

## COMMUNICATIVE FACTORS ASSOCIATED WITH ASSERTIVENESS IN SLOVENIAN NURSING STAFF IN CLINICAL PRACTICE

## KOMUNIKATIVNI ČIMBENICI POVEZANI S ASERTIVNOŠĆU MEĐU ČLANOVIMA ZDRAVSTVENOG OSOBLJA U SVAKODNEVNOJ KLINIČKOJ PRAKSI U SLOVENIJI

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### *Abstract*

The objective of this research was to investigate the assertiveness of nursing staff members in their everyday practice. The secondary goal was to investigate whether assertiveness is related to sex, age, years of working experience, education and self-esteem. Nursing staff members are expected to have a high level of assertiveness to establish optimal professional communication and working performance. A cross-sectional study design and convenience sampling were applied. Altogether, 303 nursing staff members (88.8% female and 11.2% male; aged between 21 and 58 years) from the northeastern part of Slovenia were enrolled in the study. The participants were asked to complete an anonymous questionnaire, which consisted of the Rathus Assertiveness Schedule and the Rosenberg Self-Esteem Scale. The sample included 44.6% registered nurses and 55.4% nursing assistants with mean = 15.9 (SD 10.1) years of working experience. In general, the level of assertiveness by Rathus scale was low at mean = +4.0 (SD 17.2) points. The male nursing staff members were significantly more assertive than the female nursing staff members ( $p=0.024$ ). A positive association was observed between assertiveness and self-esteem ( $p<0.001$ ). There was no evidence of a significant association between assertiveness and age, years of experi-

### *Sažetak*

Cilj ovog istraživanja je bio analizirati asertivnost medicinskih sestara i asistenata iz zdravstvene njege u njihovoj svakodnevnoj kliničkoj praksi. Dodatno nas je zanimalo da li je asertivnost vezana za spol, dob, godine radnog iskustva, obrazovanje ili samopoštovanje. Od zdravstvenog osoblja se očekuje da imaju visoku razinu asertivnosti kako bi ostvarili optimalnu profesionalnu komunikaciju i radnu učinkovitost. Koristili smo presječno istraživanje i prikladno uzorčenje. U studiji je sudjelovalo ukupno 303 članova zdravstvenog osoblja (88,8 % žena i 11,2 % muškaraca, u dobi između 21 i 58 godina) iz sjeveroistočnog dijela Slovenije. Sudionici su zamoljeni da ispune anonimni upitnik koji se sastojao od Rathus upitnika asertivnosti i Rosenbergove skale samopoštovanja. Uzorak je uključio 44,6 % medicinskih sestara i 55,4 % asistenata u zdravstvenoj njezi s u prosjeku  $15,9 \pm 10,1$  godina radnog iskustva. Općenito je razina asertivnosti prema Rathusovoj ljestvici bila malo pod sredinom = +4.0 (SD 17.2). Muški članovi zdravstvenog osoblja su bili znatno asertivniji nego ženske ( $p = 0.024$ ). Pozitivna povezanost je zabilježena između asertivnosti i samopoštovanja ( $p < 0,001$ ). Nismo dokazali značajniju povezanosti između asertivnosti i starosti, godina iskustva ili razine obrazovanja. Članovi zdravstvenog osoblja su

ence or level of education. The nursing staff members reported low levels of assertiveness, which is consistent with previous findings in this field. Improving assertive behaviour towards patients and other healthcare staff may contribute to improving the quality of patient care.

## INTRODUCTION

Previous studies researching the actual level of assertiveness used in clinical practice by nursing staff are scarce. Therefore, in this article, we investigated and compared the assertiveness of nursing staff members from the north-eastern part of Slovenia in their everyday practice to previous research. Previous studies have suggested that nursing staff assertiveness levels were lower than expected. /1/, /2/, /3/

Nursing staff members are well known to care not only for the physically illness but also for the emotional wellbeing of their patients. Effective communication is an essential part of this process and has been associated with positive health outcomes. /4/, /5/, /6/ In everyday practice, nursing staff members encounter complicated and challenging situations in which communication is extremely important. Nursing staff members interact with patients, their relatives, colleagues and other healthcare professionals, and these interactions greatly depend on their communication skills. /7/

