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## *From Learning “Doing the Work of a Paramedic” to “Being a Paramedic” – the Results of Research on Students of the Last Year of Wrocław Medical University*

**Keywords:** paramedics; values; motivations; competencies; professional identity

**JEL:** I1; I23; M54

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### **Abstract**

**Theoretical background:** The limited number of scientific studies on the specifics of the professional identity formation of paramedics makes it possible to conclude that this subject is insufficiently identified. In addition, the growing demand for medical professions, including paramedics, has led the authors to fill the research gap related to the recognition of the real professional identity of future representatives of the discussed profession. Accepting the fact that professional identity of paramedics is formed at different stages of the professional life of the person practicing the job, the authors took up the challenge of looking at the problem in question from the perspective of, *inter alia*, the identification of key determinants of the choice of this profession, the accompanying values and motivations, as well as the degree of fulfilment of expectations from the process of preparation for this profession offered in the framework of higher education.

**Purpose of the article:** The article draws attention to a very important stage in the process of shaping the professional identity of paramedics, which is the higher-level of education. Its purpose is to recognize the opinions of students of the last year of emergency medical care about their values, motivations that determined the choice of this field of study and the competences acquired by them. These elements determine the degree of satisfaction of students with the broadly understood process of study and, consequently, the forming of their professional identity.

**Research methods:** The article refers to the results of own research conducted among students of the last year in the field of medical rescue service at the Medical University of Wrocław. The study covered a four-year period and was done each time in the second quarter of 2017, 2018, 2019 and 2020. The authors of the article conducted a diagnostic survey using the authors’ survey questionnaire.

**Main findings:** Future paramedics, while undertaking higher studies in the said field, though internally convinced that their decisions were right, were guided by different values and motivations. Among the most important were the desire to pursue their passions, fulfill dreams, care for their own health, family and relationships with friends. Work as a value and the directly related need to help others, as well as the resulting economic benefits, were not considered the most important for future paramedics at that moment. The identified dissonance pertaining to the degree of fulfilment of expectations towards the process of education and the degree of benefits gained from that process demonstrate a limited level of satisfaction from preparation for the studied profession.

**Implications/Recommendations:** The attempt made in the article to insight into the professional identity of future paramedics, and in particular the weaknesses and concerns identified in relation to the learned profession, certainly invite further research that can contribute to both improving the current education system and taking action by further actors in the subsequent stages of shaping this identity. Taking into account the

concerns identified by future paramedics and the enormity of tasks they are going to face, the professional predisposition as well as psychophysical characteristics of potential candidates should be taken into account at the stage of recruitment for the studies. In this context the teaching time should be increased for such subjects as psychology, patient communication and stress management. So far, the Polish education system of paramedics offers no planned career path, no vertical differentiation and promotion during professional work, which would certainly be a motivating factor. Continuous professional development should be an important element, which could enable them to develop their professional identity from learning “doing the work of a paramedic” to “being a paramedic”.

## Introduction

Paramedics form a very important and growing group of health professionals. The profession was set up to provide assistance to anyone in a state of emergency (Journal of Laws of 2006, No. 191, item 1410). To fully accept and perform the responsibilities of their professional role, in line with the existing laws and the professional code of ethics,<sup>1</sup> developing and maintaining a strong professional identity (PI) is required (Johnston & Bilton, 2020; *Developing...*, 2020). The identity of a paramedic can be understood as a sense of oneself, and in relationship with others, that is influenced by characteristics, norms, and values of the paramedic discipline, resulting in an individual thinking, acting, and feeling like a paramedic (Godfrey & Young, 2021).

PI is not simply acquired. It continues to develop over time. This is a process, which is ongoing and multi-staged. Individuals shape their professional identity in relation to the perceptions and expectations of those around them, including educators and mentors, colleagues, patients, employers, and regulators, as well as those outside of their working life and wider society (Johnston & Bilton, 2020; Ashby, Adler, & Herbert, 2016, pp. 223–243; Adams, Hean, Sturgis, & Macleod Clark, 2006, pp. 55–68).

The article draws attention to a very important stage in the complex process of shaping the professional identity of paramedics, which is higher level education. During this particular process students acquire necessary competences and get prepared to perform their professional role. The aim of the article is to recognize the opinions of students of the last year of emergency medical service at the Medical University in Wroclaw about their values and motivations which determined the choice of this field of study and about the competences they acquired. These elements determine the degree of satisfaction of students with the broadly understood educational process and, consequently, their formative professional identity.

