

Therapeutic Relationship and Quality of Life in Chronic Diseases

Alexandra Mitsi¹, Michael Kourakos^{1,*}, Georgia Poulimenakou¹, Demetra Latsou², Markos Sarris²

¹General Hospital “Asklepieio” Voulas, Athens, Greece

²Technological Educational Institute of Athens, Athens, Greece

Email address:

mixkourakos@hotmail.com (M. Kourakos)

*Corresponding author

To cite this article:

Alexandra Mitsi, Michael Kourakos, Georgia Poulimenakou, Demetra Latsou, Markos Sarris. Therapeutic Relationship and Quality of Life in Chronic Diseases. *American Journal of Nursing Science*. Special Issue: Nursing Education and Research.

Vol. 7, No. 3-1, 2018, pp. 103-108. doi: 10.11648/j.ajns.s.2018070301.25

Received: February 25, 2018; **Accepted:** March 4, 2018; **Published:** March 22, 2018

Abstract: The relationship between healthcare professionals and patients is a special form of human relationship. The interpersonal relationship developed among the patient and the caregiver involves not only communication and active listening, but also emotions from both sides. The establishment of a therapeutic relationship and the roles within it are largely determined by the behavior of those involved. A therapeutic relationship requires effective communication and empathy of the nurse practitioner, as well as the patient's active participation in the process. The quality of the relationship between two people is the most important element in determining the effectiveness of the care delivered.

Keywords: Chronic Diseases, Quality of Life, Therapeutic Relationship

1. Introduction

Chronic and complex health conditions or diseases are the greatest challenges that healthcare systems, globally, are going to have to attend to in the years to come. Since the late 1990s, a global shift of attention from acute health conditions to more chronic has been recorded [1]. At the same time, universal health policy makers adopted a more humanistic approach with the services having the patient/client at the center of healthcare provision. Furthermore, global healthcare systems focused on public health and health promotion addressing health risks from the natural and socio-economic environment.

Advances in sciences and medical technological improvements, better living conditions and better preventive strategies increased life expectancy, altered the proportion of older people in the population, and changed the burden and type of diseases that healthcare systems are required to manage. Except from diabetes mellitus, cardiovascular or cerebrovascular diseases that are chronic, some other health conditions that were thought to be fatal, such as Human Immunodeficiency Virus/Acquired Immunodeficiency

Syndrome (HIV/AIDS), are nowadays chronic manageable health problems [2]. In addition, health conditions caused by the “modern” lifestyle, such as obesity, allergies or depression, need to be addressed. Finally, health impairments and disabilities, such as blindness or musculoskeletal disorders, are regarded as chronic and need chronic treatments. All the above described conditions have led to a growing number of people with chronic health problems to seek healthcare [3].

As the age structure of the population is changing, old age could be considered a factor contributing to chronic health problems. It is estimated that by 2030 the 23.5% of Europe's population will be 65 years and older, with those aged more than 80 years old being the 6.4% of the population [4].

Within this context, healthcare professionals, either in hospital settings or in the community, are asked to provide care for chronic patients for longer periods of time. The long-term relationship established between the professional and the patient is a commitment of care, a mutual agreement to work together for the good of the patient and it is described in the literature as Therapeutic Relationship (TR). Therapeutic Relationship is considered to be a system of diverse and expected social values and behaviors produced

from the interaction between healthcare professionals and patients/clients [5].

2. Chronic Diseases

The World Health Organisation has defined chronic diseases as “a health problem that lasts for long periods of time, progress slowly and is not passed from person to person” [6]. The criteria of defining a chronic health condition include duration and severity of the illness, the way it affects everyday life and the need for healthcare services [7]. Chronic diseases are usually a long-term issue for patients with a great variation of symptom severity and functional status. During the course of patient's life their health status is constantly changing for better or worse [8]. In general, chronic diseases are slow in progression, long in duration and requiring medical treatment [9].

Chronic non-communicable diseases not only change the people's quality of life but account for more than 50% of the global disease burden [10] and are the leading cause of death worldwide, accounting for 38 million deaths each year [6]. In Europe, chronic diseases account for the 77% of the disease burden [11]. In the European Union, in 2014, the 32.5% of the population over 16 years old reported a long-lasting health problem [12]. On the other side of the Atlantic, in the USA, chronic diseases are the leading causes of disability and death, accounting for 70% of deaths [13] [14]. In addition, it has been estimated that about 50% of adults have a chronic medical condition and 25% of all adult population have multiple chronic health conditions [15].

