The course of the professional development and the level of job satisfaction among physiotherapists

Przebieg rozwoju zawodowego oraz poziom satysfakcji zawodowej wśród fizjoterapeutów

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Key words: physiotherapy, job satisfaction, professional development.

Słowa kluczowe: fizjoterapia, satysfakcja zawodowa, rozwój zawodowy.

Abstract

Introduction: The occupation of a physiotherapist, due to its nature, is very challenging. It requires continuous work on oneself and the improvement of professional skills.

Aim of the research: To assess the level of competence, professional development, and job satisfaction among a group of active physiotherapists.

Material and methods: The study involved a group of 62 physiotherapists, among whom a questionnaire was conducted. The survey contained questions concerning demographic data of the respondents, general working conditions, and satisfaction with their profession. The calculations and graphs presented in the descriptive statistics, as well as the statistical hypotheses, were all performed in MS Excel's spread sheet and *T*-Czuprow's similarity rate.

Results: The results show the high activity concerning participation in specialised courses in physiotherapy methods and the use of specialised literature. The level of job satisfaction is high, at about 70%, in all groups. The character of the work and positive relations with co-workers and supervisors were assessed highest and salary and promotion opportunities lowest from all the determinants of job satisfaction. Although the level of job satisfaction itself is acceptable, nearly 1/3 of respondents have no plans for further development and 40% do not plan to follow this profession in the future.

Conclusions: After graduation they often willingly improve their professional qualifications. The level of job satisfaction itself is acceptable; however, the lack of plans for further development or willingness to follow this profession in the future can cause a significant decline in the number of professionally active physiotherapists.

Streszczenie

Wprowadzenie: Zawód fizjoterapeuty, ze względu na swój charakter, jest wymagający. Zobowiązuje do ciągłej pracy nad sobą, poszerzania wiedzy i rozwijania warsztatu.

Cel pracy: Ocena kompetencji i rozwoju zawodowego oraz poziomu satysfakcji zawodowej wśród aktywnych zawodowo fizjoterapeutów.

Materiał i metody: Badaniami objęto 62-osobową grupę fizjoterapeutów, u których przeprowadzono specjalnie do tego celu opracowaną ankietę. Ankieta zawierała pytania dotyczące danych demograficznych osób badanych, ogólnych warunków pracy oraz satysfakcji z wykonywanego zawodu. Obliczenia i wykresy parametrów w statystyce opisowej oraz testowanie hipotez statystycznych wykonano w arkuszu kalkulacyjnym MS Excel, obliczono także współczynnik zbieżności *T*-Czuprowa. Wyniki: Stwierdzono dużą aktywność fizjoterapeutów, jeśli chodzi o uczestnictwo w specjalistycznych kursach i korzystanie z fachowej literatury. Wszystkie grupy stażowe cechuje wysoki poziom satysfakcji ogólnej – w granicach 70%. Spośród determinantów satysfakcji zawodowej najwyżej oceniane były charakter pracy oraz pozytywne relacje ze współpracownikami i przełożonymi, najniżej natomiast płaca oraz perspektywa awansu. Niepokojący jest fakt, że pomimo ogólnego zadowolenia z wykonywanego zawodu, blisko 1/3 ankietowanych nie ma dalszych planów zawodowych, a 40% jednej z najliczniejszych grup stażowych nie zamierza tego zawodu wykonywać w przyszłości.

Wnioski: Po zakończeniu edukacji fizjoterapeuci chętnie i często podejmują dalsze kroki w celu podniesienia swoich kwalifikacji zawodowych. Poziom ogólnej satysfakcji zawodowej w ankietowanej grupie jest zadowalający. Jednak brak planów zawodowych oraz chęci wykonywania zawodu w przyszłości u dużej części badanych może wpłynąć na znaczne zmniejszenie się liczby aktywnie pracujących fizjoterapeutów.

