QUALITY OF LIFE AS A DETERMINANT OF THE COMPREHENSIVE SATISFACTION OF PATIENTS

BENEDYKT BOBER, MARCIN OLKIEWICZ

Abstract
This paper presents the issue of quality of life from the perspective of broader medicine. The recent increased interest in research on quality of life is due to dissatisfaction with the current performance assessment criteria processes to provide medical services, as well as their economic aspects as a whole. The question is discussed whether the evaluation of quality of life does provide a sufficient information on what domains of life are considered as the worst. The paper therefore contains a theoretical analysis of searched topic. When evaluating the quality of patient's life, it is needed to respect a very important fact: this evaluation would be made in two points of view, i.e. objective as well as subjective. The paper is concluded by recommendation to provide the support and build effective channels of communication and cooperation with dealt subjects of medical services. This conclusion is based on the following premises: a) There is no comprehensive definition of the quality of life to the area of shaping prosumer's satisfaction; b) Medical service providers rarely take the challenge of creating a comprehensive strategy for assessing prosumers quality of life.

Key words: quality of life, health, health satisfaction, survey questionnaires.

Classification JEL: I3 – Welfare, Well-Being, and Poverty; I11 – Analysis of Health Care Markets.

1. Introduction

The history of interest in the quality of life issues reaches ancient times. Heraclitus's theories encouraged live improvement and to make it more enjoyable. Democritus considered satisfaction as the supreme good and reason was to be the means to obtain happiness. On the other hand, Socrates saw happiness in virtue, which in his understanding, meant physical prowess, efficiency and knowledge. Plato defined the concept of quality by considering it to be a certain degree of perfection *(Wójcik, Kurjanowicz & Bidache, 2007: 31–38).* According to Aristotle, quality of life means well-being, self-perfection of the individual and achieving one's own goals. Hippocrates recognised happiness as an ability to achieve internal balance *(Sokolnicka 2003: 126–128).*

The last few years have shown increasing interest in the quality of life assessment in medical practice conditioned by health-related quality of life (HRQoL). The relation between prosumers clinical status and the used process of medical services *(Zboina, 2008: 15–23, 31–37).* This stems from, inter alia, the adaptation of a holistic medicine model, assuming a holistic approach to a prosumer. In this perspective, a prosumer is treated as a bio-psycho-social entity, who receives information relevant to his areas (part of the assessment of effectiveness of the process of provided medical services and the reduction of information asymmetry).

Research on quality of life also allows to customize the process of provided medical services for prosumers needs, because the objective is not only to prolong life but also to improve the well-being and to maximise independence in aspects of everyday life. Quality of life in relation to the processes of provision of medical services is based on individual feelings and needs of the prosumer. It should be considered in a tier-wise manner on a physiological, psychological and social factor levels *(Bidacha, Wójcik & Kurjanowicz, 2003: 31–38).*

Common civilisation diseases significantly reduce the quality of life and that is why the processes of provided medical services are intended to restore disturbed functions of the body by ensuring a comprehensive, holistic care to a prosumer. S/he serves as a partner in the

decision-making processes and therefore his assessment of the situation is essential *(Muszalik & Kędziora-Kornatowska, 2007: 24–25).*

Quality of life is a complex category with a difficult to determine range. B. Poskrobko shows that the quality of life (associated with happiness and life satisfaction) should be regarded as a relationship between values, lifestyles, needs and living conditions *(2007: 13).*

Each of these quality of life elements has its objective dimension but its assessment depends on the subjective system of values and feelings as to the degree of satisfying own needs and aspirations of the prosumer. Quality of life can also be understood as a category opposed to the quantity and as a property experiences through the senses. This dual approach, in accordance to Boris *(2000: 34)* results that in the study on the quality of life, following dimensions of quality should be taken into account:

- Comparative, evaluative (the level of quality of life);
- Descriptive (different as well as various quality of life).

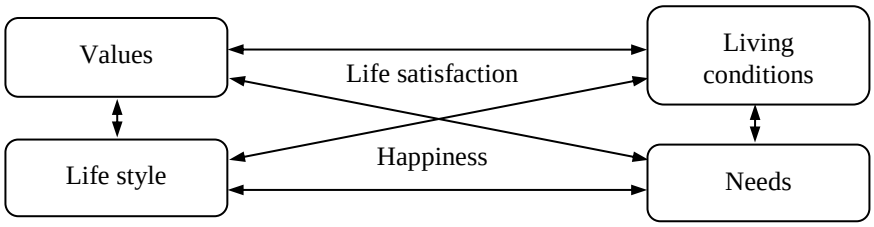

Figure 1. Components of the quality of life
(Poskrobko, B. 2007. Towards economy of sustainable development. Białystok: Economy and Environment: 13)

Descriptive interpretation of quality of life is the starting point for the formulation of derivatives of terms that are evaluative in nature, i.e. the objective and subjective quality of life. It also designates areas of observation by defining a set of features and fields (spheres, subsets of features) defining the global quality of life (full field of observation) and the partial quality of life (subject specific field of observation) as well as creating on this basis synthetic or disaggregated (sub-synthetic or one-dimensional) measurement of quality of life *(Boris, 2001: 81).*

It is difficult for a clear definition of the quality of life concept, because for various prosumers it may be an expression of different values. It is also a concept relating to a number of areas including, inter alia: medicine, ecology, sociology, philosophy, which is also an obstacle in the creation of the homonymous definition binding all aspects of life, forcing a creation of various definitions depending on the accepted scientific discipline.

This paper presents the issue of quality of life from the perspective of broader medicine (the impact of civilisation diseases on the formation of hernias of line a alba). The recently increased interest in research on the quality of life is due to the dissatisfaction with the current performance assessment criteria processes to provide medical services, as well as their economic aspects as a whole. The *paper aims* to give an answer to the question, whether the assessment of quality of life provides information in the scope of relevant domains of prosumer's life at a given time, and which, at the same time, are assessed by him as the worst.

