Caring efficacy: nurses' perceptions and relationships with work-related factors

Cesar Ivan Aviles Gonzalez[1], Maura Galletta[2], Elsa Chessa[3], Paola Melis[4], Paolo Contu[2], Maria Francisca Jimenez Herrera[5]

[1]Anesthesia and Intensive Care Department, University of Cagliari, Italy; [2]Department of Medical Sciences and Public Health, University of Cagliari, Italy; [3]Azienda Ospedaliero-Universitaria AOU, University of Cagliari, Italy; [4]Pain Therapy Service, University of Cagliari, Italy; [5]Departament d'Infermeria, Universitat Rovira i Virgili, Tarragona, Spain

Abstract. *Background and aim of the work*: Caring nursing practice is central aspect of quality of services. It is important to assess nurses' caring experience in terms of perceived caring efficacy to make them aware of their outcomes and improve their strategies. The aims of the study was to analyze: (1) the caring efficacy level, (2) differences between the caring efficacy levels concerning positive and negative work attitudes, (3) individual and organizational predictors of perceived caring efficacy. *Methods:* 200 nurses were recruited from a University Hospital in Southern Italy. A self-reported questionnaire was administered. T-test was performed to analyze differences between caring efficacy levels concerning outcomes variables. Regression analysis was carried out to examine how some work factors were related to perceived caring efficacy. *Results:* Participants referred high confidence to care (CC) for 55%, and low doubts and concerns (DC) for 72.9%. Nurses who had low DC had lower emotional exhaustion than nurses with moderate DC. Nurses with low DC had higher job satisfaction than nurses with high DC. Regarding CC levels, there were no differences between mean values for both attitudes at work. The emotional dissonance significantly predicted DC and CC. The supervisor support had a negative link with emotional dissonance, which in turn was negatively related to CC. *Conclusions:* Education and training should be addressed to reduce doubts and concerns to care and improve the ability to manage emotions. A work environment that value caring and give support in managing emotions can reduce emotional dissonance and improve caring self-efficacy. (www.actabiomedica.it)

Key words: caring efficacy, emotional dissonance, emotional job demands, supervisor support, nursing

Introduction

Caring practice is central to nursing, which is based on developing authentic relationships between nurses, patients, and their families (1). Caring is a main predictor of patients' physical and emotional health outcomes (2, 3) and it is a central aspect of quality of services (4). Remarkable effort has been done by scholars to describe caring and its processes (5-8). Antecedents of the caring process include nurse's ethics foundations to care and working in a context that pro- motes caring. Caring can improve patients' satisfaction (9) and enhance a mental well-being and satisfaction for nurses (6, 10).

Background

The essence of caring involves nurses' thoughts and behaviors of love, compassion (empathy), respect, and availability in approaching with patients (11). Previous research showed that caring is a motivational

source influencing nurses' recruitment and retention (12) and it is a main indicator of patients' satisfaction (9, 13). Knowledge, attitude and skills of nurses are the basis of nurse caring behaviors (14). Nevertheless, nurses' perceived caring efficacy can be affected by individual and organizational factors (e.g., emotional job demand, emotional dissonance, and supervisor support) and can influence their job satisfaction and wellbeing degree.

Emotional job demand

Emotional job demands (15) characterize nurses' working experience because they are continuously exposed to difficult working contexts (16) in which they have to manage patients' critical conditions or claims of patients and their relatives, while trying to provide high quality services. According to Job Demands-Resources (JD-R) model, emotional job demands are considered among the most important ones (e.g., physical, psychological, and emotional) (17). They can reduce the work-related well-being of nurses and exhausting their mental and physical resources (18). In this scenario, the nature of the caring relationship with patient can be compromised, thus affecting nurses' perceived caring efficacy.