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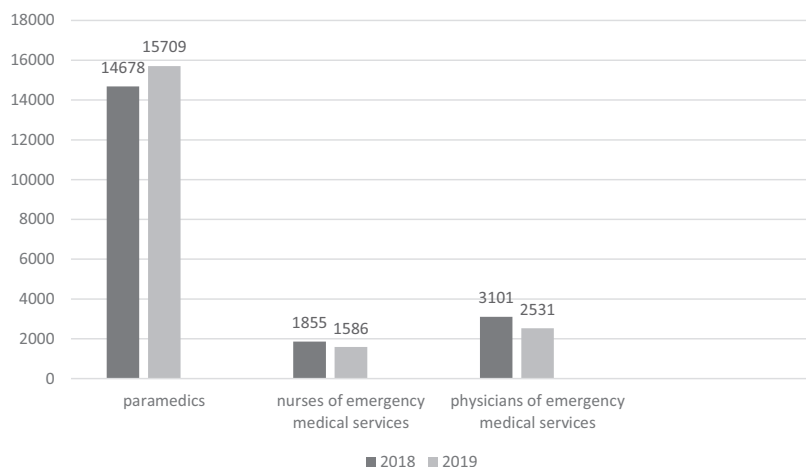
<sup>1</sup> In October 2013, the First National Congress of Paramedics was held in Krakow. During it, *The Code of Professional Ethics for Paramedics* was presented and adopted by the present representatives of the community.

### **Paramedics – profession and professional identity**

The paramedic profession is the youngest medical profession in Poland. The professional training of paramedics began in 1992. Until 2014, the right to practice could be obtained in post-secondary schools. Since 2000, paramedics have been trained by universities. Currently, one can only become a paramedic after graduation from university. Initially, only graduates of the 2-year post-secondary schools were admitted to the higher studies. They studied in the departments of Public Health with a specialty in Emergency Medical Services. It was only in the following years that medical universities began a continuous recruitment for the field of Emergency Medical Services. At the time of setting up the profession, there were no adequate legal regulations concerning either the education stage or the performance of the work (Konieczny, 2006). The competences of paramedics were not clearly defined. The scope of their duties usually depended on the employer and its internal regulations, e.g. of a hospital or ambulance service. Their main tasks included helping medical staff, carrying ambulance equipment and transporting patients. Medical emergency procedures were reserved for doctors and nurses (Sip, Juskowiak, Zgorzalewicz-Stachowiak, Zeńczak-Praga, Rybakowski, & Podlewski, 2019, pp. 15–22).

Much has changed in this regard following the implementation of the Act of 2006 on State Emergency Medical Services, amended in 2015, and the corresponding regulations, e.g. the Regulation of the Minister of Health on medical emergency operations and health services other than medical emergency operations, which may be provided by a paramedic. The analysis of these regulations shows that the initially undervalued and marginalized profession has evolved significantly over a few years. The legislator increased the role of paramedics in the medical rescue system in Poland. This is evident primarily in the number of medical emergency procedures that can be performed by a paramedic alone or under the supervision of a doctor and health services other than medical emergency procedures, which can be provided by a paramedic alone or on request. The power of paramedics to administer medicines to patients have also increased (currently 47) (Journal of Laws of 2006, No. 191, item 1410; Journal of Laws of 2016, item 587; Mikos, Juszczak, & Czerw, 2016, pp. 311–315). It is worth noting, however, that the legislation regulating the paramedic profession still requires many new solutions that will bring paramedics to a suitable place in the group of medical professions (*Kształt...*, 2018).

Today, paramedics play the key part in the State Medical Rescue Service in Poland and form the largest professional group performing medical rescue operations in emergency medical teams. According to the report by GUS (Statistics Poland) entitled *Health and Health Care in 2019*, the number of resources of emergency medical staff increases every year. Figure 1 shows the composition and number of medical staff in emergency medical teams in 2018–2019.



**Figure 1.** Medical staff in emergency rescue teams in 2018–2019

Source: (GUS, 2020, p. 107).

It is also worth noting that paramedics are the only professional group from the group of basic medical professions that does not have its own self-government. Professional self-government is a very important, joint representation of the whole profession. The absence of such a body seriously hinders the supervision of the proper and safe exercise of the profession, and limits its professional and scientific development (*Ratownicy...*, 2020; *Kształt...*, 2018).

The main task of paramedics is to provide assistance to any person in a state of emergency (Journal of Laws of 2006, No. 191, item 1410). The work of a paramedic is highly responsible because it is focused on goods that are fundamental and existential to each person. The work requires not only substantive knowledge and practical competence but also psycho-social competence such as communication with victims and providing them with psychological support (Kapler, 2012, pp. 43–46). The profession requires the continuous development of knowledge, improvement of skills and documentation of the improved qualifications (Journal of Laws of 2017, item 1884; Kudłacik, Fraś, Ilczak, Ćwiertnia, & Ryś, 2016, pp. 137–142). Additionally, paramedics are exposed to many dangerous and harmful occupational risk factors occurring in their working environment. Every day they face human suffering, also death, and often experience a sense of powerlessness during rescue procedures. They are frequently forced to act under time pressure, take risks and make quick and difficult decisions. This exposes them to severe stress. They are called to attend at any time of day or night, in very different places and circumstances, under changing weather conditions. Manually moving of patients and carrying heavy medical equipment can cause injuries to their movement organs. Providing assistance to patients exposes paramedics not only to biological factors, but also to

various forms of aggression on the part of patients, their families or witnesses to the event. Unfortunately, the current pandemic situation makes the paramedic's working environment even more difficult and demanding. This means that the profession requires adequate predispositions not only physical, but above all psychological. They should be characterized by high resistance to stress, strong internal motivation and self-control. This is certainly not a profession that can be successfully carried out by any person (Goniewicz, 2012, pp. 147–165; Frydrysiak, Grzeškowiak, & Podlewski, 2014, pp. 381–391; Kowalczyk et al., 2009, pp. 76–80; Binczycka-Anholcer & Lepiesza, 2011, pp. 455–461; Borys, Majkowiec, & Majkowiec, 2003, pp. 337–348; Ogińska-Bulik & Kaflik-Pieróg, 2006).

