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Evaluation of the relationship between social capital and manpower’s burnout in teaching hospitals of Iran

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The purpose of this study was to evaluate of the relationship between social capital and manpower’s burnout in teaching hospitals of Iran. This study was a cross sectional study conducted in the teaching hospitals of Tehran University of Medical Sciences in the year 2011. The target population of the study was manpower in hospitals of Tehran University of Medical Sciences. A total number of 320 manpower were selected as sample of the study. The data collection tools were two questionnaires that their validity and reliability had been measured in previous studies. After completing the questionnaire, using appropriate statistical software SPSS16 statistical analysis was performed based on the type of variables (T-tests, Pearson correlation and regression analysis). There was a significant relationship between social capital and female manpower's burnout; and the level of inverse correlation between the two variables were moderate (r=\textasciitilde-0.257). In general, all five dimensions of social capital in the study hospitals, had a significant inverse relationship with burnout (P<0/001). Regression analysis showed that the five dimensions of social capital explain 0.101% of burnout variance. The most important factor, which its influence is more than other factors, is the diversity of social interaction and friendships dimension.

Key words: Social capital, manpower’s burnout, teaching hospitals.

INTRODUCTION

Based on Coleman’s definition, social capital is social and cultural cohesion within the community, norms and values that is governing the interaction of people and the institutions in which these values and norms should be placed. Social capital is the reason that many theories were developed that form the basis for other management studies (Coleman, 1988). This is a new capital, which plays a more important role than other physical and human capital in organizations and communities and nowadays in sociology and economics, and recently is widely used in management and organization, and refers to the relationship between the members of a network as a valuable resources; and by creating norms and mutual trust lead to achievement of the members’ goals (Flora, 1998; Nahapiet and Ghoshal, 1998).

An organization has a high level of social capital that own a high number network of coherent and trustworthy members that can react efficiently in relation to their surrounding environment and develop a mutual collaboration with other members of organization (Portes, 1998). Managers, who can create social capital in their organizations, are paving the way to build occupational and organizational prosperity. On the other hand, social capital gives meaning to life, and makes life more enjoyable (Ottebjer, 2005). We can consider social capital as a result of the following phenomena in a social system: 1)
mutual trust, 2) reciprocal social interaction, 3) social groups. 4) feelings of a common picture of future, and 5) team work (Onyx and Bullen, 2000). Organizations can have a better understanding of the pattern of interactions between individuals and groups by recognizing and identifying all the aspects of their social capital, and can use their social capital to direct their organizational system in a better way (Gargiulo and and Benassi, 2000). Job is one of the important aspects of each person’s life (Mohamadi et al., 2012). Job, in addition to providing the living expenses of each person, satisfy the psychological needs such as social contact, sense of being valuable, confidence, competence, training and mental and physical exercise (Farzianpour et al., 2011). Considering human being complexity, his compatibility with such relations, equipment, changes, regulations and in summary occupational environments in an organization is different now from before; and human in the current age, in the process of adaptation to social and occupational environment, is forced to tolerate limitations and pressures (Ommen et al., 2009). Therefore a satisfactory job and job adaptation can turn to the source of dissatisfaction and lack of adaptability over time, and this issue can be the reason that a person go out of the normal routine and suffer from burnout (Felton, 1998; Huang and Wang, 2011). Among the most important factors related to the job, particularly in hard job, is burnout. Occupational burnout is one of the psychological syndromes and mostly is seen in jobs, that individuals are associated with work for many hours (Maslach et al., 2001; Sharon, 2005). Burnout is a psychological syndrome consisting of three pivots: chronic exhaustion, sleep disorders and different physical signs, negative and pessimistic tendencies toward colleagues and clients, feeling guilty, being cornered, reduced work and daily activities, job dissatisfaction, feelings based on failure and disability, loss of judgment and understanding, a sense of extortion and exploitation and permanent loss of job performance (Huang and Wang, 2011).

