

Awareness and Knowledge of Occupational Therapy among Health Care Practitioners at Hayatabad Medical Complex, Peshawar

Sami Ur Rehman¹, Muhammad Najeeb², Kaynat Mounner¹, Shafqat Ullah Osam², Maria Gohar⁴

Submission: 22nd March 2025;

Revision: 14th June 2025;

Acceptance: 5th August 2025

¹Occupational Therapist, Khyber Medical University, Peshawar, Pakistan

²Occupational Therapist, Fouji Foundation Hospital, Rawalpindi, Pakistan

³Occupational Therapist, ABLE, United Kingdom

⁴Occupational Therapist, Paraplegic Centre, Peshawar, Pakistan

Corresponding Author

Email: samitheot@gmail.com

Address: Phase V, Hayatabad, Peshawar, Khyber Pakhtunkhwa, Pakistan

ORCID ID: 0009-0007-4603-1856

Background: Occupational therapy is an emerging and developing medical discipline in Khyber Pakhtunkhwa (KPK), and the knowledge and awareness of such fields are considerably low among the public and medical practitioners. The source of referral must possess comprehensive knowledge about the respective field to ensure effective patient care and optimal rehabilitation outcomes. To determine the level of occupational therapy awareness and knowledge among healthcare professionals at Hayatabad Medical Complex, Peshawar.

Method: A descriptive cross-sectional study was carried out at Hayatabad Medical Complex, Peshawar, in which 514 subjects participated. A convenient sampling technique was used to select participants for the study. For data collection, a self-developed questionnaire was created, which was approved by experts from the research committee, and then distributed among subjects. Data were analyzed using means and frequencies through SPSS version 22.

Results: The results of this research study demonstrate that the awareness level of healthcare practitioners is below average. The majority of respondents (86.6%) are not aware of occupational therapy as a profession. A smaller number of subjects were aware of the domains and areas where occupational therapists provide services. Only 10.9% of healthcare practitioners were aware of the degree program in occupational therapy at Khyber Medical University, and 91.2% of respondents were not aware of the role of occupational therapy in developing treatment plans for patients.

Conclusion: The majority of healthcare practitioners demonstrate decreased levels of awareness regarding occupational therapy. Action should be channeled to enhance the role of occupational therapy in rehabilitation teams. Consideration must be given to educating referral sources as members of the rehabilitation team by including occupational therapy concepts in their curriculum.

Keywords: Awareness, Healthcare Practitioners, Occupational Therapy.

Introduction

Rehabilitation is broadly described as the process of recovering the previous level of health and wellness or enhancing the capacity of individuals to live independently.¹ It allows patients to increase chances of returning to their previous health state or optimally manage their

standard of living during disease, injury, or disability. Rehabilitation encompasses psychological, cognitive, and social aspects of recovery, optimizing functioning and participation in everyday activities for better transitions among different recovery stages.

Rehabilitation helps children, teenagers, adults, and older persons achieve maximum independence in daily tasks and enables engagement in education, work, entertainment, and significant life duties such as family care.^{2,3} The rehabilitation workforce comprises various professionals, including physiotherapists, occupational therapists, speech-language pathologists, audiologists, prosthetist and orthotists, psychologists, general physicians, rehabilitation physicians, and registered rehabilitation nurses. These professionals work collaboratively to ensure people from all backgrounds, age groups, and social strata achieve their maximum potential through personalized action plans addressing physical, mental, psychological, and social needs.

According to the World Federation of Occupational Therapy (WFOT), "Occupational therapy is a client-centered health profession concerned with promoting health and well-being through occupation. The primary goal is to enable people to participate in activities of everyday life. Occupational therapists achieve this by working with people and communities to enhance their ability to engage in occupations they want to, need to, or are expected to do, or by modifying the occupation or environment to better support their occupational engagement."^{4,5}

This definition emphasizes that occupational therapy addresses not only physical ability restoration but also environmental, psychological, and social barriers to participation. It highlights occupational therapy's importance in restoring patients' true potential, enabling them to return to daily activities without stigma and become independent society members. This approach allows individuals to develop self-reliance and serve society more effectively.

