Association between perceived social support and occupational burnout in Greek nurses: A preliminary study

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ABSTRACT

Purpose: To examine the relationship between perceived social support and burnout among nurses.
Materials and methods: The participants of this study were 42 Greek nurses of a general hospital which were randomly selected. Data was collected using the Greek version of Maslach's Burnout Inventory for burnout assessment and the Greek version of 'The Multidimensional Scale of Perceived Social Support' for the assessment of participants' levels of perceived social support. A self-administered questionnaire with questions about socio-demographic and work-related characteristics was used. Descriptive statistics and Spearman's rho correlation coefficient analysis were conducted.
Results: The results showed a negative association between emotional exhaustion, depersonalization and perceived social support, especially from friends. Social support from significant others found to have the highest impact while family support found to have the least impact in nurses' social support.
Conclusions: Findings could be applied to the assessment of burnout in Greek nurses and to future prevention of burnout through the enhancement of perceived social support.
Keywords: Perceived social support, burnout, nurses, emotional exhaustion, depersonalization, personal accomplishment

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INTRODUCTION

Although burnout can occur in most occupational fields, the ones that include interacting with other people and exposure to illness and death such as nursing may be at a higher risk of burnout as they experience great levels of stress [1]. Shifts that include extended work hours and multiple patient care could impact nurses both on the physical and psychological levels. For example, in a study revealed that employees of humancentric professions such as nurses were more prone to experience burnout contrary to others such as company employees. Also, burnout syndrome was found to have a negative impact on the quality of life in nurses [2-3].

Although helping others can offer emotional satisfaction, there could be many instances where patients can be demanding, heavily medicated, or unable to express their feelings of gratitude for other reasons resulting in fewer amounts of rewarding in nurses and thus, to lower levels of coping mechanisms. It appears that multiple job demands such as night shifts, working overtime and more patient care contacts could be reasons for nurses to experience high levels of emotional exhaustion and depersonalization [4]. Furthermore, the complexity of the work, health risks, high workloads, interpersonal conflicts, low hospital resources, ambiguity of one's job role, and the pressure of time and lack of appreciation are all associated to burnout [2,5,6].

In nurses working at an Intensive Care Unit in Shanghai, the high levels of burnout were mostly detected in the lack of personal accomplishment, then in emotional exhaustion, and lastly in depersonalization. Some researchers though, found low levels of depersonalization but the levels of personal accomplishment were equal to the levels of emotional exhaustion [7].

Sociodemographic factors such as age, gender, educational level, and years of work as well as marital status have been found to be related to burnout [8-9]. To continue, there could also be a difference between nurses of different wards regarding the levels of burnout. For instance, nurses of the emergency department and Intensive Care Unit reported higher levels of burnout contrary to the nurses of the orthopedic and dialysis units. Due to the above, it appears that all three dimensions are essential for the burnout to be detected despite in which dimension is more apparent. To summarize, according to the literature, nurses show high levels of burnout, and some factors appear to influence its amount either positively or negatively.

One way of coping with occupational burnout lies in the area of social support. Most of the researches indicate that social support from friends, family, and significant others act as a resource in order to minimize the levels of burnout whereas job demands appear to increase them. A research suggests that grateful people tend to have a high degree of perceived social support and that can be enhanced by gratitude [10].

However, differences regarding how one perceives social support were found between countries in the study of according to which women perceived less social support than males in contrast to the men and women in the Netherlands [11]. However, females tend to have higher than males [10-11]. In accordance to the above, a possible gender difference can be implied. Moreover, supervisors and work engagement were found to be predictors of nurses' intention to stay in a workplace. Supervisors' support seemed to influence all dimensions of burnout, especially depersonalization and low personal accomplishment [12-13]. Also, the combination of low supervisors' support and the high job demands indicated emotional exhaustion in Nigerian nurses. However, support acted as a moderator to nurses' job demands on personal accomplishment but no longitudinal relationship between burnout and coping was found [14-15]. In a longitudinal study, the low support from co-workers appeared to lead to depersonalization, whereas job demands were related to emotional exhaustion. Thus, a work environment which would be hostile and produce negative emotions to the employees may have the same effect.

