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Family Centeredness of Speech and Language Pathology Practices in an Underdeveloped Context: Parents' Perception and Professionals' Satisfaction

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Abstract
The family-centered model of service delivery has received growing recognition around the world for effective sensitisation and adaptation of families with children having speech and language-related disorders in rehabilitation programs. The aim of the study was to understand the extended perception of parents of the current practice model in speech pathology from a relational and participatory practice perspective, as well as parent-professionals' satisfaction with service delivery as a family-centered care model in Bangladesh. A quantitative method was undertaken to explore parent-professionals' beliefs of relative satisfaction based on parents' education status and professionals' work setting variation. Furthermore, the relationship of the extended aspects of family-centered care with parents' education and economic status, with a descriptive analysis of parents' perception, was examined. A total of 24 speech-language pathologists and 111 parents participated in this study. A satisfactory outcome was not observed for parents from existing speech pathology programs. Dissatisfactory perception of every aspect of family-centered care was found. Parents' educational status was significantly related to their perception of individual aspects of this model. Professional satisfaction within a family-centered model was on the positive side, which indicated a strong negative relationship with parents (r = -.563, $p < .05$). Parents' perception of the service-delivery defines the current practice to be more of a professional-centered model. By increasing the quality of relational and participatory practices, a shift towards a more family-centred practice is required in speech pathology practice in Bangladesh.

Keywords: Family-Centered Care; Speech and Language Pathology; Parents' Perception; Relational Practice; Participatory Practice.

Introduction

Families are placed in the nucleus where additional language learning support is required, making family-centered approach an essential part (Klatte et al., 2020). According to the American Speech-Language-Hearing Association (ASHA), as cited in (Mandak & Light, 2017), speech and language pathologists (SLPs) bear the role and responsibilities to acknowledge the important role that families play in comprehensive aspects of service delivery, including assessment and treatment-related decision-making in accordance with their skills and knowledge. The framework of family-centered (FC) care includes service-directed attitudes, values and approaches recognising families as experts as well as emphasising the acceptance of their active partnership in difficulty management and service provision (Bull et al., 2011; Brewer et al., 1989).

The initial emergence of family-centeredness from Family Systems Theory emphasises the understanding of the importance of the family's impact on the child. (Mandak & Light, 2018). Two practice types are found to be embedded, constituting streams of family-centered models of practices: relational and participatory practices (Dunst et al., 2007). Relational practices have been found to be associated with effectively addressing factors such as affective emotive features related to listening and communicating, as well as beliefs and attitudes towards the family's capabilities and strengths, as per professional belief. On the other hand, individualisation, flexibility and responsiveness to priorities, concerns and needs comprise participatory practice. The notion that families know the best and the utilisation of that knowledge is essential in treatment considerations is the prime objective of FC care. With such understanding, interventions should be individual need-based while focusing on strengthening and supporting the family (DeCarlo, 2022).

Utilising family strengths in decision-making choices and capability enhancement are observed in such practices (Mandak & Light, 2017). Parallel achievement of the promotion of well-being and delivering effective services by formal or informal family engagement can be made possible by this model of care. The opposite can be seen in a medical model, like a professional-oriented one, where decisions regarding goals and objectives surrounding treatment depend on professional expertise only (Rouse, 2012). SLP associations all over the world have reported the vitality of family's inclusion in service provision, making FC service delivery a familiar concept in this field. (Mandak & Light, 2018). Effective orientation of therapy skills in a natural family environment, therapy goal reinforcement across disciplines and improved mental well-being are the notable benefits associated with the FC model (DeCarlo, 2022). Also, improved treatment outcomes as a direct result of FC principles have been observed (Sugden et al., 2019). While growing recognition of the importance of family involvement in SLP-related early interventions is available (Klatte et al., 2019), the structural nature of it is not well-understood (Melvin, 2020). Aligned with this, parent perspectives have revealed challenges to the successful development of family-professional partnerships.

The extent of the implementation of FC services for children with speech difficulties like autism is not well-known, even though the FC model and improved success are interrelated. (Mandak & Light, 2017). Even though advocacy and evidence exist, the global implementation of the FC care model in the field of pediatric disability is not to a full extent (King et al., 2017). Barriers to this may relate to both the parent and the professional, as well as factors like workplace constraints. Parent-related barriers include a lack of ability to attend sessions, reluctance to acknowledge their role outside clinical settings (Sugden et al., 2017), as well as experiencing difficulties in completing assigned tasks (Watts Pappas et al., 2015). Professional barriers include time and workplace constraints, and a lack of confidence in training parents (Mandak & Light, 2018). While working with families is important to SLPs, the best way to do so has not been well-understood (Sugden et al., 2017). While SLPs articulated parents' roles in planning and treating, enabling parents in decision-making and acknowledging their negotiating roles were rarely articulated, making them passive in the process (Davies et al., 2019). SLPs should consider parents' views and preferences regarding their role and integration into the process (Gaffney et al., 2023).

Successful adaptations with families included sensitisation with target settings as well as taking into account the views of the family's importance. (Bear, 2022). Parents who are successfully engaged tend to be prepared and empowered to play an active role in SLP interventions (Melvin et al., 2020). Evidence of a conflict between SLPs' family-centered care-related beliefs and expectations and actual practice exists, which is more of a professional-led one (Pitchard et al., 2024). Misinterpretation of family and SLPs caused by constraints and demands can influence the possibility of this realisation of gaps. (Mandak & Light, 2017). FC services have always been associated with improved outcomes in functionality, development and adjustment, efficient service usage and related perceived satisfaction and competency, as well as parental well-being (Pekcici et al., 2021).

