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The nature of a nurse's workplace and their attitude towards learning communicative competence — a representative study of Polish nurses' population

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ABSTRACT

Background: In the education of nurses and midwives, the greatest emphasis is put on practical skills as the most important element of vocational competences. Education in the sphere of widely understood interpersonal communication and effective team interdisciplinary cooperation is getting equally important. It also accounts for important complementation of practical skills.

Exploration of factors influencing the attitude towards learning communicative competence in a group of nurses undertaking specialization training.

Methods: In the cross-sectional survey study 969 professionally active nurses from various regions of Poland took part. The respondents were divided into two groups, depending on the specialization training completed ("anaesthesiological, intensive care medicine and emergency medicine nursing" *vs.* "geriatrics, long-term and palliative care nursing"). The voluntary, anonymous survey was conducted with the use of CSAS questionnaire. A comparative analysis of the results for the two examined groups of nurses was performed with the use of the t-Student test. The scale of the effect for the observed mean variation was estimated with the use of *d* Cohen coefficient.

Results: The examined nurses manifested a positive attitude towards learning communicative competence, however, a statistically significant difference in the context of the specificity of the ward was observed. The age of nurses had a negative influence on the analysed variables. Also, a correlation between high self-esteem of the possessed communicative skills and a high CSAS result was noted.

Conclusions: The nature of the ward, time of hospitalization, as well as age and education of the personnel influence shaping the attitudes of the nursing personnel in the applicability of communicative competence in their professional practice.

Key words: communication skills attitude scale, communication, social skills

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Introduction

A nurse's workplace may be an important determinant of the frequency and duration of contact with a patient [1] and thus influence the perception of the need to excel one's own skills, including communicative skills. The nature of work at a hospital ward and professional commitments influence the time and quality of contact with a patient, which may influence the effectiveness of the health care provided [2]. As a consequence, the medical personnel, who have relatively short contact with a patient, may be focused on quick and effective communication, and focus on chosen communication techniques. However, personnel that have longer contact with a patient, have the possibility to build therapeutic relations systematically and apply a wide spectrum of communication techniques. What is more, Chan et al. [3] stress that nurses' communication behaviour is closely related to their perception of communication. Additionally, nurses should recognise the value of short, iterative interaction and chit-chat as quality communication for knowing their patients and

providing patient-centred care. In this context, the time of contact with the patient may impinge on the need for possession and improvement of various techniques of effective communication with a patient and the members of the medical team. Thus the application of these skills in practice [4].

Additionally, the shortage of nurses increases the workload, and therefore, there is not enough time to establish a good therapeutic relationship [5]. Therefore shaping the discussed skills should be supplemented with the context of the realities of functioning in the workplace. For example, the nature of work is different in emergency medicine than in anesthesiological or geriatric nursing. They differ from one another not only with the scope of duties but also with the time spent with the patient. For example, emergency medicine nursing prepares the nursing personnel for the work in the system of emergency medicine. Anesthesiological and intensive care nursing, in turn, is focused on nurses working on intensive care wards and in operating theatres. These are the nurses that have contact with patients in critical condition, often with polytrauma or mechanically ventilated patients. Another nature of the nurse-patient relation takes place in geriatric nursing, which is focused on the care over elderly patients. In long-term nursing, there is a similar nature of the nurse-patient relation. There are mainly nurses working with chronically ill patients, those staying in the centre for a prolonged time, or those down with civilization diseases, but also with bedsores. Palliative-care nursing encompasses nurses working in both in stationary and home hospices. Their work is based mainly on administering painkillers, monitoring pain syndromes, changing bandages and providing mental support to the patient and their family. Such a varied nature of work of nurses, depending on their specialization, may point to the fact that shaping of communicative skills of nurses may need to be approached individually. It may bear particular importance in designing postgraduate education [6].

It is especially important bearing in mind that effective communication between therapeutic team members (*e.g.* nurse, doctor), and the patient and their family is vital in order to provide high-quality medical care [7–10]. Effective communication conditions not only obtaining all crucial information of key importance in the context of diagnostics and treatment but also enables determining the patient's expectations towards medical care. Patients rarely communicate their needs directly [11]. Therefore shaping the skills of effective communication is a key challenge for modern medical education. Especially that in the literature an inadequate level of cooperation in interdisciplinary teams is stressed, as well as an inadequate level of social competences, including communicative competence [7, 12–14].

