Opinion survey on the profession of a physiotherapist in Poland

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Abstract
Introduction
Despite numerous activities of the National Chamber of Physiotherapists, there are reasons that question the organization of physiotherapy in Poland. Public services are particularly criticized, which is alarming, because physiotherapy that functions well within the public health service is essential for maintaining the optimal efficiency of the entire system.

Purpose
Determining the current opinion on the profession of a physiotherapist and the process of physiotherapy in Poland, taking into account the differences between reimbursed services and those provided in non-public entities.
Material and Method
The method of diagnostic survey distributed with the use of social networks was used. The study group included 164 people (53F, 111M).

Results
The quality of private services was statistically significantly (p < .0001) assessed better on a five-point scale (4.74 [SD = 0.44]) than reimbursed services (3.1 [SD = 1.20]). Comparing the opinion on commercial services with those provided under public health care, significant (p < .0001) differences were also noted in other assessed aspects in favor of private physiotherapy, which was assessed as good. Public health services were rated averagely.

Conclusions
1. Public health care physiotherapy is rated worse than commercial services.
2. People who have undergone physiotherapy financed by the National Health Fund would be less willing to start physiotherapy again if necessary than people with experience from private physiotherapy offices.
3. Activities optimizing the work system of physiotherapists can improve the opinion about physiotherapy in public health care in Poland, giving measurable health and economic benefits in the long term.

Key words: Physical Therapy Speciality; Rehabilitation; Public Opinion

Introduction
From May 31, 2016, the profession of physiotherapist in Poland is established as an independent medical profession, as defined in the Act of 25th September 2015 on physiotherapist profession. This act defines the competences of physiotherapists, establishes their place in the public health care system and gives a number of rights and obligations to increase the effectiveness of physiotherapeutic services [1]. This law was long awaited by physiotherapists due to the numerous problems they encountered in their work due to the lack of a legal act about their profession. It was also expected that the availability of physiotherapeutic services in Poland, which had been unsatisfactory so far, would improve [2]. During the next five years after the law came into force, many changes took place in the world of physiotherapy. The National Chamber of Physiotherapy (KIF) established by this legal act aims to increase the effectiveness of the services provided, while improving the working conditions of physiotherapists. Much emphasis is placed on shaping the profession of
a physiotherapist as a medical profession operating with effective therapeutic agents. The statutory option of every independent physiotherapist to plan physiotherapy on the basis of an independently performed functional test is promoted in order to maximize the effectiveness of the recovery process. The National Chamber of Physiotherapists has also introduced recommendations for Continuous Professional Development of Physiotherapists, which will become an obligation in the future. Activities for the benefit of high qualifications of physiotherapists are also carried out through the development of scientific activities, the effects of which can be found in the reviewed journal KIF "Physiotherapy Review" and regular, independent publications verifying the methods of conduct in specific clinical units. Funds for free courses for physiotherapists are also regularly obtained and distributed [3,4].

Unfortunately, despite many activities aimed at improving the situation of physiotherapy in Poland, we constantly hear voices about the poor condition of Polish physiotherapy. The waiting times for physiotherapy financed by the National Health Fund (NFZ) are a constant problem of Polish physiotherapy. These dates are so distant that they often make it impossible to undertake an effective physiotherapeutic intervention. There are also doubts about the process of outpatient physiotherapy, which usually covers 10 consecutive working days of physiotherapy treatments in the field of kinesiotherapy, massage (including manual therapy) and physical therapy. There is no scientific evidence of the effectiveness of such a procedure, and therefore it is not practiced in non-public entities.

In the non-public rehabilitation system, physical therapy modalities also play a much smaller role. They are performed rather auxiliary, as a method of increasing the effectiveness of the physiotherapy process. However, the core of the services are manual techniques and exercise. Such management is reflected in the available scientific studies, which indicate a small real impact of most physical therapy modalities. Their effectiveness has been proven in a narrow range of clinical cases, for precisely defined types of treatments. In other cases, the effectiveness of physical therapy modalities is limited to a short-term analgesic effect or inducing the placebo effect [5]. Currently, this problem has been noticed by the National Health Fund, which, due to insufficient scientific support for physical therapy modalities, has published a new list of physiotherapy services valuations, in which payments for physical therapy modalities have been radically reduced. This procedure met with protests in the circles of physiotherapists, because the reduction in the valuation of physical therapy modalities is not associated with a corresponding increase in payments for other physiotherapeutic services, i.e. massage, individual therapy and kinesiotherapy [6,7].
Apart from systemic problems, there is also a high risk of reducing the quality of services provided due to the lack of knowledge of the physiotherapist profession in the medical community. Frequently encountered opinions about the range of rights and possibilities of physiotherapists not fully respected by other medical specialists are reflected in the available studies [8]. Students of the last years of the medical studies often do not realize the possibilities of physiotherapists with whom they will be working in a moment. This situation is fully understandable if the training hours for future doctors are analyzed. The number of teaching hours devoted to rehabilitation is drastically small [8].

