The role of coping styles and stressors on professional quality of life (Pro-QoL) among in a health emergency operating center workers: a preliminary cross-sectional study

Il ruolo degli stili di coping e dei fattori di stress sulla qualita di vita professionale tra gli operatori di una centrale operativa delle emergenze sanitarie: uno studio preliminare cross-sectional

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ABSTRACT

INTRODUCTION: The professional quality of life (ProQOL) is a fundamental aspect of the care providers' working life and plays an important role in monitoring their mental health status and wellbeing. The objective of this study is to explore the level of ProQOL among the Emergency Operating Center workers in the Italian context and to examine the role of both stressors and coping strategies. Health workers from an Italian 118 Emergency Operating Center participated into the research.
METHODS: A preliminary cross-sectional study has been performed
RESULTS:. The survey's response rate was 72.04% (n = 67). Results found that Stressors are positively correlated with Burnout and Compassion Fatigue whereas Compassion Satisfaction has a positive correlation with the Task-oriented coping strategy and with the Emotion-oriented strategy.
CONCLUSIONS: In conclusion, it is pivotal to implement strategies and solutions that can enhance the levels of satisfaction of Emergency Operating Center workers in order to improve patients care and organizational outcomes.
Key words: Quality of life, Coping, Stressor, Emergency, Nurse.

RIASSUNTO

INTRODUZIONE: La qualità della vita professionale (ProQOL) è un aspetto fondamentale della vita lavorativa del personale che eroga assistenza sanitaria e gioca un ruolo importante nel monitorare il loro stato di salute mentale e fisico. L'obiettivo di questo studio è esplorare il livello di ProQOL tra gli operatori della salute di una Centrale operativa delle emergenze sanitarie nel contesto italiano ed esaminare il ruolo dei fattori di stress e delle strategie di Coping. I partecipanti alla ricerca sono operatori sanitari appartenenti alla Centrale Operativa delle emergenze sanitarie del 118.
METODO: E' stato effettuato uno studio preliminare di prevalenza.
RISULTATI: Il tasso di risposta ai questionari è stato del 72,04% (n = 67). I risultati indicano che il Burnout e la Compassion Fatigue hanno un correlazione positiva con i fattori di stress mentre la Compassion Satisfaction ha mostrato un'associazione positiva con gli stili di coping Task-oriented ed Emotion-oriented.
CONCLUSIONI: In conclusione è importante implementare strategie e soluzioni che possono innalzare i livelli di soddisfazione lavorativa degli operatori delle Centrali Operative di Emergenza per migliorare l'assistenza ai pazienti e i risultati manageriali.
Parole chiave: Qualità della vita, Coping, Stressor, Emergenza, Infermiere.

INTRODUCTION

The Emergency Operating Centers considered a physically and emotionally demanding setting as health workers are confronted with heavy patient loads, long shifts, and challenging care relationships. These factors are involved in determining a complex and stimulating work environment, but also they are more likely to provoke stress in emergency staff (Hunsaker et al. 2015). Along with their role of frontline staff in facing critical and life-threatening situations, the compassion and empathy normally shown by the Emergency Operating Center workers, can put them at risk of negatively affecting their health status (Cavallini, et al. 2016; Samson, Iecovich, & Shvartzman, 2016; Kelly & Lefton, 2017) hence, also their Professional Quality of life (O'Callaghan et al. 2020). The Professional Quality of life describes how a worker involved in helping professions perceives himself as care provider. (Figley, 1995)

The professional quality of life is a fundamental aspect of nurses' working life and plays an important role in monitoring their mental health status and wellbeing, which can acutely affect their performances as well as the quality of care provided. (Borges et al. 2019; Stacey et al., 2016).

Over the last decades, the studies of Figley and Stamm (Figley 2002a; Figley 2002b; Figley 1995; Stamm 2010) have contributed to develop the framework of Professional Quality of life (ProQOL), which have led to the implementation of the ProQOL scale (Stamm 2010) aimed to explore the facets of compassion.

The researches of Stamm (2010) and Figley (1995) on the Professional quality of life revealed a twofold understanding of the concept of compassion, which varies from the positive feeling of Compassion Satisfaction (CS) to the negative one of Compassion Fatigue (CF). The term of compassion satisfaction denotes the rewarding feeling related to a sense of pleasure and gratification that the helper workers perceives from their caregiving work. (Yilmaz & Ustun, 2018)

On the contrary, experiencing Compassion Fatigue means having to deal with a stressful feeling shown in behaviors and emotions that naturally derive from helping other people that are suffering and traumatized. (Figley, 2002b).

