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Parents' ability to access community health occupational therapy services in a disadvantaged area: A proof of concept study

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Abstract

Introduction: In New South Wales children from disadvantaged backgrounds have poorer health outcomes and reduced access to health services than their more advantaged counterparts. This study aimed to identify barriers and enablers to accessing child and family occupational therapy services in a disadvantaged area.

Methods: This was a mixed methods study that included: 1) a retrospective analysis of de-identified routinely collected Community Health service utilisation data from 2016-2017, and a 2) face to face interview guided survey with parents and carers.

Results: The retrospective data analysis showed outreach at the targeted suburbs' Early Childhood Health Centres (ECHC) improved attendance for families living in these suburbs. Overall parents' reports indicated that they were able to access the Community Health Centre (CHC) however, certain barriers to accessing the service remain, including difficulty parking and not having a license or car to attend appointments. Low health literacy was also a barrier to accessing health appointments as parents were unaware of the range of services provided at CHC, did not know how to make appointments, or that these services did not generate out-of-pocket expenses to clients. Conversely, enablers that would make it easier for parents to attend appointments include the provision of home visits, after hours and weekend appointments, and outreach such as delivering services in community spaces such as the ECHCs, library, or mosque.

Conclusion: This research suggests that outreach occupational therapy services are valued by families in this disadvantaged area and contribute towards improving access to allied health services for disadvantaged families with young children. However, additional work is required to increase awareness among disadvantaged families on the role of allied health in improving child development outcomes and to reduce some of the transport and logistical issues that can reduce access to health care.

Introduction

Inequities in health care occur largely because of social determinants such as housing, where people live, education, employment, wealth and social inclusion (Commission on Social Determinants of Health (CSDH), 2008). This includes affordability, accessibility and knowledge of health care service options (Levesque et al., 2013). For families from culturally and linguistically diverse (CALD) backgrounds, this is further complicated by cultural barriers (Davidson, Skull, Burgner, et al., 2004; Onyeabor, 2016). Furthermore, socioeconomic status, cultural, and language differences may interact with and contribute to low health literacy (HL). As described by the World Health Organisation (WHO), HL has a social gradient and can further underpin existing inequalities (Kickbusch et al., 2013). In New South Wales (NSW) children from disadvantaged backgrounds have poorer health outcomes and reduced access to health services than their more advantaged counterparts (Joshua et al., 2015). The term 'disadvantaged' in this context is used to describe groups that are subjected to deprivation or social exclusion for reasons such as low socioeconomic status or ethnicity (Rogers, 2004). It comprises both socioeconomically deprived and vulnerable groups. This includes but is not limited to people living in deprived areas, minority ethnic/racial groups or recently arrived migrants (Hollowell J et al., 2009).

The Australian Early Development Census (AEDC) reports a widening gap between developmentally vulnerable children in the most disadvantaged areas relative to the least disadvantaged areas across all five developmental domains including physical health and well-being, fine motor, and cognitive skills (Australian Early Development Census (AEDC), 2019). Delays in development can impact a child's ability to participate in activities of daily living including play, independently dressing and toileting, social relationships with peers, and academic performance at school. Developmental delays and disabilities can have a profound

impact on a family's health and functioning requiring higher rates of health care, multidisciplinary health care appointments, learning supports at school or special education services (Boulet et al., 2009; Davidson, Skull, Chaney, et al., 2004). Health intervention for developmental delays and disabilities in the first five years of life improves outcomes to overall health and development of the child (NSW Health, 2019).

Within the *Area* of interest (from here after referred to as the *Area*) referrals indicate not all children with developmental vulnerabilities are identified prior to starting school. The *Area* within a large metropolitan Local Health District (LHD) has a higher percentage of developmentally vulnerable children compared to the NSW average and has the highest proportion of developmentally vulnerable children in the LHD (*Inner West Sydney Child Health Wellbeing Plan (2016-2021)*, 2014). An AEDC 2015 report also indicated that in three target suburbs within the *Area* between 14 to 17% of five year old children were vulnerable on two or more developmental domains (Australian Early Development Census (AEDC), 2019). According to the Community Health Child and Family Health Service (CFHS) service records, referral trends in the *Area* indicate that approximately 70-75% of all occupational therapy referrals are for children 0-5 years old. There is also a high number of referrals for school aged children presenting with many developmental vulnerabilities who have not received services in the first 5 years of their lives. This may reflect the level of vulnerability and complex needs of the community.

