

Perception (Some Aspects) of Part-Time Students of Study Programme Nursing Care About Communication and Interrelations in Healthcare Teams

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Abstract

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BACKGROUND: Communication in healthcare teams is challenging, as they are mostly composed of professionals from different disciplines who need to work together to achieve positive and desirable patient outcomes. Interpersonal relationships are crucial for optimal and reflective professional nursing care. The joint collaboration and effort of all members of the healthcare team ensures quality and safe healthcare.

AIM: The aim of this study was to analyse the opinion of part-time healthcare students (N = 147) on the importance and role of the communication and interrelations in healthcare teams.

METHODS: We used a quantitative, descriptive, non-experimental method of empirical research. Data were collected with questionnaires. For statistical analysis we use Levene test, T- test and Pearson correlation coefficient using Statistical Package for the Social Sciences 24.0. A statistical significance of $p < 0.05$ was assumed.

RESULTS: The majority of respondents said that communication in the healthcare team is clear, respectful, empathetic and understandable. Subjectively, they assess that assertive communication prevails. They are cooperative with their colleagues and rarely encounter individual and organisational issues when communicating in the healthcare team. Respondents perceive that communication ($p = 0.02$) and interpersonal relationships ($p = 0.01$) are better in smaller healthcare teams than in larger teams. They also point out that good communication influences good interpersonal relations in health teams ($p = < 0.05$).

CONCLUSION: In nursing, good communication and interpersonal skills help to meet patient needs. Individuals need to learn how to form these relationships with each other. Each member of the healthcare team needs to know where he or she stands in the team, what his or her tasks and responsibilities are and how he or she should work. The quality standards for teamwork promote the application of a process approach to developing, implementing and improving the effectiveness of the quality management system in the healthcare team, with the aim of increasing patient satisfaction by meeting patient expectations.

Introduction

Interactions and relationships in nursing care are built through communication. Communication is the basis for building a healthcare team where cohesion and good relationships prevail. Good communication between team members increases trust, commitment to the team and to the team's tasks, which in turn influences the team's results. Without good communication, there is no cohesion and trust, no good relationships and no successful team [1].

Nursing is a communication-based profession, which means that correct and appropriate communication between the nurse and the patient is

important for the delivery of nursing care [2]. It is essential for successful patient care outcomes. To achieve this, they need to understand and help patients, be friendly, polite and honest. They must take the time to communicate with the patient with the necessary confidentiality, remembering that the people around the patient are involved in this communication, so the language of communication must be understood by all those involved [3], [4], [5]. Good communication is that which engenders trust, cooperation, respect, maintains a sense of dignity, good self-esteem, respect and autonomy of the user. Healthcare professionals should therefore strengthen skills such as listening, answering questions, asking (open) questions, explaining in simple lay language, encouraging users

to ask questions, encouraging participation in decision-making [6].

Communication in healthcare organisations is becoming increasingly challenging as healthcare professionals are often faced with difficult patient health conditions, high expectations from supervisors, colleagues and patients' families. Modern technology and the associated access to information, which can be of varying quality, also contribute to more complex communication. As a result, healthcare professionals face communication barriers that can negatively affect the work process, which can lead to less successful team relationships or patient treatment [7].

In healthcare, as in other fields, we are faced with an ever-increasing pace of knowledge, skills and technology development, and consequently with increasingly complex problems that need to be solved quickly and efficiently. It has always been said that "many heads know better", and today this is confirmed by collaboration and teamwork, which are delivering ever better results in solving problems [8], quality and patient safety in treatment and care [9].

Teamwork in hospitals comes with multiple challenges [10]. Team members come from different professional background with different training, knowledge and attitudes. Teams are diverse in structure and purpose [11]. The effectiveness or efficiency of teams depends to a large extent on the relationships within the team. When team members have good relationships with each other, this helps to reduce stress, promote goodwill and a good team atmosphere, which in turn leads to greater efficiency at work. The treatment and attitude of the patient, and consequently patient satisfaction, also depend on the attitudes of the nursing team. Team effectiveness is particularly important when it comes to solving complex problems or saving lives, major illnesses, interventions, etc. Because of the importance of this segment, in the following part of the thesis we examine the importance of good relationships in nursing teams and ways to build good relationships, and we also touch upon the attitudes of healthcare professionals towards patients.

Theoretical background

Each area of work and expertise has its own specific characteristics and features, and therefore each area is characterised by its own specific communication. Communication is different between computer experts, politicians, construction workers, scientists, athletes or healthcare professionals. Each group has its own characteristics, approaches and methods, its own specific symbols and expressions in communication, its own professional language, jargon, etc. Healthcare thus has many specificities in communication and in the approach to patients, relatives and colleagues [12]. It requires a holistic approach to the patient and continuous improvement. Nursing staff need to master a variety of skills. The

nurse, within the scope of her competences, helps patients and relatives to accept the new medical condition. She performs a variety of tasks in relation to the patient, which requires oral and written communication skills [7].

Communication is a fundamental tool for the delivery of healthcare and determines the quality of care. According to its content, purpose and users, healthcare communication is divided into patient and family communication, professional communication and team communication [13]. Communication between healthcare professionals and patients and relatives is a process that starts with the first contact and lasts as long as the therapeutic relationship. Patients and relatives need to feel comfortable around healthcare professionals, to receive correct and understandable information about their illness or treatment, and to trust healthcare professionals [3]. Professional communication using professional terms that the patient does not understand can be intimidating, confusing, pressurising, and indirectly tests the patient's knowledge, forcing the patient into a subordinate role. The patient cannot implement the health professional's advice if he or she does not understand what is being said. The Code of Ethics for Medical Personnel stipulates that the patient should be given the opportunity to participate actively by being fully informed in advance in a language that he or she understands. They are obliged to inform the patient of the consequences and benefits of a particular activity [14]. The foundations of appropriate communication in a team are, above all, mutual respect, an effort to understand other members and to accept different opinions, and candour. Communication should not be hierarchical, but rather horizontal, as team members are on an equal footing. Communication is two-way because team members talk (not just one person talking and the others listening). It is also characteristic of a team to communicate through all channels, which means that team members agree with each other, rather than one team member talking to a supervisor who then talks to another team member [15].

