

Case Study

**The Impact of Physical Health on Social Health.
Case Study of Two Healthy and (Cardiovascular) Patient
Groups in Rasht City of Iran**

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ABSTRACT

The present article investigates the impact of physical health on social health. The purpose of the study was to show how physical health as a biological matter affected the feeling of social health and whether physical disease was an obstacle to the sense of social health. The presumption was that social health was a structural matter that exceeded physical and bodily health in importance and its fulfillment was not dependent on the latter. The authors used Keyes theory of social health to examine the hypothesis. The sample comprised two convenience groups, one healthy and the other ill. The findings of the study showed that the social health of the sample was moderately low. The results on five social health components demonstrated that social actualisation and social acceptance were moderately high, while the descriptive statistics of other three (social coherence, social integration, social contribution) indicated that the three were low in the sample. The comparison of five indicators between the two groups demonstrated that healthy individuals maintained better a “feeling of actualisation and social acceptance” while the ill enjoyed higher degrees of “social coherence, social integration, and social contribution”.

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INTRODUCTION

A review of the history of medicine indicates that there have been various perceptions of health throughout time. Based on historical accounts, health and related concepts have evolved to become more complex and multidimensional. Based on a primary understanding, wellbeing is guaranteed by the adoption of certain policies for dealing with natural incidents that may be inflicted on individuals but are out of the affected individual's control and may endanger the health of more than one in case if it is not subdued (Vedadhir & Sadati, 2008). In late 19th and early 20th centuries, medical breakthroughs and discoveries added the idea of prevention to the prevalent understanding of hygiene of the time and elevated it into retrofitting and medication combined. Nowadays, health is constitutive of something more than biomedicine and includes medication and medical interventions as multidimensional multi-layered processes for the preservation of health. Based on a definition by the World Health Organization (WHO), health does not simply imply safety from disease or injury; rather, health means complete fulfilment of physical, psychosomatic, spiritual, and social wellbeing (Vedadhir & Sadati, 2008). The understanding of health as constitutive of something more than a physical organism was recognised earlier during the Alma-Ata (1978) meeting. The new perception of health brought a paradigmatic shift in the knowledge of health and medicine; during the session, health was determined as a fundamental human right and the maxim

“health for all by 2000” was introduced to the world (Vedadhir & Sadati, 2008). The realisation of the purpose, however, relies on recognising social, political, cultural, and economic aspects of health. Henceforth, determining health care and hygiene strategies have tried to consider socio-economic roots of wellbeing. In health improvement strategies, too, the identification of communal and individual empowerment tools has been considered the main route for goal achievement.

In effect, health is no longer a taken-for-granted medical phenomenon; rather, it constitutes social, cultural, and economic dimensions and causes. “Social medicine” has caused a novel approach to health, where the duty of the physician, who must facilitate preventative therapies, becomes entangled in social networking, public sympathising, construction of public trust and cooperation. Evidently, this concentration in new medicine is disconnected from the ill to the healthy. The development of screening for unwanted symptoms prior to diagnosis, and attempts by healthcare systems to promote healthier lives, are part of the transition. In this approach, physical, psychosomatic, and social health are complementary aspects of health in general, while causes affecting it vary by society. Therefore, defining any health improvement program without the consideration of socio-cultural and economic backdrops would give unfeasible results.

The problem of the present study concerns whether health is a social construct, whether biological obstacles in form of

diseases in individual level could lead to the sense of lack of social health in the grand, social level. The main question of this study is, “what elements contribute to social health?”. Previous studies have underscored the role of socio-economic causes in improving physical and social health (Blaxter, 1990; Kaplan & Keil, 1993; Shavers, 2007). This study examines whether social health is influenced by biologic conditions, too. The question is whether physical health is of any influence on social health; in other words, if people divested of bodily health are devoid of social health as well. The purpose is to evaluate the degree of divergence and convergence between two aspects of health, namely physical and social. The presumption is that the social aspect is not seriously associated with physical health. Social health is a constructional phenomenon that arises from the functionality of social, economic, and cultural structures, and is less influenced by physical health and biological issues. As a result, if a society maintains a socio-cultural functionality, it could promise acceptable states of social health, regardless of the physical condition of its individual members. In these circumstances, the absence of bodily health is not a detriment to social health.

