

Awareness and Knowledge of Paediatric Physiotherapy Among Health Care Professionals

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Abstract—Background: Physiotherapists' caseloads now frequently include children with psychological and mental health disorders as well as a wider range of acute and chronic paediatric conditions. Historically, they have been required to treat children with respiratory, orthopaedic, neurological, oncological, developmental, and post-surgical condition.

The pediatric population is served by physiotherapists who specialize in treating and supporting children. They are well aware of how different children are from adults. These medical practitioners are well-versed in the relationship between normal child growth and bodily systems and functions. Paediatric Physiotherapy practice is a new and emerging concept in India. This study aimed to understand Paediatric Physiotherapists' perceptions of the barriers. We will be able to figure out the level of awareness among medical professionals as well as the interest and acceptability of pediatric physical therapy through this study.

Study design: Observational study

Objective: Awareness and Knowledge of Paediatric Physiotherapy among health care professionals in Kolhapur city using Knowledge and Awareness of Paediatric Physiotherapy Questionnaire.

Method: A sample of 97 participants was chosen at random. The study was done using a questionnaire-based interview format. All willing health care experts from diverse streams, including super specialists, were included; uncooperative practitioners were removed. Subjects were informed about the study beforehand, written agreement was obtained, and a questionnaire was personally distributed to fill out the details. The resulting response was used to do further analysis.

Result: According to previous study found that medical practitioners are well aware of physiotherapy. However, only 78.35% (76) of health care professionals in our survey were aware of Paediatric Physical therapy, and 21.65% (21) were not aware of Paediatric Physiotherapy.

Conclusion: The purpose of this study was to assess the Knowledge and Awareness of Paediatric Physical

therapy among Kolhapur City's health care providers. Previous research indicates that general practitioners are 100% aware of Physiotherapy, and our study indicates that healthcare professionals are only 78.35% aware of Paediatric Physiotherapy. The findings suggest that health care professionals need more information about Paediatric Physiotherapy services.

Index Terms—Paediatric Physiotherapy, Questionnaire, Awareness, Knowledge, health care professionals.

I. INTRODUCTION

Physicians' Perspectives on Paediatric Physical Therapy

This study aimed to explore physicians' views on paediatric physical therapy, their understanding of the role of physiotherapists, and the importance of collaboration between physicians and physiotherapists in providing optimal patient care.

Paediatric physiotherapists specialize in treating and supporting children with various conditions. They possess in-depth knowledge of child development and the relationship between normal growth and bodily systems and functions. Their expertise extends to evaluating, detecting, diagnosing, and managing movement abnormalities and physiological problems in children.

Paediatric physiotherapists treat infants to teenagers with a range of acute and chronic conditions, including respiratory, orthopaedic, neurological, oncological, developmental, and post-surgical conditions. They also address psychological and mental health disorders, employing specialized skills and training related to child development and growth.

Neurological disorders in children can arise from brain, spinal cord, or peripheral nerve issues.

Paediatric physiotherapists are skilled in treating various neurological conditions, such as Down syndrome, cerebral palsy, and muscular dystrophy. They help children with range of motion, balance, muscle strength, and mobility challenges.

Paediatric physiotherapists offer specialized treatment for children with neurological and/or developmental issues affecting their physical development. Their expertise encompasses a broad range of conditions, including genetic disorders, weight issues, and athletic injuries.

Pediatric physiotherapists possess specialized skills in assessing, identifying, diagnosing, and treating developmental and mobility disorders in children. They create individualized treatment plans, incorporating fun, imagination, and playfulness to maximize each child's health, abilities, and well-being. The primary objective of pediatric physiotherapy is to enable children to achieve their developmental milestones, such as rolling, crawling, walking, and talking. Physiotherapy treatment helps children with neurological or developmental issues reach their full potential and advance their physical development.

Physiotherapy's advancement relies on referring physicians' knowledge and acceptance of the field. Physicians play a crucial role in providing timely referrals and facilitating communication between patients and therapists. Their awareness of physiotherapy's role in various disease conditions is essential for effective rehabilitation.

Ensuring access to high-quality pediatric physical therapy services is vital to address the diverse needs of

children. However, there is a lack of international research on the availability and quality of these services.

Misconceptions about physiotherapy can arise from ignorance or inadequate knowledge. Therefore, it is essential to promote awareness and understanding of physiotherapy's role in healthcare. Pediatric physical therapists are expanding their services to include health promotion and obesity prevention, adapting to diverse contexts and settings.

The International Organization of Physical Therapists in Paediatrics (IOPTP) used the ICSO-R 2.0 framework to characterize the services offered by pediatric physical therapists worldwide. This initiative aimed to capture the diversity of practices and contexts in which pediatric physical therapy services are provided.