Current service delivery model

CFHS occupational therapy department in the *Area* of interest provides services to children aged 0-12 years. It prioritises service delivery to vulnerable families and children aged 0-5 years (preschool) where there is strongest evidence for the benefits of early intervention (e.g. children

entering school with greater proficiency in fine-motor skills and play skills, appear to perform better academically in later years) (Grissmer et al., 2010). Currently, once assessed, therapy is typically centre based, with limited community-based therapy services in the school and/or home. The demographic and health outcomes outlined above suggest that this existing model of care may need to change to support children to access the health service prior to school. The service is funded within the NSW Health Service activity-based funding model where the health service is paid by the government for the number and mix of clients seen for treatment. Clients attending CFHS are not required to pay a fee. Approximately 20% of clients do not attend appointments some of which have access needs identified by therapists. If these families continue to accept appointments but not attend, this leads to unused clinical time and contributes to increased waiting lists, and reduced activity-based funding for the service.

In 2017, the CFHS occupational therapy department implemented an outreach service in two new LHD locations due to high non-attendance rates in the *Area* and feedback from families that transport access to the centre was difficult. The aim of the outreach was to make the services available in settings closer to clients. The outreach locations were health and community centres and schools as community centres (SaCCs). These locations were chosen as they were closer to the residences of families living in the *Area.* Outreach occupational therapy services included assessment and intervention for children 0-12 years. This study aimed to identify the barriers and enablers in accessing occupational therapy service by families living in the target suburbs. The objectives were to: 1) Identify demographics and socio-economic factors that may be impacting the ability of families to access occupational therapy health services and 2) Identify extrinsic and intrinsic barriers to accessing these services. A secondary aim was to describe the outreach occupational therapy service implemented.

Method

Ethics

Ethics approval was provided by the Sydney Local health District Human Research Ethics Committee (approval number X17-0329 & LRN/17/RPAH/497).

Study design

To better understand how many and why children are missing occupational therapy services in this *Area* a convergent exploratory mixed methods study was used (Creswell, 2009). The study used data from: 1) a retrospective analysis of de-identified routinely collected Community Health service utilisation data from 2016-2017; and 2) interviewer facilitated face-to-face survey with parents and carers who live in three different suburbs in the *Area*.

Setting

This study took place at the CHC and at community locations in three target suburbs (1, 2 and 3) in the *Area*. Compared to Greater Sydney these suburbs have a higher proportion of residents born overseas and a higher proportion of households classified as low income and socioeconomically disadvantaged suburbs within the *Area* (Van Buskirk & Broome, 2018). In two of the target suburbs, the most common country of birth after Australia was Bangladesh. Two predominant language groups for referrals received by occupational therapy are from Arabic speaking and Bangladeshi families. Hence, the target cultural groups for this study were Arabic speaking and Bangladeshi families.

Part 1 - Community Health service utilisation data

Before the occupational therapy outreach services started in September 2017, baseline measures of attendance and non-attendance rates were extracted from the LHD electronic medical record (EMR). This is utilisation data routinely collected by Community Health.

Part 2- Interviewer facilitated face-to-face survey.

Participants and recruitment

Two groups of participants were recruited for the study to capture the perspectives of parents who currently access the service, and parents whose children do not yet access the service.

Group A: Parents attending the CHC (existing clients of the service)

This consisted of parents of children living in the target suburbs who were attending or on the waiting list at the CHC. Therapists working with families identified Arabic speaking and Bangladeshi families for the study and obtained consent for the families to be contacted regarding the study by an Allied Health Assistant (AHA). The identified families were then contacted in the CHC waiting area or clinical therapy room by the AHA either before or after their appointment with their therapist. The AHA provided information about the study and if parents agreed to participate an appointment time was made to complete the survey with the AHA. The AHA received training in the administration procedure of the survey, briefing on confidentiality of data and data records. The AHA had prior training and experience working with interpreter services. Health Care Interpreters were used for families who did not speak English. A Bangla speaking community member that received training in community outreach, interviewing and ethics, also acted as a cultural broker. Even though cultural broker is a term not well defined in the literature they are individuals that link, bridge or mediate between people or groups of differing cultural backgrounds (Jezewski, 1990).

Group B: Parents attending community centres and organisations.

