

PATRYCJA GIERSZON<sup>1</sup>, JOANNA MILANOWSKA<sup>1</sup>, URSZULA ŁOPUSZAŃSKA<sup>1</sup>,  
KATARZYNA SIDOR<sup>1</sup>, MAGDALENA PAZIEWSKA<sup>2</sup>, MARZENA SAMARDAKIEWICZ<sup>1</sup>

## Self-esteem of medical students and their attitudes towards the nurse profession

### Abstract

**Introduction.** The profession of a nurse is next to the medical profession, one of the pillars of medical care in Poland and in the world. In recent years, the need to see the importance of this profession and the responsibility associated with it, both by the public and the doctors, is increasingly underlined.

**Aim.** The research carried out is an attempt to answer the question, what attitudes towards nurses are shaped by future doctors already during the studies and what influence on students' self-esteem on these attitudes.

**Material and methods.** The research was conducted among 89 students of the medical faculty, Medical University in Lublin in April 2018. A questionnaire of own authorship was used, constructed on the basis of descriptive research carried out by Maik M. et al and the Rosenberg Self-Assessment Questionnaire (SES). The obtained results were subjected to statistical analysis using the STATISTICA program, version 13.1.

**Result.** The vast majority of medical students (80%) believe that the role of a nurse is underestimated both in society and in the medical community. Students think that this work requires sacrifice and constant vigilance. Students who have encountered nursing staff notice symptoms of burnout in some of them, such as depersonalization of patients (56%). However, most of them (60%) think that this is ungrateful work and often interferes with family life. Students do not agree that the nurse should always be smiling and optimistic (75%). She values her features such as patience, good organization of time (86%) and ability to cooperate with doctors (91%). Most of students think that a nurse is a partner of a doctor (73%), while almost half (49%) of them see imperfections in cooperation both professional groups, resulting from the lack of mutual respect (64%). Students notice the commitment and hard work performed by nurses (70%), and also, although to a lesser extent, they appreciate their knowledge (56%).

**Conclusion.** Appreciation of the nurse's role on the part of doctors seems to be particularly important due to the need for cooperation of medical staff. The quality of cooperation between the interdisciplinary team and, consequently, the quality of care and medical care depends to a large extent on the mutual respect, understanding and correct communication between these professional groups.

**Keywords:** self-esteem, medical students, nurse profession.

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### INTRODUCTION

The profession of a nurse is, next to the medical profession, one of the pillars of medical care in Poland and in the world. In Poland, this professional group has 288.395 people employed in many different types of facilities (hospitals, outpatient clinics, nursing homes, schools, kindergartens, nurseries and others) [1]. Looking at the history of this profession in Poland, until the nineteenth century it was usually charitable, obliging and auxiliary. The nuns from various congregations exercised care over the sick. Later on, secular people were increasingly included in this care [2]. Since in the second half of the twentieth century nursing received the status of practical socio-natural sciences, and professional nurses were legally granted the status of independent profession, there have been changes in the relationship between the nurse, the patient and the doctor. Modern nursing in Poland is rapidly developing

and changing, especially in the field of education, which has been raised to the academic level [3]. In 2017, the Ministry of Health together with the Nursing Council of Nurses and Midwives, the National Trade Union of Nurses and Midwives and the Warsaw Medical University organized a debate on the problems of contemporary nursing and midwifery. Minister Radziwiłł emphasized at the time that the problems of Polish nursing are the problems of the whole country, he also admitted that one of the biggest problems of health care, not only in Poland, is insufficient number of representatives of this profession. Quoting the former health minister of Poland: "we certainly have to work on the prestige of the nurse and midwife professions, because this prestige is what will attract new staff and also prevent people from leaving the profession" [4].