Perception of respectful and comprehensive service with a partnership system has been observed in high-income countries, while FC care for children with disabilities varies across cultural contexts (Cunningham & Rosenbaum, 2013). This type of outcome is also documented in different Asian contexts with a positive perception of this type of care, as cited in (Pekcici et al., 2021). Family-centered or parent-mediated intervention programs have been shown to increase parental knowledge and attitude in managing children across all disorders by influencing social, behavioural and communication skills of children in the South Asian region (Koly et al., 2021). However, positive findings as well as the effectiveness of such intervention programs were not consistently observed in this region. Due to the scarcity of well-equipped and structured service delivery that supports families in the South Asian region, the family-centered service delivery model is a pragmatic solution to an effective rehabilitation of the population, particularly those needing speech and language therapy (Brezis et al., 2015).

The fact that communication disorders negatively affect children's ability to express, parents could provide valuable insights regarding behaviours and feelings, highlighting the importance of their perspective (Kerry, 2018). Thus, the parent-SLP relationship can be a key determinant of satisfaction in service delivery (Awaji et al., 2024). SLP is a growing profession in Bangladesh with limited diversity in service provision. While the burden of the population needing SLP services is higher in the South Asian region, including Bangladesh, the lack of quality evidence of family-centered intervention programs and their implementation is significantly limited (Koly et al., 2021). The nature of existing service delivery from an FC view has not been explored yet, which is crucial for effective service delivery in the field of SLP. In congruence with the reality of the South Asian region, further exploration of the implementation of such care delivery models in the field of SLP is required in the context of Bangladesh, which is significantly underrepresented. The aim of this study is to understand the extended belief of parents of the current practice model from a relational and participatory practice perspective, as well as parent-professionals' beliefs in their satisfaction with service delivery as a family-centered care model.

Methods

Participants

A purposive sampling method was incorporated for the study. Participants were recruited into two different categories: Parents and SLP professionals. A total of 111 parents availing SLP services from the school, rehabilitation center (private), and home-based therapy participated in the study. Recruitment considerations for the parents' group were initially based on their educational status into four different categories: Graduate (30), High School Graduate (41), Primary Education (24) and No Formal Education (16). Further, 3 different categories of income status were attributed to the parents group: above 60,000 BDT (40), 40,000 to 60,000 BDT (57), 25,000 to 40,000 BDT (14). The mean age of the participants was 34.5, ranging from 28 to 46 years of age. SLP professionals were recruited by considering three categories of work settings: School-based (10), Rehabilitation center-based (10) and Self-practising (4). The mean age of the professionals was 30.3, ranging from 26 to 35 years of age. Participants were recruited by direct contact, and following written consent, further proceedings were carried out.

Materials

To understand parents' and professionals' satisfaction with existing SLP programs, a Bengali translated version of the Measure of Process of Care (MPOC) scale, both MPOC-20 and MPOC-SP, were used. The translation process involved forward and back translation, replacing culturally sensitive words with appropriate ones and cognitive debriefing. MPOC-20 (King et al., 2004) is a 20-item questionnaire assessing parents' satisfaction on five subscales; MPOC-SP (Woodside et al., 2001) is a 27-item questionnaire assessing rehabilitation service providers' satisfaction in four subscales. A 7-point rating ranging from 1(Not at all) to 7 (To a very great extent) is attributed to both questionnaires. In a pilot study of 25 participants for both scales, the MPOC-20 exhibited substantial internal consistency (Cronbach's alpha = 0.843) and inter-rater agreement ($\kappa = 0.643$ to 0.780); the MPOC-SP also exhibited substantial internal consistency (Cronbach's alpha = 0.937) and inter-rater agreement ($\kappa = 0.658$ to 0.816). To extensively assess parents' perception of the existing SLP programs, an 85-item Likert scale questionnaire was developed covering Relational and Participatory Practice domains as well as gross Achievement and Satisfaction with the existing program. The Relational Practice domain involved 5 subsections: Service Providers' response, Helping Family by Considering Family as an Indispensable Part of Child's Life, Ongoing Service and Help, Appointment Considerations and Policy Considerations. Participatory Practice domain involved 5 subsections: Knowledge and Skill Enhancement, Decision Making Team, Considerations in Selecting Diagnosis and Treatment Methods, Diagnosis Information and Community-based Service, Information and Referral.

Data Collection

Following written consent, participants were asked to fill out the questionnaires. As SLP is a growing profession in Bangladesh, diversity in service delivery models is restricted to the categories according to our recruitment, and the number of professionals is not significant. Considering this, 24 professionals and parents from all recruitment categories were asked to answer the MPOC-SP and MPOC-20 questionnaires. Furthermore, all the parents answered the 85-item questionnaire to cover their perception and satisfaction with the overall domains of Relational and Participatory Practice domains covering the family-centered model of service in SLP. Participating parents were given the two different questionnaires at two different points in time.

Data Analysis

A quantitative approach was undertaken to analyse the collected data. Data was analysed using IBM SPSS version 20 software. Pearson Correlation was administered to see the relationship between the satisfaction scores obtained from MPOC-20 and MPOC-SP. To observe the differences in responses to the subscales of MPOC-20 and MPOC-SP across parents' educational status and SLPs' work settings, a non-parametric Kruskal-Wallis H test with Post Hoc (Dunn's Test) comparisons was administered due to normality violation of the data. A Chi-square test of independence was further administered to see the relationship of parents' perceptions across sub-sections of the Relational and Participatory practice domains from the self-developed questionnaire to parents' educational and income status. Additionally, a descriptive analysis of the important findings of parents' responses across sub-sections of the family-centered practice model was done.

