

Original article

Emotional Control in Surgical and Intensive Care Nursing: Sociodemographic Differences

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Abstract

Aim: To determine whether there is a difference in the impact of emotion on memory, behaviour, thinking and mood with regard to age, gender, level of education and length of service.

Methods: Research included 105 nurses. It was conducted anonymously by a standardized Emotional Regulation and Control Questionnaire (ERIK).

Results: Average rating on the scale was somewhat lower for men, respondents under 30 years of age and respondents with a university degree. Average rating on the emotional regulation and control scale were significantly higher for respondents with 31 and more years of service (Kruskal-Wallis test, $p=0.046$). Regarding male respondents, there is a significant correlation of age (Spearman's correlation coefficient, $=0.429$, $p=0.020$) and length of service (Spearman's correlation coefficient, $=0.412$, $p=0.026$) with their overall score on the scale. Regarding female correspondents, there is no significant correlation between age and their overall score on the emotional regulation and control scale and sub-scales. Considering the age of respondents, results indicate that the decrease in the ability to control emotional reactions is proportional to the increase in age, but not to a significant degree. Regarding elderly respondents, the value of emotional regulation and control is higher in comparison to younger respondents (Spearman's correlation coefficient, $=0.440$, $p=0.017$).

Conclusion: Increase in length of service decreases the ability to control emotional reactions and there are no significant differences in emotional control with regard to gender, age and educational background.

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Introduction

Emotional intelligence is defined as the ability to monitor one's own and other's emotions and as the ability to perceive, assess and express emotional information by creating feelings for emotional and intellectual development (1). As such, it has an indirect role between mental health and stress. People with a higher level of emotional intelligence have a greater ability to deal with conflicts and the environment than people with a lower level of emotional intelligence (2). Emotional intelligence is composed of five main elements: self-awareness, self-regulation, internal motivation, empathy and social skills. These five elements of emotional competence have been defined as levels built one on another, which ultimately represent emotional intelligence as a whole (3). Pence (4) points out that emotional intelligence can help nurses in managing their own and patient's emotions; it reflects a real emotional reaction, where feelings and communication are exchanged during nurse-patient interaction. Nursing is considered an emotionally demanding job because nurses are required to cope with various emotional demands and affective behaviours in their work-related relationships, be it with their patients, relatives or colleagues (5). Emotions play an important role in the nursing practice and in order to understand and manage them, they first must be properly identified. Even though this sounds simple, it is often rather difficult to accomplish. Nurses can desire to express their emotional states, yet they should minimize their display. This can make them appear inauthentic and thus produce a negative effect on both the provision of optimal nursing care and the nurse-patient relationship (6). The problem of work burnout can cause emotional stress, emotional burnout, depersonalization, feeling of failure, stress-related illnesses, demotivation and dissatisfaction with care, reduced quality of care and conflicts with other team members and patients (7). Putting on one's professional face highlights the need of nurses to use a "mask" to control their emotional states and to maintain their professional persona whilst caring for patients (8).

In the last decade, there has been an increase in the interest for the implementation of programs aimed at developing social and emotional skills, such as problem-solving, decision-making, communication skills, recognition of own and others' emotions, control of emotions, control of one's own behaviour and so on (9). Emotional regulation relates to the ability of managing one's own emotions in situations when particular emotions are unfavourable, occur at inconvenient times or when their intensity is inappropriate (10).

Emotional regulation relates to heterogeneous processes that regulate which emotions we feel, when we feel them and how we experience and express them. There is a consensus among researchers that emotions have more components in an experiential, behavioural and physiological domain. Emotional regulation involves a change in one or more of these systems and does not need to (but it certainly can) include attempts to change the subjective experience of emotions (11). Research has shown that the ability of emotional self-regulation can help in coping with emotional demands of jobs (12). Emotional regulation is a new research area that provides nurses with an opportunity to explore their value and become more efficient in managing stressful situations in the working environment and improving the full range of nursing practice (13).