This syndrome is seen more in jobs which are offering service to people, more than other professions. Personnel in the health sector, including general practitioners, specialists, nurses and healthcare workers due to exposure to various stress factors including psychological, emotional, physical, managerial and interpersonal stress, experience a higher level of burnout than other jobs. These stressors include high job strain, low social support, exposure to violence and intimidation at work, night shift work, high demands at work, poor work organization, hard work and ambiguity in decision making in critical situations based on inadequate information and facing the serious result of this decisions (Ashkar et al., 2010, Gachter et al., 2010; González et al., 2011).

Considering the negative effects of burnout on individuals’ performances, which is in the form of reduced income and effectiveness, absenteeism from work, decreased patient satisfaction, professional leave, family and marital problems, alcohol and drug use, depression and even suicide, recognition of this syndrome and its effects and ultimately preventing the occurrence of this syndrome is of special importance (Gachter et al., 2010; Maslach et al., 2001; Sharon, 2005).

Today, health sector, due to its association with the human health, is one of the most important fields of sustainable development in human societies. Achievement of this goal requires having healthy, vibrant and with high work motivation therapists (Maslach et al., 2001; Sharon, 2005). Burnout is a common phenomenon among nurses in health care, especially among staff of hospitals. Therapists, who are experiencing burnout, usually are physically, emotionally and mentally tired. This have a widespread effect on the quality of patient care, in a way that gradually therapists feel that they cannot face patients (Smith et al., 2012). One of the factors, which play important roles in achievement of the organizations objectives, is existence of informal groups and their relations in organization. Social capital assesses this informal relationship in the work environment. Undoubtedly, recognition of social capital will assist in the organization in achieving the pre-determined objectives (Farr, 2004).

Many studies investigated the relationship between health, social capital and its components (Looney, 2007). Recently in one study in the Canada, it was shown that cognitive social capital, especially trust, has a significant relationship with reducing the depression rate (Sheingold et al., 2012). Also it has been said that the purpose of this study is not to show that social capital can prevent depression in individuals, but that social capital and especially trust among individuals, can improve depression or stop its progress. In a study by Neal et al. (2011), Kowalski et al. (2010) and Rahmani et al. (2010), they concluded that stress and high level of pressure, in addition to creating psychological and physical problems in Medical personnel, can cause reduction in care and treatment quality of patients. The results of Momenen’s research indicated that burnout is high among nurses in the central province hospitals. He suggested that to reduce this burden, special schemes including increase in work stability, work efficiency and increase in the level of participation of staff in decision making process, should be considered (Momeni et al., 2010). The present study examined the effect of social capital dimensions (5 components of trust, informal social relation, forgiveness and the spirit of volunteering, diversity in socializing and friendship, leadership and civic participation) on burnout of female nurses in the hospitals of Tehran University of Medical Sciences to help reducing the fatigue and nurse staff problems and ultimately promotion of society and patients health.

MATERIALS AND METHODS

This descriptive-analytical study was performed by a cross-sectional method in teaching hospitals of Tehran University of Medical Sciences in 2011. The study population was man power of
Tehran University of Medical Sciences hospitals. Total number of 320 man power was selected as the study sample. The main objective of this study was to investigate the relationship between organizational social capital scores and manpower’s burnout in hospitals of Tehran University of Medical Sciences. As this association will be determined by correlation and regression analysis, therefore the sample size was calculated in a way that considering 95% confidence level and the study power of 90%, if the correlation coefficient that would be achieved is equal or more than 0.2, then the test become statistically significant, therefore the below formula was used to calculate the sample size.

\[
Z = \frac{1}{2} \ln \left( \frac{1 + p_0}{1 - p_0} \right) = \frac{1}{2} \ln \left( \frac{1 + 0.2}{1 - 0.2} \right) = 0.203
\]

\[
n = \left( \frac{Z_{1-\alpha} + Z_{1-\beta}}{Z_{\alpha}} \right)^2 + 3 = \left( \frac{1/96 + 1/65}{0/203} \right)^2 + 3 = 320
\]

Then from the list of hospitals covered by Tehran University of Medical Sciences, five hospitals were selected.

