CONCEPTUAL VIEW ON THE RELATIONSHIP BETWEEN SOCIAL WEEL-BEING AND HEALTH STATUS

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ABSTRACT

The opinion that healthcare service contributes to individual and social wealth is a widely accepted notion. Healthy individuals play a role in the development of their country by contributing to producing. According to the numbers of Human Development Index it is possible to state that in developed countries the level of social wealth is high. Besides economic indexes such as Gross National Income and Per Capita National Income, indexes such as education and health play a significant role in high social wealth of developed countries. The share that such countries allocate for social services and health is at a wanted level. Moreover, these countries developed and put various policies into practise in order to produce and serve necessary healthcare fairly so as to meet the healthcare needs of the society.

The aim of this study is to indicate a conceptual frame of the relationship between social wealth and health status. In accordance with this aim this paper studies Abasolo and Tsuchiya's "Health Related Social Wealth Function" (HRSWF), which is claimed to be most widely accepted in the literature and developed by Bergson in 1938.

In the light of the conclusions drawn from HRSWF if the presentation of healthcare service is carried out in accordance with the principle of equality and efficiency there will be an increase in the status of social health as a result of which social wealth will increase. It is possible to state that in the societies where social wealth is high the level of health status is high as well.

Key Words: Social wealth, health status, economical development

Jel Classification: I15, I31, I14

TOPLUMSAL REFAH İLE SAĞLIK STATÜSÜ İLİŞKİSİNE KAVRAMSAL BAKIŞ*

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ÖZET

Sağlık hizmetlerinin birey ve toplum refahına hizmet ettiği görüşü genel kabul gören bir olgudur. Sağlıklı bireyler üretime katkıda bulunarak ülke kalkınmasında rol oynarlar. Beşeri Kalkınma Endeksi rakamlarına bakılırsa kalkınmış ülkelerde toplumun refah düzeyinin yüksek olduğu söylenebilir. Kalkınmış ülkelerin refah düzeyinin yüksek oluşunda Gayri Safi Milli Hasıla, Kişi Başına Düşen Milli Gelir gibi ekonomik göstergelerin yanı sıra, eğitim ve sağlık gibi sektörlere ait göstergelerin de önemli etkisi bulunmaktadır. Bu tür ülkelerin sosyal hizmetlere ve sağlığa ayırdıkları pay istenilen düzeydedir. Bununla birlikte bu ülkeler, toplumun sağlık hizmetleri ihtiyacını karşılamak amacıyla yeterli sağlık hizmeti üretmek ve bunu adil ve ulaşılabilir şekilde sunabilmek için çeşitli politikalar geliştirmişler ve uygulamaya sokmuşlardır.

Bu çalışmada toplumun refah düzeyi ile sağlık statüsü ilişkisinin kavramsal çerçevesi ortaya konulması amaçlanmaktadır. Bu amaç doğrultusunda literatürde en fazla genel kabul gördüğü iddia edilen 1938 yılında Bergson'un geliştirdiği fonksiyonu baz alarak geliştiren Abasolo ve Tsuchiya'nın Sağlıkla İlişkilendirilmiş Toplumsal Refah Fonksiyonu (HRSWF) irdelenmektedir.

Sağlıkla İlişkilendirilmiş Toplumsal Refah Fonksiyonundan (HRSWF) elde edilen çıkarımlara göre, sağlık hizmetlerinin sunumu eşitlik ve etkinlik prensibine uygun olarak yapılırsa toplumun sağlık statüsünde artış olur ve dolayısıyla toplumsal refahı da yükselir. Toplumsal refahı yüksek olan toplumlarda sağlık statüsünün de yüksek olduğu söylenebilir.

Anahtar Kelimeler: Sosyal refah, sağlık statüsü, ekonomik büyüme

Jel Kodları: I15, I31, I14

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INTRODUCTION

The aim of this study is to find an answer to the question whether health status reflects social weel-being or social social weel-being reflects health status.