Results

Relationship of the Satisfaction Scores Between Parents and SLPs Based on the MPOC-20 and MPOC-SP Scale

The correlation coefficient between MPOC-20 and MPOC-SP was -0.563 ($p < 0.05$) for the cumulative scores. The bivariate correlation between them was strong and suggested a high degree of negative correlation. The relationship is illustrated in Figure 1.

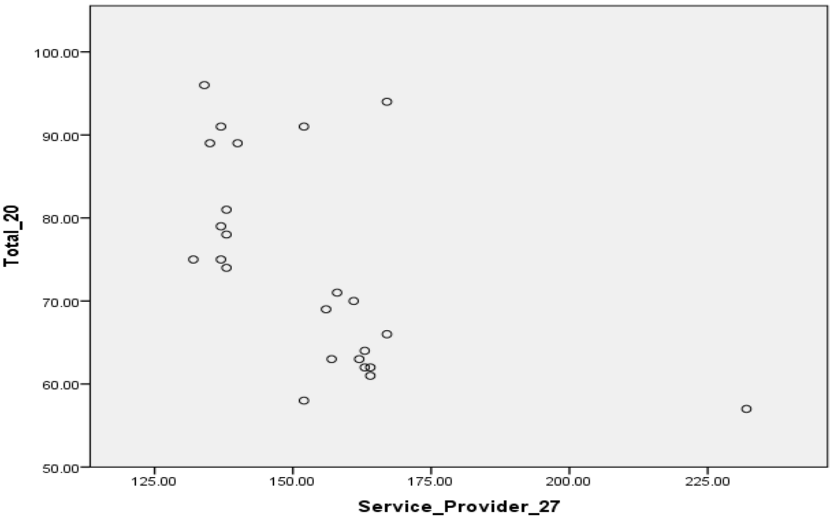

Figure 1: Scatter plot of MPOC-SP by MPOC-20 cumulative scores

Differences in Satisfaction among Parents and SLP Groups according to the Subscales of MPOC-20 and MPOC-SP:

A Kruskal-Wallis H test showed that there was a statistically significant difference in subscale scores of MPOC-20 across four groups of parents: Enabling and Partnership χ^2 (3) = 19.150, p = .001, Providing General Information χ^2 (3) = 17.041, p = .001, Providing Specific Information χ^2 (3) = 17.186, p = .001, Coordinated and Comprehensive Care χ^2 (3) = 18.418, p = .000 and Respectful and Supportive Care χ^2 (3) = 17.982, p = .001. Statistically significant difference in subscale scores of MPOC-SP across three groups of SLPs was found for the first two and the last Subscale: Showing Interpersonal Sensitivity χ^2 (2) = 19.102, p = .001, Treating People Respectfully χ^2 (2) = 17.880, p = .001, Providing General

Information Respectfully χ^2 (2) = 19.165, p = .001. No significant difference was found for the “Communicating Specific Information about the Child” subscale.

Post Hoc comparisons using Dunn’s test indicated that the mean rank of participants with no formal education (5.75, 6.00, 7.25 and 8.83) and primary education (7.67, 8.67, 7.42 and 5.25) was significantly higher than that of high school graduates (21.50) ($p < .05$) for the first four subscales of MPOC-20. For the last subscale of the MPOC-20, the mean rank of no formal education group (5.25) was significantly higher than graduates (18.33) and high school graduates (18.67) ($p < .05$); the mean rank of primary education group (7.75) was significantly higher than high school graduates (18.67) ($p < .05$). Post Hoc comparisons for the MPOC-SP indicated that the mean rank of school-based SLPs (5.50) was significantly higher than rehabilitation center based (15.75 and 19.20) and self-practicing SLPs (21.88 and 20.25) for the first two subscales of MPOC-SP ($p < 0.05$). The mean rank of school-based SLPs (5.50) was only significantly higher than rehabilitation center-based SLPs (13.25) for the last subscale ($p < .05$). The mean scores of the SLPs across four domains of the MPOC-SP are presented in Table 1.

Table 1. Summary of MPOC-SP Scores

	Mean	Minimum	Maximum
Showing Interpersonal Sensitivity	5.31	4.40	6.30
Treating People Respectfully	6.29	5.33	14.33
Communicating Specific Information about the Child	5.81	5.00	7.00
Providing General Information	5.32	4.60	6.40

Relationship of the Aspects of Relational and Participatory Practice with Parents’ Educational and Income Status