An important part of being a professional in any field is having a clear identity. A strong and confident professional identity is a known predictor of personal and professional satisfaction, well-being and is viewed as foundational to successful practice in health occupations (Johnston & Bilton, 2020; *Developing...*, 2020; Ashby, Adler, & Herbert, 2016, pp. 223–243; Monrouxe, 2010, pp. 40–49). A review of the literature on the subject of individual and collective identity allows to conclude that professional identity is considered to be a type of group identity that encompasses the shared knowledge, skills, values, beliefs and attitudes specific to a professional group. It can be perceived as identification of a worker with the given professional group and the performed job, being part of a team, as an employee of an organization and as a member of a professional body. The sense of professional identity then precedes the search for elements that differentiate the represented profession from others, while at the same time distinguishing those elements that are specifically owned by the profession (Goltz & Smith, 2014, pp. 785–789; Adams et al., 2006, pp. 55–68; Gołuszka, 2003).

By nature human identity is changing, discontinuous and uncertain, and its formation is based on discovering and constructing one's own self in relation to the world around (Mysiakowska, 2008, p. 285; Beijaard, Verloop, & Vermunt, 2000, pp. 749–764). Professional identity should also be seen in terms of an ongoing and dynamic process of creating meanings that are related to the performance of a social role resulting from the circumstances of the time and place where professional duties are carried out (Burke, 1991). This process involves self-defining of a person as an employee of a particular profession and growing into a profession. This usually happens through contact with the values relevant to the profession, its tradition, history, as well as the nature of the professional activities performed (Ślusarska, Zarzycka, & Dobrowolska, 2007, pp. 147–156). In case of health and care professionals, including paramedics, the identities are formed in different settings and through various interactions – from formal education and training to clinical practice and patient care, as well as mentoring and supervision. Time of professional studies is a very important period of creating and strengthening the foundations of the sense of later professional identity (Adamus & Jaworski, 2017, pp. 199–205). Students entering a program of study will start with some measure of PI and there

is agreement that universities play an important role in fostering this identity to strengthen students' career preparation. As paramedic students' progress through their didactic and practical education, they will internalize the values and attributes of the profession (Johnston & Bilton, 2020).

## Methods and results

The authors of the article conducted a diagnostic survey using the authors' survey questionnaire. The research was conducted among students of the last year in the field of medical rescue service at the Medical University of Wrocław.

The study covered a four-year period and was conducted each time in the second quarter of 2017, 2018, 2019 and 2020. The selection of the research sample was deliberate due to the particular interest of the authors in the profile of people who are graduating from the indicated field. At this stage, their opinions, declarations and experience on the issues taken up in the article can be considered as the most mature, thoughtful and up-to-date. Questionnaires were distributed among 115 respondents. Out of 112 returned, the number of 110 questionnaires were selected for the final analysis. Participation in the study was voluntary and anonymous. Data shown in the article is based on the responses/declarations of the surveyed. The material scope covered selected issues related to the process of shaping the professional identity of future paramedics, including, *inter alia*:

- their key life values,
- motivations and expectations that prompted the choice of paramedic's service as the field of study,
- competences acquired during studies and the evaluation of their importance for exercising such an important profession.

The questionnaire consisted of closed questions. The respondents used a 4-point type scale to assess several items asked in the questionnaire. Depending on the characteristics of the question, the 4-point scale offered the following sets of answers: 1 – "unimportant", 2 – "little important", 3 – "important", 4 – "very important", or 1 – "definitely no", 2 – "rather no", 3 – "rather yes", 4 – "definitely yes".

Taking into account the aim of the article, the following research questions are formulated:

1. Which life values are crucial for future paramedics and which are relatively less important?
2. Which motivations for choosing this field of study were very important for respondents and which were less important?
3. Which benefits of higher education, that determine the quality of their work, gained the future paramedics?
4. Which soft competences do they considered key for their future profession?
5. Which soft competences have the future paramedics acquired during studies?

In the context of theoretical considerations, it is stated that life values are the basis for professional identity. Therefore, the first question addressed to the respondents concerned precisely this aspect. Eight important values in human life have been analyzed. The respondents evaluated the values in a 4-point type scale (“very important” – 4, “important” – 3, “little important” – 2 and “unimportant” – 1), as in Table 1.