In recent years, the need to see the importance of this profession and the responsibility associated with it, both by the public and the doctors, is increasingly underlined. Appreciation

<sup>1</sup> Department of Applied Psychology, Medical University of Lublin, Poland

<sup>2</sup> Department of Experimental Haematology, Medical University of Lublin, Poland

of the nurse's role on the part of the latter group seems to be particularly important due to the inevitable collaboration of medical staff. The quality of cooperation between the interdisciplinary team and, consequently, the quality of assistance and medical care, depends to a large extent on the mutual respect, understanding and correct communication between these professional groups. Attitudes towards the nursing profession are shaped by future doctors already during their studies, which is why it seems important to investigate what they are and what affects them.

The image of nursing is conditioned by many factors, such as: previous experience with staff, stereotypes that are peniless in society, education and competence of nurses, the amount of their remuneration, media activities, perception of the prestige of the profession and the attitude and appearance of its representatives. The caring nature of the profession explains why nursing is mainly chosen by women and why they are still called sisters in their work. When learning about the characteristics of the profession and the currently difficult situation of nursing in Poland, it is worth considering the image of nursing. As today, nurses and the profession they do are perceived in a way, which determines the picture of a modern nurse being not fully satisfying for the medical community [5].

However, apart from external factors, there are internal ones – such as values or self-esteem. The following work attempts to find the dependence of students' attitudes towards the nurses on account of this last factor.

Self-esteem consists in a critical attitude towards oneself. Thanks to it, a man is able to define his own being, to separate himself from the environment. Self-image is considered to be an integral part of the personality, a value-assessment element. It makes it possible to assess the self-esteem of a person in terms of ability, success and importance in the environment. It is dynamic, shaped through interpersonal contacts, depending on the level of self-awareness, possessed abilities and skills [6]. According to James's concept, self-esteem is the resultant of what the individual has achieved and what he would be potentially able to achieve. The value of self-esteem is the ratio of the entity's achievements to its aspirations. The smaller the disproportion between what the person has achieved and what he could achieve, the higher his/her self-esteem and more positive affect directed towards the self [7].

According to Niebrzydowski, self-esteem is an element of the human knowledge system about itself. It is the backbone of the image of one's own person, an essential component of self-awareness, inseparably connected with the concept of oneself, because without it, it would be impossible to define one's own being or separate oneself from the environment [8]. In the Encyclopedia of Pedagogics of the 21st Century, under the term of self-evaluation, we read: "a team of diverse judgments and opinions that relate to a person, and in particular to its appearance, talents, achievements and possibilities" [9]. In the literature, we can also find a definition of self-esteem, as "attitudes towards oneself, especially towards one's own abilities and other socially valuable qualities" [10]. Self-esteem is a kind of theory on its own subject, referring mainly to internal factors that determine the achievement of goals. An interesting approach to the discussed issue can be found in the views of Aronson, Wilson and Akert, who, under the concept of self-esteem, understand the self-esteem made by people, that is, the extent to which they perceive themselves as good, competent and decent [11]. The most generalized level of self-evaluation

is general self-evaluation (global self-esteem), which is a measure of how positive or negative our attitude to ourselves is.

Looking at the definition of self-esteem more globally, it is worth mentioning the definition of self-assessment proposed by Wells and Marwell [12]. These authors adopted a criterion which was associated with an attempt to find a common concept for various self-assessment approaches. The first element of such an approach was the assessment, the second the affect. A group of definitions based on self-evaluation explains the cognitive processes underlying the I-stance. In the second group of definitions, based on the emotional aspect of self-esteem, the feelings that the subject experiences in relation to himself are emphasized. A similar division was also described in the late eighties of the last century [13]. Cognitive and emotional aspects of self-assessment are also visible in Wojciszke – he defines self-esteem as an affective reaction of the individual to himself [14], and Niebrzydowski – as a "team of judgments and opinions that the individual refers to himself" [15]. These opinions and judgments may concern both current and potential psychological and physical characteristics of the subject [16].