It needs to be noted that the mere transfer of knowledge on the basis of effective communication does not guarantee the acquisition of these skills [15]. Adequate attitude towards the acquisition of these skills may be of key importance here. The attitude is defined as a robust evaluation pertaining to reactions to something or someone. Three important elements make up the attitude: emotional (*e.g.* emotional reaction to the possibility of shaping communicative competence), cognitive (e.g. thoughts and convictions pertaining learning these competences) and behavioural (*e.g.* activities and behaviours). The attitude may be negative or positive [16]. Although only a positive attitude toward the acquisition of these competences guarantees their proper formulation. In this regard, theoretical basics pertaining to effective communication should be preceded by reinforcement of positive attitude towards these competences and inclusion of the nature of work of a nurse.

The aim of the work was the analysis of the influence of the nature of the workplace on the portrayal of attitude towards learning communicative competence. In this regard, two extreme groups, as the authors put it, were collated, in terms of the time spent with the patient — nurses working in emergency medicine and intensive care units, where time spent with the patient is relatively short, with nurses working on wards where patients spend a long time (geriatric wards, long-term and palliative care). The analyzed model assumes that the time spent with the patient may impact the attitude of the nurses towards acquiring communicative competences. Also, factors that have an influence on the attitude towards learning communicative competences in a group of nurses who graduated from specialization training were searched for.

Methods

Design and participants

A representative group of 969 Polish registered nurses participated in the cross-sectional survey study. All professionally active nurses, who participated in a specialization training program in 2017 between March and May 2017, were invited to take part in the study. Potential participants in the study were identified and recruited from the Center of Postgraduate Education for Nurses and Midwives in Warsaw, Poland.

The cohort consisted of 4,380 registered nurses, but the return rate was 22.1%. Thus, 969 participants took part in the study. The cohort was representative of the broader Polish nurse population. The cohort was representative in terms of the mean age ($t = 1.654$, $P = 0.098$) and the selected specialization ($\chi^2 = 25.728$, $P = 0.106$). With this cohort size and the number of

registered nurses working in Poland (N = 280,000, the error margin was 3.21% (95% confidence level and proportion 0.50).

The examined group was divided into two subgroups depending on the specialization training taken: G1 (emergency medicine and anesthesiological and intensive care nursing, N = 636) and G2 (geriatric nursing, long-term and palliative-care nursing, N = 333). The subgroups were similar in terms of age (mean 37.1 *vs.* 37.6, t = -0.741, *P* = 0.459), but differed in terms of mean professional experience (mean 17.8 *vs.* 15.6, t = 4.864, *P* = 0.000). The remaining characteristics of both examined subgroups are presented in Table 1.

Data collection

Participation in the study was voluntary and anonymous. Results were collected using an auditorium method (self-report questionnaire), whereby respondents filled in the questionnaires individually in one room. By virtue of a large number of participants of the study, the random survey was conducted in 20 turns. Every time the place and procedure of the study were identical. Interviewer only limited himself to providing the aim of the research conducted and presenting the instruction of filling out the questionnaire.

Instruments

In the exam, a standardized scale of attitudes towards learning communicative skills was used — CSAS [17]. It is one of the most popular standardized tools serving the measurements of attitudes towards learning communicative competence. The tool was also translated into 12 languages and localized to the cultural conditions in the countries [18–29]. Taking into account good psychometric parameters and numerous adaptations and translations, the scale enables the comparison results among various countries and faculties.

The questionnaire is made up of 26 statements pertaining to attitudes towards communicative competence in teaching the profession and in the professional practice. The statements are assessed on a five-point Likert scale, where: 1 — strongly disagree, 2 — disagree, 3 — neither agree nor disagree, 4 — agree, and 5 — strongly agree. The tool is divided into two subscales — positive (PAS) and negative (NAS). On each subscale, there are thirteen statements indicating a favourable or unfavourable attitude. Evaluation of the attitudes towards learning communicative competences was done on the basis of the overall score of the scale, where replies on the NAS scale were recorded before summing up (reversed score). The maximum possible score was 130 (65 points on every subscale).

