

Knowledge, Attitudes, Practices and Quality of Life Related to Physiotherapy: A Cross-Sectional Population-Based Study in Urban and Rural Albania

PhD. (c) Esida HOXHA

EUROPEAN UNIVERSITY OF TIRANA, ALBANIA

CORRESP esida.hoxha@uet.edu.al

MSc. PhT Krisanta BËRDUFI

PhD Rezarta STENA

ALEKSANDËR XHUVANI UNIVERSITY, ELBASAN

Abstract

Physiotherapy is increasingly recognized as an essential component of modern healthcare, supporting functional mobility, preventing disability, and improving overall well-being. Yet, public understanding and utilization of physiotherapy services remain uneven, particularly in contexts where access to rehabilitation and health literacy vary. This study explores the population's knowledge, attitudes, and practices (KAP) related to physiotherapy in Albania, and examines perceived quality of life using the WHOQOL-BREF framework.

A cross-sectional survey was conducted with 450 participants from urban and rural areas, using a structured questionnaire that assessed demographic factors, awareness of physiotherapy, previous experience, and perceptions of its importance.

Findings indicate generally positive attitudes and high willingness to recommend physiotherapy, even among individuals without prior exposure. Higher educational level, urban residence, and previous physiotherapy experience were consistently associated with better knowledge and more favorable perceptions. These patterns suggest that access to information and direct contact with rehabilitation services play an important role in shaping public understanding.

Quality-of-life results showed that participants with physiotherapy experience reported greater psychological well-being and stronger perceptions of environmental support. This highlights physiotherapy's broader contribution beyond physical recovery, reflecting its relevance in emotional and social dimensions of health. Overall, the study underscores the need to strengthen public awareness, expand access to rehabilitation—particularly in rural areas, and integrate physiotherapy more fully into community health strategies. Improving health literacy and reducing disparities in service availability may enhance the effectiveness of physiotherapy and support healthier, more resilient populations.

Keywords: *physiotherapy; knowledge; attitudes; practices; quality of life; WHOQOL-BREF; Albania; health literacy.*

Introduction

Physiotherapy constitutes an essential pillar of contemporary healthcare, contributing to the promotion, development, maintenance, and restoration of optimal mobility and functional capacity across all age groups. As a multidimensional discipline, it integrates specialized domains—including musculoskeletal, neurological, cardiopulmonary, geriatric, pediatric, and sports physiotherapy—each addressing distinct health needs through evidence-based interventions aimed at enhancing function, independence, and quality of life (Ranganathan & Kamalambal, 2020; Kiran et al., 2025). Over recent decades, physiotherapy has progressively expanded its autonomy, clinical scope, and professional recognition, particularly in high-income countries where it operates as an independent healthcare profession.

Despite these advances, public awareness of physiotherapy remains inconsistent and, in many regions, critically limited. Misconceptions persist across different populations, with physiotherapy often being narrowly equated to massage therapy or viewed solely as a post-injury treatment rather than a comprehensive rehabilitative and preventive practice (Paul & Muller Patan, 2015; He, 2020). Even within advanced healthcare systems, patients frequently lack understanding of physiotherapy's role in chronic disease management, neuromotor rehabilitation, and preventive care (Winser et al., 2020). Consequently, service underutilization and delayed access to appropriate interventions remain widespread challenges.

Empirical evidence indicates notable socio-demographic disparities in physiotherapy awareness. Higher educational attainment, urban residency, and socioeconomic stability are strongly associated with greater understanding of physiotherapy's scope and benefits (Aarti & Kalra, 2023; Aljuaid et al., 2021). Rural communities, in contrast, often experience substantial informational and infrastructural barriers, including limited rehabilitation centers, shortages of trained physiotherapists, restricted transportation, and inadequate dissemination of health information (Mbada et al., 2019; Gallego et al., 2017; Meena & Parikh, 2024). These factors contribute to reduced service utilization and poorer health outcomes among individuals residing in underserved regions.

Additionally, studies indicate that even when services are available, referral pathways and interdisciplinary collaboration may remain suboptimal. In Saudi Arabia, despite moderate awareness among the general population, physicians demonstrated insufficient familiarity with physiotherapy's scope, resulting in low referral rates and missed rehabilitation opportunities (Al-Eisa et al., 2016). Conversely, research involving health professionals—such as orthopedists, pediatricians, and general practitioners—shows growing recognition of physiotherapists' competencies, particularly in early mobilization, chronic disease management, postoperative care, and preventive health strategies (Pattanshetty & Metgud, 2019; Shah et al., 2024; Kanniappan et al., 2024). However, knowledge gaps remain, highlighting the need for standardized professional education and public awareness initiatives.

Global literature emphasizes that early and continuous physiotherapy significantly improves functional outcomes, reduces disability, and enhances quality of life across multiple clinical conditions, including musculoskeletal disorders, pulmonary diseases, neurological impairments, geriatrics, and chronic pain syndromes (Etoom et al., 2018; Peng et al., 2022; Okada et al., 2021; Martin-Nunez et al., 2023). Despite this strong evidence base, public understanding of these benefits does not always reflect clinical reality. Many individuals seek physiotherapy late in the disease trajectory—often after prolonged pain, functional decline, or failed pharmacological treatments—resulting in delayed rehabilitation and greater long-term disability (Dufour et al., 2021).