However, the problem with the perception of the profession of physiotherapist seems to lie not only with medical professions. You can often find voices pointing to the lack of sufficient public awareness of physiotherapy. This problem is so important that one of the main activities carried out by the National Chamber of Physiotherapy is the nationwide promotional campaign "Physiotherapy Moves", in which various advertising materials show what the physiotherapist actually does [9]. The current epidemic situation is also used in the media, in which physiotherapy plays a huge role as an element of postcovid rehabilitation. KIF prepared a series of materials on recovery from SARS-CoV-2 infection, which were promoted in nationwide media [10]. However, there are voices that physiotherapy, which is shown in promotional materials, is often available to the patient only as part of private services [11].

Problematic access to rehabilitation treatments may be a significant problem in building awareness of the profession of a physiotherapist.

From a public health perspective, the proper functioning of physiotherapy is extremely important in optimizing the cost of financing public health. Effective physiotherapy shortens the recovery time, reducing the costs associated with it, but also reduces the need to finance the treatment of recurring health problems. The preventive role of physiotherapy is also extremely important. An early visit to a physiotherapist allows for accurate functional diagnostics, which, in combination with appropriately selected therapy, saves the patient a lot of suffering, and the budget of expenses incurred due to the neglected primary source of health problems [12, 13].

**Purpose**

The aim of the study is to determine the current opinion on the profession of physiotherapist and the process of physiotherapy in Poland, taking into account the differences between services financed by the National Health Fund and provided in non-public institutions.
Material and methods

The research method used in the research was a survey. In questions for opinion, a five-point Likert scale was used, where the answer 1 corresponded to an extremely negative feeling, and 5 the maximum positive.

Due to the restrictions related to the ongoing COVID-19 epidemic, the survey was made available only online via social networks. 164 responses were collected.

Table 1. Characteristics of the study group

<table>
<thead>
<tr>
<th>Characteristics of the study group</th>
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<tr>
<td></td>
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<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>52 (32,3%)</td>
</tr>
<tr>
<td>Male</td>
<td>111 (67,7%)</td>
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<tr>
<td><strong>Age (years)</strong></td>
<td></td>
</tr>
<tr>
<td>18-26</td>
<td>46 (28%)</td>
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<tr>
<td>25-30</td>
<td>67 (40,9%)</td>
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<td>31-40</td>
<td>22 (13,4%)</td>
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<tr>
<td>41-50</td>
<td>11 (6,7%)</td>
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<tr>
<td>51-60</td>
<td>10 (6,1%)</td>
</tr>
<tr>
<td>&gt;61</td>
<td>8 (4,9%)</td>
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<tr>
<td><strong>Place of residence</strong></td>
<td></td>
</tr>
<tr>
<td>Village</td>
<td>13 (7,9%)</td>
</tr>
<tr>
<td>City &lt;50 000 inhabitants</td>
<td>17 (10,4%)</td>
</tr>
<tr>
<td>City 50 000-100 000 inhabitants</td>
<td>18 (11%)</td>
</tr>
<tr>
<td>City 100 000-500 000 inhabitants</td>
<td>62 (37,8%)</td>
</tr>
<tr>
<td>City &gt;500 000 inhabitants</td>
<td>54 (32,9%)</td>
</tr>
<tr>
<td><strong>Average monthly net earnings (Polish zloty)</strong></td>
<td></td>
</tr>
<tr>
<td>No steady source of income</td>
<td>25 (15,2%)</td>
</tr>
<tr>
<td>&lt;2000</td>
<td>15 (9,1%)</td>
</tr>
<tr>
<td>2000-4000</td>
<td>64 (39%)</td>
</tr>
<tr>
<td>4000-6000</td>
<td>33 (20,1%)</td>
</tr>
<tr>
<td>6000-10000</td>
<td>18 (11%)</td>
</tr>
<tr>
<td>&gt;10 000</td>
<td>9 (5,5%)</td>
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</tbody>
</table>
Results

4.9% of the respondents used the services of a physiotherapist at least once in their lifetime. 87.2% of respondents are aware that a physiotherapist is an independent medical profession. Among the techniques that a physiotherapist is entitled to use, massage is the most frequently mentioned - this answer was indicated 156 times (95.1% of all answers). The next most common answers were physical exercises (149, 90.9%), manual therapy (140, 85.4%) and physical therapy modalities (124, 75.6%). 36% of respondents (59 responses) indicated that physiotherapists can do joint reductions, which is an activity reserved only for certain medical specializations. Other indicated techniques, mistakenly chosen as those that can be performed by a physiotherapist, include platelet-rich plasma injections (10, 6.1%), permanent limb stiffening (9 responses, 5.5%) and steroid injections (6, 3.7%).