On the other hand, there was no difference in the levels of burnout between midwives and hospice nurses who shared the same high social support from their superiors, and burnout could be predicted by the levels of social support only in midwives. However, the low support from their superiors indicated a significant difference in the levels of burnout between hospice nurses and midwives [16]. Moreover, burnout was found to be mediated by coping strategies such as social support, recreation, self-care, and rational/cognitive coping among oncology nurses with the highest levels of burnout detected in the emotional exhaustion and the lack of personal accomplishment [17]. To add to that, nurses with higher perceived social support experienced lower levels of burnout although personality seemed to play a role regarding the experience of burnout [18].

A researcher found that social support, specifically from significant others, reduced all dimensions of burnout. In another study researchers suggested that inadequate support from family and a friendly environment in nurses is related to burnout [3,6].

Except from the work environment and social support at work, work-family conflict was found to increase the emotional exhaustion dimension of burnout but social support in accordance to staff adequacy and a good leader reduced emotional exhaustion and depersonalization [19].

The aim of this study was to identify the possible relationship between the levels of perceived social support and burnout syndrome in a sample of nursing professionals of a general hospital in Greece.

The results could facilitate the assessment of nurses' burnout levels as well as the possible improvement of their social support and thus, their burnout levels.

MATERIALS AND METHODS

A cross-sectional design was used for this project with two variables; participants' level of perceived social support and participants' levels of burnout syndrome. In order to determine whether or not the two variables were correlated, a correlation coefficient was performed. It is very important to note that correlation doesn't imply causation. The two variables, perceived social support and burnout syndrome, are both continuous variables. There was no independent variable and dependent variable.

Participants

In the present study, a sample of forty-two nurses was randomly recruited from a general hospital in Greece (N=42).

Their participation was freely chosen and without any credits or financial reward promised. The inclusion criteria were: to be nurses working in the general hospital for least 1 year, speak and read the Greek language.

There were no exclusion criteria regarding age, gender, education, marital status, working hours, working sector, working ward, administrative duties or years working as a nursing professional in general and in the current working ward.

The time estimated for the completion ranged from 10 to 20 minutes.

The study took place during the period of November - December 2019.

Tools

The two questionnaires were used: the Greek version of The Multidimensional Scale of Perceived Social Support and the Greek version of Maslach Burnout Inventory (MBI)'. T

he Maslach Burnout Inventory- Human Services Survey (MBI-HSS) [20] which assesses the levels of participants' burnout, consists of 22 items, which form three dimensions: emotional exhaustion (nine items), personal accomplishment (eight items) and depersonalization (five items). It is a self-evaluated inventory with a six-point response scale rating from 0 (never) - 6 (every day).

The items represent a characteristic in which a participant has to evaluate the level of which item appeals to him or her. The scores of each dimension are calculated separately. Higher scores on the first (emotional exhaustion) and the third (depersonalization) dimensions and lower scores on the second dimension (personal efficacy) may indicate high levels of burnout [20]. The Greek version has been shown to have satisfactory reliability and construct validity [21-22]. The scale has been used in a variety of studies in Greece [3,23].

The Multidimensional Scale of Perceived Social Support (MSPSS) [24] is a 12-item instrument that measures an individual's perceived level of social support. Participants were asked to rate their perceived level of social support on a 7-point Likert response rating from 1 (very strongly disagree) – 7 (very strongly agree). The scale consists of three groups depending on the source of support. Each group consists of 4 items: family (3, 4, 8, 11), friends (6, 7, 9, 12), and significant others (1, 2, 5, 10). The score can range from 12 to 84 with a high score indicating higher levels of social support. Each subscale indicates a score and the sum of all sub-scale scores gives the overall scale score. The score of each subscale ranges from 4 to 28 and the total score from 12 to 84. The Greek version of MBI has been found to be a reliable and valid assessment tool with an overall Cronbach's alpha at 0.804 [25-26]. The scale has been used in many studies [3,23,27].

Ethics

Ethical approval for this study was given by the ethics board of the ICPS College for Humanistic Sciences. Each participant was asked to take part in the study. To those participants who agreed to take part, the information sheet, the consent form, and a pen were handed over. The participants were both verbally and in a written form informed that the study is anonymous and that there are no correct or incorrect responses. Furthermore, it was explained to them that they can stop their participation. Before the participants were asked to fill out the questionnaires, they were asked to fill out the consent form and to read the information sheet.

Data Analysis

After collecting the questionnaires, the data were inserted and processed through SPSS 20 statistics. Descriptive statistics were obtained regarding gender, age, marital status, educational level, wards and sectors, years and hours of working as well as whether the participants possess an administrative position or not. After that, a normality test was performed. Due to the fact that no normality was found between the samples, Spearman's rho correlation coefficient followed. Spearman's rho is a non-parametric test which assesses a possible positive or negative correlation between variables. The strength of the relationship between the two variables can be "very weak" (.00- .19), "weak" (.20- .39), "moderate" (.40- .59), "strong" (.60- .79) and "very strong" (.80- 1.0).

