

BMJ Open Perspectives of paediatric occupational therapists on the use of evidence-based practice in Kuwait: a qualitative study

Zainab Jasem ,¹ Dareen Dursia,² Dalal Ahmad,² Feddah Ahmad¹

To cite: Jasem Z, Dursia D, Ahmad D, *et al.* Perspectives of paediatric occupational therapists on the use of evidence-based practice in Kuwait: a qualitative study. *BMJ Open* 2024;**14**:e086617. doi:10.1136/bmjopen-2024-086617

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<https://doi.org/10.1136/bmjopen-2024-086617>).

Received 19 March 2024
Accepted 22 November 2024



© Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.

¹Occupational Therapy Department, Kuwait University, Kuwait City, Kuwait

²Occupational Therapy Department, Ministry of Health, Kuwait, Kuwait

Correspondence to

Dr Zainab Jasem;
zainab.jasem@ku.edu.kw

ABSTRACT

Objectives To investigate the perspectives of paediatric occupational therapists on factors relating to the use of evidence-based practice (EBP) in clinical practice/settings.

Design A qualitative approach entailing the use of (face-to-face) semistructured interviews. Collected data were analysed using thematic analysis.

Setting Governmental and private hospitals, clinics and schools in Kuwait that offered occupational therapy services.

Participants 10 occupational therapists with a minimum of 2 years experience working with children.

Primary and secondary outcome measures

Occupational therapists' perspectives on the factors relating to the implementation of EBP in clinical practice.

Results Three themes emerged: (1) source of motivation towards EBP; (2) organisational support for EBP use and (3) creativity and flexibility in implementing EBP. Several motivators encouraged therapists to use EBP in their clinical practice, including their personal motivation and clients' outcomes. However, the barriers to EBP implementation are due to the lack of organisational support for EBP. Using creativity and flexibility in practice is essential to overcome challenges.

Conclusion This study identified factors related to the implementation of EBP from the perspective of paediatric occupational therapists in Kuwait. It provides several implications and recommendations for occupational therapy education and practice in the region due to similarities in culture. As therapists' concerns are identified, developing the educational curricula at universities and providing continuous professional development courses in regard to EBP utilisation are important for delivering effective healthcare services.

INTRODUCTION

Evidence-based practice (EBP) integrates latest research evidence with clinical experience and patient values.^{1 2} Clinicians implement EBP when they use the best available research evidence along with their clinical experience considering their patients' needs, values and preferences in clinical decision-making and healthcare delivery.³ The application and implementation of EBP advances any profession and enhances the quality of services delivered to patients.^{4 5} Its benefits

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This is the first study to identify factors related to the implementation of evidence-based practice from the paediatric occupational therapists' perspective in Kuwait.
- ⇒ The transferability of the findings can be considered by readers when cultural background and health-care systems are taken into consideration.
- ⇒ The findings were captured from therapists' subjective point of view; accordingly, adopting a mixed-methods design could enhance the trustworthiness of the data.

have also been found among therapists in reducing levels of burn-out.^{4 6}

Occupational therapists play a crucial role in delivering effective and efficient health-care services for patients in need. High-quality occupational therapy services require careful consideration and implementation of the best available evidence to enhance EBP.

Understanding factors related to EBP implementation is crucial for supporting students, practitioners and educators in the healthcare field. Several surveys have been conducted worldwide to study the factors related to EBP application. Despite the positive attitude towards EBP among occupational therapists, there have been multiple challenges and barriers to its global.⁷ Some of the challenges for applying EBP among occupational therapists in Sweden included insufficient research evidence for intervention, lack of support (ie, lack of encouragement at the workplace to use research and not having easy access to guidelines) and time.⁸ Additional barriers were found among occupational therapists in Saudi Arabia, including insufficient education, limited resources, training, and funding, and a lack of research skills and knowledge.⁹ Krueger *et al*¹⁰ indicated an association among occupational therapists in the USA between implementing EBP and those with higher education (ie, doctorate), practising self-reflection behaviour, receiving organisational

support, having time for EBP activities and access to full-text articles. However, there is no clear focus on the use of EBP in the paediatric population, considering the unique specifications and needs of this population.