Introduction

In many respects, the physiotherapist's occupation is a demanding profession. Due to its character, there is a need to have appropriate qualifications, personality traits, and interpersonal skills, which are, to some extent, the essential tools for reaching the goals that are set for the representatives of this profession [1, 2]. As the profession is strictly connected with medicine, it is commonly regarded as a social service [3]. A person following it should have features which are identified with the vocation [4].

A physiotherapist with a proper education, who has gained extensive medical knowledge, as well as knowledge in the scope of other fields like psychology, pedagogy, ethics, and practical skills, is obliged to broaden his/her knowledge and improve his/her professional skills unceasingly [1, 5]. It is crucial for him/her, in order to make his/her work more efficient and effective, and so that he/she can provide adequate assistance for patients, without the risk of damaging their health. Therefore, the physiotherapist occupation requires unceasing and versatile work on oneself.

Satisfaction from the performed work is a driving factor and a key to self-development. However, there must be a balance between what one is investing in the work (i.e. time, education, experience) and the results of it, as well as the benefits one receives in exchange (i.e. promotion, remuneration, relations with co-workers, training opportunities). This balance gives a feeling of satisfaction and enables the physiotherapist to find fulfilment in the work he/she performs. When we take into account the fact that work constitutes a considerable part of our life, it is obvious that the level of job satisfaction significantly affects the level of life satisfaction because it is an integral component of it.

The physiotherapist occupation may be a source of satisfaction, fulfilment, and the feeling that we are doing something good and valuable. At the same time, it is very demanding. Sometimes, however, the noble idea of bringing help to another person may not be sufficient for physiotherapists, especially when they are confronted with the reality of this profession.

Due to its character of work based on contact with other people, physiotherapists represent one of the occupational groups that is particularly exposed to occupational stress [6, 7]. One of its sources can be the feeling of failure and frustration, resulting from the impossibility of meeting the expectations of the patients concerning full recovery and regaining physical fitness [8]. The other stress factors are, for instance: difficult working conditions, too many duties, and a lack of autonomy in making decisions concerning the good of the patients. These and other factors can evoke a feeling of professional burnout and mental exhaustion.

Physiotherapy is still a popular subject. It is carried out at universities having different profiles and

modes of specialised training, which can affect the level of knowledge and skills of graduates. There is also a possibility that candidates for these studies and this profession have different views on its social role, and they often have doubts about their qualification to perform this kind of work [4]. It is also probable that the choice of such a subject was made faddishly and it did not result from a conscious decision [9, 10].

The factors that are listed above certainly affect the level of qualifications of active physiotherapists, as well as the level of physiotherapy services.

Aim of the research

The above considerations resulted in the indication of the level of competence, the course of the professional development, and the level of job satisfaction. These issues were the main concern of this research. The results of it defined the strengths and weaknesses of this branch of the medical industry.

Material and methods

For this research, we used data collected in September and October 2013. The research was conducted among professionally active physiotherapists, working at institutions with signed contracts with the National Health Fund in the city of Kielce. The participation in the research was anonymous and voluntary and respondents were chosen at random.

A questionnaire, which was used in the research, was specially created for it. There were 94 copies of the questionnaire distributed, from which 62 were diligently filled in, and these copies were used for the statistical analysis.

A total of 44 women and 18 men participated in the research. Being a professionally active physiotherapist was the main required criterion for taking part in the research, as well as the common feature that linked all people participating in it. The age of the respondents varied from 24 to 57 years. The work experience varied from less than 1 year up to 35 years.

The research was conducted in the form of a questionnaire, which was specially created for it. It consisted of 18 questions. In the initial part it was concerned with the population statistics of a given group of respondents (age, sex, professional title) and general working conditions (i.e. work experience, type of employment). In the further part, the questionnaire was concerned with the level of job satisfaction, which was indicated on the basis of a few chosen determinants. Each of these determinants was assessed by the respondents on the basis of a five-point scale, where 1 was the lowest value and 5 was the highest. Further questions were concerned with the current and future course of professional development (the number and the type of specialised courses that were completed by the respondents, active membership in scientific

Table 1. Empirical distribution

Groups divided according to work experience [years]	Job satisfaction			Sum of rows
	Remuneration	Promotion	General	-
Up to 1	17	17	258	292
1–5	42	50	725	817
6–10	43	39	616	698
> 11	19	22	279	320
Sum of columns	121	128	1878	2127

Table 2. Theoretical distribution

Groups divided according to work experience [years]	Job satisfaction			
	Job satisfaction	Promotion	General	
To 1	16.61	17.57	257.82	
1–5	46.48	49.17	721.36	
6–10	39.71	42	616.29	
> 11	18.2	19.26	282.54	

associations, and ways of broadening specialised knowledge).

