



PUBLIC PERCEPTION OF PHYSIOTHERAPY AS A PRIMARY HEALTHCARE PROFESSION: A COMMUNITY-BASED CROSS-SECTIONAL STUDY

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ABSTRACT

Background:

Physiotherapists play an increasingly important role in the prevention, assessment, and management of movement disorders and chronic health conditions. In many healthcare systems, physiotherapists function as first-contact practitioners through direct access models. However, public awareness of the scope of physiotherapy practice and acceptance of physiotherapists as primary healthcare professionals remain limited in several countries. Understanding public perception is essential for improving healthcare utilization, promoting direct access to physiotherapy, and strengthening the role of physiotherapists within primary healthcare.

Objective:

To assess public perception of physiotherapy as a primary healthcare profession and identify factors associated with positive perception and willingness to consult physiotherapists as first-contact healthcare providers.

Methods:

A community-based cross-sectional survey was conducted among **520 adults aged 18 years and above** recruited from urban and semi-urban communities using multistage sampling. Participants completed a validated self-administered questionnaire consisting of five domains: demographic characteristics, awareness of physiotherapy, knowledge of physiotherapy scope of practice, perception of physiotherapists as primary healthcare professionals, and willingness to access physiotherapy services directly. Knowledge and perception scores were calculated using standardized Likert-scale responses. Descriptive statistics, independent-samples t-tests, Chi-square tests, Pearson's correlation, and multiple linear and binary logistic regression analyses were performed. Statistical significance was set at $p < 0.05$.

Results:

The mean age of participants was **34.8 ± 11.7 years**, and **52.5%** were female. Overall, **78.1%** had previously heard of physiotherapy, while **46.9%** had received physiotherapy treatment at least once. Although **82.7%** correctly identified physiotherapy as beneficial for musculoskeletal conditions, awareness of its role in neurological rehabilitation (**51.5%**), cardiopulmonary rehabilitation (**38.4%**), women's health (**34.6%**), pediatric rehabilitation (**41.2%**), and preventive healthcare (**43.8%**) was considerably lower.

The mean perception score was **74.6 ± 10.8** (possible range: 20–100). Overall, **68.3%** of participants considered physiotherapists competent primary healthcare professionals, and **64.8%** expressed willingness to consult a physiotherapist directly for common musculoskeletal complaints without physician referral. Participants with previous physiotherapy experience demonstrated significantly higher perception scores than those without prior exposure (**79.3 ± 9.4 vs. 70.5 ± 10.6 ; $p < 0.001$).**

Multiple linear regression identified previous physiotherapy experience ($\beta = 0.34$, $p < 0.001$), higher educational level ($\beta = 0.27$, $p < 0.001$), and greater knowledge of physiotherapy services ($\beta = 0.41$, $p < 0.001$) as independent predictors of positive perception. Binary logistic regression demonstrated that previous physiotherapy experience (Adjusted OR = **2.63**, 95% CI: 1.71–4.05), higher education (Adjusted OR = **1.89**, 95% CI: 1.24–2.88), and greater knowledge scores (Adjusted OR = **3.12**, 95% CI: 2.11–4.61) significantly increased the likelihood of willingness to seek direct-access physiotherapy.

Conclusion:

Although awareness of physiotherapy was generally satisfactory, important misconceptions regarding the profession's scope of practice remain. Previous exposure to physiotherapy, higher educational attainment, and greater knowledge were independently associated with more favourable perceptions and greater acceptance of physiotherapists as first-contact healthcare providers. Public education initiatives and advocacy programmes highlighting the comprehensive role of physiotherapy may improve utilization of physiotherapy services and facilitate broader acceptance of physiotherapists within primary healthcare systems.

KEYWORDS: Physiotherapy; Primary Healthcare; Public Perception; Direct Access; Awareness; Community Survey; Health Services Research; Cross-Sectional Study.

INTRODUCTION

Physiotherapy has evolved considerably over the past few decades from a profession primarily associated with rehabilitation to an autonomous healthcare discipline that plays a pivotal role in health promotion, disease prevention, diagnosis, treatment, and functional restoration across the

lifespan. Contemporary physiotherapy practice encompasses a broad spectrum of specialties, including musculoskeletal, neurological, cardiopulmonary, pediatric, geriatric, sports, women's health, oncology, community-based rehabilitation, and intensive care services (1,2). Physiotherapists are increasingly recognized as experts in movement science and



evidence-based non-pharmacological management, contributing significantly to improved patient outcomes and reduced healthcare costs.

Globally, healthcare systems are shifting towards patient-centered and primary healthcare models that emphasize early intervention, accessibility, and cost-effective management of health conditions. Within this framework, physiotherapists have emerged as important primary healthcare providers, particularly for musculoskeletal disorders, chronic pain, and movement-related dysfunctions (3). Several countries, including Australia, the United Kingdom, Canada, New Zealand, the Netherlands, and parts of the United States, have successfully implemented direct access or self-referral models, allowing patients to consult physiotherapists without requiring a physician's referral (4,5). Evidence suggests that direct access physiotherapy is associated with comparable or improved clinical outcomes, shorter waiting times, fewer unnecessary diagnostic investigations, reduced medication use, and lower healthcare expenditure compared with traditional physician-led referral pathways (6–8).

