

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 task¹. 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 systems². 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's³. 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 lack⁴. However, awareness of OT role identification in clinician practice is crucial between occupational, physiotherapist and special educator⁵. The concept of EBP in occupational therapy tended to focus on three main areas: occupational therapists' perceptions, knowledge and utilization of EBP skills barriers to implementing EBP; and educational interventions with qualified therapists which address some of the barriers identified. Curtin and Jaramazovic explored perceptions of EBP amongst occupational therapists based in the UK. They found that they were positive but identified lack of time, high staff turnover and access to resources as barriers to EBP. Bennett et al. examined attitudes and barriers amongst Australian occupational therapists. They also found that the majority were positive about EBP, although they relied on clinical experience, their colleagues and continuing education to make clinical decisions rather than on research examined the use of EBP by occupational therapists in the USA and found that only a small number of registered therapists used EBP when planning interventions. Barriers to EBP include lack of time, large caseloads, limited searching and appraisal skills, difficulty accessing journals and a perceived lack of evidence to support specific interventions According to occupational therapists report low levels of knowledge and skills in relation to EBP. Education-focused interventions have been shown to improve therapists' knowledge and skills, although the impact on behavior change was minimal Notwithstanding the challenges to implementing EBP, it remains pivotal to modern health care and the occupational therapy profession Changing behaviors and increasing knowledge are significant challenges for educators Yet few studies have addressed the levels of knowledge skills and the use of evidence in student occupational therapists. In contrast, attitudes to EBP have been examined in medical and nursing students. The impact of an evidence-based training programme on final-year medical students' information-seeking practices were examined by. The study concluded that whereas students' confidence in evidence-based medicine increased, there were no changes in the students' information-seeking behaviors. used the Knowledge, Attitude and Behavior (KAB) Questionnaire to identify self-reported knowledge, attitudes, use and future use of EBP amongst 436 baccalaureate nursing students at two universities. They found that knowledge, attitudes, use and future use of EBP were generally found to increase with advancing academic level. Additionally, in a study examined knowledge and attitudes towards EBP in final-year nursing students and post-registration nurses. They found that student nurses were more confident in their searching skills than the registered nurses but that in both groups the level of knowledge was low to moderate. Interestingly these aspects of EBP have not been examined within the literature to date in relation to occupational therapy students. Occupational therapy programmers are required to incorporate effective teaching strategies about EBP into the curriculum so as to prepare students with the appropriate knowledge, skills and attitudes. In another study authors suggest that educators have a role in assisting students to become scholarly consumers of evidence. If academic and fieldwork educators understand the students' preferred sources, level, use of and perceived barriers, this

may contribute toward more effective teaching strategies in academic and fieldwork settings. Educational methods for teaching EBP in occupational therapy programmes have been the focus of some literature. For example, in stud researchers has described a research methods course which was permeated with EBP content, whereas an EBP review project in which students completed a specific clinical issue. The study concluded that students learn about EBP through opportunities in the academic programme and, even more so, in their clinical fieldwork experiences where students value sharing their knowledge of EBP with their supervisors during clinical fieldwork. The study suggested that students, by sharing their energies and skills, have the potential to create a culture of lifelong learning in clinical environments. As such, students may be well placed to support EBP within occupational therapy. 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 ⁶. In contrast, professionals in healthcare services must have ample knowledge to approach, appraise and implement research conclusions ⁷. Applying EBP in rehabilitation is predominantly grounded on evidence for many treatments ⁸. 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 ⁹. Factors concerning with both the specific and the organizational i-e provision and period accessible to exploration for research suggestion, are typically important ⁶. EBP promoted way for clients in OT practice to deliver the best level of care in hospital, school or in private clinics in rehabilitation ¹⁰. However, limited content is available that is used by OT to evaluate attitude and perceptions ¹¹. Moreover, different evaluation tool are an assessment of personal knowledge and enhancement of the skills are beneficial ¹². A research conducted in 2015 in South Africa explored EBP related to knowledge, skills, attitude and behavior ¹³. 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 ¹⁴. Recent research in KSA stated that limited literature is available in EBP application in clinical practice among Saudian's OTs ¹⁵. 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% ¹⁶. 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 ¹⁷. 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 ¹⁸. 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 ¹⁹. Another study stated that EBP is not used to apply conclusions in clinical practice as a guideline ²⁰. 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 ²¹. Another research has been conducted in three countries Australia, Taiwan and United Kingdom, examining KAP of pediatric online web survey ²². 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)²³ 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 ± 2.27 . Majority of participants (69.2%) were BSOT while 30.8% were ADOT.