Objectives of this research are to determine whether there is a difference in the impact of emotion on memory, behaviour, thinking and mood with regard to age, gender, level of education and length of service.

Respondents and Methods

Research subjects were 105 nurses employed at the Department of Surgery in intensive care units and operating rooms at the Clinical Hospital Osijek. Of 105 respondents, 29 (28%) were men and 76 (72%) were women. Most respondents – 79 (76.7%) of them – had secondary school qualifications. The mean age of respondents was 38 years, whereas the average length of service was 16.5 years.

Research was conducted during May and June 2015 and it included nurses holding the position of operating nurse in the operating room and the position of intensive care nurse at the Department of Surgery of the Clinical Hospital Osijek. The respondents were informed about emotional assessment and control in nursing in both written and oral form. They read the form/questionnaire related to the research and were introduced to the research process. Introduction to research included a presentation of basic information about the research, main objective, manner of carrying out the research, confidentiality and data protection. The survey was voluntary and anonymous. The Ethics Committee of the Clinical Hospital Osijek granted its consent to conduct the research. Completed forms/questionnaires were submitted personally in an envelope in order to ensure anonymity.

A standardized Emotional Regulation and Control Questionnaire was used upon permission from the author Vladimir Takšić. The questionnaire assessed the impact of unpleasant emotions and mood on thinking, memory and behaviour of individuals. The questionnaire consisted of 20 items that assessed the size of the effects of negative emotions and moods on thinking, memory and behaviour of the individual and on the ability of emotional control (Takšić, V.: Emotional Regulation and Control Scale, ERIK, 2003) (14). The subjects rated 20 statements about emotional regulation and control from 1 to 5 on the Likert scale, where 1 was (not at all), 2 (seldom), 3 (occasionally), 4 (mostly) and 5 (completely). The first part consisted of statements related to the effects of emotions and mood on thinking and behaviour (8

statements), followed by statements related to the memory of emotionally saturated contents (6 statements) and to statements related to control of their own emotional reactions (6 statements). Higher scores indicated poorer emotional regulation and control. The second part of the questionnaire contained general information about sociodemographic characteristics (age, gender, length of service, qualifications).

Statistical methods

The figures were described by median and interquartile range. Categorical variables were described in absolute and relative frequencies. Fisher's exact test and Mann-Whitney test were used to determine the differences between independent groups (age, gender, education). The level of significance was set at $\alpha = 0.05$. The analysis of the data obtained was done by a programming system SPSS for Windows (version 13.0).

Results

The study included 105 respondents, of which 29 (28%) were men and 76 (72%) were women. The respondents' ages ranged from 24 to 64, their mean age was 38 (an interquartile range of 30-48 years) and 5 (4.9%) respondents had a university degree. Average length of service was 16.5 years (an interquartile range of 8-26 years), ranging from 1.5 to 45 years of service, with no significant differences in gender (Table 1).

Table 1. Respondents by characteristics and gender

	Men	Women	Total	p
Total	29 (28%)	76 (72%)	105 (100%)	
Age*	40 (28 - 49.5)	38 (31.5 - 47)	38 (30 - 48)	0.985†
Length of service*	19 (7.5 - 28)	16 (8.5 - 25)	16.5 (8 - 26)	0.894‡
Level of education				
High school degree	24 (82.8%)	55 (74.3%)	79 (76.7%)	
Higher education	4 (13.8%)	15 (20.3%)	19 (18.4%)	0.770‡
University degree	1 (3.4%)	4 (5.4%)	5 (4.9%)	
Age				
- 30 years	10 (34.5)	16 (21.1)	26 (24.8)	
31 - 40	6 (20.7)	27 (35.5)	33 (31.4)	
41 - 50	8 (20.7)	23 (30.3)	31 (29.5)	0.348‡
51 years and above	5 (17.2)	10 (13.2)	15 (14.3)	
Length of service - by groups				
up to 10 years	11 (37.9)	20 (26.3)	31 (29.5)	
11 - 20	5 (17.2)	26 (34.2)	31 (29.5)	
21 - 30	8 (27.6)	22 (28.9)	30 (28.6)	0.286‡
31 and above	5 (17.2)	8 (10.5)	13 (12.4)	

*Median (interquartile range); †Mann-Whitney test; ‡2 test

Average rating on the scale was somewhat lower for men, respondents under 30 years of age and respondents with a university degree. However, the differences with regard to gender, age and educational background were not that significant.