This group consisted of parents attending three different playgroups in the target suburbs. Families who attended sessions at the playgroup locations were recruited to the study by either an occupational therapist or AHA visiting the above community centres and early childhood health centres. If parents agreed to participate, the survey was completed at the parents' nominated community centre/clinic by the interviewer in a private room or space in which other people were not present.

Data collection

Part 1. Service utilisation data

Data were collected 10 months prior to starting outreach and 10 months during the implementation of outreach. The data was inclusive of CHC and two outreach locations in order to compare attendance rates before and after outreach implementation. Data collected included: the number of attended and non-attended assessment or therapy sessions for current clients living in the target suburbs. This routinely collected utilisation data were generated from the EMR by the chief investigator and LHD Health Information Manager.

Part 2. Survey data

Data were collected and recorded on a paper-based questionnaire. Parents and carers from both groups (A & B) were asked to answer questions relating to:

- Demographic information for themselves and their children including (age, gender, language/s spoken at home, years living in Australia, marital status and occupation).

- Barriers and enablers to accessing CFHS

- Knowledge and perceptions of children's occupational therapy and allied health services

Parents in group B were also asked if their child had previously attended an occupational therapy service. If during the interview families were identified as requiring additional health services, with their consent, the AHA was able to facilitate appropriate referrals.

Reflecting summaries

The AHA interviewer and the cultural broker were also asked to complete a reflective summary. The summaries provided findings not captured by the survey and that occurred during the interactions with the participants.

Pilot testing

The surveys were written in English and then pilot tested in both Bangla and Arabic using parents in the community and accredited interpreters. Respondents were advised that the purpose of the pilot was to improve the questionnaire and were asked to critically evaluate the wording of the questions and their cultural appropriateness. Edits and adjustments were made to the wording of some of the questions. Skip logic was also included in the design of the questions. For example, the question a participant answers next is determined by their response.

Data analysis

Administrative and responses to close ended survey questions were analysed using STATA version 11 (StataCorp, College Station, Texas). Descriptive statistics were used to summarise these data. Frequencies and proportions were calculated. An analysis was completed of the free text responses to the open-ended questions in the survey using deductive content analysis. All comments were reviewed line by line to determine which codes fitted the predetermined categories of either a barrier or an enabler. These were then grouped into themes (Elo & Kyngäs, 2008).

Results

Part A administrative data

Retrospective data analysis showed that from 2016-2017 to 2017-2018 there was an increase in new booked appointments for CFHS occupational therapy in the Area. Fourteen percent of all CHC booked appointments were seen at the outreach ECHCs for assessment or therapy. Data collected during implementation of outreach services indicated that for targeted, vulnerable suburbs, non-attendance rates reduced by 14%. However, non-attendance rates were higher at outreach ECHCs at 21% to 32% when compared to the average percentage of non-attendance for all *Area* appointments inclusive of outreach locations (18%). When comparing the total number of appointments not attended for CHC inclusive of the *Area's* ECHC outreach locations from 2016-2017 to 2017-2018 non-attendance rates were only reduced by 1% (See Table 1).

Part B survey data

<u>Family characteristics</u>

Twenty-one parents completed the survey, of those eight were from group A (existing clients) and thirteen were from group B (parents in the community). Table 2 describes the family characteristics. Most participants were born in Bangladesh (n=21, 76%), on average had been in Australia for 10 years and one third (n=6, 30%) of the mothers were employed. Almost sixty percent of the parents (n=15, 58%) reported that their child/ren aged under 5 years did not attend child or day care.

Information about and access to CHC

Parents in both groups reported being aware of the CHC (n=18, 86%), however parents were unaware of the CFHS services provided at CHC (n=18, 86%). Participants were not prompted to identify the range of existing services which exist at CHC in addition to CFHS (i.e. Drug health,

Sydney District Nursing). Most parents did not know who to call to make appointments (n=16, 76%) or that services did not require out-of-pocket expenses from patients (n=18, 86%). More than half of the parents (n=9, 56%) mentioned they would use an internet search to find CHC rather than call the health centre or talk to the General Practitioner (GP) (see Table 3). Overall parents' reports indicated that CHC and its services were accessible; however, transport issues provided a barrier to accessing care. This included difficulty parking and reduced access to a license or car to attend appointments. In group A, existing clients missed appointments because they forgot (n =1), children were sick (n = 2), unable to get to the centre (n =1). Conversely, reported enablers that would make it easier for parents to attend appointments included access to a car, and improved parking and public transport. The provision of home visits, after hours and weekend appointments, and outreach such as delivering services in community spaces such as the ECHCs, library, or mosque were also suggested (see Table 3).