Chi-square test of independence was performed to evaluate whether aspects of relational and participatory practice were related to parents’ educational and economic status. The chi-square test was statistically significant, χ^2 (9, N = 111) = 49.118, $p < .01$, with Cramer's V coefficient of .384 suggesting a strong relationship of service providers responses with parents’ educational status only; χ^2 (3, N = 111) = 9.501, $p < .05$, with Cramer's V coefficient of .293 suggesting a moderate relationship of appointment consideration responses with parents’ educational status only; χ^2 (6, N = 111) = 19.156, $p < .01$, with Cramer's V coefficient of .294 suggesting a moderate relationship of knowledge and skill enhancement responses with parents’ educational status and χ^2 (6, N = 111) = 11.924, $p < .05$, with Cramer's V coefficient of .233 suggesting a moderate relationship of knowledge and skill enhancement responses with parents’ income status; χ^2 (3, N = 111) = 12.811, $p < .01$, with Cramer's V coefficient of .340 suggesting a strong relationship of decision making team responses with parents’ educational status only; χ^2 (6, N = 111) = 21.03, $p < .01$, with Cramer's V coefficient of .308 suggesting a strong relationship of diagnosis and intervention selection consideration responses with parents' educational status only; χ^2 (6, N = 111) = 51.513, p< .01, with Cramer's V coefficient of .482 suggesting a strong relationship of diagnosis information responses with parents' educational status only and χ^2 (6, N = 111) = 10.234, p< .05, with Cramer's V coefficient of .216 suggesting a moderate relationship of diagnosis information responses with parents' income status only. No significant relationship was found between parents' educational and income status, with helping family as an indispensable part of a child's life, ongoing help and assistance, policy considerations and helping with community-based services, information and referral. Moreover, gross achievement and satisfaction from the existing program were not significantly related to either the educational or income status of the participating parents.

Findings of Parents' Responses to Relational Practice Aspects of Existing SLP Program:

Service Providers' Response and Helping Families as an Indispensable Part of a Child's Life:

The majority of parents, with almost half (48.2%) of them, thought that their concerns, questions and perceptions were listened to at least often, and clear, helpful information was provided to almost half of them often or always (total = 46.5%). As a result, the majority of the parents felt themselves as an active member often or always (total = 68.4%). Exchanging family expectations and enjoying success with each other was perceived to be at a moderate to extended frequency of time (both > 90%). Respecting familial limitations, informing service delivery options, asking about well-being, concerns, pressure or success, identifying family strength and suggesting level-appropriate mental development help, as well as allowing changing roles, was not very satisfactory among participants (Majority perceive those to be delivered either rarely or *sometimes*). Results are presented in Table 2.

Table 2. Service Providers' Response and Helping Families as an Indispensable Part of a Child's Life

	R	S	O	A
Listen and respond to my concerns, questions and perception		26.3	48.2	23.4
Consider being an active member in meetings rather than just as a listener	8	20.2	42.1	26.3
Provide clear and helpful information	13.2	37.7	31.6	14.9
Respectful of limitations in my activeness and time due to familial reasons	36.8	54.4	6.1	
Inform me about the options for available service delivery	36.8	53.5	7	

Ask me about my well-being and assistance needs, concerns of my family, pressure or success	60.5	36.8	
Inform me of the appropriate help and mental development according to my child's level	81.6	15.8	
Help me identify the strength of my family	81.6	15.8	
Allow me to learn about the changing role of family with my child's development from other families	78.9	18.4	
Discuss family expectations about the child's future education, social relationships and self-independence		50	47.4
Exchange and enjoy each child's success		43	54.4

R = Rarely, S = Sometimes, O = Often, A = Always

Ongoing Service and Assistance, Appointment and Policy Considerations

Helping parents identify their skills, knowledge and assistance requiring areas was perceived to be at a moderate to extended frequency of time (both > 80%). Such perceptions were also observed in asking about children's behaviours, family pressure, needs and priorities according to parents' competence, giving opportunities to provide feedback on service delivery systems (both > 90%). Other aspects of this domain were not very satisfactory among participants (the majority perceive those to be delivered either rarely or *sometimes*). Results are presented in Table 3.

Table 3. Ongoing Service and Assistance, Appointment and Policy Considerations

	R	S	O
Help me identify my strengths, knowledge and skills related to the care system	7	69.3	21.1
Help me identify areas requiring extensive assistance	10.5	78.1	8.8
Ask about my child's behaviours and reactions, family's pressure, recent needs and priorities based on my knowledge	3.5	59.6	34.2
Inform me about changes in the care system or daily activities if needed	16.7	65.8	14.9
Respond to the family's concerns in the appointment and other scheduling processes	33.3	59.6	4.4
Respectfully consider if a long time is needed to discuss complex matters	69.3	28.1	
Decide appointment schedule based on my and my child's needs	29.8	54.4	13.2
Give an opportunity to provide feedback on the service and the service system	2.6	52.6	42.1

Existence of any formal advisory committee to ensure the family's feedback on service delivery policy and training, or a mentoring program to participate in it	65.8	19.3	12.3
Hold any program or invite to get informed of the family's attitude towards service providers	82.5	14.9	
Respect family beliefs, cultures and values in deciding diagnosis and treatment procedures	72.8	15.8	8.8

R = Rarely, S = Sometimes, O = Often

Findings of Parents' Responses to Participatory Practice Aspects of Existing SLP Program

Knowledge-Skill Enhancement and Community-Based Services, Information and Referral:

A moderate or moderate to extended satisfaction was perceived by parents regarding their ability to understand and assist learning, understanding learning needs, consciousness about elementary learning activities and the developmental process to help them, as well as the apparent visibility of special needs (all > 75 to 90%). Interestingly, deciding goals and strategies was informed by 54.4% on a rare basis. Other aspects of this domain were not very satisfactory among participants (the majority perceive those to be delivered either *rarely* or *sometimes,* mostly *rarely*). Results are presented in Table 4.