The questionnaire to study the general level of self-esteem that was used to conduct the following tests is a one-dimensional tool allowing to assess the level of general self-assessment – relatively constant instruction understood as a conscious attitude (positive or negative) towards the self. It consists of 10 diagnostic statements. The respondent is to indicate on a four-level scale, to what extent he agrees with each of these statements. In the course of Polish adaptation, numerous data on the theoretical validity of the tool were collected, such as the results of exploratory and confirmatory factor analysis and SES correlations with questionnaires measuring different constructs, e.g. depression, narcissistic personality, temperament, locus of control, optimism, basic hope, social competence or shyness. The results obtained prove the accuracy of SES. Considering the accuracy and ease of use of this tool verified in Polish adaptive studies, the SES Self-Esteem Scale is recommended primarily for scientific research. The manual also contains data needed to interpret the results for individual diagnosis [17].

## AIM

The research carried out is an attempt to answer the question, what attitudes towards nurses are shaped by future doctors already during the studies and what is the influence of students' self-esteem on these attitudes.

## MATERIAL AND METHODS

The research was conducted among 89 students of the medical faculty of the Medical University of Lublin in April 2018. A questionnaire of own authorship was used, constructed on the basis of descriptive research carried out by Maik M. et al [18] and the Rosenberg Self-Esteem Questionnaire (SES).

The obtained results were subjected to statistical analysis using the STATISTICA program, version 13.1. The normality of the distribution was checked using the Shapiro-Wilk test and the homogeneity of the variance was tested using the Levene test. Correlations between the studied variables were calculated with the Spearman rank correlation coefficient. Due to the diversity of the groups studied, hypothesis testing was per-

formed using the Mann-Whitney U test (comparing 2 groups). When comparing more than 2 groups, statistical analysis was performed using the Kruskal-Wallis test for independent samples, including post hoc (Dunn’s test). The results were considered significant at  $p < 0.05$ .

**RESULTS**

There were 61 women in the study group, what constituted almost 69% of the respondents, the remaining 31% were respectively 28 men. Average age of the respondents was equal to 21.5 years.

The group of over 41% (37) of respondents assess their financial situation as good, only slightly over 37% (33) assess it on an average level. Over 20% (18) of respondents assess their financial situation as very good. One person who found his financial situation difficult is excluded from the analysis. The material situation of the respondents did not differentiate the group in terms of assessment of the nurse profession,  $p > 0.05$ .

The majority of over 50% of respondents live in a city of over 100,000 inhabitants, over 32% of respondents are resi-

dents of smaller cities, and rural residents account for over 16% of students. The place of residence did not differentiate the group in terms of points obtained in individual subcategories of the survey. Only some equations have been observed in the subcategory “the nurse profession is difficult and responsible”,  $p < 0.02$ , but the analyzes did not show any differences between the surveyed people due to their place of residence.

The distribution of results obtained in the questionnaire regarding the opinion of medical students about the nurse profession is presented in Table 4.

Table 5. shows the percentage distribution of results obtained in the SES test in the studied group – the biggest group

**TABLE 1. Percentage share of women and men in the survey.**

Gender	Number	Percent
Women	61	68.539
Men	28	31.460

**TABLE 2. Percentage distribution of the surveyed group with regard to the financial situation.**

Financial situation	Number	Percent
Good	37	41.573
Very good	18	20.224
Average	33	37.078
Difficult	1	1.123

**TABLE 3. Percentage distribution of the surveyed group with regard to the place of residence.**

Place of residence	Number	Percent
City with more than 100,000 inhabitants	45	50.561
City with less than 100,000 inhabitants	29	32.584
Village	15	16.853

**TABLE 4. The distribution of results obtained in the questionnaire regarding the opinion of medical students about the nurse profession.**

