Informed consent and physiotherapists concern in healthcare - a development perspective

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Abstract. *Physiotherapy has developed over the last century, and the physiotherapists' professional identity is growing. Our research aims to explore the physiotherapists perceptions regarding informed consent (IC) and their role in healthcare, and to identify the necessary elements of information technology that can improve medical care. A cross-sectional survey was distributed online to physiotherapist in Europe. The questionnaire contained two open questions regarding IC and assumed role in healthcare. The data from the open items were coded, using mixed study design. Eight categories of items related to IC and eight categories related to the role in healthcare were identified. The physiotherapists response rate was 81.85% (n = 248 from 303) for the item related to IC and 71.62% (n = 217) for the second item related to the role in healthcare. A percent of 24.20% (n=60) are still considering IC a simple patient information process, while 23.40% (58) have linked IC with ethically and legally concerns, 21.67% (n=51) of physiotherapists identified their role in healthcare with the restore of physical independence, while 6.91% (n=27) are aware of their multidisciplinary role. The study shows that heterogeneity, legislation, and healthcare system differences influence physiotherapists professional development and suggests the necessity of information technology development to offer assistance and support to physiotherapists, and patients.*

Keywords: physiotherapy; informed consent, healthcare, information technology.

Introduction

Throughout the evolution of the physiotherapist profession, the concept of professional identity has developed, assuming the necessity of a set of moral norms, abilities, and skills designed to define the physiotherapists' profession towards high standards of practice *(Hammond et al., 2016; Holden et al., 2012; Christmas & Cribb, 2017).* The physiotherapy field has developed throughout Europe during the last century as a profession assimilated to healthcare professionals *(Ottoson, 2009, 2011; Quin, 2017).* In most countries in Europe and around the world, the physiotherapist occupation has been regulated and recognized so far, leading to the occurrence of ethical norms that must be respected and complied with high standards of practice *(World Confederation of Physical Therapy, 2019; Swedish Association of Physiotherapists, 2019; The Association of Danish Physiotherapists, 2019)*. Romania is the only country in the European Union, where the physiotherapist profession was partially regulated in 2016, and the professional organization was legislated, with the application of the methodological norms only at the end of 2019 *(Romanian Public Law 229/2016, 2016).* The legislation, health systems, and study programs in physiotherapy vary from one country to another, although competencies are mostly similar, with few exceptions. However, the differences between countries health systems are essential, especially in the context of migratory physiotherapists, especially in European territory. According

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to the European database on regulated professions, from 1997 to 2013, 19 973 physiotherapists migrated to European countries *(European Commission Internal Market-Free movement of professionals-Regulated professions database-Ranking, 2019; European Commission. Regulated Professions Database, 2019; Mueller-Winkler, 2015)* In addition to the physical and functional rehabilitation skills and abilities, physiotherapists play a vital role in the prevention, health, and promotion of physical activity, being part of the medical profession with a significant impact on the quality of life *(WCPT, 2019, Suciu et al., 2016; Patrascu et al., 2014; Sirbu et al., 2020)*

Literature review

So far, research shows that the professionalism and attitude of the physiotherapist have significant repercussions on the evolution of the rehabilitation process *(Mosadeghrad, 2014; WHO, 2011).* As a medical act in which the physiotherapist often guides the patient in the physical therapy program, the approach of physiotherapists is often paternalist and usually does not involve the patient in creating the content of the physiotherapy program, omitting cultural or social elements of patients, and often granting importance only to physical rehabilitation and less motivation through socio-cultural aspects *(Hall et al., 2010; Jorgensen, 2000; Poulis, 2007, Delany et al., 2018).* Regarding both patients' and physiotherapists' perspectives about the rehabilitation process, the most crucial ability appreciated by patients is communication, followed by the therapist's focus on the patient himself and not just on the present disorder. One important element regarding patients' rights and autonomy is linked with informed consent (IC), a useful tool for physiotherapists to establish the professional connection with the patient, and after, the therapist should draw some guidelines and recognize critical ethical issues, but also extract ethical principles and connect them to particular clinical contexts *(Praestegaard & Gard, 2011, Roman et al., 2018, Rogozea et al., 2008).* It is crucial for the physical therapist to assume the level of practical authority, to have the ability to connect ideas, to understand the relationships and to have the knowledge necessary to make the right decision finally. *(Praestegaard et al., 2013; Potter et al., 2003, Edwards et al., 2011; Fennety et al., 2009)).*

Given the many factors that may influence the physiotherapists' professionalism, the main objective of our research was to explore physiotherapists' perceptions of informed consent (IC) and the level of development of professional identity in the context of educational, legislative and professional differences.

