

Compassion Fatigue and Perceived of Social Support Among Polish Nurses

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Abstract

Background:

Social support has an important role to prevent traumatic stress connected with performing a nurse profession. The aim of the study was to measure the relationship between compassion fatigue and perceived social support in Polish nurses.

Methods:

The study was conducted in a group of 862 professionally active nurses in Poland using the CAWI method (Computer-Assisted Web Interview). Professional Quality of Life scale (ProQOL) and the Multidimensional Scale of Perceived Social Support (MSPSS) were used for collecting the data. StatSoft, Inc. (2014) was used for data analysis. For comparisons between the groups: Mann-Whitney U test, ANOVA Kruskal Wallis test, multiple comparisons (post-hoc). Relationships between variables were tested using the Spearman's R test, Tau Kendall's test and chi 2 test. The level of significance in all calculations was assumed $p < 0.05$.

Results:

The research showed the presence of Compassion Satisfaction, Compassion Fatigue and Burnout in the group of Polish hospital nurses. A higher level of perceived social support was associated with a lower level of compassion fatigue ($r = -0.35$; $p < 0.001$). A higher level of social support was associated with higher job satisfaction ($r = 0.40$; $p < 0.001$). The study also found that a higher level of social support was associated with a lower risk of Burnout ($r = -0.41$; $p < 0.001$).

Conclusions:

Preventing of Compassion fatigue and Burnout should be a priority for health care managers. It is worth noting that an important predictor of Compassion Fatigue is the fact that Polish nurses often work overtime. It is necessary to pay more attention to the key role of Social Support in preventing CF and BO.

Background

Compassion is an important and necessary element in providing professional patient care [1]. Health care professionals such as nurses are regularly exposed to contact with violence, suffering and death. Sometimes except the caregiver role, nurses have to provide psychological support for the patient's family. Chronic stress and anxiety can lead not only to somatic symptoms but can also be harmful to the employee's mental sphere leading to depression and social problems [2, 3].

Stamm (2010) noted that the work of a helper, including work in health care, may affect the quality of professional life. He identified positive and negative aspects of work.

He described the positive aspect as satisfaction with compassion (CS) and presented it as feeling the pleasure of helping others, caring, and how the work performed can have a positive impact on society [4].

The consequences of long-term emotional involvement in caring for people experiencing traumatic stress and suffering i.e. the negative aspect of help were defined as compassion fatigue (CF) [5]. Fatigue of compassion consists of two parts. The first is burnout, which is associated with exhaustion and negative emotions that accompany it like anger and frustration. The second part of Secondary Traumatic Stress is the fear of doing work and traumatic experiences [6, 7].

Studies have shown a strong relationship between occupational burnout of healthcare professionals and patient safety and medical malpractice [8–10]. Appropriate management of human resources, improvement of working conditions of healthcare professionals could certainly improve the well-being of employees. However, it is worth paying attention not only to economic factors. More and more research is paying attention to psychosocial resources, especially the role of social support, which helps reduce the psychological burden of doctors, nurses and caregivers [11–14]. Chen et al. (2017) define social support as „individual’s experience of being cared for and loved, having a sense of being valued and needed by other people, and being part of a mutually supportive network” [15].

Healthcare professionals, due to the specific of work, cannot avoid stressors, but those who receive social support are less susceptible to CF and they handle stress better [16, 17]. A sense of coherence and respect helps to maintain the mental well-being of nurses [18]. Social support is therefore strongly correlated with BO and should be a key element to prevent CF and BO [19, 20].

The aim of the present study was to determine the perception of social support among nurses and to identify the relationship between the impact of social support on CF and BO.

The above data can help the health manager and psychologists in providing social support to nurses to improve their mental health, which in turn can help improve working conditions and prevent burnout.

Methods

The study was conducted among a group of 862 nurses using the CAWI method (Computer-Assisted Web Interview). Six people were removed from the data analysis due to errors in completing the form. Finally, 856 respondents were included, being composed of 828 women (96.7%) and 28 men (3.3%). The age of the respondents ranged from 20 to 68. The average for the study group was 39 years old (\pm SD 11.51). The years of professional experience of the respondents was a maximum of 51. The average for the respondents was 17 years (\pm SD 12.57). The vast majority of respondents took up work in the adult ward (87%). The time of work of the respondents was mostly full-time work (77%), 23% were employed full-time plus overtime.