**Table 1.** Evaluation of importance of life values by the respondents (%)

Life values	Very important	Important	Little important	Unimportant
Work	11.8	82.7	5.5	0.0
Family	88.2	11.8	0.0	0.0
Health	82.7	17.3	0.0	0.0
Religion	16.4	28.2	20.0	35.5
Friends	60.0	38.2	1.8	0.0
Interests development	40.0	55.5	4.5	0.0
Pleasures	62.7	20.9	16.4	0.0
Responsibilities	49.1	46.4	4.5	0.0

Source: Authors' own study based on the conducted research.

As indicated in Table 1, the two most important life values for the respondents were: *family* (88.2%) and *health* (82.7%). Subsequent values, although not so much very important, but at least important were: *pleasures* (very important – 62.7%; important – 20.9%), *friends* (60.0%; 38.2%, respectively), *responsibility* (49.1%; 46.4%, respectively) and *development of interests* (40.0%; 55.5%, respectively). When analyzing the indications for the next value, i.e. *work*, a relatively high consistency of the opinions obtained can be observed. *Work* is very important for only one in eight respondents on average (11.8%), and for more than 80% of the respondents is only important (82.7%) (Table 1). For only 5.5% of future paramedics, such value as *work* turned out to be rather unimportant.

In view of the above results, it is worth pointing out that the most diversified indications concerned the last value analyzed, i.e. *religion* (Table 1). Only one in six respondents considered it to be a very important value (16.4%), and nearly 30% of the respondents gave *religion* the rank of only an important value (28.2%). The remaining respondents considered *religion* to be less important to them (55.5%).

Another important question in the context of the professional identity of paramedics was their internal belief in the choice of the discussed field of study. For the vast majority of the respondents, i.e. for 98.2%, the choice was rather thoughtful.

Looking for answers to another research question on the actual motivations that led the respondents to choose the indicated field of study, more than several motivations were analyzed. Their importance was evaluated by the respondents in a 4-point type scale (“definitely important” – 4, “rather important” – 3, “rather unimportant” – 2 and “definitely unimportant” – 1), as presented in Table 2.

**Table 2.** Evaluation of importance of motivations that determined the choice of paramedical service as the field of study by the respondents (%)

Motivation	Evaluation scale			
	Definitely important	Rather important	Rather unimportant	Definitely unimportant
Security of employment in the studied profession	31.8	24.5	36.4	7.3
Equitable remuneration	20.0	40.9	23.6	15.5
High remuneration	20.9	36.4	22.7	20.0
Appreciation by others / respect	20.0	28.2	32.7	19.1
Prestige of the profession	23.6	32.7	25.5	17.3
Desire to help others	39.1	52.7	8.2	0.0
Desire to pursue dreams	57.3	35.5	3.6	3.6
Acquaintances that may help in professional career	26.4	40.9	16.4	16.4
Suggestions from family members	6.4	8.2	26.4	59.1
Suggestions from others	3.6	4.5	23.6	68.2
Development of interest in the field of human sciences	55.5	37.3	3.6	3.6

Source: Authors' own study based on the conducted research.

The collected results confirmed the declarations made earlier by the respondents and pertaining to the personal, internal belief as to the choice of the field of study. Decisions on studying the chosen field were made independently by the majority of the respondents, without suggestion from *family members* (85.5%), or *others* (91.8%).<sup>2</sup> When analyzing the impact of other motivations that significantly influenced the decision to undertake the discussed field of study, it is concluded that the respondents' declarations were of a diversified nature. It is worth pointing out that more than a half of future paramedics want to *fulfil their dreams* (57.3%) and *develop interest in human sciences* (55.5%) than satisfy the *desire to help others* (39.1%). The motivation – *desire to help others* – despite being almost imprinted in the profession of paramedics was ranked “rather important” by only 52.7% of respondents. It is also worrying that for 8.2% of the respondents, it has proved to be rather an unimportant motivation.

An important aspect of the conducted research was also to look at the decision on the choice of the field of study from the perspective of economic reasons. In this context, three motivations were examined: *job security in a learned profession*, *the possibility of receiving a decent wage for the work performed* and *the possibility of receiving a high salary* (Table 2). The assessment of validity strongly divided the opinions. On average, 40% of the respondents considered the above motivations to be at least “little important”: *job security in the learned profession* (43.7%, includ-

<sup>2</sup> The sum of indications concerning the evaluation of the importance of the motivation “rather unimportant” and “definitely unimportant”.

ing: “rather unimportant” – 36.4%; “definitely unimportant” – 7.3%), *the possibility of receiving a fair wage for the work performed* (39.1%, including 23.6%; 15.5%, respectively) and *the possibility of receiving a high salary* (42.7%, including 22.7%; 20.0%, respectively). Although the remaining respondents considered these motivations to be at least important, a relatively high proportion of opposite responses might indicate two points. Firstly, the awareness of respondents of the possibility of achieving limited financial benefits from exercising that profession. Secondly, the existence of a strong internal motivation as to the desire to work in the paramedic profession.

In the light of the above motivations, two more deserve special attention: *appreciation by others/satisfaction of the need for recognition* (51.8%, including “rather unimportant” – 32.7%, “definitely unimportant” – 19.1%) and *the prestige of the profession* (42.8% including “rather unimportant” – 25.5%, “definitely unimportant” 17.3%) (Table 2).

