Original Article:

Perceptions of physiotherapists and caregivers in Saudi Arabia regarding family-centred services provided by paediatric physiotherapy clinics

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Abstract:

Background & Aims:

Family-centred care (FCC) is globally acknowledged as a leading practice model in paediatric rehabilitation. However, there is limited evidence available on its practice in Saudi Arabia. The study aimed to explore the perceptions of caregivers and physiotherapists regarding family-centred services (FCS) offered in paediatric physiotherapy clinics within four major hospitals in Riyadh.

Methods:

A cross-sectional descriptive design was utilised. Data were gathered using validated Arabic versions of the 20-item Measure of Processes of Care (MPOC-20) for caregivers and the 27-item Measure of Processes of Care for Service Providers (MPOC-SP) for physiotherapists. The participants were 128 caregivers of children with disabilities and 14 paediatric physiotherapists. Descriptive statistics are provided along with a multivariate analysis of covariance (MANCOVA) to assess the impact of workload and independent samples t-tests to compare perceptions between the caregivers and physiotherapists.

Results:

Caregivers scored Respectful and Supportive Care as the highest factor, followed by Enabling and Participation and then Coordinated and Comprehensive Care. The lowest score was found for Providing Specific Information with Providing General Information being the second lowest, highlighting notable communication gaps. Caregivers in low-workload centres reported significantly higher Enabling and Participation and Providing General Information, while physiotherapists did not report workload-related differences in their practices according to workload. When comparing viewpoints, both groups rated Respectful and Supportive Care similarly, but a significant disparity was noted in the Provision of Specific Information, with physiotherapists rating this area as much higher than the caregivers did.

Conclusion:

Paediatric physiotherapy clinics in Riyadh exhibited a strong basis for FCC in interpersonal care. However, there were still gaps in information provision and alignment between the caregivers and providers. Addressing workload distribution, enhancing structured communication tools and investing in education for both staff and families are crucial strategies to improve FCC in Saudi paediatric rehabilitation.

Keywords:

Family-centred service, MPOC, perceptions, Saudi Arabia

Introduction:

Families play a central role in the rehabilitation process, which is recognised by the family-centred approach. In this approach, families, healthcare professionals and other relevant stakeholders are recognised and valued as individuals with unique perspectives, knowledge and experiences.[1] Over the past few years, paediatric rehabilitation has moved from a medically focused approach to a family-centred approach. As a result of this shift, families are increasingly involved in decision-making processes and are provided with the resources and support they need.[2–4] Family-centred care (FCC) is defined as a collaborative partnership among healthcare providers, patients and families in the planning, delivery and evaluation of healthcare services. This approach recognises the invaluable insights that parents have regarding their child's needs and underscores their role as partners with service providers, positioning the family and community at the core of the care experience.[3,4]

Models of service delivery in paediatric rehabilitation that implement a family-centred approach underscore the importance of engaging families in the planning, delivery and evaluation of healthcare services.[5–7] Research shows that FFC is associated with higher parental satisfaction and improved psychological well-being for both parents and their children in rehabilitation settings. Moreover, it is recognised as one of the best practices in early intervention services.[8–10]

Family empowerment is a vital component of family-centred services, as it aims to increase families' independence and capacity to work with service providers.[11,12]

Numerous studies have investigated how healthcare providers perceive FFC in paediatric settings. The findings indicate that providers generally have a favourable view of FFC, acknowledging its advantages, such as increased patient satisfaction, improved adherence to treatment plans and strengthened collaboration between healthcare providers and families. Nonetheless, it is essential to also consider the viewpoints of caregivers and families because they are vital to the effective implementation of FFC.[13–15]

Exploring the perceptions of paediatric caregivers regarding the family-centred approach in paediatric rehabilitation clinics is of utmost importance. By understanding their perspectives, professionals can create a more personalised and effective care experience for both the child and the family. This understanding can also enhance communication and collaboration within the rehabilitation team and help ensure that interventions are tailored to individual

needs, leading to increased satisfaction and positive overall outcomes.