Knowledge regarding EBP

The results of the survey revealed that 46.2% of OT believes that the application of EBP is necessary in the practice of occupational therapy, 38.5% believed that literature search and research findings are useful in daily practice while 3% also assumed that the adoption of EBP places an unreasonable demand on occupational therapists. The detailed description of responses of OT on their knowledge regarding EBP is shown in table 1.

Table.1 Knowledge of Participants	
Questions	n (%)
Application of EBP is necessary in the practice of occupational therapy	46.2%
Literature and research findings are useful in day-to-day practice	38.5%
I need to increase the use of evidence in my daily practice	34.6%
The adoption of EBP places an unreasonable demand on occupational therapists	3%
I am interested in learning or improving the skills necessary to incorporate EBP into my practice	30.8%
EBP improves the quality of patient care	11.5%
EBP does not take into account the limitations of my clinical practice setting	15.4%
My reimbursement rate will increase if I incorporate EBP into my practice.	3.8%
Strong evidence is lacking to support most of the interventions I use with my patients.	15.4%
EBP helps me make decisions about patient care.	26.9%
Practice guidelines are available for topics related to my practice.	7.7%

Attitude regarding EBP

80.8% participants use MEDLINE or other databases to search for practice-relevant literature/research while 84.6% access practice guidelines online whereas 80.8% access to current research through professional journals in their paper form as shown in Table-2.

Table.2 Attitude of Participants	
	n (%)
Use MEDLINE or other databases to search for practice-relevant literature/research	80.8%
I actively seek practice guidelines pertaining to areas of my practice	73.1%
I use practice guidelines in my practice.	61.5%
I am aware that practice guidelines are available online.	65.4%
I am able to access practice guidelines online.	84.6%
I have access to current research through professional journals in their paper form.	80.8%
I have received formal training in search strategies for finding research relevant to my practice.	73.1%
Use MEDLINE or other databases to search for practice-relevant literature/research	80.8%
I actively seek practice guidelines pertaining to areas of my practice	73.1%
I use practice guidelines in my practice.	61.5%
I am aware that practice guidelines are available online.	65.4%
I am able to access practice guidelines online.	84.6%
I have access to current research through professional journals in their paper form.	80.8%
I have received formal training in search strategies for finding research relevant to my practice.	73.1%

Practice of Participant

34.8% participants prefer to read articles related to their clinical practice 2-4 times while 34.6% prefer them only once and only 3.8% prefer to read them more than 16 times. The detailed description is shown in Table-3.