The last 150 years of history have witnessed a global change of human health which resulted in human beings' leading healthier, longer and more productive lives. On one hand this situation resulted in a tremendous change in size and structure of population, on the other hand it brought about an increase in economic development all over the world. Between the 16th and 19th centuries the average life span was fluctuating between 40 and below. Naturally that trend did not continue. Beginning from the second half of the 19th century the average life span started to increase slowly. Firstly in Europe and later in other countries in the rest of the world a significant increase in life span was observed in the 20th century. Economic historians and demographers are still discussing the starting point of this change. The reason of the increase in the income is that because of improvements such as having healthy and efficient nutrition, sanitation etc. mortality started to decrease and people's contribution to production increased. Some claimed that technical developments were a reason for the increase of life span in the 20th century. These developments are the discovery of germ theory especially on diseases, awareness of importance of hygiene and development of vaccines and antibiotics (Bloom, Canning, Jamison, 2004: 10).

Examining particularly health statistics of the last century, the fact that the frequency of emergence of infectious diseases and fatality have decreased independently from developments in medicine means environmental factors and life styles are responsible for newly appearing diseases (Hayran, 1997: 3). It is possible to state that the increase in the social welfare is effective on the positive change in environmental factors and lifestyles here.

For instance Chile is an important example of how mortality decreased. The average life span of a woman who was born in 1910 was 33 years. Today the life span in Chile is over 78. While the possibility fatality of children under the age of 5 was 1/3 in 1910, this ratio is 1/50 today. Mortality of middle aged people is lower. According to Bloom et al. this positive change in the number of

mortality depends on the change in welfare and quality of life in this country (Bloom, Canning, Jamison, 2004: 10).

1. Social welfare

The term welfare is defined as well-being and happiness. In other words it stands for well-being and happiness of members of a society as group (Akalın, 1986: 45). Well-being is provided, influenced or sometimes destroyed by some exterior factors. In this respect positive improvements in the person's state or their state of being well which are caused by exterior conditions is defined as welfare (Mutlu, Işık, 2005: 174).

On the other hand welfare can be dealt with in two different levels one of which is individual level and the other is social level.

1. Individual Level: Welfare is the equivalent of satisfaction and to afford. An increase in a person's welfare means that his state has improved. The person provides the increase in their own welfare (Akalın, 1986: 45). According to Culyer individual welfare is a function of consuming goods and services (Culyer, 1991: 37).
2. Social Level (Social welfare): a transition from individual welfare to social welfare certainly requires value judgements. Improvement means everybody has a better state than their previous state. At that point it is important that resources are distributed optimally through economic analysis social action principles (Olsen, 1997: 628). There are economists who define social welfare as something obtained through sum of individuals' welfare and individual's welfare is a sum of the satisfaction they obtained. The function of social welfare is a function which aims at maximisation of sum of individual utilities. It is formulised as follows (Akalın, 1986: 51).
3. $W=U^1 +U^2 +U^3 \ldots\ldots\ldots\ldots U^n$ (U^1 =1. Welfare of Individual)

Hypotheses that social welfare approach are based on are as follows (Akalın, 1986: 49-50):

1. The welfare of all the individuals that constitute a whole society form the function of social welfare. W=W (U,U,…………U^n) Here W; stands for Social welfare, U,U,U indicates welfare level of 'n' number of individuals.
2. An individual is the best judge of their own welfare. (and judgement is subjective)
3. If any improvement on the distribution of resources increases welfare of at least one individual without changing welfare status of other individuals, this change increases social welfare.
4. If distribution of public resources is activated and a fair share is ensured, social welfare increases.

Welfare levels of groups of people from different classes are different from each other. Notwithstanding essentially they all have something common which are vital needs, components that these needs include and conditions that compose the notion of well-being. These conditions in question are the ones which are necessary for welfare of all human beings. Even though vital minimum needs are the point in common, there is not an upper bound for it as it is difficult to determine (Mutlu and Işık, 2005: 175).

2. Health Status

It is necessary to state that it is difficult to make a clear distinction between the notions of healthy and unhealthy. According to the definition of World Health Organisation health means being neither ill nor disabled and having a state of complete well-being both mentally and physically. According to this definition there are a lot of difficulties in measuring health status because a person whose body functions properly can be healthier than another person whose body functions in the same way as theirs.