The form of communication depends on the situation we are in, how we are feeling, our surroundings and the people involved. So we communicate in different ways, but usually in the way that is closest to us. There are four basic forms of communication [16]:

- *Assertive communication*, defined as the ability to express one's own opinions, beliefs, rights, needs or feelings openly, while respecting one's interlocutor and communicating clearly, confidently and respectfully;
- *we use aggressive communication* to influence other people and situations, to show our power over others, to express our views, feelings and thoughts in a way that is intrusive, socially unacceptable and undermines the rights of others;

- *Passive communication* is characterised by not expressing your opinions, needs and feelings - a person who behaves passively does not take responsibility for their behaviour and lets others make decisions for them;
- *Manipulative communication*, which is characteristic of people who dare not be direct and honest, often change their minds, and in their relationships with others are tactful, deny their needs and feelings, and have low self-esteem.

Successful and effective communication depends on a number of factors. Managing them is essential for healthcare professionals. The skills that a healthcare professional should have are [17]:

- Cognitive skills: knowledge of diseases, nursing care, signs and symptoms; basic communication theory affecting therapeutic communication; knowledge of goals and stages that help relationships.
- interpersonal skills: ability to communicate with confused, frightened, hostile or indifferent patients and relatives; ability to establish good working relationships; listening skills, speaking skills, humour and silence.
- visual skills: looking with interest, smiling at the right time, maintaining eye contact, open posture.
- listening skills: relaxed speech rate, soft tone of voice, use of affirmative sounds.
- kinesthetic skills: touching a shoulder or hand, shaking hands to greet, hugging around the shoulders, from the side, etc.

Healthcare professionals also come into contact with people who have reduced abilities, so special skills and knowledge are needed to communicate with them, as the outcome of treatment depends on it. Without the ability to communicate orally, with appropriate facial expressions, gestures and the ability to respond immediately to a message, the risk of miscommunication is high, which can lead to conflict. Additionally, the extraverbal and paraverbal levels of communication, where the emphasis is on tone and intensity, as well as the timing of communication, contribute to effective nurse communication [7].

The accelerating development of different sciences and disciplines and the need for teamwork to solve increasingly complex problems in a holistic way are driving the need for teamwork, which is why healthcare is increasingly talking about teamwork. We are most often focused on the professional tasks of the team and how to solve them, but we are not sufficiently aware that the way teams work is different from the way individuals work. The expertise of team members alone will not lead to the desired synergies at work [8].

Today, delivering care services is a complex endeavour for healthcare professionals or colleagues. As all healthcare services and tasks are information-driven, the effective management of healthcare organisations is also based on trust in the information of the health sciences and professionals involved in the treatment process, the impact of the provision and on the outcomes of treatment, and the coordination and integration of healthcare services [18].

Teamwork, defined as the interaction between health professionals who deliver care in an interdependent way, must become a key way of working in the health system. According to [19], summarising the World Health Organisation, which recommends interprofessional collaboration in nursing as a necessity due to the complexity of patient care, technological advances and the rising costs of healthcare. Interprofessional collaboration also increases patient safety, contributes to greater job satisfaction, reduces treatment costs and staff turnover.

In nursing, teamwork is defined as health professionals taking on complementary roles and working together, sharing responsibility for problem-solving and making decisions to design and implement patient care plans. Collaboration between doctors, nurses and other healthcare professionals increases team members' awareness of each other's knowledge and skill sets, leading to continuous improvement in decision-making [20].

Teamwork involves working together in a coordinated way to care for patients, solving problems together and making decisions together to avoid errors, interruptions or overlaps. It is important wherever health professionals work with shared goals for patient care, but especially in situations of uncertainty. The interdependencies of team members within organisational units, between units and in relation to external factors in the community and society are becoming increasingly important. Being part of a team means being part of a small and complex system that cares for a community or an individual. Each team member needs to be familiar with team functioning, team processes and team outcomes, as each member influences the outcomes [6].

Healthcare teams are made up of different health professionals. The composition of the team depends on the task or the type of problem the healthcare team is solving. According to [19], team management can only be democratic (participatory) and not autocratic, as healthcare teams are mostly composed of experts from different disciplines. Rosen [21] points out that the success of teamwork depends to a large extent on the team members' cooperation with each other and with the patients. The team approach brings many positive changes in terms of positive treatment outcomes. The point of any organisation or team is to work purposefully and in concert with all participants to achieve specific goals.

One person cannot do much, a group of people working together can achieve much more. Cooperation requires communication [22].

The joint collaboration and commitment of healthcare professionals or teams is the key to getting the right medicine to the patient, at the right time, in the right amount. In the treatment process, each health professional or team has a role to play - the doctor treating the patient knows the patient's health problems and makes the right diagnosis, the pharmacist prepares the medicine in the right dose and form, and the nurse administers the medicine at the right time and in the right way. According to [23], it is important that the patient is also involved in the treatment process, which is strongly influenced by the communication of healthcare professionals and the way in which treatment is administered. By instilling confidence in the treatment, healthcare professionals can bring the patient to a level where they can achieve the desired treatment outcome.

It is becoming increasingly clear that cooperation has an impact on quality. It is important that all employees are involved, whatever their status and whatever their roles. The ability to work together is also an essential characteristic when selecting employees for an organisation. It is not only important to work together within teams, but also between teams and departments and between institutions. In healthcare, researchers have looked at collaboration between nurses and doctors and linked it to treatment outcomes. They found that good collaboration has been shown to have an impact on treatment outcomes [24]. The aim of healthcare teams is therefore to be health service user-centred - to provide quality treatment and service to the patient and thus to achieve mutual satisfaction of needs. In practice, it is recognised that problems often arise due to disagreements and poor communication and non-cooperation. However, when interests are agreed and shared, it is easier to focus on common goals. At the same time, we must also be aware that people who meet their own needs and not just those of society can produce better quality work and be more motivated to work. It is also important that healthcare team workers are treated as equals and not as superiors/subordinates. There should also be respect, trust and accountability among health workers [25].