The continuation of the above research thread concerned the indication of benefits from completing the studies<sup>3</sup> (Table 3).

**Table 3.** Evaluation of benefits from the studies according to the respondents (%)

Benefits	Evaluation scale			
	Definitely yes	Rather yes	Rather no	Definitely no
Theoretical professional background	3.6	68.2	24.5	3.6
Practical professional background	0.0	48.2	40.9	10.9
Preparation to job search	3.6	7.3	53.6	35.5
Preparation to team work	7.3	75.5	11.8	5.5
Shaping the need for education increment – lifelong learning	14.5	44.5	24.5	16.4
Preparation to an adult life	23.6	40.0	28.2	7.3
Development and shaping of personality	15.5	54.5	24.5	5.5

Source: Authors' own study based on the conducted research.

The data gathered in Table 3 shows that the respondents were much more likely to attribute to benefits the evaluation rating “rather yes” than “definitely yes”. This was decided by 3/4 of the respondents with regard to *preparation for teamwork* (75.5%), more than 2/3 of them assessing the degree of *theoretical preparation for the profession* (68.2%) and one in two respondents assessing the benefits of studying *development and personality formation* (54.5%). The high percentage of indications “rather no” and “definitely no” concerning the practical professional preparation seems worrying (“rather no” – 40.9%; “definitely no” – 10.9%) (Table 3).

<sup>3</sup> The benefits were evaluated in a 4-level scale (“definitely yes” – 4, “rather yes” – 3, “rather no” – 2 and “definitely no” – 1).

**Table 4.** Evaluation of importance of selected competences in the paramedics' profession and the level of acquisition of the competences during studies according to the respondents (%)

Competences	Evaluation of the importance of selected competences				Evaluation of the level of acquisition of selected competencies during studies			
	very important	important	little important	unimportant	definitely yes	rather yes	rather no	definitely no
Coping with stress	88.2	11.8	0.0	0.0	5.5	65.5	27.2	1.8
Assertiveness	62.7	37.3	0.0	0.0	3.6	61.8	33.7	0.9
Diagnosing the patients' needs	68.2	31.8	0.0	0.0	17.3	79.1	3.6	0.0
Building relationship with patients	40.0	47.3	12.7	0.0	28.2	66.3	5.5	0.0
Communication with patients	73.6	26.4	0.0	0.0	31.9	62.7	4.5	0.9
Teamwork skills	80.0	20.0	0.0	0.0	39.1	55.5	3.6	1.8
Solving/handling difficult situations	75.5	24.5	0.0	0.0	8.2	60.9	28.2	2.7
Empathy	37.3	48.2	14.5	0.0	21.8	39.2	34.5	4.5
Ethics and values	46.3	48.2	5.5	0.0	30.0	47.3	20.9	1.8
Compassion	35.5	31.8	28.2	4.5	11.8	50.0	37.3	0.9
Self-confidence	70.0	26.4	3.6	0.0	18.2	64.5	17.3	0.0
Focus on job quality	64.6	31.8	3.6	0.0	13.6	73.7	10.9	1.8
Taking up initiative	50.0	39.1	10.9	0.0	10.9	60.0	28.2	0.9
Time management skills	50.9	38.2	7.3	3.6	11.8	38.2	50.0	0.0
Involvement	50.0	37.3	12.7	0.0	19.1	46.4	33.6	0.9
Diligence	53.6	40.9	5.5	0.0	20.9	53.6	25.5	0.0
Reliability	55.5	42.7	1.8	0.0	20.0	64.5	15.5	0.0
Priorities setting	56.4	42.7	0.9	0.0	19.1	57.3	20.9	2.7
Decision making	57.3	40.0	2.7	0.0	30.0	64.5	5.5	0.0
Relations with superior	34.5	51.8	13.6	0.0	13.6	60.9	24.6	0.9
Relations with coworkers	60.9	39.1	0.0	0.0	9.1	70.0	20.9	0.0
Personal culture/manners	50.9	40.0	9.1	0.0	28.2	53.6	18.2	0.0
Problem solving	52.7	46.4	0.9	0.0	13.6	70.9	15.5	0.0
Flexibility of thinking	66.4	30.0	3.6	0.0	18.2	65.4	15.5	0.9

Source: Authors' own study based on the conducted research.

The purpose of the next analyzed area was to determine the importance of selected soft competences for paramedic profession and then to assess the competences in terms of their level of acquisition during studies (Table 4). The analysis of the results obtained shows an inconsistency between the inner conviction of future paramedics as to the high importance of selected competences in their profession and their actual level developed during studies. In principle, all competences indicated in the survey were considered by the respondents to be at least important in the paramedic profession. This demonstrates a high level of awareness among the respondents of the role and significance of soft competences. The highest importance ratings, exceeding 70% of the responses, were attributed to: *coping with stress* (88.2%), *teamwork* (80.0%),

*solving difficult situations* (75.5%) and *communication with the patient* (73.6%). The remaining competences were evaluated as only slightly less important. Most of these competences received at least 50% of indications as “very important”. Only in the case of four of them the indication “important” prevailed “very important”. These included competences such as *building relationship with patient* (40.0% of “very important” indications vs. 47.3% “important”), *empathy* (37.3%; 48.2%, respectively), *ethics and values* (46.3%; 48.2%, respectively) and *relationships with a supervisor* (34.5%; 51.8%, respectively). Within this group of competences, the opinions of the respondents were most distant in the case of *compassion*. Although as many as two-thirds of the respondents considered *compassion* to be at least important, for others it was only little important or unimportant (32.7%).