Consequently, Stamm's Professional Quality of life model (Stamm 2010) defines Compassion Fatigue as a combination of Burnout (BO), secondary traumatic stress (STS) and poor feeling of Compassion Satisfaction (CS) (Stamm 2010).

In this sense, Compassion fatigue is a negative feeling that affects emergency staff as they experience prolonged exposure to trauma, resulting from caring of patients who have undergone a traumatic experience or very stressful events. (Kelly & Lefton, 2017)

Although nurses experience a feeling of professional satisfaction when their work is carried out in respectful environments (Munger, Savage, & Panosky, 2015), repeated exposure to the consequences of critical events put them at high risk of developing the Compassion Fatigue, a phenomenon that shows a close resemblance to the signs and symptoms in the post-traumatic stress disorder (Sacco et al., 2015). According to Maslach (1982), Compassion Fatigue is a combination of emotional exhaustion, depersonalization and a sense of reduced efficiency in the working performance. The impact of Compassion fatigue on nurses' productivity is a well-known issue that derives from an unbalanced sense of being which reflects its consequences on the quality of nursing practice as well as the patients' safety. (Al Barmawi et al. 2019) In fact, the consequences of Compassion Fatigue along with its factors of Post-traumatic stress disorder and Burnout, negatively affect the quality of nursing care provided in terms of increased staff absenteeism and staff turnover that lead to higher costs for the healthcare organizations (Steinberg, Klatt, & Duchemin, 2017).

As the state of psychosocial well-being is pivotal in influencing the nurses' Professional Quality of life (Palestini et al. 2009), investigating it among the emergency health workers might improve staff retention rate as well as the quality of patient care. (Bellagamba et al. 2015)

In the literature, it has been established that the balance between the positive aspects of Compassion Satisfaction and the negative ones of Compassion Fatigue can be considered as an indicator of Professional Quality of Life (Sacco et al. 2015). In fact, maintaining a working environment with the positive influence of Compassion Satisfaction over the feeling of Compassion Fatigue can be of support for Emergency health workers. (O'Callaghan et al. 2020)

Figley's research outlines a causal model explaining how the development of the Compassion Fatigue is influenced by both coping strategies and environmental factors, such as prolonged exposure to the traumatic event (Figley, 2002; Palestini et al., 2009). The main precursors of a negative ProQOL have been identified in different kind of stressors including socio-demographic and work-related factors (Silva et al., 2017; Yilmaz & Ustun, 2018).

As stressors start to influence the Professional Quality of Life, the Emergency staff reacts with a range of activities, known as Coping Strategies, aimed to reduce stress and moderate the impact of the stressful environment over the physiological responses (El-Shafei et al. 2018). The Coping Strategies may be more or less effective in limiting the onset of the symptoms deriving from a stressful experience (Jones, 2014); therefore, it is not clear the role of the coping strategies in determining the Professional Quality of life of the Emergency Health workers.

The scope of the study aims to explore the level of ProQOL of the Emergency Operating Center workers in the Italian context and to examine the role of both stressors and coping strategies. Considering the international literature on the topic (Jenning, 2008) we took into account the hypothesis that the ProQOL differs among the Emergency staff by their working role in order to better clarify the findings related to the nursing personnel.

Based on the purpose of the study, the research questions were:

1. Is there a relationship between the coping styles of Emergency Operating Center workers and their ProQOL?
2. Which is the coping style that promotes a better ProQOL?

3. Which stressors have a greater influence on Emergency Operating Center workers' ProQOL?

METHODS

Study design

The research was based on a preliminary cross-sectional study design. The description of the study was carried out following the guidelines of Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) (Von Elm et al., 2008).

Sample

Fifty-five nurses and twelve technical operators have been enrolled in the study. The sixty-seven participants work for an Emergency Operating Center on behalf of Regional Health Emergency Company 118, placed in Rome. The participants' recruitment took place on a volunteer basis. The target population has been selected using a probabilistic sample (Polit & Beck, 2009).