Theoretical Framework

Human attention to disease as a pathological phenomenon has been a permanent subject of studies. The attraction has changed along with human mentality about the surrounding

world and his own body. The transition in body pathology could be observed in societies’ reaction to diseases from the ancient times to the modern era. Two general approaches toward disease and health could be distinguished between two historical time sets. From Ancient Greece to modern times, it is distinguished by three medicinal views of Ancient Greece (humoral), traditional Chinese medicine (acupuncture), and traditional Indian medicine (ayurvedic) (Masoudnia, 2010). Here, disease is assumed as the result of metaphysical powers and the wrath of supernatural forces, or the bodily imbalance enforced by an external source in nature (Morgan et al., 1985). Generally, the dominant pattern of diagnosis in this era rests on natural and supernatural forces. The second phase begins with modernisation and the advent of biomedicine. Based on this paradigm, every disease has causes that need to be diagnosed and cured. Biomedicine is featured by Masoudnia (2010):

1. Lineal causality: human individual gets diseases with no volition or agency;
2. Disease is a physiologic process upon which medication should be performed instead of psychic and anxiety processes;
3. The dichotomous approach says that an individual’s psychological condition and anxieties are separate from his physical condition (Lovallo, 1997).
4. Health is the absence of biological infirmities;
5. Diseases have recognised causes;
6. The body is like a machine that restores health through special therapies that act by halting diseases or deterring them.

Due to the functional propensities in improving health conditions, biomedicine has been the long-time predominant mode in medication sciences. Meanwhile, the approach was criticised in the late modernity by socio-medicine views. The original approaches defend some principles:

1. Health is more a source for daily livelihood than a mere absence of diseases;
2. Diseases are caused by a set of factors, which are mainly environmental;
3. The locus of diagnosis is the relation of body and environment;
4. The improvement in general health is probably the result of changes in people's ways of life and their living circumstances (Taylor & Field, 2007).

With this approach, disease is a social construct that cannot be until someone diagnoses and describes it. Unlike biomedicine, the belief is that epidemic diseases diagnoses are normally different across time and geography (Jones & Moon, 1992).

Social sciences adopt the approach that considers the body and its complications knitted into social, cultural, economic, and political contexts. New social sciences follow the legacy of late 19th century sociologists, like George Simmel, Emile Durkheim, Marcel Mauss, and Robert Hertz, in considering the body more as the product of socio-cultural complexes that blend with human biology and genesis to construct humans in their social and individual senses. The dichotomous health/disease is understood biologically as the "normal" or "healthy" condition, defined

by a standard positivist state of "bodily balance", the absence of which will produce "harm". Accordingly, disease is beyond an undeniable biological condition, a cultural construct that is formed differently in various cultural and strategic settings. For a person to assume himself healthy or ill, or for a community to consider a member as such, a series of socio-cultural preconditions are required. Although biologically determined and bodily actuated (skin changes in hue or sensory, lingual, and operational competences decline), bodily symptoms need to be measured in a conceptual continuum that defines the intensity of the case. To every condition in this continuum, society gives specified reactions which, in a cyclic manner, are transmitted to the diseased individual, who takes a position towards his condition accordingly. For example, Kasper and Ferguson's research shows that the definition of breast cancer is influenced by people's definition of the disease (Kasper & Ferguson, 2000).

Emphasis on various aspects of health and disease has created a health discourse in recent decades that has multiple inter-related aspects. Based on the definition of the World Health Organization [WHO] (1994), health is not merely the absence of disease, but includes the immunity from mental, social, economic, and physical infirmities (Bowling, 1991; Engel, 1997; Miringoff et al., 1999; Stewart & Ware, 1992; Ware, 1986; Wolinsky & Zusman, 1980). Here, spiritual wellbeing is highlighted next to other forms of health. According to the subject in this study, social health is elaborated upon and

the theoretical framework for understanding social health is explained.

Belloc and Breslow investigated the concept of social health for the first time in 1972; they defined social health as the “level of performance by individual members” and constructed a social index for health (Belloc & Breslow, 1972). They attempted to get to individual performance by proposing multiple questions considering physical, mental, and social health. The concept was later elaborated by Donald, who postulated that health is something more than diagnosing symptoms or reporting on an individual’s performance (Pourafkari, 2012). In their reasoning, individual wellbeing is neither mental nor physical. Rather, they postulate that social health is the meantime principle in determining health and a subordinate of it.

