

**ORIGINAL ARTICLE****KNOWLEDGE, ATTITUDE AND PRACTICE  
TOWARDS EVIDENCE-BASED PRACTICE AMONG  
OCCUPATIONAL THERAPISTS OF KARACHI****ABSTRACT****OBJECTIVE**

Evidence-based practice is considered as keystone in this advanced era of clinical practices. Little evidence regarding the use of evidence in practice among Occupational therapists is available both nationally and internationally. A number of specific organizational factor that affects the practice are evident in clinical setting. Therefore, this study aims to evaluate knowledge, attitude and practice among occupational therapists as a new paradigm.

**STUDY DESIGN**

A cross-sectional survey was conducted among Occupational therapists recruited through the non-probability sampling technique.

**STUDY SETTING AND PARTICIPANTS**

The data was collected through Questionnaire adapted from Knowledge, Attitude and Practice (KAP) American College of Sports Medicine (APTA). Only 26 OT were recruited from a sample of 30 with mean age of 23.9±2.27.

**RESULTS**

The findings of this study revealed that 46.2% have knowledge of EBP however, 53.8% participants do not take into account patient preferences while 34.65% use professional literature in clinical decision making.

**CONCLUSION**

It was concluded that majority of the occupational therapists have knowledge of Evidence-based practice but these are not implicated in to clinical practice and patient management. Therefore, further studies are required in the domain to evaluate the knowledge of therapist and its implication into patient care.

**KEY WORDS:**

Occupational Therapists, Evidence-based practice, Knowledge, Practice.

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## INTRODUCTION

Evidence-based practice (EBP) is considered as the keystone of clinical practice. It is the implementation of existing evidence into clinical treatment, considered as a complex task<sup>1</sup>. Now a day, this practice has become a cornerstone for most healthcare practitioners to provide service that advance their profession. Occupational Therapists (OTs) provide treatment to all age groups ranging from pediatrics' to adults, and then geriatrics, based on their physical, mental or sensory systems<sup>2</sup>. In rehabilitation sciences, OTs are emerging practitioner, their key role is to make their client independent to perform activities of daily living ADLs. They enhance functional skills of clients by using practice framework that foremost centered approach that affectively lead to desired outcome for the client's<sup>3</sup>. Several studies stated that OT is a field emerging in minor countries in order to lead socialization and promote occupation to people with disabilities in order to prevent exclusion and occupational lack<sup>4</sup>. However, awareness of OT role identification in clinician practice is crucial between occupational, physiotherapist and special educator<sup>5</sup>.

The evidence-based practices in occupational therapy are predominantly focused on the therapists' knowledge, attitude, and utilization of skills that will serve as a resolution to evade barriers in implementing the evidence-based practices in clinical and educational interventions with qualified therapists<sup>3-4</sup>. Moreover, it will also serve as the key to identify certain barriers that may be overlooked during the practice. According to Curtin and Colleagues, the perception of occupational therapists in the United Kingdom was found to be assertive, yet they faced time constraints, staff burnout, and high turnover as well as limited access to certain resources<sup>5</sup>. In addition to it, Bennett et al. explored the insights of occupational therapists and barriers in occupational therapists working in Australia<sup>3</sup>. It was revealed that a number of therapists have a positive attitude regarding evidence-based practices relying on their clinical expertise. Moreover, it was revealed that only a few registered therapists were using planned interventions and updates their knowledge through CME's rather than the research for clinical decision-making<sup>3-4</sup>. Despite the fact, certain barriers are included in the implementation of evidence-based practices by included lack of time, increased caseloads, limited searching, appraising skills, and accessing journal skills<sup>5</sup>. This may be due to the lack of knowledge and practice in this regard due to the limitation of scientific evidence to support specific interventions. Besides, occupational therapists have also reported a low level of knowledge and skills in performing evidence-based practices<sup>6</sup>. However, studies have revealed that education-based interventions were shown to enhance a health professional knowledge

and skills, which will have a profound impact on their behavioral change, although this impact was seen to be minimal despite the current challenges in evidence-based practices<sup>7</sup>.

Yet these practices remain pivotal to modern healthcare in behavioral modifications through knowledge and practice that will lead to significant challenges for the healthcare educators. Besides, there is a scarcity of researches about evidence-based practices to date to address the occupational therapists' knowledge, skills, and practices in healthcare<sup>4</sup>. On the contrary, a study that examined the attitudes of health sciences, students, in particular, medical and nursing undergraduates examined the impact of an evidence-based training protocol in information-seeking practices through KAP-Q (Knowledge, Attitude and Behavior Questionnaire). It was revealed that evidence-based practices enhance student's confidence in information-seeking behaviors and the practice tends to increase the future usage of these practices with advancing academic levels<sup>6</sup>.

In addition, another study investigated the knowledge and attitude of evidence-based practices towards nursing students of final year and post-registration. It was revealed that the nursing students were confident in searching and appraising skills however the level of knowledge was found to be low-to-moderate. Unfortunately, these aspects have not been appropriately investigated in the literature in relation to occupational therapy students<sup>4-6</sup>.