Relationships in the workplace have a significant impact on wellbeing, health and job satisfaction. When good interpersonal relationships prevail among employees, they can help to reduce stress, provide a source of satisfaction and good humour, and enable greater performance at work. Research even shows that good relationships among staff in healthcare teams are associated with good patient outcomes, even though communication between different profiles in healthcare is not always adequate [7]. Research on peer support among nurses shows that support, respect and empathy from the head nurse contribute to a reduction in emotional

exhaustion among staff. Involving staff in decisions about work and patient circumstances leads to higher morale, which results in more individualised patient care [8]. Without good communication, it is not possible to create trust and cohesion, which are prerequisites for strong relationships, and which in turn are a prerequisite for building a successful team [1, 26], [27].

Healthcare teams often involve members who differ not only in terms of expertise, experience and knowledge, but also as persons. It takes some skill to channel these differences towards a common goal and patient-centred care. To do this, we first need to know ourselves and how we work as a team, and to practice teamwork skills to avoid unnecessary conflicts and misunderstandings. In practice, the most effective way to train in teamwork is for the team to set aside a few hours of their time and do the exercises. It is important that the exercises are started at the beginning of the team's formation and that the team meets for the sole purpose of developing a shared dynamic [6].

Most teams break up because of poor communication. Today, with so many ways of communicating at our disposal, communication is increasingly empty, and as a result our relationships, teamwork and team involvement and effectiveness suffer. Communication builds the cohesion, trust and commitment needed for a good team whose members will shape a shared future [1]. The literature contains a variety of strategies to help healthcare professionals communicate more effectively and cope more effectively with stress in the workplace [7]. Therefore, to improve communication in a team, healthcare staff must first be aware of their own communication deficits, be aware of the integrity of the person and monitor the views of the general public.

Methods

We used a quantitative, descriptive, non-experimental method of empirical research. For data collection, a structured questionnaire based on similar questionnaires was used [5, 6, [28], [29], [30], [31], adapted, and supplemented for the needs of the study. The first part of the questionnaire covered socio-demographic data, identifying their workplace and the size of the teams they work in. In the second part of the questionnaire, we were interested in the respondents' opinion on communication in their health teams (7 statements), on the prevailing communication methods (5 statements each for assertive, aggressive, passive and manipulative communication), on the interpersonal relationships between team members (6 statements) and on the barriers to communication in health teams (individual barriers - 6 statements, organisational barriers - 4 statements). Respondents were indicate their level of agreement with the given statements using a five-point Likert scale of attitudes from 1 - "Strongly disagree" to 5 - "Strongly agree". The

reliability of the instrument was acceptable ($\alpha = 0.690$). Data were coded and analysed using Microsoft Office Excel and IBM SPSS Statistics 24.0 software.

The aim of the study is to analyse the opinion of part-time students of study programme Nursing Care at the University of Novo mesto, Faculty of Health Sciences (N = 147) on the importance and role of the healthcare team in which they work in their work environment.

We formulated the following hypotheses:

- Hypothesis 1: Smaller healthcare teams (up to 10 members) have better communication than larger teams (11 members or more).
- Hypothesis 2: Smaller healthcare teams (up to 10 members) have better relationships than larger teams (11 or more members).
- Hypothesis 3: Good communication leads to good interpersonal relationships in healthcare teams.

The survey was completed by 147 part-time students, 123 of whom were women (84%) and 24 men (16%). The majority of respondents (58%) were aged between 20 and 30 years, 30% were aged between 31 and 40 years, 10% were aged between 41 and 50 years and 2% were aged between 51 and 60 years. 37% of the respondents are senior nurses, 35% are intermediate nurses, 24% are nursing technicians and 4% are senior nursing technicians and specialists. In terms of team size, most respondents work in large teams (44%) with more than 21 employees, while 27% of respondents work in medium-sized teams with 11 to 20 employees. 29% of respondents work in small teams of up to ten employees. 53% of respondents have completed secondary school and 47% have completed higher education.

Results

Table 1 shows the descriptive statistics for the assessment of communication in the healthcare teams in which the respondents work. We used a five-point Likert scale of attitudes, where 1 means 'strongly disagree' and 5 means 'strongly agree'.

Table 1: Respondents' assessment of communication in their health teams

Communication in our healthcare team is:	1	2	3	4	5	\bar{x}	SD
Understandable - we all understand what someone is trying to tell us.	0 %	4 %	35 %	42 %	20 %	3.8	0.81
Respectful - we respect each other.	1 %	13 %	15 %	38 %	34 %	3.9	1.04
Empathetic - we can empathise with our interlocutors.	2 %	8 %	24 %	39 %	27 %	3.8	0.99
Clear - if you don't understand the messages, ask additional questions.	0 %	3 %	24 %	36 %	38 %	4.1	0.86
Quality, as we continuously improve our communication skills.	4 %	14 %	29 %	35 %	19 %	3.5	1.07
Appropriate - we can manage our emotions and moods in all situations.	2 %	17 %	36 %	34 %	12 %	3.4	0.97
If someone speaks, others actively listen.	2 %	7 %	29 %	41 %	22 %	3.7	0.95
Average score for all claims						3.7	

Respondents rate communication in their healthcare teams differently. The average score across all statements is 3.7, which is good but could be better. The two lowest-rated statements were that communication in the healthcare team where the respondents work is adequate, that they are able to manage their emotions and mood in all situations ($\bar{x} = 3.4$) and that communication is of good quality, as they are continuously improving their communication skills ($\bar{x} = 3.5$).