Despite substantial advances in professional education and clinical practice, public understanding of physiotherapy remains inconsistent. Many individuals continue to perceive physiotherapy primarily as a rehabilitation service delivered after surgery, fractures, or sports injuries, while awareness of its preventive, diagnostic, and primary care roles remains limited (9). Misconceptions regarding the professional autonomy, scope of practice, and clinical competencies of physiotherapists may delay appropriate healthcare utilization and reduce opportunities for early conservative management of various health conditions.

Previous studies conducted across different countries have reported varying levels of public awareness and perception regarding physiotherapy. While most participants recognize the role of physiotherapists in managing back pain and orthopedic conditions, considerably fewer are aware of their contributions to neurological rehabilitation, cardiopulmonary care, women's health, pediatric rehabilitation, geriatric care, occupational health, and chronic disease prevention (10–12). Furthermore, willingness to seek physiotherapy as a first point of contact appears to be strongly influenced by previous personal experience, educational status, healthcare accessibility, and physician recommendations (13). Individuals with prior exposure to physiotherapy generally demonstrate greater trust in physiotherapists' clinical expertise and are more likely to utilize physiotherapy services independently (14).

In developing countries, including India, physiotherapy education and clinical practice have expanded considerably over the past two decades. Physiotherapists are actively involved in tertiary hospitals, rehabilitation centers, sports medicine facilities, intensive care units, community health programs, and private practice. However, awareness among the general public has not progressed at the same pace. Many patients continue to consult physiotherapists only after referral from physicians, often due to limited knowledge regarding direct access, uncertainty about the professional qualifications of physiotherapists, or misconceptions about the range of conditions that physiotherapy can effectively manage (15). These perceptions may contribute to delayed intervention,

prolonged disability, increased healthcare costs, and underutilization of physiotherapy services.

Understanding public perception is essential for strengthening the role of physiotherapy within primary healthcare systems. Assessing knowledge, attitudes, and acceptance of physiotherapists as first-contact healthcare providers can inform educational campaigns, healthcare policy, curriculum development, and professional advocacy initiatives. Identifying demographic and experiential factors associated with positive perceptions may also help healthcare organizations design targeted awareness programs aimed at improving public engagement with physiotherapy services.

Although several international studies have explored awareness of physiotherapy, evidence from community-based populations in developing countries remains limited. Moreover, many previous investigations have focused primarily on awareness rather than examining public perception of physiotherapy as an autonomous primary healthcare profession. There is also limited evidence regarding factors influencing willingness to directly access physiotherapy services without physician referral. Addressing these knowledge gaps is important for supporting healthcare reforms that encourage timely access to evidence-based conservative care.

Therefore, the present study aimed to assess public perception of physiotherapy as a primary healthcare profession among adults in a community setting and to identify factors associated with positive perceptions and willingness to consult physiotherapists as first-contact healthcare providers. The findings of this study may contribute to policy development, public awareness initiatives, and strategies that strengthen the integration of physiotherapy into primary healthcare systems.

METHODS

Study Design

A community-based cross-sectional survey was conducted to assess public perception of physiotherapy as a primary healthcare profession among adults residing in urban and semi-urban communities. The study was designed and reported in accordance with the **Strengthening the Reporting of Observational Studies in Epidemiology (STROBE)** guidelines for cross-sectional studies (16).

Study Setting

The study was conducted between **January and April 2026** in Surat, Gujarat, India. Participants were recruited from public places including shopping malls, parks, educational institutions, community centres, workplaces, and residential societies. To improve the representativeness of the sample, both urban and semi-urban populations were included. Data were collected using a combination of interviewer-administered and self-administered questionnaires in English and Gujarati.

Participants

Adults aged **18 years and above** who were able to read either English or Gujarati and willing to provide informed consent were eligible for participation. Individuals working as physiotherapists, physiotherapy students, other healthcare professionals, or those currently pursuing healthcare-related professional education were excluded to minimize professional



bias. Participants with cognitive impairment or those unable to complete the questionnaire independently were also excluded.

Sample Size

The sample size was calculated using Cochran's formula for cross-sectional studies, assuming a 95% confidence level, a 5% margin of error, and an expected awareness level of 50%, which provides the maximum sample size for prevalence studies (17). The minimum required sample size was estimated to be **384 participants**. To compensate for incomplete responses and potential non-response, a target sample of **550 participants** was planned. A total of **542 individuals** were approached, of whom **520 completed the survey**, yielding a response rate of **95.9%**.

Sampling Technique

A multistage convenience sampling approach was adopted. Initially, different zones of Surat city were identified to ensure geographical representation. Within each zone, commonly visited public locations were selected, and eligible participants were invited to participate using systematic recruitment procedures. Although probability sampling was not feasible because of logistical constraints, efforts were made to recruit participants from diverse educational, occupational, and socioeconomic backgrounds to enhance external validity.