Few researchers have studied this population, and studies have been limited to specific ages or patient populations. Baig *et al*¹¹ studied EBP use among occupational and physical therapists in the USA when providing services for patients with cerebral palsy aged between 0 and 3 years. The authors reported that although the majority of participants highlighted the importance of EBP in making clinical decisions, only a minority used EBP to develop interventions. Furthermore, interventions with a high level of evidence (ie, bimanual therapy and constraint-induced movement therapy) were infrequently used, whereas other treatment methods (ie, neurodevelopmental treatment and sensory regulation therapy) were not used for their recommended purposes.

In Kuwait, little research has been conducted on the standards of care provided to patients by healthcare workers. Physicians in primary care and dentists appear to rely more on their judgement regarding their clinical decisions than on EBP.^{12 13} Although physicians had a somewhat positive attitude towards EBP, studies indicated that they had low levels of knowledge of EBP and were unaware of trusted EBP resources.¹⁴ Furthermore, studies have found that these barriers apply to the use of EBP by physical therapists in Kuwait.¹⁵ Regarding the barriers faced, physical therapists were found to face parallel issues highlighted earlier (ie, insufficient time, lack of information resources and inapplicability of research findings) in Kuwait's population.¹⁵

In Kuwait and the Middle East, the concept of EBP use in children among professional or occupational therapists strikes concern for the lack of rigour in practising effective methods. Therefore, this study aimed to explore factors related to the use of EBP from the perspective of paediatric occupational therapists working in Kuwait. Moreover, this study broadly and qualitatively considered the unique specifications of the paediatric population. Such knowledge gathered both globally and regionally is essential for guiding educators to support the development of students/practitioners' EBP utilisation abilities and the facilitation of EBP in clinical practice.

METHODS

Study design

A phenomenological qualitative study design was adopted using in-depth, face-to-face and semistructured interviews.¹⁶ The qualitative approach helped achieve the study objectives to gain insight into the participants' perspectives on the studied phenomenon.¹⁷

Participants

Purposive sampling method was used.¹⁸ The eligibility criteria were as follows: (1) practising occupational therapists in Kuwait, (2) a minimum of 2 years of clinical

experience with paediatrics and (3) the ability to understand and speak English. The participants were recruited from a various government and private hospitals, clinics and schools in Kuwait.

Participant recruitment began using social media platforms and networks (ie, shared invitational messages sent to occupational therapists in Kuwait). Occupational therapists interested in the research topic contacted the principal investigator for study details, as their contact details were provided in the invitational message. During initial contact, participants were screened per the inclusion criteria, and interviews were scheduled. On the day of the interview, participants were provided with a written information sheet about the study; and their consent was obtained.

Data collection

Interviews were conducted at the participants' workplaces in a private room where only the researcher and participant were present. A trained interviewer (DD) conducted the interview using a guide (online supplemental material) for the purpose of the study. The interviews lasted 45–60 min. All interviews were conducted in English, and the audio was recorded. Once data saturation was achieved, where no additional insights were obtained from the last two individual interviews, no further participants were recruited.

Data analysis

The data collected were transcribed verbatim. The data were also subsequently analysed thematically, followed by the guidelines provided by Braun and Clarke.¹⁹ An inductive approach was used in which the transcribed data were coded by three research team members (ZJ, DD and DA) independently who met to discuss and combine their codes into themes and subthemes. Any uncertainties and disagreements between them were carefully scrutinised via discussion.

All team members maintained an audit trail and used memoing techniques to enhance the trustworthiness of the data. The study's findings were also supported through member checking and informants (eg, participants' direct quotes). In addition, the research team members engaged in ongoing reflexivity and reflection to maintain their influence on the collected data and analysis, given that they were all females.

Patient and public involvement

None.

RESULTS

The participant pool consisted of 10 paediatric occupational therapists (see [table 1](#)). Of the 10 participants, 4 were male, while 3 had master's degrees, and the remaining 7 had bachelor's degrees. The average age of the participants was 35.6 years (range 29–41 years), and their average number of years of experience was 11.5

Table 1 Participant demographics

Participants code	Gender	Workplace
Participant 1	Male	Governmental mental health hospital
Participant 2	Male	Governmental mental health hospital
Participant 3	Female	Private special needs school and private clinic
Participant 4	Female	Private clinic
Participant 5	Female	Governmental rehabilitation hospital
Participant 6	Female	Governmental specialised hospital
Participant 7	Female	Governmental rehabilitation hospital
Participant 8	Male	Governmental rehabilitation hospital
Participant 9	Male	Governmental general hospital
Participant 10	Female	Governmental specialised hospital

(range 4–20 years). The findings can be transferred to other contexts because thorough descriptions of the participants are provided,²⁰ as indicated in [table 1](#).

