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Access this article online



Website: www.jehp.net DOI: 10.4103/jehp.jehp 469 23

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> Received: 04-04-2023 Accepted: 28-05-2023 Published: 29-04-2024

Relationship between professional self-concept and perceived organizational support with family functioning in nurses in Isfahan, Iran

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Abstract:

BACKGROUND: Vocational issues affect nurses' family functioning in long term. So the purpose of this study is to investigate the relationship between professional self-concept and perceived organizational support with nurses' family functioning.

MATERIALS AND METHODS: This descriptive correlational study conducted in hospitals affiliated to Isfahan University of Medical Sciences and 250 nurses who met the inclusion criteria participated in this study. The samples were selected conveniently from December 2022 to August 2022. To collect data, Cowin's professional self-concept questionnaire, Eisenberger's perceived organizational support questionnaire, and Epstein's family function measurement were used. Data collection was done in one step and cross-sectional. Descriptive statistics and inferential methods of data analysis consisted of Pearson's correlation coefficient and multiple linear regression were used. Data were analyzed with statistical package for the social sciences (SPSS) version 22.

RESULTS: One of the six dimensions of professional self-concept consisted of staff relations significantly predicted the family function of nurses (P = .004). No significant relationship was found between perceived organizational support and nurses' family function (P = .825).

CONCLUSION: Promoting the healthcare organizations' human climate may improve nurses' wellbeing and hereby their family functioning which could further improve quality of healthcare services. It may be worthwhile to suggest supporting interpersonal and interprofessional relationships to ensure a healthy professional life for the nurses.

Keywords:

Family functioning, nurse, perceived organizational support, professional self-concept

Introduction

Nursing is the core of the health system. Long-term exposures to vocational issues on one side and familial problems on the other side lead to burnout, which itself causes reduced energy, low occupational efficacy, and frequent absences, even permanently.^[1-3] Moreover, studies show that between 40% and 78% of working people experience work-family conflict. The conflict between work and family has been recognized as a main issue that effects

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms. on the functioning of both employees and employers as well as their families. Family functioning is defined as how to establish interpersonal communication, make decisions, and solve problems between family members.^[3]

According to some evidence, nurses always face major problems in the field of mental health, such as anxiety and depression, which, along with the experience of conflict between work and family, can affect various aspects of their lives and endanger the family functioning of these people.^[3]

How to cite this article: Sahraian L, Alavi M, Ghaedi-Heidari F. Relationship between professional self-concept and perceived organizational support with family functioning in nurses in Isfahan, Iran. J Edu Health Promot 2024;13:151.

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In their research on Chinese nurses, Yu *et al.*^[4] showed that the stress caused by work-family conflict has negative effects on overall family wellbeing. Also, Zandian *et al.*'s^[5] research on nurses showed that work-family conflicts are asociated with quality of family life.

Researchers have attempted to explore potential factors which may explain the status of the family functioning particularly those of workplace factors.

The potential factors influential on the status of family functioning have been divided into individual factors, demographic and psychological factors, organizational factors, and environmental factors.^[6] Previous studies have already highlighted the crucial role of individual and organizational factors that have potentially more prominent effects than others.^[7,8]

One of the psychological factors that affects function of nurses is professional self-concept that is understanding that a person has of himself as a professional person that furtherly affects his or her attitude, behavior, and the evolution of his role and performance. So, its promotion has been globally emphasized as an important goal in healthcare systems.^[9] Some studies have examined the relationship between the professional self-concept and the family functioning of the employees. Farhadi *et al.*^[10] in their research on nurses showed that the improvement of the professional self-concept is not only related to the improvement of the quality of care of nurses but also may solve family problems.

Perceived organizational support as an organizational factor is another potential factor that may be related to family functioning of the employees. It is referred to an individual's beliefs about the level of support from a special organization.^[11] Previous studies have investigated the relationship between perceived organizational support and family function of different professions. Some evidences showed that the more perceive organizational support, results in higher performance and productivity in current job and less likely to experience work family conflicts, change job, or leave the organization.^[12,13] For example, Hao et al.'s^[13] study on Chinese doctors showed that organizational support as a source of support has positive effects on their mental health and where work-related stress interferes with family responsibilities, organizational support may be able to modify the work-family conflict.

Although some factors related to nurses' family performance have already been identified, the role of professional (professional self-concept) and organizational factors (perceived organizational support) is less considered. Therefore, the purpose of this study is to investigate the relationship between professional self-concept and perceived organizational support with family functioning in nurses.