	MEAN	MIN	MAX	SD
No position of a nurse as a professional in a team	7.146	3.000	11.000	1.974
Inadequate remuneration	2.269	0.000	4.000	1.008
Positive opinions as emotional aspect	2.494	0.000	4.000	1.197
Appreciated for their level of knowledge and skills	1.179	0.000	2.000	0.747
Negative opinions about nurses	2.112	0.000	7.000	1.668
A difficult and responsible profession	2.337	0.000	4.000	1.096
Choice of profession is a vocation	1.067	0.000	2.000	0.765
Cooperation between doctor and nurse – evaluation tendency	3.011	0.000	5.000	1.410
Expectations about the proper relationship between a doctor and a nurse	3.808	0.000	6.000	1.491
Personality qualifications	3.505	0.000	5.000	1.216
Sten self-assessment	5.056	1.000	8.000	1.773

**TABLE 5. The percentage distribution of results obtained in the SES test in the studied group.**

Self-assessment	Number	Percent
Low	24	26.966
High	18	20.224
Very low	9	10.112
Average	38	42.696

**TABLE 6. Analysis of the correlation between self-assessment and opinion on the profession of nurse.**

Pair of variables	N	R Spearman	p
No position of a nurse as a professional in a team & sten self-assessment	79	-0.038	0.733
Inadequate remuneration & sten self-assessment	79	0.007	0.945
Positive opinions as emotional aspect & sten self-assessment	79	-0.048	0.671
Appreciated for their level of knowledge and skills & sten self-assessment	79	-0.142	0.210
Negative opinions about nurses & sten self-assessment	79	0.086	0.450
A difficult and responsible profession & sten self-assessment	79	-0.056	0.619
Choice of profession is a vocation & sten self-assessment	79	-0.137	0.225
<b>Cooperation between doctor and nurse – evaluation tendency &amp; sten self-assessment</b>	<b>79</b>	<b>-0.252</b>	<b>0.024*</b>
Expectations about the proper relationship between a doctor and a nurse & sten self-assessment	79	-0.185	0.100
Personality qualifications & sten self-assessment	79	0.016	0.888

\*- correlation coefficients are statistically significant ( $p < 0.05$ )

**TABLE 7. Comparison of opinions of the surveyed women and men in terms of their opinions on the profession of nurses.**

Variable	p
No position of a nurse as a professional in a team	0.588
Inadequate remuneration	0.919
Positive opinions as emotional aspect	0.431
Appreciated for their level of knowledge and skills	0.588
Negative opinions about nurses	0.239
A difficult and responsible profession	0.386
<b>Choice of profession is a vocation</b>	<b>0.031*</b>
Cooperation between doctor and nurse – evaluation tendency	0.898
Expectations about the proper relationship between a doctor and a nurse	0.462
Personality qualifications	0.558

\*- statistically significant differences ( $p < 0.05$ )

of nearly 43% (38) of the respondents obtained average self-assessment results, almost 27% (24) of students were characterized by low self-esteem, just over 20% (18) had high self-esteem, the remaining 10% (9) obtained very low result. The analyzes showed that the level of self-esteem does not differentiate the results obtained in the survey evaluating the nurses' profession in the studied group of students,  $p > 0.005$ . The same situation took place after excluding people with very low self-esteem.

Analysis of the correlation between self-assessment and opinion about the nurse profession has shown that only in the aspect of doctor and nurse cooperation – evaluation tendency, the variable was correlated with the level of self-esteem of the respondents ( $r = -0.252$ ,  $p < 0.02$ ). The higher the self-esteem of the respondents, the less they indicated the need for cooperation between the doctor and the nurse. The lower was the respondents' self-esteem, the more they saw in this cooperation a greater necessity (Table 1).

The analysis of differences between the surveyed women and men showed significant statistical differences only in the range – the choice of profession is a vocation ( $p < 0.02$ ). Women obtained higher results in comparison with men (Table 2).