II. RESULTS

Paediatric Physiotherapy Knowledge & Awareness: A self-structured questionnaire was employed, and participants' written consent was obtained to guarantee confidentiality and privacy. Thirteen questions about knowledge of Paediatric Physical therapy were included in the questionnaire. The participants' demographic information, including age, occupation, and work experience, was collected. The participants' average age was 29.16 ± 1.79 , and their average years of experience was 5.53 ± 0.83 , 43.30% (42) were women and 56.70 (55) were men

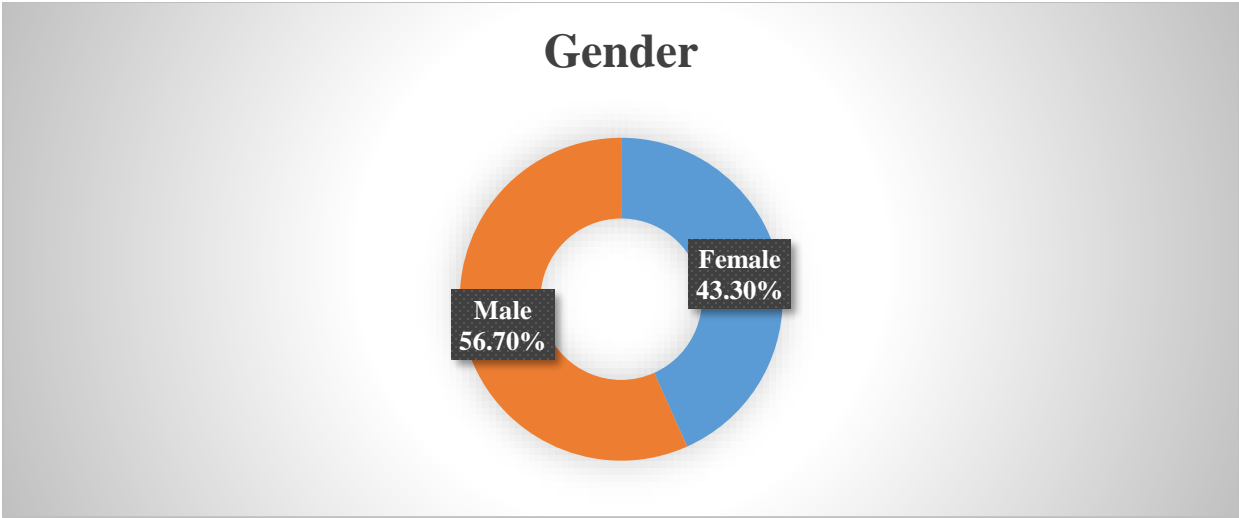
Variable	Mean	SD
Age	26.40	3.38

Variable	Mean	SD
Age	29.16	1.79
Experience	5.53	0.83

Table 1 Mean and SD of age

Gender	No. of Participants	Percentage
Female	42	43.30%
Male	55	56.70%
Total	97	100.00%

