

Factors influencing telehealth implementation in Kuwait from pediatric occupational therapists' perspective:





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Feasibility

of

telehealth

Perceived

obstacles

Telehealth

into

practice:

therapists

lens

Background

- Telehealth is the use of telecommunications technology to connect clinicians for assessment, intervention, consultation, and monitoring with their patients or caregivers, and any other individuals involved in the patient's care (Haleem et al., 2021).
- Telehealth is effective in providing children and their families with therapy services in an easy way (Onal et al., 2021)
- Potential benefits of telehealth include increasing accessibility of services to patients who live in remote or underserved areas, which will prevent unnecessary delays in receiving care (Cason, 2012).
- In Kuwait, there is no research exists regarding the use of telehealth to deliver occupational therapy services.

Objective

 This study aimed to explore the factors influencing telehealth implementation in Kuwait from pediatric occupational therapists' perspective.

Methods

Design

A **qualitative** study

Participant Eligibility

- 1. Having a minimum of one year experience.
- 2. Working with children in Kuwait.

Table 1: Participants' demographics (n=12).

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Participant name	Age	Gender	Years of experience	Working settings	Nationality
"Pseudonym"					
		Group 1			
Hanouf	47	Female	25y	PMR*	Indian
Ahmed	41	Male	17y	PMR	Philippine
Rawan	28	Female	5y	PMR	Kuwaiti
Kholoud	42	Female	15y	PMR	Indian
Jenan	40	Female	17y	PMR	Indian
Maryam	44	Female	19y	PMR	Indian
Maram	44	Female	20y	PMR	Indian
		Group 2			
Amna	30	Female	8y	NBK**	Kuwaiti
Layan	24	Female	2y	KCMH***	Kuwaiti
Reem	25	Female	1y 6m	PMR	Kuwaiti
Dalal	24	Female	2y	KCMH	Kuwaiti
Fay	24	Female	1y 10m	NBK	Kuwaiti

*PMR: Physical Medicine and Rehabilitation Hospital, **NBK: National Bank of Kuwait hospital ***KCMH: Kuwait Center of Mental Health

Instrument

Focus groups discussions

Procedure

- 1. Ethical approval was obtained.
- 2. Pilot study was conducted.
- 3. Participants were recruited by non-probability sampling (snowball and purposive sampling).
- 4. Participants' consent was taken.
- 5. Two Focus groups were conducted (7 and 5 participants in each).
- 6. Each focus group was recorded using two highquality audio recorders.
- 7. Trustworthiness techniques were used.

Data analysis

- Thematic analysis was conducted as follows:
 - 1. Transcribe the audio.
- 2. Familiarize ourselves with data and re-read
- 3. Create initial codes.
- 4. Finalize the codes after the authors' discussion.
- 5. Create themes and sub-themes.

Result

Usability of telehealth

- Telehealth could be used for consultation, coaching, follow-up, home program, etc.
- It is time and cost-effective and more flexible.
- It could help hospitals to serve more paients.

Fay: "Throughout school season like nobody wants to come [to the hospital] because they have other children they want to take to school, so it becomes difficult to schedule sessions"

Home environment

- Most children feel comfortable in their familiar environment.
- Children can perform better in their home environment in comparison to clinical settings.

Layan "I think in some ways, for some children that are quite severe, then it could be actually beneficial to leave them in their natural environment"

Caregivers'& children' hindering factors

- Parental bias: therapists not getting accurate information about children's performance.
- Lack of space, resources, equipment, or tools at home.
- Caregivers' low confidence levels in doing the therapeutic activities themselves with their children.

Hanouf: "The child has the physical potential, but the caregivers do not know how to scaffold it".

Therapists' challenges

- Organizational regulations and policies of some hospitals restrict the use of telehealth.
- Hospitals' limited space and poor internet connections.
- Difficulty in using telehealth with all conditions/cases.