Access to information, knowledge and views of occupational therapy

Parents in group A were best able to identify how occupational therapists can support their children including interaction and social skills, play activities and skills "ready for school". Some provided specific examples such as: letter formation, fine motor skills, and posture. Most parents (92%) in group B had not heard about occupational therapy for children and none of their child/ren had seen an occupational therapist. In terms of how parents preferred therapy to be delivered from health professionals (e.g. parent watching, parent involved, video etc.) responses were mixed suggesting that this is likely to be an individual preference for each family (see Table 4). Almost half of the parents reported their role as a parent is to teach their children new skills, or that this was the role of the mother (n=8) perhaps rather than the role of formal health and education institutions.

Parents were also asked where they would go to ask for help if they had concerns about their child's development and what sort of information they need about their child's development and health. Only half of the parents (57%) reported feeling confident on how to access help if they had a concern about their child/ren. Participants in group A indicated not knowing what CFHS were available. Ten families indicated they would ask their GP, nurse, or playgroup for help or information on child development. The internet was the most accessed source of information regarding information about child development (56%) (see Table 4).

The type of information parents would like included information about how to access health services (7) and developmental milestones (4). One parent described *"Milestone progression something to show knowledge of what to expect of children at specific ages"*. Other participants reflected the need for community support to access knowledge or awareness of what types of information are available. One parent reported *"When child grows up they need different help from community. This is helpful if they know how to access find out who to talk to"*. Others were requesting more information but did not necessarily know what information or who to ask *"(I don't) know enough to ask and who to ask"*. When parents were asked to mention an important thing for the health service to know about raising children in their country of birth, most Bangladeshi parents (75%) mentioned "religion", "culture" or "traditions" as important things to consider. One parent mentioned: *"We don't like iPad. Our children will speak Bengali and English don't forget their culture….Respect talk with uncles, other family"*. Another parent mentioned: *"In our country there's a lot of thing to know about our culture. Our country doesn't get help from health service. No one helps with social skill"*.

According to the reflective diaries from the interviewers, most families at the end of the survey would ask lots of questions about the services available. For example: what age groups can

access the service, what each service provides, where can they been seen and lastly, how can they get their children into the service? Some families did not know about the CFHS, many parents had concerns about their children and they did not know that a community service was available. These families were open to discussing their children's abilities and concerns.

One participant shared the story (with the interviewer) of a friend who had tried to book an appointment with an occupational therapist and had been waiting for several months. The parent also mentioned that the family was distressed about this, as their financial situation did not allow them to book a private therapist.

The interviewers also noted that participants in group B had some apprehension in taking part in the survey. One described: *"They were also doubtful in sharing their income, confidentiality, other general information. I had to reassure them that all information was kept confidential and safe and then they agreed to give their information"*.

Implementation of the outreach service

The implementation of outreach occupational therapy was started at two locations in the *Area* in September 2017 during the research phase of this project. Referrals to the service were taken through the LHD intake service. Families were then added to a wait list. Families were screened by occupational therapists at the point of booking an assessment to identify families living in targeted vulnerable suburbs and/or reported difficulty accessing the *Area's* community health centre. In partnership with a local public school, and as a part of regular core business, occupational therapists attended playgroups to provide education and information on 'What is occupational therapy', provided informal child development advice and discussed referrals to

the health service if necessary. Referrals were also taken during health service promotion at community playgroups and local women's groups.

Insights were also gained at the health promotion events. At a Bangladeshi women's group one mother reported: *"she hadn't thought about disability and children before"*. While another parent commented *"Didn't know what OT was before presentation"*.

Discussion

This study identified the barriers and enablers to accessing child and family occupational therapy services by parents from two CALD groups living in a disadvantaged *Area*. Parents indicated that the *Area's* CHC was accessible however; barriers and enablers to accessing the service were described. As explained by Levesque et al (2013), access to health care is a function of both supply and demand. From the demand side it describes that people facing health needs are able to identify that the services and health needs exist. For example, families are aware of the service. From the supply side, it means services (providers) can make themselves known to various geographical or social groups. The occupational therapy outreach service that was implemented addresses the geographical/transport barrier to accessing care described by the respondents. However, the implementation of outreach has not addressed barriers to accessing information about services that parents in this study indicated would be helpful.