To achieve these benefits, we can use families' perceptions of services and satisfaction to gauge how family-centred a service is. The Measure of Processes of Care (MPOC) instrument, originally developed by King et al. in 1996,[16] is an assessment tool that measures the degree to which a service is family centred by using parents' perceptions. Many therapists acknowledge the beneficial influence of family-centredness and actively collaborate with families to support their children's development. Several studies across various countries have utilised the 56-item (MPOC-56) and 20-item (MPOC-20) versions of the instrument to assess services, helping to pinpoint areas for improvement.[17]

Recent research has underscored persistent challenges in providing information within FCC contexts. For example, in 2024, Nematifard et al. indicated that inadequate knowledge among both staff and families remained a significant barrier to effective FCC; however, they also noted that structured interventions such as workshops and educational booklets can greatly enhance outcomes.[4] Moreover, in 2022, Thomas et al. highlighted that the caregiver–therapist relationship was dependent not just on technical proficiency but also on trust, guidance and emotional connection, which are crucial for fostering strong therapeutic alliances.[18] Additionally, organisational aspects, such as therapist workload, have been recognised globally as vital contextual factors that may influence caregivers' perceptions and satisfaction with FCC .[19]

Thus, the purpose of this study was to comprehensively evaluate the quality of family-centred services offered in paediatric physiotherapy clinics at four major hospitals in Riyadh, Saudi Arabia, by integrating perspectives from both caregivers and physiotherapists. Utilising the MPOC-20 and Measure of Processes of Care for Service Providers (MPOC-SP) tools, this research compared ratings across related domains and examined how therapist workload impacted the provision of FCC.

Methods:

Study Design and Samplinga:

This cross-sectional descriptive study employed a survey approach and was conducted across four major governmental hospitals in Riyadh: King Khalid University Hospital (KKUH), King Fahad Medical City (KFMC), King Abdulaziz Medical City (KAMC) and Prince Sultan Military Medical City (PSMMC).

The study population consisted of paediatric physiotherapists and

caregivers of children with long-term disabilities attending paediatric outpatient physiotherapy clinics in Riyadh hospitals. All the paediatric physiotherapists working in the outpatient setting were included, while those not specialised in paediatrics or working exclusively in inpatient services were excluded. Caregivers were eligible if they were parents or guardians of children with long-term disabilities attending the outpatient clinics. Parents who were unable to read, those of newly registered patients, parents of children receiving inpatient physiotherapy, caregivers who could not understand Arabic and children attending the clinic without a parent or caregiver were excluded.

Recruitment was facilitated through the therapists' weekly caseloads, from which patients were randomly selected and the parents of these children were invited to complete the survey during their child's session. Although the overall strategy for recruitment was operationally based on convenience sampling, random selection within caseloads was applied to minimise bias.

To assess the required sample size for the caregivers, an a priori calculation based on the single-proportion method (95% confidence level, Z = 1.96; conservative estimate p = .50; margin of error ±10%) indicated a minimum requirement of 96 participants. Due to their more limited number, a census approach was applied to include all eligible paediatric physiotherapists working in the participating hospitals. To ensure proportional representation across the therapists, approximately 30% of each therapist's weekly caseload was approached.

Data Collection Instrument:

To assess the quality of the family-centred services, data were collected using Arabic versions of two standardised instruments, the MPOC-20 and the Measure of Processes of Care for Service Providers (MPOC-SP). Both instruments generate ordinal-level data at the item level, which are summed to provide interval-level data for analysis and have been widely applied with acceptable internal consistency (Cronbach's α values ranging from .69 to .82) and strong item-total correlations.[20] Both the MPOC-20 and MPOC-SP were obtained from CanChild, McMaster University, which provided formal licences for their use in this study.