RESULTS

Descriptive Statistics

The results regarding the descriptive statistics indicated that most of the participants were female (n=37), married (n=24), in the technological sector (n=29) with university (n=18) and postgraduate studies (n=19). The mean age was 43.14 (SD=9.14). The working years in the specific field varied from 1 to 35 (M=20.14, SD=8.49) whereas the working years in the specific ward ranged from 1 to 30 (M=8.73, SD=6.66). Lastly, their working hours per week ranged from 4 to 50 (M=39.95, SD=6.22) (Table 1).

Table 1. Means and Standard deviations of participants' responses on burnout dimensions

	M	**SD**
Personal accomplishment	2.19	0.86
Depersonalization	2.36	0.79
Emotional exhaustion	1.74	0.77

M= Mean, SD= Standard Deviation

Through comparing the means and standard deviations of burnout dimensions, burnout is mostly detected by depersonalization (M=2.36, SD=.79) and personal accomplishment (M= 2.19, SD= .86) whereas is less detected by emotional exhaustion (M= 1.74, SD= .77). Most participants' responses show moderate levels of personal accomplishment and depersonalization as well as low to moderate levels of emotional exhaustion. Through comparing the means and standard deviations of all three kinds of social support, most of the participants (n=36) show high levels of social support. The responses are higher for social support from significant others (M= 6.04, SD=1.16), then for social support from friends (M=5.94, SD=1.07) and then for social support from family (M= 5.89, SD= 1.45) (Table 2).

Table 2. Means and Standard deviations of participants' responses on social support's dimensions

	M	**SD**
MSPSS (Significant Others)	6.04	1.16
MSPSS (Family)	5.89	1.45
MSPSS (Friends)	5.94	1.07

M= Mean, SD= Standard Deviation

Table 3. Correlations between burnout and perceived social support

	Personal accomplishment	**Depersonalization**	**Emotional Exhaustion**	**Significant Others**	**Family Total**	**Friends**	**Social Support Total**
Personal Accomplishment	-	0.450**	0.281	-0.188	-0.152	-0.283	-0.203
Spearman's rho		0.003	0.071	0.232	0.336	0.069	0.198
Depersonalization	0.450**	-	0.630**	0.246	-0.122	-0.280	-0.354
Spearman's rho	0.003		0.000	0.116	-0.443	0.072	0.021
Emotional exhaustion	0.281	0.630**	-	-0.304	-0.177	-0.352*	-0.311*
Spearman's rho	0.071	0.000		0.050	0.262	0.022	0.045
Significant Others	-0.188	-0.246	-0.304	-	0.715**	0.663**	0.625**
Spearman's rho	0.232	0.116	0.050		0.000	0.000	0.000
Family	-0.152	-0.122	-0.177	0.715**	-	0.517**	0.594**
Spearman's rho	0.336	0.443	0.262	0.000		0.000	0.000
Friends	-0.283	-0.280	-0.352*	0.663**	0.517**	-	0.576**
Spearman's rho	0.069	0.072	0.022	0.000	0.000		0.000
Social Support Total	-0.203	-0.354*	-0.311*	0.625**	0.594**	0.576**	-
Spearman's rho	0.198	0.021	0.045	0.000	0.000	0.000	

* $p < 0.05$. ** $p < 0.01$.

In order to determine whether there is normality within the data, a normality test was performed. The data were not found to be normally distributed and thus, a correlation analysis was performed using the non-parametric Spearman's rho correlation coefficient. A Spearman's rho correlation was computed to assess the relationship between the three dimensions of burnout and perceived social support by family, friends and significant other using a sample of 42 participants.

The results suggested that there was a weak negative correlation between depersonalization and perceived social support total which was statistically significant, $r_s(42) = -0.354$, $p < 0.05$. Moreover, there was a moderate negative correlation between emotional exhaustion and perceived social support total which was statistically significant, $r_s(42) = -311$, $p < 0.05$. Lastly, there was a weak negative correlation between emotional exhaustion and support by friends which was statistically significant, $r_s(42) = -0.352$, $p < 0.05$ (Table 3).