Table 2 Mean and SD of years of experience

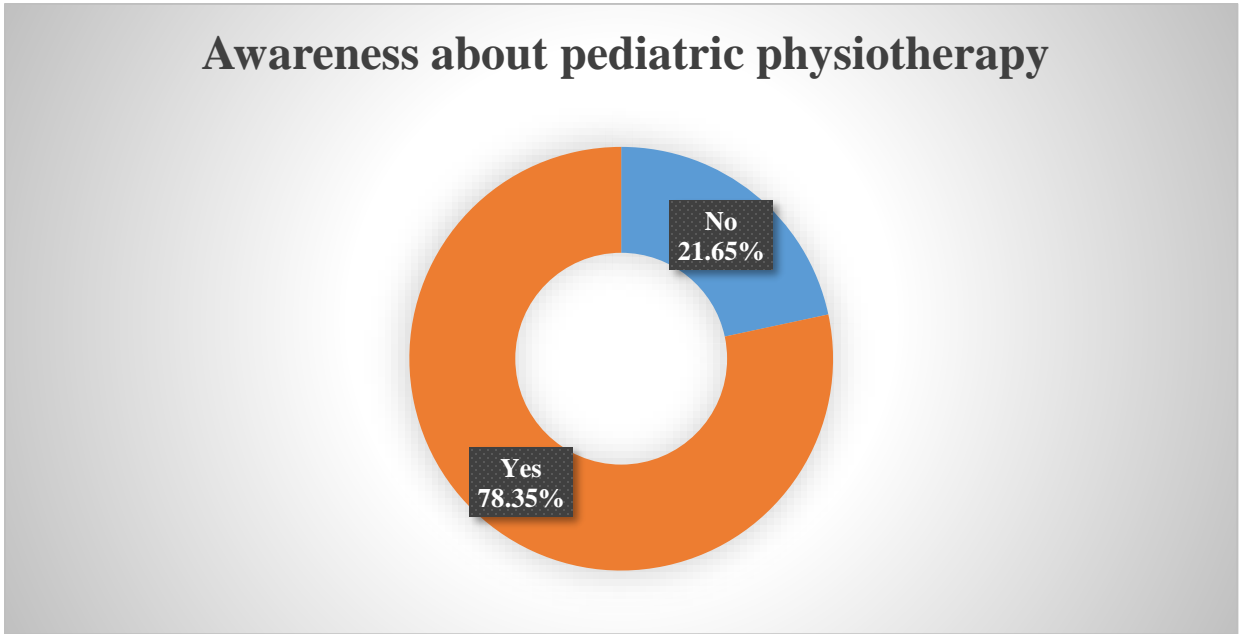


Graph 1 Percentage of male and female

According to previous study found that medical practitioners are well aware of Physiotherapy. However, only 78.35% (76) of health care professionals in our survey were aware of Paediatric Physical therapy, and 21.65% (21) were not.

Awareness about paediatric physiotherapy	No. of Participants	Percentage
No	21	21.65%
Yes	76	78.35%
Total	97	100.00%

Table 3 Awareness about Paediatric Physiotherapy

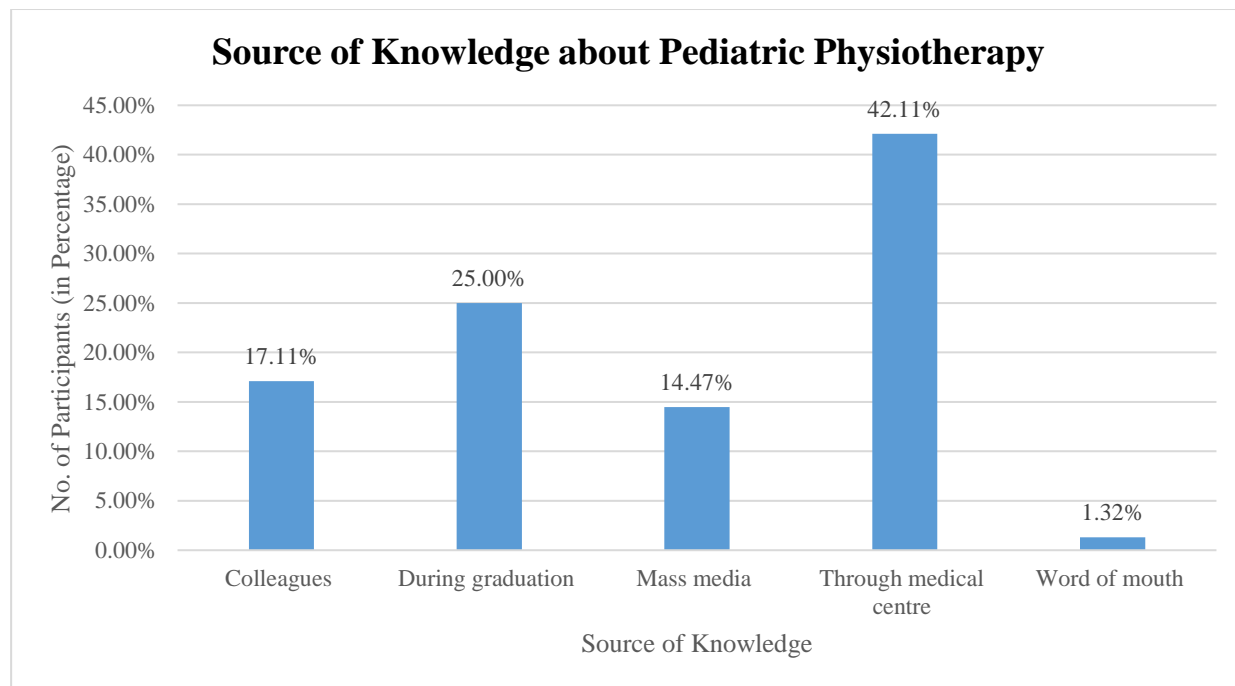


Graph 2 Awareness about Paediatric Physiotherapy

From the various sources of awareness about physiotherapy among the health care professionals the predominant source was through medical centre as compared to other 42.11% (32 participants), were to be known about Physiotherapy through medical Centre.