Assertiveness is considered a promising approach to achieving effective communication and a necessary trait in nursing staff. /1/, /8/ Nursing staff members are expected to directly express their feelings, rights, needs, desires, and opinions in a positive way without denying their own rights or the rights of others; in addition, they are expected to make requests, accept praise or say 'no' when they think it is appropriate. Assertive people are intent on making their feelings known to others. /1/, /9/, /10/

A lack of assertiveness might reduce the effectiveness of communication and even compromise patient care. /11/ In addition, the inability of nursing staff to effectively communicate

prijavili nisku razinu asertivnosti, što je u skladu s prethodnim studijama na ovom području. Poboljšanje asertivnosti do pacijenata i ostalog zdravstvenog osoblja može doprinijeti poboljšanju kvalitete njege i skrbi do pacijenta.

could deepen or trigger interpersonal conflicts, aggravate relationships, and undermine or emphasise negative feelings. All of these consequences could easily lead to increased levels of stress at work, thereby reducing work efficiency. /12/ These consequences may be felt by the patients and their relatives. Thus, focusing on improving the quality of communication, which has been recognised to play a key role in health outcomes, is highly important. /6/

Studies have shown that nursing staff assertiveness levels are generally low. /1/, /2/, /3/ Timmins and McCabe /8/ implied that evidence regarding the assertiveness of nursing staff is scarce and emphasised that nursing staff need to be encouraged to be more assertive. Nursing staff must overcome several barriers preventing assertiveness, such as the lack of knowledge regarding personal/professional rights, concerns regarding other people's thoughts about their behaviour and anxiety. /9/ Previous literature has addressed the importance of self-esteem in connection to assertiveness in clinical practice. Nursing staff members with a low self-esteem might, during their career, exhibit negative professional attitudes. /13/, /14/ Therefore, a high self-esteem is essential for nursing staff to exhibit assertiveness and communicate more comfortably and effectively. /7/, /15/ In general, self-esteem refers to individuals' overall perceptions of their worth. Self-esteem is a result of self-evaluation, which arises from the concept of one's identity. /16/, /17/ Furthermore, high self-esteem has been suggested to originate during the education process as students develop a concept of themselves as nursing staff members. /15/, /18/

Given the importance of assertiveness and self-esteem for clinical research, different instruments have been developed. The Rathus asser-

tiveness schedule (RAS) and Rosenberg self-esteem scale (RSE) are the two most often cited instruments. /19/, /20/ Both tools have been shown to be very useful and accurate and are widely used in health research to measure changes in assertiveness and self-esteem. According to Nevid and Rathus /21/, assertive individuals should be able to express their feelings, contradict others, defend their rights and withstand interpersonal stress to a greater degree than non-assertive individuals. Rosenberg /22/ suggested that individuals with higher levels of self-esteem should have greater confidence, be less self-critical and consider themselves worthy and competent.

## METHODS

The aim of this study was to investigate the assertiveness of nursing staff members in their everyday practice and to investigate whether assertiveness is related to sex, age, years of working experience, education and self-esteem.

### Design

This study is a cross-sectional study designed to explore assertiveness among nursing staff from the northeastern part of Slovenia.

### Questionnaire development

The questionnaire consisted of three different parts. The first part included personal and professional data, such as age, sex, duration of working experience and level of education. The second and third parts of the questionnaire included the following standardised questionnaires: the Rathus Assertiveness Schedule /23/ and the Rosenberg Self-Esteem Scale /22/. The Rathus questionnaire uses a scoring system to measure the self-perceived assertiveness of each individual and includes 30 situational statements. Each respondent had to rank the degree to which each statement is characteristic and descriptive of his/her behaviour (-3 to +3). The total assertiveness score ranges between -90 (least assertive) and +90 (most assertive). The Rosenberg Self-Esteem Scale comprises a 10-item scale that captures

the participants' general feelings about themselves. The items are scored using a 4-point Likert-type scale ranging from 1 (strongly disagree) to 4 (strongly agree). The sum of the scores ranges from 10 to 40. Higher scores indicate a higher level of self-esteem. Both scales were translated into Slovene and then back-translated into English by two different translators. A native English-speaker confirmed that the translated version remained consistent with the original version.

