to the microscope. **Conclusion:** The concept of Quality of Life (QoL) is intertwined with the overall objectives of nursing, that's why nurse researchers are invited to take an active role in the evaluation and application of HRQoL for both patients and for their families. As the healthcare landscape is constantly changing, the HRQoL, as a result of professional nursing care, could be one of the most important quality-care assessment indicators.

Keywords: Quality of Life, QoL, HRQoL



ΠΑΡΑΓΟΝΤΕΣ ΠΟΥ ΕΠΗΡΕΑΖΟΥΝ ΤΗΝ ΠΟΙΟΤΗΤΑ ΖΩΗΣ ΤΟΥ ΑΤΟΜΟΥ ΚΑΙ ΤΟΝ ΡΟΛΟ ΤΟΥ ΝΟΣΗΛΕΥΤΗ: ΜΙΑ ΚΡΙΤΙΚΗ ΑΝΑΣΚΟΠΗΣΗ

Ίσσιος Α.¹, Ψύχος Χ.², Παραλίκας Θ.³

¹Πτυχίο Νοσηλευτικής, MSc στην πρωτοβάθμια φροντίδα υγείας, Γενική εγκατάσταση κράτησης Γρεβενών - Υπάλληλος διοίκησης

²BPhEd, MSc., M.B.A.-M.I.S. Γενική εγκατάσταση κράτησης Γρεβενών - Κυβερνήτης

³RN, MPH, PhD, Επίκουρος Καθηγητής Πανεπιστήμιο Θεσσαλίας

ΠΕΡΙΛΗΨΗ

Εισαγωγή: Η Ποιότητα Ζωής (QoL) είναι ένα διεθνώς επικυρωμένο πλαίσιο, το οποίο αποτελείται από οκτώ τομείς που συνήθως παρέχουν υποκειμενικές αξιολογήσεις τόσο για τις θετικές, όσο και τις αρνητικές πτυχές της ζωής. Αυτό που καθιστά τη μέτρηση της Ποιότητας Ζωής δύσκολη, είναι ότι έχει διαφορετικό νόημα σε διάφορες ομάδες ατόμων. **Στόχος:** Ο κύριος στόχος της μελέτης είναι η εκτίμηση των παραγόντων που επηρεάζουν την HRQoL του ατόμου και τον ρόλο του νοσηλευτικού / υγειονομικού προσωπικού **Μεθοδολογία:** Η μελέτη περιλαμβάνει κριτική ανασκόπηση της βιβλιογραφίας και μελετών από το 1999 μέχρι και το 2019. **Αποτελέσματα:** Οι ερευνητές έχουν αναπτύξει χρήσιμες τεχνικές, που μας επιτρέπουν να αντιληφθούμε και να μετρήσουμε αυτούς τους τομείς, καθώς και τη συσχέτιση τους. Η Ποιότητα Ζωής δεν θα έπρεπε να συγχέεται με την υγεία, μιας και η τελευταία αποτελεί κλάδο της πρώτης. Η Σχετιζόμενη με την Υγεία Ποιότητα Ζωής (HRQoL) επιτρέπει τους παρόχους υγείας να αξιολογήσουν τις αδυναμίες κάλυψης αναγκών, καθώς και αποτελέσματα παρεμβάσεων. Οι δείκτες μέτρησης της HRQoL καθιστούν δυνατό να αποδειχθεί επιστημονικά η επίδραση της υγείας στην Ποιότητα της Ζωής, η οποία μέχρι πριν μερικές δεκαετίες περιοριζόταν στο μικροσκόπιο. **Συμπεράσματα:** Η έννοια της Ποιότητας της Ζωής (QoL) είναι συνυφασμένη με τους γενικούς στόχους της νοσηλευτικής, για αυτό και οι ερευνητές νοσηλευτές καλούνται να λάβουν ενεργό ρόλο στην αξιολόγηση και εφαρμογή της HRQoL τόσο για τους ασθενείς, όσο και για τις οικογένειές τους. Καθώς το τοπίο της υγειονομικής περίθαλψης αλλάζει συνεχώς, η HRQoL, ως αποτέλεσμα της επαγγελματικής νοσηλευτικής φροντίδας, θα μπορούσε να αποτελέσει έναν από τους πιο σημαντικούς δείκτες εκτίμησης της ποιότητας φροντίδας.