The MPOC-20 is a validated, parent-report instrument designed to evaluate the quality of paediatric healthcare services from a family-centred perspective.[18] It consists of 20 items rated on a 7-point Likert scale ranging from "not at all" to "to a great extent." The MPOC-20 is organised into five domains: Enabling and Participation (items 4, 7 and 8);

Providing General Information (items 16 to 20); Providing Specific Information about the Child (items 2, 14 and 15); Coordinated and Comprehensive Care for the Child and Family (items 5, 6, 10 and 12); and Respectful and Supportive Care (items 1, 3, 9, 11 and 13). For the purpose of this study, "Providing Specific Information about the Child" is referred to as "Providing Specific Information", and "Coordinated and Comprehensive Care for the Child" is referred to as "Coordinated and Comprehensive Care". Completion typically requires 5–10 minutes. Previous research has shown that the Arabic version of MPOC-20 exhibits strong reliability and internal consistency, with moderate to high intercorrelations across the subscales.[20]

The MPOC-SP is a parallel instrument designed to capture healthcare providers' perspectives on family-centred practices in paediatric care. It contains 27 items organised into four domains: Demonstrating Interpersonal Sensitivity, Providing General Information, Communicating Specific Information and Treating Individuals with Respect. Unlike the parental version, this tool focuses on observable provider behaviours. Empirical evidence supports its good reliability and validity, as well as its ability to highlight role-based differences among professionals in paediatric healthcare settings.[21]

Furthermore, three domains of the MPOC-20 are aligned with three domains of the MPOC-SP, demonstrating that higher levels of family-centred services are associated with increased satisfaction among parents.[17] Providing General Information appears in both the MPOC-20 and MPOC-SP. Providing General Information from the MPOC-20 and Communicating Specific Information from the MPOC-SP address the same topic and will be referred to by the former wording when these factors are compared. Lastly, for the purposes of this study, Respectful and Supportive Care from the MPOC-20 and Treating Individuals with Respect from the MPOC-SP will be compared as similar factors using the former wording.

Ethical Considerations and Procedure:

All participants provided their informed consent in writing before data collection. This study adhered to the principles of the Declaration of Helsinki (1975, revised 2013). Ethical approval for the research protocol was granted by the institutional review boards of King Khalid University Hospital (E-09-055), King Fahad Medical City (ERRC-09-022) and King Abdulaziz Medical City (RC09-048). Permission to conduct the study at Prince Sultan Military Medical City was granted on the basis of these approvals. Data collection

was completed over a four-week period in December 2015, with the study conducted sequentially across the participating governmental hospitals in Riyadh, each serving as a host site for one week. During their assigned week, the informed consent forms, participant information sheets and MPOC-SP instruments were distributed to and collected from the paediatric physiotherapists. From the therapists' weekly caseloads, patients were randomly selected and the parents of these children were provided with the informed consent form, participant information sheet and MPOC-20 to complete together during their child's therapy session.

Statistical Analysis:

The data were analysed using IBM SPSS Statistics, Version 31.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics (means, standard deviations [SDs], frequencies and percentages) were used to summarise the participant characteristics and the MPOC-20 and MPOC-SP scores. To assess the effect of therapist workload, a multivariate analysis of covariance (MANCOVA) was conducted with weekly load (high vs. low) as the independent variable and the MPOC-20 domains as the dependent variables. Box's M test assessed the homogeneity of variances and covariances. Significant multivariate effects were followed by univariate tests, with effect sizes reported as partial η^2 values. A separate MANCOVA compared physiotherapists' MPOC-SP scores by workload. Finally, independent-samples t-tests compared caregiver (MPOC-20) and physiotherapist (MPOC-SP) ratings on similar domains, with Cohen's d values calculated as standardised measures of effect size. Statistical significance was set at $p < .05$.

Results:

Description of Participants:

The study included a census of 14 paediatric physiotherapists and 128 parents of children with disabilities attending paediatric outpatient physiotherapy clinics across four hospitals. Of the 128 caregivers invited, 109 completed the MPOC-20 questionnaire, yielding a response rate of 85.2%. Most respondents were the birth mothers of the children. The MPOC-SP questionnaire was completed by all 14 physiotherapists (100%) of the selected hospitals. All returned questionnaires were considered valid for analysis according to the scoring methodology developed by King et al. (1996),16 which specifies that a questionnaire is invalid if more than 50% of items are missing or marked as "not applicable". The distribution of

physiotherapists and caregivers across the participating centres is presented in Table 1. For further analysis, the four centres were classified into two categories based on weekly therapist load: high load (≥40 patients per week; n = 63) and low load (<30 patients per week; n = 46), to facilitate comparison of the FCC outcomes.