The data collection tool was two questionnaires that their validity and reliability was measured in previous studies (Abdullahpur, 2009). The questionnaire, at first consisted of demographic questions. The Maslach burnout questionnaire tool is the most common tool for measuring burnout and is consisted of 22 questions, and covers all three aspects of burnout. Nine questions were related to emotional exhaustion (it allow the respondents to express their feelings related to severe weakness and emotional exhaustion in facing clients and work environment), five questions were related to the depersonalization (it allow the respondents to express their attitude in form of apathy and indifference for clients) eight questions is related to feelings of personal adequacy (it allow the respondents to express feelings of competence and achievement of success in relation to the care of patients). The measuring level of the questionnaire was ordinal and in each statement, there is an option from 1 (never) to 7 (every day) score for the positive statement and vice versa for the negative sentences (Maslach and Jackson, 1986).

The Cronbach’s alpha of the burnout questionnaire in a sample consisted of 11000 individuals were 0.71 to 0.91 and the coefficient correlation in the test-retest method, with one month interval, was between 0.6 to 0.8 (Maslach and Jackson, 1986; as said by Anisi and its colleagues from 2009, p 250).

The social capital questionnaire consisted of 15 questions, questions number 1 to 3 were related to the trust dimension, questions number 4 to 6 were related to the ability to create informal social relations dimension, questions number 7 to 9 were related to the generosity and spirit of volunteering dimension, questions number 10 to 12 were related to the dimension of variation in the interaction and friendships and questions number 13 to 15 were related to the dimension of leadership and civic participation. Abdullahpur (2009) in his research entitled social capital has tested the validity and reliability of this questionnaire.

Statistical analysis methods

In each study, considering the levels of analyzing of the variables, appropriate statistical analysis are used; and statistical tests and the necessary statistics, is depended on the type of data.

Analysis methods

The statistics in this study are divided into two major parts:

1. Descriptive statistical analysis methods, including tables and charts, indices of central tendency and dispersion, higher frequencies ...... which are used in univariate analysis.
2. Inferential statistical analysis methods that can be divided into two parts:
   A) Two-variable analysis: In this analysis tests such as T-Test (mean difference) test, F (ANOVA) and Pearson correlation coefficient are used.
   B) Multivariate analysis: In these type of tests, tests such as multivariate multiple regression analysis is used. It should be noted that in this study, statistical analysis was done with the help of statistical software package SPSS version 16.

Ethical considerations

- Provide a letter of introduction to the study, all respondents
- The research was conducted with the full consent of the respondents
- Enough to give respondents the opportunity to respond
- Requirements not mentioned in the questionnaire respondents

RESULTS

42.8% of respondents were single and 57.2% of the respondents were married. Minimum age was 22 years and maximum age was 55 years, the average age of respondents in this study was 34.7 years which indicate that respondents were middle-aged. Minimum work experience was one year and maximum work experience was 25 years, the average work experience of respondents was 8.05 years (Table 1).

In total, for assessment and measuring the level of social capital of respondents the five dimensions (mutual trust, ability to create informal social relations dimension, generosity and spirit of volunteering, variation in the interaction and friendships and leadership and civic participation) were used. These variables were consisted of 15 sentences in an ordinal level, in Likert scale and in a five options format, which after summation of the ordinal sentences, a variable with a range of 60 scores were created, the score of 75 represented high level of mutual capital of respondents and the score of 15 represented the low level of mutual capital. According to Table 2, it can be said that the respondents’ social capital was approximately equal to the average score (mean = 44.19).

<table>
<thead>
<tr>
<th></th>
<th>Low social capital</th>
<th>High social capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>75</td>
<td>44.19</td>
</tr>
</tbody>
</table>

For assessment and measuring the level of respondents’ burnout, three dimensions of burnout (emotional exhaustion, depersonalization and feelings of personal adequacy) were used. These variables were consisted of 22 sentences in an ordinal level, in Likert scale and in a seven options format, which after summation of the
Table 1. Distribution frequency respondents according to age, education, marital, experience, in teaching hospitals - Iran, 2011.