In view of the above, an assessment made by the respondents about the degree of acquisition of competences, which they considered important for the profession, during the education process which they have already completed is worrying (Table 4). The point is that the prevailing assessments are not so much “definitely yes” as “rather yes” and “rather no” among the examined indications. In this context, however, it is worth pointing out that the four competencies identified above by the respondents as the most important, at the level of their actual verification, related to the readiness of future graduates to pursue the learned profession, in almost 70% of the respondents received indications at the level of “rather yes” and “definitely yes”, of which the answers “rather yes” definitely prevailed. When analysing the degree of acquisition of other competences during the course of study, in particular in terms of high “rather yes” responses, it is concluded that this may indicate uncertainty and doubts on the part of the respondents in this area. The transfer of competences from studies was assessed relatively the lowest, hence the shortcomings felt by the respondents (on average, 1/3 of the indications of “rather no” and “definitely no”) for as many as eight competences, namely: *coping with stress*, *assertiveness*, *solving difficult situations*, *empathy*, *compassion*, *taking up initiative*, *time management skills*, and *involvement*.

The last important question in the questionnaire was related to the confirmation or denial of the desire to work in the paramedic profession. Taking into account the fears and uncertainties mentioned by the respondents regarding this profession, only 59.1% of the surveyed students currently intend to work in a learned profession, one in ten of them strongly refuses this (10%), and nearly a third of respondents have not yet taken such a decision (30.9%).

## Conclusions

According to Goldie (2012, pp. 641–648), medical education is about more than acquiring an appropriate level of knowledge and developing relevant skills. To practice medicine, students need to develop a professional identity – ways of being and relating in professional contexts.

The research conducted by the authors of this article identified a hierarchy of values of the medical service students. Work is not the most important value for them. They want their working lives not to be disruptive and not interfere with pleasures. They want to develop their passions, interests, fulfill dreams. Given the nature of the profession that they will pursue shortly, the huge responsibility, demanding working conditions and relatively low pay, many of them will feel disappointed.

While the decision to undertake studies was thoughtful and conscious for the respondents, the motivations that conditioned the decision to study emergency medicine encourage reflection. In the case of the profession of paramedic, which exists to help any person in a state of emergency, astonishing is a relatively low assessment of the motivation formulated as *the wish to help others*. Assigning a "rather important" rating to it can negatively affect their attitudes and behaviors towards patients and their relationship with them. The subjects, on the other hand, highly appreciated such motivations as: *the development of their own interests in the field of human sciences* and *the desire to fulfill dreams*. It is also worth noting that the respondents do not decide to study the field of emergency medical service due to *the prestige of the profession* and *the appreciation by others/satisfying the need for recognition*. A high percentage of indications of "rather yes" answers for theoretical preparation and "rather no" and "definitely no" for practical preparation for the profession raises concerns while summarizing the opinions of respondents pertaining to benefits obtained from the studies. This is all even more worrying as medical professionals take responsibility for human life.

The research shows that future paramedics are aware how demanding the profession is and that they will be required to develop many new competences, not only those strictly medical, to effectively perform it. Unfortunately, most of them end their education with the feeling that the studies have not sufficiently equipped them with the said competences. For these reasons they are full of concerns while entering the labour market:

- they are not sure whether their competences will allow them to effectively and professionally function in all areas of paramedic's job, they doubt if they will meet the growing health needs of their patients,
- they feel anxiety and stress resulting from the need to start a professional activity, many of them, as the research shows, will not decide to work in the profession. There is also a risk that they will go abroad in search of better working conditions,
- they have concerns whether by taking a job in this profession they will be able to develop their passions, interests, fulfill dreams.

The above concerns are exacerbated in the time of the COVID-19 pandemic, which has become the biggest challenge for the Polish health care system, including the State Medical Rescue System. Future paramedics are aware that their world of work has already faced new, even more difficult conditions.

Undoubtedly, universities play an important role in fostering professional identity. However, the research has shown that many young graduates, rather than strength-

ening their professional identity, experience first identity crises. Unfortunately, these only get worse in the subsequent stages of professional development. With regard to paramedics, this is determined by the already characterized difficult and demanding working conditions, a high responsibility for human life, constantly increasing competence requirements. Unfortunately, they do not go hand in hand with the right work and pay conditions, a sense of security for this professional group.

The above represents many challenges for educators, employers and medical managers. Many challenges are gaining on strength due to the fact that universities and the labour market feed representatives of a generation which is very different from the previous ones, with a different value system, approach to life and education, to work and professional development.