For these parents, health literacy is a barrier to accessing care. Health literacy implies having a range of skills and knowledge about health and health care, including but not limited to finding health information and seeking of appropriate care (Nutbeam, 2000). This is highlighted in that both group A and group B had similar knowledge of the health service despite group A already accessing the service. It was expected that group A might have increased knowledge of how to

book appointments and what services were available. This lack of knowledge suggests inequity exists beyond accessing the service e.g. cultural and value differences, length of residency, English literacy, and level of education. Previous research suggests that limited knowledge about health services (such as occupational therapy) decreases their utilisation by people from CALD backgrounds (Asanin & Wilson, 2008; Scheppers et al., 2006). In our study, families were unaware of entitlements to care (service at no cost) and availability of services (unaware of the services provided at CHC and did not know how to make appointments). All families who had attended CHC knew what allied health services they had received, but not what other health services were available. Six respondents that had been to CHC for services did not understand that this service is offered at no out-of-pocket cost to families, despite not ever paying when they came for their appointments. In both groups, this demonstrates the need to improve health literacy skills among CALD groups to ensure equity in access to health services. This may suggest that further investigation is required into health professionals' ability to identify and support health literacy within clinical/therapeutic roles. Even though there is limited information about the barriers to accessing occupational therapy for families from different CALD groups in Australia; similar to our study findings, research has shown lack of awareness of available health services is a widely cited barrier to accessing care (Asanin & Wilson, 2008; Davies et al., 2006; Scheppers et al., 2006). Our study highlights the importance of childhood playgroups and GPs to link families into therapy services as these are services that CALD families already access within their community.

Families often mentioned using the Internet or google search to find out about services and this indicates the increasing demand for health services to provide information on how to access services online. This may include information such as developmental milestones, the different

types of children's health services available, where these services are available and how to contact for more information.

Themes of religion, culture, and tradition in responses from families about what they would like the health service to know about their family reflects the importance of awareness of cultural differences. Hammell (2013), advocates for therapists to have cultural humility and understand their own biases, values, beliefs, and assumptions and make efforts to integrate diverse cultural perspectives in the therapist-client relationship. Awareness of cultural differences is often discussed in health services. However, the practical application is different for each treating health professional based on their own worldview, communication skills and ability to build therapeutic rapport with families. It is important to also explore the cultural appropriateness of services and whether they engage migrant families.

Parents in this study described their role in teaching their children new skills which reinforces the importance of the LHD's values of family centred and parent empowered health care to support parents to fulfil their identity roles (Sydney Local Health District, 2016). Client centred care respects the families' own values and beliefs and this shapes how therapists provide individualised care (Santana et al., 2018). Parents in the study also described their belief systems and the importance of this knowledge for therapists to know how to support their family.

Implications for practice

The findings of this study highlight, from a client perspective, that access to and navigating the health service is complex. This study also suggests that access and equity come from supporting a workplace culture and workforce that supports health service access and navigation. For example, it is essential for health management and health professionals to consider equity in the

planning and provision of existing services to prioritise vulnerable families from the point of referral. On a service planning level this may mean service redesign of workflow, revised service delivery models and review of client navigation of the service. This would consider prioritisation of families from CALD backgrounds of social and economic vulnerability with co-morbid or complex health needs that include the mental health of the parent. It is also recommended that consumers and health professionals are included in changes to the design of the service to focus on service access, navigation, and cultural appropriateness.

Health literacy is contextual and may differ between countries and cultures. An essential part of building parent skill capacity is also to regard health literacy as knowledge and a foundation skill before therapeutic interventions take place. Without understanding shared context and cultural differences, therapies may not be relevant, successful or transferrable to the home, school, or childcare environment. For a therapist this may mean prioritising the parent interview, home observations and/or assessments that provide information to the therapist about the families' individual needs, environment, intrinsic and extrinsic resources, roles and daily routines. Specifically, this might include changing assessment collection data to include factors that determine access to services e.g. questions about transport access, considering current formal and informal supports and family resources available to develop health literacy and taking a social history to identify beliefs and values that will inform the therapist of how to collaboratively provide intervention. It may also mean changing implementation of policy such as the "Failure to Attend" policy to include discussions around access. Furthermore, ongoing access needs to be discussed at the point of discharge and may need to include information such as what services are available and the access needs of the family to be able to transfer to another service.