The highest scoring statement was that communication in the healthcare teams where the respondents work is clear and that they ask follow-up questions if they do not understand the messages ($\bar{x} = 4.1$). Respondents gave medium ratings to the statements that communication in their work teams is respectful, that they respect each other ($\bar{x} = 3.9$), understandable, that everyone understands what someone is trying to say ($\bar{x} = 3.8$), empathetic, that they are able to empathise with the person they are talking to ($\bar{x} = 3.8$), and that if someone is talking, others are actively listening ($\bar{x} = 3.7$).

Table 2 shows the descriptive statistics for the most common modes of communication in the healthcare teams in which the respondents work. We used a five-point Likert scale of attitudes, where 1 means 'strongly disagree' and 5 means 'strongly agree'.

Table 2: Communication methods most frequently used by respondents in healthcare teams

In the healthcare team where I work:	1	2	3	4	5	\bar{x}	SD
Assertive communication							
We express our opinions, needs and feelings openly and honestly.	20 %	20 %	38 %	31 %	9 %	3.2	0.95
We take into account the wishes and needs of our interlocutors (colleagues).	1 %	10 %	31 %	44 %	14 %	3.6	0.89
We respect each other and the wishes, thoughts and needs of others.	2 %	9 %	27 %	42 %	20 %	3.7	0.97
We know how to praise each other, but also how to accept criticism when we receive it.	2 %	17 %	20 %	46 %	16 %	3.6	1.02
Use appropriate non-verbal communication (appropriate tone of voice, gaze, posture).	3 %	12 %	25 %	40 %	20 %	3.6	1.04
Average score for all statements						3.5	
Aggressive communication							
Communication is done in an aggressive way - loudly and by shouting.	42 %	26 %	21 %	9 %	2 %	2.0	1.09
My colleagues impose their opinions on me.	28 %	38 %	18 %	16 %	1 %	2.2	1.06
Communication is loud, abusive and aggressive.	50 %	26 %	8 %	14 %	2 %	1.9	1.17
(S)coworkers are/are competitive and vindictive and have no feeling for others.	54 %	23 %	14 %	4 %	3 %	1.8	1.07
Most colleagues see only their own wishes and interests.	25 %	35 %	20 %	10 %	10 %	2.4	1.25
Average score for all claims						2.1	
Passive communication							
We find it difficult to express our opinions, feelings and needs to each other.	19 %	29 %	41 %	10 %	2 %	2.5	0.98
Our communication with each other is rare, quiet and gentle.	26 %	37 %	26 %	8 %	2 %	2.2	1.00
We do not make eye contact.	40 %	34 %	11 %	5 %	10 %	2.1	1.27
We communicate very hesitantly.	33 %	44 %	11 %	8 %	4 %	2.1	1.07
We do not express our pleasure or anger.	20 %	36 %	30 %	11 %	3 %	2.4	1.03
Average score for all claims						2.3	
Manipulative communication							
Communication is indirect and undetected.	22 %	23 %	32 %	10 %	4 %	2.5	1.11
Colleagues change their minds.	9 %	27 %	36 %	17 %	2 %	2.7	0.95
Your colleagues are tactical.	11 %	28 %	26 %	16 %	10 %	2.8	1.18
There is always someone who puts pressure on colleagues and wants to take control.	16 %	18 %	33 %	21 %	12 %	3.0	1.24
There are conflicts between colleagues.	13 %	36 %	18 %	15 %	9 %	2.7	1.20
Average score for all claims						2.7	

Respondents use *assertive communication* most often ($\bar{x} = 3.5$). The highest score was given to the statement that they and their colleagues respect each other and respect the wishes, thoughts and needs of others ($\bar{x} = 3.7$), with an average score of 3.6 for three statements, namely that they take into account the wishes and needs of their interlocutors (colleagues), that they know how to praise each other and also accept criticism appropriately if they receive it, and that they use appropriate non-verbal communication (appropriate tone of voice, gaze, posture). The lowest score was given for expressing their own opinions, needs and feelings openly and honestly ($\bar{x} = 3.2$). The statements related to *manipulative communication* have a low mean score ($\bar{x} = 2.7$).

Manipulative communication means that individuals use deception to achieve a goal, which is not good for relationships or for the results of working together. Among these statements, the highest rating was that in the healthcare teams where respondents work, there is always someone who puts pressure on colleagues and wants to take control ($\bar{x} = 3.0$) - 33% of respondents agreed with this statement. The second highest-rated statement was that colleagues are tactical ($\bar{x} = 2.8$), with 29% of respondents agreeing. The average score of 2.7 was that there are conflicts between colleagues in the healthcare teams where the respondents work, and the same score was given to the statement ($\bar{x} = 2.7$) that colleagues change their minds.

The lowest scoring statement in this section was that communication in the respondents' healthcare teams is indirect and not open ($\bar{x} = 2.5$). *Passive communication* is rarely used by the respondents. The statements in this section were rated with an average score of 2.3. The most frequent are that employees find it difficult to express their opinions, feelings and needs to each other ($\bar{x} = 2.5$) or that they do not express their satisfaction or anger ($\bar{x} = 2.4$). Sometimes their communication with each other is infrequent, silent and gentle ($\bar{x} = 2.2$). However, the lowest scores were given to the statements that they do not make eye contact ($\bar{x} = 2.1$) and that they communicate very hesitantly ($\bar{x} = 2.1$). *Aggressive communication* was rated lowest, with an average score across all statements of 2.1. As this is aggressive and disrespectful communication, whereby the communicator expresses his/her views, feelings and thoughts in an intrusive manner that is socially unacceptable and threatens the rights of others, this average score is too high.

