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Original Research

## Perceptions of Hand Surgery Patients About Occupational Therapy

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**Purpose:** Occupational therapists provide holistic health care and social care and seek to promote health through occupation. This study measured how hand surgery patients who received referrals for occupational therapy perceive occupational therapy and occupational therapists.

**Methods:** A cross-sectional online survey was designed to determine the meaning of an occupation, the role of occupational therapists, the services and benefits provided by occupational therapists, the populations served, and the work settings of occupational therapists.

**Results:** This study included 634 patients who responded to the survey (three-fourths were women). Most participants were uncertain about the professional environment of occupational therapists. Approximately one-third of the respondents believed that occupational therapists work at general hospitals. Most participants believed that occupational therapists manage orthopedic conditions and hand injuries; however, the least participants believed that occupational therapists manage cases involving cardiorespiratory conditions. No significant correlation was noted between the participants' overall awareness of occupational therapy and their sex or age. However, a notable statistical relationship was found between the comprehensive knowledge of occupational therapy and the educational level of the participants.

**Conclusions:** To receive the benefits of occupational therapy, it is necessary for the population to be aware of those benefits.

**Clinical relevance:** Patient perspectives of occupational therapy can help in patient's education and their treatment plan.

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Occupational therapy is a health care field that uses assessment and intervention techniques to foster the development, restoration, and preservation of meaningful activities of individuals, groups, and communities, which are commonly referred to as occupations.<sup>1</sup> Occupational therapy encompasses a wide range of practices. Collaboration with an occupational therapist as part of an interdisciplinary team is important and helps patients receive all essential health services. Services provided by occupational therapists are cost-effective because they improve patient outcomes and the quality of care.<sup>2,3</sup>

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Occupational therapy includes the evaluation of factors that affect the activities of daily living, instrumental activities of daily living, health management, rest, sleep, education, work, play, leisure, and social participation. It also involves identifying and selecting methods and approaches for treatment. Thereafter, appropriate interventions and procedures can be performed to promote or enhance safety.<sup>4</sup> In the field of plastic and reconstructive surgery, occupational therapy is important for those who have undergone burn rehabilitation, hand surgery, and major surgery involving reconstruction, such as muscle transfer. The perception and awareness of occupational therapy and its roles in the general population are low, even among health care providers.<sup>5–7</sup> Therefore, this study aimed to understand how hand clinic surgery patients who required occupational therapy perceived occupational therapists before meeting them and determine whether the population has sufficient awareness of occupational therapy.

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**Table 1**  
Descriptive Statistics of the Study Sample

	N = 634
Sex	
Male	172 (27.1%)
Female	462 (72.9%)
Age (y)	
18–25 y	66 (10.4%)
26–35 y	210 (33.1%)
36–45 y	267 (42.1%)
Older than 45 y	91 (14.3%)
Education Level	
Secondary school or less	99 (15.6%)
Bachelor's degree	411 (64.9%)
MSc degree	124 (19.5%)

## Methods

### Design

A cross-sectional online survey was conducted among hand surgery patients who received a referral for occupational therapy. The survey was sent via WhatsApp after obtaining approval from the institutional review board.

### Participants

One thousand patients were invited to participate in the study, and 634 responded (73% female patients; 27% male patients). The participants voluntarily participated in this study, which was conducted from January 10, 2022 to June 8, 2023. Questionnaire responses were anonymized and sent electronically. The survey was conducted in Arabic to enhance public accessibility and comprehensibility. Subsequently, the results were translated into English using an accredited translation service to ensure accuracy and reliability.

### Materials

The survey was developed by Sarsak<sup>8</sup> and comprised 13 questions regarding the knowledge of occupational therapy. It was designed to understand the participants' knowledge of the meaning of occupation, the role of occupational therapists, the services and benefits provided by occupational therapy, the populations served, and the work settings of occupational therapists.

### Theory/calculation

Descriptive statistics, including percentages and frequencies of responses, were calculated to analyze demographic features and survey results. A one-way analysis of variance was performed to calculate the significance of the relationship between awareness of occupational therapy and level of education because the statistician weighted every category of demographic data and knowledge.

## Results

During our study, most respondents were between 36 and 45 years of age (42.1%). Two-thirds of the respondents had a bachelor's degree (65%), 15% had a secondary school certificate or less education, and 20% had a master's degree (Table 1).

Most respondents were uncertain (36%) about where occupational therapists work. Approximately one-third of the respondents believed that occupational therapists work at general hospitals (Table 2).

**Table 2**  
Distribution of Participants According to Their Opinions Regarding Where Occupational Therapists Work

	N	%
General hospitals	197	31.4
Orthopedic and neurological clinics	93	14.6
Nursing settings	25	3.9
Home care settings	39	6.1
Psychiatric hospitals	42	6.6
Schools	11	1.7
Not sure	227	35.8
Total	634	100

**Table 3**  
Distribution of Participants According to Their Responses Regarding Cases Managed by Occupational Therapists

	N	%
Orthopedic conditions	216	36
Hand injuries	182	30
Psychiatric states	219	36.1
Elderly patients	169	27.9
Neurological conditions	195	32.2
Pediatric patients	129	21.3
Burns	88	14.5
Palliative care	145	23.9
Rheumatism	75	12.4
Cardiorespiratory conditions	41	6.8
Total		

Regarding the cases for which occupational therapy could be applied, the responses varied. Most respondents believed that occupational therapists manage cases involving orthopedic conditions (36%) and hand injuries (30%). The least respondents believed that occupational therapists manage cases involving cardiorespiratory conditions (7%; Table 3).