Emotional dissonance

Nurses have to understand and interpret how patients feel and to show empathy to be effective in their caring practice (19). On the other hand, nurses have to manage their own emotions while maintaining high quality of care to patient. This aspect of caring is called 'emotional labor' (20). It requires nurse to display or suppress feeling to sustain external expression suitable for the job role and that produces good state of mind in patients. Emotional labor can be emotionally demanding (21) especially when there is a conflict between felt and required emotions. This discrepancy is named 'emotional dissonance' (22), which can threaten nurses' wellbeing by leading to emotional exhaustion and physical ill-health (23). Research showed that in nursing emotional labor and emotional dissonance occur more frequently because of the suffering, vulnerability, and negative health outcomes of patients (24).

These experiences can affect nurses' wellbeing and their caring relationship with patients (25). As caring is defined as a mental, emotional, and physical effort to look after, answer to, and support patients (26), we can expect that emotional dissonance affects perceived caring efficacy.

Supervisor support

Emotional support is characterized by the availability of close and confiding relationships within the working context (e.g., supervisors and colleagues) and it can be mostly beneficial in jobs that are emotionally challenging (27). According to JD-R model, emotional supervisor support can play a key role as a resource to mitigate the effects of stressors on physical and mental health (28). Research has highlighted that support from direct supervisor can safeguard healthcare professionals from the negative impact of emotional demands (29). This may be because the ability to reveal one's own work-related difficulties to others without fear of judgement may act as a resource that helps nurses manage the emotional demands occurring during caring relationships with patient (30). Thus, we can hypothesize that supervisor emotional support can help nurses to reduce experiences of emotional dissonance during interactions with patients, thus increasing caring efficacy.

Caring efficacy and individual outcomes

Caring has been defined as a main characteristic of nursing (31, 32). It is through actions of caring that nurses find professional identity and increase their well-being (33). At the organizational level, nurses who are able to express caring in their own working context perceive that their values as professionals are congruent with those of the organization. This perceived congruence may enhance work motivation (34) and job satisfaction, and reduce stress and burnout in nurses (10). Recently, research is showing much attention on topics such as compassion fatigue and compassion satisfaction as two important contrasting aspect of the caring experience with patients (35). Previous research reported that nurses who showed confidence in their ability to express caring referred positive job

satisfaction. In addition, it has been found a positive correlation between caring efficacy and job satisfaction (36). On the contrary, the inability to express caring and find meaning and value in their work can contribute to decrease job satisfaction (37) and augment burnout (38). For this reason, we expect that caring efficacy is correlated to both job satisfaction and emotional exhaustion, and that the perceived caring efficacy degree can condition the level of the two working outcomes.

Thus, it seems to be important to assess nurses' caring experience in terms of perceived caring efficacy to make them aware of their caring outcomes and improve their care strategies (39). Several Italian studies analyzed human caring in nurses. However, most of them referred to nurses' and patients' perceptions of caring behavior (42). At the best of our knowledge, there is no study considering self-reported caring competence of nurses.

Aims

This study aims to analyze: (a) the caring efficacy level (e.g., low, moderate, high) perceived by nurses, (b) possible differences between the caring efficacy levels concerning nurses' positive and negative work attitudes (i.e., job satisfaction and emotional exhaustion), and (c) how individual and organizational predictors such as emotional dissonance, emotional job demand, and supervisor support are associated to perceived caring efficacy.

Methods

Study design, participants and procedure

A cross-sectional study design was used involving 200 nurses from different wards from an Academic hospital in Southern Italy. An inclusion criterion was to be registered nurses who work full-time or part-time in the hospital. As nurse managers do not have direct relationships with patients and it is not possible to measure their caring efficacy, they were excluded from the study. Formal approval to recruit nurses was ob-

tained from the health manager of the hospital. After a formal agreement, nurses were recruited directly in their units. Participation was voluntary and all nurses were informed about the purpose of the study. A self-reported structured questionnaire was administered to the nurses during their working hours. They completed the questionnaire and returned it to locked boxes accessible only to the researchers. Data were collected from February to April 2019. A total of 140 entirely completed questionnaires (70% response rate) were usable to data analysis.