Table 4. Knowledge-Skill Enhancement, Community-Based Services, Information and Referral

	R	S	O
Able to understand what my child is learning by observing and assisting by myself	18.4	51.8	26.3
Able to understand what my child needs to learn		54.4	43
Conscious about the general activities included in my child's learning and developmental process, and how to help the process		36.8	60.5
The special needs of my child are apparently visible to me at this moment		35.1	62.3
I am more informed about how to decide goals and strategies	54.4	43	
Work with my family to identify community-based services	60.5	28.1	8.8
Help families connect with community-based services first, and then observe if a successful connection was made	92.1	5.3	
Observe whether the service was helpful	92.1	5.3	
Help families identify new community-based services according to changes in their situation	82.5	14.9	

R = Rarely, S = Sometimes, O = Often

Partnership in Decision Making Team, Diagnosis and Treatment Procedure Selection Considerations: Partnerships in decision making and service delivery, comfort in informing disagreements and being informed about any diagnosis to an understandable extent, as well as telling others, were perceived to be at a moderate to extended frequency of time (70% and above). A moderate to dissatisfactory perception was observed for the inclusion of family members in decision making, the family's chosen role in decision making, as well as their efforts to improve and expand the service-delivery and other decision-making, outcome, diagnosis and treatment-related aspects of this domain (Majority combinedly falling under either *rarely* or *sometimes* frequency. Results are presented in Table 5.

Table 5. Decision-Making Team, Diagnosis and Treatment Procedure Selection Considerations

	R	S	O
Play a partnership role in deciding your role in service delivery as well as in decision-making	14	56.1	27.2
Respect your requests to include other family members in the decision-making process	45.6	51.8	
Support and assist in your effort in service delivery improvement and expansion, as well as the family's chosen role in decision-making	63.2	34.2	
Discuss different methods of treatment and service delivery selection, and the most appropriate ones for your child based on the family's economic and pressure handling capabilities	50	46.5	.9
Make decisions together about expected outcomes	48.2	46.5	2.6
Make sure you have received enough information to consider treatment and service delivery processes	47.4	50	
Feel comfortable in informing disagreements regarding suggestions and recommendations	4.4	57	36
Solving disagreements by respectful negotiations regarding treatment and services is possible	32.5	58.8	6.1
Completely inform you about any diagnosis so that you can fully understand	25.4	41.2	30.7
Help your family to clearly tell others about the diagnosis	5.3	49.1	43

R = Rarely, S = Sometimes, O = Often

Gross Achievement and Satisfaction from Existing SLP Program:

Parents perception of the gross achievement and satisfaction regarding the existing program was neutral for many aspects including consciousness of the norm referenced status of child, involvement in the learning process, evaluation of the program to meet the Childs' need as well as it's basis, inclusion of matters considered important by parent, learning to assist and enjoy as well as fruitful discussion of Childs' strength (More than 50% falling under *Neutral* status). The majority of parents agreed on an increase in confidence to assist their child and a decrease in the loneliness perceived as a parent (More than 50% falling under *Agreed* status). Results are presented in Table 6.

Table 6. Gross Achievement and Satisfaction from Existing SLP Program

	D	N	A
I am more conscious about how my child is in comparison with others	7.9	64	25.4
My family is more involved in the learning process		72.8	24.6
I feel less lonely as a parent of my child		37.7	59.6
Existing services are based on individual need and are able to meet the needs of my child	9.6	66.7	21.1
Existing services include matters that are important to me		77.2	20.2
I have learnt to assist my child and am enjoying it	2.6	78.1	16.7
I am very confident in helping my child together with my family	1.8	39.5	56.1
I am satisfied that the strengths of my child are discussed by SLPs	7	71.1	19.3

D = Disagree, N = Neutral, A = Agree

Discussion

This study aimed to understand SLP professionals' and parents' beliefs about the relative satisfaction of the existing SLP programs across settings and extensively observe parental perception of the service delivery model from a family-centered view. Relative satisfaction of the elements of the care delivery system indicated a strong negative relationship and direction among SLP professionals and parents.

Subscale measures of the MPOC-20 and MPOC-SP indicated varied differences among parent and professional groups. Significant differences in perception of all the subscales of MPOC-20 were observed with parental educational status. An elevated level of perception of the first four subscales of the MPOC-20 was observed for parents with primary and no formal education, which differed significantly from high school graduate parents. However, no significant difference was found for graduate parents with other parental groups. Interestingly, for the last subscale, a significant and elevated level of perception was found for parents with no formal education, with graduates and high school graduates, whereas parents with primary education scored higher and differed significantly from high school graduates for the very same subscale. Ambiguous findings regarding the level of engagement of service providers based on mothers' educational status have been documented, where better engagement with higher educational status was linked with the possibility of providing inadequate information. On the other hand, significantly lowered perception of the first two subscales of MPOC-SP was found for school-based SLPs from both rehabilitation center-based and self-practising professionals. Similar findings were observed for school-based SLPs with rehabilitation center-based professionals. Evidence of school-based SLPs' fewer and variable interactions with parents is available in the literature (Tambyraja et al., 2017). No significant difference among or between professional groups was found for the "Communicating Specific Information about the Child" subscale. Professionals expressed the highest satisfaction in treating people respectfully, while the lowest satisfaction was shown in interpersonal sensitivity. This finding is aligned with previous literature (Mandak & Light, 2017), where "treating people respectfully" and "communicating specific information" were rated to be high, "providing general information" and "showing interpersonal sensitivity" were rated to be the lowest. The workload of school-based SLPs could be associated with their relatively poor responses while being occupied with such responsibilities and workload; rehabilitation center-based SLPs had better responses, which involved the possibility of being influenced by the commercial nature of the service-providing model and system.