This type of communication should not exist, but the respondents rated that most colleagues see only their own wishes and interests ($\bar{x} = 2.4$), that colleagues impose their opinions on them ($\bar{x} = 2.2$), and that communication, although rare, also takes place in an aggressive way - loudly and by shouting ($\bar{x} = 2.0$)

The respondents also rated that the majority of colleagues see only their own wishes and interests ($\bar{x} = 2.4$). As many as 16% of respondents answered that

communication in their healthcare team is often or always loud, abusive and aggressive ($\bar{x} = 1.9$), and 7% of respondents even answered that they are competitive and vindictive with their colleagues and have no feeling for others ($\bar{x} = 1.8$).

Table 3 shows the descriptive statistics for the assessment of interpersonal relationships in the healthcare teams in which the respondents work. We used a five-point Likert scale of attitudes, where 1 means 'strongly disagree' and 5 means 'strongly agree'.

Table 3: Respondents' assessment of interactions within their healthcare team

In the healthcare team where I work:	1	2	3	4	5	\bar{x}	SD
We have pleasant and positive relations with each other.	0 %	4 %	35 %	38 %	24 %	3.8	0.84
Working with colleagues to look after each other's wellbeing.	0 %	10 %	25 %	36 %	29 %	3.8	0.96
Working with colleagues.	0 %	3 %	20 %	30 %	48 %	4.2	0.86
We compete with our colleagues.	21 %	48 %	20 %	9 %	3 %	2.2	0.97
We have complete trust in each other and our colleagues.	3 %	14 %	36 %	31 %	16 %	3.5	1.01
Communicate with colleagues in a pleasant and high-quality way.	0 %	10 %	23 %	40 %	28 %	3.9	0.94
Average score for all claims 3.6							

Respondents rate the interpersonal relationships within their work team as good, with an average score across all statements of 3.6. The highest scoring of all statements was that they work well with their colleagues ($\bar{x} = 4.2$). 78% of respondents agreed with this statement. The second highest scoring statement was that respondents communicate pleasantly and well with their colleagues ($\bar{x} = 3.9$). 68% of respondents agreed with this statement.

The mean score was 3.8 for the statements that respondents have pleasant and positive interactions with their colleagues in the team where they work and that they and their colleagues care about each other's well-being. 69% feel that they do not compete with their colleagues in the healthcare team ($\bar{x} = 2.2$)

Table 4 shows the descriptive statistics for the assessment of barriers to communication in the healthcare teams in which the respondents work. We used a five-point Likert scale of attitudes, where 1 means 'strongly disagree' and 5 means 'strongly agree'.

As can be seen from the responses, respondents rarely face barriers to communication, with individual and organisational barriers rated with low average scores. However, they are slightly more likely to encounter organisational barriers ($\bar{x} = 2.2$) and less likely to encounter individual barriers ($\bar{x} = 1.9$). When *organisational barriers* to communication occur, it is most often because respondents disagree with the goals set by their superiors ($\bar{x} = 2.5$). *Individual barriers* are less common, but 9% of respondents said that they often do not understand what other colleagues are trying to tell them ($\bar{x} = 2.3$).

Table 4: Communication barriers most frequently encountered by respondents in health teams

In the healthcare team where I work:	1	2	3	4	5	\bar{x}	SD
<i>Individual barriers</i>							
I don't understand what other colleagues are trying to tell me (misunderstanding).	18 %	47 %	25 %	8 %	1 %	2.3	0.90
I don't understand the technical terms and words my colleagues use (jargon).	37 %	42 %	13 %	7 %	1 %	1.9	0.94
I deliberately overlook half the information because I disagree with my colleagues.	45 %	28 %	21 %	3 %	4 %	1.9	1.06
When communicating, emotions are so strong that I often can't follow through.	58 %	22 %	12 %	4 %	4 %	1.7	1.08
We communicate very quickly, so I often don't understand or even overhear messages.	49 %	30 %	16 %	4 %	1 %	1.8	0.94
I am inattentive and cannot actively listen to my colleagues.	66 %	18 %	11 %	5 %	0 %	1.6	0.89
Average score for all claims 1.9							
<i>Organisational barriers</i>							
It takes a very long time to get the information I need from management to do my job.	28 %	31 %	31 %	9 %	1 %	2.3	1.01
When I communicate with my superiors or colleagues from another discipline, I find it difficult to understand what they are trying to tell me because they use too many technical terms.	36 %	41 %	17 %	5 %	0 %	1.9	0.87
I do not agree with the targets set by our superiors.	16 %	36 %	32 %	16 %	0 %	2.5	0.95
My superiors avoid me when I have a suggestion or criticism to make.	49 %	20 %	19 %	9 %	3 %	2	1.14
Average score for all claims 2.2							

The second part of the survey asked whether the size of the healthcare team in which employees work has an impact on the quality of communication and relationships. We also looked at whether good communication influences good interpersonal relations in healthcare teams.

Table 5: T-test, assessment of communication in your healthcare team according to team size

Team size	Descriptive statistics			Levene's test		T-test		
	N	M	SD	F	p	t	df	p
1-10 members	29	4.09	0.624	2.13	0.148	3.152	98	0.002
11 or more members	71	3.58	0.789	1				

In order to determine whether there are statistically significant differences in communication according to team size, we first used Levene's test to test whether the variances in awareness of the importance of good communication are the same or different between teams of different sizes. As a consequence, we will know whether we can test the hypothesis of variance in awareness of the importance of good communication according to team size assuming equal or different variances between groups. The results of the Levene's test showed that the value of the F-statistic is equal to 2.131. The level of significance corresponding to this value of the F-statistic is equal to 0.148. This level of significance is

greater than 0.05, so it cannot be concluded that the variances in awareness of the importance of good communication are different according to team size. Consequently, we will test the hypothesis assuming equal variances and using a two-tailed t-test for two independent samples. The results show that the t-statistic is 3.152 and the corresponding exact level of significance is 0.002. Since this level of significance is less than 0.05, we can conclude that there are statistically significant differences in communication according to team size. Hypothesis 1, which states that communication is better in smaller healthcare teams (up to ten employees) than in larger teams (11 employees or more), is confirmed.