The questionnaire was the basis for descriptive statistics for the group of 62 respondents, and the results were presented in a stem-and-leaf display, in which data was grouped by the number of years of work experience. The statistical inference for the entire population was based on the examination of the statistical hypotheses carried out with the test on independence of quality features. This test was carried out with the use of the chi-squared test χ^2 and by assessing the strength of this correlation with the use of T-Czuprow's similarity rate.

There were verified two hypotheses: H – job satisfaction is independent of the physiotherapists' work experience, and K – job satisfaction depends on the physiotherapists' work experience, with the use of the test on independence χ^2 with a significance level $\alpha = 0.05$, for the degrees of freedom df = (w-1)(k-1) = 6 (Tables 1, 2).

The critical region in this distribution is right-sided and based on the χ^2 distribution: $P\left(\chi^2_{emp} \geq \chi^2_{0,05;6}\right) = 0.05$. For the data collected in the tables above, the results were as follows: $\chi^2_{emp} = 1.450$ and $\chi^2_{0,05;6} = 12.592$, so there are no grounds for the rejection of hypothesis H, which was verified. The correlation between examining features defines the T-Czuprow rate: $T = \sqrt{\frac{\chi^2_{emp}}{n\sqrt{df}}}$.

Its value is equal to T = 0.02, or the squared rate as a percentage is equal to $T^2 = 0.03\%$.

The test on independence of the quality features on the statistical significance level with the value of 0.05 led to the conclusion that particular groups, divided according to work experience, do not have an influence on the level of job satisfaction, including satisfaction from remuneration, promotion opportunity, and the level of the physiotherapists' general satisfaction. The correlation between these features was calculated with *T*-Czuprow's similarity rate and its value was less than 1%.

In 6 groups, divided according to work experience, a similar test was carried out on the correlation between remuneration and promotion. Additionally, 2 groups were taken into account with work experience of 16–20 years and more than 20 years. The results are as follows: $\chi^2_{emp} = 1,426$ and $\chi^2_{0,05,6} = 11,070$, as well as T = 0.05 and $T^2 = 0.26\%$, which means that remuneration and promotion are independent of the therapists' work experience.

Results

The physiotherapist occupation is a relatively new profession. This is reflected in the results of this research, where young people, under 30 years of age, account for the largest proportion of the respondents. What is more, it is more frequently taken up by women, who constitute 70.9% of all the respondents (Figure 1).

When we take into account the work experience of respondents, it appears that the most multitudinous group was a group with work experience from 1 to 5 years (25 people). Physiotherapists with work experience from 6 to 10 years constituted the less multitudinous group (20 people). Generally, these 2 groups constituted over 72% of all respondents (Figure 2).

The professional title, foreign languages and plans for further professional development, were taken into account as the attempt to indicate the level of educa-

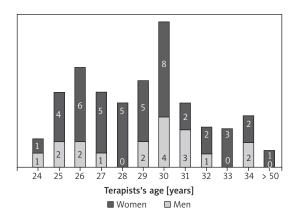
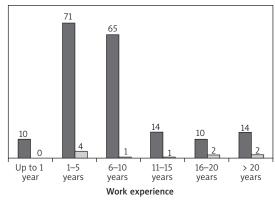


Figure 1. The group of respondents with regard to age and sex



■ The number of completed courses (cone)
■ The number of completed postgraduate education (cuboid)

Figure 3. Courses and postgraduate education in groups, divided according to work experience

tion of professionally active physiotherapists. Physiotherapists, having a master's degree, constituted the majority of respondents (84%). There were also 6 people with a bachelor's degree and one technician of physiotherapy. Some of them want to complete 2-year regular graduate studies, as a continuation of undergraduate studies, in the near future.