### Sampling and data collection

The Regional Nursing Chamber and general hospitals invited nursing staff to participate in this cross-sectional study using convenience sampling. Only the nursing staff members employed in general hospitals were enrolled for the study because such working environment implies the most comprehensive communication with patients, family and other health professionals. /6/ By the time we started collecting data (October of 2016), the register of the Regional Nursing Chamber accounted for 1846 employees in general hospitals of northeastern part of Slovenia. Invitation was made in two different ways regarding the particular setting. The Regional Nursing Chamber invited nursing staff by electronic mail. In general hospitals, top nursing management informed the department head registered nurses, who then further informed the department personnel during the staff meetings. Such procedure reduced the possibility of not being informed to participate in the study. Later, sealed envelopes containing written informed consent form were available in the hospitals department offices. After obtaining written informed consent sent by post directly to the authors, the participants were asked to complete an anonymous questionnaire (sent back by post to the address specified by the participants). The completed questionnaires were again returned by post directly to the authors. Of the 363 respondents, 303 nursing staff members were included in the study. In total, 60 participants were excluded due to missing data. A 16.4% response rate was achieved (303 out of 1846 possible).

**Ethical considerations**

The participants were informed about the purpose and aims of the study. We did not seek approval from the National Ethics Committee as we only collected basic demographic data and the Rathus and Rosenberg scales do not include sensitive or ethically questionable items. In addition, the collected data could not be linked to individuals or organisations. Approvals were obtained from the Regional Nursing Chamber and general hospitals who invited the nursing staff to participate.

**Data analysis**

Bivariate statistical comparisons were conducted using independent samples *t*-tests and Pearson's correlation coefficients. The reliability of the study sample was measured using Cronbach's alpha coefficient. A multivariable linear regression using the standard entry method was performed to study the associations among assertiveness, self-esteem and various demographic characteristics. We build a single regression model, the Rathus assertiveness score was used as dependent variable, the Rosenberg self-esteem score and various demographic characteristics were used as independent variables. The statistical analyses were conducted using IBM SPSS ver. 22 (IBM

Corp., Armonk, NY).  $p < 0.05$  was considered statistically significant.

**RESULTS**

The sex distribution of the respondents could be considered typical of the nursing profession in Slovenia. Of the 303 nursing staff members, 269 (88.8%) respondents were female, and 34 respondents (11.2%) were male. The participants' mean age was 37.6 (SD 9.0) (range of 21 to 58) years, and the respondents reported having a mean of 15.9 (SD 10.1) (range of 0 to 37) years of working experience. In total, 168 (55.4%) respondents were nursing assistants, and 135 (44.6%) respondents were registered nurses. According to the independent samples *t*-test female and male nursing staff did not differ by age and years of working experience (37.8 (SD 8.8) vs 36.3 (SD 8.7) years of age;  $p = 0.349$  and 16.1 (SD 9.8) vs 15.2 (SD 8.6) years of working experience;  $p = 0.571$ , respectively).

The nursing staff exhibited a mean Rathus score of +4.0 SD (17.2) with a range of -50 to +51 points. The Rathus scores were concentrated in the middle interval of the scale from -20 to +19 points (total 74.3%, female 74.4%, male 73.5%). The self-esteem scores of the nursing staff members are presented in Table 1.

**Table 1:** Rosenberg Self-Esteem Scale scores

Self-Esteem Scale	Mean	SD
1. Overall, I am satisfied with myself. (P)	3.1	0.6
2. At times, I think I am no good at all. (N)	1.5	0.8
3. I feel that I have a number of good qualities. (P)	3.0	0.7
4. I am able to do things as well as most other people. (P)	3.3	0.7
5. I feel I do not have much to be proud of. (N)	1.4	0.8
6. I certainly feel useless at times. (N)	1.5	0.7
7. I feel that I'm a person of worth, at least on an equal plane with others. (P)	3.3	0.7
8. I wish I could have more respect for myself. (N)	2.2	0.9
9. Overall, I am inclined to feel that I am a failure. (N)	1.1	0.3
10. I have a positive attitude towards myself. (P)	3.3	0.7
Self-esteem summary score (sum score divided by the number of items)	3.3	0.4

