



Case Study: Remote educational and early intervention support for Children with Disabilities during COVID-19 pandemic in Malaysia

November 2020

Context

In response to the escalating global COVID-19 pandemic, the Malaysian government enforced their Movement Control Order (MCO), commonly referred to as lockdown, on 18 March 2020. Consequently, all governmental and private educational institutions, including pre-schools, early intervention centres, special education schools, international schools, as well as primary, secondary and university education institutions were closed. Children and adults with disabilities could not access intervention and care services as these centres are not categorised under essential services and are not allowed to operate during MCO.

Many years of research has established the important role of early intervention and education programmes in supporting the early childhood development of children with disabilities. Children with disabilities have better developmental outcomes and educational opportunities when they have access to adequately resourced early intervention programmes (Guralnick, 2011). The benefits of early intervention also extend to parents of children with disabilities as they gain skills needed to support their children in their day-to-day living, as well as a wider support network with other caregivers and professionals.

In May 2020, UNICEF Malaysia conducted a survey to understand the impact of COVID-19 on children with disabilities in Malaysia. The findings of the survey highlighted that children with disabilities could not access the essential services they needed, and even when provided (through online or remote learning), they were not tailored to the needs of children with learning disabilities. Besides that, parents were also experiencing a loss in earnings, meaning they were unable to afford essential early intervention and rehabilitation therapies. The survey also revealed the finding that the physical and psychological health of children with disabilities was regressing, with some reporting that they were experiencing more loneliness and isolation.

Impact of COVID-19 on Children with Disabilities and their families

Access to educational and therapy services for children with disabilities in Malaysia were already stretched prior to the COVID-19 pandemic. This was further disrupted by the MCO, which can have detrimental short-term and long-term consequences on any progress in development children with disabilities have gained from the routine educational and intervention programmes (Neece, McIntyre

& Fenning, 2020). The loss of income for parents or caregivers also meant difficulty to continue accessing intervention programmes that their children with disabilities need.

Closure of schools and disability service centres pose additional challenges to families, and especially so for families of children with disabilities. The disruption of carefully established routines and the attached uncertainty can make children with disabilities, especially children with Autism, more anxious and distressed (Pavlopoulou, Wood & Papadopoulos, 2020), which can in turn increase caregiver stress. Children with disabilities and their families were also faced with losing their support network which can negatively impact their mental health. Additionally, parents and caregivers suddenly find themselves thrust into specialist roles - such as special educator, speech-language therapist, social-emotional coach, and so on - with limited or no training (Asbury et al., 2020; Neece, McIntyre & Fenning, 2020). These roles are often even challenging for experienced and trained practitioners and educators. Thus, the pressures placed upon parents of children with disabilities during MCO becomes a huge physical and emotional burden.

Research Evidence on Remote Provision of Intervention Services.¹

A recent study on how COVID-19 is affecting children with disabilities and their families (Asbury et al., 2020) provided some suggestions on how to help families and their children with disabilities to cope with COVID-19. The suggestions from parents included (a) the availability of specialist professional advice for parents on how to meet the educational and mental health needs of their child with disabilities, and (b) providing opportunities for their children to see familiar faces, even remotely.

Emerging research has suggested that delivery of disability-related services to children and families with disabilities via remote methods is equally as effective as in-person services (Blaiser et al, 2013). Terminologies for remote delivery of intervention and therapy services used include: telehealth, teletherapy, telemedicine, and telecare. Benefits of teletherapy include increased access to intervention services for families living in rural areas where these specialists may not be available (Cole, Pickard & Stredler-Brown, 2019), and enhanced parent and family involvement in their child's sessions through parent coaching (Othman & Abdul Aziz, 2019). Besides technological barriers, in particular usage of internet and video-conferencing platforms, the same study also identified negative attitudes of families towards the use teletherapy as a barrier to its wider adoption.

The evidence detailed above highlights the key challenges - and interventions that are critical to establish - during a crisis period which interrupts normal service provision. Once established, the benefits of teletherapy for children with disabilities and their families include safe access to intervention services, greater integration of strategies with children's home routine, and enhanced parental knowledge and confidence in supporting their children. This is especially relevant during the pandemic when children with disabilities have limited to no access to necessary services and parents and caregivers are taking on the additional role of a therapist or educator.

