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## **Physiotherapists' Perceptions of Professional Ethics and Law**

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#### Abstract:

Introduction: Ethics and law guide healthcare professionals, promoting trust and confidence by ensuring they act in the best interests of patients, despite navigating legal complexities. Objective: The purpose of this study was to evaluate the knowledge, attitudes, and perceptions of physiotherapists regarding the practice of professional ethics in Khartoum. Methodology: A descriptive cross-sectional design with a purposive sample was employed. A questionnaire was distributed to 140 participants to determine their knowledge and attitudes. Results: The response rate reached 71.4% with 100 out of 140 participants (73 female, 27 male, age  $26\pm$  5.5 year). The sample was both comprehensive and representative, maintaining a confidence level of 95% and a margin of error of 6.9%. A substantial proportion (71%) of the physiotherapists received formal education in ethics and law as part of their undergraduate curriculum. Only 42% of participants believed that the SNCMHP significantly impacted guiding interactions between physiotherapists and other healthcare professionals, particularly in public facilities and to a lesser extent in private facilities. The majority of physiotherapists (79%) concurred that SNCMHP has no control over physiotherapist service fees, while 51% think the organization has no malpractice control measures. The majority (70%) of the participants reported that SuPTA effectively contributes to increasing awareness and enhancing their knowledge of professional ethics and law. There is no clear evidence or measurement scales showing the level of alignment between the three bodies. Conclusion: Most physiotherapists in Khartoum demonstrate a good understanding and attitude towards professional ethics. Furthermore, they possess an inadequate understanding of the roles of regulatory bodies. Further research is essential to establish standardized ethics and laws in the physical therapy profession in Sudan.

Keywords: Ethics, Law, Regulation, Sudanese Physiotherapy.

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#### Introduction:

Physiotherapists encounter ethical dilemmas in their practice, including meeting patient needs and managing resource constraints. Although they undergo ethics training in their studies, teaching ethics effectively poses challenges. While interest in professional ethics in physiotherapy has grown, understanding in this area remains restricted. Identifying and addressing pertinent ethical issues is crucial for providing quality care as a physiotherapist.

Ethics in physical therapy pertains to the moral principles that foster mutual respect and trust among therapists, patients, and other healthcare providers<sup>1</sup>. These principles and standards are essential for experts in the area to facilitate successful interactions and maintain ethical practices. To examine the ethical dimensions of the therapeutic connection between physiotherapists and patients, it is imperative to understand the ethics training received by the therapist, their fundamental views towards ethical professional conduct, and their practical experiences in the field<sup>2-3</sup>. The World Confederation of Physical Therapy (WCPT) emphasizes that physiotherapy educational programs should align their curricula with the ethical value of upholding the rights and dignity of all individuals; however, there is limited evidence supporting this alignment<sup>4</sup>.

The physiotherapy education programs in Sudan started in the early 2000s with the aim of training physiotherapists for the local community<sup>5,6</sup>. At present, multiple physiotherapy programs offer undergraduate education, but there is limited information available about the specifics of the curriculum content<sup>5</sup>. Oyeyemi (2011)<sup>7</sup> emphasizes that physiotherapists must engage in ethical decision-making during their practice. This involves examining various options and recognizing moral contradictions, which should be acknowledged rather than resolved. Solutions should be developed through discussions with all parties, including patients. So that all perspectives are taken into consideration and the best course of action can be determined .

Oyeyemi (2011)<sup>7</sup> also highlights the importance of ongoing professional development and staying up-todate with advancements in the field of physiotherapy. By constantly striving to improve their skills and knowledge, physiotherapists can provide the best possible care to their patients and contribute to the overall well-being of the community. Consequently, a primary objective of the Sudanese Physiotherapy Association (SuPTA) is to enhance knowledge among physiotherapists concerning their professional obligations. Additionally, SuPTA collaborates with the Sudanese National Council for the Medical and Health (SNCMHP) which mandates Profession that physiotherapists participate in at least two lectures on ethics and law as part of their registration process<sup>8</sup>. Those lectures made the physiotherapists aware of legal and ethical risks such as negligence, malpractice, breach of confidentiality, informed consent, conflict of interest, and professional misconduct to protect themselves from liability and reputational damage. They should also build trust with clients by demonstrating respect, honesty,

integrity, and professionalism<sup>8</sup>. Additionally, physiotherapists can expand services and opportunities by understanding legal and ethical implications. Legal and ethical knowledge is crucial for physiotherapists to thrive in their practice and career<sup>1</sup>.