Data collection

The data have been collected from October 2017 to December 2017. The inclusion criterion were being an active health worker of the 118 Emergency Operating Center. All the participants have been asked to fill out a questionnaire of which they have received full instructions on how to compile it. The questionnaires had to be completed at at least the 80% to be suitable for the study purpose.

Over 93 questionnaire provided, 79 (84.94%) returned it correctly compiled where 11 (15.06%) were rejected because the number of responses was < 80% which exceeded the inclusion criterion. The questionnaires included into the analysis was 67 and the response rate was 72.04%.

Instruments

All the instruments implemented in this study have been validated in Italian, including the Professional Quality of Life Scale (ProQOL) (Stamm, 2010), the Coping Inventory for Stressful Situations (CISS) (Pedrabissi & Santinello, 1994), the Health Survey Short Form 12 (SF-12) (Ware Jr, Kosinski, & Keller, 1996), and the Rapid Stress Assessment Scale (RSAS) (Tarsitani & Biondi, 1999).

ProQOL is a questionnaire that evaluates the quality of professional life, consisting of 30 items and considering three dimensions, each comprised of 10 items. The first dimension is Compassion Satisfaction (CS), which represents the positive feelings that an individual has both in working with traumatized or suffering people and in helping others, in particular, the pleasure of doing the job well. The second dimension is Compassion Fatigue (CF), which is comprised of the feelings of deep participation and understanding for someone struck by suffering, accompanied by a strong desire to alleviate suffering or to eliminate its cause. The third dimension is the Burnout syndrome that arises as a response to stress conditions. Each item of the ProQOL is measured on a five-point Likert scale from "Never" = 1 to "Very often" = 5. Furthermore, for items 1, 4, 15, 17, and 29, the matrix score is reversed. However, the items that make up the size of the CS are 3, 6, 12, 16, 18, 20, 22, 24, 27, and 30 while the items that make up the Burnout dimension are items 1, 4, 8, 10, 15, 17, 19, 21, 26, and 29. Finally, those that make up the CF dimension are 2, 5, 7, 9, 11, 13, 14, 23, 25, and 28.

The CISS, on the other hand, measures the coping strategies that are put in place within stressful situations. It is a tool that consists of 48 items and considers three dimensions, with each composed of 16 items that are randomly distributed within the questionnaire to avoid biased distortion of responses. The answers are evaluated on a five-point Likert scale that goes from "For nothing" = 1 to "Very much" = 5. The first dimension is called Task-oriented (T), or the coping strategies that address the efforts directed to a solution, to its cognitive restructuring, or to attempts to modify an existing situation. The second dimension is called Emotion-oriented (E), referring to the coping strategies that address emotions and the emotional reactions that each individual turns to for stress reduction. The third and final dimension is the Avoidance-oriented (A) dimension, or the coping strategies that address avoidance; these are oriented to those activities and cognitive changes that are considered necessary to avoid a stressful situation. Moreover, in the questionnaire, there are items that are reversed, where a score of 1 on the Likert scale is considered the maximum score while a score of 5 constitutes the lowest score. Therefore, concerning the 13 negative items, these were transposed positively in the following way: 5-4, 4-2; 3 = 3; 2 + 2; 1 + 4 (Pedrabissi & Santinello, 1994).

The RSAS is a questionnaire that quickly estimates stress. It is composed by 15 items distributed among five factors, including Anxiety (items 1, 5, and 10), Depression (items 2, 4, and 7), Somatization (items 9, 12, and 14), Aggressiveness (items 3, 6, and 8), and Social Support (items 11, 13, and 15). Each factor comprises of 3 items over 15, where items 1-9 refer to the Health state at the time of compilation and items 10-15 detects the Health state over the past six months. Three items (7, 11, 13) are assessed following a reverse scale as they describe the Social support factor which, does not represent a psychopathological dimension but rather it is considered as an essential factor in response to stressors (Tarsitani & Biondi, 1999). Responses are evaluated by a Likert scale in a four-point format (not at all, slightly, fairly, very), rating from 0 to 3 points. Over all the factors, the questionnaire admits a score ranged from 0 to 45 points, which quantifies the degree of response to stressors.