Description of Programme

The National Early Childhood Intervention Council (NECIC), Malaysia, a registered coalition of parents, therapists and professionals from a large number of non-governmental organisations (NGOs) working

¹ From this point on this programme will be referred to as "Teletherapy for Children with Disabilities during COVID-19 Malaysia"

with and advocating for children with disabilities, recognise that the COVID-19 pandemic posed great challenges for this vulnerable and often marginalised group. In April 2020, NECIC and UNICEF Malaysia partnered to support children with disabilities and their caregivers and address some of the impacts of COVID-19.

Therefore, to support children with disabilities during the MCO, NECIC coordinated the remote educational and intervention support (Teletherapy) for children with disabilities and their parents in partnership with UNICEF Malaysia (using the Humanitarian Programme Document: Partnership Cooperation Agreement modality).

Programme Expected Results:

- Children with Disabilities and parents/caregivers (impacted by the COVID-19 pandemic) gain access to Mental Health, Psychosocial, Early Intervention and Educational support services;
- Early Intervention Educators and Allied Health Therapists build their capacity and confidence to provide Teletherapy services using online platforms.

The programme's objectives were:

- 1) To provide ongoing educational and intervention support to children with disabilities;
- 2) To support practitioners in the transition to providing services remotely through capacity building activities;
- 3) To relieve families' financial burden to continue providing educational and intervention services for their children with disabilities;
- 4) To provide both children with disabilities and their parents with psychosocial and mental health support.

The indicators and targets identified were:

- 1) 500 parents/caregivers receiving guidance to provide emotional/psychosocial/educational support to their children
- 2) 500 children receiving psychosocial and support services
- 3) Mechanisms to collect and analyze social science data (including KAP studies, qualitative and mixed methodologies studies) related to 2019 n-CoV established (y/n)
- 4) 100 personnel and partners that have completed training on GBV risk mitigation and referrals for survivors, including for sexual exploitation and abuse

Programme activities

1) Virtual intervention and education (Teletherapy) sessions

- Teletherapy sessions were conducted at least once a week. Two sessions per week were commonly provided by practitioners.
- Duration of each teletherapy session was between 30-60 minutes.

2) Webinars for practitioners

- Practitioners had access to both live stream and recording of all webinars
- List of webinar topics:
 - i. Online Video Conferencing Security & Emotional Support to Parents during MCO
 - ii. Parent Coaching through Telehealth (Youtube resource)
 - iii. Teletherapy Experience in Malaysia

- iv. Working Together with Parents: the Malaysian experience
 - NECIC also organised a complementary 4-part mental health lecture series on psychoeducation for practitioners. 38 practitioners participated in this lecture series and found the in-depth coverage of the topic useful to help them support parents and caregivers.
- 3) Online support group for practitioners**
- 106 practitioners opted in for the online support group
 - One discussion session every fortnight.
 - First discussion and debrief session held over Zoom.
 - Other sessions were conducted via a member-only Facebook group to accommodate practitioners' work and time commitment.
 - List of discussion topics include:
 - i. Challenges faced conducting teletherapy and recommendations
 - ii. Strategies to engage children with disabilities via virtual means
 - iii. Strategies to support self-regulation at home for children with disabilities and their family members
 - iv. How has practitioners' experience with virtual sessions changed the way they support or interact with children and families?
 - v. Challenges of working with parents via virtual methods
- 4) Provision of Zoom and Internet subscription to participating NGOs**
- 8 NGOs received provision for Zoom subscription for 5 months
 - 9 NGOs received provision for internet subscription for 5 months
- 5) Online courses for practitioners on Psychological First Aid (PFA) and Gender-based Violence (GBV)**
- Practitioners were given a few options of online courses to choose from and flexibility to complete these training at their own pace.
 - 31 practitioners completed both PFA and GBV online courses and training.
 - 37 practitioners completed only the PFA online courses.
 - 12 other NGO leaders completed prevention of sexual exploitation and abuse online Agora course.
 - Language was a barrier to some practitioners accessing PFA and GBV courses.