Table 6: T-test, assessment of interpersonal relationships in the healthcare team according to team size

Team size	Descriptive statistics			Levene's test		T-test		
	N	M	SD	F	p	t	df	P
1-10 members	22	3.92	0.465	3.00	0.087	3.35	78	0.001
11 or more members	58	3.43	0.622	1		4		

In order to determine whether there are statistically significant differences in the assessment of the importance of interpersonal relationships according to team size, we first used Levene's test to test whether the variances in the awareness of the importance of interpersonal relationships are the same or different between teams of different team sizes. As a consequence, we will know whether we can test the hypothesis of variance in awareness of the importance of interpersonal relationships in a healthcare team according to team size, assuming equal or different variances between groups. The results of the Levene's test showed that the value of the F-statistic is equal to 3.001. The level of significance corresponding to this value of the F-statistic is equal to 0.087. This level of significance is greater than 0.05, so it cannot be concluded that the variances in the awareness of the importance of interpersonal relationships are different according to the size of the team. Consequently, we will test the hypothesis assuming equal variances and using a two-tailed t-test for two independent samples. The results show that the t-statistic is equal to 3.354 and the corresponding exact level of significance is equal to 0.001. Since this level of significance is less than 0.05, we can conclude that there are statistically significant differences in the assessment of the interrelationships according to the size of the team. Hypothesis 2, which states that interpersonal relationships in smaller healthcare teams (up to ten employees) are better than in larger teams (11 employees or more), is confirmed.

To test hypothesis 3, we used correlation, or Pearson's correlation coefficient, to determine whether there is a linear relationship between the variables and how strong the relationship is. As can be seen from Table 7, there are three variables, namely variable 1: the index of the importance of good communication (average of the answers in Table 1) or IDX_1, variable 2: the index of communication (average of the answers in Table 2) or IDX_2 and variable 3: the index of

interpersonal relationships (average of the answers in Table 3) or IDX_3.

Table 7: Pearson correlation coefficient (correlation between good communication and relationships)

		IDX RV1	IDX RV2	IDX RV5
IDX_1 (index of the importance of good communication)	R	1		
	P			
	N	147		
IDX_2 (communication assessment index)	R	0.112	1	
	P	0.264		
	N	147	101	
IDX_3 (index of assessment of interrelationships)	R	0.103	0.721	1
	P	0.363	< 0.05	
	N	147	147	147

In Table 7 we have the values of Pearson's correlation coefficient (r), statistical significance (p) and number of units (N). The correlation coefficient between the index of the importance of good communication and the index of interpersonal relationships is only 10.3%. In contrast, the correlation coefficient between the index of the importance of good communication and the index of interpersonal relationships is 72.1% and the correlation is statistically significant as the p is less than 0.05. Hypothesis 3 is accepted. Pearson's correlation coefficient showed that good communication has an impact on good interpersonal relations in healthcare teams.

Discussion

Our main research topic among 147 part-time nursing students was communication and interpersonal relationships in the nursing team. Because communication is so complex, it has been studied by many authors [5], [32], [33], [34], [35], [36], [37] and, as a result, there are a number of models that explain how individuals and organisations communicate. The key to communication is that a certain piece of information is successfully transmitted from the sender of the message (the healthcare professional) to the receiver (the patient). The authors mentioned above divide communication in different ways according to its form, direction, modalities, participants, content, etc. The form of communication depends on the situation we are in, how we feel, our surroundings and the participants in the communication. We therefore communicate in different ways, but usually in the way that is closest to us. The choice of communication channel depends on the form and nature of the message and the accessibility or ability of the receiver and sender of the message.

Communication is a fundamental tool for healthcare delivery, enabling us to work together and determining the quality of care [38], which is why our study focused on the awareness of good communication in the nursing team. We found that respondents were aware of the importance of good communication, rating it as clear - to ask additional questions if they did not understand the messages (\bar{x} =

4.1), respectful (\bar{x} = 3.9), understandable (\bar{x} = 3.8), empathetic - to be able to empathise with the interlocutor (\bar{x} = 3.8). They are also considered to actively listen to their interlocutors (\bar{x} = 3.7). Similar findings are reported by [3] and [4], who consider that good communication between healthcare staff in the nursing team is essential for successful nursing outcomes and for faster and more durable treatment of patients. Effective communication skills among healthcare professionals are crucial, both in relation to patients and relatives, and among staff in the working team [7]. Research [19], [29], [39], [40], [41] also shows that nursing staff are aware of the importance of empathetic attitudes towards patients and effective communication, but not all of them are proficient in these skills. Communication in healthcare teams is becoming increasingly challenging, as healthcare professionals are often faced with difficult patient health conditions, high expectations from supervisors, colleagues and patients' families. Modern technology and the associated access to information, which can be of varying quality, also contribute to more complex communication. As a result, healthcare professionals face communication barriers that can negatively affect the work process, which can lead to less successful team relationships or patient treatment [6]. Pretnar Oblak [42] also considers that good team functioning in the treatment of a patient is only possible with the participation of all team members and with regular, empathic and understanding communication. Each team member can contribute to the successful treatment and rehabilitation of the patient by acting appropriately. Good communication is that which engenders trust, cooperation, respect, maintains a sense of dignity, good self-esteem, respect and autonomy of the user. Healthcare professionals should therefore strengthen skills such as listening, answering questions, asking questions, explaining in simple lay language, encouraging users to ask questions, encouraging participation in decision-making [43]. Unfortunately, there are too few opportunities for good-natured and frank conversations in the workplace today. There is a lack of encouragement and praise and an increasing amount of criticism and comments, which often leaves nurses in particular vulnerable to emotional problems. It is essential to continuously improve communication in nursing teams. Even when a team member seems to communicate nothing to others, when he or she is silent and reserved, his or her behaviour communicates and conveys a negative attitude towards others [44]. As Gordon [1] also states, communication builds trust, trust generates commitment, commitment generates teamwork and teamwork generates results. Without good communication, it is not possible to create trust and cohesion, which are prerequisites for strong relationships, and these are prerequisites for building a successful team.