Λέξεις Κλειδιά: Ποιότητα Ζωής, QoL, HRQoL

INTRODUCTION

Quality of Life (QoL) can be considered as the “*general well-being of societies and individuals*”. Quality of Life includes the observation of satisfaction of an individual from life on multiple layers. These include, but are not limited to: (i) physical health, (ii) wealth, (iii) religion, (iv) family, (v) education, (vi) employment, (vii) financial status and environment (Barcaccia et al, 2013). Quality of Life has a wide range of frameworks, including the areas of international development, healthcare, politics and employment. It is essential not to parallel the concept of Quality of Life with the Health-Related Quality of Life or HRQOL (Bottomley, 2002). Also, there is a misconception that Quality of Life and living standards are identical concepts. It should be noted that living standards are primarily based on income, but Quality of Life takes multiple factors into account.

Quantitative measurements of quality of life and happiness

In contrast to the per capita GDP or living standards, which can be measured in financial terms, it is more difficult to perform an objective or even a long-term measurement of quality of life as experienced by individuals, groups or nations in general. Researchers have started in recent years to categorize two aspects of personal prosperity.

1. Emotional well-being. In this aspect, interviewees were asked about the quality of their everyday emotional experiences and the frequency and the intensity of experiences, like happiness, stress, sadness and anger (Kahneman et al, 2010).
2. Life evaluation. Interviewees were requested to consider their life in general and to evaluate it with the use of a scale (Kahneman et al, 2010).

Apart from the above, other measurement systems and scales have been used for a certain period of time. Some studies have attempted to examine the relation between quality of life and productivity (Rappaport, 2008). As far as healthcare, wealth and material goods are concerned, there are many different methods of measuring Quality of Life. However, it is far more difficult to measure the true expression of an individual's desires. One way to achieve this is for

individuals to evaluate how and to what extent their ideas and desires are accomplished. Of course, based on this rationale, people in a developing country might be more appreciative, granted that they are satisfied with basic needs, such as healthcare, education and safety for themselves and their families (Singer 2011).

Quality of life in international development

Quality of Life plays a substantial role in the field of international development, because it allows the analysis and development of a wider framework, beyond that of living standards.

Organizations like World Bank for example, declare that they work for a world free of poverty (World Bank 2006), with poverty defined as lack of basic human needs, like food, water, shelter, freedom, access to education, healthcare or work (Fiszbein et al, 2009). In short, poverty is considered as an index of low quality of life.

Other organizations, on the other hand, work towards improving worldwide quality of life using a slightly different definition, which however has a different approach. Many Non-Governmental Organizations (NGOs) do not focus on reducing poverty on a national or international level, but attempt to improve Quality of Life for individuals or communities.

AIM

The main aim of the current study is to acknowledge the main factors that affect the quality of life of the individual and point out the role of nursing staff in its improvement.

Quality of life in healthcare

Within the area of healthcare, quality of life is often evaluated as to how a certain disease affects a patient on an individual level. That disease, depending on the situation, may not be life threatening for the individual, may be threatening but not terminal, threatening and terminal, or predictable (e.g. old age). The Quality of Life Model is based on existential classifications (who someone is), belonging (in which environment someone is or is not included) and becoming (personal goals and expectations someone has) (UofT, 2009).

Health-related quality of life evaluation tools

Early editions of Health-Related Quality of Life (HRQOL) instruments stated simple evaluations of physical activity by an external assessor (for example the patient can stand up, eat, drink and tend to their personal hygiene without assistance).

The current concept of Health-Related Quality of Life acknowledges and studies how patients perceive a situation in correlation to their own, personal expectations (Jongen et al, 2010). Although Health-Related Quality of Life (HRQOL) is invariably used in the measurement of health condition, the two should not be confused, since they are completely different concepts.

Similar to other psychometric evaluation instruments, the HRQoL questionnaires must comply with certain criteria, mainly in the fields of reliability and validity. As a result, hundreds of certified HRQoL questionnaires were developed in order to cover various needs. These HRQoL questionnaires can be divided into the following categories:

1. General Questionnaires such as the SF-36 (Short Form with 36 questions)
2. Questionnaires of diseases, disorders or specific conditions, such as King's Health Questionnaire (KHQ) for incontinence (Hirakawa et al, 2013), LC-13 for lung cancer or HADS (Hospital Anxiety and Depression Scale) etc.

It must be noted that these HRQoL Questionnaires do not necessarily express the fact that they are objectively and fully reliable.

Usefulness of quality of life instruments

A range of validated instruments for healthcare professionals, was presented above. These instruments are used for the evaluation of the Health-Related Quality of Life of the individual. When used on a longitudinal study before, during and after the implementation of an intervention or a cure, it can help the scientific community decide which cure or intervention is better and how the provided care can be further improved.

Importance of health-related quality of life

There is a growing field of research on the development, evaluation and implementation of qualitative life measures related to health, especially when there is correlation with Health Services Research.