Among the respondents, 33% of the respondents used physiotherapeutic services reimbursed by the National Health Fund (55 responses), and 42.1% of the respondents (69 responses) had the opportunity to use private services. When using physiotherapy as a part of public health care, the respondents most often selected a physiotherapy office based on the proximity to their place of residence - it constituted 49.1% of responses. For private services, the choice of the facility was most often made by recommendations from family or friends (52.6% of responses).

The respondents assessed the quality of provided services reimbursed by the National Health Fund averagely - the mean on a scale of 1-5 was 3.1 [SD=1.20]. Private services were assessed significantly better, on average by 1.63 points (p <.0001, t(127)=10.82, 95%CI[1.34, 1.93]), which were rated at 4.74 [SD=0.44]. A significant (p <.0001, t(127)=8.69, 95%CI[0.93, 1.48]) difference was also noted in the assessment of the competencies of physiotherapists who worked with the respondents, between services financed by the National Health Fund and privately paid. The competences of physiotherapists providing services as a part of the private health care were assessed on average at 4.8 [SD=0.43], and as a part of the public health care at 3.59 [SD=1.09] on a five-point scale. The responses regarding the level of trust towards the physiotherapist conducting the therapy were similar. As part of services financed by the National Health Fund, it was assessed at an average of 3.54 [SD=1.27], and as part of private services - 4.77 [SD=0.51]. It is a statistically significant difference (p <.0001, t(127)=7.63, 95%CI[0.92, 1.56]).

Pewne różnice odnotowano także w świadczeniach oferowanych w ramach publicznej opieki zdrowotnej, a prywatnej. Korzystając z fizjoterapii finansowanej przez NFZ, badani najczęściej mieli ordynowane zabiegi z zakresu elektroterapii (51,9%), ćwiczenia ruchowe
Some differences were also noted in the services offered under public health care and private health care. When using physiotherapy financed by the National Health Fund, the respondents most often had electrotherapy (51.9%), physical exercises (50%) and massage (46.3%). As part of private services, the most common were massages (66.2%), physical exercises (63.5%) and manual therapy (55.4%). Manual therapy in publicly funded physiotherapy was rarely performed (18.5%). In private physiotherapy, electrotherapy procedures were rarely performed (16.2%).

In the open-ended question about the positive and negative traits of physiotherapists who worked with the respondents, at least one positive trait was indicated for 67.39% of physiotherapists working in public health care and for 85.51% of physiotherapists working in private clinics. At least one negative trait was mentioned by the respondents for 50% of physiotherapists providing services financed by the National Health Fund and 14.49% of physiotherapists providing services under non-public health care.

**Discussion**

The results of our research on the percentage of people using physiotherapy are in line with the research carried out by the Kantar company for the National Chamber of Physiotherapists [14]. A study published in 2019 in the Lancet journal estimated that 2.41 billion people worldwide need physiotherapy, which is 31.42% of the total population (for 2019) [15,16,17]. In this perspective, it can be assumed that the availability of physiotherapy in Poland is at a satisfactory level. The problem is shaped by the large differences between public healthcare services and private services. This fact is worrying taking into account the constantly growing demand for physiotherapy and the health and economic benefits of its efficient implementation and management [13, 16].

An interesting difference between services financed by the National Health Fund and privately is the way of choosing a physiotherapy office. In the case of services financed from public funds, the respondents most often indicated that the proximity to the office was decisive. In turn, people who decide to use physiotherapy for a fee, make their choice based on the recommendations of people from their immediate surroundings. This may indicate a
more prudent selection of physiotherapists whose services are paid for out of pocket. Paying for the service, the patient has higher expectations as to its effectiveness, therefore the selection of the person providing it is preceded by collecting opinions. Although such a procedure is obvious, it may raise the question whether health in itself is not a value significant enough to choose the best possible provider of medical services, regardless of financing sources. There may be two possible answers - either in the society there is a belief that physiotherapists working in the public health care system are of the same high effectiveness, or patients do not expect high effectiveness from them.

