

HEALTH RELATED QUALITY OF SOCIAL LIFE

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ÖZET

Sağlığa İlişkin Sosyal Yaşam Kalitesi

Yaşam kalitesi sadece sağlık alanında çalışan uzmanlar tarafından değil aynı zamanda filozoflar, psikologlar, ilahiyatçılar, şairler ve politikacılar tarafından da çok kullanılan bir terimdir. Sağlık çok boyutlu düşünülmesi gereken bir konudur. Bu nedenle sosyal varlık olan insanın tıbbi ve klinik yönden ele alınması "iyi olma için" yeterli değildir. Bireyin sağlık açısından "iyi olma" halinin sosyal, psikolojik ve fiziksel yönden de değerlendirilmesi gereklidir. Konunun zenginliği bu alanda somut ölçüm kavramları geliştirilmesine yol açmıştır. Bu nedenle 20. asrın sonlarına doğru hekimler ve ekonomistler tarafından "yaşam yıllarına uyarlanan kalite" kavramının kullanılması tercih edilmeye başlanmıştır. Bu kavram, bireyin günlük hayatındaki; yaşamsal işlevlerini, kaliteli biçimde sürdürebilmesi özüne dayandırılan tıbbi ağırlıklı bir yaklaşımdır. Yaşam boyunca sağlıklı olma durumunun miktar ve kalite olarak ekonomik açıdan değerlendirilebilmesi ve toplumların sağlık profillerinin belirlenerek, geleceğe yönelik planlar yapılması bu tip ölçümlerin kullanılması ile mümkün olacaktır.

Anahtar Kelimeler: Sağlık, Yaşam Kalitesi, Sosyal Yaşam Kalitesi, Yaşam Yıllarına Uyarlanan Kalite, Sağlığın Ölçümü.

SUMMARY

Quality of life is a term which has been used extensively not only by health professional but also philosophers, psychologists, theologians, poets and politicians. Health is a multidimensional phenomenon including not only medical or clinical aspects but also other important dimensions related to the physical, psychological and social aspects of well-being. The richness of the concept requires that for its evaluation multiple dimensions of quality of life are utilized. The concept of quality adjusted life years (QALYs) has become a popular topic among doctors and economists during the last two decades. It combines "quantity i.e., life expectancy with "quality" adjusted life years.

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The construction of health indices are of fundamental importance for establishing priorities in the health sector and for assessing the objectives of efficiency and effectiveness.

Key Words: Health, Quality of life, Social Quality of Life, QALYs, Health Measurement.

"Health is a state of complete physical, mental and social well-being -not merely the absence of disease or infirmity"

WHO 1948

Health related quality of social life (HRQOSL) is a measure of an individual's physical, functional, emotional, social well being, fulfillment and satisfaction resulting from factors in the external environments. This is a rich, multidimensional, pejorative, vague and elusive concept which has undergone various historical phases and has received many interpretations. It depends on personal tastes, experiences, perceptions, attitudes and beliefs concerning philosophical, cultural, spiritual, psychological, financial, political and interpersonal dimensions of everyday living. HRQOSL does not mean merely happiness, satisfaction, living standards, climate or environment. Rather, it means aspect of social life quality that relate to health.

The historical roots of the term HRQOSL can be identified in the classical writings of Aristotle from 330 years B.C. In his classical Nichomachean Ethics, he tried to show the relationship between happiness, quality of life and subjective value of individual.

"What happiness consists? Opinions differs. There are various others views, and often the same person actually changes his opinions. The same person, when he falls ill, says that it is his health and when he is hard up, says that it is his money which is important".(1)

Several years after, Empire Ottoman Suleyman the magnificent, law maker and famous poet of his time as well, whom during his reign, the ottoman empire experienced its golden age and who shook the world of the 16th century said "Nothing is respected more than the Empire, No fortune in the world is as important as health". But historians noticed surprisingly that he wrote this poem during his illness. (2)

The multidimensional aspects of quality of life

have often been analysed by social scientists, politicians, administrators, economists, epidemiologists and other health scientists in order to measure and evaluate quality of life. Both subjective and objective methodology have been used as indicators.

Subjectives approaches are:

- Utility
- Quality adjusted life years indicators
- Social justice

Objective approaches:

- Functionalism
- Concept of social quality

Theories on subjective well-being are prominent among a great number of behavioral science researchers. In quality of life research psychological well-being constitutes an important dimension. It is often analysed in terms of life fulfilment, mood, self worth, anxiety and depression.

Utility

Economists may also take a subjective view of health and they often examine the relationship between health resources and draw implications on the efficiency, effectiveness and equity aspects of the health care systems. Personal or objective evaluation of health status is analysed with reference to utility.