Carried out research on the literature allowed to present an assessment of the prosumers' quality of life through the influence of civilisation diseases: hypertension, diabetes, asthma or chronic obstructive pulmonary disease (COPD) on the formation i.e. hernia of line a alba *(Bak-Drabik & Ziora, 2004: 128–133; Mudge & Hughes, 1985: 70–71).*This opinion allows to set priorities and preferences that determine the decision-making processes of

multidisciplinary teams. The complexity of the process of provided medical services and subjectivity is the basis for the prosumers growth of quality of life and health satisfaction.

Method used in the paper is an analysis of the literature on the subject, in which both similarities and differences in comprehensive defining of quality of life in the process of prosumers health satisfaction when providing medical services were sought (hernia of line a alba). As a result of carried out literature analysis, the study of quality of life can be researched by using a variety of techniques: questionnaires and surveys, consisting of a series of questions assessing symptoms and their impact on different spheres of everyday life and their mutual reactions.

Discussion will be devoted to the literature on subject; the concept of quality of life is ambiguous, multidimensional and in addition – has both objective and subjective aspects. According to B. Wojnarowska, quality of life is: "The ability to implement plans, the degree of satisfaction with the material and non-material needs of individuals, families and communities, a positive overall assessment of functioning, the difference between hopes and expectations and the current experiences" *(2007: 41).* The last period shows a growing interest in medical practice and evaluation of the Health related quality of life (HRQoL). In this context, the quality of life, based on the cited author, can be defined as: "Satisfaction of the individual with how it functions in the physical, mental and emotional sense, in family and social relations (...) the impact of the health status on individual's ability to lead a full life".

From the viewpoint of paper conclusions, the carried out research of the literature on the subject indicates attempts to develop a definition of the quality of life in the medical science of the important domains of the prosumer's functioning. This conclusion is based on the following premises:

- There is no comprehensive definition of the quality of life to the area of shaping prosumer's satisfaction who is a determinant of the decision-making processes and the increase of the quality of medical services.
- Medical service providers rarely take the challenge of creating a comprehensive strategy for assessing prosumers quality of life which is a consistent configuration of purposes, procedures, and programs for obtaining satisfactory process of mutual communication (reducing information asymmetries and the risk of decision-making).

At the moment, it is also worth considering on how to provide them with support and build effective channels of communication and cooperation with stakeholders of the entities providing medical services.

2. An attempt to define Quality of Life

The quality of life is a very broad term. That is why despite the growing interest in the quality of life, a single, generally accepted by all the stakeholders definition, has not yet been created.

The origins of the classification of the concept can be seen in ancient times. Hippocrates and Aristotle tried to find out what is the foundation of a happy and fulfilling life. Hippocrates recognised a happy life as an ability to achieve internal balance. On the other hand, for Aristoteles it meant an aspiration to achieve supreme good, which guaranteed happiness *(Chrobak, 2009: 124–127).* However, according to the WHO definition of quality of life is: *A state of a complete physical, mental and social well-being, and not merely the absence of a disease, where everyone, regardless of race, religion, political belief, economic or social conditions, has the right to the best, possible health*[1].

[1] WHO (2006). Constitution of the World Health Organisation, Basic Documents, ed. 45

The concept of quality of life related to health (HRQoL) was introduced in the early 90's by D. L. Patrick, D. H. Fenny and G. H. Guayaff. The subject of their discussion was the relationship between the clinical status of the prosumer and the implemented process of provided medical services and the care system (quality of life in individual disease entities and health), *(Guyatt, Feeny & Patrick, 1993: 622–628).* The precursor of studies on the quality of life, A. Campbell, had a similar view. Moreover, he also considered that quality of life is dependent on the degree of satisfaction in areas of life such as: family, work, health, friends, housing conditions and free time as well as the standard of living or educational background *(Klimaszewska, Krajewska-Kula & Kondzior, 2011: 47–54).* In contrast, C. J. Flanagan drew attention to the fact that the pre-defined spheres of life can have different meanings for a given prosumer. It is therefore proposed to use the weight indicator to assess that the quality of life was objective *(Jaracz&Kozubski, 2008: 419–422).*

HRQoL assessment shows the subjective prosumer's perception of their individual situation conditioned by health. It also enables his subjective assessment of profitability and an indication of the overall benefits achieved as a result of the particular medical procedures. The process of obtaining this information, based on the analysis of clinical parameters or general indicators, is practically impossible. The improvement in these parameters and indicators does not always mean an increase in self-assessment of health and well-being of the prosumer, and sometimes the results are contradictory, i.e. in situations of adverse reaction to a medication.

Table 1. Chosen definitions of quality of life (based on presented authors)

Author	**Quality of life is:**
Campbell, Convers, Rodgers (1971)	Subjective level of satisfaction of people, quality of life organized community
Słaby (2007)	All elements of human existence, which are related to the fact of its existence, to be somebody and feeling different emotional states
WHO	A comprehensive method for evaluating the entity of her physical health, emotional state, independence in life and degree of independence from the environment, as well as personal beliefs and convictions
Bywalec (2010)	The satisfaction of a man with his whole existence is a kind of the sum of individual or collective feelings of the existing living conditions and also their evaluation
Trzebiatowski (2011)	The handling, where their common core is to reflect the ways and extent to meet the different needs of man
Wnuk, Marcinkowski (2012)	The search for positive determinants of happiness and satisfaction with life in opposition to the negative factors affecting the lack of satisfaction with life, feelings of happiness and unsatisfactory quality of life
Steuden (2012)	Specifically received by the reality, making its interpretation and reacting emotionally wearing only right way. Take into account the own needs, desires, past experience professed beliefs and accepted philosophy of life