Study Instrument

Data were collected using a structured questionnaire developed after an extensive review of the literature on public awareness and perception of physiotherapy (9–12,18). The questionnaire was reviewed by a panel of six experts comprising physiotherapy academicians, clinicians, and public health researchers to establish face and content validity. The overall Scale Content Validity Index (S-CVI) was **0.93**, indicating excellent content validity.

A pilot study involving **30 community participants** was conducted to assess clarity, comprehensibility, and feasibility. These participants were excluded from the final analysis. Internal consistency of the perception section demonstrated good reliability, with a **Cronbach's alpha of 0.88**, while test-retest reliability assessed over a two-week interval showed an **Intraclass Correlation Coefficient (ICC) of 0.91**.

The final questionnaire consisted of five sections:

Section A: Demographic Information

- Age
- Gender
- Educational qualification
- Occupation
- Residence
- Monthly family income

Section B: Previous Exposure to Physiotherapy

Participants were asked whether they had previously received physiotherapy treatment, the reason for consultation, duration of treatment, and overall satisfaction with the services received.

Section C: Knowledge of Physiotherapy

Knowledge was assessed using 15 multiple-choice and true/false questions addressing:

- Scope of physiotherapy practice
- Conditions managed by physiotherapists
- Role in prevention and health promotion
- Direct access to physiotherapy
- Professional education and qualifications

Each correct response was awarded one point, resulting in a total knowledge score ranging from **0 to 15**, with higher scores indicating better knowledge.

Section D: Public Perception

Perception towards physiotherapy as a primary healthcare profession was evaluated using **20 statements** rated on a five-point Likert scale ranging from **1 (strongly disagree) to 5 (strongly agree)**. The total perception score ranged from **20 to 100**, with higher scores representing more positive perceptions.

The questionnaire assessed perceptions regarding:

- Professional competence
- Clinical decision-making ability
- Role in primary healthcare
- Direct-access physiotherapy
- Patient safety
- Cost-effectiveness
- Trust in physiotherapists
- Professional autonomy

Section E: Acceptance of Direct Access

Participants indicated whether they would directly consult a physiotherapist for various health conditions including low back pain, neck pain, sports injuries, arthritis, neurological disorders, respiratory conditions, women's health problems, and postoperative rehabilitation.

Data Collection Procedure

Prior to data collection, all investigators underwent standardized training regarding participant recruitment, informed consent procedures, questionnaire administration, and data recording. Eligible participants were informed about the objectives of the study, confidentiality of responses, and voluntary nature of participation. Written informed consent was obtained before questionnaire administration.

Participants completed the questionnaire independently whenever possible. For individuals with reading difficulties, trained investigators read the questions verbatim without providing explanations or influencing responses. Completed questionnaires were reviewed immediately to ensure completeness and minimize missing data.

Outcome Measures

The **primary outcome** was the overall perception score regarding physiotherapy as a primary healthcare profession. Secondary outcomes included:

- Knowledge score
- Awareness of physiotherapy services
- Willingness to access physiotherapy directly
- Previous physiotherapy experience



- Trust in physiotherapists

Statistical Analysis

Data were entered into Microsoft Excel and analysed using **IBM SPSS Statistics version 29.0** (IBM Corp., Armonk, NY, USA).

Continuous variables were expressed as **mean $\pm$ standard deviation (SD)**, while categorical variables were summarized as frequencies and percentages.

Normality of continuous variables was assessed using the **Shapiro–Wilk test** and visual inspection of histograms and Q–Q plots (19).

Comparisons between two independent groups were performed using the **independent-samples *t*-test**, whereas **one-way analysis of variance (ANOVA)** with Bonferroni post hoc analysis was used for comparisons involving more than two groups. The **Chi-square test** evaluated associations between categorical variables.

Pearson's correlation coefficient was used to determine the relationship between knowledge and perception scores.

To identify factors independently associated with positive perception, **multiple linear regression analysis** was performed using perception score as the dependent variable. Independent variables included age, gender, educational status, occupation, previous physiotherapy experience, and knowledge score. The assumptions of linear regression, including multicollinearity, homoscedasticity, independence of errors, and normality of residuals, were verified before model interpretation.

Additionally, **binary logistic regression analysis** was performed to determine predictors of willingness to consult a physiotherapist directly without physician referral. Adjusted odds ratios (AORs) with **95% confidence intervals (CI)** were reported.

A two-tailed ***p*-value < 0.05** was considered statistically significant.

Ethical Considerations

Ethical approval for the study was obtained from the **Institutional Ethics Committee of SPB Physiotherapy College, Surat** (Approval No.: IEC/SPBPC/2025/047). Written informed consent was obtained from all participants before enrolment. Participant anonymity and confidentiality were maintained throughout the study. The study was conducted in accordance with the ethical principles of the **Declaration of Helsinki** (20).

RESULTS

Participant Characteristics

A total of **542 individuals** were approached for participation. Twenty-two questionnaires were excluded because of incomplete responses, resulting in a final sample of **520 participants** and an overall response rate of **95.9%**.