The interview analysis resulted in the emergence of three main themes: (1) sources of motivation, (2) organisational support for EBP use and (3) creativity and flexibility in implementing EBP. As shown in [table 2](#), each theme is presented with subthemes to provide further insight into the research objectives.

Theme 1: sources of motivation

All participants agreed about the importance of using EBP, clarifying how they used it in practice on every occasion. Participant 6 explained:

I use EBP all the time, I don't put a plan or a strategy for a child without evidence

Participants explained a variety of motivational sources that encouraged them to use EBP. These sources are condensed into three main subthemes: (a) personal factors, (b) clients' outcomes and (c) supportive social environment.

Subtheme A: personal factors

Participants claimed that being an occupational therapist gave them a sense of responsibility towards their clients. Participant 5 commented:

For me, being an OT, I feel that is a huge responsibility job... you are dealing with children, you cannot use trial and error. You need proper evidence, otherwise [if EBP is not used] it will lead to negative results. It will affect the child's future, so EBP is the best.

Participants 3 also mentioned:

It is my duty, and I mean, the fear from God.

A sense of responsibility can also arise from client and family expectations. The use of EBP satisfies therapists by giving them confidence in their jobs. For example, participant 9 mentioned:

I want to be more confident when applying a technique... It [EBP] will give you the guidelines and how to treat and how to start from basically start from the assessment till the intervention and even going to the home program.

Subtheme B: client outcomes

Several participants indicated client outcomes as motivators for improving practice methods. The participants agreed that being an occupational therapist gave them a passion for helping others. Participant 6 stated:

My clients are my motivators to use EBP. To see the outcome in your clients.

Thus, outcomes that motivate therapists in their work include progress in client conditions. Participant 8 added:

I'm a man who loves when people remember me, I love when I provide service to see people's satisfaction. It is an indescribable, blissful feeling of contentment.

Thus, outcomes are not only measured by clients' progress; the satisfaction level of the entire family is another factor.

Subtheme C: supportive social work environment

The third subtheme highlighted how and diverse environments proved to be motivational sources for these therapists. The role of supportive colleagues was evident from the data. All participants highlighted the role of peers applying EBP (ie, formal discussion, monthly in-services, weekly journal clubs/seminars and friendly conversations). Participant 7 highlighted diverse environmental support with:

With our colleagues, we discuss things such as conditions. We have group discussions about cases... taking their advice to implement, get their feedback also and then apply that.

Similarly, participant 10 added:

I believe that discussion is very effective. It is the most beneficial thing for me thus far.

The therapists also obtained access to books and journal articles from colleagues when needed. When participant 6 discussed how she kept herself updated on EBP, she mentioned:

I'm a clinical employer for (the institution's name). I don't have access to these types of engines [PubMed and scope of science]. So, I have to be like a worker in university or use another person's account in the university to get access to it. I did not pay for accessibility, I usually use my colleagues' account.