Therefore, R. Kolman defined the quality of life as the degree of satisfaction of spiritual and material needs of a man and the degree of satisfaction of the requirements of a daily life of individuals and society as a whole (2007: 8–11). On the other hand, T. Tomaszewski believes that quality of life can be determined on the basis of the criteria adopted arbitrarily and equal for all, i.e. a wealth of experience, awareness, activity, creativity and participation in social life. The greater the meeting of these criteria, the higher is the quality of life (Sęk & Pasikowski, 2001: 17–29). Additionally, in accordance to the concept of N. Cantor, quality of life is dependent on whether and how a man realises his life's tasks related to his needs and

the way of facing them. The most interesting definitions or opinions of other authors are included in Table 1.

Satisfaction (quality of life) depends on the experience with the realisation of tasks and in comparing oneself against others *(Czapiński, 2000: 17–23).* This is shown, inter alia, in the research of L. Nordenfelta, where the negative as well as positive experiences are the reflection of quality of life. Prosumer is under the constant influence of the environment (physical, cultural, psychosocial), which limits his possibilities, because the quality of life is not completely determined by him. He collects experiences, i.e. sensory and emotional stimuli binding with the sphere of his own life experiences. The author also believes that what one feels is more important than the degree of satisfaction of needs *(Nordenfelt, 1993: 78–82).*

The concept of the quality of life also refers to its objective dimension, while the quality of life is associated with a subjective respond to reality *(Dziurowicz-Kozłowska, 2002: 77–99; Rasińska, 2010: 34).*

Quality of life originally meant a good life, a sense of satisfaction, degree of prosperity in life in accordance to the needs and capabilities of the prosumer. According to S. Levin, it is an area of life that is important to him, is seen individually from his vital position *(Olkiewicz, 2015: 63–72)* as well as a system of values, in relation to the tasks, expectations and environmentally conditioned set of standards *(Levine, 1995: 7–13).*

In summary, the carried out analysis of the definition of quality of life includes almost all psychological, medical, educational and sociological phenomena which are associated with the assessment of human functioning *(Trzebiatowski, 2011: 25–31).* Therefore, quality of life is an ambiguous issue. Comprehensive definition depends on the perspective of the entity analysing a specific problem *(Rasińska & Nowakowska, 2013: 203–213).*

3. Characteristics of selected questionnaires assessing quality of life

Carried out research on the literature of the subject *(Haacke, Althaus & Spottke, 2006: 193–198; Jonsson, Lindgren & Hallstrom, 2005: 803–808; Nichols-Larsen, Clark & Zeringur, 2005: 1480–1484)* showed that the quality of life depends on many factors, inter alia, social support, especially family, economic, personality traits. The evaluation process consists of both objective and subjective elements. It is a combination of many important areas of prosumer's life and is dependent on his previous experiences and individual ability to cope with difficult situations. In addition, the evaluation process of quality of life not only allows to estimate the impact of a disease on quality of life but may also be important in selecting optimal methods in the process of providing medical *services (Wołowicka, 2001: 341).*

On the basis of medical science, a term is used to determine quality of life conditioned by the state of health (HRQoL) which was introduced by H. Schipper *(1990: 171–185).* It is defined as a functional effect of a disease and provided medical processes received by a prosumer. This assessment covers the basic areas of its operation *(Olkiewicz, 2015a: 125–133):* physical and motor skills, mental state, somatic sensations, the social situation and economic conditions. The carried out study by A. H. Petermann & A. Celle have broadened this assessment with a set of factors including:

- Physical welfare, including feelings of discomfort;
- Functional welfare, expressing an ability to participate in daily activities associated with work and resting time;
- Emotional well-being, including positive and negative emotional states;
- The ability to sustain relationships and family contacts;
- Functioning in social spheres as well as satisfaction with performing them;
- Satisfaction with the treatment;
- Intimate zone, body image *(Peterman & Cella, 2000: 401–495).*

In modern medicine, while examining quality of life, both the objective and subjective aspects should be considered. For this reason, the purely technical, objective physical examination focuses mainly on assessing the impact of the treatment – the control of symptoms and the occurrence of complications *(Wielgosz & Mroczkowski, 2011: 57).* On the other hand, the subjective quality of life is assessed on the basis of questions addressed to the prosumer, derived from the questionnaires *(Dudzińska, Tarac & Nowakowski, 2011: 57–58),* evaluating quality of life:

- General questionnaires – are used to broadly examine HRQoL, used with healthy subjects as well as patients with various health problems. Their advantage is that the results can be compared among different treatment groups. These tools are used to assess the negative impact of the disease on patient life, his response to treatment and to evaluate the benefits of different forms of therapy. But they do not provide answers on the patient's global quality of life *(Papuc, 2011: 141–145);*
- Specific questionnaires – have narrower application; relate to specific groups of patients but they are more sensitive to changes in health. They are divided into specific to the particular disease, used to assess HRQoL of patients with a particular disease, or to assess the effect of a particular group of drugs on quality of life and on questionnaires, which are specific to a disease group that may be used for a test group of patients suffering from the same disease;
- Mixed questionnaires – contain elements of a general questionnaire but are designed for a specific disease. They include ad hoc questionnaires, prepared and used specifically for a particular clinical trial *(Jankowska-Polańska & Polański, 2014).*

Depending on the scope of obtained information, general questionnaires can be distinguished, measuring quality of life, in a wide range, describing it with the HRQoL concept. They are used to build up a health profile (description of the medical condition through the assessment of each domain of the questionnaire) or a general medical condition (ranging from 0 to 1, which indicates how the prosumer appreciates a given health state). An important task of the researcher is to choose the most effective measure, while maintaining the precise intentions of research, critical evaluation of psychometric properties of tools and the knowledge of the measurement possibilities. On the other hand, specific questionnaires may refer to:

- Diseases, i.e. cancer – QOL-C30 questionnaire, Spitzer Quality of Life Index – rheumatoid arthritis, AIMS 2 questionnaire – Arthritis Impact Measurement Scale, mental illnesses – QLI-MH questionnaire – Quality of Life Index Mental Health;
- A given feature (i.e. motor dysfunction – Ferrenca and Pawers questionnaire);
- Specific problem (adiagnosed patient – Parfrey and Laupacisa questionnaire);
- Population.