While exploring the relationship of relational and participatory practice aspects with parental education and income status, education status was found to be a key factor influencing perceptions regarding various domains of a family-centered model. The two distinct components of an FC model of service delivery complement each other. While the relational practice component reflects the empathy and respect towards family through active listening and showing sensitivity by considering their capacities, beliefs and values, participatory practice reflects the active engagement of family in meeting their desired needs based on their priorities in the service delivery (An et al., 2018). As the two components complement each other, this study has explored the two dimensions within a service delivery model, which required certain aspects to be studied separately while keeping in mind that they are directly connected to and affect each other. The relational practice component studied involved empathy and respect towards family members in accepting them as an indispensable part of the child's life, as well as actively listening and considering their beliefs, opinions and cultural values reflected in the responses towards family from appointment, policy making, to guiding them throughout the service delivery. The professional practice component studied involved consideration of family capacity and priorities to work as a team in diagnosis and treatment selection, enhancing knowledge and skills to effectively manage their children, facilitating the family's capacity and the intervention process through information and referral, as well as enabling them to explore other community-based services.

From the relational practice stream, strong relationships were found for the perception of service providers' response with parents' education status. Appointment consideration perceptions were moderately related to parents' educational status only. However, other aspects of relational practice involving helping the family as an indispensable part of the child's life, considerations in appointment and policy making, as well as feedback about it, were not significantly related to either the education or income status of the parents. Positive responses from service providers regarding responding to concerns, questions and ideas, followed by providing clear and useful information, were perceived by the majority of the parents. Consequently, most of them felt themselves as active members in a positive manner. Such a positive attitude was also visible in exchanging success and discussing future functionality, social inclusion and educational outcomes. The majority of the participants felt that SLPs sometimes informed them about available service delivery options and respected familial limitations. Parents rarely perceived that SLPs helped to identify their strengths, allowed inter-family communication to understand evolving roles with development, as well as informing children's developmental level with coherent assistance. Satisfactory perception regarding assistance in ongoing services was not observed for the majority of them, as assistance in identifying strengths in knowledge and skills, areas in need of extra care, as well as informing about changes in daily activities, was not provided often. Such was the case in asking about the family's needs, pressures, as well as the Child's behaviours. A dissatisfactory outcome concerning appointments involved not respectfully considering extended discussion in terms of time, while other appointment considerations were not up to the mark. Parents' involvement in policy considerations depicted a negative picture as a significant lack of any parental advisory committee, training or programs to convey feedback or attitudes about the care system was evident. Respecting cultural beliefs and values in diagnosis and treatment considerations was rarely felt for most of them.

From the participatory practice stream, perception of enhancement in parents' knowledge and skills was at a moderate level of relationship with both education and income status. While the majority of the parents often understood the special needs of their children and were conscious about general activities in the learning process, as well as assisting them, this proportion of parents sometimes understood what their children were learning and what they needed to learn, but not often. Being an effective part of the decision-making team was strongly associated with parents' education status only. They were rarely informed about ways of deciding goals and strategies. In the case of decision making, ensuring partnership in deciding the family's role and respecting the inclusion of other family members were not observed in a consistent manner. Similar relationships were observed for the perception of being involved in diagnosis and intervention selection considerations. Simple, clear and jargon-free information is normally expected by parents regarding intervention to empower and support them to make informed decisions (Edwards et al., 2016). Interestingly, while almost half of them felt they rarely received adequate information regarding such considerations as well as collaborating to decide expected outcomes, half of them felt that it was so inconsistent. The family's chosen role, as well as efforts in service improvement and expansion, were rarely supported, as perceived by parents. Comfort in expressing disagreements and solving them by respectful negotiations regarding service provisions was only possible sometimes for the majority. The association of effectively informing diagnosis showed a strong level of relationship with education status, while this was at a moderate level for income status. However, almost half of them felt that unequivocal diagnosis information was provided to them, and they could clearly convey that to others without consistency. The realisation of being informed and connected with community-based services, related information and referral evoked poor responses and had no significant relationship with the status of parents. The majority of parents rarely got help in identifying community-based services, while almost all of them rarely felt that assistance was provided in connecting with such services by monitoring connection, usefulness, and assistance in identifying new services in accordance with changes.

Since the two components of family-centered practice complement each other, parents' perception of the relational practice component evoked similar perception regarding the participatory practice component, as the perception of service delivery from both perspectives was poor and dissatisfactory. Gross achievement and satisfaction from the existing SLP program evoked similar findings for not being significantly associated with either the education or the income of parents. More than half of the participants agreed to become more confident in assisting children and felt less lonely. The majority of the parents expressed neutral perception regarding other aspects of achievement and satisfaction. Such aspects involved being more conscious about the norm-referenced level of the child, identification of the existing program as individual need-based and its ability to meet needs, inclusion of matters considered important to parents, satisfaction in discussion of the child's strengths, as well as increased involvement in the learning process. Highlighting progress has the potential to improve a family's self-efficacy, motivation and engagement (D'Arrigo et al., 2019).

Overall, the service delivery model in SLP practice in Bangladesh outlines a dissatisfactory and inconsistent nature from a family-centered viewpoint. The attitude towards family as a constant has not been established yet, which further hindered the effective flow of service-delivery in which professional-centered practice tradition is evident. In such a scenario, efficient parent-professional partnership establishment is hard to expect, hindering capacity enhancement to deal with and cope with their reality. The findings of the study support evidence that suggests that parent-SLP collaboration could be challenging for SLPs (Davies et al., 2016). Several contextual factors, as well as professional factors, could influence the poor perception of a service delivery model from an FC perspective. Contradictory or opposite beliefs of parents regarding the causes of speech-language related disorders, the language development process, as well as therapy services may exist (Marshall et al., 2016). On the other hand, SLPs' attitudes and beliefs have the potential to influence collaboration with parents (Davies et al., 2019). In such regard, therapists might assign a passive role for parents while leaving a little space for parents to negotiate and to enable them to be an active member in decision-making.

