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Attitudes towards communication skills among nursing students and its association with sense of coherence

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ABSTRACT

The aim of the study is to examine the relationships between attitudes towards communication skills, self-evaluation of communication abilities, and sense of coherence among students of nursing. A cross-sectional correlational study design was employed. Altogether, 227 university nursing students participated in the study (20.53 ± 2.04 ; 96.9% females). Communication Skills Attitudes Scale (CSAS), Sense of Coherence Scale (SOC), and short self-evaluation scale of communication ability of own design were used. The results showed a high average score in the positive attitudes subscale and moderate negative attitudinal scores in the CSAS questionnaire, as well as positive self-evaluation of the communication abilities among students. The positive subscale of the CSAS was positively related to the sense of coherence ($p = 0.05$), while the negative subscale of the CSAS was negatively related to the sense of coherence ($p \leq 0.001$). The study showed that sense of coherence is associated with more positive attitudes towards communication skills. Understanding the factors associated with the effective communication strategies provides an important base for improving the content of the current communication curriculum in nursing study programs.

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Introduction

Communication is an important topic, perceived as inevitable for providing effective and high quality health care among both patients and health care professionals. Research evidence has shown the important role of communication in a number of health care related outcomes, such as better utilization of health care, better

patient compliance, higher social support, or improved clinical outcomes and prevention [1–3]. Research findings also showed that contrary to expectations, most patients did not report that their most memorable experiences were related to the clinical or technical quality of the care they received, but rather they were associated with the personal attitude or interpersonal communication by health care professionals [1]. Street et al. [2] conclude that the pathways through which the quality of clinicians/

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patient communication can influence the health outcomes may be both direct and indirect. The direct pathway may be shown for instance in lowering physiological arousal and pain, enhancing well-being and lessening anxiety of patients by empathic communication provided by health care professionals. In a more indirect way, communication influences factors such as satisfaction with care, motivation to adhere, trust in the clinician and health system, self-efficacy in self-care, or cooperation between patient and clinician.

Inter-professional communication within the health care team is also essential for providing effective health care. Quality of team cooperation and communication plays a vital part in fostering a healthy work environment, increasing job satisfaction, preventing burnout syndrome and lowering health care professionals' intentions to leave [3–5]. Some studies have also demonstrated a relationship between the effectivity of communication and the occurrence of medical errors [6,7].

The level of communication skills among students of the healthcare professions have been explored in a number of studies. However, most of the studies aimed at attitudes towards the importance of communication skills were focused on medical students [8–11]. Examining the attitudes towards communication skills among students of health care professions is important due to a close relationship between individual's attitudes and behaviour in social situations, as shown in the often cited "Theory of reasoned action" [12]. Based on this theory, a behavioural change might be evoked by the change of a person's attitude. As the behavioural component of the attitudes are manifestations of underlying cognitive and affective components, changes in behaviour might be provoked by influencing the related aspects of attitudes: cognitive and emotional component [10]. This theoretical background might be effectively used in the education process, and demonstrates the importance of exploring the attitudes towards communication among students of the healthcare professions. Negative attitudes towards learning communication skills and an inability to perceive communication as an important part of effective healthcare might negatively influence the effectiveness of the education process in the health care professions.

The relationship between communication skills and personality traits among health care professionals has been explored less often, although some studies have studied empathy in the context of communication skills training [12–14]. The present study is focused on a less examined personality trait: the sense of coherence and its association with communication skills attitudes. Sense of coherence (SOC) is defined as an individual's ability to cope with difficult situations and to maintain physical and mental health in stressful life situations. SOC is composed of three dimensions, including comprehensibility (the capacity to perceive the world and life events as understandable, ordered and, to some extent, predictable), manageability (the confidence that one has the necessary resources to deal with environmental demands successfully) and meaningfulness, the belief that life is worthwhile and that the challenges in life deserve the investment of effort and resources [15].

The objective of this study is to examine the attitudes towards the importance of communication skills in clinical practice and the education process among students of nursing, as well as exploring the self-evaluation of communication skills among students. Another objective of the study is focused on the relationship between attitudes towards communication skills and sense of coherence among students of nursing.

Materials and methods

Design

A cross-sectional correlational study design was employed in the present study.