Therefore, proficient occupational therapy programs should be incorporated in the curriculum to administer effective teaching strategies to prepare students for the advanced academic levels, enhancing their knowledge, skills, and attitudes towards evidence-based practices. It was evident, that educators play a pivotal role to aid the students to become scholarly stakeholders of evidence. In order to pursue these practices, the academician and fieldworkers must understand the preferred sources of evidence, its level, usage, and identification of certain barriers that may contribute toward more effective teaching strategies<sup>3</sup>. Furthermore, these educational strategies for implementing evidence-based practices in occupational therapy programs should be focused to demonstrate appropriate research approaches permeated with evidence-based content<sup>4</sup>. Moreover, students must be provided with the opportunities in their academic or clinical phases to share their evidence-based knowledge, skills, and practice insights with their supervisors to enhance their expertise and to develop a proficient culture of advanced learning in clinical practice for the implementation of evidence-based occupational

therapy interventions<sup>5</sup>.

Despite of the fact, a marked gap in the field to demonstrate health consequence of different health care professionals' knowledge, attitude and practice to apply EBP in clinical trials<sup>6</sup>. In contrast, professionals in healthcare services must have ample knowledge to approach, appraise and implement research conclusions<sup>7</sup>. Applying EBP in rehabilitation is predominantly grounded on evidence for many treatments<sup>8</sup>. On the other hand, OT practice is evidence based on both external and external factors. Further, individual factors include therapist's behavior, educational level, preferences, and context skills<sup>9</sup>. Factors concerning with both the specific and the organizational i.e provision and period accessible to exploration for research suggestion, are typically important<sup>6</sup>.

EBP promoted way for clients in OT practice to deliver the best level of care in hospital, school or in private clinics in rehabilitation<sup>10</sup>. However, limited content is available that is used by OT to evaluate attitude and perceptions<sup>11</sup>. Moreover, different evaluation tool are an assessment of personal knowledge and enhancement of the skills are beneficial<sup>12</sup>. A research conducted in 2015 in South Africa explored EBP related to knowledge, skills, attitude and behavior<sup>13</sup>. Another survey conducted between students and health care professionals to determine EBP-KAP. One hundred and nine students participated in study were asked to complete a self-administered questionnaire paper based or online survey<sup>14</sup>. Recent research in KSA stated that limited literature is available in EBP application in clinical practice among Saudian's OTs<sup>15</sup>. A survey has been conducted to understand the attitude, knowledge and behavior towards EBP in primary care revealed rate of response that is 50% to 55%<sup>16</sup>. Outcomes involved highly positive responses, almost 2/3 stated that they have information about guidelines and less than 50% have an idea of finding the guidelines, among 4/5 reported that they had knowledge about how to access the guidelines and 75% claimed that they were habituating to use the guidelines routinely. It was also observed that the male participant was more confident to invention research ( $p=0.047$ ) and can get easily administer to guidelines ( $p=0.005$ ). Although, most common difficulty was stated by the participants while using guidelines is shortage of time<sup>17</sup>. Another study reported in South Africa (2017) evaluated EBP in health care in four different domains such as physiotherapist, occupational therapist, speech therapist and nutrition<sup>18</sup>. In the year 2011, three Australian enlightened role of Evidence-based practice in related to knowledge, attitude and practice in field of pediatric OT. The response rate was low approximately less than 50% who completed the entire survey. However, the outcome of this study was extremely constructive,

as the participants showed knowledge and imposed research into practice, though was less confident<sup>19</sup>. Another study stated that EBP is not used to apply conclusions in clinical practice as a guideline<sup>20</sup>. Research conducted in Canada discuss only about the hindrances mostly faced by occupational therapist while turning the evidence into practice and concluded it is an extremely complex task to use evidence based conclusions into routine practice. More over it is a big challenge due to number of factors such as shortage of time, less accessibility and poor perception<sup>21</sup>. Another research has been conducted in three countries Australia, Taiwan and United Kingdom, examining KAP of pediatric online web survey<sup>22</sup>. No research has been yet conducted in Pakistan and specific in Karachi to explore the KAP towards Evidence-based practice in the OT. Marked research gap has been filled after completion of research; it seems to be very beneficial for the growth of Occupational Therapy.

## METHODOLOGY

The Cross-Sectional survey was conducted through questionnaire that is adapted from the study of Jette et al (2003)<sup>23</sup> as per the perspective of OT. Data was collected through non probability Convenient Sampling from Occupational Therapists practicing in primary and tertiary care hospitals of Karachi including DUHS, JPMC, tertiary care Hospital for 6 months. Both male and female Occupational Therapists with qualification of BSOT/DOT and greater the one year were included in the study Procedure:

Participants were given consent forms prior to study. All the information was given regarding the procedure and data collection whereas participants' identity/material was kept confidential and shall not be disclosed or used without permission.

## RESULTS

A total number of 30 participants were approached, out of which 26 participants submitted their response with a mean age of  $23.9 \pm 2.27$ . Majority of participants (69.2%) were BSOT while 30.8% were ADOT.