It is important to continuously improve university programs. They play a significant role in the formation of professional identity of students and a lot of research has explored this area (Matthews, Bialocerkowski, & Molineux, 2019, pp. 308–318). For example, Ashby, Adler and Herbert (2016, pp. 223–243) explored the impact of various aspects of university curricula and their impacts on professional identity development, from a student perspective. According to the authors, when designing curricula, educators need to be aware of the fact that students perceive practice education and professional socialisation as the most influential on professional identity formation. Their findings reinforce the need for curricula to provide students with a range of practice experiences, which allow the observation and application of occupation-based practices.

In an emergency medical service setting, education should be characterized by a broader and more general interdisciplinary approach, a greater emphasis on practice skills and psychosocial competences, so important in profession of paramedic (Kapler, 2012). Necessary is the reframing of approaches to medical education away from an exclusive focus on “doing the work of a paramedic” toward a broader focus that also includes “being a paramedic”. Tan, Van der Molen and Schmidt (2017) propose that university educators who aim to develop professional identity should focus on five distinct dimensions. The first three include providing practice knowledge, professional experience, and role modelling to help students understand what it means to be in the profession and what the expectations are. Next, professional self-efficacy and preference for the profession are two dimensions that signal student readiness and confidence as well as how strongly they identify with learning about the profession. The employers and human resources managers, as well as supervisors and colleagues, should first of all be aware of their influence on the professional identity of the newly-bred paramedics. At the beginning of their professional careers and in the face of the challenges of the paramedic profession, they need support, strong patterns, a kind of modelling in the field of “doing the work of a paramedic” but above all “being a paramedic”. This poses a huge responsibility on the representatives of older generations of paramedics, doctors and nurses with whom the young person will work. Interaction with older professionals could provide opportunities for the mutual negotiation of identities invested in different historical contexts (Wenger, 2008).

## References

- Adamus, M., & Jaworski, M. (2017). Badanie czynników determinujących poziom motywacji do studiowania u studentów uniwersytetów medycznych a poczucie identyfikacji z przyszłą rolą zawodową. *Pielęgniarstwo i Zdrowie Publiczne*, 7(3), 199–205. <https://doi.org/10.17219/pzp/70427>
- Adams, K., Hean, S., Sturgis, P., & Macleod Clark, J. (2006). Investigating the Factors Influencing Professional Identity of First Year Health and Social Care Students. *Learning in Health and Social Care*, 5(2), 55–68. <https://doi.org/10.1111/j.1473-6861.2006.00119.x>
- Ashby, S.E., Adler, J., & Herbert, L. (2016). An Exploratory International Study into Occupational Therapy Students' Perceptions of Professional Identity. *Australian Occupational Therapy Journal*, 63(4), 223–243. <https://doi.org/10.1111/1440-1630.12271>
- Beijaard, D., Verloop, N., & Vermunt, J.D. (2000). Teachers' Perceptions of Professional Identity: An Exploratory Study from a Personal Knowledge Perspective. *Teaching and Teacher Education*, 16(7), 749–764. [https://doi.org/10.1016/S0742-051X\(00\)00023-8](https://doi.org/10.1016/S0742-051X(00)00023-8)
- Binczycka-Anholcer, M., & Lepiesza, P. (2011). Stres na stanowisku pracy ratownika medycznego. *Hygeia Public Health*, 46(4), 455–461.
- Borys, B., Majkovicz, M., & Majkovicz, H. (2003). Radzenie sobie ze stresem w różnych grupach służb ratowniczych. *Psychiatria Polska*, 37(2), 337–348.
- Burke, P. (1991). Identity Process and Social Stress. *American Sociological Review*, 56(6), 836–849. <https://doi.org/10.2307/2096259>
- Developing Professional Identity in Multi-Professional Teams*. (2020). Academy of Medical Royal Colleges. Retrieved from [https://www.aomrc.org.uk/wp-content/uploads/2020/05/Developing\\_professional\\_identity\\_in\\_multi-professional\\_teams\\_0520.pdf](https://www.aomrc.org.uk/wp-content/uploads/2020/05/Developing_professional_identity_in_multi-professional_teams_0520.pdf)
- Frydrysiak, K., Grześkowiak, M., & Podlewski, R. (2014). Agresja pacjentów zagrożeniem w pracy zespołów ratownictwa medycznego. *Anestezjologia i Ratownictwo*, 8, 381–391.
- Główny Urząd Statystyczny (GUS). (2020). *Zdrowie i ochrona zdrowia w 2019 r.* Warszawa – Kraków.
- Godfrey, N., & Young, E. (2021). Professional Identity. In J. F. Giddens (Ed.), *Concepts of Nursing Practice*, 3<sup>rd</sup> ed. (pp. 363–370). St. Louis: Elsevier Publishing.
- Goldie, J. (2012). The Formation of Professional Identity in Medical Students: Considerations for Educators. *Medical Teacher*, 34(9), 641–648. <https://doi.org/10.3109/0142159X.2012.687476>
- Goltz, H., & Smith, M. (2014). Forming and Developing Your Professional Identity. *Health Promotion Practice*, 15(6), 785–789. <https://doi.org/10.1177/1524839914541279>
- Gołuszka, M. (2003). *Spoleczne i kulturowe powinności medycyny. Tożsamość zawodowa i atrofia moralna.* Wrocław: Wrocławskie Towarzystwo Naukowe.
- Goniewicz, M. (2012). Kształcenie ratowników medycznych w Polsce – przeszłość, teraźniejszość, przyszłość. In M. Goniewicz & G. Nowicki (red.), *Ratownictwo medyczne – teraźniejszość i przyszłość* (pp. 147–165). Lublin: Perfecta.
- Johnston, T., & Bilton, N. (2020). Investigating Paramedic Student Professional Identity. *Australasian Journal of Paramedicine*, 17. <https://doi.org/10.33151/ajp.17.759>
- Journal of Laws of 2006, No. 191, item 1410, Act of 8 September 2006 on State Medical Rescue Service.
- Journal of Laws of 2016, item 587, Disposition of the Minister of Health dated 20 April 2016 on medical rescue activities and health services other than rescue activities which can be performed by a paramedic.
- Journal of Laws of 2017, item 1884, Disposition of the Minister of Health dated 2 October 2017 on the professional development of paramedics.
- Kapler, M. (2012). Zawód: ratownik medyczny. *Na Ratunek*, 4(12), 43–46.
- Konieczny, J. (2006). *Ratownik medyczny – problemy edukacyjne i organizacyjno-prawne.* Poznań: Garnmond.
- Kowalczuk, K., Jankowiak, B., Krajewska-Kułak, E., Sierakowska, M., Lewko, J., Krajewska, K., & Ostapowicz-Van Damme, K. (2009). Ocena stopnia narażenia ratowników medycznych na agresję w miejscu pracy. *Annales Academiae Medicae Stetinensis*, 55(3), 76–80.