Table.3 Practice of Participants	
Question	n (%)
Read/review research/literature related to my clinical practice.	1 Time (34.6%) 2-3 Times (38.5%) 6-10 Times (15.4%) 11-15 Times (7.7%) >16 Times (3.8%)
Use professional literature and research findings in the process of clinical decision making.	1 Time (34.6%) 2-4 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 study shows that participants have knowledge but implication of practice is restricted. Another study that has been conducted in primary care of occupational therapy concluding that the attitude towards EBP were positive, that is approximately 98% revealing more than half of the respondents were confidently reported about searching²⁴. It was also evident that respondents were aware about practice guidelines and had easy access towards guidelines while 75% reported that they used guidelines often²⁵. However, it was found that male feel confident in this survey as they have easy access and use guidelines, only few participants reported reading scientific articles while some showed uncertainty in findings. Notwithstanding the challenges to implementing EBP, it remains pivotal to modern health care and the occupational therapy profession changing behaviors and increasing knowledge are significant challenges for educators yet few studies have addressed the levels of knowledge skills and the use of evidence in student occupational therapist. 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 lack⁴. However, awareness of OT role identification in clinician practice is crucial between occupational, physiotherapist and special educator⁵. The limitations in reported were lack of time due to busy schedule and appointment. The attitudes among OTs were positive as majority uses guidelines²³. 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 practice²⁶. Further occupational therapy programmes are required to incorporate effective teaching strategies about EBP into the curriculum so as to prepare students with the appropriate knowledge, skills and attitudes. In another study authors suggest that educators have a role in assisting students to become scholarly consumers of evidence. If academic and fieldwork educators understand the students' preferred sources, level, use of and perceived barriers, this may contribute toward more effective teaching strategies in academic and fieldwork settings. 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 results²⁵.

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. Further occupational therapy programs are required to incorporate effective teaching strategies about EBP into the curriculum so as to prepare students with the appropriate knowledge, skills and attitudes. In another study authors suggest that educators have a role in assisting students to become scholarly consumers of evidence. If academic and fieldwork educators understand the students' preferred sources, level, use of and perceived barriers, this may contribute toward more effective teaching strategies in academic and fieldwork settings. 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.

REFERENCES

- [1] Boström AM, Sommerfeld DK, Stenhols AW, Kiessling A. Capability beliefs on, and use of evidence-based practice among four health professional and student groups in geriatric care: A cross sectional study. *PloS one*. 2018;13(2):e0192017.
- [2] Lindström AC, Bernhardsson S. Evidence-based practice in primary care occupational therapy: A cross-sectional survey in Sweden. *Occupational therapy international*. 2018;2018.
- [3] Harris M, Giza C, Rafeedie S, McArthur D, Babikian T, Polster D, Snyder A. Pediatric Concussion Treatment: Occupational Therapy's Role in Identifying Impacted Occupational Domains (P3. 9-031).
- [4] Burns A, Eshalieva D, Bakhshi P. Bringing sunshine children into the light: Exploring a role for occupational therapy with a parent association in Kyrgyzstan. *World Federation of Occupational Therapists Bulletin*. 2019 ;75(2):90-3.
- [5] Ong SY, Lee M, Lee LS, Lim I, Tham KY. Tensions in integrating clinician and educator role identities: a qualitative study with occupational therapists and physiotherapists. *BMJ open*. 2019 ;9(2):e024821.
- [6] Bennett S, Allen S, Caldwell E, Whitehead M, Turpin M, Fleming J, Cox R. Organisational support for evidence-based practice: occupational therapists perceptions. *Aust. Occup. Ther. J.*. 2016;63(1):9-18.
- [7] DeCleene Huber KE, Nichols A, Bowman K, Hershberger J, Marquis J, Murphy T, Pierce C, Sanders C. The correlation between confidence and knowledge of evidence-based practice among occupational therapy students. *Br J Occup TherThe*. 2015;3(1):5.
- [8] Ritchie KC, Snelgrove-Clarke E, Murphy AL. The 23-item Evidence Based Practice-Knowledge Attitudes and Practices (23-item EBP-KAP) survey: Initial validation among health professional students. *Health Professions Education*. 2019;5(2):152-62.
- [9] Early A, Walsh R, Douglas B. The occupational therapy practitioner's role in health promotion, injury prevention, and role participation for the older worker. *Work*. 2019;63(2):309-18.
- [10] Brown T, Tseng MH, Casey J, McDonald R, Lyons C. Research knowledge, attitudes, and practices of pediatric occupational therapists in Australia, the United Kingdom, and Taiwan. *J Allied Health* 2010;39(2):88-94.
- [11] Lyons C, Brown T, Tseng MH, Casey J, McDonald R. Evidence-based practice and research utilisation: Perceived research knowledge, attitudes, practices and barriers among Australian paediatric occupational therapists. *Aust. Occup. Ther. J.*2011;58(3):178-86.
- [12] Johnston JM, Leung GM, Fielding R, Tin KY, Ho LM. The development and validation of a knowledge, attitude and behaviour questionnaire to assess undergraduate evidence-based practice teaching and learning. *Medical education*. 2003 Nov;37(11):992-1000.
- [13] Buchanan H, Jelsma J, Siegfried N. Measuring evidence-based practice knowledge and skills in occupational therapy—a brief instrument. *BMC medical education*. 2015 ;15(1):191.
- [14] Alshehri MA, Falemban R, Bukhari RA, Bakhsh HR. Occupational therapy practitioners' decision-making preferences, attitudes, awareness and barriers in relation to evidence-based practice implementation in Saudi Arabia. *Int J Evid Based Healthc* 2019;17(2):121-30.
- [15] Parham LD, Clark GF, Watling R, Schaaf R. Occupational Therapy Interventions for Children and Youth With Challenges in Sensory Integration and Sensory Processing: A Clinic-Based Practice Case AM.J Occup ther. Example.. 2019;73(1):7301395010p1-9.