As the research showed, the physiotherapists having a master's degree were not willing to start postgraduate studies thus far (Figure 3). Among the respondents, only 3 people graduated with a specialisation in physiotherapy, 4 of them in neurorehabilitation, 2 people were graduates of management in the Health Service, and 2 of them in pedagogical studies (among them there was also 1 person who graduated in 2 of the types of studies mentioned above).

Only 8% of respondents are going to attain the rank of specialist, or obtain a doctor's degree or other academic title. When it comes to the issue of participation in organised forms of training, i.e. in courses connected with the methods applied in physiotherapy, the situation is completely different. Over 54% of

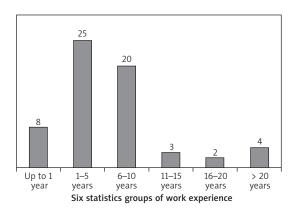


Figure 2. The number of physiotherapists in groups divided according to work experience

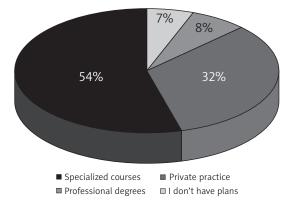


Figure 4. Plans for further professional development

respondents think it is a good way to improve their qualifications. The fact that nearly 1/3 of respondents do not have any further plans for their professional development can be disturbing (Figure 4).

Additionally, analysis was also conducted regarding the number of specialised courses that were completed by the respondents, which was done on the basis of the division into groups according to the work experience of the respondents. As before, there were two groups that constituted the majority of respondents: the first, with work experience from 1 to 5 years, and the second, with work experience from 6 to 10 years. The members of these groups finished the largest number of specialised courses (Figure 3).

As the research proved, the courses in specialised methods are among the most popular forms of specialised training. Among the professionally active physiotherapists, only 6 people (constituting not more than 10% of all respondents) did not complete any such course. The majority said that they are familiar with between 1 and 6 physiotherapy methods.

The most popular specialised course is in kinesiology taping, which constitutes about 27% of all fin-

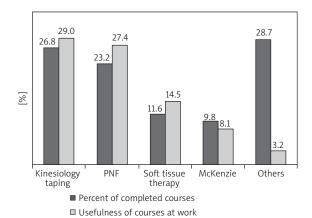


Figure 5. The most popular courses in physiotherapy methods and the evaluation of their usefulness

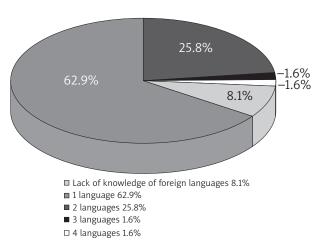


Figure 6. The number of acquired foreign languages among the physiotherapists

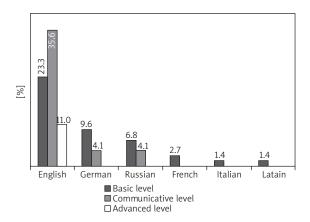


Figure 7. The level to which the foreign languages are acquired among the physiotherapists

ished courses. Other popular courses among respondents are: propioceptive neuromuscular facilitation (PNF) (23%), soft-tissue therapy (12%), and McKenzie's method (10%). The research also showed that the

popularity of the above-mentioned courses results from their great usefulness. Due to their diversity, the other courses were included into one group, which constitutes over 28% of all courses. According to the respondents, this group is characterised by the lowest usefulness in everyday work (Figure 5).

With regard to the foreign languages, almost 70% of physiotherapists speak English, 13.7% of them speak German, 11% speak Russian, and small percentages of them speak French (2.7%), Italian (1.4%), and Latin (1.4%). Only 5 people, out of all respondents, admitted they did not acquire any foreign language.