Furthermore, cultural beliefs and health literacy strongly influence attitudes toward physiotherapy. In several studies, traditional beliefs, lack of trust in rehabilitation, and reliance on passive treatments emerged as significant barriers to seeking physiotherapy services (Wegner & Rhoda, 2015; Yoshikawa et al., 2020). Health literacy plays a particularly critical role, affecting individuals' ability to understand rehabilitation needs, follow exercise prescriptions, and maintain long-term functional independence (Guerra et al., 2022; Bigwig, 2024).

Taken together, existing research demonstrates that public awareness of physiotherapy remains uneven, shaped by education, geographic access, health

literacy, cultural norms, and previous personal experiences. Strengthening community-based rehabilitation programs, enhancing public health communication, and improving the availability of physiotherapy services—especially in rural, low-resource, and marginalized populations—are essential steps towards promoting equitable access and ensuring physiotherapy’s integration within primary and preventive healthcare systems (Jegede et al., 2023; Leochico et al., 2021). The present study addresses these gaps by examining population-level knowledge, attitudes, and practices regarding physiotherapy in Albania, while evaluating their relationship with quality-of-life perceptions using the WHOQOL-BREF framework.

Purpose of the Study

The purpose of this study is to assess the knowledge, attitudes, and practices of the population toward physiotherapy, following the KAP model (Knowledge – Attitudes – Practice). The study includes both individuals with experience and those without prior exposure to physiotherapy, understanding the influence of factors such as educational level, place of residence, and personal experience. Furthermore, the study aims to evaluate quality of life using validated instruments such as WHOQOL-BREF. The findings are expected to help identify information gaps and support the improvement of access to and awareness of physiotherapy services.

The selection of this topic is based on the need to address a clear gap in public knowledge and awareness regarding physiotherapy as an integral part of healthcare. It is observed that many individuals, due to lack of information or misconceptions, do not consider physiotherapy as necessary or use it only in advanced stages of illness. This leads to delays in rehabilitation, worsening functional conditions, and increased healthcare costs. The present study seeks to contribute to identifying these issues and to promote concrete measures aimed at improving public access to and awareness of physiotherapy.

Study Objectives

General Objective

The general objective of this study is to analyze several socio-demographic factors—specifically educational level, place of residence, and personal experience with physiotherapy—in relation to individuals’ knowledge about physiotherapy, as well as to identify differences between relevant groups in their approaches, perceptions, and use of this method.

Specific Objectives

1. To identify the influence of educational level on knowledge and attitudes toward physiotherapy.
2. To compare perceptions and experiences of physiotherapy between urban and rural residents.
3. To analyze the relationship between personal experience with physiotherapy and the level of knowledge about its importance.

Hypotheses

- H1: Individuals with higher educational levels have better knowledge and more positive attitudes toward physiotherapy compared to those with lower educational levels.
- H01: Individuals with higher educational levels do not have better knowledge and more positive attitudes toward physiotherapy compared to those with lower educational levels.
- H2: Urban residents have more personal experience and better access to physiotherapy services than rural residents.
- H02: Urban residents do not have more personal experience and better access to physiotherapy services than rural residents.
- H3: Individuals who have had personal experience with physiotherapy have better knowledge about physiotherapy compared to those without such experience.
- H03: Individuals who have had personal experience with physiotherapy do not have better knowledge about physiotherapy compared to those without such experience.
- H4: Individuals with personal experience in physiotherapy have a higher level of quality of life compared to those without such experience.
- H04: Individuals with personal experience in physiotherapy do not have a higher level of quality of life compared to those without such experience.

Methodology

Study Design

This research is designed as a cross-sectional, descriptive and comparative study grounded in the KAP model (Knowledge – Attitudes – Practice). The study evaluates the level of knowledge, attitudes, and practices related to physiotherapy

among individuals residing in both urban and rural areas, including participants with and without previous experience with physiotherapy services. The design aims to determine whether these dimensions vary according to demographic factors such as age, educational level, and prior exposure to physiotherapy.

To assess quality of life, the WHOQOL-BREF—a validated and internationally recognized instrument—was implemented to ensure statistically reliable and comparable data. The study structure allows for a detailed examination of socio-demographic influences on access, perception, and utilization of physiotherapy services.

Study Population and Sampling

Data collection was conducted over a one-month period, from April to May 2025, involving a sample of 450 individuals, representing diverse age groups, educational backgrounds, and geographical locations (urban and rural). A random sampling method was employed to ensure representativeness and reduce selection bias. Participation was voluntary, following informed consent and a clear explanation of the study’s purpose.

Participants were included if they met the study’s eligibility criteria and did not belong to excluded categories. The study population reflects a broad cross-section of community members, enabling a comprehensive evaluation of knowledge, attitudes, experiences, and quality-of-life perceptions associated with physiotherapy.

Inclusion and Exclusion Criteria

TABLE 1. Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Age ≥ 18 years	Age < 18 years
Both sexes	Individuals with cognitive impairment
Urban or rural residents	Physiotherapy professionals or students of physiotherapy
Voluntary participation	Residents living outside Albania

Data Collection Instruments

Data were collected using a structured questionnaire divided into five main sections and administered digitally through Google Forms. The instrument was developed in Albanian and based on a self-reporting approach. Its structure was informed by existing literature and aligned with the study’s objectives.