Table 1: Weekly Workload of Each Physiotherapist by Hospital.

Hospital	Physiotherapist	Average Workload	30% of Load	Filled Forms
PSMMC	#1	54	16	13
	#2	50	15	13
Total PSMMC	**2**	**52**		**26**
KAMC	#3	35	10	8
	#4	20	6	3
	#5	25	7	4
	#6	10	3	2
	#7	9	2	2
Total KAMC	**5**	**19.8**		**19**
KKUH	#8	35	10	6
	#9	32	9	7
	#10	30	9	9
	#11	20	6	5
Total KKUH	**4**	**29.25**		**27**
KFMC	#12	34	10	10
	#13	41	13	13
	#14	47	14	14
Total KFMC	**3**	**40.6**		**37**
Grand Total	**14**		**130**	**109**

KAMC=King Abdulaziz Medical City; KFMC = King Fahad Medical City; KKUH = King Khalid University Hospital; PSMMC = Prince Sultan Military Medical City

Measure of Processes of Care for Caregivers (MPOC-20)

On the MPOC-20 questionnaire, the domains of Enabling and Participation, Coordinated and Comprehensive Care and Respectful and Supportive Care were rated relatively highly, with mean scores above the midpoint of the scale (4.0). Among these, Respectful and Supportive Care received the highest overall rating (M = 5.8, SD = 1.1), indicating that this aspect of family-centred service was a

notable provision. Scores for Enabling and Participation (M = 5.5, SD = 1.5) and Coordinated and Comprehensive Care (M = 5.5, SD = 1.4) were also consistently above the midpoint of the scale, reflecting favourable caregiver perceptions in these areas.

In contrast, the domains of Providing General Information and Providing Specific Information about the Child were rated less favourably, both falling below the scale midpoint. The lowest mean score was observed in Providing General Information (M = 3.9, SD = 1.5), suggesting that this area was addressed only to a limited extent. Providing Specific Information received a similar mean score (M = 3.9, SD = 1.9), further indicating a gap in communication tailored to the individual child.

When visually examining mean scores by weekly therapist load, caregivers in low-load centres generally rated services higher across several domains. For instance, the mean scores for Enabling and Participation (M = 5.9, SD = 1.2) and Coordinated and Comprehensive Care (M = 5.7, SD = 1.2) were higher than those in high-load centres (M = 5.1, SD = 1.6 and M = 5.3, SD = 1.5, respectively). Similarly, caregivers in low-load centres reported greater access to General Information (M = 4.3, SD = 1.4) and Specific Information (M = 4.1, SD = 1.9) compared to those in high-load centres (M = 3.6, SD = 1.6 and M = 3.8, SD = 1.9, respectively). The MPOC-20 domain scores are shown in Table 2.

Table 2: Mean (SD) Scores of MPOC-20 Domains by Weekly Therapist Load (Low/High) and the Entire Sample.

MPOC-20 Domain	Entire Sample (N = 109)	High Weekly Load (n = 63)	Low Weekly Load (n = 46)
Enabling and Participation	5.5 (1.5)	5.1 (1.6)	5.9 (1.2)
Coordinated and Comprehensive Care	5.5 (1.4)	5.3 (1.5)	5.7 (1.2)
Respectful and Supportive Care	5.8 (1.1)	5.7(1.1)	5.8 (1.0)
Providing General Information	3.9 (1.5)	3.6 (1.6)	4.3 (1.4)
Providing Specific Information	3.9 (1.9)	3.8 (1.9)	4.1 (1.9)
MPOC-20 = Measure of Processes of Care			

To further explore whether weekly therapist load across centres influenced FCC, a MANCOVA was conducted to examine differences in MPOC-20 domain scores between centres with high versus low weekly patient loads (see Table 3). The results of Box's M test indicated that the homogeneity of the covariance matrices could be assumed (p = .712). The overall multivariate effect was significant (Wilks' λ = .89, F(5,100) = 2.38, p = .04, partial η^2 = 0.11). Univariate follow-up tests showed

that caregivers at the low-load centres reported significantly higher scores for Enabling and Participation [F(1,104) = 7.7, p = .01, partial η^2 = .07] and Providing General Information [F(1,104) = 4.97, p = .03, partial η^2 = .05]. No significant load-related differences were observed for Comprehensive Care, Respectful/ Supportive Care or Specific Information (all p > .05).