Additionally, organisational constraints might have played a significant role in the way the existing service delivery model is perceived by parents in a low-resource setting like Bangladesh. Evidence of collaborative relationships in yielding positive changes in low-resource settings in the field of SLP has been documented in Vietnam (Atherton et al., 2019). To lessen the impact and burden of speech-language related disabilities in low-resource settings where overwhelming stigmatisation exists, with limitations, a family-centered model could be effective. A substantial amount of training is required for SLPs in Bangladesh to develop their ability to build constructive relationships and cultural competence, which enables mutual understanding in meeting families' needs. On the contrary, support and facilitation of parental reasoning and utilisation of resources could ensure that they become empowered, participatory and proactive in countries like Bangladesh, where the field of speech and language pathology is expanding on an organisational level. Significant inclusion of family in aspects ranging from policy making, enabling empowerment, to collaborating in successful exchange of information regarding referrals and sources of help can bring about changes in the existing model and practice of service delivery in SLP.

Conclusion

Parents' perception of the existing service delivery model of SLP practice in Bangladesh is significantly deviated from what is considered a family-centered model. Lack of implementation of the elements of a family-centered model of practice has significantly affected the family's achievement and satisfaction. Such a professional-centered service delivery model will not be sustainable and effective in the long run. By addressing concerned areas, a shift from current practice is required in SLP practice in Bangladesh.

References

An, M., Palisano, R. J., Yi, C., Chiarello, L. A., Dunst, C. J., & Gracely, E. J. (2018). Effects of a Collaborative Intervention Process on Parent–Therapist Interaction: A Randomized Controlled Trial. *Physical & Occupational Therapy in Pediatrics*, *39*(3), 259–275. https://doi.org/10.1080/01942638.2018.1496965

Atherton, M., Davidson, B., & McAllister, L. (2019). Growing a profession: Clinician perspectives on the evolving practice of speech-language pathology in Vietnam. *International Journal of Speech-Language Pathology*, 1–11. https://doi.org/10.1080/17549507.2018.1559358

Awaji, N. N. A., Al-Taleb, S. M., Albagawi, T. O., Alshammari, M. T., Sharar, F. A., & Mortada, E. M. (2024). Evaluating Parents' Concerns, Needs, and Levels of Satisfaction with the Services Provided for ASD Children in Saudi Arabia. *Journal of Multidisciplinary Healthcare*, *17*, 123–146. https://doi.org/10.2147/JMDH.S447151

Bear, R. (2022). *Analysing parental involvement in the delivery of speech interventions for children with speech sound disorders* (Doctoral dissertation, University of Sheffield).

Brewer Jr, E. J., McPherson, M., Magrab, P. R., & Hutchins, V. L. (1989). Family-centered, community-based, coordinated care for children with special health care needs. *Pediatrics*, *83*(6), 1055-1060.

Brezis, R. S., Weisner, T. S., Daley, T. C., Singhal, N., Barua, M., & Chollera, S. P. (2015). Parenting a Child with Autism in India: Narratives Before and After a Parent–Child Intervention Program. *Culture, Medicine, and Psychiatry*, *39*(2), 277–298. https://doi.org/10.1007/s11013-015-9434-y

Bull, M. J., & Committee on Genetics. (2011). Health supervision for children with Down syndrome. *Pediatrics*, *128*(2), 393-406.

Cunningham, B. J., & Rosenbaum, P. L. (2013). Measure of Processes of Care: a review of 20 years of research. *Developmental Medicine & Child Neurology*, *56*(5), 445–452. https://doi.org/10.1111/dmcn.12347

D'Arrigo, R., Copley, J. A., Poulsen, A. A., & Ziviani, J. (2019). Parent engagement and disengagement in paediatric settings: an occupational therapy perspective. *Disability and Rehabilitation*, *42*(20), 2882–2893. https://doi.org/10.1080/09638288.2019.1574913

Davies, K. E., Marshall, J., Brown, L. J. E., & Goldbart, J. (2019). SLTs' conceptions about their own and parents' roles during intervention with preschool children. *International Journal of Language & Communication Disorders*, *54*(4), 596–605. https://doi.org/10.1111/1460-6984.12462

Davies, K. E., Marshall, J., Brown, L. J. E., & Goldbart, J. (2019). SLTs' conceptions about their own and parents' roles during intervention with preschool children. *International Journal of Language & Communication Disorders*, *54*(4), 596–605. https://doi.org/10.1111/1460-6984.12462

Davies, K. E., Marshall, J., Brown, L. J., & Goldbart, J. (2016). Co-working: Parents' conception of roles in supporting their children's speech and language development. *Child Language Teaching and Therapy*, *33*(2), 171–185. https://doi.org/10.1177/0265659016671169

DeCarlo, E. (2022). *Family-Centered Practice Knowledge and Use Amongst Speech-Language Pathologists: A National Survey* (Master's thesis, Auburn University).

Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2007). Meta-analysis of family-centered helpgiving practices research. *Mental Retardation and Developmental Disabilities Research Reviews*, *13*(4), 370–378. https://doi.org/10.1002/mrdd.20176

Ebert, K. D. (2018). Parent perspectives on the clinician-client relationship in speech-language treatment for children. *Journal of Communication Disorders*, *73*, 25–33. https://doi.org/10.1016/j.jcomdis.2018.03.005

Edwards, A., Brebner, C., Mccormack, P. F., & Macdougall, C. (2016). "More than blowing bubbles": What parents want from therapists working with children with autism spectrum disorder. *International Journal of Speech-Language Pathology*, *18*(5), 493–505. https://doi.org/10.3109/17549507.2015.1112835

Gaffney, T., Newbury, J., Sutherland, D., & Macrae, T. (2023). Speech-language pathologists' practices and perceptions of parent involvement in paediatric services funded by the NDIS in Australia. *International Journal of Speech-Language Pathology*, 1–12. https://doi.org/10.1080/ 17549507.2023.2281222

King, G., Williams, L., & Hahn Goldberg, S. (2017). Family-oriented services in pediatric rehabilitation: a scoping review and framework to promote parent and family wellness. *Child: Care, Health and Development*, *43*(3), 334–347. https://doi.org/10.1111/ cch.12435

King, S., King, G., & Rosenbaum, P. (2004). Evaluating Health Service Delivery to Children With Chronic Conditions and Their Families: Development of a Refined Measure of Processes of Care (MPOC−20). *Children's Health Care*, *33*(1), 35–57. https://doi.org/10.1207/s15326888chc3301_3

Klatte, I. S., Harding, S., & Roulstone, S. (2019). Speech and language therapists' views on parents' engagement in Parent–Child Interaction Therapy (PCIT). *International journal of language & communication disorders*, *54*(4), 553-564. doi:10. 1111/1460-6984.12459

Klatte, I. S., Lyons, R., Davies, K., Harding, S., Marshall, J., McKean, C., & Roulstone, S. (2020). Collaboration between parents and SLTs produces optimal outcomes for children attending speech and language therapy: Gathering the evidence. *International Journal of Language & Communication Disorders*, *55*(4), 618–628. https://doi.org/10.1111/1460-6984.12538

Koly, K. N., Martin-Herz, S. P., Islam, Md. S., Sharmin, N., Blencowe, H., & Naheed, A. (2021). Parent mediated intervention programmes for children and adolescents with neurodevelopmental disorders in South Asia: A systematic review. *PLOS ONE*, *16*(3), e0247432. https://doi.org/10.1371/journal.pone.0247432

Mandak, K., & Light, J. (2017). Family-centered Services for Children with ASD and Limited Speech: The Experiences of Parents and Speech-language Pathologists. *Journal of Autism and Developmental Disorders*, *48*(4), 1311–1324. https://doi.org/10.1007/s10803-017-3241-y

Mandak, K., & Light, J. (2018). Family-centered services for children with complex communication needs: the practices and beliefs of school-based speech-language pathologists. *Augmentative and Alternative Communication*, *34*(2), 130–142. https://doi.org/10.1080/07434618.2018.1438513

Marshall, J., Harding, S., & Roulstone, S. (2016). Language development, delay and intervention-the views of parents from communities that speech and language therapy managers in England consider to be under-served. *International Journal of Language & Communication Disorders*, *52*(4), 489–500. https://doi.org/10.1111/1460-6984.12288

Melvin, K., Meyer, C., & Scarinci, N. (2020). What does a family who is "engaged" in early intervention look like? Perspectives of Australian speech-language pathologists. *International Journal of Speech-Language Pathology*, *23*(3), 1–11. https://doi.org/10.1080/17549507.2020.1784279

Pritchard, K., Vesna Stojanovik, Titterington, J., & Pagnamenta, E. (2024). How speech and language therapists and parents work together in the therapeutic process for children with speech sound disorder: A scoping review. *International Journal of Language & Communication Disorders*. https://doi.org/10.1111/1460-6984.13132

Rouse, L. (2012). Family-Centred Practice: Empowerment, Self-Efficacy, and Challenges for Practitioners in Early Childhood Education and Care. *Contemporary Issues in Early Childhood*, *13*(1), 17–26. https://doi.org/10.2304/ciec.2012.13.1.17

Sugden, E., Baker, E., Munro, N., Williams, A. L., & Trivette, C. M. (2017). An Australian survey of parent involvement in intervention for childhood speech sound disorders. *International Journal of Speech-Language Pathology*, *20*(7), 766–778. https://doi.org/10.1080/17549507.2017.1356936

Sugden, E., Munro, N., Trivette, C. M., Baker, E., & Williams, A. L. (2019). Parents' Experiences of Completing Home Practice for Speech Sound Disorders. *Journal of Early Intervention*, *41*(2), 159–181. https://doi.org/10.1177/1053815119828409

Tambyraja, S. R., Schmitt, M. B., & Justice, L. M. (2017). The frequency and nature of communication between school-based speech-language pathologists and caregivers of children with language impairment. *American Journal of Speech-Language Pathology*, *26*(4), 1193-1201.

Watts Pappas, N., McAllister, L., & McLeod, S. (2015). Parental beliefs and experiences regarding involvement in intervention for their child with speech sound disorder. *Child Language Teaching and Therapy*, *32*(2), 223–239. https://doi.org/10.1177/0265659015615925

Woodside, J. M., Rosenbaum, P. L., King, S. M., & King, G. A. (2001). Family-centered service: developing and validating a self-assessment tool for pediatric service providers. *Children's health care*, *30*(3), 237-252.