



Indices of motivation background of choosing a career by ambulance officer students

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Abstract

Our research brings the examination of value and career orientation of the ambulance officer students into focus. The ambulance officer profession and its training have been unique in Europe and all over the world for a long time. Full time training is reckoned young in the Hungarian higher educational system too because it is only 13 years old. In our country ambulance officer students are trained on full-time course in three educational institution (SE -EK, DE-EK, PTE-EK), which, due to their territorial location, cover the whole territory of the country. We carried on our survey with the full-time students of the three educational institutions, with complete inquiry. In our research we purposed to examine the “after-growth” of a medical profession, which is a profession of high prestige within the medical institutional system as well and its estimation by society is also positive. The job’s difficulties, dangers and low waging, however, are known even by non-professionals, through the media. The subjects of the future research are the students of a sphere, about which no comprehensive survey has been made yet, thus we made mainly descriptive research that applies quantitative method (survey-type). The most important aim of our research is to examine who choose the profession of ambulance officers at the present time.

Keywords: ambulance officer students, career choosing

Introduction

Economic and social changes happening in Europe affect the opportunities of young people to find employment and in relation to this choice of career and training as well. One of the main problems of European healthcare is that shortage of professionals may evolve by 2020 and simultaneously emergency medical services may become unavailable. Generally, the national researches and publications treating healthcare also deal with the problems of work force in healthcare. (Kajtor, 2003; Fodorné –Zagyi, 2004; Betlehem, 2012). The situation is no better in the sphere of the on-site emergency (prehospital) care either. Every scene of emergency care is characterised by lack of human resources and working conditions that worsen medical conditions to a great extent. (Betlehem et al. 2010;). Need for physicians at home may be filled in this sphere with skilled ambulance officers. Despite of the high level of social interest and the necessary changes concerning healthcare, there are few technical papers and analyses related to this matter. No national research is known whose subject is the choice of career and training of ambulance officers. Reasonableness of the research carried on among ambulance officers is supported also by the fact that their training has been present in the Hungarian educational system on full time course only for 13 years, while in the surrounding countries ambulance officer specialization is not included in the higher educational system or it has been present in it only in the recent years. Since no such research has been conducted in Hungary so far, we made mainly descriptive research that applies quantitative method (survey-type), whose coverage of sample is constituted by three institutions of higher education.

The main aim of our survey is to analyse who and why choose nowadays the profession of ambulance officers.

Methodological characteristics of the research

The used questionnaire previously was applied by Ágnes Kovácsné Tóth (2007), in her comparative research conducted with nurses and teachers. We supplemented the questionnaire with Super's work value inventory and with the Rokeach value survey.

1. The questionnaire includes the following question groups:

1. Demographic and socio-cultural variables
2. Variables related to choice of career
3. Variables related to job plan and career plan

We carried out the survey on the Faculties of Health where training of ambulance officers on the full time course takes place. At the present time ambulance officer training takes place in our country at the Faculty of Health of the Semmelweis University in Budapest, at the Faculty of Health of University of Debrecen in Nyíregyháza and at the Faculty of Health of University of Pécs in Pécs. For the inquiry we planned complete survey (examination of every full-time ambulance officer student), we did not have to count on any sampling error (Table 1).

Table 1. Characteristics of the pattern of the survey (person)

Year	Faculty of Health of the Semmelweis University Budapest	Faculty of Health of University of Debrecen Nyiregyháza	Faculty of Health of University of Pécs
Year I.	51	50	47
Year II.	49	50	35
Year III.	32	30	25
Year IV.	29	18	23
Total	161	148	130

In the course of data analysis we applied single- and multivariable methods. In the multivariable analysis we principally conducted cross table analysis and in order to explore interrelations we made, in addition to Pearson's chi-squared test, variance analysis. From the several groups of variables we made patterns with factor analysis, while we tested explanatory models with linear regression.¹

Previous school achievements

In the course of our research we examined the previous school achievements of the ambulance officer students too. We asked two questions: how did they do in the primary school and how in the secondary school. With the involvement of the two variables, with the quick cluster analysis, we formed two groups.

The 1st group is the excellent / very good, we named them the eminent group.

The 2nd group is the good / average, we named them the group of goods.

In the examination of the ambulance officer students two thirds of the ambulance officer students belong to the first i.e. to the eminent group. One third of the students belong to the group of goods. Within the eminent group it can be stated that nearly half of the members of this group of ambulance officer students had excellent achievements in primary school. In the secondary school this rate decreased significantly because in the secondary school only one tenth of the students had excellent achievements. It is characteristic to the eminent group that the rate of the very good students was almost identical in the primary and secondary school. Both in the primary school and in the secondary school more than half of the eminent students had very good achievements from the ambulance officer students. Based on the results we can state that among the eminent students good qualification appeared in the secondary school because one third of the students had good achievements. Students with average achievements are still not

¹ In the publication of the results of statistical analyses the marks -* ($p \leq 0.05$) and ** ($p \leq 0.001$) concern the following statistical tests: 1. T-test with two patterns (Independent Samples T test), 2. One-way variance analysis (One-Way ANOVA); 3. Pearson's correlation The tables containing the results of the linear regression models made with Stepwise method contain in each case significant ($p \leq 0,05$) beta (Standardized Beta Coefficients) values.

included in the eminent group. In the group of goods, in the primary school no students had excellent achievements only some per cents were very good (3%). A considerable effect of our research is that the number of the excellent qualifications in the secondary school increased with one per cent (4%). In the group of goods typically the good qualification appears in the greatest proportion (85%) and only one third of the students had average achievements in the primary school. Good qualification in the group of goods decreased with several per cents in the secondary school and the average qualification increased with several per cents.