Table 2 Emerged themes and subthemes

Themes	Subthemes	Illustrative quotes
Sources of motivation towards EBP	Personal factors	'For me, being an OT, I feel that is a huge responsibility job... you are dealing with children, you cannot use trial and error. You have proper evidence, otherwise [if not using EBP] it will lead to negative results. It will affect the child's future, so EBP is the best.' (participant 5) 'It is my duty, and I mean, the fear from God especially because I work in a private sector. It is the family who comes and pays money from their pockets. I mean, my salary depends on families' payments, so this makes you feel responsible.' (participant 3)
	Clients' outcomes	'My clients are my motivators to use EBP. To see the outcome in your clients'. (participant 6) 'I'm a man who loves when people remember me, I love when I provide service to see people's satisfaction. It is an indescribable, blissful feeling of contentment' (participant 8)
	Supportive social work environment	'With our colleagues we are discussing things like the conditions, we are having like a group discussion about the case... taking their advice to implement, get their feedback also and then applying that.' (participant 7) 'I believe that discussion is very effective. It is the most beneficial thing for me thus far.' (participant 10)
Organisational support towards EBP use	Cost and inaccessibility to EBP resources	'Resources are there, but we don't know how to access it [without the organization giving you access]... you cannot access the university's library... To update my knowledge, I'm ready to spend money, but not if it's too expensive.' (participant 2) 'Access to journals it is a big factor [as a barrier to EBP use] sometimes it is from my personal income... [My employer] will support you financially only for conferences if you meet the minimum 10 years of service in the (her institution's name). Okay throughout these 10 years, I need the EBP to work on. You know these rules limit the majority of us. Not everybody is capable considering their financial status.' (participant 4)
	Continuous professional development	'some of the clinics don't want to change the practice or anything; they want you to provide the service. This is what they care about, the number of patients.' (participant 9) 'I read [research articles] sometimes I cannot understand, I keep reading again because you know the quantitative and qualitative analysis, I read about them to only know how to read an article how to understand what the study finds outs because they write in a language not understandable by us. Because they have a different language.' (participant 7)
	Effective strategies for implementing EBP	'If there's a common library, especially for (the institution name), it is a big institution, so if they have a common library that the employees can go to and approach it'. (participant 2) 'Free access to library ummm remote access no need to come to university to access' (participant 6)
Creativity and flexibility in implementing EBP	Time management	'Time is not a barrier if you plan it appropriately, time at all won't be a barrier' (participant 1) 'We work for approximately 7 hours, and the day is 24 hours, so you have the time. If we sleep for 8 hours and another 8 hours for work and 8 for leisure, you can take 1 hour and a half from each.' (participant 4)
	Implementation of EBP in daily practices	'You might find studies not in your country, you need something from your community... in our Arab community, we do not have many studies, and this is a barrier a very difficult barrier' (participant 8) 'There are no barriers. We are OT. We are creative minds. We can make everything simple' (Participant 5)

EBP, evidence-based practice.

For these participants, the supportive social environment also helped to overcome other barriers to implementing EBP (ie, organisational sources providing accessibility to resources and implementation strategies towards improving professional development), which is further discussed in the second theme below.

Theme 2: organisational support for EBP use

The second theme focused on the practice of using EBP in relation to the limited organisational support therapists receive from their employers. This theme is described and expanded by considering three subthemes:

(a) cost and inaccessibility, (b) continuous professional development (CPD) and (c) effective strategies to be implemented.

Subtheme A: cost and inaccessibility to EBP resources

For the participants, the main barriers to using EBP were the inaccessibility of resources (ie, books, journal articles and workshops) and their high costs. Participant 2 stated:

Resources are there, but we don't know how to access them [without the organization giving you access]... You cannot access the university's library... To update

my knowledge, I'm ready to spend money, but not if it's too expensive.

Nevertheless, some practical techniques require certification and are costly. Participants complained about the high costs, as there are neither nearby organisations offering such courses nor financial support from employers. Therefore, therapists must travel abroad for certification. Participant 4 indicated:

Access to journals it is a big factor [as a barrier to EBP use] sometimes it is from my personal income... [My employer] will support you financially only for conferences if you meet the minimum 10 years of service in the (her institution's name). Okay but throughout these 10 years, I need the EBP to work on. You know these rules limit the majority of us. Not everybody is capable considering their financial status.

Several therapists reported spending their annual leave and money as the only means of enhancing their professional development.

Subtheme B: CPD

Not receiving financial support from employers was a major concern for the participants. Several participants believed that the lack of support from employers was owing to an organisational underestimation of the importance of CPD. Participant 9 mentioned:

Some of the clinics don't want to change the practice or anything; they want you to provide the service; this is what they care about, the number of patients.

Therefore, participants perceived that institutions found importance in the quantity, and not in the quality, rendered through professional development.

The lack of CPD support also extended to therapists' research-related knowledge. Participant 7 stated:

I read [research articles] sometimes. I cannot understand and have to keep reading because of the quantitative and qualitative analysis. I read about these analysis to understand what the article says and what the study's findings are. They are written in a language not understandable by us. They have a different language.

Accordingly, participants believed that these issues could be solved by their employers indicating ways to overcome the barriers highlighted in the next subtheme.

Subtheme C: effective strategies for implementing EBP

To minimise barriers, participants highlighted facilitators as potential strategies to help therapists and their employees implement EBP. The participants also suggested that employers could be supportive and push for using EBP. Participant 2 proposed:

If there's a common library, especially for (the institution name), it is a big institution, so if they have

a common library that the employees can go to and approach it.

Participant 6 also highlighted:

Free access to library ummm remote access no need to come to the university to access.

Some of the participants' suggested strategies can be summarised as having a library in their workplace, access to resources that can be accessed remotely from home and more collaboration with the university in organising seminars and workshops. Therefore, the proposed ideas and strategies presented by organisations are essential to address barriers from the therapists' perspectives on providing services.