Scale: 1 (strongly disagree) – 4 (strongly agree), P – positive item (grade 4 is considered most positive), N – negative item (grade 4 is considered most negative)

The self-esteem summary score was obtained by summing all items on the self-esteem scale. The negative items were inversed before the summation (inversed grade = 5 - current grade). Then, the summed score was divided by the number of items to remain in the range of the original scale from 1 (lowest degree) to 4 (highest degree). The reliability of both scales was calculated by Cronbach's alpha coefficient.

An alpha coefficient of 0.747 was calculated for the Rathus Assertiveness Schedule, and an alpha coefficient of 0.892 was calculated for Rosenberg's Self-Esteem Scale; both scales had a satisfactory level of reliability. /24/

The results of bivariate statistical analysis are shown in Table 2.

**Table 2:** Bivariate comparison of Rathus assertiveness scores

	Rathus assertiveness score	
	r	p
Age in years	-0.193	0.001*
Years of working experience	-0.192	0.001*
Rosenberg self-esteem score	0.394	<0.001*
	M (SD)	
Sex		<0.001**
female	+2.7 (11.7)	
male	+13.8 (17.5)	
Education		0.065**
registered nurse	+6.0 (6.7)	
nursing assistant	+2.3 (17.7)	

\* Pearson's correlation coefficient, \*\* independent samples *t*-test

M (SD): mean value (standard deviation)

We found a negative correlation between the Rathus score and age ( $r=-0.193$ ,  $p=0.001$ ) and between the Rathus score and duration of working experience ( $r=-0.192$ ,  $p=0.001$ ). Thus, older nursing staff members and staff with more years of working experience were less assertive; however, the negative correlations were weak. The correlation coefficient between the Rathus score and Rosenberg's self-esteem summary score was  $r=0.394$  ( $p<0.001$ ). Thus, nursing staff members with higher self-esteem are more assertive, and this positive correlation was of medium strength. The female nursing staff members exhibited a mean Rathus score of +2.7 (SD 11.7) points, while the male respondents exhibited a mean score of +13.8

(SD 17.5) points. The difference in the Rathus scores was statistically significant, suggesting that female nursing staff members perceived themselves as less assertive than their male counterparts ( $p<0.001$ ). However, we found no significant differences in the Rathus scores by education ( $p=0.065$ ); the registered nurses exhibited a mean Rathus score of +6.0 (SD 6.7), and the nursing assistants exhibited a mean score of +2.3 (SD 17.7).

The multivariable linear regression analysis resulted in two significant associations between the Rathus score and five analysed predictors (Table 3).

**Table 3:** Associations between various characteristics and assertiveness scored by the Rathus questionnaire (multivariable linear regression)



Characteristics	B	SE	95% CI for B	p
Sex				
male			reference	
female	-6.77	2.99	(-12.65, -0.90)	0.024
Age in years	-0.06	0.33	(-0.70, 0.58)	0.852
Years of working experience	-0.20	0.29	(-0.78, 0.38)	0.500
Education				
nursing assistant			reference	
registered nurse	3.52	1.87	(-0.16, 7.20)	0.060
Self-esteem summary score	17.48	2.37	(12.81, 22.14)	<0.001

R<sup>2</sup>=0.215

B: regression coefficient, SE: standard error, 95% CI: 95% confidence interval

An increase by one self-esteem point was associated with a 17.48-point increase in the Rathus score (B=17.48, 95% CI=12.81, 22.14, p<0.001), and the female sex was associated with a 6.77-point decrease in the Rathus score (B=-6.77, 95% CI=-12.65, -0.90, p=0.024).