Average ratings on the emotional regulation and control scale were significantly higher respondents with the length of service of 31 years or more (Kruskal Wallis test, $p = 0.046$) (Table 2).

Table 2. Average ratings on the scales and subscales in the Emotional Regulation and Control Questionnaire by gender, age, level of education and length of service*

	Median (25% - 75%)			
	The impact of emotions and mood on thinking	The impact of emotions and mood on memory	Control of emotional reactions	of The whole scale
Gender				
Men	2.5 (2.2-2.9)	2.7 (2.4-3.3)	2.5 (2.2-3.1)	2.6 (2.4-3.2)
Women	2.7 (2.3-3)	3 (2.5-3.3)	2.3 (2-2.8)	2.7 (2.4-3.0)
p value†	0.860	0.560	0.138	0.649
Age				
- 30 years	2.4 (2.2-2.9)	3 (2.7-3.4)	2.2 (2-2.5)	2.5 (2.3-2.9)
31 - 40	2.5 (2.1-2.9)	3 (2.7-3.3)	2.3 (2-3)	2.7 (2.3-3)
41 - 50	2.8 (2.4-3.3)	2.8 (2.5-3.3)	2.5 (2-3)	2.8 (2.5-3.1)
51 and above	2.4 (2.1-3.4)	2.8 (2.3-3.3)	2.7 (2.3-3.3)	2.7 (2.4-3.4)
p value‡	0.308	0.838	0.220	0.440
Level of education				
High school degree	2.6 (2.3-3)	3 (2.6-3.3)	2.3 (2.2-3)	2.7 (2.3-3)
Higher education	2.6 (2.1-3)	3.2 (2.7-3.3)	2.3 (2-2.8)	2.6 (2.3-3.1)
University degree	2.3 (1.9-3.1)	2.5 (2.1-3.3)	2.2 (1.8-3.1)	2.2 (1.9-3.2)
p value†	0.695	0.344	0.655	0.525
Length of service				
up to 10 years	2.5 (2.1-2.9)	3 (2.7-3.3)	2.2 (2-2.5)	2.5 (2.3-2.8)
11 - 20	2.6 (2.3-3.1)	3.2 (2.7-3.5)	2.5 (2.2-3.2)	2.8 (2.4-3.1)
21 - 30	2.8 (2.4-3.2)	2.9 (2.3-3.3)	2.5 (1.9-3)	2.7 (2.4-3.1)
31 years and above	2.4 (2.2-3.3)	2.7 (2.4-3.3)	2.7 (2.3-3.3)	2.6 (2.4-3.4)
p value‡	0.332	0.539	0.046	0.184

*Mann-Whitney test; †Kruskal-Wallis test

In the group of men, there is a significant correlation between age (Spearman's correlation coefficient, $r = 0.429$, $p = 0.020$) and the length of service (Spearman's correlation coefficient, $r = 0.412$, $p = 0.026$) with their overall score on the scale. In comparison to younger respondents, older respondents agreed mostly or entirely with the statements. Regarding elderly respondents, control of emotional reactions was rated higher when compared to the ratings given by younger respondents (Spearman's correlation coefficient, $r = 0.440$, $p = 0.017$).

Regarding female correspondents, there was no significant correlation between age and their overall score on the emotional regulation and control scale and sub-scales.