In 18th century, utility meant producing benefit, advantage, pleasure, good and preventing mischief, pain, evil, unhappiness. In 19th century economist believe that an individual derives utility from a large number of social and economic actions and choose among competitive goods and services. In 20th century, in their book titled, *Theory of Games and Economic Behavior*, Von Neumann (genius physician and consultant to the Manhattan Project at Los Alamos, New Mexico, in which the first atomic bomb was built.) and Morgenstern (economist) developed the notion of expected utility with light of a new conception uncertainty in individual choices. Theirs approach has been applied extensively in the classical literature of health economics. They gave birth to modern utility theory. Together, von Neumann and Morgenstern revived and mathematically structured the idea that individuals appear to be choosing among alternatives with probabilistic outcomes to maximize the expected amount of some measure of value termed "utility." The definition of utility that they created led to the first coherent theory suggesting how we should make decisions when we know only the probabilities of some events. (2,3)

Finally after several variants of these approaches, health economists have designed the cost-utility

study for measuring the health status of the population, (often also referred to as a kind of "cost-effectiveness" analysis). The outcome is measured in terms of its effect on global well-being, or quality of life, or utility, which is supposed to be a common measure of value in any human life. In many medical applications, utility is operationalised as QALYs, quality adjusted life years. (4)

QALYs (Quality adjusted life years)

This is an outcome measure that takes into account both the quantity and the quality of the extra life provided by a health care intervention; it is the arithmetic product of the life expectancy and quality of the remaining years. Quality adjusted life years measure the incremental health gain (or loss) of one treatment over another. Any gain in life expectancy is adjusted for changes in quality of life. The measures of quality of life used are multi-attribute utility instruments (MAUs) of which the Rosser Kind matrix and EuroQol-5D are the best known (These measures have recently modified their conclusions into five categories - strong support, support, limited support, no support and not proven).(5,6) These instruments sub-divide health status into a series of functional dimensions and severities and derive a value (utility) for each of the possible health states by using visual analogue scales and time trade off (TTO) or standard gamble techniques. When assessing the health gain of interventions some estimate is needed of the baseline state of health without treatment and the state after treatment. These valuations are often derived by asking experts (usually clinicians) to assign values, or sometimes by asking the patients for whom the treatments are intended. Utility estimates lie between 0 and 1, where 0 is death (or the worst possible outcome, although states worse than death and with negative scores have been described) and 1 is the best possible outcome. Where treatments are compared, the net gain in utility is the difference in utility gains between one treatment and another.(7)

To calculate a cost per QALY an estimate is needed of the difference in net cost of

the two treatments (this can take into account side effects of drugs and reductions in health care utilisation - the perspective is usually direct health system costs). Because many of the estimates used in deriving costs per QALY are imprecise, sensitivity analysis is often performed and recommendations for sensitivity analysis have recently been published.(8)

$$\text{Cost Per QALY} = \frac{\text{Incremental Cost}}{\text{Incremental QALY gain}}$$

QALYs are estimated of person years lived at particular levels of health. They are mostly used in cost-effectiveness analysis and clinical trials involving health conditions that consider the quality as well as the length of life. QALY approach is said to be the ability to compare "apples and pears" i.e. different therapies/ interventions by developing a "standard" unit of benefit. Other such units have been used or proposed, for example the Oregon process used a Quality of QALYs Wellbeing measure (QWB). Others include Quality Adjusted Life Expectancy (QALE) and Healthy Life Expectancy (HLE).(9)

Using the above definition, health economists attempted to combine quantity with quality of life. Quantity has been expressed as length of survival (L), eg number of healthy days after a transplantation, or days after a medical therapy. These measures can be defined in objective terms.

Quality of life has been expressed in subjective terms and it is defined objectively with the formula as the value assigned to a day of life. This relationship is expressed as(10)

$$U(\text{quantity, quality}) = aL^r U(H)$$

Where . a = a constant scaling factor

r = a parameter showing attitude to risk

L = length of survival

U(H) = health state

Social Justice

Countries with a greater degree of socioeconomic inequality show greater inequality in health status; also, that middle-income groups in relatively unequal societies have worse health than comparable, or even poorer, groups in more equal societies. The health is affected by the underlying inequality of the society. Social inequality and health inequality are social determinants of health which offer a distinctive angle about justice, public health, and reform of the health care system. Health is not produced only by having access to medical prevention and treatment, but also, to a measurably greater extent, by the cumulative experience of social conditions over the course of one's life. Szende a. And Molnar L. Provide evidence that despite the findings that rich people use health care less than poor, their use of health care is proportionally too high compared to their level of ill health.(11)

The social justice theory of moral philosopher John Rawls is useful to understand the correlation about social justice and public health.