Materials and Methods

Study design and setting

The present study is a cross-sectional descriptive correlational study that is conducted in two hospitals affiliated with Isfahan University of Medical Sciences (Al-Zahra, Noor, and Ali Asghar) which have randomly been selected among the respective hospitals. Quota sampling method was used considering the number of nurses in each hospital and subordinate wards. The study has been conducted between December 2022 and August 2022.

Study participants and sampling

G*power software was used to calculate the sample size. Considering the confidence interval of 95% ($\alpha \leq 5\%$), the power of at least 0.95 and the number of predictor variables (taking into account the dimensions of the questionnaires) at least seven items and estimated drop out of 10% total required sample size was 250. Upon making required coordination with the managers of hospitals and subordinate departments, the researcher referred to the nurses, introduced herself, explained the study objectives, obtained their informed consent to participate in the study, and provided some information about the research tools and how to complete them, and finally the measurement instruments were administrated. Data collection was performed at one stage and the researcher assured all the nurses that all their information would remain confidential.

Inclusion criteria included all nurses working in hospitals affiliated to Isfahan University of Medical Sciences with at least 6 months working experience and living with family and exclusion criteria were unwillingness to continue participating in the study for any reason and incomplete completion of the questionnaire (loss of more than 5% of the data).

Data collection tool and technique

To collect data, a four-part measurement instrument was used in this study. The first part included demographic information sheet. The second one was Cowin's professional self-concept questionnaire which included 36 items that measure nurses' self-concept in six dimensions consisted of General nursing, Care, Knowledge, Staff Relations, Communication, and Leadership. Each dimension includes six items. The scoring of the questionnaire was based on an eight-point Likert scale and the range of scores that is 36-288 and for each of the dimensions is 6-48. The higher scores indicate, the better self-concept. The validity and reliability of the Persian version of this questionnaire in the Iranian population has been confirmed by Badiyepeymaye Jahromi *et al.*^[14] The Spearman-Brown correlation coefficient was 0.84 and total Cronbach's alpha was 0.97 and reliability coefficient for the general nursing, leadership, knowledge, care, staff relations, and communication subscales were 0.93, 0.93, 0.83, 0.84, and 0.84, respectively.

To measure perceived organizational support, Eisenberger's questionnaire was used. This questionnaire has eight items that are graded using a seven-point Likert scale (1 indicating completely disagree to 7 indicating completely agree). Therefore, the range of scores is between 8 and 56, and a higher score means more perceived organizational support. Finally, scores between 8 and 24 indicate poor perceived organizational support, between 24 and 40 indicate moderate perceived organizational support, and scores between 40 and 56 indicate very good perceived organizational support. The reliability and validity of the Persian version of Eisenberger's Perceived Organizational Support Questionnaire was confirmed by Rajabi et al.[15] in Iran who they have also reported the total Cronbach's alpha coefficient as 0.84.

Family function was measured with Family Assessment Device. This questionnaire has 19 items and it determines the family member's ability to compromise with intrafamilial roles on a four-point Likert scale in the form of completely agree (4), agree (3), disagree (2), and completely disagree (1). A higher score indicates healthier family performance. The validity and reliability of the Persian version of questionnaire had already been established in various studies. The reliability values in the study by Zadehmohammadi and Malek^[16] in Iran had been determined by 0.92. In the present study, the reliability of this questionnaire in a pilot sample of 25 nurses was examined and the interclass correlation coefficient was 0.76.

After assigning the informed consent forms by participants, data gathering was done and data were analyzed with SPSS. Before the multiple linear regression, it was checked whether the data met the key assumptions of the regression. For each of the predictor variables, tolerance values considered > 20. The variance inflation factor was less than 10 and the Durbin-Watson indicator was between 1 and 6 that indicates no significant statistical error. Multiple linear regression analysis was done considering unstandardized coefficient (B) and standardized coefficient (β). Significance determined as *P* < .05.

Ethical considerations

This study was approved in the Ethics Committee of Isfahan University of Medical Sciences (IR.MUI. NUREMA.REC.1401.006). All the researchers of this study believed in Helsinki Ethical principles. The informed consent form was completed by the participants at the beginning of the study.

Results

The mean, standard deviation, and correlation coefficient between the main variables are reported in Table 1. The results showed that there is a statistically significant correlation between the communication with colleagues and family function (P < .01) [Table 2]. There was no statistically significant correlation between total performance score and family function (r = 0.023, P < .01).