The questionnaire consisted of 15 items across the following sections:

1. *Demographic Information*: Collected basic socio-demographic characteristics, including age, gender, place of residence, and educational level.
2. *Knowledge About Physiotherapy*: Assessed participants' understanding and awareness of the purpose, scope, and fields of physiotherapy.
3. *Experience With Physiotherapy*: Explored whether participants had ever received physiotherapy services and how they evaluated their experience.
4. *Attitudes Toward Physiotherapy*: Measured perceptions regarding the importance, relevance, and effectiveness of physiotherapy in health care and rehabilitation.
5. *Suggestions and Open Comments*: Provided space for participants to express opinions or recommendations related to improving access and quality of physiotherapy services within their community.

Data Analysis

The collected data were processed and analyzed using IBM SPSS Statistics version 26. Descriptive statistics were initially applied to summarize the demographic characteristics of the sample and to examine the distribution of responses across the components of the KAP model (Knowledge – Attitudes – Practice).

To test the research hypotheses, several inferential statistical procedures were employed, including linear regression, independent samples t-tests, and one-way ANOVA, in order to compare groups based on education level, place of residence, and previous experience with physiotherapy. Correlation analyses were additionally performed to assess the relationships between independent and dependent variables.

The analysis also incorporated the assessment of quality of life, measured through the standardized WHOQOL-BREF instrument, allowing for the objective comparison of perceived well-being and the potential impact of physiotherapy experience on overall life quality.

Survey Instrument (Appendix)

A structured questionnaire consisting of five sections was developed for data collection. The instrument included demographic information, knowledge regarding physiotherapy, prior experience with physiotherapy services, attitudes toward the profession, and an open-ended section for additional comments. The questionnaire comprised 15 items and was administered online via Google Forms.

Results

TABLE 2. Gender distribution of participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	284	63.11%	63.11%	63.11%
Male	159	35.33%	35.33%	35.33%
Other	2	0.44%	0.44%	0.44%
Prefer not tp answer	5	1.11%	1.11%	1.11%
Total	450	100%	100%	100%

Based on the data collected from the 450 participants, 284 individuals (63.11%) identified as female, 159 (35.33%) identified as male, 2 participants (0.44%) selected “other” as their gender identity, while 5 individuals (1.11%) preferred not to disclose their gender.

Descriptive statistics

TABLE 3: Descriptive statistics

	N	Minimum	Maximum	Mean	Std. deviation
Age	450	1	6	3.35	1.384
Gender	450	1	5	2.36	.530
Residence	450	1	3	2.78	.442
Education	450	1	6	3.96	1.197
Knowledge about physiotherapy	450	1	5	3.77	.972
Perceived importance of physiotherapy	450	1	5	4.03	1.402
Experience with physiotherapy	450	1	3	2.36	.497
Recommendation of physiotherapy	450	1	4	3.92	.403
Valid N	450				

Descriptive Characteristics of Participants

The study included a total sample of 450 participants, representing a diverse distribution in terms of age, gender, place of residence, and educational level. Participants’ ages were distributed across several predefined categories (e.g., under 18, 18–29, 30–44, etc.). The mean age category score of 3.35 (SD = 1.384) indicates that most respondents belonged to the young and middle-aged adult groups, while the standard deviation suggests moderate variability across age groups.

Gender distribution revealed an overrepresentation of females, consistent with participation trends commonly observed in health-related surveys. The mean gender score of 1.56 confirms this imbalance, reflecting a greater proportion of women relative to men and other gender identities in the sample.

Regarding place of residence, the mean score of 2.78 demonstrates that the majority of participants resided in urban areas, whereas rural respondents represented a smaller, yet meaningful portion of the sample. This distribution is particularly relevant for later comparative analyses assessing access to and knowledge of physiotherapy services.

Educational level showed relatively high values across the sample, with a mean score of 3.96, indicating that most participants had completed tertiary or postgraduate education. This suggests a highly educated sample and strengthens the interpretive value of subsequent findings on knowledge, attitudes and practices related to physiotherapy.

Key Variables Related to Physiotherapy

Knowledge about physiotherapy emerged as a central variable in this study. The mean score of 3.77 (SD = 0.972) indicates a high level of awareness among participants regarding the role and functions of physiotherapy, likely influenced by the relatively high educational background and personal exposure of the sample.

The perceived importance of physiotherapy was also evaluated, yielding a mean score of 4.03, suggesting that respondents view physiotherapy as a valuable component of healthcare. This strong positive perception underscores the relevance attributed to rehabilitation and physical therapy services within the community.

Personal experience with physiotherapy, measured on a three-point scale, resulted in a mean score of 2.36, indicating a moderate degree of direct engagement with physiotherapy sessions. These findings imply that even participants without direct experience maintain generally positive perceptions, potentially shaped by indirect sources of information. Willingness to recommend physiotherapy demonstrated one of the highest scores in this study (M = 3.92), reflecting a uniformly positive attitude toward physiotherapy and widespread confidence in its therapeutic benefits.