The authors of the study used and validated the Polish version of the tool (CSAS-P) described by Panczyk et al. [30]. After the performed validation of CSAS-P, the scale was reduced to 23 items (items 1, 12 and 22 were excluded), therefore the maximal result for CSAS-P is 115 points.

CSAS scale was supplemented by the authors with two additional questions pertaining to the self-esteem of the possessed communicative skills and the participation in courses and training pertaining to communication. The part pertaining to self-esteem contained four elements — communication with the patient, their family, members of the nursing team, as well as other members of interdisciplinary teams. The questions were also assessed on a five-degree Likert scale, where: 1 — very poor, 2 — poor, 3 — average, 4 — well, and 5 — very well. The form was completed with another personal questionnaire regarding sex, age, years of work in the profession, particular profession, place of residence, education, and work place.

Data analysis

The calculations were performed with the use of the STATISTICA package version 13.3 (TIBCO Software, Inc.). The measurements results obtained with the use of CSAS-P were developed with the methods of descriptive statistics [mean (M) and standard deviation (SD)]. Comparative analysis of the results for the two examined subgroups of nurses was performed with the use of the t-Student test. The size of the effect for the observed mean variation was estimated with the help of *d* Cohen coefficient, whereby 0.2 be considered a 'small' effect size, 0.5 represents a 'medium' effect size and 0.8 a 'large' effect size [31].

In order to determine the influence of selected factors on the attitude towards learning communicative competence, an analysis by means of multiple regression method was performed. The regression model was fit to empirical data with the method of least squares approximation. For the evaluation of variable significance, a statistical threshold F was established a *priori* on the level 1.0. The regression models obtained in this way were tested for the regularity of its functional form (Ramsey RESET test). The occurrence of outlying data was assessed as a part of diagnosis by means of determining the Mahalanobis & Cook distance [32]. Rules proposed by Larose [33] were used for the interpretation of the distances. The direction and force of significant correlations were interpreted by determining standardized β regression coefficients. In order to evaluate the degree of clarification of variation, values of adjusted R2 statistics were determined for regression models. The default level of statistical significance was approved at level 0.05 for all analyses.

Table 1. Characteristics of the examined subgroups

	N (%)		*P*-value*
	G1 (N = 636)	G2 (N = 333)	
Sex			0.004
Woman	587 (91.7%)	323 (97%)	
Man	49 (8.3%)	10 (3%)	
Age range			0.000
up to 30 years	90 (14.2%)	14 (4.2%)	
31–40 years	141 (22.2%)	42 (12.6%)	
41–50 years	271 (42.6%)	171 (51.4%)	
> 50 years	50 (7.9%)	67 (20.1%)	
no answer	84 (13.2%)	39 (11.7%)	
Place of residence			0.001
Village	134 (21.1%)	108 (32.4%)	
Town up to 50 000 residents	123 (19.3%)	61 (18.3%)	
Town from 51 up to 200 000 residents	132 (20.8%)	72 (21.6%)	
Town from 201 up to 500 000 residents	78 (12.3%)	36 (10.8%)	
Town above 500 000 residents	99 (15.6%)	28 (8.4%)	
Education			0.002
Secondary	107 (16.8%)	66 (19.8%)	
Vocational (Bachelor)	176 (27.7%)	124 (37.2%)	
Higher (Master)	288 (45.3%)	115 (34.5%)	
PhD	0 (0.0%)	2 (0.6%)	

*Chi-square test
G1 — anesthesiological, intensive care and emergency medicine nursing; G2 — geriatric nursing, long-term and palliative-care nursing; M = mean; SD = standard deviation

Results

Attitudes towards learning communicative competence

The examined nurses were characterized with a positive attitude towards learning communicative competence (average cumulative result 86.4/115). However, it was observed that for G1 the average result CSAS was significantly lower than for G2 (84.8 *vs.* 89.5; t = -5.827 *P* = 0.000). The results for both subgroups were statistically significantly different both in the PAS subscale (43.9 *vs.* 46.6; t = -5.924; *P* = 0.000) and in NAS (40.9 *vs.* 42.9; t = -3.519, *P* = 0.000). The greatest discrepancies (d Cohen's at least -0.30) were observed for four statements contained in the subscale PAS and only in one in the NAS subscale. Detailed results in the scope of attitudes of the respondents towards learning communicative competence are presented in Table 2.