Discussion

Mood affects work-effectiveness of nurses (15). Some authors have stated in their studies that people with a low level of positive emotions suffer from emotional exhaustion, which is one of the elements of burnout and the development of psychosomatic disorders and physical illnesses (16). Nurses are usually asked to provide care in an unemotional manner, without demonstrating any emotional response to the pain; they have to be able to buffer their emotions, and to focus on medical care (17). If we consider the impact of emotions and mood on thinking and memory by gender, the results indicate that said impact received a higher average grade on the Likert scale from women than from men. This suggests that emotions have a greater impact on opinion and memory in women than in men, although those differences are not significant. Men and women use different sides of their brains to process and store long-term memories (18). The results also indicate that emotions have a greater impact on memory in women, in the sense that women remember negative emotions more than men do. These differences may be attributed to various genetic, hormonal and environmental factors. Both sexes are equal in intelligence, but tend to operate differently. Men and women appear to use different parts of the brain to encode memories, sense emotions, recognize faces, solve certain problems and make decisions (19).

If we consider the age of respondents, there was no significant difference in the impact of emotions and mood on memory. However, it can be said that increase in age decreases the impact of emotions and mood on memory among nurses. There is a significant correlation between age and length of service, which is understandable because nurses who have been working longer are older. Results indicate that the decrease in the ability to control emotional reactions is proportional to the increase in age, but not to a significant degree.

Regarding educational qualifications, the results indicate that the higher the level of education, the lower the impact of emotions and mood on thinking and memory. This means that people who are more educated can control emotional reactions better, but the differences are also not that significant. We know that emotional regulation is a complex construct which is from an educational perspective seen as an ability to use appropriate strategies in a particular context. Therefore, it is presumed that emotional control can be learned and that education and practice must be combined (20). Through the self-awareness process, nursing students can become aware of the importance of taking care of their own emotional health. Furthermore, they can also learn how to effectively cope with complex interactions with their patients and colleagues (20).

Emotional regulation or control of allows people to comfort themselves and relieve anxiety, depression or irritability (21). Emotional regulation includes managing of unpleasant emotions and emotional reactions, analysis of the causes of such emotions, choice of reaction and the ability to postpone fulfilment of a particular desire or need. In that sense, it determines the external behaviour of individuals and internal well-being (22). Some scholars have discovered that emotional self-regulation can help nurses in recognizing and responding to patients' emotions in an empathic manner, which enables them to provide better nursing care (23). However, as the number of years of service in the nursing profession increases, the level of nurses' empathy decreases (24), which is also true for people working in the same department for a long period of time. Results of a study in Tehran have shown that length of

service is related to continuance commitment and occupational commitment (25).

When it comes to the impact of emotions and mood on the control of emotional reactions, the majority of respondents rated their emotional control on the Likert scale as average. When people are in a good mood, they evaluate life in general as successful and fulfilled and they are more likely to remember positive events in their lives. In contrast, when they are in a bad mood, then such mood also affects their motivation, behaviour and everyday interactions (26). People in a good mood are nicer to other people, more generous and more willing to help. They are also more open to new activities and ideas and more creative than people in a bad mood (27). Healthcare workers who are more competent in recognizing emotions and needs of patients are much more successful in taking care of themselves (28). Average ratings on the scale were somewhat lower for men, respondents under 30 years of age and respondents with a university degree. However, the differences with regard to gender, age and educational background are not that significant.

Conclusion

Average ratings on the emotional regulation and control scale were significantly higher for

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respondents with 31 or more years of service. It has also been discovered that nurses with the shortest length of service are the least active in coping with problems, as well as that their competence increases with length of service (29).

Taking into consideration the demands of the nursing profession, it can be concluded that the possession of emotional intelligence and control is an imperative for successful professional activities. Nurses should attend training programs that also include communication skills programs. It is also necessary to help nursing staff in adopting constructive emotional regulation strategies so that they could manage their and others' emotions and apply such strategies in their work. Nurses with better emotional regulation skills are more motivated to work and to take care of their well-being at home in situations when they have to face emotionally demanding situations at work, which indicates a spillover effect (30).

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