The survey found that respondents most often use assertive communication (\bar{x} = 3.5), followed by manipulative communication (\bar{x} = 2.7), mainly due to

those team members who put pressure on colleagues and want to take control, or who use tactics because of different interests. The presence of passive communication ($\bar{x} = 2.3$), because they have difficulty expressing their opinions, feelings and needs, also points to the need to improve assertive communication among healthcare team members. In fact, even when a team member feels that he/she is not communicating anything to others, when he/she is silent and reserved, his/her behaviour communicates and conveys his/her negative attitudes towards others [16]. Research by various authors [37], [45], [46], [47], [48], [49], [50] has shown that for successful teamwork, health professionals need to be educated, learn good communication and foster good relationships with each other. They need to learn the different aspects and transfer of communication to different areas of nursing care. In this context, it is understood that the importance of nurse-patient communication should be emphasised and nursing education should focus on nurses' communication skills.

Good communication is that which generates trust, cooperation, respect, maintains a sense of dignity, good self-esteem, respect and autonomy of the user. Healthcare professionals should therefore strengthen skills such as listening, answering questions, asking (open) questions, explaining in simple lay language, encouraging users to ask questions, encouraging participation in decision-making. Without good communication, it is not possible to create the trust and cohesion that are the prerequisites for strong interpersonal relationships, which in turn are a prerequisite for building a successful team.

We have also found that communication is better in smaller healthcare teams (up to 10 members) than in larger teams (11 members or more). Some studies [51], [52] have shown that larger numbers of team members can hinder team productivity, with a higher likelihood of poorer communication, poorer team coordination and higher likelihood of groupthink. According to Peltokorpi and Hasu [53], members in large teams are less motivated to participate in team activities than members in smaller teams. Another interesting study with 1266 students from the faculties of medicine, midwifery, nursing and physiotherapy from Poznan University of Medical Science on their opinion about participation in interdisciplinary teams [54]. The students who took part in the study also thought that working in a team improves the quality of care, increases patient safety and improves communication between team members. Although the survey does not report on the optimal number of team members, it is interesting to note that it was nursing students who perceived the provision of health care by an interdisciplinary team as the most beneficial compared to students from other faculties. The same was also true for the perceived importance of collaboration in interdisciplinary teams, with nursing students attaching more importance to collaboration in teams compared to

students from other faculties. Another interesting study was conducted by Al Kurdi et al. [55]. They investigated how team size moderates the effect of team social networking on performance. They found that team size act as a mediator variable that mediates the direct relationship between team social networking and team performance. On the other hand, [56], [57] found that larger teams can be more effective in terms of communication because they have more resources to draw on, more transfer of expertise, and thus a greater chance of performing more complex tasks more successfully. The differences in the results of different studies on the impact of the number of team members on the quality of communication in a team suggest that there is not a clear consensus on this issue. Our own view is that we need to look at the quality of team communication in a broader context. The type of team, the organisational and systemic factors of individual hospitals, the adaptability of team members, their skills and experience in working in teams, and the development of the aforementioned culture of mutual support among team members are all very important.

Šemrl [58] states that communication is often taken for granted by health care professionals, who become aware of it when there are barriers to communication between interlocutors. Team communication can be hampered by barriers such as: the weakness of the organisational structure itself, psychological factors in the people involved during the communication process, and human errors made willingly or unwittingly during the communication process [59]. The respondents rarely encounter barriers to team communication, but when they do, they are related to the weakness of the organisational structure itself and psychological factors in the interlocutors. Among the individual barriers to team communication, 9% of Annuitants face a lack of understanding, as they do not understand what other colleagues are trying to tell them. As for organisational barriers, 16% disagree with the goals set by their superiors and 10% face situations where it takes a very long time to get the information they need from management to do their job. In their study, Wei et al. [60] conclude that interprofessional collaborative practice is essential in reducing communication barriers and can be fostered through five processes: building caring relationships, developing an ownership mentality, providing constructive feedback, applying the strengths-based practice, and acting as the first and last lines of defence. According to [47] the five most common challenges that face healthcare teams relate to accountability, conflict management, decision-making, reflecting on progress, and coaching. Weller et al. [61] note that communication barriers and unwillingness to work as a team can compromise patient care, leading to strained relationships between colleagues and reduced work performance. Cmerman Kac [62] states that the most common communication breakdowns in the healthcare team by the sender are misunderstood instructions, own insecurities, fear of co-worker's questions, indifference, underestimation of

the importance of the information for the work, misconceptions "because he doesn't understand me like that", disorganised and unclear speaking, lack of contact, time pressure. The most common communication breakdowns in the healthcare team by the receiver include indifference, lack of time, inappropriate attitudes, stereotyped answers, not being honest, not responding appropriately, being discouraged by gestures and facial expressions. Guttman et al. [63] propose that being more precise when describing communication error is a valid mechanism to learn from these errors.

The study revealed that smaller health teams (up to 10 members) have better interpersonal relationships than larger teams (11 members or more). A similar finding was also reported by [64], who studied health teams with 3-4 members in a qualitative case study. Members of these smaller teams communicated well, asked for help, supported each other in their work and helped each other with tasks. They stressed that a culture of mutual support was fundamental to their ability to adapt within the team, and that it was also important for them to work together regularly, as this gave them the opportunity to get to know each other professionally and so develop their own structures for sharing responsibilities and supporting each other, knowing each other's preferences, strengths and weaknesses.