We have examined the relationship between the sexes and previous school achievements. Based on their previous achievements, 73 per cent of the girls belong to the excellent or very good group, while in case of the boys this proportion decreases significantly, it is 43 per cent. The significant ($p=0,000$) difference indicates that based on their previous achievements ambulance officer students from the girls were admitted to the training with better achievements.

The three institutions included in our pattern can be characterized differently based on the students' previous (secondary) school achievements. In the greatest proportion (75 per cent) the students of the PTE belong to the eminent group with the best previous school achievements. They are followed by the students of the SE (69 per cent) while only 47 per cent of the students of the DE answered that they had very good or excellent secondary school achievements. Our findings indicate that there is significant difference between the previous school achievements and the institutions ($p=0,000$).

Based on our findings, there is no difference between the years and the previous school achievements. In the last four-five years students arrived at the educational institutions with similar achievements.

Relationship between the previous school achievements and the choice of career

We asked the students which educational institution they applied for at the first place. Half (58%) of the students ($N=389$) applied for the current educational institution for the first time and they submitted the application form there at the first place. However, almost half of the ambulance officer students (42%) did not apply for the current educational institution. We examined this further, in order to know which other institution type was indicated by the respondents that did not name their current institution at the first place. 42 % of the students that did not apply for the current institution at the first place named medical school as their further educational aim.

In relation to this we examined whether there is interrelation between the institutions and the applications (1). In our survey we got the result that 53 per cent of the ambulance officer students of the PTE-EK named the medical school as their further educational aim. 48 per cent of the ambulance officer students of the SE-EK and 25 per cent of the students of Nyíregyháza applied for the medical school, before naming the ambulance officer

specialization. Our findings indicate that there is significant difference between the institutions and the applications ($p=0,000$). In the background of our findings we can found the pervious school achievements. In our survey the students of the PTE-EK belong to the eminent group to the greatest proportion (75 %). These previous school achievements justify that the ambulance officer students, that named the ambulance officer specialization not at the first place, considered the medical school as their potential further educational aim.

We have examined which other job / profession came into question when applying for the ambulance officer vocation. 41 per cent of the ambulance officer students of the different educational institutions thought of the medical profession. In the choice of career other professions belonging to the sphere of healthcare arose only in case of 20 per cent of the students, since 39 per cent of the students intended to learn in other speciality. The intention to choose a career in healthcare is determinant because more than two thirds of the students (61 %) planned to choose a career in this sphere, beside the ambulance officer profession. Examining the institutions we found that 49 per cent of the ambulance officer students of the PTE- EK and 74 per cent of the students of the SE- EK thought of the medical profession, beside the ambulance officer profession. In case of the students of the DE- EK it was only 29 per cent. This can be explained by the previous secondary school achievements. Among the students learning in the educational institutions of Pécs and Budapest we found students that based on their previous school achievements belong to the eminent group in greater proportion. Based on our findings we can state that the students of the DE EK planned their future in healthcare more because 27 per cent of the students of the DE EK considered also other health profession. Contrary to this, in the two other educational institutions, nearly in the same proportion, only 16 per cents of the SE -EK students and 16 per cent of the PTE- EK students would have chosen other medical profession. Our findings refer to the fact that there is significant difference between the institutions and applications (2) ($p=0,005$).

Motivations of choice of career

The date of choice of career can determine effectiveness in higher education and staying in the future profession. We asked the ambulance officer students about the date when they chose a career. In our survey we applied contraction from the possible answers, which was justified by the distribution. According to the time of decision-making three stages segregated. The group of the students that decided to be ambulance officers before their secondary school years. Only 6 per cent of the ambulance officer students decided to choose this profession in the primary school or even earlier. Two thirds of the ambulance officer students decided to be an ambulance officer in the secondary school. After finishing the secondary school one third of the students elected to choose the ambulance officer profession. Based on our previous findings we can conclude on that the students, which elected the ambulance officer profession after the school-leaving examination, chose this profession after the unsuccessful application to the medical school.