Yet, there is limited data on the ethical and legal understanding of Sudanese physiotherapists. Hence, the impact of ethics and legality on physical therapy services in Sudan remains uncertain. Although legal and ethical knowledge is crucial for physiotherapists, Sudanese practitioners can still deliver effective services without an in-depth grasp of these concepts. Ethics and legality may have a less pronounced effect on physical therapy services in Sudan compared to countries with stricter regulations. However, it is still important for practitioners to be aware of ethical considerations and legal requirements in order to ensure the highest quality of care for their patients. Thus, having a good understanding of ethical principles and legal requirements is essential to prevent ethical dilemmas and legal consequences in healthcare<sup>2-4</sup>.

The ethics of physiotherapy practice is fundamental to ensuring the quality of services offered to clients/patients; understanding and applying these principles optimizes and sustains the long-term quality of physiotherapy services. Our study aims to evaluate the knowledge, attitudes, and perceptions of physiotherapists concerning the practice of professional ethics.

### Method and Material:

#### Participants

This study employed a descriptive cross-sectional design with a purposive sample. The study involved 100 registered Sudanese physiotherapists with a minimum of one year of experience, engaged in hospitals or private clinics within Khartoum State, who met the eligibility criteria for participation. Individuals in this study who lacked licensure to perform physiotherapy, such as students and trainees, were excluded. Physiotherapists employed in Khartoum State were randomly selected for inclusion.

#### **Procedures:**

A self-administered questionnaire comprised closedended questions categorized into three primary sections in addition to the demographic information section:1) knowledge of ethical responsibilities 2) awareness of the function of regulatory bodies; 3) physiotherapists' attitudes towards the ethics and laws. The questionnaire items were developed through literature research and focus group discussions. Subsequent to the creation of the questionnaire, a panel of experts evaluated the questions and affirmed the face validity of the items. The expert group comprised three PhD holders in physical therapy. One individual from Jordan and two individuals from Sudan.

A pilot research study involving 10 individuals was conducted from May 14 to 16, 2021. The participants were either approached by the researcher at many health facilities or met during the Second Sudanese Physiotherapy Conference, hosted by the Sudanese Physiotherapy Network (SPTN) in Khartoum, Sudan, in 2021. The participants were requested to complete a survey and offer feedback regarding the clarity of the questionnaire items, phrasing, and response options. The feedback was predominantly positive, with only a few modifications to the phrasing of certain items. The subjects involved in the pilot study were excluded from the sample of this investigation. The pilot research and participant feedback were subsequently submitted to the expert panel. The final version was created following the expert panel's feedback on the pilot study and their observations, resulting in a thorough and refined questionnaire.

The research took place between June 2021 and December 2021. Approval for the study was granted by the Ethical Committee of Ahfad University for Women. Physiotherapists provided informed consent prior to completing the questionnaire. They were assured that their identities would remain anonymous, their information confidential, and that they could withdraw from the study at any time if they desired.

An envelope was hand-delivered, comprising multiple copies of the questionnaires, proportionate to the number of physiotherapists in the relevant department in Khartoum city (5 public and 7 private). The department supervisor who consented to partake in this inquiry disseminated the copies to the therapists subsequent to receiving the envelope. The supervisor was directed to store the envelope in a location accessible to all physiotherapists involved in the investigation. Upon completing the surveys, the therapists were directed to return them immediately to the envelope without transferring them to any other individual. This measure was implemented to ensure the confidentiality of the questionnaire from individuals other than the researchers. Upon completion of the questionnaire by the therapists in each department, the questionnaires were subsequently collected either later that day or the following day, contingent upon the follow-up communication with the physical therapy supervisor. Participants were required to sign a consent form before completing the questionnaire and were asked to disclose their age, sex, years of experience, and educational level in the demographic part.