Many of these chronic diseases are sharing the same risk factors and are widely associated with lifestyle [16]. Researchers attribute a lot of the chronic diseases to tobacco and alcohol consumption, dietary habits and lack of physical activities [17]. Some commonly known chronic diseases are diabetes mellitus (with a global yearly increase in prevalence), cardiovascular diseases (major causes of long-term disability), chronic respiratory diseases (the fourth leading cause of death worldwide), depressive disorders (projected to be the second major contributor to the disease burden worldwide by 2020) and some types of cancer [2] [18].

Despite the various prevention and/or control strategies implemented by governmental and non-governmental organisations the number of people affected by chronic health problems is steadily increasing [16].

Devins (1994) claimed that chronic disease disrupt a person's life and has an impact on his/her well-being or quality of life [19]. But it is not only the patient that it is affected; chronic illness is affecting the family as well. It is an experience that influences a bigger group of people, with care, quite often, being provided within the family [3]. Illness, as a family member, develops a relationship with all other family members, not just the person with the diagnosis [20] [21]. It is common that the family as a whole is partner in the Therapeutic Relationship with the healthcare professionals.

3. Therapeutic Relationship

Nowadays, that chronic diseases have become a major medical problem for the healthcare system, the chronic patient is invited to be a partner in the medical care process and actively participate in decision making. A Therapeutic relationship or Therapeutic Alliance is formed between the healthcare professional and the patient. It is a special form of human relationship and a major part of care delivered. Moreover, it is the means by which a therapist and a client hope to interact with each other, aiming at producing a beneficial change for the client/patient, healing and/or enhancing functioning and rehabilitation [22] [23]. In other words, it is a purposeful, goal directed relationship for the best interest and outcome of the client/patient [22] [24]. The establishment of a Therapeutic Relationship and the roles within it are mainly determined by the behavior of persons involved. Achieving a good Therapeutic Relationship requires effective communication and empathy from the healthcare professionals, as well as the positive participation of the patient.

The Therapeutic Relationship is central to all domains of healthcare provision, regardless of setting and clinical situation. In mental health and community or primary care, Therapeutic Relationship is the basis of working together to promote health issues. In hospital settings, such as Intensive Care Unit or Operating Theatre, Therapeutic Relationship may not be obvious but it is the intervention through which comfort, support and provision of care are facilitated [24]. It has been found that when people with HIV perceive that they have a good Therapeutic Relationship with the professionals responsible for their treatment and their physician knows them by name, a better adherence to treatment is achieved [25].

A Therapeutic Relationship to be effective has to be built on sincerity, empathy, altruism and congeniality [26]. It has to evolve around qualities such as respect, genuineness, empathy, trust, confidentiality, active listening and responding to patient/client concerns [27].

The healthcare professional, without being judgmental, accepts the patient/client as a unique human being and respects his/her beliefs and way of living, enhancing therapeutic communication. The ability to be truly interested and not hide behind the professional status, helps the patient/client to better interact with the healthcare providers. Furthermore, high levels of empathy, the ability to understand the emotional state of another person, can assist the professional to identify the patient's concerns and attend to them [28].

It is well documented that trust is very important in the context of chronic illness due to enhanced patient vulnerability, uncertainty about the outcome, and increased dependence on healthcare professionals [29] [30] [31]. Hall (2006), states that trust is constructed through interpersonal relationships and is driven by the ability of the professional to provide care, competency, honesty and confidentiality [30]. Healthcare professionals have the legal and moral

obligation for keeping to themselves, and the immediate team of carers, any information given by their patients, unless criminal acts or neglect is revealed. For other scholars effective communication among clinicians, patients and/or their families plays a crucial role towards improving patient outcome [11] [32] [33].