<table>
<thead>
<tr>
<th>Socio-demographic indicator</th>
<th>N (%)</th>
<th>Socio-demographic indicator</th>
<th>N (%)</th>
<th>Socio-demographic indicator</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td>Education</td>
<td></td>
<td>Experience</td>
<td></td>
</tr>
<tr>
<td>&lt;30</td>
<td>138(43.1)</td>
<td>B.Sc</td>
<td>202(63)</td>
<td>&lt;5</td>
<td>125(39.1)</td>
</tr>
<tr>
<td>31-35</td>
<td>52(16.2)</td>
<td>MSc</td>
<td>105(33)</td>
<td>6-10</td>
<td>105(32.8)</td>
</tr>
<tr>
<td>36-40</td>
<td>31(9.7)</td>
<td>Ph.D</td>
<td>13(4)</td>
<td>11-15</td>
<td>55(17.2)</td>
</tr>
<tr>
<td>41-45</td>
<td>56(17.5)</td>
<td>Total</td>
<td>320(100)</td>
<td>16-20</td>
<td>16(5)</td>
</tr>
<tr>
<td>46-50</td>
<td>25(7.8)</td>
<td>Marital</td>
<td>137(42.8)</td>
<td>21+</td>
<td>19(5.9)</td>
</tr>
<tr>
<td>51+</td>
<td>18(5.6)</td>
<td>Single</td>
<td>183(57.2)</td>
<td>Total</td>
<td>320(100)</td>
</tr>
<tr>
<td>Total</td>
<td>320(100)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2. The relationship between social capital dimensions of manpower's burnout in teaching hospitals - Iran, 2011.

<table>
<thead>
<tr>
<th>Components of social capital</th>
<th>Mean</th>
<th>SD</th>
<th>Relationship with burnout</th>
<th>Correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutual trust</td>
<td>8.6</td>
<td>2.2</td>
<td>Yes</td>
<td>0</td>
</tr>
<tr>
<td>Ability to create informal social relations dimension</td>
<td>8.8</td>
<td>2.1</td>
<td>Yes</td>
<td>0.052</td>
</tr>
<tr>
<td>Generosity and spirit of volunteering</td>
<td>8.6</td>
<td>1.9</td>
<td>Yes</td>
<td>0.001</td>
</tr>
<tr>
<td>Variation in the interaction and friendships and leadership</td>
<td>8.9</td>
<td>2.4</td>
<td>Yes</td>
<td>0.001</td>
</tr>
<tr>
<td>Civic participation</td>
<td>9.3</td>
<td>2.1</td>
<td>No</td>
<td>0.794</td>
</tr>
<tr>
<td>Social capital</td>
<td>44.19</td>
<td>6.6</td>
<td>Yes</td>
<td>0</td>
</tr>
</tbody>
</table>

Ordinal sentences, a variable with a range of 132 scores was created, the score of 154 represented high level of burnout of the respondents and the score of 22 represented the low level of burnout. According to Table 3, it can be said that the respondents’ burnout level was approximately equal to the average score (mean = 90.1).

<table>
<thead>
<tr>
<th>Low levels of burnout</th>
<th>Mean</th>
<th>High levels of burnout</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>88</td>
<td>154</td>
</tr>
</tbody>
</table>

These data suggests that the rate of respondents’ burnout is relatively at a modest level. Respondents were in a relatively low level of emotional exhaustion or emotional problems. In another word, the level of mental fatigue, lack of energy and a feeling of reduced mental and emotional resources of manpower, were not high. Respondents, also, had a relatively low level of de-personalization (de characters). In other word, the negative responses of these female manpower towards clients were not high. Respondents’ sense of personal efficacy was relatively at a low-level. In other words, the negative evaluation of female manpower towards their private duty was not high.

Therefore, in order to compare the relationship between manpower’s burnout (an ordinal variable) and the serving hospitals of the manpower (F=13.405 and p<0.001). Therefore, in order to compare the relationship between manpower's serving hospital and their burnout, Scheffe's test was used, which its results are presented in (Figure 1).

Based on the result of Scheffe's test, the burnout level of manpower which serve in Farabi Hospital (Ophthalmology) is less than other manpower which serve in other hospitals and the burnout level of manpower which serve in Imam Khomeini Hospital (General) is more than other manpower which serve in other hospitals and these differences are statistically significant ( p<0.05). There was not a significant difference between age of respondent and the burnout level (p=0.494, which is more than α=0.05). The correlation between these two variables, also was low(r=-0.038), and was not statistically significant.