- [16] Ramírez-Vélez R, Correa-Bautista JE, Muñoz-Rodríguez DI, Ramírez L, González-Ruiz K, Domínguez-Sánchez MA, Durán-Palomino D, Girabent-Farrés M, Flórez-López ME, Bagur-Calafat MC. Evidence-based practice: beliefs, attitudes, knowledge, and skills among Colombian physical therapists. *Colombia Médica*. 2015;46(1):33-40.
- [17] Schoonees A, Rohwer A, Young T. Evaluating evidence-based health care teaching and learning in the undergraduate human nutrition; occupational therapy; physiotherapy; and speech, language and hearing therapy programs at a sub-Saharan African academic institution. *PloS one*. 2017;12(2):e0172199.
- [18] Lyons C, Casey J, Brown T, Tseng M, McDonald R. Research knowledge, attitudes, practices and barriers among paediatric occupational therapists in the United Kingdom. *Br. J. Occup. Ther.*. 2010;73(5):200-9.
- [19] Fujimoto S, Kon N, Takasugi J, Nakayama T. Attitudes, knowledge and behavior of Japanese physical therapists with regard to evidence-based practice and clinical practice guidelines: a cross-sectional mail survey. *J. Phys. Ther.* 2017;29(2):198-208.
- [20] Samuelsson K, Wressle E. Turning evidence into practice: Barriers to research use among occupational therapists. *Br. J. Occup. Ther.* 2015;78(3):175-81.
- [21] Snibsoer AK. Evidence-based practice in Bachelor healthcare education. A survey of attitudes, knowledge and behaviour.
- [22] Jette DU, Bacon K, Batty C, Carlson M, Ferland A, Hemingway RD, Hill JC, Ogilvie L, Volk D. Evidence-based practice: beliefs, attitudes, knowledge, and behaviors of physical therapists. *Physical therapy*. 2003;83(9):786-805.
- [23] Taylor RR. Kielhofner's research in occupational therapy: Methods of inquiry for enhancing practice. FA Davis; 2017.
- [24] Upton D, Stephens D, Williams B, Scurlock-Evans L. Occupational Therapists' attitudes, knowledge, and implementation of evidence-based practice: a systematic review of published research. *Br.J.Occup.Ther.* 2014;77(1):24-38.
- [25] Yahui HC, Swaminathan N. Knowledge, attitudes, and barriers towards evidence-based practice among physiotherapists in Malaysia. *Hong Kong Physiother J*. 2017;37:10-8.
- [26] AbuRuz ME, Hayeah HA, Al-Dweik G, Al-Akash HY. Knowledge, attitudes, and practice about evidence-based practice: a Jordanian study. *J Res Health Sci*. 2017;11(2):1.