The understanding of Quality of Life is acknowledged as an important field of healthcare, because the connection between cost and price sets complex problems. For that reason, healthcare providers need to analyze the correlation between cost and benefit for the decision-making process. For example, access to expensive medicine that can extend the life of a person from short term to long term or/and provide improvement in Quality of Life.

Research on the field of HRQoL

The research that revolves around the Health-Related Quality of Life (HRQoL) is extremely important due to the impacts that it can have on current and future therapeutic interventions and health protocols. For example, the Centers for Disease Control and Prevention (CDC) use Health-Related Quality of Life models, to track and evaluate health inequalities.

Quality of life factors

As explained above, Quality of Life (QoL) is the general well-being of individuals and communities. According to WHO, the Quality of Life is characterized by the perception that a person has for his own life in the context of culture and the system of values he lives, in correlation with the aims, expectations and concerns. As Quality of Life indicators or factors, we usually refer to those elements in the life of a person, that allow him to maintain his well-being. These are usually divided in: (i) physical factors, which include exercise, nutrition, security, hygiene, and pain relief, (ii) emotional factors, which include emotional factors, intellectual factors and social factors.

Exercise and quality of life

Regular exercise has important and long-term benefits for the improvement of Quality of Life. Exercise can take many forms, from daily activities, such as walking or housework, up to organized activities etc. Usually they are divided in three main categories: (i) aerobic exercises, (ii) anaerobic exercises, (iii) flexibility exercises.

Physical exercise is important for the maintenance of physical condition and can contribute to normal weight, regulate digestion, maintenance of healthy bone density, muscle strength and joint mobility, decrease surgical risk and increase the immune system. Individuals who participate in moderate to high physical training have decreased probability of mortality in comparison to non-active individuals.

Exercise has a positive impact on the cardiovascular system. There are direct and indirect indications between physical inactivity and cardiovascular mortality and related ailments.

Several studies researched the neurobiological effects of physical exercise in brain structure (Erickson, 2015). Longitudinal studies on individuals who exercise present increased neural activity, increased resistance to stress and improved cognitive control on behavior and memory (Paillard, 2015).

Physical activity has been documented as anti-depressant and current studies support that exercise interventions can act as preventive measure or supplementary cures along anti-depressant medicines (Rosenbaum et al., 2014). A meta-analysis of 2016 pointed out that physical activity improves the Quality of Life for individuals with depression (Schuch et al., 2016). A systematic review presents that yoga can be effective for the relief of prenatal depression (Gong, 2015).

According to a 2005 study, exercise is recommended as the best alternative solution to sleeping pills, for insomnia. Additionally, exercise can be a healthy, safe and inexpensive vehicle for better sleep (Buman, 2010).

Nutrition and quality of life

Nutrition is the science that interprets the correlation between nutrients and other substances that exist within the foods. A poor diet may cause various health problems and degenerative ailments, like blindness, anemia, premature labor, stillbirth and congenital iodine deficiency syndrome (Whitney, 2013), obesity, metabolic syndrome, common chronic systemic diseases, like cardiovascular diseases (Steven et al, 2011), diabetes (National Institute of Diabetes, 2019), osteoporosis, etc, which may lead to low quality of life.

Malnutrition is a condition which emerges from the intake of foods, the nutrients of which are either not sufficient or too superfluous and cause health problems and reduced quality of life in individuals. The lack of sufficient nutrients intake is called undernourishment, while the superfluous intake is called hyperphagia or polyphagia (Young 2012).

The main causes of malnutrition may be poverty and cost of food, dietary practices and agricultural produce, etc. Clinical undernourishment, like cachexia, is a major problem in developing countries. Various measurement analyses have been conducted in order to determine the sociopolitical causes of malnutrition (Fotso et al, 2005).

Malnutrition increases the risk of spreading of infectious diseases and reduces every aspect of the immune system (Stillwaggon et al, 2008). For example, poor nourishment is one of the main factors of tuberculosis breakouts (Schaible et al, 2007).

As far as mental development is concerned, a diet poor in protein may cause cognitive disorders. In particular, the period from the third month of pregnancy until the first two years of life is especially important (Laus et al, 2011). Iron deficiency in children under two years old may affect brain function temporarily or chronically. Folic acid deficiency is connected to anomalies of the nervous system (Kenton et al, 2008).

Human safety

Human safety is an emerging model for the understanding of worldwide vulnerability issues. The concept of human safety has an anthropocentric – interdisciplinary notion of safety, which includes a number of research fields, like international relations, strategic studies and human rights. The Development Program Report 1994 of the United Nations (UNDP, 1994) is considered a milestone publication in the field of human safety (NAP 2010).