Programme Results

| | |
|----------------|---|
| Timeframe: | The programme ran for 6-months |
| Dates: | April to early October 2020 |
| NECIC Members: | 14 NGOs across eight states participated in this programme |
| States: | Kuala Lumpur, Selangor, Perak, Penang, Melaka, Johor, Sarawak, and Sabah. |

Clients of the participating NGOs had the choice to opt in or out of receiving teletherapy support via this programme. In total, 500 children with disabilities (363 male, 137 female), 493 parents of children with disabilities (97 male, 396 female), and 115 practitioners participated in the programme. All children with disabilities in this programme have developmental disabilities, learning disabilities or physical disabilities with co-occurring learning disabilities.

Table 1: Demographic data of participating children, caregivers and practitioners.

| | Male | Female | Total |
|--|------------|------------|------------|
| Number of caregivers | 97 | 396 | 493 |
| Number of children with disabilities | 363 | 137 | 500 |
| <i>Age group</i> | | | |
| 0-23 months | 8 | 7 | 15 |
| 2-4 years old | 124 | 46 | 170 |
| 5-6 years old | 125 | 41 | 166 |
| 7-12 years old | 89 | 36 | 125 |
| 13-18 years old | 16 | 7 | 23 |
| Above 18 years old | 1 | 0 | 1 |
| <i>Disability category</i> | | | |
| Autism Spectrum Disorder | 179 | 48 | 227 |
| ADHD | 10 | 0 | 10 |
| Down Syndrome | 51 | 41 | 92 |
| Dyslexia | 2 | 1 | 3 |
| Intellectual Disability / Specific Learning Disability | 51 | 28 | 79 |
| Mobility & Physical Impairments | 12 | 6 | 18 |
| Multiple Disabilities | 11 | 7 | 18 |
| Speech and language delay | 47 | 6 | 53 |
| Number of practitioners | 9 | 106 | 115 |

Pre and Post Programme Feedback Survey

Post programme feedback survey from parents was conducted as a part of the formal evaluation the implementation of the programme. At the start of the programme, testimonials from parents and practitioners were also collected to gain initial (non-formal) feedback on their experience with the programme. Meanwhile, both pre and post programme surveys were conducted with practitioners to explore any changes in their skills and knowledge on delivering teletherapy.

Survey Design

The programme coordinators were interested in the following questions regarding the implementation of teletherapy for children with disabilities:

1. How did teletherapy support the needs of children with disabilities during the programme?
2. Did caregivers feel supported through teletherapy during the programme?
3. What were the barriers of conducting teletherapy?
4. Did the capacity building activities support practitioners to take their service online during the programme?

A simple survey design was used to gain some insight into the implementation of the programme. Three surveys were distributed:

- (a) a pre-programme survey to practitioners to evaluate their baseline skills and knowledge on teletherapy,

- (b) a post-programme survey to practitioners to evaluate their teletherapy skills and knowledge after capacity building activities, and
- (c) a feedback survey to parents/caregivers to evaluate the programme implementation.

The surveys were distributed to target groups of the programme, i.e. practitioners conducting teletherapy via the programme and parents of children with disabilities receiving funding through the programme. Anonymous response was allowed for the parents' feedback survey.

Feedback from practitioners through the discussions in the online practitioner support group were also included as part of the discussion of the evaluation of this programme.

Survey Data Analysis

The surveys were analysed using SurveyMonkey's existing analysis function.

115 practitioners responded to the pre-programme survey as a part of the requirement to participate in the programme. However, only 41 practitioners responded to the post-programme survey even though it was mandatory (36% return rate). Meanwhile, out of the 493 caregivers who participated, only 25 provided feedback (5% response rate); 3 responses were omitted as they were incomplete.

As the response rate for both the post-programme surveys to caregivers and practitioners were low, descriptive analysis is used to examine the data. Even so, the insights provided by the caregivers and practitioners could be helpful to explore the experience of conducting virtual intervention and educational sessions in the Malaysian context.

Children's experience:

Overall, the experience of caregivers with teletherapy support were mixed. Of the 25 caregivers who responded regarding their children's experience with teletherapy:

- 56% think that the sessions supported their children's emotional needs
- 44% think that the virtual sessions positively met their children's needs
- 60% feedback that their children were only somewhat comfortable attending the online intervention sessions.

These responses indicated a need to examine in further the depth the enablers and barriers of teletherapy for children and families with disabilities, which unfortunately was not possible within time scales of the programme.