The central objective of occupational therapy is enabling individuals to participate in daily life

tasks, offering effective interventions in work, education, recreation, play, social engagement, and instrumental activities of daily living.⁶⁻⁹ Occupational therapists work in diverse settings, including public and private healthcare facilities, non-governmental organizations, insurance companies, and private rehabilitation centers, serving all ages in physical and mental health, HIV/AIDS care, palliative care, injury rehabilitation, and community-based rehabilitation. Their scope extends to all life areas to ensure essential care provision. Timely occupational therapy initiation yields more positive results through effective care provision.^{10,11}

Occupational therapists are skilled professionals working with individuals having different medical diagnoses and chronic clinical problems. They help individuals understand their conditions better and develop personalized rehabilitation programs promoting independence and quality of life.^{12,13}

Globally, significant recognition has been given to occupational therapy as an essential healthcare component. Increased awareness has developed regarding the profession and its scope through awareness programs, training workshops, seminars, webinars, and social media campaigns promoting understanding in hospital and clinic settings. However, some regions worldwide have not explored occupational therapy benefits, with studies highlighting this variability. Research reflects that most healthcare practitioners at public sector hospitals were unaware of occupational therapy, its services, and operational domains. Conversely, a Jordan study (2010) exploring rehabilitation services awareness among medical specialists found many were aware of occupational therapy rehabilitation services.¹⁴ Research at the University of Gothenburg, Sweden, regarding psychiatrists' knowledge and referral practices to occupational therapy, indicated lack of education among psychiatrists

regarding occupational therapy knowledge and referral.¹⁵ In Nigeria, a study concerning occupational therapy awareness and knowledge among medical and health sciences undergraduates found more than 80% of respondents were aware of occupational therapy services.¹ This variability suggests structured exposure to occupational therapy concepts during medical education positively influences awareness and leads to better integration among healthcare professionals. When students learn about occupational therapy's role during education, they become better equipped to recognize which patients need specific therapies, leading to better diagnosis and earlier referrals.

According to Pakistani literature, several studies determined attitudes, knowledge, and awareness of healthcare practitioners regarding occupational therapy services in Sindh (Dow University of Health Sciences), where significant participants were aware of occupational therapy services.⁴ In contrast, no research study had been conducted to determine occupational therapy services awareness among healthcare practitioners in Peshawar.

This comparison can be attributed to established occupational therapy educational programs and stronger professional networks in Karachi and surrounding regions, explaining why Dow University of Health Sciences results showed participant awareness of occupational therapy. Meanwhile, Peshawar, the capital of Khyber Pakhtunkhwa province, has unique demographics with significantly different cultural and healthcare characteristics. Limited rehabilitation facilities compared to other major cities may contribute to occupational therapy awareness lack. Therefore, understanding how well the profession is recognized and integrated into healthcare practice in this region is important. Investigating this population will help increase awareness, introducing an entire new demographic to the benefits, leading to better

care provision, improved patient rehabilitation outcomes, and potential awareness expansion to surrounding smaller towns and cities.

Hence, the primary objective of this study was measuring awareness and knowledge of occupational therapy among healthcare practitioners at Hayatabad Medical Complex (HMC), Medical Teaching Institute (MTI) in Peshawar. By identifying the knowledge gap extent, this study aims to provide evidence for better educational facilities and development of more professional-centered programs and workshops, enabling interdisciplinary collaboration that will ultimately strengthen rehabilitation services in Khyber Pakhtunkhwa.

Methodology

Study Design

A descriptive cross-sectional survey was undertaken.

Study Population and Sample

A total of 514 healthcare practitioners participated from different departments. The sample size was calculated using Rao Soft calculator for a known population with a confidence level of 95% and a significance level of 5%.

Inclusion Criteria

The sample included doctors (general surgeons, neurologists, gynecologists, cardiologists, psychiatrists, pediatricians, orthopedic surgeons, and medical specialists), physiotherapists, nurses, and paramedical staff.

Exclusion Criteria

Those who denied consent were excluded from the study.

Ethical Considerations

After approval from the Institutional Review Board (IRB), formal permission was obtained

from the director of the Institute of Physical Medicine and Rehabilitation (IPMR), Khyber Medical University (KMU). Written consent was obtained from the head of HMC and concerned departments, and the study's purpose was explained. The questionnaire was distributed after informed consent was obtained. Privacy and confidentiality of participants were thoroughly maintained, and any questions regarding the study or questionnaire were addressed. All ethical considerations were taken into account.