Table 3: Multivariate Analysis of Covariance for Weekly Therapist Load on Family-Centred Process for Caregivers.

Dependent Variable	F	p	η^2
Enabling and Participation	7.70	*0.01	0.07
Coordinated and Comprehensive Care	1.88	0.17	0.02
Respectful and Supportive Care	0.82	0.37	0.01
Providing General Information	4.97	*0.03	0.05
Providing Specific Information	1.10	0.30	0.01
F = F-statistic; p = significance level; η^2 = partial eta squared (measure of effect size)			

Measure of Process of Care for Service Providers (MPOC-SP)

On the MPOC-SP questionnaire, the physiotherapists generally reported generally high ratings for the domains. The highest mean score was observed for Treating Individuals with Respect (M = 5.6, SD = 0.8), followed closely by Communicating Specific Information (M = 5.5, SD = 0.8) and then Demonstrating Interpersonal Sensitivity (M = 5.2, SD = 0.9). Providing General Information received the lowest mean score (M = 4.0, SD = 1.2), suggesting this domain was addressed to a lesser extent in practice. When stratified by weekly therapist load, a visual examination of the means shows that the physiotherapists in low-load centres reported slightly higher mean scores across most domains, with Providing General Information showing the most notable difference (4.3 vs. 3.4). However, the overall pattern of results suggests comparable ratings between the groups. Table 4 presents the descriptive statistics for each MPOC-SP domain.

Table 4: Mean (SD) Scores of MPOC-SP Domains by Weekly Therapist Load (Low/High) and the Entire Sample.

MPOC-SP Domain	Sample (N = 14)	High Weekly Load (n = 5)	Low Weekly Load (n = 9)
Demonstrating Interpersonal Sensitivity	5.2 (0.9)	5.1 (1.0)	5.2 (1.0)
Treating Individual Respectfully	5.6 (0.8)	5.5 (1.0)	5.7 (0.7)
Providing General Information	4.0 (1.2)	3.4 (0.7)	4.3 (1.3)
Communicating Specific Information	5.5 (0.8)	5.3 (0.7)	4.6 (1.0)
MPOC-SP = Measure of Processes of Care for Service Providers			

A MANCOVA showed that physiotherapists' perceptions of FCC did not differ significantly between the low-load and high-load centres (Wilks' λ = .80, F(4,9) = 0.58, p = .69, partial η^2 = .20). Follow-up univariate tests confirmed no significant differences across the four MPOC-SP domains (all p > .05). Descriptively, physiotherapists in low-load centres reported slightly higher scores for Providing General Information compared to those in high-load centres, although this difference did not reach statistical significance (see Table 5).

Table 5: Multivariate Analysis of Covariance for Weekly Therapist Load on Family Centred Process for Physiotherapists.

Dependent Variable	F	p	η^2
Demonstrating Interpersonal Sensitivity	0.08	0.78	0.01
Treating Individuals with Respect	0.08	0.78	0.01
Providing General Information	2.04	0.18	0.15
Communicating Specific Information	0.31	0.56	0.03
F = F-statistic; p = significance level; η^2 = partial eta squared (measure of effect size)			

Comparison of Family-Centred Care Perceptions Between Physiotherapists and Caregivers

Independent-samples t-tests were conducted to compare similar domains of FCC between physiotherapists and caregivers (see Table 6). No significant differences were observed for the domains of Respectful and Supportive Care (p > .05) or Providing General Information (p > .05), indicating that both groups reported largely comparable perceptions in these areas. In contrast, a significant difference was found for the Providing Specific Information domain, as the physiotherapists rated this aspect much higher than the caregivers did (p < .001). The effect size was large (Cohen's d > 1.8), underscoring a strong discrepancy between providers' and caregivers' perceptions of the information-sharing practices regarding a specific child.