Approximately 200 physiotherapists were deemed eligible to join this study from various hospitals and centers. With a confidence level of 95% (p<0.05) and a margin of error of 5% (0.05), a representative sample size of 132 was determined. Out of 140 distributed questionnaires, 115 were collected from participants. However, only 100 responses were included in this study's analysis. Around 25 were not returned, and 15 were excluded from the analysis due to incomplete answers in several sections..

#### **Data Analysis:**

The data were analyzed using SPSS v25 (IBM, Chicago, USA) and expressed as a percentage, and the results were presented in the form of tables and figures.

#### **Results:**

A majority of the study's respondents were females, making up 75% of the participants (75 out of 100), with

ages ranging from 23 to 52 years (mean age  $26.5\pm5.9$  years). Most of them held a bachelor's degree, and only a few had obtained a higher degree (as seen in Table 1). Forty percent (40) of the participants were employed at multiple physical therapy locations, with a mix of locations outlined in Table 1. Participants working in hospitals ranked second at 35%, while the remaining participants (ranging from 2% to 15%) were employed in other locations (Table 1).

#### Knowledge of ethical responsibilities.

In terms of undergraduate education in ethics, 71% of the respondents took an ethics and law course, whereas 29% did not. Among those who did receive ethical education, 25.4% were instructed in the course throughout all years, and the same percentage mentioned taking it in their third year. Additionally, 21.1% received the course in their second year, 16.9% took it in their final year, and 11.3% attended it during the first year. Most respondents (38%) believe that ethical education in physiotherapy should span all academic years. This was followed by 34% who felt it should be taught in the final year, while 15% suggested it be introduced in the first year. In addition, 99% of those surveyed considered the integration of professional ethics in physiotherapy into clinical training to be crucial, while only 1% did not see it as important. Just 3% rated their comprehension of ethics and law as poor, whereas 97% rated their understanding as very good.

#### Knowledge of the function of regulatory bodies

Forty-two percent of the participants noted that the SNCMHP governs the interactions between physiotherapists and other health professionals in public facilities, and 38% noted this for the private sector. Meanwhile, the majority believed the opposite concerning SNCMHP, with 58% and 62% respectively. Additionally, a majority of 79% of physiotherapists stated that the SNCMHP does not regulate the fees for physiotherapist services. Fifty-one percent of participants indicated that SNCMHP does not impose punitive measures for misconduct. Furthermore, 70% of participants reported that SuPTA effectively contributes enhancing awareness and increasing their to understanding of professional ethics.

# Physiotherapists' perceptions of professional ethics and laws.

Eighty nine percent of respondents believed that their professional views and ethical attitudes are shaped by personality traits and cultural background, while 11% disagreed, thinking that neither influences their perceptions and attitudes. Additionally, 79% thought the institutional environment greatly impacts the application of professional ethics, whereas 21% considered its impact weak. Moreover, 57% of physiotherapists updated their professional ethics knowledge annually, compared to 43% who didn't. Furthermore, 54% did not update their knowledge by reviewing the physiotherapy practice oath each year, while 46% did so.

#### **Discussion:**

The response rate reached 71.4% with 100 out of 140 participants, and the sample was both comprehensive and representative, maintaining a confidence level of 95% and a margin of error of  $\pm 6.9\%$  for Sudanese physiotherapists. In 2023, the SuPTA reported that 93% of registered physical therapists were female<sup>9</sup>. The study found that a significant portion (75%) of physiotherapists were women. This situation might be due to the predominance of women in Sudan's medical and paramedical sectors, highlighting a gender imbalance within the profession<sup>10</sup>.