The advantage of specific questionnaires is the ability to better evaluate the symptoms of the disease. In addition, they better reflect changes in HRQoL than general questionnaires. The choice of the questionnaire is therefore a very important part of the study because improperly selected questionnaire may not show changes in quality of life, despite the fact that such changes occur. Depending on the purpose of the study, a general or specific questionnaire (it is recommended to use specific along with the general questionnaire) or so-called *battery of test*, meaning a set of several questionnaires, should be chosen. If there is no ready questionnaire, it can be created for a specific examination (the so-called 'ad hoc' questionnaire).

Due to the fact that in questionnaires, different domains are assigned a different impact on the final result, data obtained by using a variety of questionnaires cannot be compared.

If possible, standardised questionnaires should be used, i.e. a type for which there is a clearly defined procedure: who is to carry out the examination (by the patient, whether it is read by the interviewer, who marks the answer by the phone, etc.), what are the instructions for the interviewer and prosumer, how does the questionnaire looks like, how to assess the results and how to interpret them. In these questionnaires, the following types of questions occur:

- Closed questions – only yes/no answers are possible;
- Nominal/analogue scale (NAS) – answers are most frequently arranged from the least to the greatest severity;
- Visual analogue scale (VAS) – in the form of a predetermined length segment and closely specified start and finish points (usually death and a state of full health).

General questionnaires are more universal, and results can be compared between different populations, which cannot be accomplished in the case of specific questionnaires.

4. Units of measurement of the health state utility

The most commonly used measurement of utility is *quality-adjusted life year* (QALY), meaning a year of life adjusted by quality. It allows a quantitative expression of differences between the two procedures which the outcome affects quality of life and not just the length of life; also it allows to detect differences if rated programs only affect quality of life and not the length. QALY is therefore a measure of the qualitative and quantitative differences between the assessed programs, it can mean: one year of life spent by one person in full health (the utility of which is equal to 1) and 2 years spent by five people, whose utility of health state is 0.1. In addition to QALY, when assessing the utility, we also use:

- HYE – an equivalent of one year of healthy life (healthy years, equivalent);
- YHL (USA) – years of healthy life;
- HALE (Canada) – health-adjusted life expectancy;
- HAPPY (Canada) – health-adjusted person years.

Comprehensive assessment of quality of life should be based on a simultaneous application of both general and specific questionnaires. When assessing prosumer's quality of life, attention should be paid to the fact that measurement takes place in two dimensions: the objective and *subjective (Chrobak, 2009: 126; Bak-Drabik & Ziora, 2010: 4; Bak et al., 2013: 552–554; Jankowska-Polańska & Polanski, 2014: 69–74).*

Elements, describing the objective level of quality of life, include material level, financial security, social and living conditions, the conditions of providing medical services, social activity, relaxation and recreation. Objective assessment includes, therefore, the functional level of the prosumer, and is made on the basis of the difference between the adopted external standard and the existing state *(Trzebiatowski, 2011: 25–31).* On the other hand, the subjective level of quality of life is based on the level of satisfaction, the so-called internal criteria, namely: a sense of security and inner peace, realisation of person's life dreams and goals, the degree of self-esteem, social acceptance, meeting one's own ambitions.

5. Discussion

The elusiveness of the concept of 'Quality of life' and thus the difficulty of its clarification is emphasized by many authors *(Romney, Jenkins & Bynner, 1992: 165–167; Bowling, 1995: 1447–1462).* In the foregoing considerations it was assumed that quality of life should be understood not only by person's well-being but also as the prosumer's ability to continue to function in various spheres of life. For an objective assessment of the health state, specific biomedical indicators are used. In contrast, the subjective perception of quality of life with

hernia of line a alba by the prosumer, is affected by, inter alia, individual assessment of symptoms and coping with physical, mental and social consequences. In the foregoing considerations, the term hernia (Lat. Hernia) defines the exit of an organ, a part of it or a tissue. Places of reduced resistance of the abdomen walls (loci minor is resistance) are the areas that are the most common route of hernias exit; they can be both loss of muscle and fascial in the abdominal wall. These include line a alba (hernia of line a alba), placed in and around the navel, lumbar triangle, sinewy lumbar part in the back wall, and the sterno costal triangle and lumbar-rib in diaphragm *(Noszczyk, 2007: 929–40).* This assessment takes into account personality and environmental conditions: gender, age, education, economic status and social and cultural influences *(Cramer & Spilker, 1998: 44–49).*

Therefore, if we can agree with the view of R. Kolman *(2000: 2),* quality of life is the result of fulfilling spiritual and material needs of a person as well as the desire of living requirements and peaceful activities in good social conditions. So the quality of life is dependent on the connection between a number of areas of human life, including, what should be emphasized in particular, of the human psyche. It varies in time, and its assessment may be determined by different reasons.