Overall, there was a weak, negative correlation between two dimensions of burnout and perceived social support. Increases in the amount of perceived social support were correlated with decreases in the levels of burnout. That is, when nurses have high levels of perceived social support, their amounts of burnout appear to be slightly small.

DISCUSSION

The purpose of this study was to investigate any possible relationships between the three dimensions of occupational burnout and perceived social support from friends, family and significant others in nurses. The participants were 42 nurses of a general hospital in Greece. The relationship between the variables was examined through Spearman's rho correlation coefficient analysis. Our hypothesis was that social support will be negatively correlated to nurses' burnout in all of its dimensions. Perceived social support was found to be negatively correlated to emotional exhaustion and depersonalization but not related to participants' low levels of personal accomplishment. Thus, our hypothesis was partially supported.

The findings from this study suggest that high levels of occupational burnout may be related to the level of social support in nurses. Specifically, depersonalization and emotional exhaustion may be related to perceived social support in general and emotional exhaustion mostly related to social support from friends, albeit to a low degree.

To elaborate, the present findings suggest that depersonalization and emotional exhaustion are negatively associated with perceived social support at a total level. These findings are in accordance with those of other studies which also argue that job resources were associated with depersonalization [28-29].

Emotional exhaustion and depersonali-zation were both found to be related to high levels of social support. According to Maslach, high levels of emotional exhaustion and depersonali-zation and low levels of personal accomplishment may indicate burnout [20]. The significance of the result lies in the possibility that high levels of social support could assist in diminishing the levels of emotional exhaustion and depersonalization and thus, reduce burnout or even prevent it. Even if no association between low personal accomplishment and social support was found, the probability that reducing depersonalization and emotional exhaustion through social support could also enhance the levels of personal accomplishment should be examined.

Some researches regarding the relationship between social support and burnout indicated that high levels of social support are related to lower levels of burnout [3,18]. However, social support from superiors and significant others appeared to be the most important influential factors of emotional exhaustion [3,14]. These studies are contrary to the present finding which suggests that emotional exhaustion is related to social support from friends instead of the social support from significant others. This finding could be consistent, though, with a study which the researchers suggested that burnout is associated with low levels of social support from family and friends. However, higher levels of social support were granted by significant others, a finding supported by another study [3,6]. These findings could be explained firstly, from the possibility that nurses receive high support from their superiors but they valuate more the support from friends. Secondly, there is a possibility that nurses do not consider their superiors as significant others but as friends considering that the participants work for a mean of 20 years as nursing professionals and about 8 years in the specific ward. Also, there is a possibility that they find support from their coworkers considering them both friends and significant others. Lastly, nurses' patients could be perceived by them as significant others, gaining both support and gratitude from them resulting in high levels of perceived social support [10].

In the present study nurses' burnout levels were mostly detected in depersonalization, then in low personal accomplishment, and lastly in emotional exhaustion. The related literature varies. According to a research, job demands are related to emotional exhaustion, whereas job resources are negatively related to depersonalization. Even though participants showed high levels of social support, depersonalization levels were higher than emotional exhaustion [28]. This could be attributed to the fact that participants' burnout does not entail high job demands but lack other job resources except perceived social support such as autonomy or feedback. Furthermore, according a study, personal factors such as the reason that a nurse has chosen

one's profession may predict the levels of personal accomplishment, explaining why the participants from the present study showed moderate levels of personal accomplishment [30]. Personal accomplishment seems to be the second detector of burnout which may imply that the reason that nurses chose their profession may not be clear to them, or that they may have had higher expectations of their work as a nursing professional.

LIMITATIONS

Although this study offers multiple insights, there are some limitations associated with it. Firstly, the results of this study cannot be representative and generalized due to both the small sample and the fact that they were chosen from a single general hospital in a specific country and at a single point in time. Also, nurses had different level education, working years and working hours so this may influenced their responses. Replications in Greece and elsewhere among nurses of general hospitals are needed in order for conclusive generalizations.

CONCLUSIONS

The investigation on where burnout is mostly detected could assist in examining the core of burnout in each organization, considering that the three dimensions of burnout are distinct.

The results showed a negative association between emotional exhaustion, depersonalization and perceived social support, especially from friends.

Social support from significant others found to have the highest impact while family support found to have the least impact in nurses' social support.

Even though the findings show moderate to low levels of burnout, occupational burnout has been considered as a chronically evolved syndrome, and thus, preventing burnout from evolving is important for nurses' health and hospitals functionality.

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Conflict of interest

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