Rawls' theory of social justice is based on the social contract model, a model used to define moral conceptions (e.g., a theory of justice). The term,

traditionally, has been used in arguments associated with the nature of political obligation. Because the arguments explain political and social cohesion as a product of an agreement among individuals, it makes these individuals conceptually vulnerable to political and social units. Rawls believes justice is fairness, and through the social contract model, he theorizes that when individuals produce social goods cooperatively--not for individual consumption--there will be enough goods for everyone. But when individuals compete for those goods, the problem of "distributive justice" arises, hence, the "difference principle," a principle that redistributes inequalities justly to the greatest advantage of everyone. When these inequalities are redistributed, this redistribution must occur in the "original position of the social contract," a position where individuals make rational decisions to further self-interest based on conditions of fairness. (12)

The main idea in the society is justice and order therefore must be arranged so as to achieve the greatest balance of satisfaction for all his individuals. Culture, social organization, and government policies also help determine population health, and variations in these factors may explain many of the differences in health outcomes among nations.

Politicians and decision makers think that health outcome researches should not be restricted to medical parameters but should also incorporate both economic and social parameters in order to maximize the expected welfare level of the citizens(Fig 1).

The distribution of income is an important factor in explaining the health of a society. Differences in health outcomes among developed nations cannot be explained simply by the absolute deprivation associated with low economic development--lack of access to the basic material conditions necessary for health such as clean water, adequate nutrition and housing, and general sanitary living conditions. The degree of relative deprivation within a society also matters. In A Theory of Justice, Rawls sought to show that a social contract designed to be fair to free and equal people would lead to equal basic liberties and equal opportunity, and would permit inequalities only when they work to make the worst-off groups fare as well as possible.(13) Though Rawls's account was devised for the most general questions of social justice, it also provides a set of principles for the just distribution of the social determinants of health. Rawls did not talk about disease or health in his original account. To simplify the construction of his theory, he assumed that his contractors were fully

functional over a normal life span--no one becomes ill or dies prematurely. This idealization provides a clue about how to extend this theory to the real world of illness and premature death. The goal of public health and medicine is to keep people as close to the idealization of normal functioning as possible under reasonable resource constraints. Maintaining normal functioning, in turn, makes a limited but significant contribution to protecting the range of opportunities open to individuals. So one might see the distribution of health care as governed by a norm of fair equality of opportunity. Rawlsian justice--though not devised for the case of health--regulates the distribution of the key social determinants of health, including the social bases of self respect. The theory of Rawls does not focus narrowly on medical services. Properly understood, justice as fairness means what justice requires in the distribution of all socially controllable determinants of health. Although fairness cannot be guaranteed, a minimum package of services distributed to all members of the society within the limits of scarce resources could be pursued.(14)

Functionalism

Emile Durkheim (1858-1917) is considered to be the founder of functionalism. His study called *Suicide* is regarded as one of the classical works in health sociology. He argued that the causes of suicide must lie in the social system rather than in the individual who commits suicide. He studied the suicide rate in every one thousand people and showed that the suicide rate varied from society to society. Accordingly, he argued that the individual's decision to commit suicide was influenced by the condition of society whenever it departed from a state of balance. At a time of economic recession and high unemployment the suicide rate may increase.(15)

Functionalists who examined the relationship between the social system and illness argued that feelings of stigma, shame and vulnerability, all of which vary from one society to another according to the social system of each society, cause many illnesses. The American sociologist Talcott Parsons was one of the leading functionalist theorists who analysed the doctor/patient relationship and believed that for the sick person it was his/her social obligation to get well and cooperate with the doctor, and professional ethics guided the doctor to provide effective services.

What extent the body is biological or social? Medicine plays an important role in social control in societies. Another common element in these approaches is that social structure, cultural practices and beliefs all contribute to our understanding of

health and illness. Therefore, our knowledge about the social as well as the natural world should not be seen as neutral. Quality of life is assessed in terms of participation in the larger possible spectrum of capabilities.(16)

The concept of social quality

Health is impacted by health behaviors, access to medical care, genetic endowment, the physical environment, and social factors and societal conditions. The relative importance of each of these varies among countries according to their phase of economic development. In developing nations, which lack a strong public health infrastructure, access to food and clean drinking water, preventive and clinical medicine, and other basic goods and services, continue to be of the utmost importance in determining the health of the population. However, among industrial nations, in which basic material needs are met for the majority of the population, such as in the United States, investigations demonstrate that educational, occupational, and socio-economic position, labor market conditions, quality of the residential environment, and degree of social integration impact the health status of populations as much, if not more than, access to medical care, genetic endowment, and individual health behaviors. Evidence that social status differences might indeed produce the differences in health observed in the social-health gradient comes from discoveries that the extent of "turn-on" of several physiological regulatory systems (cortisone secretion patterns, immune responses, blood clotting factor levels, nervous control of the heart beat) differs by social status. (17)

Termed the socio-biological translation this hypothesized mechanism is under investigation in several of the institute's research programs. The social context is interpreted in the human mind, perhaps subconsciously, as either enabling or interfering with one's aspirations. During the socio-biological translation, the mind triggers physiological responses that even though of low force when retained over time result in adaptations at the cell level that are determinants of the social-health gradient.