Methodology

A cross-sectional study was carried out through a questionnaire survey, with two open questions about physiotherapists' perception of IC and their role in healthcare.

The survey was distributed through the Survey Monkey platform. The approval of The Ethics Commission of the Faculty of Medicine of the Transilvania University of Brasov was obtained. The surveys were distributed from November 2017 until July 2018, initially in Romanian, and after was translated into English, French, and Italian, by translators of specific languages.

The sample size was 303 respondents. The questionnaire responses were collected from Romania, Belgium, France, United Kingdom, Spain, Portugal, Switzerland, Hungary and Italy. We have contacted all physiotherapy associations in Europe, but most of the answers were negative or the response was lacking. The informed consent was obtained implicitly by filling in the questionnaire. No personal data has been collected, research being accordingly with European legislation data protection.

The author should make references to some previous research similar to the present one, if that is the case. Also, the author should mention the software programs used for processing statistical data, if it is the case.

Data operationalization

Informed Consent

The responses gathered from the two open items varied, and it was necessary to distinguish between the types of response. Depending on the description, several categories have been differentiated by operating and encoding data. Inductive coding was applied separately by two of the team members, following a few steps: 1) Reading raw data and creating codes to cover the sample based on responses; 2) re-evaluating the specimen and applying the codes for each respondent and creating another code for irrelevant answers that did not correspond to the question. We have added a code for respondents which claimed the lack of IC at the onset of physiotherapy.

After the coding, the responses were separated into seven categories, making an ordinal grading, accounting as maximum complexity of reactions related to patient rights and legal considerations, and at the last level classifying the respondents who stated that they do not demand IC at the onset of treatment.

The coding of responses was done both to obtain data that can be measured and analyzed and to be ranked according to the efficiency or the correctness of the response. The codes were assigned from zero to 7:

0 - assigned to respondents who do not request IC,

1 - assigned to irrelevant answers,

2 - assigned to respondents who believe that obtaining IC is done to protect themselves against malpractice

3- assigned to respondents who declared it to be an informing process about the therapeutic program

4 - assigned to respondents who thought IC is necessary to increase patient confidence

5 - assigned to respondents who sought IC as a tool to determine good collaboration with the patient and to integrate it into the physical therapy process

6 - assigned to respondents who have declared patient consent or disagreement with the treatment

7- the most comprehensive and correct answers from legal, ethical, and professional perspectives.

Assumed role in healthcare

The second open question item of the questionnaire aimed to investigate the perception of physiotherapists role in healthcare, as medical care providers. Data interpretation and coding was realized similarly with the IC item.

Response categories were differentiated into eight sections. The most complex and appropriate category was considered the last one. The responses related to the prophylactic, therapeutic, and rehabilitation role, which is, in fact, the definition of physiotherapy [16] and embraces the complex characteristics of the physiotherapist profession was ranked the highest. The eight items related to physiotherapists perceptions regarding their role in health care were:

0- Irrelevant answer

1- Role in rehabilitation

2-Restore physical / independent condition

3-Planning, evaluation, and application of physiotherapy

4-Improving the quality of life/condition
5-Interdisciplinary / binder in the medical team
6 Essential / Complex
7-Prophylactic, curative and therapeutic
Statistical analysis was performed using SPSS 20. Descriptive analysis of the two items was accomplished, and for comparative analysis, the non-parametric Kruskal-Wallis test was used to determine the differences perceived related to IC and role in healthcare from the perspective of newly regulated profession, in Romania. Adjusted p-values are presented.

Results and discussions

From 331 collected surveys, 28 were removed due to missing or incomplete data, in the case of the two open-ended questions, the answer rate was 81.85% (n = 248) to the first open question related to IC and 71.62% (n = 217) to the second item associated with the role in healthcare.