Source of knowledge about paediatric physiotherapy	No. of Participants	Percentage
Colleagues	13	17.11%
During graduation	19	25.00%
Mass media	11	14.47%
Through medical centre	32	42.11%
Word of mouth	1	1.32%
Total	76	100.00%

Table 4 Percentage of source of knowledge about paediatric physiotherapy

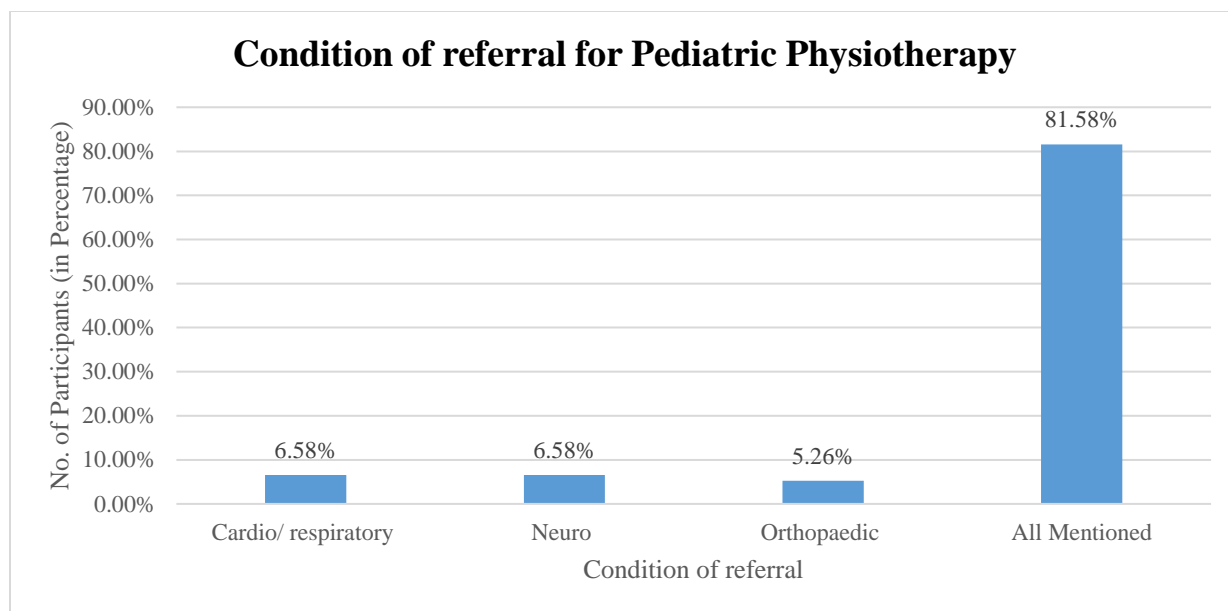


Graph 3 Source of knowledge about Pediatric Physiotherapy

According to this study, referrals to pediatric physiotherapy were made for a variety of causes, including neurologic, orthopaedic, and cardio/respiratory disorders.

Condition of referral for Paediatric Physiotherapy	No. of Participants	Percentage
Cardio/ respiratory	5	6.58%
Neuro	5	6.58%
Orthopaedic	4	5.26%
All Mentioned	62	81.58%
Total	76	100.00%

Table 5 Referral conditions for Paediatric Physiotherapy

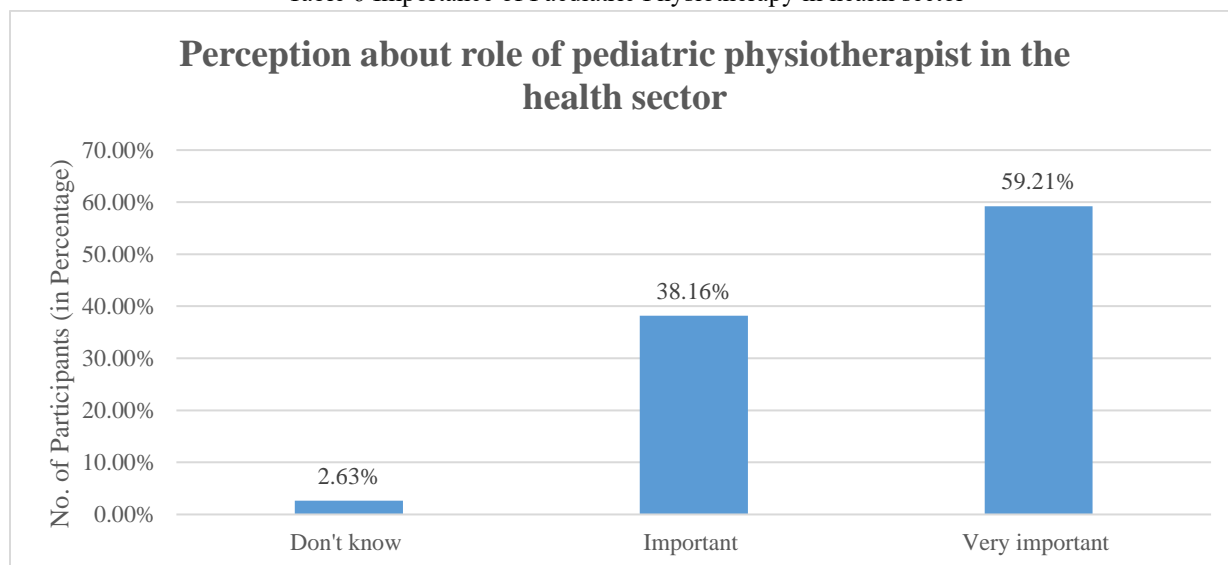


Graph 4 Referral conditions for Paediatric Physiotherapy

Regarding the importance of Paediatric Physiotherapy in the medical field, 45 respondents (59.21%) indicated it was extremely important, and 29 (38.16%) indicated it was significant. And 2 participants (2.63%) had no idea about the importance of Paediatric Physiotherapy.