Quality of life, in relation to human life, is based on individual feelings and the needs of the prosumer. It is assumed that quality of life should be considered on a tier-wise level based on the determinants of health, i.e. physiological, psychological and social *(Wójcik, Kurjanowicz & Bidache, 2007: 31–38).* The introduction of clear, uniform rules for clinical decision-making processes and the inclusion of the prosumer in said decision-making processes – patient-oriented goal setting is the determinant of the growth of the efficiency processes of providing medical services. Additionally, Evidence Based Medicine – EBM, is a bridge between research and clinical practice; a set of standards, procedures *(Isaac & Franceschi, 2008: 656–659).* It also enables search, verification and selection of current research results.

The literature of the subject[2] has shown that the promotion of clinical indications and models of conduct is more effective than creating rigid procedures *(Buetow, 2008: 660–662; Bernhardt & Legg, 2009: 3–13; Mikołajewska, 2010: 87–102).*Whereas the verification of diagnostic and therapeutic methods allows to provide the best, currently available therapy to the prosumer, thus determining his quality of life. Modern medicine (the process of providing medical services) seeks to restore the disturbed functions of the body, offering a comprehensive, holistic care to the prosumer. Therefore, assessment of quality of life allows to estimate the impact of the disease on quality of life, which is important in providing adequate medical services *(Kochman, 2007: 242–248).*

The founding father of studies on quality of life in medicine was R. M. Rosser who in her research also showed that there is a close correlation between the method (process) of provided medical services and the prosumers quality of life. The results obtained by A. Kubicz confirmed the close links between the selected method of treatment, and prosumers life satisfaction *(Wołowicka, 2001: 19).* In addition, quality of life can be also assessed as a result of a health program which theoretically can affect quality of life. Assessment of HRQoL is essential in chronic diseases which are practically symptomless to the prosumer (i.e. hypertension); with diseases those treatment is associated with a large number or frequency of adverse reactions (i.e. cancer treatment) or in cases, where it is difficult to find other parameters by which a given procedure could be assessed *(Zygadło,*

[2] Bernhardt, J. & Legg, L. The procedure based on scientific evidence. S. Lennon, M. Stokes & A. Kwolek. (eds.). Physiotherapy in neurological rehabilitation. Wroclaw: Elsevier Urban & Partner. 2009: 3–13; Buetow, S. A. (2008). Meta theory, change and evidence-based medicine. A commentary on Isaac & Franceschi. J Eval Clin Pract., 14(5): 660–662; Mikołajewska, E. (2010). The dominant trends in modern rehabilitation. Disability and Rehabilitation, 1: 87–102.

2005: 65). That is why, due to the introduction of the term quality of life to medical science, a prosumer becomes a participant of the processes of provided medical service *(Chrobak, 2010: 1–2).* It is very important for the reason that various measures of utility have different interpretations and are estimated in a different way, so the attention should be paid on using the results of previously performed tests *(Drummond et al., 2003: 29–33),* in which units the results of the assessment of usability are given.

Quality of life, as an *economic category*, was introduced in the second half of the twentieth century. This category, additionally, due to interdisciplinary nature, also allows to determinate the tier-wise self-fulfilment of the prosumer in the framework of sustainable development. It is not an easy task to answer the question of how to measure the statistical quality of life[3].

Quality of life should be, if possible, built on the basis of existing data, which the collection is not too time-consuming or costly *(Szatur-Jaworska, Firlit-Fesnak & Szylko-Skoczny, 2009: 35-44).* The literature of the subject also showed that the process of perceiving and describing the criteria for evaluating quality of life can take many forms *(Kryk, 2012: 145–155; Borys, 2008: 24–40).* Therefore, the category of quality of life and problems of its statistical measurement became the subject of Stiglitz[4] Report including, inter alia: broadly understood objective conditions and – so far often overlooked in 'Official Statistics' studies – subjective well-being.

In the framework of objective conditions, certain domains should be taken into account, i.e.: the material conditions of life, health, education, economic activity, free time and social relationships, personal safety, the quality of the state and its ability to provide and exercise basic rights, as well as the quality of infrastructure and the environment at the place of residence. The measurement of subjective well-being should include the perceived quality of life, i.e. the satisfaction prosumers derive from various aspects of life and life as a whole, but also the elements on the psychological well-being and perceived emotional states.

By considering the objective and subjective dimension of quality of life, we can point to and highlight the reasons designating a particularly important role to the *subjective aspect.* Firstly, the purpose of the socio-economic development is the satisfaction derived by prosumers with the transition process being carried out. The most adequate assessments of the measures of satisfaction are the ones made directly by the interested parties themselves. Secondly, it is often difficult or even impossible, to make the so-called *objective measurement of many of the elements constituting quality of life*. This includes, inter alia, the assessment of a higher level needs, relating to i.e. human relationships or lifestyle. Thirdly, the knowledge about the social perception of living conditions, emotional states, and of social satisfaction can have a great practical importance in planning of specific measures in the field of socio-economic policies. Often, because we can feel it – relativized in relation to other people or relating to the past – and not an objective standard of living, determines the attitudes and behaviours of individuals in the field of personal and public lives.

[3] Report by the Commission on the Measurement of Economic Performance and Social Progress (2009), http://www.stiglitz-sen-fitoussi.fr/en/index.htm; Measurement of the Quality of Life: TF3 Contribution to the summary report of the Sponsorship Group; http://epp.eurostat.ec.europa.eu/portal/page/portal/quality_life/publications; Regulation of the EP and the Council 223/2009 of 11 March 2009 on European statistics; Decision of the Commission of 21 April 1997 on the role of Eurostat as regards to the production of Community statistics.

[4] Commission working under the direction of several Nobel Prize winners (Joseph Stiglitz, Amartya Sen, Daniel Kahneman, Kenneth Arrow and James Heckman) – report from September 14th, 2009.