There was a significant adverse correlation between work experience and burnout (r=-0.121, p<0.031) that means with increase in work experience of female nurses, the level of burnout decreases. T test was used to assess the association between burnout and marital status. So in the ANOVA test (F=0.0999, p=0.753) there was no significant difference between the variance of different groups, therefore there was no significant association between burnout and marital status (p=746), T=0.324.

The application of multivariate regression analysis is prediction and explanation of the variance in the criterion.
Table 3. Levels of manpower’s burnout in teaching hospitals- Iran, 2011.

<table>
<thead>
<tr>
<th>Components of burnout</th>
<th>Mean</th>
<th>SD</th>
<th>The mean baseline score</th>
<th>Results of research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional exhaustion</td>
<td>28.4</td>
<td>4.8</td>
<td>49</td>
<td>Exhaustion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>Low</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>32.6</td>
<td>4.6</td>
<td>56</td>
<td>Exhaustion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>32</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>Low</td>
</tr>
<tr>
<td>Feelings of personal adequacy</td>
<td>29.1</td>
<td>4.98</td>
<td>49</td>
<td>Exhaustion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>Low</td>
</tr>
<tr>
<td>Job burnout</td>
<td>90.1</td>
<td>8.9</td>
<td>154</td>
<td>Exhaustion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>88</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>22</td>
<td>Low</td>
</tr>
</tbody>
</table>

variable (dependent) from predictive variables (independent). In other words, the change in the dependent variable is usually the result of multiple criterion variables that react simultaneously.

In this study, burnout is also affected from several factors and each of the predictive variables is a factor for prediction of different aspects of criterion. We can expect that each of the factors or variables contribute to the formation of the burnout level. In multivariate regression analysis, to predict the criterion variable (burnout), the predictive variables were used.

The calculation is done in a way that with having correlations among all variables the best prediction becomes possible. In other words, instead of using if X then Y, we say if X1 and X2, … then Y, and the results tell us that the best linear combination of variables explained roughly how much variance of the criterion variable (Kerlinger, 1973, 1986). Multivariate regression model which is used to estimate regression coefficients (beta and alpha) is based on the following mathematicals:

\[ Y = B_0 X_0 + B_1 X_1 + \ldots + B_n X_n + e \]

\[ B = (X^T X)^{-1} X^T Y \]

In this equation, \( X \) was \( X \) axis and \( b \) called the coefficients and \( e \) the prediction error. In the process of explaining a model for burnout, step wise regression model was used.

In stepwise regression, independent variables, which in the regression analysis has a significance level close to zero, are selected for subsequent models. Finally, after several stages, two types of models are extracted:

1. A model of the variables that could have a role in explaining the variance in the dependent variable.
2. Other models, exhibit variables omitted from the final model. Variables extracted from the final model, do not have a significant effects in explaining variability.

Some assumption should be considered for applying multivariate regression analysis. The most important assumptions are described as follows:

1. One of the fundamental assumptions of multivariate regression analysis is normal distribution of variables. In other words, whether the distribution of the characteristics of errors or residuals will follow a normal distribution of residuals? One of the ways to test the above assumption is to draw the P- P Plot. In this plot, whatever the distribution of residuals are more close to the regression line, we can conclude that the residuals have a normal distribution and do not have much distance with the regression line. The following chart shows the normal distribution of residuals in the studied model (Figures 2 and 3).

2. The second assumption in regression analysis is independence of errors, to test that whether the errors of regression model are independent of each other, the Durbin-Watson test was used. The variation range in this test was from 1.5 to 2.5 which show that in this study the errors are independent of each other (DW = 1.69).

3. The last major regression analysis assumption is “a linear relationship between variables”. Linear relationship between the variables is investigated from the standard graph versus predicted values. The results obtained show a linear relationship between variables.
For fitting the model, all variables in the study of mutual capital (mutual trust, informal social ties, ability to create informal social relations dimension, generosity and spirit of volunteering, variation in the interaction and friendships and leadership, civic participation), which were measured by an ordinal scale, were entered into the equation as independent variables. As it was said before, in this study, the multiple analyses with a stepwise method was used. In this method, variables are entered into the regression analysis with respect to the level of
their correlation with dependent variable (burnout) and at the end; those variables remained in the model that have maximum $R^2$ and interaction with each other.