Caregivers experience:

Meanwhile, when asked about their own experience with the teletherapy support, 68% of the caregivers felt that the sessions supported themselves well.

The caregivers in this sample gave an average rating of 3.56 out of 5 for their confidence level in mediating the virtual sessions between their children and practitioners, indicating a need to provide more support to caregivers in their role as mediators in the teletherapy sessions. 18 out of 24 caregivers responded that it was relatively easy to obtain resources they needed for their children's teletherapy sessions.

Practitioners experience:

Overall, there seemed to be a pattern of improvement of skills in providing intervention or educational services through remote methods among the practitioners in the programme.

Closed Survey Questions:

Table 2: Comparison of the average self-rating (out of 5 points) of practitioners' skills in conducting teletherapy sessions pre- and post-programme.

| Survey question | Pre-programme survey | Post-programme survey |
|---|----------------------|-----------------------|
| Confidence level of practitioner to host teletherapy | 3.1 | 4.0 |
| Expertise level providing interventions through virtual methods | 2.9 | 3.6 |

Before the teletherapy programme started, majority of the practitioners reported unfamiliarity with delivering intervention and educational sessions via virtual methods. For virtual group sessions, 62% were unfamiliar or have no experience pre-programme, and 48% indicated increased familiarity post-programme. There is a greater increase in practitioners' experience or familiarity with virtual individual session delivery, with 56% reporting unfamiliarity or inexperience in the pre-programme survey and 83% reported that they often conduct and are familiar with virtual individual sessions.

In the pre-programme survey, 57% of the practitioners were only somewhat or not familiar with coaching parents for both online and in-person service delivery. However, in the post-programme survey, 59% of the practitioner respondents indicated they were familiar with parent coaching. Practitioners also reported increased competence to overcome technical issues of conducting virtual sessions, from 50% with no practical experience in the pre-programme survey to 68% of the respondents indicating in the post-programme survey that they were competent with minimal difficulty.

Most of the practitioners (95%) thought that they had opportunities to ask questions and provide feedback in the online support group, and 80% of them are interested to remain in the support group to receive updates related to teletherapy after the end of the programme. For an open-ended question about webinars, the practitioners found the webinar sessions on conducting teletherapy helpful generally and appreciated the flexibility to re-watch the recording of the sessions. The session most cited by practitioners as most helpful to them is the mental health series webinar on psychoeducation to cope with stress and distress. The complementary 4-part webinar series was conducted by a Clinical Psychologist based in New York and attended by 28 of 115 practitioners in this programme.

Open Survey Questions:

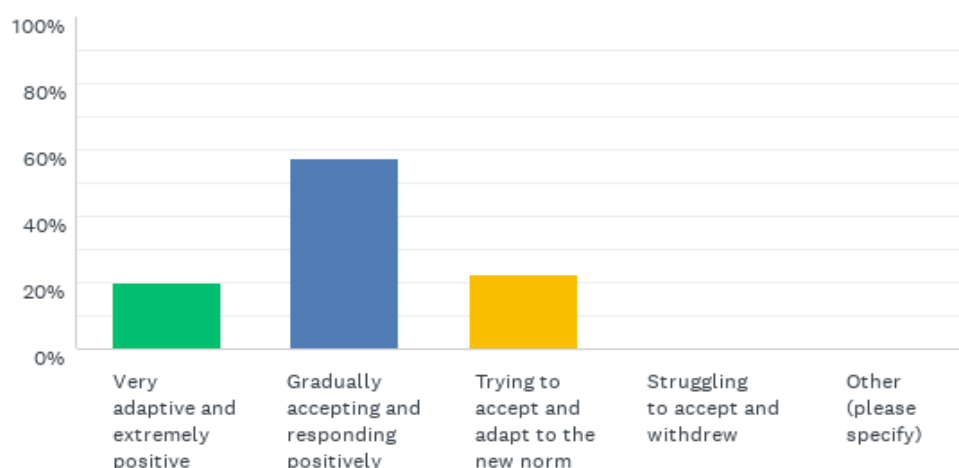
In the post-programme survey, practitioners were also asked an open-ended question about how they overcame barriers of providing virtual support. The common themes that emerged include:

- Importance of communicating with parents to clarify expectations and understanding their needs.
- Learning techniques to conduct teletherapy.