Ethical statements

The study was approved by the Independent Ethic Committee of the Azienda-Ospedaliero Universitaria of Cagliari, Italy. The study observes the ethical principles of the Declaration of Helsinki and the General Data Protection Regulation 679/2016 on privacy. Nurses were informed that they could leave the research at any time without consequences for their job. To preserve anonymity, informed consent was given when the nurses returned their completed questionnaire.

Instruments

Caring Efficacy Scale. The Italian version by Aviles et al. (39) of the original Caring Efficacy Scale by Coates (43) was used to evaluate perceived ability to develop caring relationships with patients. The Italian version includes 17 items distributed in two sub-dimensions: doubts and concerns to care for patients (10 items) and confidence to care (7 items). Nurses indicated their level of agree/disagree to the items by following a 6-point response Likert- scale ranging from strongly disagree (–3) to strongly agree (+3). To uniform the data and better analyze mean values of the subscales, the Likert scale values were changed from -3 to +3 into 1 to 6.

Emotional job demands. Three high-loading items (.74 to .83) were selected from the Italian version of the Emotional Job Demand Scale (44, 45). A sample item was "My work is emotionally demanding". Items were assessed using a 4-point scale ranging from 1 (never) to 4 (always).

Emotional dissonance. Four items of the scale by Zapf et al. (46) were used to measure how often nurses usually repress their emotions to the patients. A four-point scale (from 1 = disagree to 4 = agree) was used to answer each item. A sample item was "The emotions I show to appear professional do not correspond to what I actually feel".

Supervisor emotional support. Four items from the perceived organizational support (POS) scale by Eisenberger et al. (47) were used to measure nurses' perception of supervisor emotional support. The items were adapted in a similar way as described by Rhoades et al (48). A sample item was "My direct supervisor help me to manage my emotions with patients. The survey items were measured using a five-point Likert scale ranging from 1 ('Strongly disagree') to 5 ('Strongly agree').

Emotional exhaustion. Three high-loading items (.85 to .91) were used to measure emotional exhaustion from the Italian version of the Maslach Burnout Inventory (49, 50). A sample item was "I feel tired when I weak up on the morning and I have to face a new working day". Items were rated using a 7-point scale ranging from 0 (never) to 6 (daily).

Job satisfaction. Three items from Cammann, Fichman, Jenkins, & Klesh's scale (51) were used to measure satisfaction with nurses' job. A sample item was "Overall, I am satisfied with my job". A five-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree) was used to answer each item.

Data analysis

Data analysis was carried out via SPSS 20.0 program (SPSS: An IBM Company, Chicago, IL, USA). Descriptive analysis (i.e., frequencies, means, and standard deviations) was performed to examine the sample characteristics. Cronbach's Alpha was performed to analyze the reliability of the used measures. T-test was performed to analyze possible differences between caring efficacy levels concerning the outcome variables (job satisfaction and emotional exhaustion). Pearson's correlation was carried out to analyze the association between variables and linear regression analysis by using Enter method was performed to examine how emotional job demand, emotional dissonance, and

supervisor support were related to perceived caring efficacy. Possible mediating effects were tested via PROCESS macro with Model 4 (simple mediation) (52). Bootstrapping procedure was performed to measure indirect effects with confidence intervals (95%) calculated with 5000 bias-corrected bootstrapped random resamples of the data with replacement (53).

Results

The first aim of the study was to analyze the nurses' perceived level (low, moderate, high) of caring efficacy. The findings showed that participants referred having high confidence to care (CC) for 55% (n=77/140), moderate CC for 43.6% (n=61/140), and low CC for 1.4% (n=2/140). Nurses claimed to have moderate doubts and concerns (DC) for 27.1% (n=38/140), and low DC for 72.9% (n=102/140). No one referred having high DC.