Ahmed: "There are no proper steps that you could follow to achieve whatever the patient asks you".

Telehealth requirements

- Caregivers should be with children during sessions for safety and mentoring.
- Distractions should be avoided within the home environment during the session.
- Train both therapists and caregivers on how to use telehealth.

Suggested criteria

- Caregivers should be provided with the choice between telehealth or face-to-face sessions.
- Therapists should adhere to their dress code and provide sessions in the hospitals for professionality.
- Sessions could be recorded to protect therapists' and caregivers' rights.

Rawan: "I feel that we must be strict about the session when we use telehealth?... It should be counted as a session, so the caregiver can be complaint more about attending these sessions.".

Discussion

- Since telehealth is novel in Kuwait, there was a persistent need to have criteria that surround its application and reflect our cultural norms (Almubark et al. 2022).
- Some assessments that rely on touch such as range of motion, muscle tone, and muscle power cannot be applied in distant care. This is supported by a previous study, which stated that many hands-on assessments or treatment techniques were difficult to perform using telehealth (Wittmeier et al., 2022)
- The majority of children could concentrate and engage better within their own familiar environment. However, sometimes the familiarity of the home environment restricts their engagement, and both beliefs were highlighted in this study (Hines et al., 2019).
- Telehealth sessions could compromise family privacy and limit children's participation in sessions (Raatz et al., 2020, Rortvedt & Jacobs, 2019). On the other hand, some studies highlighted participants' beliefs about telehealth and how it could improve family privacy (Campbell et al., 2019, Edirippulige et al., 2016).

Implications

- Maximizing public awareness about telehealth benefits is the first step to successful telehealth provision.
- Hindering factors could be avoided by implementing specific criteria and requirements before using telehealth; therefore, the Kuwait Ministry of Health should adopt the telehealth idea by enacting legislation that could facilitate telehealth implementation and protect people's rights.
- Training courses should be provided for both therapists and patients to increase the quality of telehealth services provided.

Limitations

- Children's and caregivers' perspectives were not explored.
- This study involved participants from 3 general hospitals only.

Conclusion & Future plans

- This study showed that implementing telehealth services offers therapists, children, and their caregivers some advantages, which include saving time, flexibility in scheduling sessions, and serving more patients.
- Several factors could hinder the application of telehealth, such as parental bias, privacy, home social environment, child tolerance level, and some hospital policies that restrict the use of telehealth
- To overcome previous challenges, therapists suggested having specific requirements and criteria surrounding telehealth.
- Future studies need to be conducted to elicit the perspectives of therapists who had a prior experience with telehealth sessions and take children's and caregivers' perceptions into consideration.

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References

- Almubark, B. M., Majrashi, N., Alghusun, N., Alhammad, M., Alhthifi, F., & Alyahya, R. S (2022). Telehealth Clinical Practice Guide for Occupational Therapy, Physical Therapy, and Speech and Language Pathology: A Saudi and Middle Eastern Guide. Telemedicine and E-Health, 28(5), 636–642. https://doi.org/10.1089/tmj.2021.0021
- Haleem, A., Javaid, M., Singh, R. P., & Suman, R. (2021). Telemedicine for healthcare: Capabilities, features, barriers, and applications. Sensors international, 2, 100117.
- Önal, G., Güney, G., Gün, F., & Huri, M. (2021). Telehealth in paediatric occupational therapy:a scoping review. International Journal of Therapy and Rehabilitation, 28(7), 1–16.
- Wittmeier, K. D. M., Hammond, E., Tymko, K., Burnham, K., Janssen, T., Pablo, A. J., Russell K., Pierce, S., Costello, C., & Protudjer, J. L. P. (2022). "Another Tool in Your Toolkit": Pediatric Occupational and Physical Therapists' Perspectives of Initiating Telehealth during the COVID-19 Pandemic. Physical & Amp; Occupational Therapy in Pediatrics, 42(5), 465–481.

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