The three institutions included in our pattern can be characterized differently based on the date of choosing a career. Before the secondary school only some per cents of the students chose the ambulance officer profession. Examining the institutions we found that the students of the DE-EK decided to be ambulance officers at the earliest. Two thirds of the students of the DE-EK decided in the secondary school, what is more, 6 per cent of the students decided prior to the secondary school to choose the ambulance officer profession as further educational aim. The findings show that the students of the PTE-EK elected the ambulance officer profession after the school-leaving examination to the greatest proportion (42 per cent). They are followed by the students of Budapest, with 30 per cent. Based on our findings we can state that there is significant difference between the institutions and the date of choosing a career ($p=0,013$). From our findings we can draw the conclusion that the students of the PTE-EK and of the SE-EK elected the ambulance officer profession and their current educational institution later. Our findings are confirmed also by our previous findings, according to which they applied for the ambulance officer speciality after the unsuccessful application to the medical school.

Beside the date of the choice of career in our survey we examined the influencing factors of the decision on the choice of career as well. We tried to reveal the factors, which were determinant in choosing the ambulance officer profession. We examined the question according to 10 items. From the ten items we found 4 decision factors with factor analysis. 1. the safety career 2. pedagogical motivation 3. family-friend effect 4. charitable types of decision.

Charity aspects influenced the decision mechanism of 43 per cent of the ambulance officer students. In case of 12 per cents of the ambulance officer students safety career played a role in electing the profession. 28 per cent of the ambulance officer students elected the profession because they have pedagogical motivations (Table 2).

Table 2. Career decision-making factors

	Main component analysis			
	<i>Safety-career</i>	<i>pedagogical motivation</i>	<i>family-friend effect</i>	<i>charitable reasons</i>
Secure employment	,647	,007	,114	,036
Appreciation by society	,646	,124	-,086	,082
Opportunity for a career in the profession	,577	,030	,170	,098
They can earn much money	,575	,110	,146	-,105
Interest towards pedagogical profession	,112	,989	,088	-,036
Influence by parents	,108	-,023	,795	-,064
Example of a friend, family member	,056	,093	,478	,079
Influence by a pedagogue	,194	,267	,284	-,100
Ministering to people	,170	-,018	-,015	,528
They would not have admitted elsewhere	,076	,033	-,021	-,514

1. charitable reasons: In the group of the ambulance officer students whose decision was influenced by charitable reason characteristically ministering to people appears as main motive. They unequivocally repeat that “they would not have admitted to elsewhere”, this did not play any role in their decision. This group unequivocally repeats that salary or income opportunities would have influenced their choice of career. In case of this type pedagogical influence does not appear at all, nor the interest towards the pedagogical profession. Influence by parents did not affect this group of the ambulance students in their choice of career. The personal example of a friend or family member, however, promoted the choice of career.
2. family-friend effect: It is characteristic to this group of the ambulance officer students that they chose this profession mainly with parental assistance and direction. The choice of career, however, was significantly affected by the personal example of a friend or family member in the profession. The pedagogical influence appears here as well. In case of this group social appreciation and ministering to people, as determinant motive, does not appear at all. This is one of the groups, which did not deem helping people important in the choice of career.
3. pedagogical motivation: This group of the ambulance officer students was affected mainly by the interest towards the pedagogical career in the choice of the profession. The influence of a teacher appears in the decision, with direct or indirect guidance contrary to the influence by parents, which does not appear in case of this group. This is the other group, in which ministering to people did not play a role in the choice of career.
4. Safety-career: Among the factors influencing the decision of the ambulance officer students in this group we find, beside the secure employment, social appreciation as well. It is characteristic only to the members of this group that among the influencing factors, as an aspect of the choice of career, we find the opportunity of a career and the possibility to earn money. This group chose this profession because they think this profession is appreciated by society and the profession of the ambulance officers means secure employment to them. In addition to the stable employment it ensures adequate possibility to earn money to those working in the profession.

We examined the interrelation between the institutions and the choice of career with variance analysis. We were eager to know which factors and how affected the choice of career by the ambulance officer students of the different educational institutions. Is there an interrelation between the two variables? In our survey we could state that there is significant difference between the institutions and the choice of career ($p=0,000$). Among the three educational institutions we found significant difference in case of those belonging to the Safety-career group. Our findings show that in case of the students of the DE-EK secure employment, income and the opportunity to make a career played bigger part. These factors signified the least in the choice of career in case of the students of the

SE-EK. To the students of the PTE-EK these factors are rather neutral, these were not given preference but were not ignored among the factors of the choice of career.

Summary

According to our findings charitable reasons influenced the decision mechanism of the ambulance officer students to the greatest proportion (43%). In the choice of the ambulance officer students characteristically ministering to people appears as main motive of decision. At the same time salary and opportunity to earn money is ignored. An interesting finding of our survey is that after the charity aspects pedagogical motivation played role to the greatest proportion (28%). This significant group of the students was influenced in their decision by interest towards pedagogical profession. Here the direct or indirect guidance of a teacher also appears in the choice of career. This is one of the groups, which did not consider ministering to people important in the choice of career. When revealing the decision mechanism of the choice of career we did not expect such an outcome. In consideration of the training's curriculum, when learning methodology of first aid, these students will be more motivated, which is worthy of being emphasized more in the course of the training.

In the current economic situation hope of secure employment is revalued but in the choice of career by the ambulance officer students this was not the determinant factor. Love of the profession, vocation and the humanistic attitude are determinant factors of choosing the ambulance officers' profession.

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