Perception about role of paediatric physiotherapist in the health sector	No. of Participants	Percentage
Don't know	2	2.63%
Important	29	38.16%
Very important	45	59.21%
Total	76	100.00%

Table 6 Importance of Paediatric Physiotherapy in health sector

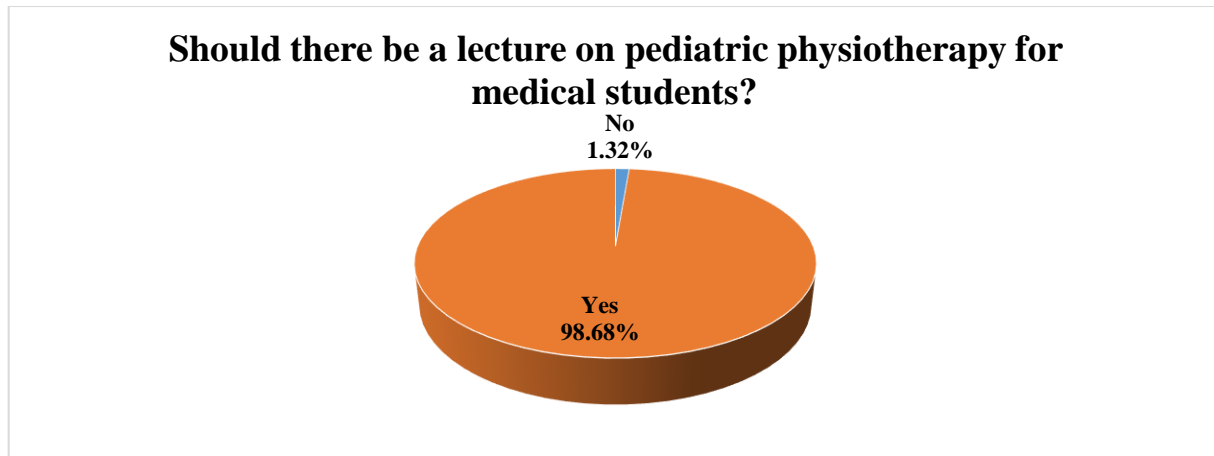


Graph 5 Importance of Paediatric Physiotherapy in health sector

According to this study, 98.68% (75) of respondents considered a lecture about Paediatric Physical therapy should be given to medical students.

should there be a lecture on paediatric physiotherapy for medical students	No. of Participants	Percentage
No	1	1.32%
Yes	75	98.68%
Total	76	100.00%

Table 7 Lectures on Paediatric Physiotherapy

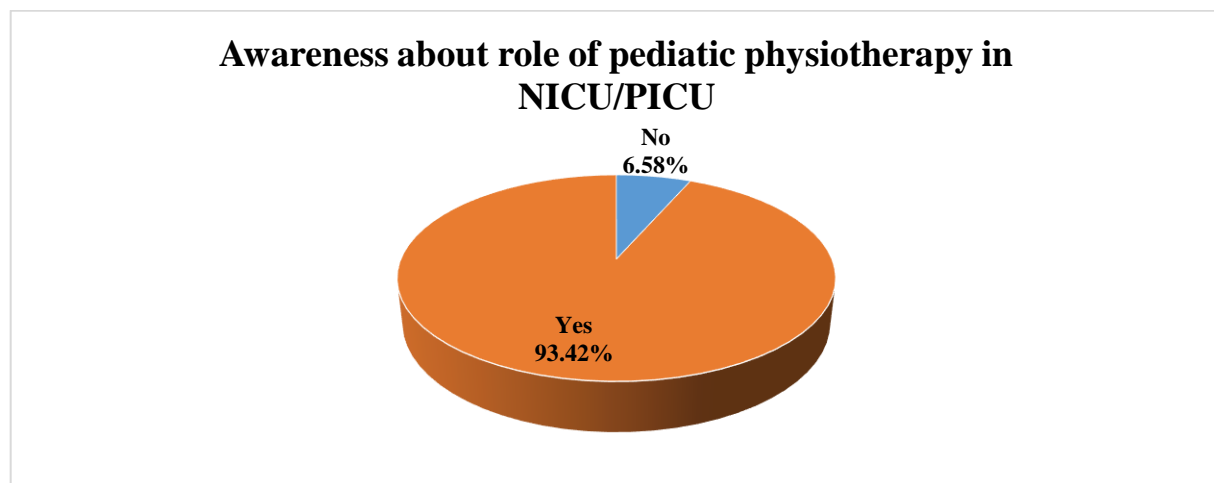


Graph 6 Lectures on Paediatric Physiotherapy

This study found that 93.42% (73 participants) had a high level of awareness regarding Paediatric Physical therapy in the NICU or PICU.