## DISCUSSION

According to the literature, nursing staff members could improve their clinical practice by further development of assertiveness skills. /9/, /25/ Effective communication among healthcare professionals from different departments, both within and outside of their groups, is necessary for efficient, interdisciplinary collaboration. /6/ Previous studies suggest that education and trainings improve not only collaboration and communication between nurses and physicians or patients but also respectful and non-hierarchical behaviour. /26/, /27/ The key features of confident and self-assured professionals include high levels of self-esteem and assertiveness. /7/, /15/ Understanding assertiveness and learning how to communicate effectively can be used as a communication strategy to enable behaviours that create a positive influence on others and oneself and are crucial for the nursing profession. /11/, /28/ Communication is considered an essential ingredient for success in the rapidly changing healthcare climate. /29/

In the present study, our goal was to investigate the relationship among self-perceived levels of assertiveness, sex, age, years of working experience, levels of education, and perceived self-esteem among nursing staff from the northeastern part of Slovenia. First, our

results showed that the overall levels of the self-perceived assertiveness of the participants according to the Rathus scale was rather low (mean value of +4 on the scale from -90 to +90), which is consistent with the findings of other researchers. /1/, /3/ In addition, approximately 75% of all responses were between -20 to +19 points. According to the mean values, none of the above listed studies reached the upper third interval on the Rathus scale. Our findings of rather low scores of self-perceived assertiveness reflect the traditional submissive role of nurses in clinical settings and the fact that the nursing staff members in Slovenia are still regarded as sole assistants to doctors rather than assistants to patients. Furthermore, this lack of assertiveness could be related to occupations that are predominantly female and gender stereotyping by dominant males, emphasising that nursing staff members are dually oppressed as follows: 'by their gender and by the medical dominance'.

By focusing on the nursing staff members' sex, our results regarding assertiveness were not consistent with those reported in a study by Kilkus /1/, who showed that males and females were equally assertive. In our study, the male nursing staff perceived themselves as being more assertive than the female staff (p=0.024). Even though nursing is traditionally perceived as a female profession, in our study, the male nursing staff expressed a higher level of assertiveness. In contrast, our results regarding age and working experience are consistent with the findings reported by Kilkus /1/, who also found no significant differences among groups that were below 60 years of age and/or any group based on the duration of working experience.

rience. Our results indicate that older nursing staff with more experience in clinical practice had levels of assertiveness that were comparable to those of younger nursing staff who were less experienced. Furthermore, the level of assertiveness does not improve with the years of working experience in clinical practice. In analysing the relationship between the level of education and assertiveness, we expected that higher levels of education would be associated with higher levels of assertiveness as shown by Kilkus /1/ and based on the general belief that higher education improves various skills. However, the level of perceived assertiveness was similar between the nursing assistants (lower level of education) and the registered nurses ( $p=0.060$ ). The mean assertiveness score exhibited by the nursing assistants was +2.3, and that by the registered nurses was +6.0 points. Thus, the assertiveness level did not increase with the level of education. Our findings were not consistent with the findings reported by Kilkus. /1/ Nevertheless, a comparison of the results by demographic data must be considered with caution because Kilkus /1/ conducted only bivariate statistics.

In our research, self-esteem accounted for the majority of the assertiveness score. Different studies have indicated that nursing staff members should reflect high self-esteem to exhibit the levels of assertiveness necessary for establishing communication more comfortably and effectively. /7/, /15/ In addition, a positive self-image and professional identity are prerequisites for nursing staff members to develop strong and therapeutic relationships with patients. /30/ In our study, we found a positive association between higher self-esteem and assertiveness ( $p<0.001$ ). The nursing staff in our study expressed a high level of confidence and satisfaction with themselves (mean value 3.3). The respondents felt self-worth and self-respect and had an overall positive attitude towards themselves. Although self-esteem and assertiveness have been frequently discussed, we only found a single study that measured their association empirically. İlhan et al. /31/ investigated nursing students who exhibited a consistent positive relationship between these two variables throughout their four years of

education. Interestingly, the Rathus assertiveness level among the students was even higher than that in the above mentioned studies involving nursing staff in clinical practice; however, the assertiveness level did not improve throughout the traditional education process. This and other findings show that undergraduate education and workshops at present have only a limited effect on building assertive behaviour in nursing staff. /3/, /7/, /11/, /15/