The number of acquired foreign languages and the level to which they are acquired, are depicted in the figures below (Figures 6 and 7).

During the analysis of the course of professional development there the use of specialised literature was also investigated, and the activity of the respondents in learned societies and professional societies was analysed. In the questionnaire, conducted among the physiotherapists, questions concerning these issues were included.

As the results indicate, membership in associations and other societies is not very popular among the physiotherapists. Almost 74% of all respondents have no fellowship in any society, and only 11% of those who are currently members of such societies, take an active participation in the meetings and conferences. According to the answers of respondents, the most popular society is Polskie Towarzystwo Fizjoterapii (PTF). The respondents also said that they are the members of Towarzystwo Terapii Manualnej and Polskie Towarzystwo Integracji Sensorycznej.

With regard to the use of specialised literature, the situation is more optimistic. Eighty-seven percent of all respondents use the specialised literature and they read from 1 to 20 positions per annum. Sixty-eight percent of respondents read specialised magazines and/or subscribe to them. The most popular magazine is *Practical Physiotherapy and Rehabilitation*. The respondents also mentioned periodicals, such as *Polish Physiotherapy, Rehabilitation in Practice, Medical Rehabilitation*, and *Manual Medicine*.

This research was also intended to indicate the level of job satisfaction among professionally active physiotherapists. Each from the determinants affecting this level was assessed in a 5-point scale, where 1 was the lowest and 5 was the highest value. The results were partly analysed on the basis of the division into groups, which was made according to the work experience of the respondents.

With regard to the question about the prestige of the pursued profession in comparison to other professions, the respondents were not able to give an unequivocal answer. Over 42% of respondents chose the value of 3 in a 5-point scale, which may suggest that they have no clear opinion about this issue. Nearly 40% of respondents chose the values of 4 and 5, which

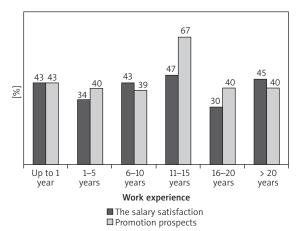


Figure 8. Satisfaction from the amount of remuneration and the promotion opportunities in groups divided according to work experience

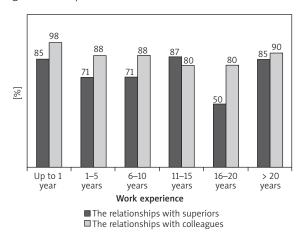


Figure 10. The level of satisfaction with relationship in groups divided according to work experience

may suggest they consider the physiotherapist occupation a prestigious one. According to the answers of the majority of respondents, the physiotherapist occupation would not occupy a high position on a list of prestigious professions.

What is interesting, the physiotherapists defined very positively the attitude of the patients to the character of the physiotherapist occupation (63%). A clear majority chose the value of 4 in a 5-point scale (37%).

The amount of remuneration and the promotion opportunities were assessed lowest from all the determinants. In all groups divided according to the work experience, the level of satisfaction from the amount of remuneration was low, at less than 50%. The situation was similar in the case of promotion opportunities. In almost all of these groups it did not exceed 50%. However, there was an exception in groups where the work experience varied from 11 to 15 years. The promotion opportunities in these groups were assessed as close to 70% (Figure 8).

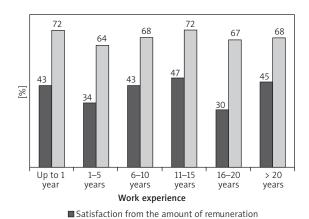


Figure 9. Satisfaction from the amount of remuneration with regard to the level of general satisfaction in groups divided according to the work experience

■ General satisfaction

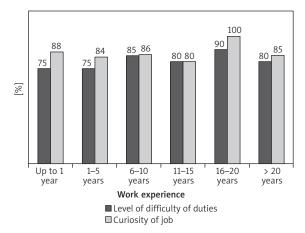


Figure 11. The assessment of the character of the work in groups divided according to work experience

As to the working conditions, the opinion of respondents was not explicit. With regard to the care of the employee, the same percentage of respondents acknowledged and contradicted the view that it is satisfying and sufficient.