The second aim of the study was to examine possible differences in the levels of caring efficacy regarding nurses' positive and negative work attitudes (job satisfaction and emotional exhaustion). T-test analysis showed that nurses with low DC to care referred having lower emotional exhaustion (M=2.47) than nurses with moderate DC (M=3.18) (t=-2.34, 95% CI=-1.32--.10, p<.05). Similarly, nurses with low DC to care had higher job satisfaction (M=3.06) than nurses with high DC (M=2.78), but this difference was marginally significant (t=1.80, 95% CI=-.03-.59, p=.08). Regarding confidence to care levels, T-test showed no significant differences between mean values for both the attitudes at work (moderate CC [emotional exhaustion M=2.91], high CC [emotional exhaustion M=2.47] p=.09; moderate CC [job satisfaction M=3.01], high CC [job satisfaction M=2.98], p=.79).

The third aim of the study was to analyze how as emotional dissonance, emotional job demand, and supervisor support were associated to the sub-dimension of the caring efficacy. Means, standard deviations, and correlation analysis for the studied variables are shown in Table 1. Regression analysis showed that emotional dissonance is the only one predictor significantly and positively associated with DC to care (β =.17, p<.05), and negatively associated with confidence to care (β

Table 1. Means, Standard Deviations and Pearson's correlation for the study variables (N =140)

Variable	M	SD	1	2	3	4	5	6	7
1. Confidence to care	4.85	.689	(.62)						
2. Doubts and concerns	2.51	.782	-.321**	(.72)					
3. Emotional dissonance	1.88	.727	-.212*	.182*	(.75)				
4. Emotional job demand	3.05	.598	.110	-.018	.125	(.66)			
5. Emotional supervisor support	2.46	1.211	-.099	-.098	-.182*	-.060	(.95)		
6. Job satisfaction	2.98	.667	-.012	-.164*	-.044	.090	.126	(.75)	
7. Emotional exhaustion	2.67	1.495	-.134	.217*	.384**	.159	-.116	-.289**	(.87)

Note. **p<0.01, *p≤0.05 (2-tailed). Cronbach's Alpha is shown in parenthesis

=-.26, p<.01). Both emotional job demand and supervisor support did not contribute to explain variance in nurses' DC and confidence to care (see Table 2 for all the results). Nevertheless, the results showed that supervisor support had a negative link with emotional dissonance (β = -.12, p<.05) which in turn was negatively related to confidence to care. Table 3 shows the results from mediation analysis. The emotional dissonance is a mediator in the relationship between supervisor support and confidence to care even its effect is

marginally significant (indirect effect: γ = 03, bootstrap CI = .005-.08; Table 3).

Discussion

The results highlight that nurses of the study refer having a positive caring orientation, in agreement with Amendolair's (36) findings. The most part of them have high confidence to care and low doubts and

Table 2. Regression analysis for the relationships between emotional dissonance, emotional supervisor support and emotional job demand on both confidence to care and doubts and concerns (N = 140)

Dependent variable	Predictor	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
Confidence to care	(Constant)	5.041	.350		14.405	.000
	Emotional dissonance	-.243	.080	-.256	-3.036	.003
	Emotional supervisor support	-.084	.048	-.147	-1.756	.081
	Emotional job demand	.154	.095	.134	1.612	.109
Doubts and concerns	(Constant)	2.441	.408		5.988	.000
	Emotional supervisor support	-.048	.056	-.074	-.857	.393
	Emotional job demand	-.057	.111	-.044	-.515	.608
	Emotional dissonance	.188	.093	.174	2.019	.045

Table 3. Mediating role of emotional dissonance (N =140)

Model	Path coefficient	SE	Bias corrected bootstrap 95% CI	
			Lower limit	Upper limit
Emotional support on emotional dissonance	-12*	.05	-.22	-.02
Emotional dissonance on confidence to care	-.23**	.08	-.39	-.07
Total effect of emotional support on confidence to care	-.06	.05	-.16	.03
Direct effect of emotional support on confidence to care	-.09	.05	-.19	.003
Indirect effect of emotional support on confidence to care through emotional dissonance	.03†	.02	.005	.08