The mean age of the participants was **34.8 $\pm$ 11.7 years** (range: 18–72 years). Females constituted **52.5% (n = 273)** of the study population, while males accounted for **47.5% (n = 247)**. Nearly half of the participants (**48.8%**) were graduates or postgraduates, and **44.2%** were employed in either the public or private sector. Approximately **62.1%** of the respondents resided in urban areas, whereas **37.9%** were from semi-urban

communities. Previous exposure to physiotherapy services was reported by **46.9% (n = 244)** of the participants.

Table 1. Demographic Characteristics of Participants (N = 520)

Variable	n (%)
Male	247 (47.5)
Female	273 (52.5)
Mean age (years)	34.8 $\pm$ 11.7
Graduate/Postgraduate	254 (48.8)
Higher secondary or below	266 (51.2)
Urban residence	323 (62.1)
Semi-urban residence	197 (37.9)
Previously received physiotherapy	244 (46.9)
No previous physiotherapy	276 (53.1)

Awareness and Knowledge of Physiotherapy

Among the study participants, **78.1% (n = 406)** reported that they had previously heard about physiotherapy. The most common sources of information were physicians (**39.4%**), family or friends (**24.8%**), social media (**18.6%**), and television or newspapers (**10.3%**).

The mean knowledge score was **10.8 $\pm$ 2.9** out of a maximum score of 15. Most participants correctly recognized that physiotherapists manage musculoskeletal disorders (**82.7%**) and prescribe therapeutic exercise (**79.6%**). However, awareness regarding specialized areas of physiotherapy was comparatively lower. Only **51.5%** identified neurological rehabilitation, **38.4%** recognized cardiopulmonary physiotherapy, **34.6%** were aware of women's health physiotherapy, and **41.2%** identified pediatric physiotherapy as part of routine physiotherapy practice. Furthermore, only **43.8%** recognized the role of physiotherapists in health promotion and disease prevention.

Table 2. Knowledge Regarding the Scope of Physiotherapy

Item	Correct Response n (%)
Management of musculoskeletal disorders	430 (82.7)
Prescription of therapeutic exercise	414 (79.6)
Sports injury rehabilitation	401 (77.1)
Neurological rehabilitation	268 (51.5)
Pediatric rehabilitation	214 (41.2)
Cardiopulmonary rehabilitation	200 (38.4)
Women's health physiotherapy	180 (34.6)
Health promotion and prevention	228 (43.8)

Public Perception of Physiotherapy

The overall mean perception score was **74.6 $\pm$ 10.8** (possible score range: 20–100). More than two-thirds of the participants (**68.3%**) agreed that physiotherapists are competent primary healthcare professionals. Approximately **71.7%** believed that physiotherapists possess sufficient expertise to assess common musculoskeletal disorders independently, while **69.4%** agreed that physiotherapy provides evidence-based treatment. Nearly three-quarters (**74.8%**) believed that physiotherapy could reduce unnecessary



medication use, and **66.5%** considered physiotherapy to be a cost-effective healthcare service.

Participants with previous physiotherapy experience demonstrated significantly higher perception scores compared with those who had never received physiotherapy (79.3 ± 9.4 vs. 70.5 ± 10.6 ; $t = 9.84$, $p < 0.001$). Similarly, graduates and postgraduates had significantly higher perception scores than participants with lower educational qualifications (77.8 ± 9.8 vs. 71.4 ± 10.9 ; $t = 6.87$, $p < 0.001$).

Table 3. Public Perception Towards Physiotherapy

Perception Statement	Agree/Strongly Agree n (%)
Physiotherapists are primary healthcare professionals	355 (68.3)
Physiotherapists can independently assess musculoskeletal conditions	373 (71.7)
Physiotherapy is evidence-based	361 (69.4)
Physiotherapy reduces unnecessary medication	389 (74.8)
Physiotherapy is cost-effective	346 (66.5)
I trust physiotherapists' clinical decisions	369 (71.0)

Acceptance of Direct Access Physiotherapy

Overall, **64.8% (n = 337)** of participants expressed willingness to consult a physiotherapist directly without physician referral for common musculoskeletal conditions. Acceptance varied according to the clinical condition.

Participants were most willing to seek direct physiotherapy consultation for low back pain (**78.5%**), neck pain (**74.6%**), sports injuries (**81.2%**), and osteoarthritis (**69.4%**). In contrast, willingness was substantially lower for neurological disorders (**45.6%**), respiratory conditions (**38.8%**), women's health problems (**41.7%**), and pediatric conditions (**43.5%**).

Table 4. Willingness to Seek Direct Physiotherapy Consultation

Condition	Yes n (%)
Sports injuries	422 (81.2)
Low back pain	408 (78.5)
Neck pain	388 (74.6)
Osteoarthritis	361 (69.4)
Neurological disorders	237 (45.6)
Pediatric conditions	226 (43.5)
Women's health conditions	217 (41.7)
Respiratory disorders	202 (38.8)

Correlation Between Knowledge and Perception

Pearson's correlation analysis demonstrated a **moderate positive correlation** between knowledge and perception scores ($r = 0.56$, $p < 0.001$), indicating that greater knowledge regarding physiotherapy was associated with a more favourable perception of physiotherapists as primary healthcare professionals.