The concept of social quality was introduced at the level of European Union, on June 8th to 10th 1997 during the Dutch Presidency. A group of social scientists from various member states met in Amsterdam and discussed the relationship between European policy and social quality. They accepted that for an economically successful society quality should be taken as a criterion or "a scientific yardstick" to measure the effectiveness of national

and European policies. (18)

In 1998, the same scientist group decided to establish the European Foundation on Social Quality. Following research in this area they come forward with the following definition.

"Social quality is defined as the extent to which citizens are able to participate in the social and economic life of their communities under conditions which enhance their well being and individual potential. The level of social quality experienced by citizens depends on:

- The degree of economic security
- The level of social inclusion
- The extent of social cohesion or solidarity
- The level of autonomy or empowerment
- The health of European citizens".

The principal factor influencing quality of life in Europe is "being in good health". Income and family constitute the second group of factors followed by housing, friendship, job satisfaction and stress. Health outcome research in this way should not be restricted to medical parameters only but should also incorporate both economic and social parameters. The Social Policy Agenda, is based on the guiding principle of strengthening the role of social policy as a productive factor and modernising and improving the European social model. This should lead to a policy mix, i.e. to a dynamic and positive interaction between economic, employment and social policies. Social quality is a key element in this process(Fig2).(19-20)

Social quality represents is a dynamic concept, integrating the multiple determinants of the quality of life for the people living in Europe: economic, social, cultural, political, etc. It puts light not only individual determinants, but also the interplay between the policy action in different fields and external factors (globalisation, ageing, etc.). Quality of life can be considered a key concept that is enlarged by social quality. The quality of life of individuals and groups is determined by the circumstances influencing individual living conditions and by components of subjective well-being. Social quality is policy-oriented and thus transcends the concept of quality of life. In contrast to social quality as the more general concept, it is useful to delimit the content when referring to quality of life, i.e. to link it to a given group whose quality of life is measured. When interpreting indicators to measure these two concepts, a consensus must be achieved that either more or less is desirable with regard to the value of any given indicator(= normative significance).

Quality of life is complex and requires rigorous

scientific research.It also shows that quality of life measurement has proved to be a useful instrument for assessing the effectiveness, efficiency and equity of health care systems. Focusing on HRQOL will help to make distinctions between physical and mental health and spur collaboration with a wider circle of health partners toward shared goals. Since Turkey is currently trying to be in the process of joining European Union, a comprehensive health policy must be chosen for setting effective and efficient criteria for resource allocation.

*"The web of our life
is of mingled yarn-
good and ill together."
Shakespeare, All's Well That Ends Well*

FIGURES:

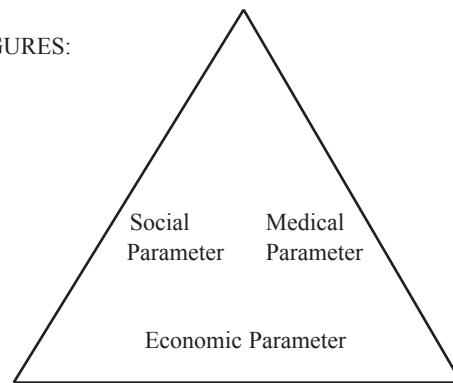


Fig 1. Health outcome parameters

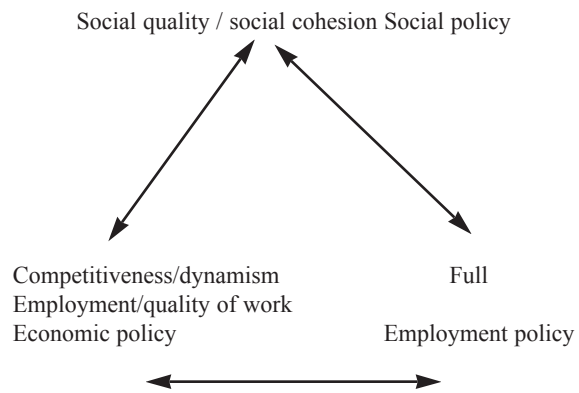


Figure 2 : Policy challenge

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