Factors influencing the attitudes of the respondents towards learning communicative competence

The best-fitted model of multiple regression obtained with a method of stepwise variable introduction was composed of five independent variables ($R^2_{adjusted}$ = 0.39, AIC = 5065.66). The model was statistically significant (F = 74.621, *P* = 0.000, SEE = 9.508), and the linear shape of the regression function was well fit to the data (Ramsey RESET test; F = 2.238, *P* = 0.107). Age was the only factor which negatively influenced the investigated attitudes (β_{std} = -0.135, *P* = 0.000). However, the remaining factors were positive predictors, which positively influenced the examined attitudes of the respondents. The nurses who assessed their communicative competences high in the sphere of contact with the patient, their family, and the therapeutic members, scored higher on the CSAS scale than the nurses with lower self-esteem of communicative competences (β_{std} = 0.189, *P* = 0.000). Also, respondents who declared participation in trainings in the sphere of communicative competence presented a more positive attitude (β_{std} = 0.428, *P* = 0.000). Education was another vital factor influencing the studied attitudes. Nurses with a Bachelor and Master degree scored higher in CSAS in relation to respondents with secondary medical education (respectively β_{std} = 0.064, *P* = 0.044 and β_{std} = 0.108, *P* = 0.001). A detailed summary of the obtained results from the regression model is presented in Table 3.

Table 2. The attitude of nurses towards learning communication skills

Subscale / Statements	M	SD	M	SD	*P*-value*	d**
	Group 1		Group 2			
Total PAS	43.9	6.76	46.6	6.89	0.000	-0.40
Developing my communication skills is just as important as developing my knowledge of medicine	4.1	1.01	4.4	1.00	0.001	-0.30
Learning communication skills has helped or will help me respect patients	4.1	1.07	4.3	1.10	0.004	-0.19
Learning communication skills is interesting	3.8	1.01	4.1	0.98	0.000	-0.30
Learning communication skills has helped or will help facilitate my team-working skills	4.2	0.90	4.4	0.95	0.001	-0.22
Learning communication skills has improved my ability to communicate with patients	4.1	0.90	4.3	0.96	0.000	-0.22
Learning communication skills has helped or will help me respect my colleagues	4.0	0.99	4.3	0.96	0.000	-0.31
Learning communication skills has helped or will help me recognize patients' rights regarding confidentiality and informed consent	3.9	1.04	4.1	1.07	0.001	-0.19
When applying for medicine, I thought it was a really good idea to learn communication skills	3.6	1.07	3.8	1.11	0.003	-0.18
I think it's really useful learning communication skills on the medical degree	4.2	0.96	4.5	0.90	0.000	-0.32
Learning communication skills is applicable to learning medicine	3.8	1.01	4.1	1.09	0.000	-0.29
Learning communication skills is important because my ability to communicate is a lifelong skill	4.1	0.96	4.3	1.05	0.002	-0.20
Total NAS	40.9	8.48	42.9	8.38	0.000	-0.24
I can't see the point in learning communication skills	4.0	1.28	4.1	1.37	0.439	-0.08
Nobody is going to fail their medical degree for having poor communication skills	2.9	1.34	2.9	1.25	0.619	0.00
I haven't got time to learn communication skills	3.4	1.32	3.6	1.37	0.012	-0.15
I can't be bothered to turn up to sessions on communication skills	3.5	1.26	3.7	1.34	0.085	-0.16
Communication skills teaching states the obvious and then complicates it	3.3	1.21	3.4	1.35	0.052	-0.08
Learning communication skills is too easy	3.4	1.12	3.7	1.15	0.008	-0.27
I find it difficult to trust information about communication skills given to me by non-clinical lecturers	2.9	1.16	3.1	1.23	0.003	-0.17
Communication skills teaching would have a better image if it sounded more like a science subject	3.2	1.19	3.3	1.23	0.113	-0.08
I don't need good communication skills to be a practitioner	3.6	1.32	4.1	1.30	0.000	-0.38
I find it hard to admit to having some problems with my communication skills	3.5	1.25	3.5	1.33	0.898	0.00
I find it difficult to take communication skills learning seriously	3.5	1.18	3.7	1.31	0.002	-0.16
Communication skills learning should be left to psychology students, not medical students	3.7	1.37	3.9	1.45	0.030	-0.14