Data Collection Tool

Data were collected through a self-developed questionnaire [Awareness about Occupational Therapy], which was approved and validated by the research panel of IPMR, KMU. The questionnaire was divided into four sections: participants' demographics, awareness/knowledge of occupational therapy, awareness regarding occupational therapy services, and referral resources. The questionnaire comprised 23 closed-ended questions.

Data Analysis

Data were analyzed using SPSS version 22 through descriptive statistics. All variables in the study were categorical and were presented in tabulated form using frequencies and percentages.

RESULTS

Demographic Characteristics

Out of 514 participants, 259 (50.4%) were males and 255 (49.6%) were females, with 72.2% being married. The majority of healthcare practitioners were in the age category 31-40 years (47.1%). A greater number of subjects were general physicians (22.0%). Additionally, 44.9% (231) of participants had an employment record of 6-10 years in clinical settings, and

100% of subjects had no experience working outside Pakistan.

Table 1: Demographic Distribution of Participants (N=514)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	259	50.4
	Female	255	49.6
Age Groups	20-30 years	151	29.4
	31-40 years	242	47.1
	41-50 years	90	17.5
	>51 years	31	6.0
Marital Status	Single	143	27.8
	Married	371	72.2
Professional Category	General Physicians	113	22.0
	Specialists	89	17.3
	Nurses	156	30.4
	Physiotherapists	67	13.0
	Paramedical Staff	89	17.3
Years of Experience	0-5 years	176	34.2
	6-10 years	231	44.9
	11-15 years	82	16.0
	>15 years	25	4.9
Work Outside Pakistan	Yes	0	0
	No	514	100

Occupational Therapy Awareness

Table 2: Healthcare Practitioners' Awareness of Occupational Therapy

Awareness Variable	Response	Frequency (n)	Percentage (%)
Aware of OT as a Profession	Yes	69	13.4
	No	445	86.6
Aware of OT Degree Program at KMU	Yes	56	10.9
	No	458	89.1
Aware of OT Role in Treatment Plans	Yes	45	8.8
	No	469	91.2
Aware of OT Role in Neuromuscular Diseases	Yes	0	0
	No	514	100

The results demonstrate that a large number of healthcare practitioners, 86.6% (n=445), are unaware of occupational therapy as a profession. Only 10.9% (n=56) of healthcare practitioners were aware of the degree program in occupational therapy at KMU, and 91.2% (n=469) of respondents were not aware of the role of occupational therapy in developing treatment plans for patients. Moreover, 100% of participants (n=514) had no awareness of the role of occupational therapy in treating various neuromuscular diseases. This demonstrates a significant knowledge gap regarding occupational therapy, indicating that substantial work is required to increase awareness, which, if implemented effectively, will help improve patient rehabilitation approaches.

Knowledge and Information Concerning Occupational Therapy Services

Service Area	Aware (Yes) n (%)	Unaware (No) n (%)
Role in Rehabilitation Centers	174 (33.9)	340 (66.1)
Role in Psychiatric Disorders	49 (9.5)	465 (90.5)
Role in Surgical Operations	0 (0)	514 (100)
Role in Sports Centers	69 (13.4)	445 (86.6)
Role in Research Centers	6 (1.2)	508 (98.8)
Role in Industries	0 (0)	514 (100)

A total of 66.1% of participants thought that occupational therapy has no role in rehabilitation centers. Ninety percent (n=465) of healthcare practitioners do not have knowledge about occupational therapy services in psychiatric disorders. All participants (100%) responded negatively about occupational therapy performance in surgical operations. Additionally, 86.6% of healthcare practitioners believed that occupational therapy does not

work in sports centers, while 13.4% acknowledged that it does. Only 1.2% (n=6) consider occupational therapists to work in research centers, while 100% of participants had no idea about the role of occupational therapy in industries. Approximately 33.9% of participants correctly identified that occupational therapists work in rehabilitation centers. This section of the study reveals significant gaps in perception regarding what occupational therapy encompasses and its role in different domains of healthcare and patient betterment.