The SF-12 questionnaire is a tool for assessing the health status. It is the shortened version of SF-36, which consists of 12 questions. This questionnaire was created by extrapolating 10 questions from 6 of the 8 scales comprised in the SF-36 questionnaire that were able to explain at least 90% of the variance between the two domains of the SF-36, the physical and the mental domain. The addition of two other questions useful for providing a complete description of the 8 scales included in the SF-36, has justified the implementation of the SF-12 questionnaire, which is more than sati-

sfactory both from a statistical point of view and a practical one. Furthermore, the questionnaire permits to describe the Health State by using two synthetic indexes, calculated from the twelve questions provided to the respondents. The first index is called the Physical Component Summary (PCS) and concerns the Physical State. The items takes into account the Physical Activity (PF02 and PF04), the Physical Role and Health (RP2 and RP3), the Physical Pain (BP2) and the General health (GH1) (Ottoboni, Cherici, Marzocchi, & Chattat, 2017). The second index, called the Mental Component Summary (MCS), measures the Mental State. This index takes into consideration the other six items concerning Vitality (VT2), Social activities (SF2), Emotional State (RE2 and RE3) and Mental Health (MH3 and MH4) (Ottoboni et al., 2017).

Analysis of data

A descriptive analysis and a multivariate data analysis were performed. The ProQOL, CISS and RSA data-analyses were performed using SPSS 19.0 statistical package (SPSS Inc., Chicago USA). The SF-12 data-analysis was performed using a Microsoft Excel spreadsheet (Ottoboni et al., 2017). In order to determine any differences between ProQOL, coping styles and stressors among the Emergency Health workers, a univariate variance analysis (ANOVA) was conducted.

Ethical considerations

Participation was performed on voluntary basis before filling in the questionnaire participants gave written consent to the study. The data have been treated as confidential and stored in a secure location by the principal investigator. They have been anonymously analyzed and aggregated. The principal investigator requested permission from the instruments' authors for using them into the study.

RESULTS

Sixty-seven Emergency Operating Center workers participated into the survey of which 55 were Emergency nurses (82.1%) and 12 were Emergency technical operators (17.9%). The 38.8% of participants were male (n = 25), and the 61.2% were women (n = 41). Findings in Table 1 describe the Socio-demographic characteristics of the Emergency Operating Center workers (n=67) analyzed by means of contingency tables and the Fisher's Exact test to investigate any difference between the two groups.

In Table 1, the data show the Fisher's Exact test values in relation to the categories of Sex, Title of study, Basic training, Post-basic training, marital status and number of children.

According to the Title of study, results showed a significant difference between the two groups of Emergency Operating Center workers (F = 15.131, p = .004). No other significant differences have been found among the remaining categories.

Table 2 shows the ANOVA data-analysis in relation to the categories of Age and Length of working service of the Emergency Operating Center workers (n=67) included in

Table 1 - Socio-demographic characteristics. (*< .01)

		Nurse (N=55)	Technical Operator (N=12)	Total (N 67)	Fisher's Exact Test	p
Sex	Male	20	5	25 (38.8%)	6.352	.886
	Female	34	7	41 (61.2%)		
Title of study	ND	11	1	12	15.131	.004*
	Primary School	4	5	9		
	Secondary School	40	6	46		
Education Basic	ND	3	12	15	50.692	.000
	Professional Degree	35	0	35		
	University Degree	5	0	5		
	Bachelor's Degree	12	0	12		
Education Post Basic	ND	26	12	38	19.554	.011
	Master Degree	7	0	7		
	Master 1° Level	21	0	21		
	Another Degree	1	0	1		
Civil Status	ND	1	0	1	18.003	.393
	Unmarried	7	1	8		
	Married	25	7	32		
	Unmarried Partner	10	1	11		
	Separated	6	2	8		
	Divorced	6	1	7		
Sons	0	20	0	20	21.634	.011
	1	9	0	9		
	2	18	9	27		
	3	6	3	9		
	5	2	0	2		

Table 2 – Age and length of service. (* P = <.05)

	Nurse (N=55)			Technical Operator (N=12)			Total (N=67)			
	N	Mean	SD	N	Mean	SD	N	Mean	SD	F	Sig.
Age	54	48.15	9.20	12	54.50	5.07	66	49.30	8.91	5.313	.024*
DSD5***	53	22.64	9.86	12	21.08	9.56	65	22.35	9.75	.247	.621
DSD6****	54	11.07	6.84	12	7.50	9.62	66	10.42	7.46	2.294	.135