* — t Student test ;** — *d* Cohen coefficient; Group 1 — anesthesiological nursing and intensive care and emergency medicine nursing; Group 2 — geriatric nursing, long-term nursing, palliative-care nursing; M — mean; SD — standard deviation

Discussion

Overview

The presented paper is one of the few studies [25] investigating the attitudes towards earning communicative competence of nursing personnel. The obtained results bear therefore important significance in relation to professional perfection in medical care. It stems from the fact that the quality and effectiveness of the therapeutic and nursing process of the patient may depend on the communicative competence of nurses [4]. The nature of social skills influence the patients' compliance with recommendations, their understanding and willingness to observe them.

Table 3. A multiple regression model for the evaluation of attitudes towards learning communicative competence

Independent variables	b	β_{std}	Confidence interval		t	*P*-value
			-0.95	+ 0.95		
Intercept	80.466	-	-	-	27.865	0.000
Age	-0.175	-0.135	-0.196	-0.073	-4.295	0.000
Self-esteem of communicative skills	0.778	0.189	0.125	0.252	5.853	0.000
Participation in communicative competences trainings	5.206	0.428	0.365	0.491	13.329	0.000
Education						
Secondary medical						
higher B.A.	1.110	0.064	0.002	0.126	2.017	0.044
higher M.A.	1.694	0.108	0.045	0.171	3.372	0.001
Specialization						
Group 1						
Group 2	1.142	0.089	0.029	0.149	2.907	0.004

b — unstandardized regression coefficient, β_{std} — standardized regression coefficient, t — the value of statistics; Group 1 — anesthesiological, intensive care and emergency medicine nursing; Group 2 — geriatric nursing, long-term nursing, palliative-care nursing

In the presented study it was demonstrated that the nature of the workplace is of vital importance for the perception of the need to acquire communication skills. It was recorded that nurses participating in the study were characterized by a positive attitude towards learning communicative competence. However, positive attitude was lower in the group of nurses whose nature of work involved a limited time spent with the patient.

Nurses working in wards featuring long-term hospitalization presented a more positive attitude towards the legitimacy of learning and developing communicative competence than nurses working in emergency medicine or intensive therapy nursing. The nature of the workplace affected nurses in the context of acquiring communicative skills. The reply to the statement "Developing my communication skills is just as important as developing my knowledge of medicine" among nurses working in emergency medicine or anesthesiological and intensive care nurses was very rarely on the "agree" end of the continuum. Similar observations were done for the statements "Learning communication skills is interesting", "Learning communication skills has helped or will help me respect my colleagues" and "I think it's really useful learning communication skills on the medical degree". The data indicate that the nature of work in an emergency medicine ward or intensive care ward impinges on the nurses' perception of the usefulness of communicative skills in practice. It may be connected with the response time, which, in the case of life-saving or life-supporting procedures is significantly shortened, and the personnel has frequently no time to inform the patient on the measures taken, or to explain them in an adequate way.

Geriatric nursing, long-term and palliative care nurses assessed the need to acquire communicative skills higher, as adequate communicative skills are of key significance in these specializations. The nature of these specializations consists of a long relation with a patient, who, on grounds of their illness, spends their time in the ward up to a few months. These people learn not only the patient but also their family, as well as their habits or fears.

Programs of learning communicative competence should,, therefore, take into account the nature of a nurse's work. In the context of communicative skills, the need of empathic attitude to build sustainable therapeutic relations is stressed. Zarzycka et al. [34] in their work on empathy in nursing stress that empathy skills influence a better understanding of the patient, which translates into the quality of nurse-patient relation [34]. This opinion is shared by Reynolds and Scott [35], who demonstrated positive relation between the intensity of empathy and functioning of the patient within the improvement of vital parameters and subjectively perceived reduction of the suffered pain or lower anxiety and woe [35]. La Monica et al. [36] demonstrated that high intensity of empathy among nurses correlates with a lower level of fear, depression and hostility among patients [36]. Results of a randomized study conducted by Razavi et al. [37] show that shaping empathy skills should be connected with the perfection of communicative skills, that are implemented in the framework various workshops and training. Such combinations condition a more effective communication in the relation nurse-patient [37].