Social health has been studied in two hedonistic and functional perspectives (Ryff & Singer, 1998). In a hedonistic view, social health is measured by the degree of life satisfaction and the balance in positive and negative life experiences individuals. The functional view, on the other hand, measures social health based on individual dignity, meaningfulness of life, and man’s competence in fulfilling duties (Waterman, 1993). The latter measures social health for a lengthier duration of time. Various studies on social health include studies on emotional health in a hedonistic conceptual framework and evaluate positive functionality as an indicator of one’s social and mental wellbeing (Ryff & Keyes, 1995). Ryff and Keyes believed that health is something

more than the sense of satisfaction in life that is maintained by hedonistic views. Nowadays, social health is known as a blend of cognitive, mental, and social constructs that is the product of biologic factors; therefore, contemporary views take a more general spectacle in their evaluation of health, disease, and pathology. This has led to the formation of a wide range of interconnected terms: quality of life (Phillips, 2006), mental and psychosomatic health (Ryff & Keyes, 1995), and social health (Keyes, 1998).

For a long time, social health has been defined as the absence of negative social feelings like alienation or anarchy, without centralising psychological wellness in social health (Keyes, 1998). Besides due attention to individual social health, the idea of equal attention to the social nature of health has also been promoted. In Keyes’s belief, social health or its absence has been the long-time concern of classical sociology. Despite central concepts like anarchy and alienation elaborated by Marx and Durkheim, classical sociologists have appreciated the multidimensional nature of positive social health. One of the *de jure* benefits of social life is social integration that adds the sense of internal cohesion, conscience, and communal destiny to life (Durkheim, 1952).

Keyes defines social health as individual’s perception of his social functioning and well he acts in relationships with peers and groups. Social health in this sense implies individual’s social consciousness as a meaningful, perceptible whole that has

the potential to flourish, along with a sense of social belonging and shared communal destiny. Accordingly, he presents his five-fold model in which social integration, social acceptance, social actualisation, social contribution, and social coherence are components of social health. They are defined as:

- Social integration measures the quality of the relationships an individual makes with his community; it is a quantity with which the individual identifies his shared communal traits;

- Social acceptance is the interpretation of society according to the generalised behaviour of its individual members; it is like individual acceptance, as those who equate it with trust believe that people are kind, active, and capable of making efforts;

- Social actualisation means the evaluation of society's competence and paths; it is close to the concept of autonomy and implies that society is in control of its own destiny;

- Social contribution is the measurement of social value by individual and holds that an individual is a constitutive part of social life; it is like functionality and responsibility in meaning;

- Social coherence means the individual's cognition of the quality, organisation, and mechanisms of social world; it constitutes the enthusiasm for knowledge of the world, as healthy individuals not only are mindful of the world they live in, they also try to grasp what goes on around them.

METHOD

The method used in this study was a survey of field data. The technique for data gathering was a standard questionnaire. After preparing the initial questionnaire, primary testing, and finalisation, data were gathered. Data were gathered by referring to two groups of people who had cardiovascular disease and those who did not. Rasht, a city in northern Iran with a population of 400,000, was the society question, focusing on the 20-40-year olds. Based on the sampling method, 326 samples were selected, of which 300 questionnaires were gathered. The sampling was non-probability convenience and quota sampling. Non-probability sampling is used when a group of individuals has a higher but unspecified chance for being selected and is used because of the absence of frame and population dispersion in society. This study examined two groups: healthy and patient people. The patients mainly visited the Rash Heshmat hospital for heart diseases. The whole sample consisted of 300 individuals, with 150 healthy and 150 ill individuals, based on the quota technique.

The healthy people were mainly members of individual's relatives. The heart patients were chosen for some reasons; first, due to the increasing rate of this disease in Iran in the past two decades, more as a result of life quality, social pressures, and structural causes, than biological contributors. Second, heart diseases are considered among the fatal diseases that if cured and controlled through changing

lifestyles, patients have the chance to return to the ordinary life. For the above reasons, patients with heart diseases are good cases the study of whom allows for the assessment of the relationship between physical and social health.