Awareness about role of paediatric physiotherapy in NICU/PICU	No. of Participants	Percentage
No	5	6.58%
Yes	71	93.42%
Total	76	100.00%

Table 8 Awareness about role of Paediatric Physiotherapy in NICU/PICU

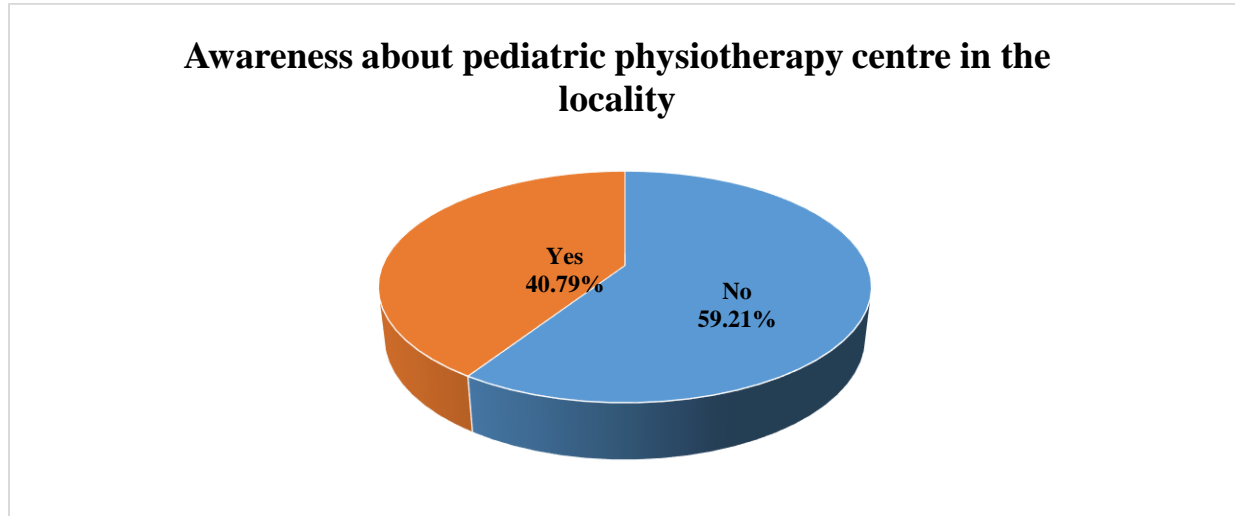


Graph 7 Awareness about role of Paediatric Physiotherapy in NICU/PICU

59.21% participants (45) were not aware about Pediatric Physiotherapy centre in their locality were as only 40.79 % participants (31) were known.

Awareness about paediatric physiotherapy centre in the locality	No. of Participants	Percentage
No	45	59.21%
Yes	31	40.79%
Total	76	100.00%

Table 9 Awareness about Paediatric Physiotherapy centres

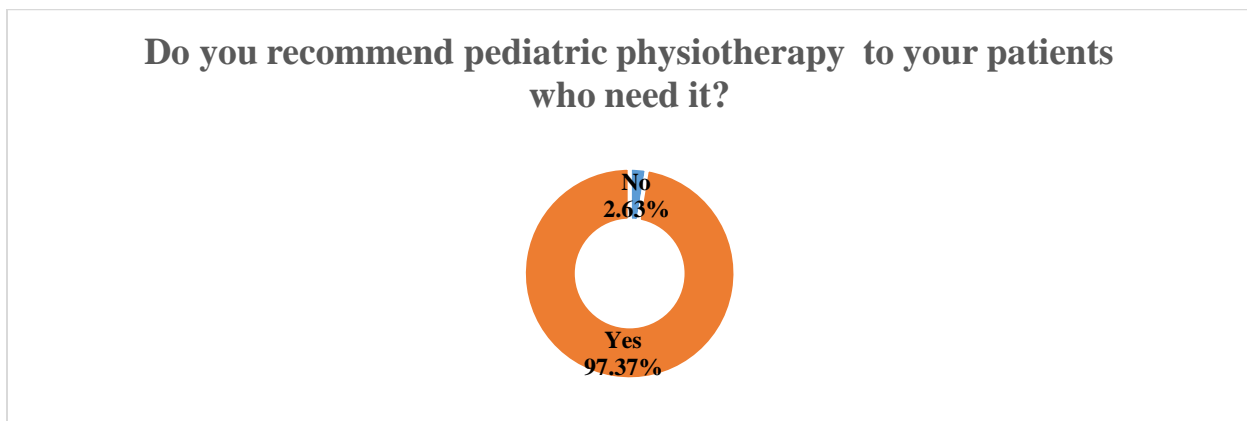


Graph 8 Awareness about Paediatric Physiotherapy centres

78.35 % Healthcare professionals recommended Pediatric Physiotherapy to the patient who needs.