Communication is the cornerstone of the relationship described. Good communication skills make distinguish the good from the excellent professional [34]. Literature, as well as, clinical practice reveals various communication patterns adapted by clinicians. Rotter et al. (1997) described five different communication patterns: 1) narrowly biomedical, 2) expanded biomedical, 3) biopsychosocial, 4) psychosocial, and 5) consumerist. The narrowly biomedical pattern is notable for the discussion of medical issues and closed type questions [35]. In the expanded biomedical pattern, similar to the narrow pattern, the clinician is asking psychosocial questions as well. In the biopsychosocial pattern, there is a balance between biomedical and psychosocial information exchanged between healthcare professionals and patients. The patient is able to describe in more details his/her personal experience of the illness [36]. In the psychosocial pattern the clinician is focusing mainly in the psychosocial problems the patient is facing and how they are affecting his physical state. Finally, in the last pattern, the consumerist, the clinician is a consultant who answers questions rather than asking them. The patient/client is dominates this last pattern [35] [36].

The foundation of the Therapeutic Relationship is set during the first meeting/appointment with a healthcare professional, the orientation phase as it is called. The tone of the words exchanged can promote communication and can help in building the relationship. Patients could begin interacting and start to establish trust to the healthcare professional who will clarify the purpose and nature of the relationship aiming at decreasing the patient's anxiety levels. Body language and active listening can help patients feel more comfortable and remain focused on the goals set at the beginning. The orientation phase usually ends with the therapeutic contract between the healthcare professional and the patient. This contract, although not formal and written, explains the roles of the people involved and the goals of the relationship [37].

After the first contact, during the orientation phase, the healthcare professional and the patient work together to identify problems, set problem-oriented goals and the appropriate interventions within the care plan. This is happening during the second, identification phase. The active part of the therapeutic relationship is happening mostly during the next phase. During exploitation phase, all the appropriate interventions are carried out and/or re-assessment and re-evaluation takes place. The therapeutic relationship established in the previous phases, allows the patient and healthcare professional to work together and help the first to regain control of his health status. The therapeutic relationship could be long-term, for patients with cancer, or short-term, for patients with minor operations.

Each one of these types of relationships will end, eventually. Ending a therapeutic relationship requires a period of resolution, or else a resolution phase. Finally, during the last phase of the therapeutic relationship, the termination phase, the achievement of goals and the care plan can be reviewed. Unmet goals can be identified and re-planned or follow-up care could be programmed. Feelings of sadness and loss are normal to be experienced, by both participants. Healthcare professionals and patients should talk about these feelings and the ending of their relationship. The therapeutic relationship will finish with completeness and satisfaction, if all feelings are acknowledged.

As in everyday life, some personal and professional boundaries have to be set in order for the therapeutic relationship to be effective [37]. Boundaries are important, both ethically and legally, and help to establish and maintain the specific roles within the professional therapeutic relationship. The most important of them is objectivity. The healthcare professional needs to be objective when assessing the patient's needs and plan his/her care, even if he/she has been caring for the patient for a long time. Through self-awareness, the healthcare professional would be able to differentiate between compassionate care and over-involvement that endangers the ability to provide professional, competent and objective care. Another component of the therapeutic relationship that has to be in mind is the professional's self-disclosure. During the interaction with patients, healthcare professionals want to appear professional and not to releave personal data or feelings, but self-disclosure could and will happen. Personal questions towards healthcare professionals might be used by patients in order to find common topics for conversation or to feel more comfortable when discussing personal data. Personal data should never be shared with the patient and nurses could avoid it by focusing on the patient's care plan [37].

4. Health-Related Quality of Life

Health has been defined by the World Health Organisation (WHO) as not only the absence of illness, but also the complete physical, mental and social well-being [39]. It is a multidimensional phenomenon, influenced by many biological, behavioral and environmental factors. In more recent years, theoretics have stated that health and illness are reflected in an individual's relationships [38]. A person's illness affects his/her adaptability and his/her personality could be characterized as divergent [40].

Aristoteles and Plato were the first to teach about QoL or *eudaimonia* ("εὐδαιμονία"), bliss. It was stated that it was not the material goods a person possessed that gave him bliss, but the happiness deriving from good and virtuous acts of the soul [41]. Within this context, and since the basic standard of living was acquired for the greater part of the population, shortly after the great wars of the 20th century, WHO produced a definition for QoL. According to that definition, *"Quality of life is defined as individuals' perception of*

his/her position in life in the context of the culture and value system in which they live and in relation to their goals, expectations and standards and concerns. It is a broad ranging concept affected, in a complex way, by the person's physical health, psychological state, level of independence, social relationships, and their relationship to salient features of their environment" [42] [43].