Table 1 Crosstabulation of the reason for IC demanding at physiotherapy onset by countries respondents

Reason for IC demanding * Countries Crosstabulation								
Categories	**Country distribution**						**Total**	
	Romania n	**Italy n**	**France n**	**Belgium n**	**UK n**	**Other European Countries n**	**N**	**Percent**
Do not demand	5	1	0	0	0	0	6	2.42%
Irrelevant answers	10	1	0	2	0	2	15	6.05%
Physiotherapist protection/malpractice	6	3	6	2	0	6	23	9.27%
Patient information	40	3	5	4	3	5	60	24.19%
To gain the patient's trust	7	0	0	0	0	2	9	3.63%
Collaboration with patient	14	3	6	5	0	1	29	11.69%
For patient Consent	18	6	4	3	5	12	48	19.35%
Ethical and legal considerations	11	19	1	4	13	10	58	23.39%
Total	111	36	22	20	21	38	248	100.00%
Percent	44.76%	14.52 %	8.87%	8.06%	8.47 %	15.32%	248	100.00%
Mean	3.83	5.56	4.00	4.45	6.19	4.84		
Sd	1.944	2.076	1.690	2.038	1.40 1	2.073		
95% IC Mean Lower Bound	3.46	4.85	3.25	3.50	5.55	4.16		
95% IC Mean Upper Bound	4.19	5.76	4.75	5.40	6.83	5.52		
Minimum	0	0	2	1	3	1		
Maximum	7	7	7	7	7	7		

Source: Authors' own research.

The best-oriented physiotherapists in relation to IC were from Italy and the UK, with a broader vision on the complexity of the IC process. Italian and English physiotherapists provided adequate responses, connecting patient's consent with ethical and legal aspects of IC. The results are surprising, as in Belgium and UK, the physiotherapists have professional independence, with diagnostic attributions as autonomous practitioners, whereas in France, Italy, and Romania, physiotherapists have a secondary contact with a patient at the referral of a specialist physician and have no

competence of diagnostic *(WCPT, 2018).* We would have expected that within the countries where physiotherapists are autonomous to exist a broader concept related to the complexity of IC process. Previous literature often advocates the need for a concise framework for IC in physiotherapy, given the specificity and dynamics of treatment in this allied healthcare segment, and this might represent a considerable factor influencing our *results (Hudon et al., 2015, Galeoto et al., 2015).*

Five Romanian physiotherapists claimed the lack of IC demanding and forty Romanian physiotherapists (36.03%) associated this process with providing treatment information. In Romania, besides the heterogeneity of university studies, and up to now incomplete regulation might influence this issue, along with the fact that the physiotherapists are having a second contact with the patient, after physician request initial IC.

From 248 respondents, 24.19% linked the IC process to patient information, omitting the ethical and legal concerns that were created and implemented as practice standards, continuing to use the IC process as a tool for detailing the treatment objectives and the techniques used *(Delany, 2007).* Issues related to IC process are critical elements in professional standards and influence the quality of healthcare service, not only from a legal perspective, from an ethical point of view and the patient's perspective *(Chima, 2013; Clark, 2007).*

A necessary facet to reflect is professional autonomy and initial contact with the patient. Considering the legislative element, specific to each country, the physiotherapists performing the medical activity, only at the physician's indication, are having secondary contact with the patient, so the ethical and professional responsibilities lie primarily with the physician and less with the physiotherapist.

Differentiating response categories by the reason physiotherapists believe that IC is obtained, allowed us to point out important aspects of physiotherapists' perception of IC. So far, this aspect has not been studied from this perspective, and the responses suggest that the IC process is elaborate. In addition to legal and deontological considerations, obtaining IC is a useful tool that allows physiotherapists to establish a connection and a relationship with the patient *(Fennety et al., 2009; Copnell, 2018).*

It seems that the lack of a solid framework for IC obtaining in physiotherapy, due to treatment specific and dynamics are negatively influencing the perceptions of physiotherapists regarding IC even after a century of professional development *(Delany, 2007; Quinn 2018).*

Table 2 Crosstabulation of physiotherapists role in healthcare by countries respondents