Theme 3: creativity and flexibility

The high costs and inaccessibility of EBP resources were not the only limiting factors or barriers to EBP, as highlighted by participants. Time and limited resources were also considered. However, despite the barriers and negativity highlighted by the participants, they remained positive.

Subtheme A: time management

All the participants acknowledged time as a requirement to stay updated on EBP. However, they believed that there was no shortage of time.

Time is not a barrier if you plan it appropriately, time at all won't be a barrier. (Participant 1)

Participants believed that it is about the need for time management was of primary importance as illustrated by Participant 4:

We work for approximately 7 hours, and the day is 24 hours, so you have the time. If we sleep for 8 hours, and another 8 hours for work and 8 for leisure, you can take 1 hour and a half from each.

Subtheme B: implementation of EBP in daily practices

The participants shared their concerns regarding the implementation of evidence in their clinical practice. Implementation is often impossible owing to the lack of published research topics on specific conditions/disabilities in the region.

There are like rare diagnoses, you won't find updated evidence on; other things, there are no studies about at all (Participant 4).

In addition, there are no studies applicable to their community, culture, or population, as participant 8 mentioned:

you might find studies, but not in your country. You need something from your community... in our Arab community, we do not have many studies, and this is a barrier a very difficult barrier.

Nevertheless, there is limited guidance in the available resources about how to apply the reported techniques in the evidence in practice.

However, other participants felt that there were no such barriers and that occupational therapists use creativity to find solutions.

There are no barriers. We are OT. We are creative minds. We can make everything simple. (Participant 5)

Thus, participants highlighted the importance of being flexible and using their creativity as effectively as possible in their practice.

In addition, some therapists believed that the application of EBP occasionally contradicts the client-centred approach. However, creativity was raised to implement the evidence while addressing the client and family concerns. Participant 1 elaborated on the client-centred practice by stating:

Sometimes, we modify it [the intervention] according to plan to hold interest of the child we modify that activity.

DISCUSSION

EBP is essential to ensure high-quality occupational therapy services for patients in need. The study explored 10 occupational therapists' perspectives on the factors related to the use of EBP in Kuwait to support practitioners' implementations of such skills. Although the aim was to use a paediatric population in particular, the participants' answers could be applicable to other age groups. Although the participants in the study by Baig *et al.*¹¹ were paediatric therapists, their research findings were agreeable to the factors of using EBP in other populations in terms of accessibility to literature, lacking time to look for evidence despite their motivation to find new interventions.

Another obvious issue regarding the paediatric population was the participants' elaboration of the family's expectations and satisfaction levels towards therapy outcomes. Considering the family in the treatment plan emphasises the importance of family-centred practice when dealing with children.²¹ Furthermore, a systematic review highlighted that family-centred practice is a high-quality and effective intervention in the treatment for children when targeting functional outcomes.²²

In accordance with the present results, previous studies have demonstrated positive attitudes of occupational therapists towards EBP.^{7-9 11 23} However, the total number of participants dependent on the use of EBP in this study differed from that in most previous studies where a lack of EBP utilisation was illustrated.^{7 10 11} All participants in this study highlighted their EBP utilisation which could be due to an imbalance in power weighted towards the researcher in the interviewer-participant relationship. This study measured the

therapists' perspectives qualitatively, whereas previous studies used objective measures for evidence-based activities. Accordingly, the participants in this study may have provided answers that do not represent their true perspectives; rather, they may have said what they think the researcher wants to hear.²⁴ Thomas *et al.*'s²⁵ exclusive study found that positive attitudes towards EBP were translated into practice, due to the studied population of recent graduates of occupational and physical therapy. In addition, the study proposed that recent graduates are more likely to accept EBP than other senior practitioners,²⁵ which was also proposed by Baig *et al.*¹¹ Universities play an important role in therapists' utilisation of EBP in terms of available facilities and education. This also accords with previous research where occupational therapists felt inadequately prepared for decision-making reflecting that they had not acquired relevant knowledge/skill at university.²⁶