Among criteria of health status mortality rate, morbidity rate, infant mortality rate, perinatal mortality rate, maternal mortality rate, natural population growth rate, the prevalence rate of infectious diseases, etc. are the main ones. Some of other significant criteria are life expectancy at birth, the most common diseases, most common causes of death, quality years of life, healthy

years of life, personal evaluation of health and awareness of health risks (Tabak, 2000: 32).

On the other hand as these criteria are insufficient some indexes have been developed in order to measure health status. Health status index SF-36 questionnaire is an example to these indexes (Kısa, 1999: 182).

3. The relation between social weel-being and health status

It is an indisputably accepted fact that health care serves for both individual and social weel-being. In this case it might be possible to measure the increase in welfare with the help of objective and subjective features of health. As general criteria are in question in terms of objectiveness they are applicable on everyone. For instance it is possible to measure that when a sick person is treated they spend will more time on work or the like and work more productively. When their wages per hour for the time they work or when they are off is known this measurement will be rather easy. However the subjective increase in welfare which differs according to individuals might again differ from one individual to another (Mutlu, Işık; 2005: 175).

The question of how to provide equality in health in order to determine the relationship between equity and efficiency in health is constantly on the agenda in extant literature on health economics (Williams, 1997: 118). So as to improve level and distribution of welfare social welfare function has been developed (SWF). While SWF is conceptualized as individual utility function in the literature on welfare economics, in the literature on health economics it is defined as individual health function which is related to social objective function (Wagstaff,1991) and it was later dealt with the approach of health related social welfare function- HRSWF (Dolan, 1998: 42). On the other hand according to some researchers HRSWF approach is extra-welfarist (Culyer, 1989). However most researchers who make use of HRSWF in order to specify the relationship between equity and efficiency also make use of characte traditional welfare economy (Abasolo, Tsuchiya, 2004. 315).

Characteristics of SWF

- Individualism: social welfare depends on health of each individual member of the society.
- Comparability: determining differences among requests of individuals for their level of health.
- Cardinal measurability: studies on equity and efficiency in the field of health which indicates the representation of level of individual health at cardinal measures.
- Additivity: it's the sum of health levels of all individuals.
- Anonymity: a change in health level of any group of an individual does not end up a change in the level of social welfare.
- Strict concavity: distribution of health considering political and social equality which is restrictedly preferred according to distribution of political and social equality.
- Homotheticity: the fact that a homogenous distribution of health affects social welfare.
- Monotonicity: any increase in individual health ends up an increase in social welfare.

Individual health is assumed to be the indicator of the sum of individual well-beings in the calculation of social welfare. At this point an individual can stand for a society, a population or a sub group of those two. The important point here is that factors of these separate populations or societies are assumed non-existent. Being affected by them is unthinkable. This means a group might be affected by health of another group or by how they feel themselves only by seeing them. Existence of such a situation cannot be accepted. Similarly, opportunities that a group own might transfer to another group. Again at this point problems in terms of distribution might cause efficiency problems as well. The main type of inequality is in the distribution of health which are issues of equality in utility, use and attainability (Abasolo, Tsuchiya, 2004: 314).

Above mentioned explanations are the restrictions of health status function related to social welfare.

Some researchers and writers come up either with critics on health related social welfare function or functions that they themselves have developed. In this paper we will refer to health related social welfare function (HRSWF) which was developed by Abasolo and Tsuchiya based on the most widely accepted function developed by Bergson in 1938.

It is possible to formulise the approaches to HRSWF as follows (Abasolo, Tsuchiya, 2004. 315):

1. Social welfare is the function of various distributions in individual health.

$$W= W (H_i, H_j), \quad H_i, H_j \geq 0.$$

This function requires measurable ordinary scales to measure individual health. However it is not necessary for comparisons among groups or individuals. HRSWF is individualistic and unbiased.