FINDINGS

The demographic backgrounds of the respondents are as follows:

- Sex: male respondents outnumber female respondents (57% to 43%);
- Physical health condition: half (50%) of respondents are healthy and half (50%) are patients;

- Age: 41% of respondents are between 45 to 55 years old, 31% below 45, and 28% above 55; the average age of respondents is 50.76, with a standard deviation of 8.58;

- Education: the lowest education level among respondents is diploma (56%), followed by bachelor’s degree (25%), associate degree (10%), and master’s and higher (9%);

- Income: the income level of more than one third of respondents is less than 5,000,000 IR;

- Residence: most respondents (47%) resided in downtown Rasht (Table 1)

Table 1

Relative distribution of respondents based on background variables

Variable	f	%	M	SD	Variable	f	%	M	SD		
Sex	Female	129	43	-	-	Physical health	Healthy	150	50	-	-
	Male	171	57				Patient	150	50		
Total	300	100			Total	300	100				
Age	Below 45	92	7/30	76/50	58/8	Education	Diploma	167	7/55	-	-
	45-55	124	3/41				Associate	31	3/10		
	Above 55	84	28				BA	74	7/24		
					MA & higher		28	3/9			
Total	300	100			Total	300	100				
Income	5-3 Million IR	118	3/39	-	-	Residence	outskirts of town	69	23	-	-
	5.1-7 Million IR	52	3/17				South of city	55	3/18		
	7.1-9 Million IR	25	3/8				Downtown	142	3/47		
	9 Million IR & above	105	35				North of city	34	3/11		
	Total	300	100			Total	300	100			

Social Health Index and Its Components

Social health in the present survey was measured by five indicators with 20 items. To build the concept of social health and its components, total scores of questions measuring each concept were aggregated with their negative and positive scores. Based on the information in Table 2, the range of changes in social health (20-100) and the mean (58.97), it is inferred that the rate of social health in the sample is moderately low. The analysis of five components of social health verified that social actualisation and social acceptance were moderately high in the sample, while the other three components (social coherence, social integration, and social contribution) were low among the sample and need to be strengthened; in all three, the given mean was lower than the hypothesised level. The low rate of social health in both groups indicates that the social health factor is influenced by structural conditions and social situations; similar social conditions for both groups causes both to have low sense of social health.

Analytical Findings

The Relationship Between Income, Education, and Social Health. To analyse the relationship between respondents' income and education level with social health, this study used the Spearman correlation coefficient. The results of the correlation coefficient on the mentioned variables and their relationship is given separately for two healthy and ill patient groups, answering the questions "Is there any relationship between income and the perception of social health for each healthy and ill group?" and "Is there any relationship between education and the sense of social health for each healthy and ill group?"

Based on the information in Table 3, the relationship between income and the sense of social wellbeing is only visible in the healthy group. Considering the correlation coefficient ($r = -0.184$), it could be said that there is a weak, negative relationship between the two variables. Among the healthy respondents, with the increase in income level (presuming the steadiness of other variables), the approximate level of social health declines gently; in other

Table 2

Relative distribution of respondents based on social health and its components

Component	Mean	Standard Deviation	Minimum	Maximum
Social Actualisation	73/12	51/2	4	20
Social Coherence	14/8	22/2	3	15
Social Integration	41/7	25/2	3	15
Social Acceptance	19/16	66/2	5	25
Social Contribution	50/14	72/3	5	25
Social Health	97/58	07/6	20	100

Table 3

The relationship bet. income & education and social health based on group

Physical health	Independent variable	Dependent variable	Correlation coefficient	Significance
Healthy	Income	Social health	184/0-	024/0
Diseased			024/0	768/0
Healthy	Education		025/0-	758/0
Diseased			024/0-	766/0

words, the two variables change in opposite directions. In effect, it is discerned that social health is influenced by social structures; with an increase in income, individuals' amount and type of demands change from natural and biological to social, and social actualisation takes incidence. Under these circumstances, if social backdrops for answering the demands are not provided, the sense of social health will decline. The other relationships between variables are not meaningful.

Social Health and Its Components in Each Group. For evaluating the relationship between physical health and social health and its components, an independent t-test is used:

1- "Is there any relationship between physical health and sense of social actualisation?"

2-"Is there any relationship between physical health and sense of social coherence?"

3-"Is there any relationship between physical health and sense of social integration?"

4-"Is there any relationship between physical health and sense of social acceptance?"

5-"Is there any relationship between physical health and sense of social contribution?"

6- "Is there any relationship between physical health and sense of social health?"