- Switching virtual communication platforms to accommodate children and caregivers' needs (especially in poor internet coverage areas).
- Being supportive and encouraging to caregivers.
- Having support from colleagues, such as co-hosting a Zoom meeting and discussing difficulties.

When asked about children and caregivers' adaptability to teletherapy, majority (77.5%) of the practitioners rated them as adapting positively to the novel mode of service delivery. Meanwhile, the remaining practitioners (22.5%) responded that children and caregivers were trying to accept and adapt to the new norm.

Graph 1: Practitioners' rating on the adaptability of children/caregivers towards teletherapy.



Key findings and recommendations

From analysis of the data collected via the surveys and also anecdotal feedback received from caregivers and practitioners, the following key findings emerge, and NECIC/caregivers/practitioners have also outlined a series of recommendation should this programmes be continued or replicated in another location:

1. **Finding:** Parents' feedback from the post programme survey regarding their experience with teletherapy during the pandemic is mixed. This was varied from the positive feedback we received from parents at the start of the programme. Such difference indicated that there is room for improvement in how teletherapy sessions are conducted to ensure that the needs of both caregiver and their children with disabilities are well supported. Besides the fact that remote service delivery is novel and different from the usual intervention services to children with disabilities, caregivers also had to switch to teletherapy with minimal preparation and training due to the sudden implementation of MCO in Malaysia. Therefore, it is understandable that some caregivers might have perceived that the teletherapy mode were not as effective as in-person sessions.

Recommendation: Besides providing training to caregivers to clarify their role in teletherapy and develop the skills to support their children, further exploration is also needed to identify characteristics of caregivers and children with disabilities that enable them to adapt to remote method of service delivery. For example, as some practitioners observed, parents who were more familiar with using digital devices had less challenges with teletherapy. Meanwhile, a couple of

parents raised their children's difficulty to focus in front of the screen as a challenge to their children adapting to teletherapy.

Responsibility: Programme coordinator and practitioners to coordinate training for caregivers to learn skills to support their children through teletherapy, such as becoming an effective e-helper or co-facilitator, and parent-professional roles in teletherapy. Programme coordinator and practitioners need to collaborate with researchers to explore characteristics and factors that enable greater adoption of teletherapy among caregivers and children with disabilities.

Timeline: 1-2 sessions within the first month of the programme for caregivers to clarify concerns and receive orientation training on teletherapy. Research study on factors enabling adoption of teletherapy to be conducted post-programme; duration of study expected to take two months.

- Finding:** While some caregivers found the teletherapy sessions helpful to their children during the pandemic, a small number of caregivers found teletherapy challenging as their children were not able to focus during the sessions thus preferring in-person sessions. In the initial months of the programme, many practitioners raised the challenge of engaging and supporting children with disabilities in a virtual session, especially when children have difficulty paying attention. As the programme progressed, the practitioners commented that the attention and focus of children with disabilities under their care improved as they gained more experience and insights from the online support group. Even so, the practitioners were still interested to gain more skills and techniques to engage children through virtual sessions.

Recommendation: There is a need to explore the factors that enable greater engagement in children through virtual sessions, such as the type of devices used, and environment for the learning session, and share these insights with practitioners. Practitioners also need training on how to engage children and caregivers through virtual sessions. There is also a need to determine if online therapy services are able to appropriately meet the needs of children with disabilities or is there another type of modality that should be explored during crisis periods such as the COVID-19 pandemic. For children and caregivers - who are not able to benefit from teletherapy - in-person services with strict infection spread preventive measures should be a legitimate alternative. Disability related early intervention services need to be included into the category of essential services by the relevant government authorities. Additionally, financial aid should also be given to disability centres to procure protective equipment and necessary items for them to carry out in-person services safely.

Responsibility: National Security Council and Ministry of Health to provide SOP for disability related early intervention service centres to conduct in-person intervention sessions and categorise disability intervention services as essential services. Relevant government agencies and civil society to provide financial aid to disability centres for the purpose of protective equipment and items. Programme coordinator to coordinate peer-learning sessions and training for practitioners on strategies to engage children virtually.