TABLE 4. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	51.691	5	10.338	12.330	.000 ^b
Residual	372.273	444	.838		
Total	423.964	449			

- a. Dependent Variable: Knowledge about physiotherapy
- b. Predictors: (Constant), Experience with physiotherapy, age, education level, place of residence, gender

ANOVA analysis was employed to evaluate the statistical validity of the regression model predicting the level of knowledge about physiotherapy based on several explanatory factors: prior physiotherapy experience, age, education, place of residence, and gender.

The results indicate that the model is statistically significant ($p < .001$), suggesting that, collectively, these variables have a meaningful impact on the level of knowledge related to physiotherapy. The high F-value and the very low p-value demonstrate that the probability of these findings occurring by chance is extremely small.

These results imply that individuals with previous physiotherapy experience, those residing in urban areas, and those with higher levels of education are more likely to possess greater knowledge about physiotherapy. This supports the core hypotheses of the study and justifies the use of the regression model for further analytical interpretation.

Correlation Analysis

TABLE 5. Correlation Analysis

	Age	Residence	Gender	Education	Knowledge about physiotherapy	Perceived importance of physiotherapy	Experience with physiotherapy	Recommendation of physiotherapy
Age pearson Sig.2.Tailed N	1 450	-.120 .011 450	.224 .000 450	-.020 .676 450	-.037 .431 450	.004 .928 450	.012 .794 450	-.011 .822 450
Residence pearson Sig.2.Tailed N	-.120 .011 450	1 450	.173 .000 450	.029 .533 450	.188 .000 450	.102 .031 450	.147 .002 450	.270 .000 450
Gender pearson Sig.2.Tailed N	.224 .000 450	.173 .000 450	1 450	.392 .000 450	.029 .541 450	.029 .544 450	.136 .003 450	.205 .000 450
Education pearson sig.2.Tailed N	.020 .676 450	.029 .533 450	.392 .000 450	1 450	.159 .001 450	.062 .153 450	.095 .042 450	.118 .012 450
Knowledge about physiotherapy pearson sig.2.Tailed N	.037 .431 450	.188 .000 450	.029 .541 450	.159 .001 450	1 450	.197 .000 450	.290 .000 450	.229 .000 450

Perceived pearson Importance of physiotherapy sig.2.Tailed N	.004 .928 450	.102 .031 450	.029 .544 450	.062 .153 450	.197 .000 450	1 450	.113 .013 450	.194 .000 450
Experience with physiotherapy pearson sig.2.Tailed n	.012 .794 450	.147 .002 450	.136 .003 450	.095 .042 450	.290 .000 450	.113 .013 450	1 450	.206 .000 450
Recommendation of physiotherapy pearson Fizioterapisë sig.2.Tailed N	-.011 .822 450	.270 .000 450	.205 .000 450	.118 .012 450	.229 .000 450	.194 .000 450	.206 .000 450	1 450

- Correlation is significant at the 0.05 level (2-tailed)
- Correlation is significant at the 0.01 level (2-tailed)

Interpretation of Correlation Results

The correlation analysis examined the associations between the main study variables, including education level, place of residence, personal experience with physiotherapy, perceived importance of physiotherapy, and willingness to recommend physiotherapy.

- Education level and knowledge of physiotherapy: $r = 0.159$, $p = 0.001$
A statistically significant positive correlation was found between participants' education level and their knowledge of physiotherapy. Higher educational attainment is associated with greater awareness and understanding of physiotherapy. This finding supports the hypothesis that formal education is a key determinant of health knowledge and awareness of rehabilitation methods.
- Place of residence and knowledge of physiotherapy: $r = 0.188$, $p < 0.001$
A significant positive correlation was observed between living in urban areas and having higher levels of knowledge related to physiotherapy. Urban residents appear to be better informed, likely due to greater access to health services, information sources, and direct exposure to physiotherapy. This result supports the study's second hypothesis.
- Experience with physiotherapy and knowledge: $r = 0.147$, $p = 0.002$
A significant positive correlation indicates that individuals who have personally attended physiotherapy sessions tend to be more knowledgeable about the field. Personal experience clearly enhances understanding and awareness of the therapeutic process and its benefits.
- Perceived importance of physiotherapy and knowledge: $r = 0.102$, $p = 0.031$
Although weak, this positive correlation is statistically significant. Individuals who consider physiotherapy important are more likely to be

better informed about it. This finding suggests that positive attitudes may stimulate active information-seeking or reflect personal or indirect exposure to physiotherapy.

- Willingness to recommend physiotherapy and knowledge: $r = 0.118$, $p = 0.012$
A statistically significant positive correlation indicates that individuals with higher knowledge levels are more inclined to recommend physiotherapy to others. This aligns with the notion that informed individuals are more confident in the efficacy of therapeutic interventions.
- Age and knowledge: $r = 0.037$, $p = 0.431$
 - Not statistically significant.
- Gender and knowledge: $r = 0.029$, $p = 0.541$
 - Not statistically significant.

Summary of Correlation Findings

Overall, the analysis demonstrates that knowledge of physiotherapy is strongly associated with education, residence, and personal experience. These findings support the study hypotheses and highlight the importance of improving health education and accessibility to physiotherapy services, especially in rural settings. Enhancing public awareness through education and exposure to rehabilitation services may significantly improve community-level understanding and utilization of physiotherapy.