Another term, used for the first time during the 1970s, determines the impact of an illness on psychological, physical and social aspects of a person's life, and it is named Health-Related Quality of Life (HRQoL) [44]. Patrick and Erickson (1993) define HRQoL as *the value assigned to duration of life as modified by the impairments, functional states, perceptions and social opportunities that are influenced by disease, injury, treatment or policy* [45]. HRQoL includes functional capacity, cognitive, emotional, sexual and social functionality as well as the patients' self-perception about his/her health status and/or treatment interventions [9] [46].

HRQoL can be easily distinguished from QoL, as the first is focusing on the effects of an illness or a disease to the individual's QoL. These effects could include symptoms of the disease and treatment side effects, satisfaction from a specific treatment, short- and long-term disabilities [47]. It is generally accepted that HRQoL is a *multidimensional concept of physical, psychological and social functioning that are affected by one's diseases and/or treatment* [9].

The current rise in chronic diseases, such those presented earlier in the paper, results in a deterioration of many people's health, in dysfunctionality and decreased HRQoL. Research on HRQoL can help patients on the long-term, as it is exposing the QoL aspects that may be affected by each chronic disease [8]. Having these information, and within the established Therapeutic Relationship, healthcare professionals can use the appropriate tools to measure HRQoL, to adjust interventions or treatment to handle these factors and to predict the effectiveness of any treatment implemented [48] [49].

Social Production Functions (SPF) theory suggests a theoretical framework of the effects of disease on QoL. Quality of life in SPF theory is seen as psychological well-being which exists to the extent that universal needs are met: physical well-being and social well-being. SPF theory assumes that people produce their own well-being by trying to optimize achievement of universal needs. Human beings choose cost-effective ways to produce well-being in order to achieve the satisfaction of their needs [5].

HRQoL is a multidimensional concept requiring the evaluation of the multiple dimensions of quality of life and the assessment of each dimension selected. Multi-item assessments within a given dimension of quality of life are necessary for someone to understand it and its relationship to the patients' illnesses, therapeutic approach, and other life circumstances [50].

Researchers demonstrate different levels of HRQoL among various chronic disease patients. Avis et al (2005) have found that in cancer patients social and sexual aspect of the HRQoL

is quite affected, as well as physical (body image) and cognitive aspect [47]. Scientists have stated that in cardiovascular patients the physical aspect of HRQoL is mainly affected [51], whereas others describe depressive disorders as the most important change [52].

The Therapeutic Relationship is a cooperative, built over time, relationship in the sense that the therapist and the patient are working as a team and complete one another [53]. The Therapeutic Relationship follows certain structural preconditions. Within this process, both members agree about the therapeutic approach and continuity of care. The therapist is trying to help his patient/client to detect and understand his/her thoughts, feelings and behaviors. Finally, they both anticipate for the best outcome. Very important concepts in the therapeutic relationship are positive interaction, trust, warmth, support, acceptance, cooperation, reciprocity and commitment.

5. Conclusions

In conclusion, empathy, effective communication and active listening are the skills required from healthcare professionals in order to effectively interact with their patients/clients. The Therapeutic Relationship is based on the joint commitment of the clinician and the patient/client to work together in order to fulfill the goals of chronic care; not only to cure the disease and prevent any complications, but to enhance the patient's functional status, minimize symptoms, prolong life expectancy and enhance QoL.

References

- [1] Kourakos M, Vlachou E, Kelesi M. Empathy in the health professions: an ally in the care of patients with Chronic Diseases. *IJHSR*. 2018; 8(2): 233-240.
- [2] Nolte E, McKee M. Caring for people with chronic conditions: A health system perspective. Pp 1-14. 2008, Open University Press, Maidenhead, UK.
- [3] Robinson C. Trust, healthcare relationships and chronic illness: a theoretical coalescence. *Glob Qual Nurs Res*. 2016; 3: 1-11.
- [4] Kinsella K, Phillips D. Global aging: the challenge of success. *Population Bull* 2005; 60(1): 5-42.
- [5] Sarris M, Soulis S, Yfantopoulos J. Social production functions theory. *Arch Helle Med* 2001; 18(3): 230-238.
- [6] World Health Organisation (WHO). Non-communicable diseases. 2017. Retrieved from the World Health Organisation website: http://www.who.int/topics/noncommunicable_diseases/en.
- [7] Hunt L, Kreiner M, Rodriguez-Mejia F. Changing diagnostic and treatment criteria for chronic illness: a critical consideration of their impact on low-income Hispanic patients. *Hum Organ* 2013; 72: 242-253.
- [8] Shofany C. Quality of Life among Chronic Disease Patients. *Nurse Care Open Access J* 2017; 4(2): 00103.