Unfortunately, the results of our research indicate that the latter answer may be closer to the truth. Significant differences in the assessment of private and public physiotherapy indicated in the results indicate a lower level of satisfaction with services reimbursed by the National Health Fund. We can see the reasons for this situation already at the stage of differences in the organization of services between the two sectors. Available scientific sources indicate that electrotherapy, which is dominant in physiotherapy financed by the National Health Fund, and rarely performed as part of commercial services, has a limited (and partially unproven) effectiveness and poor possibilities for long-term pain problem resolution [5, 18, 19]. It is indicated that electrotherapy can be used as an adjunctive treatment if its use goes hand in hand with manual therapy and appropriately selected exercises [20]. On the other hand, manual therapy, rarely performed as part of services financed by the National Health Fund, has more confirmation in the available scientific sources in relation to the effective treatment of pain. It should be noted, however, that it may also be insufficient, and for some disease entities (including sciatica, fibromyalgia, or temporomandibular joint disorders) its effectiveness is not confirmed by scientific sources. The available data indicate that properly prescribed physical exercise is an indispensable part of the treatment of pain in physiotherapy [21, 22].

When considering the subjective assessment of the effectiveness of physiotherapy, attention should also be paid to the biopsychosocial concept of physiotherapy, especially taking into account the significant difference in the results of the level of trust in a physiotherapist providing services privately and within public health care. More and more scientific publications indicate the key role of including the mental factor in therapy. Appropriate psychosocial interventions can have a positive effect on the results obtained. The relationship between the therapist and the patient, if properly managed, may improve the effectiveness of the therapy [22, 23]. On this level, one can see another reason why private physiotherapy is assessed better. In the commercial model of work, 1-on-1 work dominates, with constant
contact between the patient and the therapist. In public health care, many treatments are performed with limited contact (physical therapy modalities) or in groups. The duration of the visit also limits establishing a relationship with the patient. Individual therapies financed by the National Health Fund are to last a minimum of 30 minutes, taking into account that during this time the physiotherapist must complete the medical documentation. This time also includes the preparation of the patient for the procedure [24]. Taking into account the low valuation of services, in order to maintain any profitability of the procedures performed, the minimum time determined by the National Health Fund is in practice the standard time of individual therapy in public health care institutions. On the other hand, in private practices, the most common visits are 45 or 60 minutes.

When discussing the issue of financing physiotherapy from public funds, we should also refer to the significant difference in the assessment of the competences of physiotherapists between the public and private sectors. Such an opinion, although subjective, may be consistent with the actual state of affairs due to the limited development possibilities of physiotherapists working in public institutions. Practicing as a physiotherapist is associated with a high need to continue education after completing additional courses. Such a procedure is even recommended by the National Chamber of Physiotherapists and included in articles 62 and 77 of the Act on physiotherapist profession [1,4]. The problem, however, lies in the ratio of courses prices to earnings. According to the results of a study conducted by the National Chamber of Physiotherapists, the average net full-time salary of a physiotherapist in Poland is approximately PLN 2,000 [25]. Taking into account the prices of courses for physiotherapists starting from several thousand zlotys, the possibility of participating in them with such low earnings is very limited. It should be noted that such a low remuneration results directly from the low valuation of physiotherapeutic procedures by the National Health Fund, which is constantly alerted by the National Council of Physiotherapists [26].

Given the important role of physiotherapy in public health, the significant differences between the commercial and public sectors in willingness to retake physiotherapy, if necessary, are extremely alarming. The worse opinion shown in the results of these studies about the services provided as part of the services financed by the National Health Fund may limit the number of people using physiotherapeutic services. In the long term, this may lead to an increase in health care costs, a reduction in the efficiency of the health system, and an increased incidence of disease development and their complications, which could be prevented by effective rehabilitation. Taking into account the comparison of the research results with the practical situation of physiotherapy in the public health care system, it should
be noted, however, that the improvement of the opinion on physiotherapy financed by the National Health Fund should start with systemic changes. Improving the working conditions of physiotherapists and optimizing the implementation of physiotherapeutic procedures in line with current scientific knowledge can most likely improve the opinion about physiotherapy provided by the public health service. By doing so, we can strive to increase the universality and effectiveness of physiotherapeutic treatments and to achieve long-term benefits for both patients and the entire healthcare system.

Limitations
Research was carried out during the COVID-19 pandemic, which limited the possibility of collecting forms. According to the original assumption, they were to be distributed both in electronic and paper form, on the Internet and in non-government organizations and local government units. This would make it possible to even out the proportion of the questionnaires received between the age groups and to collect a larger number of questionnaires. The necessity to limit ourselves to Internet distribution due to epidemic restrictions resulted in an increased amount of people from the 18-30 age group in the study and a lower than expected number of responses received.

Conclusions
1. Public health care physiotherapy is rated worse than commercial services.
2. People who have undergone physiotherapy financed by the National Health Fund would be less willing to start physiotherapy again if necessary than people with experience from private physiotherapy offices.
3. Activities optimizing the work system of physiotherapists can improve the opinion about physiotherapy in public health care in Poland, giving measurable health and economic benefits in the long term.

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