Results of multiple regression analysis showed no significant correlation between family function and other remained variables included general self-concept, care, communication, knowledge, and leadership [Table 3]. Finally, findings showed that all above predicting variables were accounted for 0/059 of total variance (R²) of the family function (P < .01).

Discussion

The purpose of this study was to investigate the relationship between professional self-concept and perceived organizational support with family functioning in nurses.

Table 1: Demographic data and personal characteristics (n=250)

| Variable | Terms | Frequency (%) | | |
|-----------------|-------------------------------|---------------------------|--|--|
| Sex | Female | 207 (82.8) | | |
| | Male | 43 (18.2) | | |
| Marriage | Married | 132 (52.8) | | |
| | Single | 112 (44.8) | | |
| | Divorced | 6 (2.4) | | |
| Education | Masters | 226 (90.4) | | |
| | Masters and PhD | 24 (9.6) | | |
| Employment | permanent | 95 (38) | | |
| status | Contractual | 13 (5.2) | | |
| | Conventional | 55 (22) | | |
| | Design period | 35 (14) | | |
| | Other | 52 (20.8) | | |
| Income | Income lesser than expenses | 165 (66) | | |
| | Same as the expense | 80 (32) | | |
| | More revenue than expenditure | 5 (2) | | |
| Shift status | Fixed morning work | 57 (22.8) | | |
| Shift status | Fixed evening work | 8 (3.2) | | |
| | Fixed night work | 3 (1.2) | | |
| | rotating shift | 182 (72.8) | | |
| Variable | | Mean (standard deviation) | | |
| Age | | 35.28 (8.44) | | |
| work experience | 10.9 (8.2) | | | |

| Table 2: Mean standar | I error and interc | correlation between | key variables | (<i>n</i> =250) |
|-----------------------|--------------------|---------------------|---------------|------------------|
|-----------------------|--------------------|---------------------|---------------|------------------|

| Variables | Mean (SE) | Correlation coefficients | | | | | | | | |
|---------------------------------|-----------------|--------------------------|---------|---------|---------|---------|---------|-------|-------|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1. Staff Relations | 30.14 (4.17) | 1 | | | | | | | | |
| 2. Care | 29.45 (4.42) | 0.803** | 1 | | | | | | | |
| 3. General nursing | 26.43 (6.52) | 0.453** | 0.490** | 1 | | | | | | |
| 4. Communication | 29.40 (4.63) | 0.842** | 0.740** | 0.573** | 1 | | | | | |
| 5. Knowledge | 28.44 (5.21) | 0.635** | 0.615** | 0.748** | 0.750** | 1 | | | | |
| 6. leadership | 27.56 (4.91) | 0.713** | 0.684** | 0.478** | 0.759** | 0.679** | 1 | | | |
| 7 Total self-concept score | 1717.07 (25.41) | 0.825** | 0.817** | 0.766** | 0.898** | 0.883** | 0.824** | 1 | | |
| 8. Organizational support score | 15.54 (8.23) | 0.043 | 0.045 | 0.187** | 0.031 | 0.106 | 0.140 | 0.120 | 1 | |
| 9. Family functioning | 55.14 (7.66) | 0.201** | 0.098 | 0.040 | 0.141 | 0.094 | 0.072 | 0.109 | 0.023 | 1 |

P<0.01**

Table 3: Results of multiple regression analysis to examine the prediction model of nurses' family function

| Variable entered | Unstandardized Coefficients | | Standardized Coefficients | t | Р | CI | |
|------------------------------|-----------------------------|------------|---------------------------|-------|-------|-------------|-------------|
| | В | Std. error | Beta | | | Lower bound | Upper bound |
| Staff Relations | 0.725 | 0.248 | 0.395 | 2.924 | 0.004 | 0.237 | 1.214 |
| Care | 0.241 | 0.192 | 0.139 | 1.257 | 0.210 | 0.618 | 0.137 |
| General nursing | 0.052 | 0.114 | o. 044 | 0.456 | 0.649 | 0.277 | 0.173 |
| Communication | 0.023 | 0.234 | 0.014 | 0.099 | 0.921 | 0.484 | 0.438 |
| Knowledge | 0.079 | 0.177 | 0.053 | 0.443 | 0.658 | 0.271 | 0.429 |
| Leadership | 0.183 | 0.164 | 0.118 | 1.120 | 0.264 | 0.506 | 0.139 |
| Organizational support score | 0.013 | 0.060 | 0.014 | 0.222 | 0.825 | 0.132 | 0.106 |