Sources of Information and Referral Patterns

Information Source	Frequency (n)	Percentage (%)
No Source	442	86.0
Friends and Relatives	19	3.7
Contact with OTs	18	3.5
Internet	7	1.4
Educational Literature	6	1.2
Media	12	2.3
Professional Workshops	10	1.9

Referral Practice	Frequency (n)	Percentage (%)
Never Referred	501	97.5
General Hospitals	7	1.4
Clinics	6	1.2
Tertiary Hospitals	0	0
Health Care Centers	0	0

Eighty-six percent of the study population has no source of information regarding occupational

therapy services, while 3.7% obtained their information from friends and relatives, and 3.5% knew occupational therapy as a profession due to their contact with occupational therapists. The internet was the information source for 1.4% of participants, and educational literature was the source for 1.2%.

Regarding referral patterns, 97.5% of healthcare practitioners have never referred patients to occupational therapy services. Only 1.4% have referred to general hospitals and 1.2% to clinics. No participants had referred patients to occupational therapy services in tertiary hospitals or healthcare centers. Additionally, 61% of participants were unaware of which clients need occupational therapy services, while 35.4% specified that clients with difficulties in activities of daily living (ADLs) need occupational therapy services. However, the majority of subjects (90.1%) correctly stated that occupational therapy is not synonymous with recreational therapy.

DISCUSSION

Occupational therapy is a profession that enhances the well-being of people of every age by enabling occupations to improve fitness and participation in society.¹⁶ Occupational therapists achieve this by engaging individuals in their occupations and activities that they perform in daily life.^{8,16}

In comparison with a previous study conducted in Nigeria (2016), 80% of respondents had information about occupational therapy.¹ In contrast, the results of our study illustrated that only 13.4% of healthcare practitioners were knowledgeable concerning occupational therapy as a profession. In Nigeria, the greater number of subjects were male, while in our study, males comprised 50.4% of the sample.¹⁷

The study carried out by Wesam Barakat at the University of Jordan (2018) revealed that the majority of participants responded positively

about the role of occupational therapy in rehabilitation services, which is dissimilar to our study, in which the majority of respondents were unaware regarding the source and knowledge of occupational therapy.¹²

A study conducted at Dow University of Health Sciences Karachi at Civil Hospital (November 2010) indicated that 39% were unfamiliar with occupational therapy, which differs from our study in which 86.6% of healthcare practitioners were unacquainted with occupational therapy. In the aforementioned study, 10.7% of healthcare practitioners referred patients to occupational therapists, while the results of our study reported only 2.3% of healthcare practitioners referred patients to occupational therapists.¹⁴

The findings that occupational therapy is not well-known among healthcare practitioners indicate that occupational therapists are missing many referrals.^{18,19} The limited level of knowledge and awareness among healthcare practitioners is the main cause of restricted or absent referrals to occupational therapists because the referral source must have detailed knowledge about the respective field (occupational therapy).^{15,20}

Occupational therapists must make efforts such as engagement in campaigns, workshops, and seminars for occupational therapy awareness at the public level.^{15,21} The results of our study demonstrated that the knowledge and awareness of healthcare practitioners about occupational therapy are below average. It is very important to educate practitioners to encourage referral to occupational therapy.²² In our study, only 13.4% of respondents reported having sources of information such as friends, family, relatives, media, and internet. Not all practitioners are familiar with the term occupational therapy at their educational level.²³⁻²⁶ It is critical to include the role of occupational therapy in rehabilitation in entry-

level medical curricula, which will help healthcare practitioners become well-educated about occupational therapy services in a comprehensive manner.^{17,27} Occupational therapists working in government and private settings must ensure they highlight their role in the rehabilitation team and encourage other practitioners to refer clients to occupational therapy departments.²⁸ Occupational therapists must seek opportunities for positions in government settings.²⁹

Recommendations

The establishment, organization, and management of interdisciplinary teams may provide better services to the public. More efforts are required at public and community levels to educate healthcare practitioners and the public regarding occupational therapy services and their outcomes.

In the future, additional studies are required to be conducted on occupational therapy awareness in other tertiary care hospitals (public and private). The results also demonstrate that it is the responsibility of occupational therapists to uplift and encourage their profession and address the decreased knowledge and awareness of occupational therapy.