Participants and data collection

Altogether, 227 university students from the full-time bachelor study programme "Nursing and Midwifery" participated in the study (average age 20.53, SD = 2.04; 96.9% females; 84.6% nursing students). The study is based at an academic setting, it was carried out at two Slovak universities which are providing education in the bachelor study program "Nursing and Midwifery" (Jessenius Faculty of Medicine in Martin of the Comenius University in Bratislava: 25.9% of students in our sample, and Trnava University: 74.1% of students) (Table 1). The convenient sampling method was used. Response rate for this study was 89.1%. Data collection took place between November 2016 and January 2017. Hard copies of the questionnaires were distributed among students. Students in the 2nd and 3rd year of their studies took part in the research; all students filled-out the questionnaires after they participated in the training program for the improvement of communication skills, which is as an integral part of the study programme at both universities. This training of communication skills consists of an interactive course spanning one semester (2 h per week) and includes interactive group techniques and role playing; with the following issues incorporated into the lectures: non-verbal communication, social skills, active listening, assertiveness, conflict resolution skills, group decision processes, cooperation within the team, and stress management.

Attitudes towards communication skills were measured using the CSAS (Communication Skills Attitudes Scale). This scale was originally developed by Rees et al. [16] for the purposes of measuring attitudes towards communication among medical students. For the purposes of this study, all questions were modified in such a way that their meaning was related to the study of nursing instead of the study of medicine. CSAS consists of 26 items divided into two subscales: 13 items are written in the form of positive statements (positive attitudes subscale), and 13 items are formulated as negative statements about communication skills learning (negative attitudes subscale). Each item is accompanied by a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The total score in each subscale ranges from 13 to 65. A higher score in each

subscale indicates higher positive, resp. negative, attitudes towards communication skills learning. Cronbach's alpha for the positive attitudes subscale of the CSAS

questionnaire in this study was 0.87, and for the negative attitudes subscale it was 0.68.

Table 1 – Basic participant's characteristics

Variable		Total sample N = 227
Gender	Male	7 (3.5%)
	Female	219 (96.5%)
Age	Mean (SD)	20.53 (\pm 2.04)
Place of study	Jessenius Faculty of Medicine in Martin	59 (25.9%)
	Trnava University	166 (74.1%)
Field of study	Nursing	192 (84.6 %)
	Midwifery	35 (15.4 %)
Year of study	2nd year	149 (65.6%)
	3rd year	78 (34.4%)

A 13-item version of Antonovski's [17] Sense of Coherence (SOC) questionnaire was used to measure the 'sense of coherence' concept. This relatively stable personality trait refers to a person's ability to cope with stressful situations; people with a high sense of coherence tend to perceive life as comprehensible, manageable and meaningful. A higher score on the questionnaire indicates a higher sense of coherence and a better ability to cope with stressful situations. Responses are measured on a seven-point scale and a total score ranges from 13 to 91. In the present study, Cronbach's alpha for the SOC questionnaire was 0.77.

Self-evaluation of communication skills was measured with a short 5-item scale developed for the purposes of this study. Responses are scored at the 10-point Likert scale, ranging from a positive evaluation of an individual's communication ability to a negative evaluation of communication skills. The five items of the scale refer to: 1. General evaluation of an individual's communication skills; 2. Comparison of self-perceived communication skills with others; 3. Expectations of the ability to communicate in future clinical practice with patients; 4 With colleagues; 5. The perceived ability to cope with conflict situations in communication. The total score ranges from 5 to 50, with a higher score indicating a worse self-evaluation of communication skills.

Data analysis

For statistical analysis of the data, descriptive statistics, Student's *t*-test for independent samples and Pearson's correlation analysis were employed. All statistical analyses were performed using the free statistical software SPSS.

Results

Table 2 presents attitudinal scores in all items of the Communication Skills Attitude Scale separately for positive and negative items. Among the positive items, the highest positive attitudes were found in item 10

("Learning communication skills have improved my ability to communicate with patients") and 9 ("Learning communication skills has helped or will help facilitate my team-working skills"). The lowest positive attitudes were expressed in item 18 ("When applying for nursing study, I thought it was a really good idea to learn communication skills") and 12 ("Learning communication skills is fun"). Among the negative items, the highest negative attitudes were found in item 17 ("Communication skills teaching would have a better image if it sounded more like a science subject"), and question 11 ("Communication skills teaching states the obvious and then complicates it"). The lowest negative attitudes were expressed in item 2 ("I can't see the point in learning communication skills") and question 19 ("I don't need good communication skills to be a nurse").

Table 3 shows the mean scores and the standard deviations of the key variables in the research sample: both positive and negative subscale of the Communication Skills Attitude Scale, sense of coherence measured by the Sense of Coherence Scale, and self-evaluation of the communication abilities.