- Kształt zawodu Ratownika Medycznego jako element programu działania Polskiego Towarzystwa Ratowników Medycznych.* (2018). Retrieved from <https://ratmed.org/index.php/2018/03/29/ksztalt-zawodu-ratownika-medycznego-jako-element-programu-dzialania-polskiego-towarzystwa-ratownikow-medycznych/>
- Kudłacik, B., Fraś, M., Ilczak, T., Ćwiertnia, M., & Ryś, B. (2016). Uwarunkowania wyboru zawodu ratownika medycznego. *Nursing and Public Health*, 6(2), 137–142.  
<https://doi.org/10.17219/pzp/61709>
- Matthews, J., Białocerkowski, A., & Molineux, M. (2019). Professional Identity Measures for Student Health Professionals – a Systematic Review of Psychometric Properties. *BMC Medical Education*, 19(1), 308–318. <https://doi.org/10.1186/s12909-019-1660-5>
- Mikos, M., Juszczak, G., & Czerw, A. (2016). Nowe prawa i obowiązki ratowników medycznych w świetle nowelizacji ustawy o PRM. *Journal of Education, Health and Sport*, 6(2), 311–315.  
<http://dx.doi.org/10.5281/zenodo.46832>
- Monrouxe, L.V. (2010). Identity, Identification and Medical Education: Why Should We Care? *Medical Education*, 44(1), 40–49. <https://doi.org/10.1111/j.1365-2923.2009.03440.x>
- Mysiakowska, J. (2008). Tożsamość kobiety wobec imperatywów kulturowych i biologicznych. In B. Zimmoń-Dubowik & M. Gamian-Wilk (red.), *Oblicza tożsamości: perspektywa interdyscyplinarna* (pp. 285–299). Wrocław: Wydawnictwo Naukowe Dolnośląskiej Szkoły Wyższej.
- Ogińska-Bulik, N., & Kaflik-Pieróg, M. (2006). *Stres zawodowy w służbach ratowniczych*. Łódź: Wydawnictwo Wyższej Szkoły Humanistyczno-Ekonomicznej.
- Ratownicy medyczni – jedyny podstawowy zawód medyczny bez własnego samorządu.* (2020). Retrieved from <https://rpo.gov.pl/pl/content/rpo-ratownicy-medyczni-jedyny-zawod-medyczny-bez-samorzadu>
- Sip, M., Juskowiak, K., Zgorzalewicz-Stachowiak, M., Zeńczak-Praga, K., Rybakowski, M., & Podlewski, R. (2019). Ewolucja zawodu ratownika medycznego w Polsce oraz zagrożenia związane z jego wykonywaniem. *Hygeia Public Health*, 54(1), 15–22.
- Ślusarska, B., Zarzycka, D., & Dobrowolska, B. (2007). Postrzeganie tożsamości zawodowej przez pielęgniarki. *Problemy Pielęgniarstwa*, 15(2–3), 147–156.
- Tan, C., Van der Molen, H., & Schmidt, H. (2017). A Measure of Professional Identity Development for Professional Education. *Studies in Higher Education*, 42(8), 1504–1519.  
<https://doi.org/10.1080/03075079.2015.1111322>
- Wenger, E. (2008). *Communities of Practice: Learning Meaning and Identity*. Cambridge: Cambridge University Press.