*** How long have you practiced your current profession?

**** How long have you practiced your profession in the current operational unit?

Table 3 - Analysis of the Variance (ANOVA). (* P =<.05)

	Nurse (N=55)		Technical Operator(N=12)		Total (N=67)			
	Mean	SD	Mean	SD	Mean	SD	F	Sig.
ProQOL								
Compassion Satisfaction	33.26	7.50	37.16	5.55	33.98	7.30	2.871	.095
Burnout	25.88	6.47	23.58	3.84	25.46	6.11	1.398	.242
Compassion Fatigue	21.22	7.70	24.33	14.39	21.80	9.23	1.109	.296
CISS								
Task - Oriented (T)	56.96	8.90	54.33	9.96	56.49	9.08	.824	.367
Emotion - Oriented (E)	29.81	20.34	35.75	10.93	30.88	19.07	.952	.333
Avoidance - Oriented (A)	41.74	10.46	40.91	10.04	41.59	10.32	.063	.803
RSA								
Anxiety	2.84	2.394	2.67	1.775	2.81	2.285	.054	.818
Depression	3.85	2.438	3.25	1.138	3.75	2.265	.698	.406
Somatization	4.65	2.311	3.92	1.929	4.52	2.252	1.059	.307
Aggression	3.05	2.877	2.00	1.651	2.87	2.719	1.493	.226
Social Support	3.05	1.789	3.92	1.832	3.21	1.814	2.269	.137

the study. According to the variable of Age, a statistically significant difference has been found among the Emergency nurses and technical operators. Findings detected that technical operators have a mean age of 54.50 years (SD = 5.07; p = 0.024) and nurses have an average age of 48.15 years (SD = 9.20). Furthermore, there were no differences in terms of length of working service.

In order to investigate the Health status perceived by the Emergency Operating Center workers, the SF-12 questionnaire was administered. The Emergency health workers have been found to have a good Health quality, scoring an average of 48.87 in relation to the Physical Status (PCS12) and an average of 30.26 (MCS12) according to the Mental Status.

Table 3 describe the data-analysis (ANOVA) applied for the Emergency Health workers (n=67) in relation to the ProQOL, CISS and RSA scales. Findings have not detected any statistically significant difference between the Emergency nurses and technical operators' groups for any of the factors included in the tools administered. The descriptive results show that Emergency Operating Center workers has average levels of Compassion Satisfaction (mean 33.98; SD 7.30) as well as average levels of Burnout (mean 25.46; SD 6.11) along with low levels of Compassion Fatigue (mean 21.80; SD 9.23).

Lastly, Table 4 shows findings of the Pearson correlation analysis carried out between socio-demographic data, the factors of the ProQOL, CISS and RSA Scale and the length of working service. Results have presented at both 0.05 and 0.01 level of significance.

According to the socio-demographic variables of Sex and Age, the Pearson analysis showed that the variable of Age has a positive correlation with the length of working service (p = .671) whereas it has a negative correlation with the categories of Sex (p = -.280) and Anxiety (p = -.289). The Sex variable has a positive correlation with the Avoidance-oriented coping strategy (p = .267) and with stressors of Anxiety (p = .327) and Somatization (p = .280). In relation to the Length of working service (DSD5), findings show that it is negatively correlated with the variable of Sex (p = -.285) and positively with the Years of service in the current operative unit (DSD6) (p = .251), which has a positive correlation with the category of Compassion Satisfaction (p = .268).