## DISCUSSION

The profession of a nurse is, next to the medical profession, one of the pillars of medical care in Poland and in the world. In recent years, the need to see the importance of this profession and the responsibility associated with it, both by the public and the doctors, is increasingly underlined. Appreciation of the nurse's role on the part of the latter group seems to be particularly important due to the need for cooperation of medical staff.

The quality of cooperation between the interdisciplinary team and, consequently, the quality of care and medical care depends to a large extent on the mutual respect, understanding and correct communication between these professional groups. The research is an attempt to answer the question, what attitudes towards nurses are shaped by future doctors already during the studies, and whether this assessment results from the self-assessment of students of the medical field.

Statistical analysis of the conducted studies showed that the level of self-esteem does not differentiate the results obtained in the questionnaire assessing the profession of nurses in the studied group of students,  $p > 0.005$ . The same situation took place after excluding people with very low self-esteem. Only in the aspect of doctor and nurse cooperation – the evaluation tendency occurred. The vast majority of medical students (80%) believe that the role of a nurse is underestimated both in society and in the medical community. Students think that this work requires sacrifice and constant vigilance. Students who have encountered nursing staff notice symptoms of burnout in some of them, such as depersonalization of patients (56%). However, most of them (60%) think that this is ungrateful work and often interferes with family life. Students do not agree that the nurse should always be smiling and be optimistic (75%). They value the features such as patience, good organization of time (86%) and ability to cooperate with doctors (91%). Most of students think that a nurse is a partner of a doctor (73%), while almost half (49%) of them see imperfections in cooperation of both professional groups, resulting from the lack of mutual respect (64%). Students notice the commitment and

hard work performed by nurses (70%), and also, although to a lesser extent, they appreciate their knowledge (56%).

Research shows that students of the medical school notice that currently, the cooperation between the doctor and nurse is often inappropriate, and nurse's function is diminished, what probably results from stereotypes strongly rooted in the consciousness. However, the perception of the important role of the nurse in the therapeutic team by future doctors gives a chance to create better cooperation of medical staff in the future.

The attitude of future doctors towards nurses was also addressed by scientists from the Institute of Health Protection, State Higher Vocational School of prof. Edward F. Szczepanik in Suwalki. The number of 900 medical students from three medical universities in Poland took part in the research. They indicated a lack of holistic perception of the role of the nurse by future doctors. It turns out that the functions and duties of the nurse, understood as her role, were better and more positively assessed by women than by men. The research shows that most doctors do not see the important role of the nurse in caring for the patient, thereby diminishing her position in the therapeutic team and that the cooperation between the doctor and nurse is often inappropriate and results from the lack of openness, mutual dislike and stereotypes. The surveyed students believe that there is a lack of respect, understanding and kindness in the relations between the doctor and the nurse. The most negative opinions about the nurse profession were expressed by students graduating from the university [19].

Research conducted at the Warsaw Medical University in cooperation with the Health Care Team by D. Włodarczyk and B. Tobolska over the image of the nurse profession seen from the perspective of doctors, patients and nurses showed that nurses are positioned lower than doctors and patients. It should be noted that the studied groups did not differ significantly in the assessment of diligence, conscientiousness and education. The study found that nurses rated the majority of the analyzed traits higher than doctors and patients, which means that they have a more positive image of the nurse profession than other groups. Among the variables controlled in the study, the place of residence, the patient's health situation and the doctor's work experience were significant [20].

The studies at the New York University Rory Meyers College of Nursing also throw light on the topics discussed. Their goal was to investigate the impact of nursing change patterns on the nurse-nurse cooperation in hospital units. This indicates that cooperation between nurses and other health care providers is crucial to ensuring high-quality patient care. It is a cross-sectional study using data from 957 units in 168 hospitals in intensive care units. The cooperation measures include nurse-nurse cooperation and nurse-doctor cooperation. Measures of change patterns included the length of change and overtime. Multilevel linear regressions were performed at the unit level, controlling the unit and hospital characteristics. Hours were associated with lower cooperation at the unit level. It turned out that working overtime may negatively affect the cooperation of nurses with doctors [21].