### Knowledge regarding EBP

The results of the study indicated that 46.2% occupational therapists believed the necessity to implement EBP in the field, whereas 38.5% performed effective searching strategies in searching literature and relevant evidence to be useful in daily living practices while only 3% perceived the unreasonable demand of EBP in occupational therapy interventions as shown in Table-1.

| Questions  | n (%) |
|--|-------|
| Implementation of Occupational Therapy based EBP               | 46.2% |
| Effective searching strategies in clinical practices           | 38.5% |
| Need to apply the EBP in usual practice                        | 34.6% |
| Adoption of EBP for unreasonable demands                       | 3%    |
| Interests in learning and improving EBP skills                 | 30.8% |
| Improving quality of patient care through EBP                  | 11.5% |
| Limitations in clinical practice doesn't take into account EBP | 15.4% |
| EBP enhance imbursement rate                                   | 3.8%  |
| EBP supporting interventions are lacking                       | 15.4% |
| EBP helps in clinical -decision making                         | 26.9% |
| EBP guidelines are available for practice                      | 7.7%  |

**Attitude regarding EBP**

In this section, it was observed that more than 80% occupational therapists performed database mediated practices to seek relevant practices guidelines. Moreover, more than 80% access online practice guidelines, current evidences and professional journals as shown in Table-2.

**Practice of Participants**

It was revealed that only 34.8% occupational therapists prefer reviewing article for their clinical practice for 2-4 times, 34.6% prefer only once and 3.8% prefer more than 16 times as shown in Table-3.

| Questions   | n (%) |
|---|-------|
| Database mediated practices                         | 80.8% |
| Seeking practicing guidelines in areas of practices | 73.1% |
| Using practicing guidelines                         | 61.5% |
| Awareness of online practice guidelines             | 65.4% |

| Question  | n (%)               |
|---|---------------------|
| Reviewing literature related to clinical practice   | 1 Time (34.6%)      |
|   | 2-3Times (38.5%)    |
|   | 6-10 Times (15.4%)  |
|   | 11 -15 Times (7.7%) |
|   | >16 Times (3.8%)    |
| Implementing evidences for clinical decision making | 1 Time (34.6%)      |
|   | 2-3 Times (34.65%)  |
|   | 6-10 Times (15.4%)  |
|   | 11 -15 Times (7.7%) |
|   |                     |

**DISCUSSION**

The findings of this study revealed knowledge of participants that 46.2% have application of EBP is necessary in the practice while 53.8% participants didn't consider patient preferences, whereas only 34.65% use findings in clinical decision making.

Although one of the studies shows those participants have knowledge but the implication of practice is restricted. Another study that has been conducted in primary care of occupational therapy concluding that the attitude towards EBP was positive, that is approximately 98% revealing more than half of the respondents were confidently reported about searching<sup>24</sup>. It was also evident that respondents were aware of practice guidelines and had easy access towards guidelines while 75% reported that they used guidelines often<sup>25</sup>. However, it was found that males feel confident in this survey as they have easy access and use guidelines, only a few participants reported reading scientific articles while some showed uncertainty in findings. Despite the challenges in implementing evidence-based practices in occupational therapy interventions, the role of these practices remains

profound in modern healthcare to overcome the behavioral modifications with increasing knowledge and skills. Besides, the significant challenges for healthcare professionals, only a limited number of studies provide evidence with respect to occupational therapy interventions.

Several studies stated that OT is a field emerging in minor countries in order to lead socialization and promote occupation to people with disabilities in order to prevent exclusion and occupational lack<sup>4</sup>. However, awareness of OT role identification in clinician practice is crucial between occupational, physiotherapist and special educator<sup>5</sup>. The limitations in reported were lack of time due to busy schedule and appointment. The attitudes among OTs were positive as majority uses guidelines<sup>23</sup>. In relation to it, physical therapist also have interesting findings that they had a positive attitude towards EBP and they were extremely curious to learn much more new things that helps in getting knowledge and in improving their skills that helps them implementation into practice<sup>26</sup>. Furthermore, proficient occupational-based therapy programs in the course curriculum of undergraduate students are needed to incorporate effective teaching approaches about evidence-based practices. This will help the students to enhance their knowledge, develop a positive attitude and proactive practices. A number of studies suggested that educators must facilitate their students to consume the right evidence while evidence-based practice whether in fieldwork or academics. This will lead to a better perception of the sources, level, usage, and barriers in implementing the practices.

Another study determined different aspects of KAP that were moderate and reportedly positive while other health care professional showed less interest in reporting so further research and more data were required for more clear and better results<sup>25</sup>.

### CONCLUSION

It was concluded that majority of the occupational therapists have knowledge of evidence-based practice but these are not implicated in to clinical practice or for patient management. Studies reported that OT is a field emerging in minor countries in order to lead socialization and promote occupation to people with disabilities in order to prevent exclusion and occupational lack. However, awareness of OT role identification in clinician practice is crucial between occupational, physiotherapist and special educator therefore, further studies are required in the domain to evaluate the knowledge of therapist and its implication into patient care.

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