The sense of too much distance between the perceived level of needs and aspirations, can generate all kinds of adaptive measures[5]. In the foregoing considerations, the principle of quality of life was adopted primarily through its subjective dimension. Considerations are focused mainly on the subjective (perceived by a given prosumer) quality of life in the discussed disease entity, understood as the level of satisfaction, which is taken from life, both seen as a whole, and in relation to each of its aspects.

With the extensive range of the thematic spectrum of the carried out literature research, it became possible to also examine participation in the shaping of these phenomena of various factors of tangible and intangible character, including factors relating to the sphere of objective quality of life. Therefore, the assessment of HRQoL (hernia of line a alba) by the prosumer himself may be completely different from the doctor's or even family members *(Felce & Perry, 1995: 51–74).*

The traditional evaluation of the effects of health-related programs is based on objective indicators, such as the reduction of mortality and improvement of clinical parameters, which, from the point of view of the prosumer, are not always noticeable. More significant are his subjective feelings concerning his health by reducing the level of pain or the sense of exclusion from society due to discussed disease entity.

It may also occur that due to certain procedures *(Olkiewicz & Bober, 2015: 41–53)* that have a proven positive effects on clinical parameters (i.e. medication), prosumers may assess their mood, ability to function and their economic situation worse, what determines their decision-making processes. Such factors in the hernia of line a alba is, inter alia, the increased abdominal pressure during asthma attacks or cough. Moreover, both constipation and urinary problems increase the pressure in the bladder, by stopping or hindering micturiti on they can cause excessive pressure in the pelvic region and contribute to the formation of the hernias of line a alba. In addition, numerous constipation causes excessive use of abdominal pressure, attempts of defecation determine the increase in pressure inside the abdomen. The result is an excessive pressure on the points of reduced resistance and, consequently, the formation of the discussed disease.

That is why, in medicine there is an increase of, with the objective clinical parameters, assessment of the impact of treatment of the prosumer's quality of life, which allows his point of view to be included in the evaluation *(Jaeschke, 1999: 155–162).*

Quality of life, based on subjective assessments, refers to the perception of both objective reality and the assessment of person's own internal feelings. Thus, the full subjective assessment of quality of life performed by prosumers is based on the assessment of living conditions (i.e. infrastructure), the standard of living of the assessor who is evaluating on how to meet the needs and the subjective assessment of satisfaction, life satisfaction and happiness. A holistic approach to the prosumer is included in the considerations of A. Klak and others. *(Kłak, Minko & Siwczyńska, 2012: 632–635).*

6. Conclusions

In summary, the assessment of the quality of life means taking a holistic approach to the problems of the prosumer and strengthening his health in a broader aspect. Additionally, it also provides the necessary information on how to function in areas that are important to him. It can also be an important criterion for assessing the effectiveness of the provision of medical services processes in the discussed disease entity. It also gives insight into the

[5] Subjective well-being and social Policy (2010), Edited by Simon Chapple, European Commission Directorate-General for Employment, Social Affairs and Inclusion, http://ec.europa.eu; Szukiełojć-Bieńkuńska, A. & Walczak, T. (2011). Statistical measurement of economic and social progress in the changing world. Statistical News, 7/8. Warsaw.

complex medical issues in terms of physical and mental health and the environment in which it operates. It also helps in planning and organising the effective, immediate and long-term process of post-hospital care of the prosumer suffering from hernia of line a alba in accordance with the accepted ethical principles.

That is why the sense of coherence (coherence, support) is as it was aptly expressed by H. Sęk: "The general attitude, expressing sustainable and dynamic belief in the predictability and rationality of the world and their own position in life" *(2003: 62).* The sense of coherence also affects in many ways prosumers' health and well-being.

The increase in the level of the sense of coherence determines a greater chance of regaining lost health deficits and maintaining or developing the desired health potential. The belief that life has meaning affects the prosumer positively, facilitates the conversion of stress into inner strength. It also provides a basis for reducing situations which are adverse to health. In addition, it determines increase in the perceived quality of life and the acceptable level of risk in the process of providing medical services.

The results of the quality of life evaluation can be analysed both for a specific or a group of prosumers'. For the assessment of the health situation, examination of the prosumers' quality of life enables the identification of various aspects of life, especially of particularly disadvantaged, due to, among others, discussed disease entity and the assessment of one's own approach to health, because:

1. Lifestyle affects the occurrence of discussed disease entity;
2. Analysed prevalence of the disease among active sportsmen is less than among individuals not practicing sports;
3. Weight training increases the risk of the discussed disease entity;
4. Proper diet containing foods rich in fibre reduces the risk of constipation and indirectly affects the frequency of its occurrence;
5. Smoking is important in the therapeutic methods of the discussed disease.

The assessment of quality of life in a defined population (defined disease) may be an indicator of its health and it can also be used to assess the effectiveness and benefits of specific health programs. Furthermore, it can also be a determinant of the decision-making processes in selecting optimal alternatives (provision of medical service processes) as well as to optimise the management of financial resources.

When assessing prosumers' quality of life, it is worth noting that the measurement takes place on two dimensions: objective and subjective. The elements describing the objective quality of life include the material level, financial security, social and living conditions, conditions of treatment and therapy, social activity, relaxation and recreation. An objective assessment includes, therefore, the functional level, and is carried out on the basis of the difference between the externally adopted standards, and existing state of the prosumer.

Subjective quality of life is based on the level of satisfaction, so-called internal criteria. Realisation of individual elements, constituting the index of subjective quality of life at the appropriate level as well as the emotional state that accompanies the prosumer during their fulfilment, allows to achieve optimal quality of life. Furthermore, the objective of this study was also to show a wide range of phenomena that may affect the prosumers satisfactory level of quality of life suffering from hernia of line a alba. Despite this, the authors are well-aware that many aspects have been omitted. This approach should be regarded as intentional, since the primary goal of the study was to show the diversity of attitudes and different points of perception of quality of life of the discussed disease entity.