Economist Mahbub ul Haq was the first to draw worldwide attention to the concept of human safety in the Development Program Report 1994 of the United Nations and sought to influence the 1995 United Nations World Summit for social growth in Copenhagen. This particular report claims that the application field of worldwide safety should expand to include threats in seven areas: (i) Financial Safety, (ii) Food Safety, (iii) Health Safety,

(iv) Environmental Safety, (v) Personal Safety, (vi) Community Safety, (vii) Political Safety.

Individual hygiene

Hygiene is a set of practices which are undertaken for the preservation of health and better quality of life of the individual and society in general. According to the World Health Organization, hygiene is all the conditions and practices that help preserve health and avoid diseases. It should be stressed that although in popular culture it may usually mean just “cleanliness”, hygiene in its full and original meaning goes beyond that and includes all the conditions and practices, way of life, facilities and goods, which can expose the health of individuals and their environment to risk.

Pain management

Pain management is a field of medicine that uses an interdisciplinary approach to ease the pain and improve quality of life of people living with chronic diseases. Pain management groups comprise of professionals like doctors, pharmacists, clinical psychologists, physical therapists, occupational therapists and special clinical nurses.

Pain management includes the patients' communication about their problem. In order for healthcare professionals to determine the nature of the problem, they proceed to a series of questions, like “How intense is the pain?”, “Where is the pain located?”, “Is there something that reduces the pain?”, “When did the pain start?”. After receiving appropriate replies, healthcare professionals have an accurate description of the pain and can apply pain management practices.

A common difficulty in pain management is communication. People who experience pain may have difficulty in recognizing or describing what they feel or its intensity. Healthcare professionals and patients may face difficulty in communication and addressing the pain regarding its treatment. The aim and the difficulty of the healthcare professional in this particular case is to identify the nature, but also the quantity of the administered pain treatment, in order to avoid negative impact.

Emotional factors

Privacy

Privacy is the ability of a person or group, to isolate information about themselves and to express

them selectively. The privacy field also includes security (confidentiality), which may include the concept of either protection or information. Privacy can also take the form of physical integrity. The distinction between privacy and confidentiality is so thin, that the English word privacy is an example of non-translational word in many languages and countries (Anderman, 2003).

Dignity

In ethical, legal and political discussions, we often see that the term dignity is used to express the idea that a person has the inherent right to be respected and receive proper moral treatment (Shultziner, 2003). In the 20th century, dignity became a major matter for doctors and researchers. Dignity concerns topics of bioethics, human genetic, engineering and end-of-life individuals (Gelernter, 2008).

In 1964, the World Medical Association issued the Helsinki Declaration, in which article 11 states “It is the duty of physicians involved in medical research to protect life, health, dignity, right to self-determination, privacy and confidentiality of personal information of the individuals under investigation” (WMA, 1967). In 1998, the United Nations reported dignity in a UNESCO article, where each person has the right to respect of dignity.

Social Influence

Social influence is a type of influence that leads to the individual's compliance. In social psychology, it is described as “the influence of other people that leads us to comply in order to be acceptable and acceptable to them” (Aronson, 2005). “The power of social influence stems from human identity as a social being (Aronson, 2013). Social norms refer to unwritten rules that govern social behavior.

Emotional Safety

Emotional safety is characterized as the measurement of stability of the person's emotional state. Emotional insecurity or plain insecurity is a feeling of general discomfort that can be caused by someone's sense of being vulnerable or inferior. Emotional security is both a feeling and a reality. Reality in security is based on the likelihood of different risks and on the effectiveness of various measures. As emotion from the other hand, it is based not so much on the probability and the mathematical calculations,

but in psychological reactions on potential risk (Schneier, 2008).

Autonomy

Autonomy is an ancient Greek word and in essence it means "one who sets his own laws". This is a concept often referred to in ethics, politics and bioethics. In this context, it could be considered the reasonable person's ability to make informed, non-compelled decisions (Barvosa-Carter, 2007).

In the field of health, respect for patient autonomy is considered one of the essential principles of medicine. This means that health system receivers have the right to receive treatment with respect to autonomy rather than being "dominated" by the healthcare provider's position. Through a therapeutic relationship, a dialogue can lead to better health outcomes for the client as it will have a greater role in decision-making (Beauchamp, 2001).