Because assertiveness is highly important in the clinical environment, many authors suggest that employees should be more assertive. Deltsidou /7/ indicated that assertiveness should be encouraged through learning methods and that nursing staff should preferably obtain this skill training throughout their studies. According to Deltsidou /7/, instructors play an essential role in improving assertiveness training curricula for undergraduate nursing students. Begley and Glacken /32/ showed that, in general, students' reported assertiveness levels increased as they approached completion of their three-year education programme. Furthermore, Amicone and Miller /33/ suggested that educators could improve students' assertiveness skills by offering classes that focus primarily on assertiveness skills and training and more simulation exercises throughout the programme and by increasing clinical time instead of classroom learning. Furthermore, McCabe and Timmins /9/ also indicated that customised educational training could have a beneficial effect on behaviour. However, these authors also stated that having knowledge about assertiveness does not necessarily result in a person engaging in assertive behaviour in practice.

## STUDY LIMITATIONS

Slovenia is a new member of the European community and has adopted European healthcare standards during the past two decades. Furthermore, the nursing education programmes were designed according to the Bologna agreement. Research investigating assertiveness in nursing staff is lacking; therefore, our results could not be compared to Western

European countries. Further studies are needed to determine whether educational measures for improving the nursing profession should be implemented locally or throughout the European region.

In the present research we used a convenience sampling which may have led to biased findings as the sample of respondents might not be representative of the study population. As the research started we tried to reduce the risk of participants of not being informed to take part in the research by the call from employer site and the Regional Nursing Chamber. Our response rate was low, however the collected data had a typical sex distribution for nursing staff in Slovenian general hospitals and the mean age was also comparable to a previous study involving a larger sample from all Slovenian general hospitals. /34/ The distribution of the sample according to education was also in agreement with current Slovenian nursing staff regulations for general hospitals which direct that approximately 40% of staff must be represented by registered nurses and 60% by nursing assistants. /35/

Additional limitation to the study was also that there was no actual measure of patient outcomes related to assertiveness. There is no evidence suggesting that patient care has been compromised or that communication is ineffective due to low assertiveness. Nevertheless, current literature identifies unnecessary conflicts, not only in nursing staff interaction with patients and their family but also among health professionals themselves. /36/, /37/ Therefore, the assertive behaviour and assertive communication is seen as potential option to reduce traditional patient-family-staff conflicts. /11/

The Rathus assertiveness scale does not clearly define thresholds. In nursing profession it should be a desired trait for the staff to interact with high level of assertiveness to avoid possible conflicts, primarily with patients and family as well as with other health professionals. Past research using the Rathus scale also addressed this problem, in some cases assertive behaviour was classified, if the Rathus score

was above 0 points. Nevertheless, conclusions were primarily vague whether those scoring levels were of desired level for such a demanding occupation. According to our expectations the nursing staff members should be able to reach the upper third interval on the Rathus scale or at least a score of +30 points, a level that might also be considered as high assertiveness.

The original Rathus Assertiveness Schedule /23/ is 45 years old and has been criticised for containing items that are outdated being too aggressive or heterosexist. Meanwhile, during the past decades, many problematic items were revised to minimise heterosexist terminology, for example "attractive persons of opposite sex" was revised to "a person whom I find attractive", "salesmen" was revised to "salesperson", "waitress" to "server". /19/ For the purposes of our research we used the revised version with improved heterosexist terminology.

## CONCLUSION

Assertiveness represents an important issue in nursing but has seldom been researched in clinical practice. Nursing has always been regarded as a very demanding profession that directly impacts patients' health. We argue that assertiveness and a high self-esteem are required qualities for professional communication and are therefore critical elements in the quality of patient care. Our results show that the assertiveness levels among nursing staff members are relatively low. According to results of the multivariable linear regression we identified a positive association between 1) higher self-esteem and higher assertiveness and 2) male sex and higher assertiveness. There was no evidence of a significant association between assertiveness and age, years of working experience or level of education. Therefore, further studies are needed to obtain an understanding of all factors that might influence the assertiveness of nursing staff in clinical practice. Although scholars have identified the limited effects of various approaches, assertiveness can be improved only through special training programmes designed to in-



crease the levels of assertiveness, and these programmes should start during the student stage. Therefore, promising educational approaches should be adopted in the nursing curriculum.

Notes

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