Do you recommend paediatric physiotherapy to your patients who need it?	No. of Participants	Percentage
No	2	2.63%
Yes	74	97.37%
Total	76	100.00%

Table 10 Paediatric Physiotherapy recommendation to patients

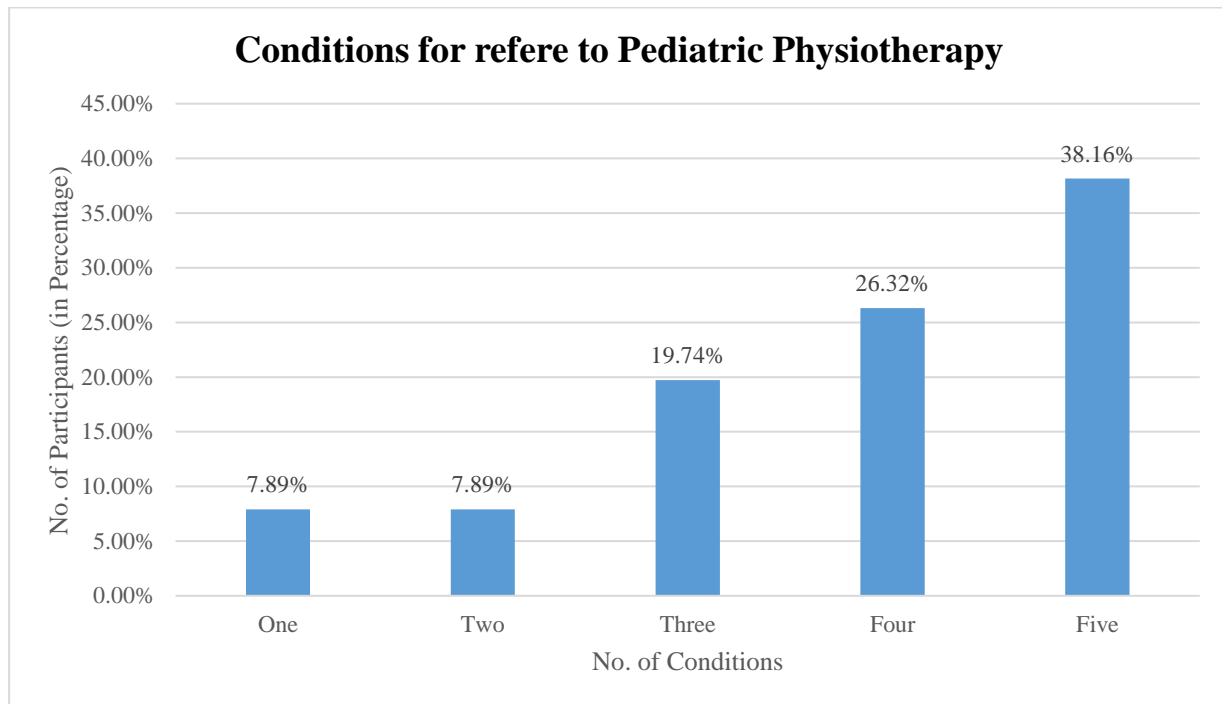


Graph 9 Paediatric Physiotherapy recommendation to patients

The study found that 38.16% of participants were aware of five Paediatric Physical therapy disorders. 4/5 conditions related to paediatric physical therapy were known to 26.32% of participants. 19.74% of participants knew three out of five Paediatric Physical therapy conditions, while 7.89% knew two out of five and one out of five.

5 conditions for refer to paediatric physiotherapy	No. of Participants	Percentage
One	6	7.89%
Two	6	7.89%
Three	15	19.74%
Four	20	26.32%
Five	29	38.16%
Total	76	100.00%