Building health literacy also relies on the quality of the therapeutic relationship and the interpersonal skills of the therapist to have respectful open and honest conversations with families about what makes it easier for clients to access appointments e.g. using interpreters, understanding home routines, family roles, how will the family travel to the appointment, preferred location, day and time of appointment, transport/parking access and how the families will remember their appointments.

During therapy this may also include asking parents to reflect back what information they have been provided about their child during appointments to develop shared understanding and insight into family values, priorities, and health literacy development. Sometimes the therapeutic relationship may involve more case planning rather than therapy, for example providing service information for families to contact and following up on how the conversation went and if they need help to initiate contact with other health services. This highlights the level of clinical skill and increased workload required for staff working in communities with a high number of vulnerable populations. It is necessary for health professionals to develop knowledge of community specific access needs as traditional clinical practice styles may differ in suitability to community needs. Workforce planning may therefore need to consider recruitment of senior therapists in teams, administrative support for increased workload or care coordinators within the service to support the workload associated with supporting equity and access for clients in the *Area*. This provides the potential to improve efficiency in client care and support access issues that impact attendance (Natale-Pereira et al., 2011). Although care coordinators exist in external health organisations this may add to the complexity with more than one service involved. For example, if a family has multiple children, social vulnerability and complex health needs they are likely to already be accessing multiple health services within the public health

system and referring externally to another care coordinator may add to confusion/complexity of coordinated client care.

This study provided the opportunity to gain feedback from two CALD groups about their ability to access health services in the local community. This feedback and engagement from the community receiving services during outreach occupational therapy services in the *Area* has resulted in the ongoing provision of therapy services being sustained at outreach locations in the Area. This includes clinic and community-based interventions (home, childcare and school visits) that continue to be offered including individual and group therapy services on a weekly basis. In 2018, multidisciplinary services including speech pathology and physiotherapy also provided outreach services at ECHC locations, alongside occupational therapy and supported by CFHS Nursing.

Limitations

One of the limitations of this study was that the outreach was implemented before the parents were surveyed. While the outreach addressed the supply problem in access to therapy services, the demand side needs further exploration.

Although the survey was pilot tested and cultural brokers were engaged to make sure the survey was culturally appropriate, the wording of the questions and the way they were presented in the survey may have influenced and/or limited the type of responses received. Another limitation of this study is the small sample size and its focus on only two cultural groups. There is also selection bias as parents who consented to complete the survey may be different from those who did not complete it. It is also important to note that these parents are already attending a playgroup or were existing health service clients hence responses may be different to those who

are not connected to any childhood services. Despite its limitations this study forms one body of evidence that can be supplemented by other research methods such as focus groups and interviews to gain an in-depth understanding.

Conclusion

This research suggests that targeted place-based therapy services such as outreach services are one of many options suggested by our community to access our health services however, the complex nature of health literacy and access means there are likely to be other factors that impact a family's ability to access occupational therapy.

Designing health services that focus on building access through consumer involvement in service design, developing cultural awareness in staff, supporting technology systems to organise and prioritise client needs, and prioritising access at all stages of service delivery are potential considerations for supporting a workforce to be able to meet the needs of our local community.

Key Points for Occupational Therapy

1. It is necessary for occupational therapists to develop knowledge of community specific access needs as traditional occupational therapy clinical practice styles may differ in suitability to community needs.

2. Occupational therapy needs to consider equity in the planning and provision of existing services and not assume a level of health literacy or access to our health services.

3. Building health literacy also relies on communication between health professionals and families about the barriers and enablers for them to access appointments.

Declaration of Authorship

All authors certify that they have substantially contributed to the conception and study design, data analysis and interpretation. All authors read and approved the manuscript.

Declaration of conflicting interests

There are no conflicts of interest to declare.

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Data availability

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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Table 1. Attendance and non-attendance data pre and post implementation of outreach occupational therapy services

Health Centre/suburb	Total number of clients booked for appointments		Number of appointments not attended by clients		Percentage of booked appointments where client did not attend	
	Pre	Post	Pre	Post	Pre	Post
CCHC[†]	702	943	148	189	21%	20%[‡]
Outreach ECHC 1		51		11		21%
Outreach ECHC 2		90		22		32%
Total outreach		141		33		23%
Target suburb 1			25	8		
Target suburb 2			6	6		
Target suburb 3			0	4		
Target suburb 4			12	11		
Total for target suburbs			43	29	29%	15%[§]

†Inclusive of outreach locations ECHC 1 & 2. ‡1% reduction in appointments not attended during outreach services inclusive of CCHC and outreach locations 1 & 2. §14% reduction in appointments not attended for families in targeted suburbs.