Occupational therapists in Pakistan must develop increased understanding of their profession's ideology. They should also work to ensure that awareness of their profession and the work they provide is recognized and understood by healthcare professionals as well as the general patient population.

Limitations

The study was limited to only a single center—one tertiary care hospital (HMC, MTI Peshawar). This does not truly reflect the awareness and knowledge levels of healthcare practitioners in other hospitals, districts, or provinces of Pakistan. The sample size was relatively small considering the overall population, which limits statistical power and may impact study findings.

The study relied on a self-administered questionnaire, which can become subject to recall bias, misunderstanding of questions, or the tendency of respondents to provide socially desirable answers. The questionnaire may not have captured all dimensions of occupational therapy awareness and could have been a limited measurement tool. Being a cross-sectional study, it only examines a single point in time and does not capture how perceptions change over time.

CONCLUSION

This study concludes that the majority of healthcare practitioners at Hayatabad Medical Complex demonstrate decreased levels of awareness regarding occupational therapy or possess inadequate knowledge. This deficiency in understanding leads to delays in the effective integration of occupational therapists in patient rehabilitation, which ultimately impacts overall patient well-being.

Action should be channeled to enhance the role of occupational therapy in rehabilitation teams. Medical and nursing curricula should include detailed and comprehensive content regarding occupational therapy, with an increased number of workshops and training programs hosted by various institutions so healthcare professionals across every spectrum can understand the complex world of occupational therapy and learn how and when occupational therapists should be contacted.

Consideration must be given to educating referral sources as members of the rehabilitation team by including occupational therapy terminology and providing detailed understanding of this profession. The Ministry of Health should issue statements and announcements clarifying the function of occupational therapy in various healthcare settings. This will help occupational therapy become an important part of the

multidisciplinary approach to patient care, elevating its status and leading to prompt referrals and better recovery for patients.

Awareness campaigns and public health initiatives should target hospital and clinical settings as well as extend beyond them, so awareness regarding occupational therapy becomes more comprehensive and this resource is utilized efficiently.

If awareness is heightened among healthcare professionals and practitioners, then patient access to occupational therapy can be improved, leading to earlier access, better interventions, improved functional outcomes, and enhanced quality of life for patients requiring rehabilitation.

Author Contributions

Sami Ur Rehman: Leading roles in conceptualization, supervision, and project management.

Muhammad Najeel: Primary data analysis and manuscript preparation.

Kaynat Mouneer: Data collection and methodology support.

Shafqat Ullah Osam: Data collection and analysis support.

Maria Gohar: Senior supervision and validation roles.

Acknowledgments

None.

Conflict of Interest

The authors declare no conflicts of interest in relation to this research study.

Funding Disclosure

None.

REFERENCES

1. Olaoye OA, Emechete AA, Onigbinde AT, Mbada CE. Awareness and knowledge of occupational therapy among Nigerian medical and health sciences undergraduates. *Hong Kong J Occup Ther.* 2016;27(1):1-6.
2. Nowrouzi-Kia B, Yazdani A. Examining the unmet need for rehabilitation through a health policy lens: a focus on prevention, engagement and participation across the lifespan. *J Health Soc Sci.* 2022;7(2):181-194.
3. McAvoy E. Occupational who? Never heard of them! An audit of patient awareness of occupational therapists. *Br J Occup Ther.* 1992;55(6):229-232.
4. Wan Yunus F, Ahmad Ridhuan NF, Romli MH. The perception of allied health professionals on occupational therapy. *Occup Ther Int.* 2022;2022:8542016.
5. Schiller S, van Bruggen H, Kantartzis S, Laliberte Rudman D, Lavalley R, Pollard N. "Making the change by shared doing": an examination of occupation in processes of social transformation in five case studies. *Scand J Occup Ther.* 2022;29(8):645-658.
6. Alotaibi N, Shaye A, Nadar M, Tariah HA. Investigation into health science students' awareness of occupational therapy: implications for interprofessional education. *J Allied Health.* 2015;44(1):3-9.
7. Roberts P, Farmer ME, Lamb AJ, Muir S, Siebert C. The role of occupational therapy in primary care. *Am J Occup Ther.* 2014;68(Suppl 3):S25-S33.
8. Mani K, Velan M. An investigation into medical practitioners' awareness of occupational therapy in South India: a survey. *Indian J Occup Ther.* 2020;52(1):12-17.
9. Devereaux E, Carlson M. The role of occupational therapy in the management of depression. *Am J Occup Ther.* 1992;46(2):175-180.
10. Miranda-Duro MDC, Nieto-Riveiro L, Concheiro-Moscoso P, Groba B, Pousada T, Canosa N, et al. Occupational therapy and the use of technology on older adult fall prevention: a scoping review. *Int J Environ Res Public Health.* 2021;18(2):702.
11. Hopton K, Stoneley H. Cultural awareness in occupational therapy: the Chinese example. *Br J Occup Ther.* 2006;69(8):386-389.
12. Darawsheh WB. Awareness and knowledge about occupational therapy in Jordan. *Occup Ther Int.* 2018;2018:2493584.
13. Pottebaum JS, Svinarich A. Psychiatrists' perceptions of occupational therapy. *Occup Ther Ment Health.* 2005;21(1):1-12.
14. Kamran F, Malik A, Malik S, Khan SZ, Kamran B. Awareness and adherence to occupational therapy among doctors in a tertiary care hospital. *J Dow Univ Health Sci.* 2011;5(2):77-79.
15. Johansson G, Eklund K, Gosman-Hedström G. Multidisciplinary team, working with elderly persons living in the community: a systematic