The results of regression analysis showed that from all the independent variables in the regression model, some variables were not entered in the regression equation, and those independent variables, which entered in the equation; approximately explained 0.327% of the dependent variable changes.

Considering the data in Table 11, we can say that multiple correlation coefficient is equal to 0.697 and its square is equal to 0.107, therefore the dimensions of mutual capital (mutual trust, informal social ties, forgiveness and the spirit of volunteering, participation and diversity of group interaction and friendship), explain 0.101% of variance of burnout in the study hospitals and remaining variances are explained by external factors, which is unknown in this study. In this model, the most important factor which its influence is more determining than other factors, its variation in socialization and friendships.

ANOVA results show that the variables are able to significantly predict and explain the changes of dependent variable (burnout); in other word, the AR corrected model is significant. Among the variables that were entered into the equation, the dependent variable is affected more by diversity of socializing and friendship dimension.

**DISCUSSION**

Based on these results, we can conclude that with increase in female nurses experience the level of burnout decreases. Based on Maslach’s opinion, among demographic characteristics, age has the most consistent relation with burnout, means younger people have more job burnout, at the same time, married individuals and single women compared to singles and men have reported higher burnout (Ehyakonandeh, 2007).

Najafi in a research study entitled “The relationship between staff burnout and mental health in Esfahan Nuclear Fuel Research and Production Center” concluded that there is no significant relationship between burnout and age, sex, marital status, education, working in various sectors and duration of service (Najafi, 2000). Our results are consistent with the result of Aspin study in 2004.

Empowering employees and strengthening them, based on increase in social capital in organizations is benefitting from the potential capacities of employees which are not used completely, at the present time. The achievements that empowered organizations can achieve due to the deployment and strengthening of social capital include the following:

- Ensuring customer satisfaction and increasing it
- Aligning with market needs,
- Increase in employee job satisfaction,
- Increased sense of belonging, participation and responsibility in employees,
- Change the attitude from force to authority,
- Greater employee commitment and improve the quality of work,
- Better communication of female staff with managers and supervisors
- Reduce operating costs and increase in organization profit,
- Increase in the efficiency of decision-making process,
Continuous improvement in the organization and increase in productivity,
Creation of new initiatives and use of intellectual resources (Aspin, 2004).

The below theoretical studies also support our study and is inconsistent with it: social capital can affect the quality of services and outputs, the results will lead to facilitation in knowledge, improvement in team collaboration and organizational commitment and probably higher quality products (Nazari, 2009).

Flix Requena in a study showed that high level of social capital creates higher level of job satisfaction and quality of life in the work environment. Social capital is a better predictor for quality of life compared to workers characteristics, organization or work environment (Requena, 2003). Therefore the subject of social capital is the main basis for important management discussions of each organization. Those managers are considered successful that are able to develop more social capital in relation to community.

The Pearson correlation coefficient showed an adverse correlation between mutual trust and burnout. The correlation between two variables were modest (\( r=-0.195 \)).

For testing this hypothesis, the Pearson Chi square test was used and the results are explained as follow: there was a significant adverse correlation between the ability of informal social relations and female nurse burnout (\( p=0.052 \)), therefore overall results indicate that whatever the ability of informal social relationships among female nurses is more, the rate of burnout is less. The inverse correlation between the two variable shows that increase in one variable resulting decrease in another, the correlation between two variables is relatively weak. Therefore the research hypothesis is temporarily confirmed, it means that the ability of informal social relations by respondents, reduces the amount of burnout.

Putnam considers norms of reciprocity as the most productive component of social capital and believes that groups and societies which are governed by these norms and follow it, can efficiently overcome opportunism and collective action problems. Trust facilitate the collaboration and moral commitment, and whatever the level of trust is more in a society, the possibility of collaboration and participation is more. Collaboration also creates trust, and based on several studies, those organization which are enjoying more social capital, are more successful than their competitors (Nahapiet and Ghoshal, 1998).