The findings showed that one of seven variables entered in the model significantly predicted the family functioning in the nurses which emphasizes the relative importance of this factor among other factors. Considering the significant predicting role of the staff relations (the state of interpersonal relationships among nursing staff), the findings suggest that this factor may play a more effective role in the wellbeing of nurses' family life. A study by Kamkar and Madani^[17] on healthcare workers the findings similarly showed that relational problems and conflicts between colleagues in a work environment may affect family function. In the other word, appropriate communication with friends and colleagues may have a significant protective role in reducing family-work conflicts, and therefore, improving individual, family, social, and professional functions.^[18,19]

Moreover, the study of Farshad *et al.*^[20] on nursing students demonstrated a significant positive correlation between communication skills and family function. Such findings highlighted the importance of peer support and communication skills in predicting the health professionals' family function. In line with the present study of Ghaffari *et al.*,^[21] on the population of married students, a significant relationship was found between satisfaction with relationships and family performance.

Other findings of this study revealed no significant correlation between professional self-concept indices (care, general nursing, communication, leadership, knowledge) and organizational support with family function. To the best of our knowledge, the predicting role of these variables on the health professionals' family functioning has not been assessed separately in similar studies. However, the findings have been discussed considering the most relevant studies. For example, in case of the predicting role of the "caring" subscale, the results of Yu^[4] and Grzywacz^[22] showed that there was no significant relationship between nursing care and family performance in second-level hospitals, which is in line with the present study. In second-level hospitals, family conflicts were reported at an average level. Moreover, Raesi et al.,[23] study on healthcare professionals during COVID-19 pandemics showed significant correlation between engagement in caring and family-work conflict. These different results may be due to different study contexts and critical situations raised in pandemics, such that COVID-19 faced nursing profession with a major challenge of being a nurse versus being a family member.

According to results from the present study, there was no correlation between "general nursing" subdomain and family function. Nevertheless, positive association between these two factors has been reported in a study.^[10]

As in another finding, no significant relationship was found between the communication subdomain of the professional self-concept and the family functioning of nurses, which is in line with the results of the study by Fallahi Khoshknab *et al.*^[24] According to the findings of this study, 52% of nurses reported that communication with patients affects their family life. The results of the present study showed that the "knowledge" dimension did not predict the nurses' family function. However, the predicting role of the nurses' education level in their family functioning, this finding was consistent with those of Zeng *et al.*,^[25] Alizadeh *et al.*,^[26] Asadi *et al.*,^[26] and Nasiripour *et al.*,^[27] that illustrated no significant correlation between family function and level of education in Chinese nurses. According to the results of these studies, academic and educational opportunities do not seem to be an important factor in reducing work-family conflicts and family functioning, respectively. However, the findings of Labrague *et al.*'s^[28] study have supported such association.

The findings of the present study also showed that there was no correlation between perceived organizational support and family function that was consistent with those of^[26] Robaee *et al.*^[12] Moreover, Seif *et al.*' $s^{[29]}$ study on married nurses showed that there was an association between supervisor support in workplace and family-work conflicts. It seems that other above variables have a moderator role in organizational support and family function that can be investigated in further studies.

Limitation and recommendation

This paper shed more light on the significant potential predicting factors of the nurses' family functioning and important role of organizations to support their family health. However, selecting the study participants from the few health centers may limit the generalizability of the findings. It is worthwhile to suggest conducting nationwide studies in different hospitals and including other potential variables that may modify the association among the predictors and family functioning.

Conclusion

The findings supported a significant relationship between relationship with colleagues and family performance of the nurses. Based on such finding, promoting the healthcare organizations' human climate may improve nurses' wellbeing and hereby their family functioning which could further improve quality of healthcare services. It may be worthwhile to suggest supporting interpersonal and interprofessional relationships to ensure a healthy professional life for the nurses. More investigations are needed to identify either predicting or modifying the role of a wider variety of potential sociocultural variables.

Acknowledgments

We thank all the nurses and those who contributed to this study.

Journal of Education and Health Promotion | Volume 13 | April 2024

Financial support and sponsorship

Isfahan University of Medical Sciences provided financial support for this study.

Conflicts of interest

The authors have no conflict of interest.

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