In Sudan, many physiotherapists hold multiple jobs, with 40% of those surveyed exhibiting this pattern. While managing several roles can provide benefits such as improved time management and varied experience if well-organized, inadequate planning can degrade work quality. Thus, finding a balance between multiple positions and maintaining high professional standards is vital for Sudanese physiotherapists. This balance may enhance professional ethics and the healthcare system. However, holding multiple jobs can lead to potential conflicts in roles, time management challenges, and burnout. Physiotherapists must navigate complex roles, especially since occupational settings greatly affect their work, whereas their professional posts have less impact. This necessitates careful consideration of additional responsibilities<sup>11</sup>.

Most of the respondents recommended the ethics and law should be taught in the final or all years during the undergraduate program. However, studies recommended that the best year to teach these courses for physiotherapist students during their first year, as it has been found that they struggle to understand the relation between these topics and future professional practice at the beginning of their studies. Practical classes in manual skills training can facilitate their awareness and knowledge of philosophy of science, ethics, and communication<sup>12</sup>. Research also shows that undergraduate education is a strong stimulus to postconventional reasoning, which is important for ethical decision-making in the field of physiotherapy<sup>12,13</sup>. While it may be beneficial to introduce these courses early on, it is important to consider the potential overload of information for students in their first year of study. It may be more effective to gradually introduce these topics throughout the curriculum to allow for better retention and understanding<sup>13</sup>.

The study emphasizes the significance of understanding ethics and law in physiotherapy, as 70% of participants in an undergraduate physiotherapy program attended an ethics and law course, highlighting the importance of understanding these subjects in the field. Physiotherapists face numerous ethical challenges in their practice, and understanding these concepts is situations<sup>12</sup>. complex crucial for navigating Physiotherapists must possess knowledge and skills to make ethical decisions and uphold legal standards to provide the best care for their patients. However, reallife situations often require more than theoretical knowledge. Experience, critical thinking, and ongoing professional development are also essential for navigating ethical decisions and upholding legal standards. Staying informed on current best practices ensures physiotherapists provide the highest quality care while adhering to ethical principles and legal standards<sup>14</sup>.

Research findings show that only 42% of participants believed that SNCMHP significantly impacted guiding interactions between physiotherapists and other healthcare professionals in health facilities. It is believed that laws and ethics should define the interactions between physiotherapists and other healthcare professionals as essential ethical standards<sup>15</sup>. However, most participants felt that SNCMHP did not have control over the interactions between physiotherapists and other healthcare providers, possibly due to therapists' lack of awareness or inadequate oversight of SNCMHP protocols. Improving these relationships and promoting a culture of respect and collaboration among healthcare professionals can greatly enhance patient care<sup>15</sup>. Moreover, the majority of participants (51%) were doubtful about SNCMHP's ability to handle malpractice issues among physiotherapists, possibly because of perceived deficiencies in enforcement or communication. It is possible that the lack of authority and oversight by SNCMHP could lead to gaps in communication and accountability. Without a strong regulatory body overseeing physiotherapists, there may be limited recourse for addressing malpractice issues effectively<sup>16</sup>. The current study provides limited information on the role of SNCMHP, indicating a need for further exploration to understand its impact on ethical and legal standards in physiotherapy practice. Further research is needed to fully understand its role in promoting ethical and legal standards within physiotherapy practice. By following these standards, physiotherapists can enhance patient outcomes and improve the quality of care they deliver. While additional investigation is warranted, existing standards should be implemented to maintain ethical and legal standards in physiotherapy practice, ensuring improved professional relationships and patient care.

The regulation of health service fees presents a complex task in emerging nations. This is due to the apparent absence of a standardized charge schedule in numerous developing countries, contrasting sharply with the situation in industrialized nations<sup>3</sup>. This study indicated that SNCMHP does not significantly influence the regulation of physiotherapy treatment fees in Sudan. Conversely, individuals perceive that the circumstances regarding SuPTA and awareness differ from their perspectives. SuPTA contributes to the ethical standards of physical therapists and legal knowledge.