Table 11 Conditions referred to Paediatric Physiotherapy



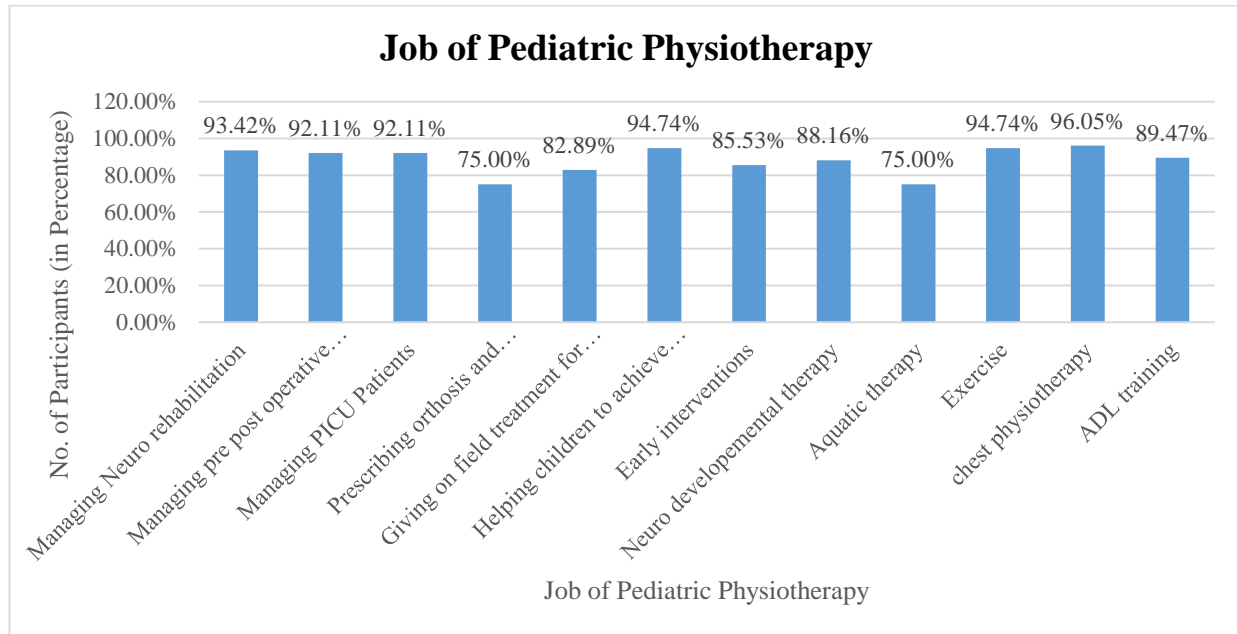
Graph 10 Conditions referred to paediatric physiotherapy

Concerns regarding the role of Paediatric Physical therapy in relation to the following conditions

Job of Paediatric Physiotherapy	Don't Know	Yes
Managing Neuro rehabilitation	5 (6.58%)	71 (93.42%)
Managing pre post-operative rehabilitation	6 (7.89%)	70 (92.11%)
Managing PICU Patients	6 (7.89%)	70 (92.11%)
Prescribing orthosis and Prosthesis	19 (25.00%)	57 (75.00%)
Giving on field treatment for paediatric sports injuries	13 (17.11%)	63 (82.89%)
Helping children to achieve their optimal physical development	4 (5.26%)	72 (94.74%)
Early interventions	11 (14.47%)	65 (85.53%)

Neuro developmental therapy	9 (11.84%)	67 (88.16%)
Aquatic therapy	19 (25.00%)	57 (75.00%)
Exercise	4 (5.26%)	72 (94.74%)
Chest Physiotherapy	3 (3.95%)	73 (96.05%)
ADL training	8 (10.53%)	68 (89.47%)

Table 12 Awareness about job of Paediatric Physiotherapy



Graph 11. Awareness about job of Paediatric Physiotherapy

This study indicates that there is a nearly 100% need for Paediatric Physical therapy.

Is there need of paediatric physiotherapy?	No. Participants	Percentage
Yes	76	100.00%
Total	76	100.00%

Table 13. Need of Pediatric Physiotherapy

III. DISCUSSION

This study aimed to assess healthcare professionals' knowledge of pediatric physiotherapy. The research built upon the concept of regular evaluations of physicians' knowledge regarding significant elements of healthcare. A total of 97 subjects participated in the study.

The results showed that 100% of the participants were aware of physiotherapy, consistent with previous studies. However, when it came to pediatric physiotherapy, only 78.35% of healthcare

professionals were aware of the specialty, while 21.65% were not.

The study found that 42.11% of participants learned about pediatric physiotherapy through medical centers, followed by 25% who learned about it during their graduation. Other sources of information included colleagues (17.11%), mass media (14.47%), and word of mouth (1.32%).

The study highlights the importance of raising public awareness about physiotherapy and pediatric physiotherapy through various media channels. This is

crucial in improving public knowledge and enlightening the general public.

When asked about the role of physiotherapists in healthcare facilities, 59.21% of participants felt that it was extremely significant. This emphasizes the importance of physiotherapy services in healthcare settings.

Pediatric physiotherapy plays a vital role in managing symptoms and enhancing the quality of life for children with serious or potentially fatal illnesses. It is essential to spread awareness about this specialty among parents and healthcare professionals.

IV. CONCLUSION

The purpose of this study was to assess the knowledge and awareness of Paediatric Physical therapy among Kolhapur City's health care providers. Previous research indicates that general practitioners are 100% aware of Physiotherapy, and our study indicates that healthcare professionals are only 78.35% aware of Paediatric Physiotherapy. The findings suggest that health care professionals need more information about Paediatric Physiotherapy services.

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