

Determining dimensions of social health in nurses: findings from a population-based survey of Tehran nurses

Yaghub Hame khezri¹, Mina Shayestefar²

1. MSc Student, School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran
(corresponding author)
2. MSc Student, School of Nursing and Midwifery, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran

ABSTRACT: Social health is “a better social status generally” that according to each society’s situations can have different objective meanings and examples. Despite evidence based on the particular emphasis on the health promotion activities, most of nurses are unhealthy and, therefore, personal and professional health activities is less promote. The aim of this research was to determine dimensions of social health in nurses of Tehran private hospitals in 2014. In this descriptive cross sectional study, 318 nurses who worked in Tehran private hospitals were selected by simple random sampling, then completed a demographic questionnaire and Keyes's social health questionnaire. 51% of the participants were men, and 49% of them were women. Most of the participants (31%) were between 31 and 40 years, 74% were Bachelors and 26% held Mastery Degrees. The minimum social health of the participants was 36 and the maximum was 91, with the average of 69, which indicates that the nurses are at average level of social health. Higher level of education leads to higher social health in different dimensions including social coherence, contribution and actualization; therefore, such nurses should be employed in clinical environments. Some measures should also be taken to increase nurses’ social health.

Keywords: nurse, public health, social health

INTRODUCTION

According to the definition of World Health Organization, “Health” is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (WHO, 2014). With WHO emphasizing on social health, besides physical and mental domains, appealed to attentions of sociologists, economists and health system policy makers (McDowell, 2006).

The social health of an individual has also become a relevant issue on longevity and illness risk factors reduction (Khotdee et al, 2012). On the other hand, individualistic social health points to wellbeing of an individual which is, in turn, related to the quality of life and interacting with other people and also quality of reactions to social institutions and conventions (Russell, 1973). Considering different definitions and approaches, it seems that social health can be defined in three ways: social health as a social dimension of an individual’s health, along with physical and mental health, which is concerned with being in a relationship with society, a healthy society as pro-health social conditions and finally as “a better social status, in general” that according to each society’s situations, can have different objective meanings and examples (Amini Rarani et al, 2013). The concept of social health can refer to the characteristics of individuals as well as a society. The health of a society can be indicated by the equality and accessibility of all to the goods and services to meet their basic needs. In terms of the social health of individuals, Russel (1973) referred to it as “the dimension of an individual’s well-being which concerns how he gets along with other people, how other people react to him, and how he reacts with the social institutions and societal mores” (Russell, 1973).

Theories of social health have used different conceptual models, based on different disciplines, posing a special challenge in defining sub-domains. Primary components include social role participation, social network quality, social integration and interpersonal communication (Abachizadeh et al, 2013). Keyes

(1998) demonstrated five dimensions of social well-being which included social integration, social contribution, social coherence, social actualization, and social acceptance. Social integration with peers and friends is important for social, cognitive, and emotional development during adolescence, but these relationships are themselves shaped by individual characteristics such as race, sex, and body size (Cunningham et al, 2012).

Social contribution is the evaluation of one's social value. Social coherence is the perception of the quality, organization, and operation of the social world and it includes a concern for knowing about the world. Social actualization is the evaluation of the potential and the trajectory of society. Social acceptance is the construal of society through the character and qualities of the other people as a categorized category (Keyes, 1998). The three major elements of health—physical, mental and social health—are very crucial for people in adjusting him/herself to such a complex social context of urban society (Khotdee et al, 2012) and Good health is one of the primary aspirations of human social development. Consequently, health indicators are key components of human development indices (Rogers et al, 2010).

It is increasingly recognized that health workers, especially nurses and nursing technicians, are subject to a variety of health hazards. Several studies have indicated the need to identify the factors causing hazards, as well as strategies to avoid them, so that the health of these workers is not affected. Signs of strain in nurses and nursing technicians are manifested in various forms, depending on the task complexity (Shimizu et al, 2010). Nurses who can fulfill physical, emotional, and spiritual needs of themselves will be more successful for patients, family and society. Despite evidence based on the particular emphasis on the health promotion activities, most of nurses are unhealthy, and therefore, personal and professional aspects of health activities are less promoted (McElligott et al, 2009). Healthy nurses are the determinant factor of qualitative and quantitative work efficiency (Ohaida et al, 2001). Despite the studies conducted on this area, there is not enough knowledge available on social health in nurses. The aim of this research is to determine dimensions of social health among nurses in Tehran Province in 2014.