StatSoft, Inc. (2014) was used for data analysis. STATISTICA (data analysis software system) - version 12 and Microsoft Excel (version 2016) - Microsoft Office. For comparisons between the groups: Mann-Whitney U test, ANOVA Kruskal Wallis test, multiple comparisons (post-hoc). Relationships between variables were tested using the Spearman's R test, Tau Kendall's test and chi 2 test. The level of significance in all calculations was assumed $p < 0.05$.

The analysis included factors affecting the Compassion Fatigue, Compassion Satisfaction and Burnout of nurses.

In the study were used the following tools for collecting the data:

Sociodemographic Variables

Socio-demographic data were used to collect information on sex, age, job experience, type of work department and the time of work of respondents.

The Professional Quality Of Life scale (ProQOL) - version 5

The ProQOL scale was developed by Dr Beth Hundall Stamm (1992). The study used the version 5 tool from 2009. The validated 30-element questionnaire includes three 10-element subscales: compassion satisfaction (CS), compassion fatigue (CF) and burnout (BO). ProQOL involves assessing Likert scale answers from 1 to 5, where 1 means "never", 5 "very often". The use of the survey is free and available in various languages. The following study uses a Polish version of the scale [21].

The Multidimensional Scale Of Perceived Social Support (mspss)

The authors of the Multidimensional Scale of Perceived Social Support (MSPSS) are Gregory Zimet et al. (1988). This instrument consists of three basic sources of support: family, friends, significant other. The range contains 12-items, rated on a 7-point Likert scale, where 1 means "Very Strongly Disagree", 7 "Very Strongly Agree". The following study uses Polish adaptation, whose authors were Buszman and Przybyła-Basista (2017) [22–23]. Obtained agreement of the author of the Polish adaptation to use the tool in carrying out the study.

Results

The study showed no correlation between age and CF ($r = 0,12$; $p = 0,004$). There is no relationship between the age of respondents and BO ($r = 0,05$; $p = 0,18$) and the level of perceived SS ($r = -0,08$; $p = 0,02$).

The study showed a relationship between CS and CF - the higher the CS the lower CF ($r = -0,45$; $p < 0,001$). The higher level of CS was associated with a lower level of BO ($r = -0,71$; $p < 0,001$).

The study observed a correlation between the general perception of SS and CF ($r = -0,35$; $p < 0,001$). The obtained results allowed to identify a significant relationship to CF for support from a significant other ($r = -0,29$; $p < 0,001$), family ($r = -0,30$; $p < 0,001$) and friends ($r = -0,33$; $p < 0,001$). A higher level of perceived SS was associated with a lower level of CF.

There is a significant relationship between the level of SS and the result of CS. A higher level of SS was associated with greater CS ($r = 0,40$; $p < 0,001$). The higher level of SS was also associated with a lower risk of BO ($r = -0,41$; $p < 0,001$) (Table 1).

Table 1
Results of Simple Regression Analyses Between age, CS, SS and CF, BO, CS, SS

Characteristic	Compassion Fatigue		Burnout		Compassion Satisfaction		Social Support	
	r	p	r	p	r	p	r	p
Age	0,12	0,004	0,05	0,18	0,03	0,36	-0,08	0,02
Compassion Satisfaction	-0,45	< 0,001	-0,71	< 0,001	-	-	0,40	< 0,001
Social Support	-0,35	< 0,001	0,41	< 0,001	0,40	< 0,001	-	-
Friends	0,33	< 0,001					-	-
Family	0,30	< 0,001					-	-
Significant Others	0,29	< 0,001					-	-

An analysis of BO occurrence was conducted taking into account the specificity of hospital wards in which Polish nurses work. Due to the possibility of large differences in results, departments were divided into two particularities: adult and pediatric wards. Then types of departments when nurses work were identified, such as ICUs, psychiatric, surgical and general. In response "other" respondents most often indicated the "A&E department".

ANOVA analysis indicated that the highest result was obtained by people working in the "surgery" and "other" departments, while the lowest was obtained by those working in the psychiatric ward. The differences in results depending on the department were not statistically significant (Table 2).

Table 2
The level of burnout by particularity and type of work department.