Intellectual factors and quality of life

Intellectuality is a term used in the studies of the human mind and refers to the ability of brain to reach logical conclusions about what is true on untrue and how to solve problems. As stated by JP Guilford, intellect comprises of 3 crucial parameters (Guilford, 2016): (i) Functions, (ii) Contents, (iii) Products. Each parameter consists of definitive components which are autonomous and due to this they must be measured separately and considered independent units of human intellect (Guilford, 2016). The mental factors that influence the quality of life of the individual are two, namely the stimuli and participation activities.

In psychology, stimuli are changes in vitality, which are recorded by the senses. In Behaviorism and similar stimulus-response theories, a stimulus is the basis for behavior, while in Perceptual Psychology is the basis for perception (Gregory, 2004). Stimuli help people find life interesting, motivating and challenging. Research conducted on Parkinson's sufferers has found that brain stimulation and stimuli can be a viable form of alternative therapy (Diamond et al, 2005; Oyama et al, 2014).

Engaging in specific activities, individuals can obtain a sense of well-being that makes them feel remarkable, while some activities provide the

opportunity for social interaction or the development of a better physical condition.

Social factors in quality of life

Social Contact

Social contact can be described as the relationship between people or the opportunity to be with other people. Without social contact, individuals can become isolated and depressed. Social Contact can be provided if someone belongs to a range of social groups that depend on age, abilities and interests (Sztompka, 1999).

Social Support

Social support is the notion and reality that a person is taken care of, has available help from other persons and is part of a supporting social network. Social support is associated with several advantages for the physical and mental health. Two basic models have been recommended to specify the connection between social support and health. These are the gender and cultural differences.

In order for social support to operate, the following common functions are imperative: (i) emotional support, (ii) material support, (iii) informational support, (iv) companionship support.

The benefits of social support in the Quality of Life of a person are multiple and can affect mental (Taylor, 2011) and physical health.

DISCUSSION

Nurses are considered a critical component in the development of public health, as they contribute substantially in patients' improved quality of life. In the past, nurses' main aim concerned disease prevention and habit modification inside hospitals. Today, their role as professional health supporters has become more complex (Kohn, 2000), as they hold multidisciplinary expertise and background on health advancement, both in in-hospital and out-of-hospital fields (Institute of Medicine, 2001).

The role of nurses in providing high quality healthcare is of vital importance. Cases in Magnet hospitals suggests that under appropriate management, the nursing staff can actively improve HRQoL of inpatients (Lacey S.R. et al, 2007; Aiken et al, 2008).

Several programmes like RWJF (Robert Wood Johnson Foundation), INQRI (Interdisciplinary Nursing Quality Research Initiative) explore how specialized procedures in the nursing field, like drug administration, health protocol implementation, planning and coordination relate to HRQoL improvement and patient outcomes.

Although these studies continue to produce results in their respective fields, it seems that policy makers, institutions and the public are unable to fully grasp the nature of nursing work. According to Ferguson (2008) in his health care survey 88% of the public agreed that the existence of sufficient nurses to monitor patient condition, coordinate care and educate patients should be part of the HRQOL improvement process. The same study however presented that the public is confused about the role of nurses and the differences with nurse associates and less trained personnel.

Nurses have a wide variety of critical duties, such as:

- Assessing and monitoring patients frequently and if necessary, implement interventions in order to reduce risk or address complications.
- Coordinated care along with other health professionals
- Providing education to the patient or the family members

Regarding the correlation between nurse services provision and cost, Needleman et al (2006) examined whether the increase of number of professional nurses in healthcare units can decrease hospital expenses or at least equal the same amount of expenses. The results of this study found that it is not possible for the nursing staff to offset entirely long stays in hospital or tackle arising complications.

The active participation of nurses in quality improvement in hospitals is of highly importance. However, developing proper models has proven difficult in several cases (Greenhalgh et al, 2004; Pronovost et al, 2006). Such a model was developed by RWJF (Robert Wood Johnson Foundation) and IHI (Institute for Healthcare Improvement) in 2003, where three hospitals participate. The TCAB (Transforming Care at the Bedside) model is to involve the hospital staff with the leadership in order to improve the following aspects (Rutherford et al, 2008):

- Improving healthcare quality and safety
- Ensuring the high quality of working environment to attract and retain nurses
- Improving healthcare experience for patients and their families
- Improving the effectiveness of the entire healthcare team

CONCLUSION

The objective of professional nurses is to influence and support with a positive way the Quality of Life (QoL) of the individual on therapeutic and preventive level. This aim reflects the belief that Quality of Life is a process that changes continually and can be influenced by internal (reaction from the person itself) and external (etc. nursing interventions) factors. By combining the above-mentioned objectives with the perception of the individual on Quality of Life, the person could have far better results in physical, psychosocial and mental level.

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