- [9] Megari K. Quality of Life in Chronic Disease Patients. *Health Psychol Res* 2013; 1 (e27): 141-148.
- [10] Solomons N, Kruger H, Puoane T. Adherence challenges encountered in an intervention programme to combat chronic non-communicable diseases in an urban black community, Cape Town. *Health SA Gesondheid* 2017; 22: 70-78.
- [11] Kooij L, Groen W, van Harten W. The effectiveness of information technology-supported shared care for patients with chronic disease: a systematic review. *J Med Internet Res*. 2017; 19(6): e221.
- [12] Röttger J, Blümel M, Linder R, Busse R. Health system responsiveness and chronic disease care – What is the role of disease management programs? An analysis based on cross-sectional survey and administrative claims data. *Soc Sci Med*. 2017; 185(Sup. C): 54-62.
- [13] Booth F, Roberts C, Laye M. Lack of exercise is a major cause of chronic diseases. *Compr Physiol*. 2012; 2(2): 1143-1211.
- [14] Bauer U, Briss P, Goodman R, Bowman B. Prevention of chronic disease in the 21st century: elimination of the leading preventable causes of premature death and disability in the USA. *The Lancet* 2014; 384: 54-52.
- [15] Smith M, Bergeron C, Adler C, Patel A, Ahv S, Towne Jr S, Bien M, Ory M. Factors associated with healthcare-related frustrations among adults with chronic conditions. *Patient Educ Couns* 2017; 100: 1185-1193.
- [16] Kourakos M, Fradelos E, Papathanasiou I, Saridi M, Kafkia T. Communication as the basis of care for patients with chronic diseases. *AJNS* 2018; 8(3-1): 7-12.
- [17] Román P, Ruiz-Cantero A. Polypathology, an emerging phenomenon and a challenge for healthcare systems. *Rev Clinica Esp. Engl. Ed.* 2017; 217: 229-237.
- [18] Pauwels R, Rabe K. Burden and clinical features of chronic obstructive pulmonary disease (COPD). *Lancet* 2004. 362: 613-620.
- [19] Devins G. Illness intrusiveness and psychosocial impact of lifestyle disruption in chronic life-threatening disease. *Adv Ren Replace Ther* 1994; 1(3): 251-263.
- [20] Robinson C, Throne S. Strengthening family “interference”. *J Adv Nurs* 1984; 9: 597-602.
- [21] Robinson C. Women, families, chronic illness, and nursing interventions: from burden to balance. *J Fam Nurs* 1998; 4: 271-290.
- [22] Stalikas A. Therapeutic interventions. 2005. Athens, Hellenic Grammata [in Greek].
- [23] Stalikas A, Mertika A. Therapeutic alliance. 2004. Athens, Hellenic Grammata [in Greek].
- [24] Grinspun D for the Registered Nurses Association of Ontario (RNAO). Establishing Therapeutic Relationships. 2002. Toronto, Canada.
- [25] Beach M, Keruly J, Moore R. Is the quality of the patient-provider relationship associated with better adherence and health outcomes for patients with HIV? *J Gen Intern Med* 2006; 21: 661-665.
- [26] Gilson L. Trust in healthcare: Theoretical perspectives and research needs. *J Health Organ Manag* 2006; 20: 359-375.
- [27] Reynolds S, Austin W. Nursing, empathy and perception of the moral. *J Adv Nurs* 2000. 32: 235-242.
- [28] Theofilou P. The role of sociodemographic factors in health-related quality of life of patients with end-stage renal disease. *IJCS* 2011; 4: 40-50.
- [29] Calnan M, Rowe R. Researching trust relations in healthcare: conceptual and methodological challenges – an introduction. *J Health Organ Manag* 2006; 20: 349-358.
- [30] Hall M. Researching medical trust in the United States. *J Health Organ Manag* 2006; 20: 456-467.
- [31] Calnan M, Rowe R. Trust and healthcare. *Sociol Compass* 2007; 1: 283-308.
- [32] Østbye T, Yarnall K, Krause K, Pollak K, Gradison M, Michener J. Is there time for management of patients with chronic diseases in primary care? *Ann Fam Med*. 2005; 3(3): 209-214.
- [33] Brunner-La Rocca H, Fleischhacker L, Golubnitschaja O, Heemskerk F, Helms T, Hoedemakers T, Huygen Alliances S, Jaarsma T, Kikrova J, Ramaekers J, Ruff P, Schnur I, Vanoli E, Verdu J, Zippel-Schultz B. Challenges in personalized management of chronic diseases – heart failure as prominent example to advance the care process. *EPMA J* 2016; 7(1): 2-11.
- [34] Kourkouta L, Papathanasiou I. Communication in nursing practice. *Mater Sociomed*. 2014; 26(1): 65-67.
- [35] Rotter D, Stewart M, Putnam S, Lipkin M, Stiles W, Inui T. Communication patterns of primary care physicians. *JAMA* 1997; 277: 350-356.
- [36] [36] Bellali T. Communication with the patient nowadays: is it necessary clinical skill/practice? (editorial). *HJNS* 2018; 11(1): 4-8 [in Greek].
- [37] Kennedy Sheldon L, Foust J. Establishing a therapeutic relationship. In Kennedy Sheldon L, Foust J. *Communication for nurses: talking with patients*. 2014. Jones & Bartlett Learning. Burlington, MA.
- [38] Aggrafiotis D. Health, Illness, Society. 2003. Typothyto Publications. Athens [in Greek].
- [39] World Health Organisation (WHO). WHO Constitution. 1948, Geneva, Switzerland.
- [40] Spyropoulos M. Communication between doctor and patient in contemporary times. *Am J Orthod Dentofacial Orthop* 2017; 151(4): 629-632.
- [41] Economou M, Kokkosis M, Triantafillou E, Christodoulou G. Quality of life and mental health. Conceptual approaches and clinical and assessment issues. *Arch Hell Med* 2001; 18(3): 239-253 [in Greek].
- [42] World Health Organisation (WHO). Handbook for reporting results of cancer treatment. 1979. WHO Offset Publishing, no 48, Geneva, Switzerland.
- [43] World Health Organisation (WHO). The World Health Organisation quality of life assessment (WHOQOL): Position paper from the World Health Organisation. *Soc Sci Med* 1995; 41(10): 1403-1409.
- [44] Kafkia T, Vehvilainen-Julkunen K, Sapountzi-Krepia D. Renal patient's Quality of Life as it is affected by pain. *IJCS* 2017; 10(2): 1108-1112.