BO	Particularity	Type	N	Mean	Mdn.	Min.	Max.	Q1	Q3	±SD	P
	Pediatric	ICU	28	24,29	24	16	34	21	26	4,78	0,417
		Psychiatric	1	25,00	25	25	25	25	25	-	
		Surgery	19	26,63	26	17	43	20	31	6,82	
		General	27	23,89	24	11	34	20	28	5,51	
		Other	35	25,14	25	13	37	20	31	6,81	
	Adult	ICU	127	25,34	25	11	38	22	29	5,44	
		Psychiatric	41	23,83	25	12	36	18	28	6,16	
		Surgery	218	25,15	25	14	38	21	29	5,49	
		General	171	25,77	26	13	41	22	30	5,91	
		Other	189	25,36	25	10	42	21	29	6,07	

The effect of working time on CF incidence among nurses was examined. The study group was divided into two parts consisting of nurses whose working time equals 1 or less and a group working overtime.

The result of ANOVA analysis showed significant differences in CF depending on working time - people working overtime had a significantly higher result of CF compared to those working full time or less (Table 3).

Table 3
Impact of working time on compassion fatigue

CF	Working time	N	Mean	Mdn.	Min.	Max.	Q1	Q3	±SD	P
	1 or less	659	51,80	51	22	85	45	59	10,73	0,043
	overtime	197	53,40	54	28	78	46	61	10,89	

Discussion

This study showed the presence of CS, CF and BO in the study group. The obtained data indicate that Polish nurses were characterized mainly by the average level of CF, BO and CS. The study indicates a significant role of social support in a profession at high risk of mental and social problems.

Results of the study indicated no relationship between the age of respondents and CF. Other studies regarding age indicate that higher age is associated with a higher CS level

($p = -0.006$) [24].

The presented results, similarly to the study by Zhang YY, Zhang C and co-authors, showed that the positive aspects of work and the associated CS are correlated with a lower intensity of BO ($p < 0.00001$) ($r = -0.446$) [25]. These results may indicate that job satisfaction has a positive effect on the mental health and well-being of nurses [26]. According to Cheung and Lee, a significant problem in achieving job satisfaction is the aggressive behaviour experienced by healthcare professionals. As many as 79.7% of nurses with low satisfaction reported fear of violence and this was associated with the experience of bullying and physical attack in the past [27].

According to the results, social support has a key role in CF and BO. As the study showed, nurses who had a higher level of perceived social support had lower levels of CF and BO. Similar results were obtained in the study of Iranian nurses. Nurses whose perceived SS score was higher were characterized by a lower level of BO ($p = 0.002$; $r = -0.236$) and in the case of family support a lower level of CF ($p = -0.17$, $r = 0.02$) [28]. In other studies, it was proved that higher CS was shown by nurses who sought SS ($p = 0.011$) [29].

Many hospital nurses in Europe work 12-hour shifts and overtime. Even though nurses do not complain about such a high number of hours of work per day, research shows that working over a standard 8 h of work per day is associated with greater dissatisfaction with work (aOR = 1.40; 95% CI 1.20 to 1.62) and a greater intent to leave (aOR = 1.29; 95% CI 1.12 to 1.48) [30]. The results of our study are therefore coherent with the results of the Luther and Gerhart study in which overtime working respondents experienced burnout in three indicators: emotional exhaustion ($p = 0.002$) and depersonalization ($p = 0.001$) and lower personal achievement ($p = 0.05$) [31].

There are some limitations to this study. First of all, it would have been necessary to investigate the reason for such a large number of nurses' working hours, especially because the motivation for overtime could be the social, family or economic situation of the respondents, not just a low salary. An additional advantage of the study could have been to divide the respondents into the private and public sectors due to differences in earnings and working conditions.

Conclusions

CF and BO is a serious problem in the healthcare system. BO prevention should be a priority for people involved in health care human resources management. It is worth noting that an important predictor of CF is the fact that Polish nurses often work overtime. Attention should also be paid to the key role of SS in preventing CF and BO.

Healthcare managers should pay special attention to the number of working hours and mental health of nurses. Effective prevention of CF and BO could affect more efficient work, reduced absenteeism at work, and reduced medical errors. It is possible thanks to a policy aimed at improving the working conditions of all healthcare professionals.

Further qualitative research is needed to identify other CF and BO determinants among nurses.

Abbreviations

CF
Compassion Fatigue
CS
Compassion Satisfaction
SS
Social Support

Declarations

Ethics approval and consent to participate

Consent to Participate:

The participants have been informed about the objective of the study before submitting the survey. A verbal consent was obtained from all participants. The ethics committee approved this procedure because the data was collected by Computer-Assisted Web Interview method. Committee's reference number AKBE/92/2020

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Consent for publication

Not applicable

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

The corresponding author PPM: Medical University of Warsaw

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All authors have read and approved the manuscript.

Availability of data and material

The datasets used and analysed during the current study available from the corresponding author on reasonable request.

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