According to the ProQOL factors, the Pearson analysis

Table 4 - Pearson Correlation between ProQOL, CISS and RSA subscales
(* Correlation is significant at level 0.05. ** Correlation is significant at level 0.01)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	**Age**		-.280*	.671**								-.289*				
2	**Sex**	-.280*		-.285*						-.263*	.267*	.327**		.280*		
3	**DSD5*** **	.671**	-.285*		.251*											
4	**DSD6**** **			.251*				.268*								
5	**CS**						-.698**		.426**	.455**			-.420**	-.359**	-.343**	-.396**
6	**BO**					-.698**		.311*	-.353**	-.543**		.530**	.673**	.594**	.541**	.537**
7	**CF**				.268*		.311*			-.436**		.460**	.345**	.305*	.419**	.301*
8	**(T)**					.426**	-.353**				.358**		-.253*			-.413**
9	**(E)**		-.263*			.455**	-.543**	-.436**				-.649**	-.612**	-.630**	-.716**	-.394**
10	**(A)**		.267*						.358**							
11	**Anxiety**	-.289*	.327**				.530**	.460**		-.649**			.798**	.727**	.779**	.383**
12	**Depression**					-.420**	.673**	.345**	-.253*	-.612**		.798**		.689**	.710**	.415**
13	**Somatization**		.280*			-.359**	.594**	.305*		-.630**		.727**	.689**		.648**	.418**
14	**Aggression**					-.343**	.541**	.419**		-.716**		.779**	.710**	.648**		.350**
15	**Social Support**					-.396**	.537**	.301*	-.413**	-.394**		.383**	.415**	.418**	.350**	

**** How long have you practiced your current profession?

**** How long have you practiced your profession in the current operational unit?

LEGENDA: CS, compassion satisfaction; BO, burnout; CF, compassion fatigue; (T), task-oriented coping strategy; (E), Emotion-oriented coping strategy; (A), avoidance-oriented coping strategy.

found that the Compassion Fatigue (CF) has a positive correlation with Burnout (p = .311), DSD5 (p = .268) and stressors of Anxiety (p = .460) Depression (p = .345) Somatization (p = .305) Aggressiveness (p = .419) and Social Support (p = .301) whereas CF has a negative correlation with the Emotion-oriented coping strategy (E) (p = -.436). The factor of Compassion Satisfaction (CS) shows a negative correlation with Burnout (p = -.698) and stressors of Depression (p = -.420), Somatization (p = -.359), Aggressiveness (p = -.343) and Social Support (p = -.396). Furthermore, CS has a positive correlation with the Task-oriented coping strategy (p = .426) and with the Emotion-oriented strategy (p = .455).

The Burnout (BO) is positively associated with the CF (p = .311) and stressors of Anxiety (p = .530), Depression (p = .673) Somatization (p = .594) Aggressiveness (p = .541) and Social Support (p = .537). As opposed, it has a negative correlation with the Task-oriented coping strategy (p = -.353) and the Emotion-oriented strategy (p = -.543).

In relation to the Coping strategies the Pearson analysis have found that the Avoidance-oriented coping strategy has a positive correlation with the Task-oriented coping strategy (p = .358)

The Emotional-oriented coping strategy has a negative correlation with stressors of Anxiety (p = -.649) Depression (p = -.612) Somatization (p = -.630) Aggressiveness (p = -.716) and Social Support (p = -.394).

In contrast, the Task-oriented coping strategy is negatively correlated with the two stressors of Depression (p = -.253) and Social Support (p = -.413).

Lastly, the Stressors of Anxiety, Depression, Somatization, Aggression, and Social Support are positively correlated with Burnout and Compassion Fatigue whereas they has a negative association with Compassion Satisfaction.

DISCUSSION

This study aimed to provide a better understanding of the influence of coping strategies and stressors on the Emergency Operating Center workers' ProQOL, in the Italian context. In order to extend the knowledge on the relationship between the factors of ProQOL, CISS and RSA scales, the international literature on the topic have been considered (Hunsaker et al., 2015; Sacco et al., 2015; Stacey et al., 2016; Cragun, April, & Thaxton, 2016; Steinberg et al., 2017; Austin, Saylor, & Finley, 2017; Al Barmawi et al. 2019; O'Callaghan et al. 2020).

Therefore, the results of this study contribute that there are no significant differences between the two professional profiles involved herein that make up the emergency operations center. Additionally, the stressors were highlighted; they play an important role in increasing or decreasing levels of job satisfaction, both in the quality of professional life and through coping styles (Figure 1).

As our results have not detected any significant difference among the groups of Emergency Operating Center workers considered, we describe the ProQOL of the Emergency staff as they have shown average levels of both CS and BO along with low levels of CF.

Similar findings among Emergency nursing staff have been found in the study of O'Callaghan et al. (2020), which detected average to high score of CS and low to average levels of BO.