Each of these groups are characterised by quite high level of general satisfaction, which is near to, or even exceeds 70% (Figure 9).

The atmosphere in the work place was highly appraised by the respondents. The relations with superiors, as well as with co-workers, are satisfactory for them. However, the relations with co-workers are better than with superiors. This fact however, seems to be nothing unusual (Figure 10).

Similar values are presented on the graph concerning the character of the work. Over 80% of respondents, in all groups divided according to work experience, consider the physiotherapist occupation as interesting. The same percentage of respondents admitted that it is also a difficult and responsible profession (Figure 11).

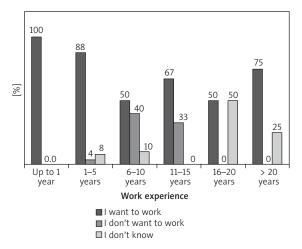


Figure 12. The opportunities for work in 10 years in groups divided according to work experience

Respondents were also asked about whether they could see themselves still being a physiotherapist in 10 years' time. Seventy-four percent of the respondents answered affirmatively, 16% of them could not see themselves working as physiotherapists, and 10% of respondents had no opinion. The results from each of these groups are presented on the graph below (Figure 12).

The most interesting situation occurred in the group with work experience from 6 to 10 years, in which 40% of respondents did not want to, and 10% of them did not know if they would still be practicing this profession in the future. The factors that affected these answers are unknown, and these answers are quite surprising regarding the fact that the level of general satisfaction in this group was quite high.

Discussion

The physiotherapist occupation is a quite new profession. It was put on the list of professions and specialties in 2004 [11]. It still raises universal interest. As the results indicate, the number of people following this profession has risen significantly over the last 10 years. The universal interest concerning this profession might be the result of a prevailing trend for choosing this subject and also from raising consciousness of it in society, as well as the need for taking care of one's health, and hence the rise in demand for physiotherapy. This profession is mainly followed by people under 30 years of age [12].

The results show that there is a phenomenon of feminisation of the physiotherapist occupation. The existence of this phenomenon was also confirmed in the research conducted by Starczyńska *et al.* in 2011. It is probable that this tendency will continue in the future [13]. It is rather surprising because this profession is still associated with the use of strength and physical

effort in everyday work. However, the author of the article mentioned above put forward the conclusion that the psychosocial qualifications are the dominant feature of women, and it mainly affects the view that it is a rather male-dominated profession.

The clear majority of people working as the physiotherapists have a master's degree. Only a few people have a higher academic title, or are aiming to obtain one. It seems that having a master's degree is satisfactory for the majority of physiotherapists. Postgraduate education is not very popular among them.

With regard to involvement in specialised courses concerning methods applied in physiotherapy, the situation is quite different. Over 54% of respondents said that the participation in specialised courses is a good way to improve their qualifications. These courses are chosen according to their usefulness in everyday work.

The great interest in courses, as a means of professional development, and relatively little in postgraduate education, can be caused by two factors. Since the research was conducted in medical facilities, people who work in such places could be uninterested in getting different academic titles. As Starczynska's research proved, students and professionally active physiotherapists think that the studies of physiotherapy inadequately prepare people for following this profession, especially with regard to the practical side of it. Consequently, people are forced to pay for courses in physiotherapy methods in order to acquire certain skills [12].

The research also indicated a disturbing phenomenon. Nearly 1/3 of respondents do not have any plans for further professional development. Even though the results of research did not explicitly show the cause of this phenomenon, it probably resulted from the poor remuneration and the lack of promotion opportunities in the workplace.

As the research showed, the membership and active participation of the physiotherapists in the learned societies and professional societies is unfortunately not very common. The majority of people who are already members of this kind of society are mainly passive participants. It seems that there is much work to do in order to popularise this kind of society among physiotherapists, as well as to raise their awareness concerning the benefits of being a member of such a society.