The research included 120 respondents – 62 women and 58 men, living in Świętokrzyskie Voivodeship. A diagnostic survey method was used in the research. The research tool was a questionnaire of own authorship, consisting of 26 closed questions. The statistical analysis was conducted using the IBM Statistics 23. Level of significance  $p < 0.05$  was assumed.

Results: Professional prestige of nurses increases with the age of examined person. The examined assume that contemporary nurse is a person, who performs ones professional duties honestly and carefully, is also a person who systematically enriches ones knowledge. The level of social trust to the nurses is assessed as high. Young people in their age below 40 years old present better knowledge about the demographical situation of nurses [22].

In another study an attempt was made to evaluate the perception of the relations between nurses and young doctors. In one study, nurses and resident physicians reported varied perceptions (e.g. positive and negative perceptions) of nurse-physician collaboration. In this qualitative study analyzing the perceptions of collaboration between female nurses (n=28) and female residents (n=23), Wear and Keck-McNulty found that nurses practicing on surgical units and in emergency departments had positive perceptions of nurse-resident cooperation. Nurses on these units described collaboration with residents as less intimidating and stated that female residents were easy to get along with, whereas nurses on OB-GYN units reported negative perceptions of nurse-resident collaboration. Nurses on the OB-GYN units reported that female residents did not value their knowledge and experience. One nurse reported that female residents did not respect them as much as male residents do [23].

The aim of the another study was to investigate the physician and nursing perceptions regarding communication and collaboration as well as the factors that may influence these activities. A self-administered questionnaire survey was sent to a random sample of 93 physicians and 197 nurses from two large public hospitals in Athens, Greece. Years of experience, the size of the clinic, the university degree and the postgraduate studies were found to be significant factors according to nurses' view. For the physicians – age, sex, years of experience and the size of clinic affected the communication and collaboration with the nursing staff significantly. These findings suggest that nurses and physicians do not share the same views concerning the effectiveness of their communication and nurses' role in the decision-making process of the patients' care. The most important barrier for the establishment of good relations between these professions, according to the physicians, was that they did not recognize the nurses' professional role. The study also indicated that the absence of interprofessional collaboration may result in a higher possibility of errors and omissions in patients' care. Therefore, in everyday practice, both nurses and physicians should acknowledge the importance of their effective communication and they should develop and implement interprofessional teamwork interventions to improve cooperation. What is more, nurses have to constantly consolidate their role in the decision process and patients' care, especially in countries with limited interprofessional collaboration culture. In addition, factors that improve physicians' attitudes toward collaboration and effective communication should be further explored [24].

Conducting research in the field of self-assessment of medical students and their attitudes towards the nurse profession seems justified. However, it should be extended to include this group at the end of the course of study, to check whether the opinion on nurses and attitudes towards them have changed. If so, how and what influenced it.

## CONCLUSIONS

Medical students notice that the cooperation between the doctor and the nurse is often incorrect, and the nurse's function is undervalued, what may result from stereotypes rooted in the consciousness and insufficient knowledge about the responsibility of individual parties.

Studies have shown that the level of self-esteem does not differentiate the assessment of the nursing profession in medical students. However, the higher self-esteem characterized the students, the less they pointed to the need for cooperation between the doctor and the nurse. The lower the self-esteem of future doctors, the more they saw greater value in this cooperation. It seems, therefore, that the characteristic of this cooperation should be indicated to all students, so that they understand its legitimacy, due to the varied duties of the nurse and the doctor.

The perception of the important role of a nurse in a therapeutic team by future doctors gives a chance to create better cooperation of medical staff in the future.

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**Corresponding author**

Patrycja Gierszon

Department of Applied Psychology, Medical University of Lublin

tel: 506 164 778

E-mail: patrycja.gierszon@umlub.pl