In Table 4, the results of Pearson's correlation analysis are shown. Significant associations were found between the positive subscale of the CSAS and sense of coherence score ($r = 0.14$, $p \leq 0.05$). Self-evaluated communication abilities were correlated negatively with sense of coherence ($r = 0.29$, $p \leq 0.001$; the scale used for measuring of the self-evaluated communication abilities is scored in such a way that the higher the score is, the worse is the self-evaluated communication ability).

Discussion

This study is focused on exploring the attitudes towards communication skills and self-evaluation of communication abilities in students of nursing. The results of the study showed that students perceive communication skills as an important part of the education process and clinical practice. This was shown in high positive scores and moderate negative scores of the CSAS questionnaire.

Table 2 – Attitudinal scores in all items of the CSAS questionnaire

	Mean	SD
CSAS positive items		
4. Developing my communication skills is just as important as developing my knowledge of nursing.	3.92	0.90
5. Learning communication skills has helped or will help me respect patients.	3.95	0.98
7. Learning communication skills is interesting.	3.65	1.06
9. Learning communication skills has helped or will help facilitate my team-working skills.	4.00	0.83
10. Learning communication skills has improved my ability to communicate with patients.	4.15	0.80
12. Learning communication skills is fun.	3.25	1.08
14. Learning communication skills has helped or will help me respect my colleagues.	3.55	1.03
16. Learning communication skills has helped or will help me recognise patients' rights regarding confidentiality and informed consent.	3.84	0.93
18. When applying for nursing, I thought it was a really good idea to learn communication skills.	3.23	1.09
21. I think it's really useful learning communication skills in the nursing study.	3.96	0.90
22. My ability to pass exams will get me through school rather than my ability to communicate. ^a	2.96	1.06
23. Learning communication skills is applicable to learning nursing.	3.93	0.89
25. Learning communication skills is important because my ability to communicate is a lifelong skill.	3.95	0.95
CSAS negative items		
1. In order to be a good nurse I must have good communication skills. ^a	1.40	0.58
2. I can't see the point in learning communication skills.	1.94	1.07
3. Nobody is going to fail their nursing study for having poor communication skills.	3.00	1.11
6. I haven't got time to learn communication skills.	2.48	1.13
8. I can't be bothered to turn up to sessions on communication skills.	2.61	1.16
11. Communication skills teaching states the obvious and then complicates it.	3.07	1.11
13. Learning communication skills is too easy.	2.69	0.95
15. I find it difficult to trust information about communication skills given to me by non-clinical lecturers.	2.88	1.17
17. Communication skills teaching would have a better image if it sounded more like a science subject.	3.19	1.02
19. I don't need good communication skills to be a nurse.	2.45	1.28
20. I find it hard to admit to having some problems with my communication skills.	2.60	1.01
24. I find it difficult to take communication skills learning seriously.	2.62	1.06
26. Communication skills learning should be left to psychology students, not nursing students.	2.49	1.18

^a Reversed items.**Table 3 – Mean scores of the key variables in the study**

Variable	Mean	SD	Range of the scale
Sense of coherence	55.79	10.75	13–91
Self-evaluation ^a	17.51	7.19	5–50
CSAS positive attitudes	3.71	0.96	1–5
CSAS negative attitudes	2.50	1.06	1–5
CSAS positive attitudes – total score	48.24	7.84	13–65
CSAS negative attitudes – total score	33.31	6.32	13–65
Self-evaluation: item 1	3.84	1.83	1–10
Self-evaluation: item 2	4.34	1.71	1–10
Self-evaluation: item 3	2.88	1.59	1–10
Self-evaluation: item 4	4.34	1.69	1–10
Self-evaluation: item 5	3.64	1.76	1–10

^a Higher score in this scale indicates a lower self-evaluation of the communication skills.**Table 4 – Pearson's correlation coefficients (*r*) for the study variables**

	CSAS positive	CSAS negative	Sense of coherence	Self-evaluation
CSAS positive	1	–0.50 ^c	0.14 ^a	–0.11
CSAS negative		1	–0.19 ^b	–0.02
Sense of coherence			1	–0.29 ^c
Self-evaluation				1

^a Correlation is significant at $p \leq 0.05$.^b Correlation is significant at $p \leq 0.01$.^c Correlation is significant at $p \leq 0.001$.