Timeline: Practitioners' peer-learning session to share resources and strategies at least twice a month for the whole duration of the programme.

- Finding:** Parents felt more supported through teletherapy than they think it had for their children. Feedback from some parents shed light on this. For example, some parents found this programme helpful because their children had continuous support in addition to reducing their financial

burden. Meanwhile, some parents shared that they appreciated the opportunity to discuss with practitioners about their children's needs and implement strategies that are more naturalistic to the home setting. One parent elaborated that the remote sessions helped her better understand her child and the principles behind the different support strategies as well as feeling more involved in her child's sessions.

Recommendation: Besides children with disabilities, practitioners also need to focus on supporting the parents to take on the role of therapists and educators via the remote service method. Practitioners also need to provide informal emotional support and psychoeducation to parents and caregivers. Provide financial aid programmes for intervention services to relieve the financial burden of parents and caregivers so that their children with disabilities could have continued access to intervention services.

Responsibility: Practitioners to provide support to parents and caregivers throughout the programme. Programme coordinator to organise psychoeducation training to practitioners. Relevant government agencies and donors to provide financial aid programmes for intervention services for children with disabilities and their caregivers.

Timeline: A minimum of 5 months of financial aid programme to provide continuity of service for children with disabilities and their caregivers.

4. **Finding:** Many practitioners raised the issue of poor internet connectivity (both from cities and small towns). Practitioners elaborated that unstable internet was a huge barrier to engaging the attention of and maintaining rapport with children with disabilities and caregivers during virtual sessions (Othman & Abdul Aziz, 2019). This hugely contrasts with the level of engagement and rapport that in-person sessions allow and may be a huge factor that influences practitioners and caregivers' perception of the effectiveness of virtual sessions (Cole, Pickard & Stredler-Brown, 2019). To some extent this affects their adaptability and confidence to conduct and engage in teletherapy.

Recommendation: Long-term plan should focus on improving existing internet connectivity in the country. For programme-specific needs, practitioners, children with disabilities and their caregivers need to explore alternative ways to communicate.

Responsibility: Relevant government agencies to improve internet connectivity within the country, including the rural areas.

5. **Finding:** In response to poor internet connectivity, some practitioners switched to using non-synchronous methods to conduct the remote sessions. These practitioners communicated using text-messaging apps or virtual classroom platforms to share instructions and receive photographs or video recordings of children doing activities. Then practitioners discussed with caregivers about how the child responded to the activities and caregivers provided feedback. Besides poor internet connectivity, some practitioners also use non-synchronous methods to communicate with caregivers due to caregivers' work and time commitment.

Recommendation: Allow flexibility for non-synchronous methods to communicate with caregivers, especially situations in which internet connectivity is poor and mismatch of time commitment between practitioners and caregivers.

6. **Finding:** From the online practitioners' support group, it is evident that practitioners have different approaches to implementing remote intervention or educational sessions with children with disabilities and their caregivers.

Recommendations: Strategies that enable better outcomes from teletherapy sessions, raised by practitioners in the online support group, include:

- Communicating with parents in advance about the lesson plan and materials needed;
- Preparing contingency plans and be flexible to change activities;
- Alternating work with fun activities to keep children engaged;
- Using props available in children's home and pictures to engage children's attention;
- When virtual session is conducted at child's home in a room with less distractions;
 - Having a co-host to troubleshoot technical issues in the background, especially for group sessions;
 - Having a partner to record observations during the sessions.

In the design of capacity building activities, further exploration of the skills and strategies implemented by practitioners that enable or create barriers to better outcomes from teletherapy sessions is also needed.

7. **Finding:** From the literature, remote delivery of intervention services needs to depart from the traditional way of supporting, teaching and engaging with children with disabilities and their caregivers. Parent coaching is an integral component of teletherapy success (Snodgrass et al., 2017). Practitioners in this programme also identified parent coaching as one of the main challenges of conducting teletherapy. It is likely that practitioners in this programme did not have adequate training in family-centred practices such as parent coaching prior to the commencement of this programme, a barrier also identified by Cole and colleagues (2019). Although a webinar on parent coaching was conducted to address this, it was held towards the end of the programme, and some practitioners feedback that in-depth training in this area is needed.