- [45] Patrick D, Erickson P. Health status and health policy: quality of life in health care evaluation and resource allocation. 1993. Oxford University Press, New York, USA.
- [46] Minasidou E, Bellali T. Quality of life of patients with Lupus Erythematosus: a literature review. *Nurs Care Res* 2013; 35(2): 109-116 [in Greek].
- [47] Avis N, Crawford S, Manuel J. Quality of life among younger women with breast cancer. *J Clin Oncol* 2005; 23(15): 3322-3330.
- [48] Sarris M, Goula A. The health-related quality of life as assessment criterion of the healthcare quality. 2006. Papazisis Publishers, Athens, Greece.
- [49] Farfaras A, Pierrakos G, Pateras I, Skolarikos P, Wen SW, Sarris M. Endometriosis: does surgery offer long-term improvement in quality of life? *J Endometr Pelvic Pain Disord* 2014; 6(2): 106-111.
- [50] Yfantopoulos J, Sarris M. Health-related quality of life: Measurement, methodology. *Arch Hell Med* 2001; 18(3): 218-229.
- [51] Fukuoka Y, Lindgren T, Rankin S, Cooper B, Carroll D. Cluster analysis: a useful technique to identify elderly cardiac patients at risk for poor quality of life. *Qual Life Res* 2007; 16(10): 1655-1663.
- [52] Carod-Artal J, Egido J, Gonzalez J, De Seijas E. Quality of life among stroke survivors evaluated 1 year after stroke: Experience of a stroke Unit. *Stroke* 2000; 31(12): 2995-3000.
- [53] Sarris M, Goula A, Gioka B, Soulis S. Quality of life of patients and quality of healthcare after renal transplantation. *Arch Hell Med* 2008; 25(2): 201-208 [in Greek].