References:

[1] Bak, E., Wojtuń, S., Gil, J. & Dyrla, P. (2013). The Importance of Selected Questionnaires in Assessing the Quality of Life of Patients with Esophageal Reflex. *Nursing Problems,* 21(4).

[2] Bąk-Drabik, K. & Ziora, D. (2010). The Impact of Socioeconomic Status on the Quality of Life in Patients with the Chronic Obstructive Pulmonary Disease. *Pneumology and Allergology*, 78(1).
[3] Bąk-Drabik K. & Ziora D. (2004). The Quality of Life of Patients with Chronic Obstructive Pulmonary Disease. *Pneumology and Allergology*, 72.
[4] Borys, T. (2008). The Proposal of Seven Typologies of the Quality of Life. *Economy and Environment*, 22.
[5] Borys, T. (2001). *Quality of Life and Sustainable Development. Relationships and Measurement.* Białystok: Ed. Economics and the Environment.
[6] Borys, T. (2000). *Quantity and Quality – Reflection after Few Years*. Krakow: Ed. AE in Krakow.
[7] Bowling, A. (1995). What Things Are Important in People's Lives? A Survey of the Public's Judgements to Inform Scales of Health Related Quality of Life. *Social Science and Medicine,* 41(10).
[8] Bidacha, M., Wójcik & Kurjanowicz, A. (2007). Assessment of Quality of Life from a Medical Perspective. *Progress in Rehabilitation*, 4.
[9] Cramer, J. A. & Spilker, B. (1998). *Introduction*. J. A. Cramer & B. Spilker. (eds.). *Quality of Life and Pharmacoeconomics. An Introduction.* Philadelphia: Lippincott-Raven.
[10] Chrobak, M. (2010). Not Only Biomedical Indicators. *Journal of Nursing and Midwifery,* 10.
[11] Chrobak, M. (2009). Quality of Life Depending on Health. *Nursing Problems*, 17(2).
[12] Czapiński, J. (2000). *Psychology of Happiness*. Warsaw: Ed. Psychological.
[13] *Decision of the Commission of April 21st, 1997 on the Role of Eurostat as Regards to the Production of Statistics for the Community*.
[14] Drummond, M. F., O'Brien, B., Stoddart, G. L. & Torrance, G. W. (2003). *Methods of Economic Research of the Healthcare Programs*. Gdańsk: Ed. VIA MEDICA.
[15] Dudzińska, M., Tarach, J. S. & Nowakowski, A. (2011). Measurement of the Quality of Life Depending on Living with Diabetes. *Practical Diabetology,* 12(2).
[16] Dziurowicz-Kozłowska, A. (2002). Around the Concept of Quality of Life. *Quality of Life psychology,* (1).
[17] Felce, D. & Perry, J. (1995). Quality of Life – Its Definition and Measurement. *Research in Developmental Disabilities*, 16(1).
[18] Guyatt, G. H., Feeny, D. H. & Patrick, D. L. (1993). Measuring Health-related Quality of Life. *Annals of Internal Medicine*, 118.
[19] Haacke, C., Althaus A. & Spottke, A. (2006). Long-term Outcome after Stroke: Evaluating Health-Related Quality Of Life Using Utility Measures. *Stroke:* 37.
[20] Isaac C. A., Franceschi A. (2008). EBM: Evidence to Practice and Practice to Evidence. *J Eval Clin Pract.*, 14(5): 656–659.
[21] Jaeschke, R. (1999). Evidence Based Medicine (EBM), Meaning Medical Practice Based on Reliable and Recent Publications (POWAP). Episode 8: Defining and Measuring Quality of Life Related to Health. *Practical Medicine*, 4.
[22] Jaracz, K. & Kozubski, W. (2008). *Neurological Nursing*. Warsaw: Medical Publisher PZWL.
[23] Jankowska-Polańska, B. & Polański, J. (2014). Methods for Assessing Quality of Life in Rheumatic Diseases. *Rheumatology*, 52(1).
[24] Jonsson, A. C., Lindgren, I. & Hallstrom, B. (2005). Determinants of Quality of Life in Stroke Survivors and Their Informal Caregivers. *Stroke:* 36.
[25] Klimaszewska, K., Krajewska-Kułak, E. & Kondzior, D. (2011). The Quality of Life of Patients with Pain Syndromes of the Lumbar Spine. *Nursing Problems*, 19(1).
[26] Kłak, A., Mińko, M. & Siwczyńska, D. (2012). Questionnaire Methods for Testing the Quality of Life. *Problems of Hygiene and Epidemiology*, 93 (4).
[27] Kolman, R. (2007). Methodology for Assessing Quality Transformations. *Quality Problems*, 1.
[28] Kolman, R. (2000). Research Teams of the Quality of Life. *Quality Problems*, 2.
[29] Kochman, D. (2007). Quality of Life. *Public health*, 117(2).
[30] Kryk, B. (2012). Quality of Life in the Context of Sustainable Development. *Internal Trade*, July-August 2012.