Table 6: Independent-Samples t-Test Comparing Family-Centred Care Domains between Physiotherapists and Caregivers

	Mean (SD)		Independent Sample t-test		
Domains of Family-Centred Care	**Caregiver (N=109)**	**Physiotherapist (N=14)**	**t-test**	**p-value**	**Effect Size**
Respectful and Supportive Care	5.75 (1.06)	5.61 (0.81)	-0.49	0.63	-0.14
Providing General Information	3.87 (1.55)	3.97 (1.17)	0.22	0.83	0.06
Providing Specific Information	3.94 (1.90)	5.50 (0.81)	5.47	<.001*	1.82

Discussion:

This research explored the views of caregivers and physiotherapists on family-centred services in paediatric physiotherapy clinics across four major hospitals in Riyadh, Saudi Arabia. Overall, both groups considered the services to be family-oriented, with mean scores above the midpoint of the scales. Caregivers at the two low-workload centres reported significantly higher family-centred care, particularly concerning Enabling and Participation and Providing General Information, implying that the therapists' caseloads were a factor affecting service quality. However, no significant differences were found in the physiotherapists' reporting of their practices in relation to workload. When comparing perspectives, caregivers and physiotherapists reported similar ratings regarding Respectful and Supportive Care and Providing General Information, but a significant difference was found in the domain of Providing Specific Information, where physiotherapists rated the provision of child-specific information much higher than the caregivers did as the intended recipients of that information for their children. These findings point to an overall positive foundation of family-centred care while emphasising the need for improvement in information provision and alignment with caregivers.

This pattern is consistent with earlier international studies indicating that families valued respectful engagement but frequently voiced concerns over the sufficiency of information provided.[22–24] In a 2018 meta-analysis, Almasri et al. found that most MPOC-20 domains were rated highly, with mean scores above 5, indicating that families generally perceived family-centred care as provided to a great extent.[25] Our findings were consistent with this pattern, as caregivers in our sample rated Respectful and Supportive Care, Enabling and Participation and Coordinated and Comprehensive Care above the scale midpoint. Notably, both our study and the cited meta-analysis highlighted Providing General Information as the weakest domain, rated around or below 4, reflecting an ongoing gap in addressing families' informational needs. However, unlike the meta-analysis, the caregivers in our sample also rated Providing Specific Information below 4, suggesting an additional area where communication with families may be insufficient. Moreover, recent findings further corroborate this finding; in 2024, Nematifard et al. highlighted insufficient knowledge among staff and families as a significant obstacle to family-centred care in paediatric rehabilitation units.[4] Their participatory action research demonstrated that educational workshops, informational

booklets and peer mentoring led to notable improvements in MPOC scores, especially in the areas of general information and child-specific details, emphasising that communication deficiencies can be addressed through organised educational interventions.

Building on the caregiver-reported findings, examining the physiotherapists' self-assessments provided further insights into how family-centred practices were enacted and where discrepancies in communication may persist. The results indicate that physiotherapists in paediatric outpatient clinics in Riyadh generally rated their family-centred practices positively, particularly in domains such as Treating Individuals with Respect, Communicating Specific Information and Demonstrating Interpersonal Sensitivity, all of which received mean scores above 5.0. These findings align with previous research showing that physiotherapists prioritise family-centred care.[25] However, consistent with international evidence, Providing General Information was reported as the weakest domain, with physiotherapists in our sample rating it lower than the others. This is comparable to the 2021 findings of Antunes and Vaz in which there were significantly lower scores for Providing General Information in both the MPOC-20 and MPOC-SP compared to other domains, while Treating Individuals with Respect received the highest ratings.[26] Similarly, Raghavendra et al. (2007) and Dyke et al. (2006) reported stronger performance in the relational domains but lower provision of general information, although their samples included the broader groups of service providers.[22,23] Taken together, these various findings reinforce a consistent gap in the provision of general information across diverse contexts, underscoring the need for strategies to enhance communication and information-sharing practices within paediatric rehabilitation.

Another important finding of the current study was the difference in perceptions between caregivers and physiotherapists regarding the information provided about the child. While physiotherapists felt they were offering sufficient individualised information, caregivers gave this aspect a much lower rating. This difference points to a communication gap and underscores the necessity of enhanced strategies for sharing information. These insights align with the work of Thomas et al. (2022), who found through qualitative research that the caregiver–therapist relationship relies not only on technical skills but also on a therapist's ability to guide, forge emotional connections with families and embody professional qualities.[18] Their results

indicate that a strong therapeutic alliance builds trust and cooperation, which may clarify why caregivers and physiotherapists had differing views on the provision of child-specific information.