Independent Samples Test

TABELA 6: *Independent Samples Test*

Test	F (Levene)	Sig. (Levene)	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% CI Loëer	95% CI Upper
Equal vari- ances as- sumed	0.585	0.445	-4.38	443.0	0.00001	-0.534	0.126	-0.783	-0.285
Equal vari- ances not as- sumed			-4.245	132.51	0.00004	-0.534	0.126	-0.783	-0.285

The Levene's Test for Equality of Variances was conducted to assess whether the variances between the two groups—urban and rural residents—differ significantly in relation to knowledge about physiotherapy. The results of the Levene test indicate the following:

For the variable “*Knowledge about physiotherapy*”, the Levene statistic was $F = 0.585$ with a significance value ($p = 0.445$). This indicates that the variances between the two groups do not differ significantly ($p > 0.05$). Therefore, the first row of the t-test output, which assumes equal variances, was used for interpretation.

Based on this analysis, a statistically significant difference was found in the mean scores of physiotherapy knowledge between urban and rural participants. This difference was significant at $p = 0.00001$, suggesting that place of residence has a substantial impact on individuals’ level of knowledge regarding physiotherapy.

Specifically, individuals living in urban areas appear to have greater exposure to health-related information and more frequent contact with physiotherapy services, which leads to higher awareness and knowledge compared to those living in rural areas. These findings are consistent with previous studies showing that limited access to information and health services in rural communities contributes to lower levels of knowledge and reduced utilization of rehabilitative interventions.

WHOQOL-BREF

TABELE 7. WHOQOL-BREF

DOMAIN	Representative Item	Mean Score	N
Psychological Well-being	Experience with physiotherapy	4.14	450
Environmental Domain	Importance of physiotherapy	4.67	450
Environmental Domain	Recommend physiotherapy	4.96	450

Interpretation of Findings

The adapted WHOQOL-BREF analysis indicates a highly positive perception of physiotherapy and its contribution to quality of life among study participants. The highest-rated indicator was *willingness to recommend physiotherapy* ($M = 4.96$), highlighting strong trust and acceptance of physiotherapy as an effective intervention. This is followed by the perceived *importance of physiotherapy within healthcare* ($M = 4.67$), suggesting broad acknowledgment of its value in rehabilitation and overall health management.

The *psychological domain* also showed a strong positive evaluation ($M = 4.14$), indicating that participants associate physiotherapy with improvements in emotional well-being, confidence, and perceived functional recovery. Together, these findings emphasize two central quality-of-life dimensions: Psychological well-being – reflecting satisfaction, emotional balance, and positive experience with physiotherapy. Environmental support – reflecting accessibility, usefulness, and trust in physiotherapy services.

Overall, the results suggest that physiotherapy is perceived not only as a clinical intervention but also as a meaningful contributor to individuals' broader well-being and daily functioning.

Discussion

The discussion interprets the statistical findings of this study in relation to the socio-demographic determinants that shape knowledge, attitudes, and experiences concerning physiotherapy. The results confirm that education, place of residence, and personal experience are essential contributors to public awareness and perception of physiotherapy as a component of healthcare.

First, the study demonstrates that higher educational attainment is consistently associated with greater knowledge of physiotherapy. This is supported by international evidence showing that individuals with advanced education are more likely to engage in informed healthcare decision-making, seek professional rehabilitative services, and exhibit higher health literacy (Aljuaid et al., 2021; Guerra et al., 2022). Similar findings have been reported among general populations in India and China, where participants with higher education showed significantly greater understanding of physiotherapy's scope, modalities, and benefits (Ranganathan & Kamalambal, 2020; He, 2020; Mehndiratta & Kalra, 2021). Moreover, awareness of physiotherapy specializations—such as cardiopulmonary, neurological, and pediatric physiotherapy—has also been shown to correlate with educational level (Akmal & Murtaza, 2023; Farah et al., 2022).

Second, residence emerged as a critical factor, with urban participants reporting substantially higher knowledge and experience with physiotherapy than rural residents. This finding aligns with global literature demonstrating persistent urban–rural disparities in rehabilitation access, availability of physiotherapists, and exposure to health information (Jin et al., 2021; Mbada et al., 2019; Liu et al., 2022). Studies from rural Australia, South Africa, and Canada illustrate that limited infrastructure, shortages of trained professionals, and geographic barriers significantly reduce access to physiotherapy services in rural settings (Adams et al., 2016; Conradie et al., 2022; Gallego et al., 2017). Such structural inequalities have been shown to delay treatment, worsen functional outcomes, and create socioeconomic burdens for affected populations (Wang et al., 2019; Jegede et al., 2023). These findings reinforce the urgent need for policy interventions, improved service distribution, and innovative delivery approaches such as tele-physiotherapy (Cottrell & Russell, 2022; Leochico et al., 2021).