However, the use of specialised literature among physiotherapists is quite satisfactory. The definite majority of them willingly reach for specialised magazines and books in order to broaden the specialised knowledge they have already gained, as well as to improve their professional skills.

According to respondents, the physiotherapist occupation does not occupy a high position on the list of prestigious professions. This situation is probably caused by the fact that there is no act concerning the legal protection of the physiotherapist occupation, which can negatively influence the sense of identity and professional autonomy [12]. Additionally, it is quite a new profession, and in the opinion of physiotherapists it is an underestimated profession [13]. As Gotlib's research indicated, the view that the physiotherapist occupation is underestimated by other professional groups, mainly by doctors, is a common one [14]. This situation can unfavourably influence the cooperation in the rehabilitation team. On the other hand, the attitude of the patients to the physiotherapist occupation was assessed positively.

When we take into account the assessment of the level of job satisfaction, the amount of remuneration, and the promotion opportunities, it can be seen that they were assessed lowest by the respondents. Dissatisfaction with the amount of remuneration was noticed in all groups divided according to work experience. Therefore, it can be said that work experience, measured in years, does not affect the amount of remuneration the physiotherapist receives for his/her work, as well as the level of his/her financial satisfaction.

From the comparison between the level of job satisfaction and the amount of remuneration, quite interesting conclusions were drawn. It appeared that the amount of the remuneration had no significant impact on the level of job satisfaction, and what is more there must be some other factors that compensate for the poor remuneration. It is probable that people who decide to work as physiotherapists are driven by their personal beliefs and features commonly identified with the vocation, rather than by the financial inducement. This conclusion is partly confirmed by Gotlib's research, which was conducted on a group of students of physiotherapy. Gotlib's research proved that the satisfaction from bringing help is more important than the amount of remuneration received for the work [14]. Additionally, the successful treatment of patients can contribute to the development of one's sense of self-efficiency, as well as to raising one's selfesteem [15]. Consequently, the level of dissatisfaction from the amount of remuneration can be reduced and it can enhance the significance of personal and professional achievement [16, 17].

The atmosphere in the workplace, good relations with superiors and co-workers, and the character of the profession, are the most important things for the respondents. It seems that these features positively affected the level of general job satisfaction and are recognised by the people who follow this profession as the advantages of the physiotherapist occupation.

Although the level of general job satisfaction is quite high, the research indicated that nearly 1/3 of respondents have no plans for further professional development. Additionally, about 40% of professionally active physiotherapist with work experience from 6 to 10 years, who took part in the research, do not plan to

follow this profession in the future. It is quite disturbing because this group constitutes 1/3 of all respondents, and currently it presents a considerable developmental potential. If this trend continues, there is a possibility that the number of professionally active physiotherapists will decline significantly in the near future.

Conclusions

During the analysis of the course of professional development among the respondents, with regard to higher education and foreign languages they had acquired, it may be concluded that this group represents a high level. After graduation the physiotherapists often and willingly take further steps in order to improve their professional qualifications. It is particularly apparent among young people with work experience which does not exceed 10 years. With regard to the number of groups and the number of completed courses, this group presents a considerable developmental potential. As the research proved, the courses in specialised physiotherapy methods are the most popular forms of self-development. The physiotherapists also willingly reach for the specialised literature. Therefore, on the basis of the above issues, it can be concluded that the level of competence of the surveyed therapists is high. However, there is lack of equally active involvement in the field of scientific development and on the ground of activity of scientific societies.

The research, based on the answers from a given group of respondents, also indicated that the level of job satisfaction is acceptable. The atmosphere in the workplace, as well as the character and specific nature of this occupation, were assessed highest. It emerged that even the low remuneration and the lack of promotion opportunities have no significant impact on the level of job satisfaction in this occupational group.

The issue that the article touches upon is a broad subject, and the article did not examine it fully. With regard to the number of respondents, this article was not an attempt to characterise the whole occupational group, although it partially presented the reality of this profession. The results can provide inspiration to conduct further research concerning this issue.

Conflict of interest

The authors declare no conflict of interest.

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