Nevertheless, prior studies have noted therapists' awareness of the need to improve their EBP research skills,^{7-9 23 27} which was also evident in this study. Although occupational therapy curricula focus on EBP as an accreditation standard by the World Federation of Occupational Therapists,²⁸ a possible explanation could be the lack of practical training on its implementation and addressing this issue only theoretically in education. The issue of inadequate EBP education despite the presence of EBP-specific topics in undergraduate education is not limited to occupational therapy; physical therapy programmes have the same issue.²⁹ Few researchers have proposed and evaluated the effectiveness of focusing on EBP and critical appraisal courses for students in which significant benefits can be noted after completing the courses.³⁰⁻³² These promising data suggest the adoption of such teaching techniques in educational curricula. Generally, participation in EBP education has been found to enhance clinicians' EBP knowledge and skills.²⁷

The most obvious finding limiting EBP implementation, consistent with previous studies, is the lack of accessibility of research evidence and funding.^{7 9} When accessibility was supported by the therapists' organisation, it was not an issue, as noted in the literature.^{10 11 25 33 34} Bennett *et al.*'s³³ interviewed 30 occupational therapists and found that attempting to increase the use of EBP requires a workplace culture that encourages its use, which is highly influenced by the organisation. Unfortunately, the participants in this study lacked support. The lack of organisational support found in this study could be because, in Kuwait, occupational therapy services are very limited in both the governmental and private sectors; thus, the market is not competitive, owing to which organisations are not forced to spend money on funding CPD and implementing EBP. Accordingly, the participants in this study had no option to improve other than self-funding their CPD during their annual leave. This initiative by the participants could be explained by their high sense of responsibility towards their profession and patients, as elaborated in the results.

In contrast to the work of Thomas *et al.*,²⁵ our findings regarding the implementation of EBP were not limited to those working in the private sector; all participants showed a high passion for its utilisation. Nevertheless, CPD helps therapists improve their self-confidence, which is important and associated with the use of EBP.^{25 33}

The occupational therapy market in Kuwait is non-competitive, as highlighted earlier, because occupational therapy is still considered a nascent practice there and in nearby regions. Hence, studies in this region are lacking, which is a barrier highlighted by the participants. When evidence is available, its scope is not always applicable to this community and culture, as found by Alrowayeh *et al.*¹⁵ Therefore, when the participants in this study applied the evidence, they did not follow EBP alone. Participants in our study highlighted their use of creativity in their clinical practice, using their judgement to adapt the available evidence and apply it in a way that matches their community of practice. This flexibility can be attributed to creativity, which is encouraged in occupational therapy education curricula. Nevertheless, the participants also mentioned that their use of creativity helped them adopt a client-centred approach while implementing EBP. They believed that the sole application of EBP might contradict the client-centred approach. This limited understanding of the meaning of EBP might be due to their limited knowledge in regards to the implication of EBP. According to Melnyk *et al.*,³⁵ EBP Implementation Scale, several items addressed client-centred EBP activities. Therefore, the best scientific evidence required to drive practice must be integrated and modified based on the clinicians' expertise, the client/family situation and their related values. It is worth noting that on some occasions, the barrier to implementing EBP cannot be addressed by flexibility and creativity when the available evidence is unclear to therapists or insufficient information is provided.¹⁵

To overcome this lack of evidence, the participants appreciated their colleagues' involvement. Consulting colleagues was also highlighted by Rochette *et al.*³⁶ as the preferred strategy by occupational therapists in Canada with regard to their professional competencies in their clinical practice. Nevertheless, occupational therapists in Matus *et al.*²⁶ study highlighted that when a supportive colleague (ie, allowed them to feel comfortable asking for help, gave constructive feedback and was approachable and responsive) was available, it fostered their learning. It is noteworthy to make therapists aware that social support from peers can only be possible through well-informed peers in that specific field. Alshehri *et al.*⁹ reported that therapists initially seeking the opinions of colleagues before looking for literature were likely to have insufficient knowledge of how to access databases and research articles, which was a highlighted barrier in this study.

Furthermore, our findings expanded the understanding of the time factor reported in the literature. It has been identified that lack of time is one of the main barriers to EBP^{7 8 11 15}; however, the use of a qualitative approach in this study helped in understanding that time

management skills should be used, as therapists need more time dedicated to searching the literature and attending CPD training sessions.

Implications of the study

The study has several implications and recommendations for EBP education and practice:

- ▶ Universities need to consider topics related to EBP and provide practical training on its implementation.
- ▶ CPD courses in Kuwait and the surrounding region need to be offered routinely to practitioners of EBP utilisation and implementation to keep therapists updated with research-related knowledge and skills, including understanding papers and critically appraising evidence.
- ▶ Organisational roles in delivering effective health services for patients should be clarified by advancing new knowledge regarding clinical education practices to help create a supportive work environment for CPD (eg, encouraging seminar discussions and accessible educational resources).
- ▶ Researchers can focus more on possible and effective strategies to enhance EBP in educational curricula and its utilisation.