According to the socio-demographic and work-related characteristics, we found that the length of working experience in the current unit is positively correlated with higher level of Compassion Satisfaction. The findings of the study of Hunsaker et al. (2015) are consistent with ours in evidencing that the length of working experience is a factor influencing higher levels of CS reducing those ones of CF and BO. As the older and more experienced Emergency staff have showed better levels of Compassion satisfaction, the latter study concludes that they must provide support to the youngest and less experienced staff. (Hunsaker et al. 2015)

In our study, findings detected a negative correlation between Compassion Satisfaction and Burnout whereas the latter is positively correlated to Compassion Fatigue. These results suggested that Emergency Operating Center workers are at risk of developing a poor ProQOL as higher level of CF and BO negatively affect the workers' efficiency and patients' care. (Al Barmawi et al. 2019)

Regarding the relationship the factors of ProQOL and the coping strategies we found that an Emotion-oriented coping strategy reported higher levels of Compassion Satisfaction and lower levels of Compassion Fatigue and Burnout. Results in the study of Al Barmawi et al. (2019) support ours in considering the Emotion-oriented coping style as a suitable strategy to reduce the level of Burnout positively modulating the sensations of emotional exhaustion and depersonalization. Further, our results show that the implementation of Emotion-oriented coping is associated with an improvement in terms of staff well-being, a reduced risk for nervous breakdown, and a decrease in stressors.

Analyzing the role of stressors on the ProQOL of Emergency Health workers, we found that they have been likely to experience higher level of Compassion Fatigue and Burnout if exposed to stressors such as anxiety and depression. This finding is supported by the study of Hegney et al. (2015) that demonstrates that anxiety and depression have a strong influence in the developing of CF and BO whereas they have not affected the CS levels. In our study, only anxiety have not any impact on CS levels meaning that the Compassion Satisfaction is strongly independent by stressors as measured with the RSA scale.

Moreover, our results showed that the Task-oriented coping style have a positive association with CS. It is consistent with study of Al Barmawi et al. (2019), which found that a problem-solving strategy is a predictor of higher CS levels as it is directed to understanding the cause of a stressful situation.

Lastly, the Avoidance-oriented coping style, described as those activities and cognitive changes deemed necessary to prevent a certain situation from becoming stressful, has found to have not any associations with stressors even if in the study of Al Barmawi et al. (2019) is correlated to the development of the secondary traumatic syndrome.

Limitations

This study contains some methodological limitations. Data collection and completion of questionnaires took place during working hours so that it could have influenced and biased the reliability of responses. The sample (N = 67) should be extended to have a more representative sample of the population. Limitations should be considered in the results' interpretation due to the non-homogeneity of the samples describing the two groups of health workers compared in the analysis.

Implication for nursing practice

This study aimed to contribute on the debate about the role of coping styles and stressors among the Emergency Operating Center workers referring to managers who have concerning about the staff wellbeing and the patient's satisfaction. In our study, we have used various tools, ProQOL, CISS, SF-12, RSA scale. These instruments can be used in different Emergency contexts to assess both satisfaction levels, coping styles and stressors to determine if interventions are needed to improve the ProQOL of health workers. In fact, as suggested by the study of Hegney et al. (2015) our findings might be of support for managerial interventions aimed to enhance the level of resilience in the Emergency working setting, which can consequently minimize the level of CF and BO. Analyzing factors that might affect the ProQOL is fundamental for developing pro-active strategies aimed to avoid the negative impact of CF and BO on both patients care and organizational outcomes. For this reason, learning to understand situations that might affect the Emergency working life's staff remains the primary objective for improving both work wellbeing and patient satisfaction.

CONCLUSION

Emergency Operating Center workers are more exposed to work-related stress and are likely to develop Compassion Fatigue and Burnout. Our study have explored the ProQOL in an Emergency Operating Center in the Italian context. Findings have shown average levels of both Compassion Satisfaction and Burnout along with low levels of Compassion Fatigue. In order to provide indication on a better staff management in the Emergency context we analyzed the role of stressors and coping styles over the ProQOL subscales. The Emotion-oriented and Task-oriented coping strategies have been found to support higher levels of job satisfaction by decreasing the Compassion Fatigue levels. Anxiety and depression has been shown as the stressors that have a worst impact on the ProQOL by increasing the CF and BO levels. In conclusion, it is important to implement strategies and solutions that can enhance job satisfaction levels among the Emergency Operating

Center workers to improve both staff environment and patients care outcomes.

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