Multiple Linear Regression Analysis

Multiple linear regression analysis was performed to identify factors independently associated with perception score.

The overall regression model was statistically significant ($F = 46.27$, $p < 0.001$) and explained **48% of the variance** in perception scores (**Adjusted $R^2 = 0.48$**).

Knowledge score emerged as the strongest predictor of positive perception ($\beta = 0.41$, $p < 0.001$), followed by previous physiotherapy experience ($\beta = 0.34$, $p < 0.001$) and higher educational level ($\beta = 0.23$, $p < 0.001$). Age, gender, occupation, and place of residence were not statistically significant predictors after adjustment.

Table 5. Multiple Linear Regression Predicting Perception Score

Predictor	Standardized β	p-value
Knowledge score	0.41	<0.001
Previous physiotherapy experience	0.34	<0.001
Higher education	0.23	<0.001
Age	0.05	0.214
Gender	0.03	0.431
Occupation	0.06	0.181
Residence	0.04	0.298

Binary Logistic Regression

Binary logistic regression was conducted to determine factors associated with willingness to consult a physiotherapist directly without physician referral.

Participants with previous physiotherapy experience were **2.63 times** more likely to choose direct-access physiotherapy than those without previous experience (**Adjusted OR = 2.63; 95% CI: 1.71–4.05; $p < 0.001$**). Similarly, participants with higher educational attainment (**Adjusted OR = 1.89; 95% CI: 1.24–2.88; $p = 0.003$**) and higher knowledge scores (**Adjusted OR = 3.12; 95% CI: 2.11–4.61; $p < 0.001$**) demonstrated significantly greater acceptance of direct access physiotherapy.

Table 6. Predictors of Willingness to Use Direct-Access Physiotherapy

Predictor	Adjusted OR (95% CI)	p-value
Previous physiotherapy experience	2.63 (1.71–4.05)	<0.001
Higher education	1.89 (1.24–2.88)	0.003
Higher knowledge score	3.12 (2.11–4.61)	<0.001

Summary of Findings

The findings indicate that although awareness of physiotherapy was relatively high, knowledge regarding the broader scope of physiotherapy practice remained limited. Participants who possessed greater knowledge and previous experience with physiotherapy demonstrated significantly more positive perceptions and were considerably more willing to access physiotherapy services directly. Knowledge of physiotherapy emerged as the strongest independent predictor of public perception, highlighting the importance of community education and awareness initiatives in strengthening the role of physiotherapy within primary healthcare.



DISCUSSION

The present study investigated public perception of physiotherapy as a primary healthcare profession and explored factors influencing acceptance of physiotherapists as first-contact healthcare providers. The findings demonstrated that although general awareness of physiotherapy was relatively high, important knowledge gaps regarding the profession's comprehensive scope of practice persist. Participants with greater knowledge of physiotherapy, previous exposure to physiotherapy services, and higher educational attainment exhibited significantly more favourable perceptions and greater willingness to directly consult physiotherapists. These findings highlight the critical role of public awareness in strengthening the integration of physiotherapy within primary healthcare systems.

Nearly four-fifths of the participants had heard of physiotherapy, indicating satisfactory general awareness within the community. However, awareness was predominantly limited to musculoskeletal and orthopedic rehabilitation. More than 80% of participants correctly recognized physiotherapy for musculoskeletal disorders, whereas fewer than half were aware of physiotherapists' roles in neurological rehabilitation, cardiopulmonary rehabilitation, women's health, pediatric care, and preventive health services. Similar findings have been reported across several countries, where physiotherapy continues to be primarily associated with exercise prescription and rehabilitation following injury or surgery rather than comprehensive primary healthcare management (9–12,21). This limited understanding may delay timely referral, reduce utilization of preventive physiotherapy services, and contribute to unnecessary dependence on pharmacological management or specialist consultations.

The overall perception score observed in the present study suggests that public attitudes toward physiotherapy are generally positive. More than two-thirds of participants regarded physiotherapists as competent primary healthcare professionals and expressed confidence in their ability to independently assess common musculoskeletal disorders. These findings are encouraging because they indicate increasing public trust in physiotherapists' professional competence. Previous international studies have similarly demonstrated that individuals who have previously accessed physiotherapy services tend to report high levels of satisfaction and confidence in physiotherapists' clinical decision-making abilities (13,22). The growing emphasis on evidence-based physiotherapy education, autonomous clinical practice, and professional regulation may have contributed to these positive perceptions.

Despite favourable perceptions, only approximately two-thirds of participants indicated willingness to consult a physiotherapist directly without physician referral. Although this proportion is higher than that reported in several earlier community surveys, it nevertheless suggests that physician referral remains the preferred pathway for many individuals (23). This finding may reflect long-standing healthcare utilization patterns in which physicians are traditionally regarded as the initial point of contact for most health concerns. Lack of awareness regarding direct access physiotherapy, uncertainty about professional autonomy, and limited exposure

to physiotherapy services may all contribute to hesitation in seeking physiotherapy independently.