The findings of independent t-test regarding the comparison of social health and its components in two healthy and ill groups show that there is a significant difference, with an error rate of less than 1% and confidence level of 99%. The mean comparison suggests that social health of the ill (mean: 60.94) is higher than the rate among the healthy (mean: 57.01) (Table 4). Moreover, the results comparing five components of social health between the two groups tells that healthy respondents are of higher "social actualisation and social acceptance", while the ill maintain a higher sense of "social coherence, social integration, and social contribution". The higher levels of social actualisation and social acceptance among the healthy come from the socio-cultural construction of the two conditions of health and disease. Having a positive image of one's body based on social definition of health helps the healthy individuals actualise and achieve better social acceptance.

Table 4

The relationship between physical health and social health and its components

Variable	Physical health	Descriptive statistics		Analytical statistics		
		Mean	Standard deviation	T	df	Sig
Social Actualisation	Healthy	76/13	06/2	826/8	298	001/0
	Diseased	69/11	50/2			
Social Coherence	Healthy	29/7	86/1	129/7-	298	001/0
	Diseased	98/8	23/2			
Social Integration	Healthy	24/6	88/1	447/10-	298	001/0
	Diseased	57/8	97/1			
Social Acceptance	Healthy	84/16	83/2	357/4	298	001/0
	Diseased	54/15	30/2			
Social Contribution	Healthy	86/12	69/3	485/8-	298	001/0
	Diseased	14/16	95/2			
Social Health	Healthy	01/57	00/6	908/5-	298	001/0
	Diseased	94/60	49/5			

DISCUSSION

The present article attempted to study the relationship between the biologic condition of health/disease and social health as a socio-cultural construct. Based on the findings of the study, social health is more the result of social constructs than actual physical competence/incompetence. In other words, social health is acceptable in societies where the prerequisites for individual growth and improvement is prepared regardless of bodily conditions, and individuals have access to equitable resources and opportunities as members of a community. A society's health indices could include rule of law, acceptable distribution of wealth, public access to decision-making procedures, and the level of social capital. Based on the findings in this study, the

level of social health among the sample is moderately low. The findings related to the five components of social health show that the level of social actualisation and social acceptance are moderately high while the descriptive statistics of the remaining three (social coherence, social integration, social contribution) indicate that all three are weak among the sample and in need of strengthening; in these three indicatives of social health, mean is lower than the predicted rate. To improve social health, the orientations in policy-making should shift toward structural changes and reforms, because social backdrops are facilitators of social health.

The present research has come to the following theoretical findings and proposes questions based on Keyes' theory. In his

study on social health, Keyes offers a set of pre-arranged, standard questions, the assessment of which in the individual level makes the assessment of social health probable. This is while the findings of this study show that health in various forms is a social construct. That is why a patient individual (physically) might have the highest levels of social health in form of factors such as social coherence, social integration, and social contribution, while, on the other hand, a healthy individual (physically) might demonstrate the lowest rate of social health based on the same factors. Keyes' point of departure is the ideal, healthy society and the level of individual harmony with it. In other words, Keyes presupposes social conditions as ideal and thereupon, the level of both healthy and patient groups regards with integration, coherence, and contribution is judged. Consequential to such a presumption, the role of social structures, the quality of life, and individuals' agency is constructing health and disease is undermined.

CONCLUSION

In this article, we attempted to examine the impact of physical health on social health. The purpose of the study was to show how physical health as a biological matter affects the feeling of social health and whether physical disease was an obstacle to the sense of social health. The presumption was that social health is a structural matter that exceeds physical and bodily health in importance and its fulfillment is not dependent on the latter. The problem of

the present study concerns whether health was a social construct, whether biological obstacles in form of diseases in individual level could lead to the sense of lack of social health in the grand, social level. The method used in this study was a survey. The technique for data gathering was a standard questionnaire. Based on the sampling method, 326 samples were selected. The sampling was non-probability convenience and quota sampling.

The authors used Keyes theory of social health to examine the hypothesis. The sample was comprised of two convenience groups, one healthy and the other ill. The findings of the study showed that the social health of the sample was moderately low. The results on five social health components demonstrate that social actualisation and social acceptance were moderately high, while the descriptive statistics of other three (social coherence, social integration, social contribution) indicated that the three were low in the sample. The comparison of five indicators between the two groups demonstrated that healthy individuals maintain better a "feeling of actualisation and social acceptance" while the Patients had a higher degree of "social coherence, social integration, and social contribution". As a result, if a society maintains a socio-cultural functionality, it could promise acceptable states of social health, regardless of the physical condition of its individual members. In these circumstances, the absence of bodily health is not a detriment to social health.

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