Also strong average disagreement with the following two statements: “I can’t see the point in learning communication skills”, and “I don’t need good communication skills to be a nurse” indicate a positive perception of the importance of communication skills in the educational process and practice among students. This is partly in line with the research study of Busch et al. [8], where low negative attitudes towards communication skills and moderate positive attitudes were found among medical students in Germany. On the other hand, some weaknesses of the training programs aimed at improving the communication skills included in the curriculum of Nursing/Midwifery programs might be indicated by the lower positive attitudes towards the statement: “Learning communication skills is fun”, and a higher negative attitude towards the item: “Communication skills teaching states the obvious and then complicates it”, and “Communication skills teaching would have a better image if it sounded more like a science subject”. These results identified possibilities to improve the content of the current communication training programs in Nursing and Midwifery. Such programs are an integral part of the education process in bachelor study programs. In recent years, there is a tendency to use more interactive ways, such as high fidelity simulation, in nursing education. A number of research studies support the use of these methods, as they allow students to experience a more realistic clinical situation, and involve the interplay of academic knowledge, practical skills and communication abilities [18]. For instance, in a study by Baptista et al. [19], students reported high satisfaction with the realism of high-fidelity simulated practice and better educational gains compared with the medium-fidelity simulation. The use of simulated patients is also becoming a commonly used method in educational practice. As shown in a review study by MacLean et al. [20], the use of simulated patients to teach nurse-patient communication skills might be beneficial in terms of targeting more challenging clinical interactions. McCarthy et al. [21] showed a promising way of improvement in communication training programs, based on the more in-depth integration of psychological methods and concepts into the education programs in nursing.

The findings of the present study showed that the self-evaluation of communication ability among students in a research sample to be generally positive. Students expressed the highest confidence regarding their expectations of the ability to communicate with patients in their future clinical practice, while a lower confidence was expressed when comparing their own ability to communicate with other’s communication skills, and also regarding expectations of the ability to communicate with colleagues in future clinical practice. This indicates that students in our research sample showed higher confidence regarding their abilities in patient nurse communication, than their inter-professional communication skills. Thus, it is important to incorporate training of effective communication within the health-care team into the educational courses for Nursing and Midwifery students. Active listening, communicating in the decision making process, setting shared goals and sharing responsibilities, the ability to successfully

negotiate with others, are all examples of interpersonal skills which need to be included into training programs in order to promote future effective team communication and a healthy professional environment [5,22]. Foronda et al. [23] suggest that it would be beneficial to include a broader scope into communication training programs, such as issues of patient safety, valuing diversity, team science, and cultural humility; as it seems that there are significant differences in communication styles of nurses and physicians.

One of the study objectives was to examine the relationship between attitudes towards communication skills and sense of coherence among students of nursing. Sense of coherence is conceptualized as an individual’s ability to cope with difficult or stressful situations, and to stay healthy in stressful life events, which shows that it is closely connected to personal resilience. In our study, sense of coherence was associated with more positive attitudes towards communication skills and better self-evaluation of communication skills among nursing students. Some studies have shown that sense of coherence might be promoted and enhanced through an intervention or training program [15]. This implies that specialized intervention programs targeted on increasing the communication skills might be especially beneficial for students with lower levels of personality factors related to resilience, such as sense of coherence.

Limitations of the study

There are some limitations of this study to be considered when interpreting the data. First, the convenient selection process of the participants and smaller sample size implicates that the study sample may not be representative of all nursing students. Data collection took place at the two universities; however, due to the sampling process the generalization of the findings is limited. Also, self-reported measures were used in the study, which might create a potential response bias, especially in the case of the self-evaluation of communication skills. However, anonymity of the data collection was strongly adhered to in the research, which might reduce the response bias.

Conclusion

The results of the present study showed positive attitudes towards communication skills and positive self-evaluation of communication abilities among students of nursing. Possibilities for improvement of communication training programs have been identified based on the study findings: more attention should be paid to effective inter-professional communication within the health-care team. The study findings also show that sense of coherence is associated with more positive attitudes towards communication skills. Understanding the factors associated with effective communication strategies provides an important base for improving the content of the current communication curriculum in nursing study programs.

Conflict of interests

The authors have no conflicts of interest to declare. The manuscript is original and has not previously been published elsewhere, and is not in the process of being considered for publication in another journal.

Ethical considerations

All participants were provided with information about the study goals before the data collection, and it was emphasized that participation was voluntary and anonymous. Verbal consent from participants was obtained. The study was approved by the University Ethics Committee (EK1870/2016), Martin, Slovakia.

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