Note. *p<.05, **p<.01, †p=.05.

concerns. Moreover, nurses with moderate doubts and concerns about their ability to relate to and care for patients seem to be less satisfied with their job and more emotionally exhausted than nurses with low doubts and concerns. Vice versa, nurses with high confidence to provide care for patients do not differ in their work attitudes from nurses with moderate confidence to care. This is supported also by the correlation analysis, which highlighted a positive association between doubts and concerns with emotional exhaustion and a negative association with job satisfaction. These findings are in agreement with Kalisch et al. (37) and Peery (38) findings. Nevertheless, no association was found between confidence to care and job satisfaction. This result differs from Amendolair (36). It is probable that this positive sub-dimension of caring efficacy exercises a minimal impact on nurses' work attitudes because they are likely more able to cope with job stressors (e.g., (25)). However, a reason of this difference may be attributable to the fact that she used the caring efficacy scale as mono-dimensional, while we used it as a two-factor tool (39).

The main factor negatively associated with caring efficacy for the two sub-dimensions is emotional dissonance, but there is no direct association between perceived caring efficacy with both emotional job demand and supervisor support. It is likely that emotional job demand does not play a role on a nurse's perception of caring efficacy, but only on his/her real caring be-havior, as one of the main caring antecedents is having needed time to care (54, 55). However, the results show that supervisor support indirectly affects caring efficacy through mediation of emotional dissonance; the more support from the supervisor support the less is emotional dissonance perceived by the nurses, which in turn is related to high nurse's perceived caring efficacy. Thus, supervisor support acts as a resource that helps nurses to give appropriate emotional response during caring relationships with patients (29, 30), thus increasing their caring efficacy.

Practical implications

This study has practical implication for nurse managers. They should foster work contexts promoting supervisor support for nurses and increase nurses' competencies in caring. Education and training should be addressed to reduce doubts and concerns to care and improve the ability to manage emotions during the caring relationship with patients and give appropriate emotional responses to job demands. Amendolair (36) concluded that caring is related to the nurses' work environment. In this sense, organizations should develop strategies that support and emphasize a caring environment to foster quality patient care and strengthen nurses' professional identity. An emphasis on caring can enhance nurses' job satisfaction degree and reduce

emotional exhaustion level. In addition, a work environment that value caring and give support to nurses in managing their emotions with patients can reduce their emotional dissonance and improve caring self-efficacy.

Conclusion

Measuring perceived caring efficacy may allow for developing plans of action to reduce weaknesses, doubts and concerns in providing care to patients and reinforce confidence to care. This would help nurses to better meeting the actual needs of hospital patients, as well as to improve their care-related strategies.

Limitations

The study has a few limitations. First, the sample of nurses was recruited from only one hospital and attended nurses were selected from the departments that agreed participation in the study. Hence, this can be a limit to the generalizability of the results, thus reducing external validity of the study. Second, we used a self-reported questionnaire that is a good instrument to collect substantial data in a brief lapse of time. Nevertheless, it may produce a bias related to social desirability and common method (56). Future research should reduce this issue by integrating individual perception data with objective data such as caring behavior assessed also by supervisors, job performance, and patient satisfaction. Lastly, this research is cross-sectional and we are unable to examine the causal effects of the relationship between variables. Caring efficacy perception would need to be analyzed through longitudinal studies because it can change over time based on the nurse's experience and opportunity to receive adequate support from the supervisors.

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Correspondence:
Maura Galletta
Department of Medical Sciences and Public Health,
University of Cagliari
SS 554 Bivio per Sestu - 09042 Monserrato, Cagliari, Italy
Tel. +39 070 675 3108
E-mail:maura.galletta@gmail.com