Conclusion

In general, all five dimensions of social capital were inversely and significantly associated with burnout in hospital. Existence of significant relationship between the burnout dimensions and social capital is a sign of the importance of an employee social capital in an organization. In this model, the most important factor that determines the effect of other factors is diversity in interaction and friendships dimension. In the network analyzing theory, connections and social ties is consider as social capital of an individuals, and individuals can access the resources and supports available in these social ties. Therefore the quality of social interactions and type of interactions and exchanged support is of great importance.

Maslach et al. (2001) believe that six factors affect the burnout which include: high workload, low control over work rate, low reward, lack of social relationships, discrimination in the workplace, conflict between work values and personal values.

Job-related factors such as: heavy job, responsibilities role conflict, lack of social support, geographical mobility and wastage of roles. Apart from the above factors, other factors such as limited opportunities for promotion, rigid rules and regulations, management and supervising style of the work unit can play a fundamental role in the development of burnout.

Limitations of research

It is certain that research especially in Iran society condition, from historical and cultural prospect, has its own difficulties and this difficulties become more notable and serious, because researcher is dealing with humans with special and unique abilities, thoughts, beliefs, attitudes, fears and limitations. The raw data of this research has been collected in such an atmosphere, therefore the obtained results is also under the effect of such condition, and have deficiencies.

Lack of a standard questionnaire at the organizational level, resulted that the researcher, design a questionnaire by a detailed review of literature and by using some standard questionnaires and then the validity and reliability of questionnaire was tested by exterior validity and Chronbach’s alpha. Social capital is one of the concepts that is influenced by several variables in an organization, and in researchers’ facilities framework, controlling other variables was not possible.

Another limitation of this study was that the result of this research can only be used in the sample of study and cannot be extrapolated to other community.

Another problem of the study was limited resources and research literature in the country, specially related to the study subject, as well as nobility of the topic.

Lack of collaboration of some female staff was one of the other research problems. The interviewer was facing situations that female nurse’s refused to answer the questions, against being free. Therefore, filling the questionnaires take more time in these hospitals. The reason may be due to the belief of the staff and patients on lack of effect of researches on their life condition.
Practical suggestions

These findings showed that social capital of female employees has positive relationship with burnout, therefore, in order to strengthen the associated factors with social capital, the following suggestions is considered:

- It is suggested that the ground for collective participation and social trust be prepared, without creating a ground for trust in personal relation, there is a possibility that apathy among individuals increases. Trust and creating trust, considering the present condition, is possible only if the fundamental layout of trust in families, schools and universities are strengthened, till next steps are taken at the organizational level, deficiency in this process, prevent establishment the grounds for trust.
- The results of this study suggest that hospitals should strengthen social capital and mutual trust among female employees in their work, in order to reduce burnout, investment of hospitals in developing social capital is through educating effective communication, improving communications process between employees and managers inside and outside the hospital, creating an atmosphere and culture and climate of cooperation, mutual trust and team work, that all can enhance organizational social capital.
- It is also possible to form groups and professional associations the voluntary participation of experts, nurses, specialists, doctors and paramedical staff in hos-pitals and specialized hospitals, at different organizational levels, to increase social capital level.
- Encouragement and formation of groups and associations in hospitals:
  Encouragement of establishment and strengthening social institutions is one of the structural solutions to increase social capital. Individuals in the form of social institution are getting a common identity and the ground for collaboration and participation is strengthened among them. Establishment of such institutions is also possible at organizational level. Establishment of professional associations and professional groups and hospitals, with voluntary participation of experts, nurses, specialists, doctors and paramedical staff in hospitals, can increase the social capital.

The following suggestions are aimed at reducing staff burnout:

Managers’ support from staff at the time of problem, is one of the suggestions that can have an important role in reducing the burnout because if the staff are ensured that management is responsible for them and support them at the time of problems and are responsive in front of clients, they achieve a positive attitude about their work and in light of this atmosphere, confidence and trust, sympathy and friendship and feeling of competence will be more. In such an environment, employees will love each other and they express this friendship to each other and express their desire and willingness to pay their duties. Development of recreation and tourism programs, in order to increase face to face relationships is another recommendations that can be effective in reducing staff burnout; because face to face relationships has a desired and positive affect s on creating trust, compassion and friendship and also sense of competence.

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