[31] Levine, S. (1995). *The Meanings of Health, Illness and Quality of Life*. I. Guggenmoos-Holtzmann, K. Bloomield & U. Flick. (eds.). *Quality of Life and Health: Concepts, Methods and Applications*. Berlin: Blackwell Wissenschafts-Verlag.
[32] Measurement of the Quality of Life: TF3 Contribution to the Summary Report of the Sponsorship Group. (Online). Available at: http://epp.eurostat.ec.europa.eu/portal/page/portal/quality_life/publications.
[33] Michoń, P. (2010). *Economics of Happiness*. Poznan: Harasimovich.
[34] Mudge, M. & Hughes, L. E. (1985). Incisional Hernia: A 10 Year Prospective Study of Incidence and Attitudes. *Br J Surg:* (72).
[35] Muszalik, M. & Kędziora-Kornatowska K. (2007). Quality of Life and Health. *Journal of Nursing and Midwifery*, 5.
[36] Nichols-Larsen, D. S., Clark, P. C. & Zeringur, A. (2005). Factors Influencing Stroke Survivors' Quality of Life during Subacute Recovery. *Stroke:* 35.
[37] Nordenfelt, L. (1993). *Quality of Life, Health and Happiness*. Avebury: Aldershot.
[38] Noszczyk, W. (2007). *Abdominal Hernias.* Warsaw: PZWL.
[39] Olkiewicz, M. (2015*a*). Manager's Competence as a Determinant of Organizational Development. *Economics and Organization of Enterprises*, 7(786).
[40] Olkiewicz, M. (2015*b*). Professional Activity of Disability People in the Central Pomeranian Area. Regional formation and development studies. *Journal of Social Sciences*, 3(17).
[41] Olkiewicz, M. & Bober, B. (2015). Role of Quality in Healthcare Service Provision Process. *Progress in Health Sciences*, 5(2).
[42] Papuć, E. (2011). Quality of Life – Definitions and Different Types of Approach. *Curr Probl Psychiatry*, 12(2).
[43] Panek, T. (2016). *Quality of Life. From Concept to Measure*. Warsaw: Publishing House Warsaw School of Economics.
[44] Peterman, A. H. & Cella, D. (2000). Quality of Life. A. E. Kazdin. (ed.). *Encyclopedia of Psychology*, 6. Oxford: Oxford University Press-American Psychological Association.
[45] Poskrobko, B. (2007). *Towards Economy of Sustainable Development*. Białystok: Economy and Environment.
[46] *Quality of life, social capital, poverty and social exclusion in Poland.* Studies and analysis of social. (2013) Warsaw: GUS.
[47] Rasińska, R. & Nowakowska, I. (2013). Students' Quality of Life in Terms of Knowledge of Sustainable Development Indicators. *Scientific Papers of the University of Economics in Wroclaw*, 309/2013.
[48] Rasińska, R. (2010). Self-assessment of the State of Health of the Population in Reports and Statements – Polish Nursing. *Publishing House of the Academy of Medical Sciences*, 2009, 2(32), print 2010.
[49] *Report by the Commission on the Measurement of Economic Performance and Social Progress.* (2009). (Online). Available at: http://www.stiglitz-sen-fitoussi.fr/en/index.htm.
[50] Romney, D. M., Jenkins, C. D. & Bynner, J. M. (1992). *A Structural Analysis of Health Related Quality of Life Dimensions. Hum Relat*, 45(2).
[51] *Regulation 223/2009 of the EP and the Council of March 11th2009 on European Statistics*.
[52] Schipper, H. (1990). Quality of Life: Principles of the Clinical Paradigm. *Journal of Psychosocial Oncology*, 8(2–3).
[53] Sęk, H. (2003). *Introduction to Clinical Psychology*. Warsaw: Scholar.
[54] Sęk, H. & Pasikowski, T. (2001). *Quality of Life and Health and the Sense of Coherence in a Social Context.* Poznań: Academy of Medical Sciences.
[55] *Stiglitz Report*. (2009). Commission Working under the Direction of Nobel Prize winners. (J. Stiglitz, A. Sen, D. Kahneman, K. Arrow & J. Heckman).
[56] *Subjective Well-being and Social Policy* (2010). Edited by Simon Chapple. European Commission Directorate-General for Employment, Social Affairs and Inclusion. Available at: http://ec.europa.eu.
[57] Sokolnicka, H. (2003). Medicine and the Concept of the Quality of Life. *Family Medicine*, 24.
[58] Szukiełojć-Bieńkuńska, A. &Walczak, T. (2011). Statistical Measurement of Economic and Social Progress in a Changing World. Warsaw: *Statistical News*, 7/8.

[59] Trzebiatowski, J. (2011). Quality of Life in the Perspective of Social and Medical Sciences – Systematization of Definitional Approaches. *Hygeia Public Health*, 46(1).
[60] WHO. (2006). *Constitution of the World Health Organisation*, supl. Basic Documents, ed. 45.
[61] Wnuk, M. & Marcinkowski, J. T. (2012). Quality of Life as a Pluralistic Concept of Interdisciplinary. *Probl. Hygiene and Epidemiol.*, 93(1).
[62] Wołowicka, L. (2001). *Quality of Life in Medical Science*. Poznań: Medical University.
[63] Wójcik, A., Kurjanowicz, B. & Bidacha, M. (2007). The Assessment of the Quality of Life from Medical Perspective. *Progress in rehabilitation*, 4.
[64] Wielgosz, R. & Mroczkowski, E. (2011). Methods for Assessing the Quality of Life of Patients with Chronic Nasal Inflammation and Paranasal Sinuses. *Otorhinolaryngology*, 10(2).
[65] Woynarowska, B. (2007). *Health Education*. Warsaw: PWN.
[66] Zboina, B. (2008). *Quality of Life in the Elderly*. Ostrowiec Świętokrzyski.
[67] Zygadło, E. (2005). Pharmaceutical Care of Patients with Chronic Disease. Warsaw: Medical Academy in Warsaw.

Addresses of authors:

Dr. Benedykt BOBER
Wyższa Szkoła Hotelarstwa i Gastronomii
ul. Mostowa 5A/13
61 538 Poznań
e-mail: benedykt.bober@wp.pl

Dr. Marcin OLKIEWICZ
Politechnika Koszalińska
Poland
e-mail: amolkiewicz@gmail.pl