The study also indicated that good communication leads to good interpersonal relationships in healthcare teams. According to Derickson et al. [69], in relation to team relationships, psychological safety is an important factor that supports communication, knowledge sharing and teamwork in healthcare, and also increases the level of team members' sense of safety in taking risks with each other. Boštjančič [70] points out that psychological safety at work occurs when employees feel a sense of belonging, when they are able to be authentic and express themselves in a relaxed way in the workplace, when they are able to participate in decision-making, provide feedback and share their opinions without fear of possible negative consequences, comments or embarrassment. Róisín O'donovan and Eilish McAuliffe [71] identified 13 enablers of psychological safety within healthcare contexts. For were organisational level (safety culture, continuous improvement culture, organisational support, familiarity across teams), seven were at the team level (leader behavioural integrity, status, hierarchy and inclusiveness, change-oriented leadership, leader support, peer support, familiarity leader, familiarity team members) and two were at the individual level (professional responsibility, individual differences). Adding that when healthcare organisations have a climate of continuous improvement, it supports the development of psychological safety and encourages staff to become more engaged in improving team or organisational practices. At the team level, change-oriented leaders play a key role in enabling psychological safety by role

modelling innovative thinking, taking interpersonal risks and discussing errors. We believe that knowing, identifying and analysing all these enablers of psychological safety increases the need for communication and information sharing among team members and enables the development of trusting relationships. In this way, we can empower health professionals more quickly and qualitatively to develop communication and team competences and to create a good organisational climate and job satisfaction. Also a study by Bragadóttir et al. [72], conducted among 925 nursing staff in all Icelandic inpatient medical, surgical, and intensive care units, showed that there is a significant relationship between nursing teamwork and job satisfaction. If good interpersonal relationships prevail among employees, they can contribute to lower stress, be a source of satisfaction and good mood, and allow for greater effectiveness at work. Good relationships among employees in healthcare teams are linked to good patient outcomes. A statistically significant relationship was identified between overall nursing teamwork as well as all the subscales of teamwork. A study by [73] also found significantly higher satisfaction with teamwork among direct patient care nurses. Similarly, a study [74] show that nurses with high interprofessional teamwork scores are more satisfied with their work and intend to stay in work. The result of this study is certainly important in the context of reducing turnover in healthcare and thus the shortage of nurses. Van Diggele et al [75] state that personal autonomy, accountability, appropriate recognition and role clarity among team members contribute to optimal team functioning, foster communication, interprofessional learning and collaboration among team members, which is an investment in the social capital of any healthcare institution.

Conclusion

The accelerating development of different sciences and disciplines and the need to comprehensively address the increasingly complex problems of an ageing population are making nursing an increasingly demanding, complex and diverse health discipline. Health systems are also changing due to the increasing complexity of patients' health needs, and effective and innovative patient care concepts involving teamwork, good communication and interprofessional collaboration between different health professionals are needed, as a team approach brings many positive changes in terms of positive patient outcomes.

Relationships in a healthcare team are built through communication, as communication triggers the process of building a cohesive team. If we want to connect with someone, we need to communicate with them. Great teams are built through great relationships based on communication. Communication builds trust,

trust breeds commitment, commitment breeds teamwork and teamwork breeds results. Without good communication, it is not possible to create the trust and cohesion that are the prerequisites for strong relationships, which in turn are the prerequisites for building a successful team.

Based on the results of the survey, we advise the following for faculties with first degree programmes in Nursing:

- As the curricula of the Nursing curriculum are updated in line with the Directive, more emphasis should be placed on specific areas of nursing, such as communication and teamwork in healthcare settings.
- Nursing study programmes provide students with the professional knowledge and skills to be directly employable after graduation, which makes it all the more important to pay attention to their professional competences.
- Communication, interpersonal, leadership, management and teamwork competences are certainly among the most important professional competences. Thus, during their studies, students have the opportunity to develop effective communication with colleagues (in the healthcare team), patients, families and social groups in normal and specific communication environments/atmospheres. In the area of teamwork, students gain the understanding that patient well-being is achieved through a combination of efforts, activities and responsibilities of all members of the healthcare team, and are trained to communicate cooperatively with all staff. For this reason, it would be worthwhile to consider more teaching hours in both areas, continuously updating these contents, so that the curricula are more in line with the communication and teamwork challenges in the work environment.

In the light of the survey results, we advise health organisations to:

- to develop an organisational culture that encourages open communication and a desire to work together as a health team;
- to ensure the psychological safety of health workers, as it is crucial for success, commitment, productivity and job satisfaction. They should be aware that psychological safety at work is very important because it enables team members to respect each other, diversity is respected, employees can learn from their mistakes, and their engagement and well-being is improved. All of this leads to good relationships between all employees and within individual nursing teams.

- that management supports its staff in striving for a culture of continuous improvement in the areas of communication and teamwork by facilitating continuous formal and informal education and training for healthcare staff in both areas;
- that management provides organisational support for the formation of nursing teams, taking optimal account of the number of team members, the continuity of participation of the members of these teams, which means that they strive to ensure that the composition of the teams is stable. This is very important for the quality of the work of each team, as a good knowledge of the personal characteristics and professional competences of each individual team member allows for an appropriate division of tasks between team members.

For part-time nursing students, we suggest:

- self-assess their communication and team-building skills by becoming aware of their areas of strength and weakness and formulate goals they want to achieve in developing these skills,
- being proactive or planning activities to develop communication and team competences through education and training in formal education and in the clinical setting during clinical practice,
- empower them to communicate well and develop their skills in collaboration and teamwork by actively participating in various courses and workshops on communication skills,
- take part in team-building activities, as team-building activities improve teamwork and include tasks that foster unity, creativity, critical thinking and problem-solving,
- to emulate the behaviour of others with strongly developed team competences, as they can learn from the examples of good teamwork of other team members.

In summary, effective communication skills among healthcare professionals are essential, both among staff and with patients and their families. As team members are process-oriented and therapeutic, good communication is a prerequisite for building and maintaining cohesiveness among team members, which influences the quality of the work performed and, consequently, the achievement of the healthcare team's goals - healthy and satisfied patients.

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