Table 2. Family characteristics

Characteristic	Sample % (n)	
	Mother	**Father**
Country of birth (n=21)		
Bangladesh	76 (16)	76 (16)
Lebanon	14 (3)	10 (2)
Egypt		
Syria	5 (1)	10 (2)
Australia	5 (1)	5 (1)
Years in Australia (n=18)		
Mean (SD) (years)	10 (11.5)	10 (5.7)
Range, years	0.3 – 42	0.9 – 28
Language spoken at home (n=21)		
Bangla	67 (14)	67 (14)
Bangla & English	10 (2)	10 (2)
Arabic & English	10 (2)	15 (3)
English	10 (2)	5 (1)
Arabic	5 (1)	
Employment (n=20)		
Stay at home/housewife	70 (14)	
Employed	30 (6)	100 (21)
Number of children per family (n=21)		
Mean (SD) (number)	2 (1.1)	
Range	1-5 children	
Age of children (n= 45)		
Mean (SD) (number)	4.8 (3.2)	
Range	2 months-13 years	
Child attends child or day care† (n=26)		
No	58 (15)	
Number of days per week attending child or day care		
Mean (SD) (number)	2.7 (1.2)	
Range	1-5 days	

†Non-school aged children

Table 3. Access to Community Health Centre (CHC)

Characteristic	% (n)
Have you heard of CHC?	
Yes	86 (18)
Have you been to CHC before?	
No	62 (13)
Yes, no service type listed	38 (8)
Do you know what services are available?	
No	86 (18)
Did you know services are free?	
No	86 (18)
Do you know who to call to get an appointment?	
No	76 (16)
How would you find out who to call? (n=16)	
Internet	56 (9)
Playgroup	19 (3)
General Practitioner (GP)	13 (2)
Call *Area* Hospital	13 (2)
Is the location convenient? (n=19)	
Yes	86 (18)
Reason for missing an appointment (n=5)	
Child was sick	40 (2)
Unable to attend	20 (1)
Unable to get a lift	20 (1)
Forgot	20 (1)
How would you get to the appointment?[†]	
Drive own car	50 (13)
Drive someone else's car	19 (5)
Catch the bus or train	15 (4)
A parent, family member or friend would drive me	8 (2)
Taxi or Uber	8 (2)
Do you have a driver's license?	
Yes	71 (15)
Was it easy to find parking?	
No	52 (11)
How long does it take to get there?	
Mean (SD) (number)	12.8 (6.3)
Range	5-30 minutes
What would make it easier to get to the CHC?[†]	
Access to a car	33 (11)
Improved parking/free parking	33 (11)
Free childcare during therapy appointments	18 (6)
Improved train or bus transport from my home to the centre	15 (5)
Easier to access the service[†]	
Appointments at my early childhood centre, local community centre, library, mosque	29 (17)
To have phone call/email reminder	24 (14)
Home visits	24 (14)
Appointment after hours or weekends	14 (8)
Joint appointments with more than one professional	10 (6)

[†]Respondents can choose multiple answers

Table 4. Information and access to occupational therapy

Characteristic (n=21)	% (n)
Are most parents confident in knowing how to access help?	
Yes	57 (12)
How do you find information on how to access help if you had concern about your child/ren?†	
Website/internet	74 (14)
Leaflet, brochure	53 (10)
Playgroup	21 (4)
Other (GP, sms, email, app)	21 (4)
Has your child/ren seen an occupational therapist? (n=20)	
No	55 (11)
Have you heard about occupational therapy for children?	
No	57 (12)
Who teaches your child to learn new skills?	
Both parents	48 (10)
Mother (only)	38 (8)
Parents, teachers, playgroup	10 (2)
What would make it easier to understand what the therapist does?*	
Watching the therapist do activities with my child	30 (15)
Doing the activities with my child and getting feedback from the therapist	26 (13)
A written list of activities to do at home with instructions	26 (13)
Taking a video of the therapist that I can replay at home to practice	18 (9)
Would you be able to come regularly to occupational therapy appointments?	
Yes	67 (14)

†Respondents can choose multiple answers