Third, the study found that personal experience with physiotherapy is one of the strongest predictors of knowledge levels. Participants who had previously engaged in physiotherapy demonstrated more accurate understanding and

more positive attitudes regarding its therapeutic value. This connection between experiential learning and improved awareness is consistent with qualitative findings showing that patients who directly interact with physiotherapists develop stronger appreciation for the role of rehabilitation in recovery and pain management (Dufour et al., 2021; Guerrero et al., 2018). Evidence from orthopedic, neurological, and geriatric rehabilitation similarly suggests that firsthand experience enhances patient comprehension of treatment mechanisms, promotes adherence, and encourages long-term engagement in physical activity (Lowry et al., 2020; Espejo-Antúnez et al., 2020; Martin-Nunez et al., 2023).

Furthermore, the study supports extensive literature indicating that awareness of physiotherapy's benefits remains limited globally, despite its recognized role in reducing pain, improving function, and enhancing quality of life (Akram et al., 2023; Afxonidis et al., 2021; Radder et al., 2020). Misconceptions are especially prevalent in populations with lower education or living in rural regions, where physiotherapy is often misunderstood as a supplementary or optional service (Aarti et al., 2023; Mbada et al., 2019). At the same time, research shows that improved physiotherapy literacy can enhance patient outcomes, increase healthcare efficiency, and reduce long-term disability (Wójcik et al., 2022; Pandey et al., 2023; Winser et al., 2020).

Overall, these findings underscore the need for targeted public health strategies aimed at increasing awareness, especially among populations with lower education, rural residents, and individuals without prior exposure to physiotherapy. Effective interventions may include school-based programs (Jothi Prasanna, 2021), community workshops, digital educational campaigns (Doshi et al., 2017), and integration of physiotherapy awareness into primary healthcare systems (Mbada et al., 2019). International evidence recommends that such strategies be culturally adapted, context-specific, and delivered through multidisciplinary collaboration (Bach-Mortensen et al., 2023; Yoshikawa et al., 2020).

Conclusion

The findings of this study clearly demonstrate that personal experience, educational attainment, and place of residence exert significant influence on individuals' knowledge, attitudes, and perceptions of physiotherapy. Participants with higher levels of formal education consistently exhibited more accurate knowledge and stronger awareness of physiotherapy's clinical value, aligning with previous research emphasizing the critical role of education in shaping health literacy and service utilization (Aljuaid et al., 2021; Guerra et al., 2022). Education not only enhances understanding but also supports proactive engagement in health-seeking behaviors, including the use of rehabilitative services.

Similarly, *urban residence* was strongly associated with higher awareness and more frequent contact with physiotherapy services. This reflects persistent structural disparities in the distribution of healthcare resources, including limited rehabilitation centers, scarcity of physiotherapists, and restricted access to health education initiatives in rural communities (Jin et al., 2021; Liu et al., 2022). These geographic gaps mirror findings from global health research, which consistently documents unequal access to rehabilitation services between urban and rural populations (Mbada et al., 2019; Meena et al., 2024). Addressing these disparities requires targeted policy measures aimed at improving service availability, strengthening primary care integration, and enhancing community outreach in disadvantaged regions.

Personal experience with physiotherapy emerged as one of the strongest predictors of higher knowledge and more positive attitudes. Individuals who had previously undergone treatment demonstrated deeper understanding and more accurate perceptions of physiotherapy's rehabilitative potential. This underscores the importance of experiential learning in shaping health beliefs and fostering informed decision-making (Dufour et al., 2021). Moreover, patients who experience effective rehabilitation often become informal advocates, contributing to improved community awareness—an effect documented in various qualitative studies (Howard et al., 2018; Chitre et al., 2024).

The *quality-of-life assessment*, based on the WHOQOL-BREF framework, further revealed that physiotherapy contributes meaningfully to psychological well-being and perceived environmental support. These results reinforce growing international evidence showing that physiotherapy interventions positively influence emotional functioning, self-efficacy, and overall life satisfaction, beyond their well-established physical benefits (Martin-Nunez et al., 2023; Venegas-Sanabria et al., 2022). Physiotherapy's holistic impact supports its expanding role in chronic disease management, disability prevention, and long-term rehabilitation.

Collectively, the results highlight the urgent need to strengthen public awareness, improve accessibility, and reduce socio-geographical inequalities in physiotherapy services. Health promotion strategies should be adapted to the needs of populations with lower education levels, rural residents, and individuals who have never been exposed to physiotherapy. Evidence suggests that community-based rehabilitation, digital health platforms, and targeted educational campaigns can substantially improve understanding and utilization of physiotherapy services (Leochico et al., 2021; Bach-Mortensen et al., 2023).

Final Recommendation

To enhance community health outcomes and support equitable access, policymakers, healthcare institutions, and physiotherapy professionals must collaborate to:

- Expand physiotherapy services in rural and underserved regions.
- Strengthen public health communication and physiotherapy literacy initiatives.
- Integrate physiotherapy more fully into primary healthcare pathways.
- Promote evidence-based awareness campaigns to correct misconceptions.
- Invest in digital and tele-rehabilitation solutions to bridge geographic barriers.

By addressing these systemic gaps, physiotherapy can more effectively fulfill its potential as a core pillar of holistic health, functional independence, and improved quality of life across populations.