Additionally, findings from participatory action research indicate that focused educational and communication initiatives can markedly enhance family-centred care outcomes.[4] Given these insights, healthcare organisations should focus on establishing structured communication methods, including written care plans, progress updates and multilingual materials, as well as creating opportunities for peer support among families. It is also essential to address the distribution of workloads and invest in the education of both staff and families to ensure lasting improvements.

Workload emerged as an important contextual factor influencing caregiver satisfaction. Caregivers at centres with lower workloads consistently reported greater satisfaction, particularly regarding empowerment and access to information, compared to those in higher workload environments. In contrast, physiotherapists did not report any differences in their practices related to workloads. This indicates that heavy caseloads might limit the time and focus therapists can allocate to engaging with families, even if they are not visibly aware of this impact. Similar results have been observed globally, where increased patient volumes correlate with diminished communication and lower satisfaction of caregivers. In research from 2021, Kwame and Petrucka highlighted staff shortages, excessive workloads and time limitations as major obstacles to patient- and family-centred communication in healthcare settings, underscoring that these organisational challenges hinder meaningful interactions with families and adversely affect satisfaction.[27] Thus, addressing the distribution of workloads and ensuring proper resource allocation could serve as a vital organisational strategy to enhance family-centred care in paediatric physiotherapy environments.

From both practice and policy viewpoints, the results of the current study highlight the necessity of enhancing communication methods and empowering families. Hospitals and rehabilitation facilities could gain from the adoption of organised and uniform communication instruments, such as documented care plans, routine progress updates and educational materials in multiple languages. Additionally, establishing formal avenues for peer-to-peer family support—through organised support groups or mentoring programs—might help fill the gaps noted by caregivers. These initiatives can not only boost caregiver satisfaction but also foster

empowerment and participation, which are key elements of FCC. These approaches align with global recommendations and recent intervention research has shown considerable improvements following the implementation of structured communication and educational support.[4]

This study provides a baseline assessment of family-centred service (FCS) in Saudi Arabia, offering important insights into paediatric rehabilitation practices and informing the design of future multi-centre investigations. However, this research has its limitations. The sample was collected from only four hospitals in Riyadh, which may restrict the applicability of the findings to other areas in Saudi Arabia. The individual characteristics of the participating therapists, such as experience and educational level, and of the participating caregivers, such as their education level, child's diagnosis, or duration of physical therapy service, were not collected. Furthermore, the study concentrated solely on paediatric physiotherapists, while information from a wider array of individuals on interprofessional teams working with children could offer more insights into family-centred care. Additionally, the research relied on a specific set of quantitative survey tools, which, despite being validated and trustworthy, could not capture all the intricate factors influencing caregivers' and providers' evaluations. Subsequent studies should explore mixed methods approaches, incorporating qualitative interviews or focus groups, to unveil a deeper understanding of cultural and contextual impacts on FCC. Broader research that includes more diverse healthcare environments and interdisciplinary providers would also enhance the evidence base.

Conclusion:

This research provides valuable perspectives on how caregivers and physiotherapists perceive family-centred services within paediatric physiotherapy clinics at four prominent hospitals in Riyadh. The importance of respectful and supportive care stood out as the most notable aspect, confirming that the interpersonal aspects of family-centred care are well recognised. However, in line with past global findings, the delivery of general information and the delivery of child-specific information were identified as the weakest areas, indicating ongoing communication challenges. Caregivers in clinics with lower patient workloads reported greater satisfaction, particularly regarding empowerment and information access, highlighting the possible effect of therapist caseloads on service quality.

Conflicts of Interest

The authors have no conflicts of interest to report.

Ethical Considerations

The study protocol was reviewed and approved by the research committees of three hospitals: King Khalid University Hospital (E-09-055), King Fahad Medical City (ERRC-09-022) and King Abdulaziz Medical City (RC09-048). All participants gave written informed consent before taking part in the study.

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