The perception of the role of occupational therapists as part of a multidisciplinary rehabilitation team was overwhelmingly positive, with 89% acknowledging their importance. Furthermore, 52% of the participants had previous knowledge of occupational therapy and 54% expressed satisfaction with their understanding of the field. However, only 26% of the participants believed that occupational therapists and physiotherapists had similar roles (Table 4).

Interestingly, no significant correlation between the participants' overall awareness of occupational therapy and its role and sex or age was observed (Tables 5 and 6). Conversely, a notable statistical relationship was found between the comprehensive knowledge of occupational therapy and the educational level of the participants ( $P < .5$ ), indicating that the educational level significantly influences the knowledge of occupational therapy (Table 7).

## Discussion

Most of the respondents were not sure about where occupational therapists work. Most of the participants believed that occupational therapists mainly manage orthopedic and hand cases. These results were similar to those of a study that showed that the role of occupational therapists is rarely known compared with that of other health care professionals.<sup>9</sup> The perception of the role of occupational therapists as part of a multidisciplinary rehabilitation team was positive, thus elucidating the vital role of occupational therapists and their ability to bring a unique perspective to patient care.<sup>10</sup> Although 26% of the respondents believed that occupational therapists and physiotherapists have similar roles, this rate was lower than the 37.3% observed in a study conducted among medical and health science students, who believed that occupational

**Table 4**  
Distribution of Participants According to Their Knowledge of Occupational Therapy and Its Role

		N	%	Mean	Rank
Have you ever heard of occupational therapy?	No	327	51.6	1.4	3
	Yes	288	45.4		
	Not sure	19	3		
	Total	634	100		
Do you think occupational therapists play an important role in multidisciplinary rehabilitation teams?	No	72	11.3	1.8	2
	Yes	562	88.7		
	Total	634	100.0		
	No	467	73.6		
Yes	167	26.4			
Total	634	100			
No	340	53.6	1.4	3	
Yes	294	46.4			
Total	634	100			
No	44	6.9			1.9
Yes	590	93.1			
Total	634	100			

**Table 5**  
Results of a One-Way Analysis of Variance Performed to Compare the Overall Knowledge of Male and Female Participants Regarding Occupational Therapy

Sex	N	Mean	Standard Deviation	Standard Error	95% Confidence Interval		F	Significance
					Lower Bound	Upper Bound		
Male	172	1.5861	.24926	1.5861	1.5487	1.6235	.237	.627
Female	462	1.5759	.22911	1.5759	1.5549	1.5970		
Total	634	1.5787	.23466	1.5787	1.5604	1.5971		

**Table 6**  
Results of a One-Way Analysis of Variance Performed to Compare the Overall Knowledge of Participants of Different Ages Regarding Occupational Therapy

Age Group, Y	N	Mean	Standard Deviation	Standard Error	95% Confidence Interval		F	Significance
					Lower Bound	Upper Bound		
18–25	66	1.5576	.20907	.02573	1.5062	1.6090	.292	.831
26–35	210	1.5751	.23728	.01641	1.5428	1.6075		
36–45	267	1.5865	.24287	.01489	1.5571	1.6158		
Older than 45	91	1.5800	.22245	.02345	1.5334	1.6266		
Total	634	1.5788	.23447	.00933	1.5604	1.5971		

**Table 7**  
Results of a One-Way Analysis of Variance Performed to Compare the Overall Knowledge of Participants With Different Education Levels Regarding Occupational Therapy

Education Level	N	Mean	Standard Deviation	Standard Error	95% Confidence Interval		F	Significance
					Lower Bound	Upper Bound		
Secondary school or less	99	1.5574	.23778	.02039	1.5170	1.5977	1.318	.02
Bachelor's degree	411	1.5809	.23164	.01145	1.5584	1.6034		
MSc degree	124	1.6094	.23484	.02547	1.5588	1.6601		
Total	634	1.5797	.23352	.00930	1.5614	1.5980		

therapy and physical therapy were similar, and 39.3% were unsure whether they were similar.<sup>8</sup> Although occupational therapy is 100 years old, it is not well understood by the public.<sup>11</sup> No significant correlation was observed between the participants' overall awareness of occupational therapy and its roles and sex or age. However, a correlation was found between the participants' overall awareness of occupational therapy and educational level.

Compared with the perception of occupational therapy by the general population, that of medical students is still limited. The goal of occupational therapy is to enable people to participate in daily and meaningful activities.<sup>11</sup> Most of the population can identify the roles of physicians, nurses, and physiotherapists; however, fewer individuals are aware of the services provided by occupational therapists.<sup>10</sup>

Proper visual identification, such as a badge or uniform, could help the general population and health professionals, including medical practitioners, identify occupational therapists so that they would not have to verbally explain their role.<sup>12</sup> The population needs to have proper perceptions of occupational therapy to benefit from all that it offers.

#### Study strengths and limitations

Our study included a reasonable number of participants from the hand surgery clinic who required occupational therapy. This number could have been increased by using more than one center during this study; however, we preferred to first perform this survey among patients from one center before attempting a

multicenter study. Additionally, patients in older age groups were not cooperative during our study, which may have affected the results.

### Conclusions

One century has passed since the introduction of occupational therapy. Although it has an important role in patient care, perceptions of this field are limited. Increasing awareness of occupational therapy and involving occupational therapists in multidisciplinary rehabilitation teams could improve the perceptions and knowledge of the population.

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