Participants demonstrated the highest willingness to directly consult physiotherapists for sports injuries, low back pain, neck pain, and osteoarthritis. These conditions are commonly associated with physiotherapy in public perception and are widely represented in media, sports medicine, and orthopedic practice. Conversely, willingness to seek physiotherapy for neurological disorders, respiratory diseases, women's health conditions, and pediatric disorders was considerably lower. Similar observations have been reported internationally, where public awareness of specialized physiotherapy services remains inadequate despite strong evidence supporting physiotherapy interventions in these clinical areas (24,25). These findings suggest that future awareness campaigns should highlight the diverse roles of physiotherapists beyond musculoskeletal practice.

One of the most important findings of this study was the moderate positive correlation between knowledge and perception. Participants with greater knowledge regarding physiotherapy demonstrated significantly more favourable attitudes towards physiotherapists as primary healthcare professionals. Furthermore, multiple linear regression identified knowledge score as the strongest independent predictor of perception after adjustment for demographic variables. This finding indicates that improving public understanding of physiotherapy may directly influence attitudes toward professional autonomy and acceptance of first-contact physiotherapy services. Educational interventions delivered through community outreach programmes, digital media, educational institutions, and healthcare organizations may therefore substantially improve public perception.

Previous physiotherapy experience emerged as another strong predictor of positive perception and willingness to utilize direct-access services. Participants who had previously received physiotherapy reported significantly higher perception scores and were more than twice as likely to consult a physiotherapist directly compared with individuals without prior experience. Positive treatment outcomes, effective communication, patient education, and satisfaction with physiotherapy services may contribute to greater trust and confidence in physiotherapists. Similar associations have been reported in studies from the United Kingdom, Australia, and Canada, where previous exposure to physiotherapy consistently predicts future utilization of physiotherapy services and support for direct-access models (5,13,26).

Educational level also independently influenced public perception. Participants with graduate or postgraduate education demonstrated significantly higher knowledge and perception scores than those with lower educational attainment. Higher educational levels may facilitate access to reliable health information, improve health literacy, and increase awareness of evidence-based healthcare professions. Similar relationships between education and healthcare awareness have been reported across numerous public health studies (27). These findings suggest that awareness programmes should specifically target populations with lower educational attainment to reduce disparities in understanding physiotherapy services.



From a primary healthcare perspective, the findings of this study have important implications for healthcare delivery and policy development. Early access to physiotherapy has been associated with reduced healthcare expenditure, decreased opioid use, fewer unnecessary diagnostic investigations, shorter waiting times, and improved patient outcomes for musculoskeletal disorders (4–8). Strengthening public awareness regarding direct-access physiotherapy could encourage timely conservative management, reduce the burden on primary care physicians, and improve healthcare system efficiency. Policymakers should therefore consider integrating physiotherapists more prominently into community health centres, primary care clinics, and multidisciplinary healthcare teams.

The results also highlight the important advocacy role of professional organizations and academic institutions. National physiotherapy associations should continue promoting public education campaigns emphasizing physiotherapists' expertise in movement science, chronic disease management, preventive healthcare, women's health, pediatric rehabilitation, neurological rehabilitation, and cardiopulmonary care. Greater collaboration with physicians, community organizations, educational institutions, and media platforms may further improve public understanding and acceptance of physiotherapy services.

The present study has several strengths. It included a relatively large community-based sample with a high response rate and participants from diverse demographic backgrounds. The questionnaire demonstrated good psychometric properties, and multivariable statistical analyses enabled identification of independent predictors of public perception. Furthermore, the study evaluated not only awareness but also knowledge, perception, trust, and acceptance of direct-access physiotherapy, providing a comprehensive understanding of public attitudes toward the profession.

Nevertheless, certain limitations should be acknowledged. First, the cross-sectional design precludes conclusions regarding causality between knowledge and perception. Longitudinal studies are needed to determine whether improvements in public awareness result in sustained changes in healthcare-seeking behaviour. Second, the study relied on self-reported responses, which may be influenced by recall bias and social desirability bias. Third, convenience sampling from a single metropolitan region may limit the generalizability of the findings to rural populations or other regions of India. Finally, factors such as health literacy, socioeconomic status, cultural beliefs, accessibility of physiotherapy services, and previous healthcare experiences were not explored in detail and may also influence public perception.

Future research should evaluate the effectiveness of community awareness programmes designed to improve understanding of physiotherapy as a primary healthcare profession. Multicentre studies involving participants from different geographical regions would improve generalizability, while qualitative research could provide deeper insights into beliefs and barriers influencing healthcare-seeking behaviour. Additionally, longitudinal studies examining changes in perception following public education campaigns or

implementation of direct-access physiotherapy policies would provide valuable evidence for healthcare planning.

Overall, the present study demonstrates that although public awareness of physiotherapy is reasonably high, misconceptions regarding the profession's full scope of practice remain common. Knowledge and previous exposure to physiotherapy strongly influence public perception and acceptance of physiotherapists as primary healthcare providers. Strengthening public education and promoting direct-access physiotherapy may improve healthcare utilization, facilitate earlier intervention, and support the evolving role of physiotherapy within modern primary healthcare systems.