MATERIALS AND METHODS

Nurses working in private hospitals of Tehran were studied from social health point of view in the present cross-sectional research. The samples were selected from a list of Tehran's private hospitals. The sample size was determined according to the following equation based on a pilot study, and d was 0.1 SD, which resulted in 385 participants after rounding up the final amount.

$$n = \left(\frac{(z_{1-\alpha/2})SD}{d} \right)^2$$

Then, 385 nurses were selected using simple random sampling method and included in the research. To collect the data, first, the objectives of the experiment were explained to the nurses and their consent was obtained. The questionnaires were filled up through self-administered method by the nurses.

Data collection tools in this study included demographic data form and Keyes's social Health/wellbeing questionnaire. The demographic data form included questions about age, gender and educational degree. Keyes developed the social health questionnaire based on his own theoretical model on social health. Babapour Kheirodin et al (2010) used internal homology to investigate its reliability in Iran, in which the alpha for the whole scale was reported to be 0.78. The alpha for the sub-scales included: 0.71 for social coherence, social acceptance 0.74, social contribution 0.74, social actualization 0.70, and social Integration 0.77, suggesting an acceptable reliability for this questionnaire. In a study titled as "*Factorial Structure Investigation of Social Health*", Joshanloo et al. in 2006 normalized Keye's questionnaire using Exploratory and Confirmatory Factor Analysis and showed that this model was the best Outcome of the present data explanation (Joshanloo et al., 2006). Descriptive statistics, such as frequency distribution, mean, and standard deviation, were used to analyze one-variable data. As for two-variable data analysis, first, the Kolmogorov-Smirnov test for assess of data normality was used next in order to assess the relationship between social health variable with demographic variables, the statistical tables was used. To study the association between demographic quantitative variables, correlation test was used .Also to assess the relationship between two-state qualitative variables and social health components, independent t-test was utilized.

RESULTS

Of 385 nurses participating in the test, 53% were males and 47% were females. The youngest and the oldest participants were 24 and 51, respectively. The majority of the samples (39%) aged between 31 and 40 years old. 75% of the participants was Bachelors of Nursing, while 25% of them were Master's Degree in Nursing. As it could be seen in figure 1. The minimum and maximum social health was respectively 36 and 91, with the mean of 69 which suggest an average level of social health among these nurses.

The data in the figure 1 indicates that 22.6% of the nurses had high level of social health, while only 0.8% was in low level and 76.6% of participants had moderate social health.

The findings also revealed that men had social health of 70.8 with standard deviation of 10, while women had social health of 67.7 with standard deviation of 7.4. Therefore, based on the explanations, and according to tests used, there was a significant difference between social health in men and women ($\text{sig} = 0.001$) suggesting that male nurses' social health level was higher than that of female nurses. As for nurses' health different dimensions comparison in terms of gender, table 1 shows that from social Integration and coherence, there was no significant difference between male and female nurses, while male nurses had higher mean scores in social actualization, Acceptance and contribution than female nurses which were statistically significant.

As it could be observed in table 3, the social health mean in nurses Bachelor of nurses was 67.9 with the standard deviation of 9.23. Also social health mean for Master of nurses was 73.6 with the standard deviation of 7.39. Regarding this fact, and according to the test applied, there was a significant difference between Bachelor and Master nurses' social health scores, in a way that Master nurses' social health scores were higher than those of Bachelor Nurses

As for social health comparison of nurses in terms of educational degrees, and considering table 3, it could be seen that from social acceptance and Integration points of view, there were no significant differences between Bachelor and Master nurses, while the Master nurses had higher mean scores in social coherence, contribution and social actualization than Bachelor nurses, which were statistically significant, as well.

In order to investigate the relationship between nurses' social health with their ages, Pearson's Correlation and one way variance Analysis (ANOVA) were used. The results showed that there was no significant relationship between nurses' social health levels and their ages ($\text{sig} = 0.056$).

DISCUSSION

Social health of 385 nurses working in private hospitals of Tehran was investigated in this research, where the following results were obtained based on data analysis:

The results showed that the social health of the male nurses was higher than that of female nurses and this difference was significant, which was not in accordance with the results of the study conducted by Rehman et al (2014). In a study to investigate social health of the Medicine freshmen they stated that women's social health was generally higher than that of men. Willman et al (2012) presented that there was no significant difference between gender, mental-social dimension, and quality of life related to health in the elderly. The results were in accordance with those obtained by Keye.

The results of the present study did not verify the correlation between gender, and social health of the nurses. Keye (1998) reported in his study that four dimensions of social health increase along with aging, yet social coherence decreases as aging. The results pertaining to differences between social integration and coherence in male and female nurses suggest that there was no significant difference from these perspectives. However, the findings related to social actualization, acceptance, and contribution differences between male and female nurses revealed a significant difference between male and female nurses, in the way that the level of social actualization, acceptance, and contribution differences in men was higher than that of female nurses.