Assumed role in healthcare * Countries Crosstabulation								
Category	**Country distribution**						**Total**	**Percent**
	Romania	**Italia**	**France**	**Belgium**	**UK**	**Other European countries**		
Other	12	1	0	0	0	2	15	6.91%
Role in rehabilitation	24	8	4	3	7	5	51	23.50%
Restore Physical Functionality/ Independence	21	6	2	5	6	7	47	21.66%
Planning, assessment, and application of physiotherapy	13	0	2	0	3	6	24	11.06%
Improving the quality of life/condition	11	0	4	1	2	5	23	10.60%
Interdisciplinary	7	1	1	0	0	1	10	4.61%
Essential / Complex	9	4	3	2	1	1	20	9.22%

Promotion, prevention, treatment/intervention, habilitation, and rehabilitation.	5	7	3	8	1	3	27	12.44%
Total	102	27	19	19	20	30	217	100.0 %
Percent	47.00%	12.44%	8.76%	8.76%	9.22 %	13.82%	217	100%
Mean	2.68	3.63	3.89	4.47	2.45	2.97		
Sd	2.025	2.691	2.183	2.611	1.70 1	1.956		
95% CI for Mean Lower Bound	2.28	2.57	2.84	3.22	1.65	2.24		
95% CI for Mean Upper Bound	3.07	4.69	4.95	5.73	3.25	3.70		
Minimum	0	0	1	1	1	0		
Maximum	7	7	7	7	7	7		

Source: Authors' own research.

Most of the physiotherapists summarize their role in the healthcare process, at the level of restoring the patient's functional capacity and the regaining of physical autonomy, although the role of physiotherapists in healthcare is complex. The World Confederation of Physiotherapists (WCPT) states that physiotherapists have skills and competencies regarding the development, restoration and maintaining the "ability for movement and functional capacity of people", also they have role in maximizing the quality of life and "with regard to physical, psychological, emotional and social well-being", but also have skills in terms of prevention *(WCPT, 2019).* Somewhat, most of the WCPT physiotherapists attributions are found in the categories of responses differentiated by the present study, but the proportion of physiotherapists that perceive their complex role in healthcare is deficient. Although it is a profession that has been developing for more than 100 years in Europe, the professional identity of physiotherapists is still in a complicated process, dynamic, and with various influences *(Hammond et al., 2016; Holden et al., 2012; Christmas & Cribb, 2017).*

The transition from student to practitioner and many elements can influence the professional development of physiotherapists' profession. Graduation country, workplace, experience, continuous professional training, ethical and legislative education, physiotherapist integration into the medical team, the lack of autonomy and the promotion of physiotherapy as an essential element in patients 'health are factors that can influence physiotherapists' perception of their role in the healthcare system *(Bartunek, 2011; Joynes, 2017).*

Even if we find several categories of answers related to physiotherapists' role in healthcare and physiotherapy definition, the results offer an interesting perspective of physiotherapists' self-perception, and also emphasize a cutback of the profession complexity, but also regarding their role as health promoters.

As new challenges arise in physiotherapy medical practice, like the present global pandemic interfering with the quality of practice and patient's needs. It is essential to align with good European and international practices, through communication technology, the development and training of physiotherapists in the use of telemedicine. We emphasize the need for applications or databases dedicated to physiotherapy because they are factors that can positively influence the professional development of physiotherapists, both from an ethical point of view and from medical practice, with implications on patient's quality of life and social inequities. *(Nicolau et al., 2020; Repanovici et al., 2009, Teodorova et al., 2014, Gunn, 2009; Mitchell & Ream, 2015, Drugus. D, 2017).*

Conclusion

The development of the professional identity of physiotherapists in Europe differs according to the educational system and the existing legislation. In countries where physiotherapy programs are belonging to allied healthcare, physiotherapists have a greater sense of their professional role in healthcare, as medical services providers. The heterogeneity of university studies, their duration, the presence of professional organizations, and legislation are factors that influence the perception and attitude of physiotherapists on the IC process, from medical, ethical, and legal point of view.

The lack of a robust framework for obtaining IC in physiotherapy is still felt in medical practice, and the lack of professional activity of physiotherapists focused on prevention and prophylaxis is poorly identified.

We recognize the limits of research through the small sample size and the inequality of the analyzed groups, and we suggest continuing the research from this perspective to determine real factors which require changes for the professional practice of physiotherapists at the European standards in all countries.

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