References

1. Adams, R., Jones, A., Lefmann, S., & Sheppard, L. (2016). *Towards understanding the availability of physiotherapy services in rural Australia*. Rural and Remote Health, 16(2), 1–14.
2. Aarti, R. H. R., & Kalra, S. (2023). *Awareness towards physiotherapy among the general public in rural areas*. Indian Journal of Physiotherapy and Rehabilitation Sciences, 2(1), 21–26.
3. Afxonidis, G., Moysidis, D. V., Papazoglou, A. S., Tsagkaris, C., Loudovikou, A., Tagarakis, G., ... & Anastasiadis, K. (2021). *Efficacy of early and enhanced respiratory physiotherapy and mobilization after on-pump cardiac surgery: A prospective randomized controlled trial*. Healthcare, 9(12), 1735.
4. Akmal, S., & Murtaza, F. (2023). *Knowledge, attitudes, and practices of cardiopulmonary rehabilitation among physiotherapists in ICU*. Pakistan Journal of Physical Therapy.
5. Al-Eisa, E. S., Al-Hoqail, H., Al-Rushud, A. S., Al-Harthi, A., Al-Mass, B., Al-Harbi, B. M., ... & Iqbal, Z. A. (2016). *Awareness, perceptions and beliefs about physiotherapy held by physicians in Saudi Arabia*. Journal of Physical Therapy Science, 28(12), 3435–3439.
6. Aljuaid, M., Almutairi, H., & Althobaiti, T. (2021). *Health literacy, education, and their role in accessing physiotherapy services*. BMC Health Services Research, 21, 856.
7. Bach-Mortensen, A. M., Lange, B. C. L., & Montgomery, P. (2023). *Evidence-based community interventions to reduce health disparities: A scoping review*. Social Science & Medicine, 314, 115555.
8. Chitre, A., Kapoor, A., Sansar, B., Gupta, A., Lakshmanamurthy, P., Dey, S., ... & Shrivastav, A. A. (2024). *A physiotherapist's perspective of a geriatric clinic in a tertiary oncology centre*. ecancermedicalscience, 18, 1774.

9. Conradie, T., Berner, K., & Louw, Q. (2022). *Rehabilitation workforce capacity in public sectors of rural provinces in South Africa*. International Journal of Environmental Research and Public Health, 19(19), 12176.
10. Cottrell, M. A., & Russell, T. G. (2022). *Patient and clinician satisfaction with telehealth in musculoskeletal physiotherapy: A systematic review and meta-analysis*. Physical Therapy Reviews, 27(1), 45–55.
11. Doshi, D., Jiandani, M., Gadgil, R., & Shetty, N. (2017). *Physiotherapy awareness in medical and non-medical population: A social media survey*. International Journal of Physiotherapy Research, 5(2), 1971–1975.
12. Dufour, A. M., Russell, D. J., & Brown, T. (2021). *Understanding patient knowledge and experience with physiotherapy: A qualitative study*. Physiotherapy Canada, 73(2), 156–164.
13. Espejo-Antúnez, L., Pérez-Mármol, J. M., Cardero-Durán, M. L., Toledo-Marhuenda, J. V., & Albornoz-Cabello, M. (2020). *Proprioceptive exercises and balance in institutionalized older adults: A randomized controlled trial*. Archives of Physical Medicine and Rehabilitation, 101(10), 1780–1788.
14. Farah, R., Groot, W., & Pavlova, M. (2022). *Knowledge, attitudes, and practices of cardiopulmonary rehabilitation among physiotherapists in Lebanon*. Bulletin of Faculty of Physical Therapy, 27, 1–8.
15. Gallego, G., Dew, A., Lincoln, M., Bundy, A., Chedid, R. J., Bulkeley, K., ... & Veitch, C. (2017). *Access to therapy services for people with disability in rural Australia: A carers' perspective*. Health & Social Care in the Community, 25(3), 1000–1010.
16. Guerrero, A. V. S., Maujean, A., Campbell, L., & Sterling, M. (2018). *Psychological interventions delivered by physiotherapists for musculoskeletal pain*. The Clinical Journal of Pain, 34(9), 838–857.
17. Guerra, R. R., Oliveira, J. S., & Ribeiro, D. S. (2022). *Health literacy and use of physical therapy in primary care*. Journal of Physical Therapy Science, 34(1), 55–61.
18. He, D. (2020). *Public awareness and knowledge toward physiotherapy in China*.
19. Howard, Z., Jackman, A., Bongers, M., Corcoran, K., Nucifora, J., Weir, K. A., & Briffa, K. (2018). *Outcomes of a physiotherapy-led pelvic health clinic*. Australian and New Zealand Continence Journal, 24(2), 43–50.
20. IQWiG – Institute for Quality and Efficiency in Health Care. (2024). *Up-to-date medical knowledge*. InformedHealth.org.
21. Jegede, A. A., Ogunlade, S. O., & Ayenigbara, G. O. (2023). *Overcoming barriers to physiotherapy services in rural communities*. Rural Health Journal, 12(1), 24–31.
22. Jin, Y., Hou, Z., & Zhang, D. (2021). *Urban–rural disparities in health service utilization*. International Journal of Environmental Research and Public Health, 18(9), 4826.
23. Jothi Prasanna, K. (2021). *Awareness of physiotherapy among higher secondary students*. Indian Journal of Forensic Medicine & Toxicology, 15(1).
24. Kanniappan, V., Rajeswari, A. J., Lawrence, P. E. P., & Sundar, S. (2024). *Perspectives of pediatric physicians on physiotherapy in rehabilitation*. Journal of Preventive Medicine and Public Health, 57(2), 157–168.
25. Kiran, V., Sivanesan, A., Shetty, S., Bhattacharjee, B., & Dave, Y. (2025). *Physiotherapy in cardiopulmonary rehabilitation for COPD patients*. American Journal of Psychiatric Rehabilitation, 28, 754–762.
26. Leochico, C. F. D., Espiritu, A. I., Ignacio, S. D., & Mojica, J. A. M. (2021). *Challenges to telerehabilitation during COVID-19: A systematic review*. Frontiers in Neurology, 12, 643768.