- literature review. *Scand J Occup Ther.* 2010;17(2):101-116.
16. Winter S, Sursky S, Classen S, Yarney A, Monahan M, Platek K, et al. Intermediate term effects of an occupational therapy driving intervention for combat veterans. *Am J Occup Ther.* 2016;70(4_Supplement_1):7011515246p1.
17. Chakravorty BG. Occupational therapy services: awareness among hospital consultants and general practitioners. *Br J Occup Ther.* 1993;56(8):283-286.
18. AlHeresh R, Nikopoulos CK. The role of the occupational therapist in Jordan: a survey of the members of the healthcare team exploring their knowledge about occupational therapy in rehabilitation hospitals. *Disabil Rehabil.* 2011;33(9):778-786.
19. Pitonyak JS, Mroz TM, Fogelberg D. Expanding client-centred thinking to include social determinants: a practical scenario based on the occupation of breastfeeding. *Scand J Occup Ther.* 2015;22(4):277-282.
20. Turpin MJ, Rodger S, Hall AR. Occupational therapy students' perceptions of occupational therapy. *Aust Occup Ther J.* 2012;59(5):367-374.
21. Wilding C. Raising awareness of hegemony in occupational therapy: the value of action research for improving practice. *Aust Occup Ther J.* 2011;58(4):293-299.
22. Cieza A, Kwamie A, Magaqa Q, Ghaffar A. Health policy and systems research for rehabilitation: a call for papers. *Bull World Health Organ.* 2021;99(10):686-687.
23. Castro D, Dahlin-Ivanoff S, Mårtensson L. Occupational therapy and culture: a literature review. *Scand J Occup Ther.* 2014;21(6):401-414.
24. Simpson CF. Physical and occupational therapy for arthritis. *West J Med.* 1985;142(4):562.
25. Roopchand-Martin S, Noel G. Secondary school students' knowledge of physical therapy: the Trinidadian scenario. *West Indian Med J.* 2014;63(2):151-156.
26. Akhlaghdoust M, Safari S, Davoodi P, Soleimani S, Khorasani M, Raoufizadeh F, et al. Awareness of Iranian medical sciences students towards basic life support: a cross-sectional study. *Arch Acad Emerg Med.* 2021;9(1):e12.
27. DiFonzo N, Bordia P. Rumor psychology: social and organizational approaches. Washington, DC: American Psychological Association; 2007.
28. Tariah HSA, Abulfeilat K, Khawaldeh A. Health professionals' knowledge of occupational therapy in Jordan. *Occup Ther Health Care.* 2012;26(1):74-87.
29. Lequerica AH, Donnell CS, Tate DG. Patient engagement in rehabilitation therapy: physical and occupational therapist impressions. *Disabil Rehabil.* 2009;31(9):753-760.
30. van Vuuren JJ, Okyere C, Aldersey H. The role of occupational therapy in Africa: a scoping review. *S Afr J Occup Ther.* 2020;50(3):3-21.