It is worth noting that concentration on shaping communicative skills may case resistance in nurses,

whose time of contact with a patient is limited. This limited contact is from the very beginning insufficient to build a permanent therapeutic relation. In this regard, nurses may not see the need to acquire such abilities and use them in their clinical practice.

Key results

Our own research results indicate positive attitudes towards learning communicative competence, as well as high self-esteem of the studied group of nurses. A correlation was observed between age, education and attitudes towards learning communicative competence.

In available scientific literature, little reports can be found on the communicative competence of nursing personnel and the influence of sociodemographic factors, age and sex, on the presented attitudes, towards attitudes towards learning soft skills [25]. The issue addressed is therefore original and constitutes completes a gap in this respect.

The obtained own research results indicate that the only factor bearing negative influence on the attitudes towards learning communicative competence was the age of respondents. The result complied with the study by Cleland et al. [38], who noticed that positive attitudes decline together with the progress of the classes, as well as with the research by Nor et al. [39] analysing Malaysian students where students of lower classes proved more positive attitudes than their peers in higher classes Khashab [40] obtained a different result in his research indicating that students of year V scored highest in CSAS in comparison with the other classes. Anvik et al. [41] in turn, did not observe any correlation between CSAS score and university class. The discrepancies among authors and the results of our own studies indicate a great variety of attitudes depending on the age of the respondents. A dominating conclusion is, however, that together with age, attitudes communicative competences are less positive. It may be conditioned by professional experience, large workload, because of which the personnel does not have enough time to ensure the development of social competences and spending more time with the patient. The influence of burnout cannot be excluded either, as in line with numerous research this phenomenon is frequent among medical sector employees [42–45].

The results of our own study indicated that the education of a respondent is significant in their perception of abilities to acquire and develop communicative competences. This may be caused by larger awareness of personnel that improve their skills, as well as by second-cycle studies curriculum, or the content of the program of trainings and postgraduate courses, where social competences of the medical personnel are stressed.

The demand for interdisciplinary health care has been definitely on the rise in the last decade [46]. In order to ensure safety and high quality of patient care, it is vital that medical service suppliers effectively communicate with patients and their families in their work, in the framework of interdisciplinary teams [8, 46, 47]. The problems of communication with the medical personnel have been well known in the research environment for years. Stein described it first in 1968, labelling the problem "The Doctor-Nurse Game" [48]. Although over half a century has passed since the publication of the study, the problem is still valid and numerous contemporary researchers studying the problem of communication in the health care sector [8, 49, 50] cite the study by Stein [48].

Limitations of the results

Interpretation and interference based on the data gathered is subject to some limitations that need to be considered during their evaluation. Among respondents, there were nurses taking state specialization exams. It needs to be assumed that these people represent this group of the nursing environment that invests in their professional development both in terms of knowledge and competence. Therefore, respondents may prove more positive attitudes towards learning communicative competences and professional development than nurses not taking any postgraduate courses and trainings.

Implications for practice

Shaping the nurses' communicative abilities should account for their nature of work. The choice of shaped and improved techniques of effective communication should be a part of the nature of a ward and how it works. Disregarding this factor may cause resistance among nurses to acquire these skills, and even the feeling of guilt and lack of professionalism. This, in turn, translates into the quality of medical care, and patient safety.

Conclusions

The nature of the ward may be of key significance in shaping the nurses' attitude towards acquiring communicative competences. In this regard, the curricula encompassing these competences should be more specialized. It is linked with the time of hospitalization and the possibility of application of the acquired techniques of effective communication in clinical practice. The curriculum encompassing these competences should take into account the emphatic aspect tailored to the nature of work of a nurse, as well as protect nurses from inducing the feeling of guilt and burnout.

Declaration of conflict of interest

The authors declare that they do not have any connections or financial dependency towards any organisation or party having direct financial contribution into the subject of the study or studied materials (*e.g.* by employment, counselling, holding stocks or fees).

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