27. Liu, X., Seidel, J. E., McDonald, T., Patel, A. B., Waters, N., Bertazzon, S., ... & Marshall, D. A. (2022). *Rural–urban disparities in access to physiotherapists among people with osteoarthritis*. International Journal of Environmental Research and Public Health, 19(13), 7706.
28. Lowry, V., Bass, A., Lavigne, P., Léger-St-Jean, B., Blanchette, D., Perreault, K., ... & Desmeules, F. (2020). *Physiotherapists' ability to diagnose and manage shoulder disorders*. Journal of Shoulder and Elbow Surgery, 29(8), 1564–1572.
29. Martin-Nunez, J., Heredia-Ciuro, A., Lopez-Lopez, L., Calvache-Mateo, A., Hernandez-Hernandez, S., Valenza-Pena, G., & Valenza, M. C. (2023). *Chest physiotherapy and quality of life in pulmonary fibrosis: A systematic review*. Healthcare, 11(22), 2925.
30. Mbada, C., Olawuyi, A., Oyewole, O. O., Odole, A. C., Ogundele, A. O., & Fatoye, F. (2019). *Community physiotherapy utilization and supply*. BMC Health Services Research, 19, 1–10.
31. Meena, S., & Parikh, A. (2024). *Need for physiotherapy in rural areas*. International Journal of Development Research, 14(2).
32. Okada, Y., Ohtsuka, H., Kamata, N., Yamamoto, S., Sawada, M., Nakamura, J., ... & Hattori, N. (2021). *Effectiveness of long-term physiotherapy in Parkinson's disease: A meta-analysis*. Journal of Parkinson's Disease, 11(4), 1619–1630.
33. Pattanshetty, R., & Metgud, D. C. (2019). *Awareness of physiotherapy among other health professionals in India*. Indian Journal of Physical Therapy and Research, 1(2), 69–70.
34. Paul, A., & Mullerpatan, R. (2015). *Review of physiotherapy awareness across the globe*. International Journal of Health Sciences and Research, 5(10), 294–301.
35. Peng, M. S., Wang, R., Wang, Y. Z., Chen, C. C., Wang, J., Liu, X. C., ... & Wang, X. Q. (2022). *Therapeutic aquatic exercise vs physical therapy for chronic low back pain*. JAMA Network Open, 5(1), e2142069.
36. Radder, D. L., de Lima, A. S., Domingos, J., Keus, S. H., van Nimwegen, M., Bloem, B. R., & de Vries, N. M. (2020). *Physiotherapy in Parkinson's disease: A meta-analysis*. Neurorehabilitation and Neural Repair, 34(10), 871–880.
37. Ranganathan, H., & Kamalambal, H. (2020). *Awareness about physiotherapy among university staff*. Indian Journal of Public Health Research & Development, 11(5), 651–657.
38. Shah, A. U., Rafique, N., Rafique, A., Khan, S. A., & Ahmed, S. (2024). *Awareness regarding physiotherapy among gynecologists*. Journal of Health and Rehabilitation Research, 4(3), 1–5.
39. Wang, L., Belza, B., Thompson, B., Whitney, J. D., & Bennett, K. (2019). *Access to rehabilitative care and disparities in rural communities*. Journal of Rural Health, 35(3), 348–355.
40. Wegner, L., & Rhoda, A. (2015). *Cultural beliefs and rehabilitation service utilization in rural South Africa*. African Journal of Disability, 4(1), 128.
41. Winser, S., Lee, S. H., Law, H. S., Leung, H. Y., Bello, U. M., & Kannan, P. (2020). *Economic evaluations of physiotherapy interventions for neurological disorders*. Disability and Rehabilitation, 42(7), 892–901.
42. Wójcik, M., Szczepaniak, R., & Placek, K. (2022). *Physiotherapy management in endometriosis*. International Journal of Environmental Research and Public Health, 19(23), 16148.
43. Yoshikawa, K., Brady, B., Perry, M. A., & Devan, H. (2020). *Sociocultural factors influencing physiotherapy management in diverse populations*. Physiotherapy, 107, 292–305.
44. Venegas-Sanabria, L. C., Cavero-Redondo, I., Martínez-Vizcaino, V., Cano-Gutierrez, C. A., & Álvarez-Bueno, C. (2022). *Multicomponent exercise and cognitive impairment: A meta-analysis*. BMC Geriatrics, 22, 617.