The majority of respondents contended that personal traits, cultural heritage, and the institutional context profoundly influence their professional viewpoints and ethical dispositions. The ethical conduct of physiotherapists can be influenced by several factors, including the ethical environment of the healthcare institution and the moral awareness of the therapists. Personality attributes like empathy and dedication are linked to an ethic of caring, which forms the foundation

of an effective physiotherapist's approach. Cultural background may influence the manner in which physiotherapists interact with patients and make ethical decisions. Research on the influence of personality qualities and cultural background on ethical practices among physiotherapists is scarce; however, it is clear that these factors might impact job satisfaction and employee retention<sup>18,19</sup>.

The responders exhibit a lack of interest in the periodic enhancement of their knowledge. Physiotherapists must enhance their understanding of legal statutes and regulations, as well as the ethical oath of practice, to foster a positive disposition towards the professional code of ethics and their professional oath. This coincided with the probe conducted on Nigerian physiotherapists. Samuel et al. (2019)<sup>20</sup> discovered that Nigerian physiotherapists possess a solid understanding of the professional code of ethics and the oath of professional conduct; yet their attitudes towards enhancing their knowledge on ethical issues are inadequate.

Physiotherapists risk becoming outdated about new laws and regulations that may affect their profession if they do not routinely update their expertise. By remaining knowledgeable and educated, physiotherapists may maintain the integrity of their profession and exhibit a dedication to delivering optimal care for their patients. Physiotherapists must focus on continuous education and growth to uphold a high quality of ethical practice. Regulatory organizations and professional associations are advised to conduct seminars and workshops on ethics physiotherapy and implement pre-renewal in assessments on ethics prior to each license renewal to mitigate this issue<sup>20</sup>.

#### Conclusion

The majority of Sudanese physiotherapists have a solid understanding of professional ethics; nevertheless, their attitudes towards the regular upgrading of their knowledge about the oath of practice and the SuPTA code of ethics were deemed inadequate. The research participants asserted that professional ethics are crucial to the physiotherapy field, and that ethics courses aimed at enhancing professional character and personality should be incorporated into the undergraduate curriculum at universities.

The findings revealed that physiotherapists' knowledge, attitudes, and perceptions about the practice of professional ethics were inadequate. Consequently, physiotherapists must be cognizant of their rights and responsibilities while adhering to ethical principles and rules. The study presents several recommendations, such as incorporating ethics and law courses into university curricula, enhancing awareness of professional ethics by disseminating the code of ethics via the internet and social media, organizing conferences, ensuring that every physiotherapist receives a copy of the updated codes of ethics upon registration, penalizing ethical misconduct in practice, and undertaking additional comprehensive studies.

#### Limitation

Nonetheless, the findings of this study cannot be extrapolated to all physiotherapists in Khartoum State, given that only 100 individuals participated. The instrument employed in this study was utilized to gather data regarding broad professional conduct ethics, rather than focusing on specific ethical principles that require attention and intervention.

#### **Recommendations:**

We advocate for comprehensive studies with larger samples that accurately represent different states in Sudan. Further research is necessary to establish standardized ethics and legal frameworks for the physiotherapy profession in Sudan.

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#### **Conflict of Interest**

The authors declare that they have no conflict of interest related to this manuscript.

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Table 1. Shows the demographic distribution of participants.		
	<u>N</u>	<u>(%)</u>
Age (Years)		
21-30	88	88%
31-40	8	8%
41-50	2	2%
51-60	2	2%
Gender		
female	71	71%
Male	29	29%
Places of Work		
Hospital	35	35%
Private work	15	15%
University	6	6%

#### Physiotherapists' Perceptions of Professional Ethics and Law

NGO	4	4%
More than one place	40	40%
Educational (degrees)		
BA	93	93%
MA	5	5%
PhD	2	2%
N: number; (%): percent; BSc: bachelor's degree; MA: Master's degree; PhD; Doctor of Philosophy.		

Table 2: Ethics at different undergraduate levels			
Years of study	Ν	(%)	
First (Freshman) year	8	11.3%	
Second year	15	21.1%	
Third year	18	25.4%	
The last year	12	16.9%	
All the years	18	25.4%	
Total	71	100%	