Limitations

The results of this qualitative study represent paediatric occupational therapists' perceptions of factors related to EBP implementation in a single country. However, the transferability of the findings can be considered by readers when cultural backgrounds and healthcare systems are considered. Another limitation is that the findings captured by therapists who could speak and understand English, and data were collected from the participants' subjective points of view. Accordingly, adopting a mixed-methods design could enhance the trustworthiness of the data by quantitatively investigating the EBP activities in which therapists engage.

Conclusion

This study focused on the factors related to the implementation of EBP from the perspective of paediatric occupational therapists in Kuwait. Several motivational resources encourage therapists to use EBP in their clinical practice, including personal motivation and client outcomes, which are supported by a supportive social work environment. However, barriers regarding accessibility to resources and required funds were due to the lack of organisational support for EBP. Nonetheless, therapists must use creativity and flexibility in their practice to overcome these challenges. Moreover, the findings can be extended to improve educational curricula, promote routine clinical practice of incorporating EBP into everyday practice and advance new knowledge regarding clinical education practices.

Acknowledgements We would like to thank all the participants who participated in this study for sharing their perspectives and generosity in time.

Contributors All authors (ZJ, DD, DA and FA) participated in the planning for the study and drafted the design for data gathering. ZJ, DD and DA recruited the participants and DD collected the data. ZJ, DD and DA analysed the data and all authors (ZJ, DD, DA and FA) interpreted the data. ZJ drafted the manuscript and all authors contributed to refinement and approved the final version. ZJ is the guarantor.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval This study was reviewed and approved by the Kuwait University Research Ethics Committee and the Ministry of Health (approval number 113). Verbal informed consent was obtained from participants to participate in the study.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available on reasonable request.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