About this issue, LoBello et al (2003) in a study titled as *social coherence and life satisfaction and family in survivors 5 years following an accident* where the differences in high and low social coherence as a result of differences in gender, race, educational background, occupation, and injuries severity and type. Based on the results of this study, Master Nurses had higher mean social health scores compared with those of Bachelor nurses, which were statistically significant. As for different dimensions of social health based on educational degrees, the findings of the study revealed that Master Nurses had higher scores in

social coherence, contribution and actualization which were significant. However, as for social acceptance and integration, no significant differences were observed between Masters and Bachelors. Sharma et al in 2014 showed the several factors, such as education that is individual factors, might effect on the social activities .They also suggested that high level of education, such as Low level of education, in health care workers can impact on their social health activities. In another research, Frankenberg et al (2013) stated that 5 years following the tsunami occurred, the people with higher education were better from social-health point of view in comparison with people with lower education, and in general, higher levels of education have something to do with long-term resistance.

As the results revealed, high education will lead to higher social health in nurses in several dimensions including social coherence, contribution, and actualization. Therefore, it should be considered that these nurses could have better Clinical performance and will contribute greatly to care and curing system. Nonetheless, in Iran, nurses with higher education are, unfortunately, rarely employed in clinical setting and are working mostly at educational systems. Hence, some solutions should be taken to bridge this gap. On the other hand, the social health of the nurses under study was at the average level, which entails some remedial measures to raise it, and therefore, improve the care and treatment system performance. For instance, people with high social health could sporadically be used in different treatment wards and departments to affect other colleagues and improve cumulative spirit.

However as for why men’s social health was higher than that of women, further studies and analysis are required regarding influential factors on social health in order to prevent more possible decrease in women’s social health, specifically that of female nurses, in the future since women play a key role in family and nurturing children of our society.

Table 1. Social health of the nurses in terms of gender

Gender	Number	Social health mean	Standard deviation	Freedom degree	P Value
Male	205	70.8	10	371.8	0.001
Female	180	67.7	7.4		

Table 2. Comparing different dimensions of nurses’ health in terms of gender

Variable	Gender	Number	Mean	S.D	P Value
Social Integration	Male	205	9.19	2.27	0.332
	Female	180	9.44	2.03	
Social Acceptance	Male	205	14.40	3.85	0.000
	Female	180	13.00	3.19	
Social Contribution	Male	205	19.90	3.15	0.011
	Female	180	19.13	2.67	
Social Actualization	Male	205	15.09	2.86	0.000
	Female	180	14.00	2.54	
Social Coherence	Male	205	12.12	1.93	0.782
	Female	180	12.17	1.63	

Table 3. Nurses’ social health divided in terms of educational degrees

Nursing Degree	Number	Mean	Standard Deviation	Freedom Degree	P Value
Bachelors	289	67.9	9.23	201.64	0.000
Masters	96	73.6	7.39		

Table 4. Comparing different social health of the nurses in terms of educational degree

Variable	Degree	Number	Mean	Standard deviation	P Value
Social Integration	Masters	96	9.13	2.57	0.474
	Bachelors	289	9.34	2.01	
Social Acceptance	Masters	96	14.30	3.55	0.111
	Bachelors	289	13.61	3.64	
Social Contribution	Masters	96	21.20	2.59	0.000
	Bachelors	289	18.99	2.87	
Social Actualization	Masters	96	16.07	2.23	0.000
	Bachelors	289	14.09	2.57	
Social Coherence	Masters	96	12.93	1.67	0.000
	Bachelors	289	11.88	1.77	

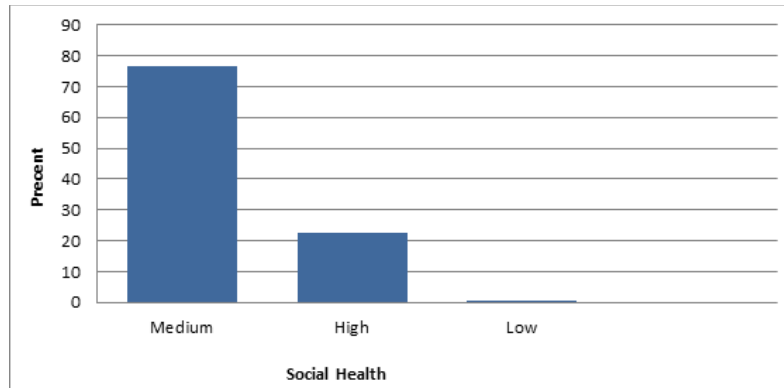


Figure1: Social health distribution range of the respondents

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