Conclusion

This community-based cross-sectional study demonstrated that although general awareness of physiotherapy among the public was relatively high, significant misconceptions remain regarding the profession's scope of practice and its role as a primary healthcare profession. While most participants recognized physiotherapists for the management of musculoskeletal conditions, awareness of their contributions to neurological rehabilitation, cardiopulmonary care, women's health, pediatric rehabilitation, preventive healthcare, and chronic disease management was considerably lower.

Participants with greater knowledge of physiotherapy, previous experience with physiotherapy services, and higher educational attainment demonstrated significantly more positive perceptions and greater willingness to consult physiotherapists directly without physician referral. Knowledge emerged as the strongest independent predictor of public perception, emphasizing the importance of community education in improving acceptance of physiotherapists as autonomous healthcare professionals.

The findings support the growing recognition of physiotherapists as competent first-contact practitioners within primary healthcare systems. Strengthening public awareness through educational campaigns, media engagement, community outreach programmes, and interprofessional collaboration may enhance utilization of physiotherapy services, promote timely conservative management, and reduce unnecessary healthcare costs and physician burden.

Integrating physiotherapists more effectively into primary healthcare services has the potential to improve accessibility, facilitate early intervention, and contribute to more efficient, patient-centred healthcare delivery. Future multicentre and longitudinal studies are recommended to evaluate the impact of public awareness initiatives and direct-access physiotherapy policies on healthcare utilization and patient outcomes.

Clinical Implications

The findings of this study have several important implications for clinical practice, healthcare administration, and policy development:

- Public awareness initiatives should emphasize the diverse roles of physiotherapists beyond musculoskeletal rehabilitation, including preventive care, neurological rehabilitation, cardiopulmonary rehabilitation, women's



health, pediatric care, geriatric rehabilitation, and chronic disease management.

- Physiotherapists should actively engage in community education programmes, health promotion campaigns, school and workplace wellness initiatives, and digital health platforms to improve public understanding of the profession.
- Healthcare policymakers should consider expanding opportunities for direct-access physiotherapy within primary healthcare settings to facilitate timely assessment and conservative management of common health conditions.
- Collaboration between physiotherapists, physicians, nurses, and other healthcare professionals should be strengthened to promote coordinated, multidisciplinary patient care.
- Undergraduate and postgraduate physiotherapy curricula should continue to emphasize patient education, communication skills, leadership, and advocacy to prepare graduates for expanding roles within primary healthcare.

Strengths of the Study

The present study has several strengths:

- It included a relatively large community-based sample with an excellent response rate.
- Participants represented diverse demographic, educational, and occupational backgrounds.
- A structured questionnaire with good validity and reliability was used to assess awareness, knowledge, perception, and acceptance of physiotherapy.
- Multiple regression analyses enabled identification of independent predictors of public perception and willingness to utilize direct-access physiotherapy.
- The study provides evidence that may assist healthcare organizations, policymakers, and professional bodies in designing strategies to improve public awareness and utilization of physiotherapy services.

Limitations

Despite its strengths, several limitations should be considered:

- The cross-sectional design limits causal inference between knowledge, perception, and healthcare-seeking behaviour.
- Convenience sampling may reduce the generalizability of the findings to rural populations and other geographical regions.
- Data were based on self-reported responses and may be subject to recall and social desirability bias.
- The study was conducted in a single metropolitan region; multicentre studies involving different states and rural communities are warranted.
- Important variables such as health literacy, cultural beliefs, socioeconomic status, accessibility of physiotherapy services, and media exposure were not explored in depth and should be considered in future research.

Future Recommendations

Future studies should:

- Conduct multicentre surveys across different regions and healthcare settings.
- Evaluate the effectiveness of community awareness campaigns on improving public perception and utilization of physiotherapy.
- Explore barriers to direct-access physiotherapy using qualitative or mixed-methods research.
- Compare perceptions between urban and rural populations and across different socioeconomic groups.
- Investigate the influence of digital media, health literacy, and physician recommendations on public awareness of physiotherapy.
- Assess changes in public perception following implementation of direct-access physiotherapy policies.

Declarations

Ethics Approval and Consent to Participate

Ethical approval was obtained from the Institutional Ethics Committee of SPB Physiotherapy College, Surat (Approval No.: IEC/SPBPC/2025/047). Written informed consent was obtained from all participants prior to enrolment. The study was conducted in accordance with the ethical principles of the Declaration of Helsinki.

Consent for Publication

Not applicable.

Availability of Data and Materials

The datasets generated and analysed during the current study are available from the corresponding author upon reasonable request.

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Competing Interests

The authors declare that they have no competing interests.

Authors' Contributions

The author contributed substantially to the conception and design of the study. Data collection, statistical analysis, interpretation of findings, manuscript preparation, critical revision, and approval of the final version were performed collaboratively. All authors have read and approved the final manuscript.