ORCID iD

Zainab Jasem <http://orcid.org/0000-0001-5894-5718>

REFERENCES

- Sackett DL, Rosenberg WMC, Gray JAM, et al. Evidence based medicine: what it is and what it isn't. *BMJ* 1996;312:71–2.
- Straus SE. *Evidence-based medicine: how to practice and teach EBM, 5th edn*. Edinburgh: Elsevier, 2018.
- Melnik BM, Fineout-Overholt E. *Evidence-based practice in nursing & healthcare: a guide to best practice, 5th edn*. 2023: Wolters Kluwer.
- Rodríguez-Nogueira Ó, Leirós-Rodríguez R, Pinto-Carral A, et al. Relationship between competency for evidence-based practice and level of burnout of physical therapists with the establishment of the therapeutic relationship. *Physiother Theory Pract* 2024;40:357–65.
- Connor L, Dean J, McNett M, et al. Evidence-based practice improves patient outcomes and healthcare system return on investment: Findings from a scoping review. *Worldviews Evid Based Nurs* 2023;20:6–15.
- Rodríguez-Nogueira Ó, Leirós-Rodríguez R, Pinto-Carral A, et al. Examining the Association between Evidence-Based Practice and Burnout among Spanish Physical Therapists: A Cross-Sectional Study. *J Pers Med* 2021;11:805.
- Upton D, Stephens D, Williams B, et al. Occupational Therapists' Attitudes, Knowledge, and Implementation of Evidence-Based Practice: A Systematic Review of Published Research. *Br J Occup Ther* 2014;77:24–38.
- Lindström A-C, Bernhardtsson S. Evidence-Based Practice in Primary Care Occupational Therapy: A Cross-Sectional Survey in Sweden. *Occup Ther Int* 2018;2018:5376764.
- Alshehri MA, Falemban R, Bukhari RA, et al. 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;17:121–30.
- Krueger RB, Sweetman MM, Martin M, et al. Occupational Therapists' Implementation of Evidence-Based Practice: A Cross Sectional Survey. *Occup Ther Health Care* 2020;34:253–76.
- Baig A, Morress C, Cecala E, et al. OTs' and Physical Therapists' Use of Evidence-Based Practice for the Treatment of Motor Function in Infants With Cerebral Palsy. *Am J Occup Ther* 2022;76:7610510171p1.
- Ahmad ASH, Al-Mutar NBE, Al-Hulabi FAS, et al. Evidence-based practice among primary care physicians in Kuwait. *J Eval Clin Pract* 2009;15:1125–30.
- Haron IM, Sabti MY, Omar R. Awareness, knowledge and practice of evidence-based dentistry amongst dentists in Kuwait. *Eur J Dent Educ* 2012;16:e47–52.
- Qadhi I, AlSaidan L, AlSomali H, et al. Knowledge, attitude, practice, and barriers of evidence-based medicine among physicians in general hospitals in Kuwait: A cross-sectional study. *Ann Med Surg (Lond)* 2021;72:103081.
- Alrowayeh HN, Buabbas AJ, Alshatti TA, et al. Evidence-Based Physical Therapy Practice in the State of Kuwait: A Survey of Attitudes, Beliefs, Knowledge, Skills, and Barriers. *JMIR Med Educ* 2019;5:e12795.
- Creswell JW, Poth CN. *Qualitative inquiry and research design: choosing among five approaches, 4th edn*. 2018: SAGE Publications.
- Busetto L, Wick W, Gumbinger C. How to use and assess qualitative research methods. *Neurol Res Pract* 2020;2:14:14:.
- Harding J. *Qualitative data analysis from start to finish, 2nd edn*. London: SAGE publications, 2019.
- Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3:77–101.
- Bryman A. *Social research methods, 5th edn*. Oxford: Oxford University Press, 2016:747.
- Kuhaneck H, Case-Smith J. The occupational therapy process in pediatrics: overview of essential concepts. In: O'Brien J, Kuhaneck H, eds. *Case-Smith's occupational therapy for children and adolescent*. Elsevier, 2020.
- Novak I, Honan I. Effectiveness of paediatric occupational therapy for children with disabilities: A systematic review. *Aust Occup Ther J* 2019;66:258–73.
- Myers CT, Lotz J. Practitioner Training for Use of Evidence-Based Practice in Occupational Therapy. *Occup Ther Health Care* 2017;31:214–37.
- Fineffer-Rosenbluh I. Incorporating perspective taking in reflexivity: A method to enhance insider qualitative research processes. *Int J Qual Methods* 2017;16:1–11.
- Thomas A, Al Zoubi F, Mayo NE, et al. Individual and organizational factors associated with evidence-based practice among physical and occupational therapy recent graduates: A cross-sectional national study. *J Eval Clin Pract* 2021;27:1044–55.
- Matus J, Mickan S, Noble C. Developing occupational therapists' capabilities for decision-making capacity assessments: how does a support role facilitate workplace learning? *Perspect Med Educ* 2020;9:74–82.
- Furuki H, Sonoda N, Morimoto A. Factors related to the knowledge and skills of evidence-based practice among nurses worldwide: A scoping review. *Worldviews Evid Based Nurs* 2023;20:16–26.
- World Federation of Occupational Therapists. Minimum Standards for the Education of Occupational Therapists 2016. 2016.
- Monteiro NRO, Santos WNN, Sousa AS, et al. Evidence-based practice (EBP) course in undergraduate physical therapy programs in private higher education institutions in Brazil. *Braz J Phys Ther* 2024;28:100951.
- Atler K, Stephens J. Pilot Use of the Adapted Fresno Test for Evaluating Evidence-Based Practice Knowledge in Occupational Therapy Students. *Am J Occup Ther* 2020;74:7404205100p1–9.
- Teichgräber U, Ingwersen M, Ehlers C, et al. Microlearning for faculty development: Concentrate on what really counts. *Med Educ* 2023;57:771–2.
- Viegas Dias C, Maria AR, Dias AC, et al. Evidence-based brunch to practise literature appraisal skills. *Med Educ* 2019;53:508–9.
- Bennett S, Allen S, Caldwell E, et al. Organisational support for evidence-based practice: occupational therapists perceptions. *Aust Occup Ther J* 2016;63:9–18.
- Crawford CL, Rondinelli J, Zuniga S, et al. Barriers and facilitators influencing EBP readiness: Building organizational and nurse capacity. *Worldviews Evid Based Nurs* 2023;20:27–36.
- Melnik BM, Fineout-Overholt E, Mays MZ. The evidence-based practice beliefs and implementation scales: psychometric properties of two new instruments. *Worldviews Evid Based Nurs* 2008;5:208–16.
- Rochette A, Brousseau M, Vachon B, et al. What occupational therapists' say about their competencies' enactment, maintenance and development in practice? A two-phase mixed methods study. *BMC Med Educ* 2020;20:191.