2. Social welfare is a simple sum of individual health.

$$W= H_i + H_j \quad H_i, H_j \geq 0$$

According to this function individual health can be measured, compared; nevertheless, social welfare is individualistic and unbiased; it increases monotonously and it is homogeneous. Everything is the total level of health and it does not deal with its distribution.

3. As a change in the health of anybody is not a result of improvement of welfare the healthcare given at the lowest level is social welfare.

$$W= \min.(H_i, H_j), \quad H_i, H_j \geq 0.$$

No matter at what level or in what way it is provided healthcare contributes to social welfare.

4. Social welfare assumes that there is an unhappiness coefficient of each individual which stands for inequality in healthcare and it is formulised as follows:

$$W = (H_i^{-r} + H_j^{-r})^{-1/r} \quad H_i, H_j \geq 0, \quad r \geq -1, r \neq 0$$

If powerfulness is enough for inequality in health the increase which is a culmination of improvement in total health might stem from previous efforts. An increase in total health might mean an increase in inequality as well. Minimum inequality will have a positive influence on social welfare.

5. The process of health distribution is social welfare or it is the differences among levels of health of individuals.

$$W = c\,|H_i - H_j| \quad H_i, H_j \geq 0; c<0$$

6. Social welfare is the function of decrease in the differences that exist among individuals.

$$W = \min.(H_i, H_j) / \max(H_i, H_j), \quad H_i, H_j \geq 0$$

That is to say social welfare is one diminishing function of two ratios. HRSWF maximises when health of two individuals or two groups is equal. If other things remain the same when there is an increase in health, there will be a decrease in social welfare. Even though it is extraordinary

HRSWF= health related social welfare function

W= social welfare

H_i= any population, society or individual

H_j=another any population, society or individual

c= education

r= level of unhappiness in inequality

α= maximum value of unhappiness in inequality

β= minimum value of unhappiness in inequality

$c = (H_i + H_j)^{\alpha} / |H_i - H_j|$

Table 1. Summary of Features of HRSWF

FEATURES OF HRSWF	Individual ism	Comparab	Additivity	Monotoni	Convex to	Homothet	Differentia
1 W= W (H_i, H_j), $H_i, H_j \geq 0$							
2 W= $H_i + H_j$ $H_i, H_j \geq 0$							
3 W= $\min(H_i, H_j)$, $H_i, H_j \geq 0$							
4 W= $(H_i^{-r} + H_j^{-r})^{-1/r}$ $H_i, H_j \geq 0$, $r \geq -1$, $r \neq 0$							
5 W= $c\lvert H_i - H_j \rvert$ $H_i, H_j \geq 0$; $c<0$							
6 W= $\min(H_i, H_j) / \max(H_i, H_j)$, $H_i, H_j \geq 0$							
7 W= $\min(H_i, H_j) - c\lvert H_i - H_j \rvert$ $H_i, H_j \geq 0$; $c> -1/2$							
8 W= $(H_i + H_j)^{\alpha} - c\lvert H_i - H_j \rvert^{\beta}$, $H_i, H_j \geq 0$, $\alpha>0$, $\beta/\alpha \geq 1$, $c \geq 0$							

Reference: I., Abasolo, A. Tsuchiya, 2004,Journal of Health Economics 23, 313-329

CONCLUSION

In health, consumption of one person or group is not an indicator of wellness. Most importantly, the ones who are in need and the general public should be able to utilize this service equally. To achieve this is significant for social welfare. Even though there are applied and methodological advances in inequality in health, a general definition of inequality in health does not exist (Bommier, Stecklov, 2002: 498).

If healthcare is given with criteria that are appropriate to the principle of equity and efficiency there will be an increase in the health status of the society as a result of which social welfare will increase. It is possible to say that in societies where social welfare is at a high level health status level is high as well. Both of these indicators are influenced by one another and complete each other. In other words good health indicators are a sign of a good social welfare.

By contributing to production healthy individuals play a role in development of their country. Welfare of people of developed countries is also high. In such countries, shares allocated to social services and health is at a desired level. Therefore there is an increase in their welfare level. Namely it is possible to say that health status of a society is the most potential and motivating element of their level of welfare.

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