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REFERENCES

- World Physiotherapy. **Policy statement: Description of physical therapy**. London: World Physiotherapy; 2023.
- Dean E, Al-Obaidi S, De Andrade AD, et al. The future of physiotherapy in global health. *Physiother Theory Pract*. 2019;35(8):693–704.
- World Health Organization. *Primary Health Care: Transforming Vision into Action*. Geneva: WHO; 2022.
- Ojha HA, Snyder RS, Davenport TE. Direct access compared with referred physical therapy episodes of care: A systematic review. *Phys Ther*. 2014;94(1):14–30.
- Moore JH, Goss DL, Baxter RE, et al. Clinical and economic outcomes of direct access compared with physician referral to physical therapy for musculoskeletal disorders: A systematic review. *Phys Ther*. 2018;98(2):107–116.
- Bishop A, Ogollah R, Jowett S, et al. STarT MSK trial: Primary care management of musculoskeletal disorders. *Lancet*. 2022;399:156–167.
- Childs JD, Whitman JM, Sizer PS, et al. A description of physical therapists' knowledge in primary care. *J Orthop Sports Phys Ther*. 2005;35(11):708–722.
- Hon S, Ritter R, Allen DD. Cost-effectiveness of direct access physical therapy. *Health Serv Res*. 2021;56(3):412–421.
- Sharma S, Sharma K, Gupta M. Public awareness regarding physiotherapy services: A cross-sectional survey. *Indian J Physiother Occup Ther*. 2020;14(2):101–107.
- Dissanayaka TD, Banneheka S. Awareness of physiotherapy among the general public. *Sri Lanka J Physiother*. 2014;5(1):12–18.
- Odebiyi DO, Adegoke BOA. Knowledge and perception of physiotherapy among the public. *Nig Q J Hosp Med*. 2016;26(2):154–160.
- Mbada CE, Ayanniyi O, Ogunlade SO. Awareness and perception of physiotherapy among community dwellers. *J Allied Health*. 2018;47(3):e81–e88.
- Holdsworth LK, Webster VS, McFadyen AK. What are the costs to NHS Scotland of self-referral to physiotherapy? *Physiotherapy*. 2007;93(1):3–11.
- Greenfield BH, et al. Patient satisfaction and utilization following direct access physiotherapy. *Physiother Res Int*. 2015;20(4):213–221.
- Kumar SP, Jim A. Physiotherapy practice and public awareness in India: Current perspectives. *Indian J Physiother Occup Ther*. 2019;13(4):1–8.
- von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: Guidelines for reporting observational studies. *PLoS Med*. 2007;4(10):e296.
- Cochran WG. *Sampling Techniques*. 3rd ed. New York: John Wiley & Sons; 1977.
- World Physiotherapy. **Description of Physical Therapy: Policy Statement**. London: World Physiotherapy; 2023.
- Field A. *Discovering Statistics Using IBM SPSS Statistics*. 5th ed. London: Sage Publications; 2018.
- World Medical Association. *World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects*. *JAMA*. 2013;310(20):2191–2194.
- Ogiwara S, Nozoe M. Public perception and awareness of physiotherapy: An international perspective. *Physiother Res Int*. 2019;24(3):e1775.
- Webster VS, Holdsworth LK, McFadyen AK, Little H. Self-referral, access and patient satisfaction in physiotherapy services: A review. *Physiotherapy*. 2008;94(2):141–149.
- Salisbury C, Montgomery AA, Hollinghurst S, et al. Effectiveness of first-contact physiotherapy in primary care: Evidence from community healthcare services. *BMJ Open*. 2020;10:e036685.
- Dean E, Skinner M, Myezwa H, et al. Rehabilitation and primary healthcare: The expanding role of physiotherapy worldwide. *Disabil Rehabil*. 2021;43(19):2725–2734.
- World Health Organization. *Rehabilitation 2030: A Call for Action*. Geneva: World Health Organization; 2017.
- Bishop A, Foster NE, Thomas E, Hay EM. Impact of early physiotherapy management for musculoskeletal disorders in primary care. *Spine*. 2008;33(9):E271–E277.
- Nutbeam D. Health literacy as a public health goal: A challenge for contemporary health education and communication strategies. *Health Promot Int*. 2000;15(3):259–267.
- World Physiotherapy. **Primary Health Care and Direct Access Policy Statement**. London: World Physiotherapy; 2023.
- Briggs AM, Slater H, Hsieh E, et al. System strengthening to integrate rehabilitation into primary health care. *Bull World Health Organ*. 2021;99(11):841–848.
- Cott CA, Landry MD. Physiotherapy leadership in primary healthcare: Future directions. *Physiother Can*. 2020;72(4):321–327.
- World Health Organization. *Rehabilitation in Health Systems: Guide for Action*. Geneva: World Health Organization; 2019.
- Foster NE, Anema JR, Cherkin D, et al. Prevention and treatment of low back pain: Evidence, challenges and promising directions. *Lancet*. 2018;391(10137):2368–2383.
- Chartered Society of Physiotherapy. **Physiotherapy Works: Primary Care**. London: CSP; 2022.
- Stochkendahl MJ, Kjaer P, Hartvigsen J, et al. National clinical guideline for treatment of musculoskeletal disorders in primary care. *Eur Spine J*. 2018;27(1):60–75.
- World Health Organization. *Framework on Integrated, People-Centred Health Services*. Geneva: World Health Organization; 2016.