Recommendation: Provide a series of structured training on parent coaching skills and techniques to practitioners, with peer-supervision or peer-support programmes for practitioners to practice and enhance skills learned. A self-assessment tool on parent coaching to guide practitioners with their practice.

Responsibility: Programme coordinator to coordinate training and parent-coaching expert to provide or develop self-assessment tool on parent coaching for practitioners.

Timeline: 3-4 sessions of lecture-style training sessions staggered over 2 months.

8. **Finding:** Although the programme covered eight out of fourteen states in Malaysia, only a small percentage (2%) of the recipients came from the rural communities, and none from remote rural areas. This is because the participating NGOs and most of their clients are based in urban areas. Also, in Malaysia, families of children with disabilities in rural areas have limited to no access to disability related early intervention services even prior to the COVID-19 pandemic.

Recommendation: To reach out to NGOs supporting children with disabilities in remote rural areas for similar programmes. Long-term plan should focus on developing services in remote rural areas, such as setting up mobile disability related early intervention services, mobile resource centres for sharing tools and materials for intervention, as well as enhancing detection and diagnosis of disability in rural communities. Such services for rural remote areas need to be supported by basic infrastructure such as roads, water and sanitation hygiene and telecommunication.

Responsibility: Government agencies and disability organisations to map out organisations providing services to children with disabilities in rural areas. Relevant federal and state government agencies to work together to improve infrastructure in rural areas. Civil society organisations and government agencies to work together to develop disability services in remote rural areas.

Timeline: 6 months for mapping out disability services in rural communities. Improving infrastructure and developing services within a year.

9. **Finding:** This programme provided funding mainly for the virtual intervention or education sessions, a small number of in-person intervention sessions, and some funding to participating NGOs for internet and video-conferencing services. Families of children with disabilities and practitioners working from home had to rely on their own means to obtain access to internet services and digital devices. This programme may have inadvertently excluded families with no access to internet services and digital devices, such as families from poor and underprivileged background and rural areas. Based on conversations with practitioners, many parents rely on their smartphones to access the virtual sessions.

Recommendation: Include funding for families of children with disabilities and practitioners without access to internet and digital devices (e.g. laptop or tablet).

Responsibility: Donors, civil society organisations and relevant government agencies

10. **Finding:** This programme also revealed the gender disparity of children with disabilities and their caregivers who are accessing intervention services in the country. There were significantly more boys (72.6%) than girls with disabilities, and significantly more female caregivers (80.3%) than male caregivers who participated in this programme. The gender distribution of caregivers in this programme is consistent with gender inequalities and patriarchal power dynamics present in Malaysia. Literature also supports this observation in that more women assume the role of primary caregivers to their children with disabilities than men (Sharma, Chakrabarti & Grover, 2016).

On the other hand, emerging evidence highlighted the issue of underdiagnosing females due to referral and diagnostic bias against girls with developmental and learning disabilities, such as Autism Spectrum Disorder (Loomes, Hull & Mandy, 2017) and Attention-Deficit Hyperactivity Disorder (Skogli et al., 2013). Hence, the gender difference observed in this programme. Further exploration may be necessary to determine whether gender bias influences parents' decision in accessing intervention services and education for girls with disabilities in Malaysia.

Recommendation: Programmes that promote fathers' involvement or establishing support network for fathers. Training for practitioners and educators on unconscious gender bias, including doctors and psychologists conducting diagnostic assessments, to mitigate

disproportionate referrals between boys and girls. Doctors and psychologists conducting diagnostic assessments need training on updated research on diagnostic bias.

Conclusion

This programme has shown that remote provision of intervention and educational services have provided continuity of services to children with disabilities during the COVID-19 pandemic lockdown, and to a certain extent supported the needs of the children and their caregivers. The funding was especially helpful as it ensured continuity of services for children with disabilities without adding to the financial burden experienced by caregivers and providers of intervention and education services due to the pandemic lockdown. Besides the teletherapy-focused capacity building activities, practitioners also had the opportunity to hone their intervention or teaching skills, such as parent coaching and psychoeducation support for caregivers. It also demonstrated some potential as an alternative mean of providing intervention services to families of children with disabilities in the rural areas where disability services are limited.

However, the effectiveness and success of teletherapy services for children with disabilities is dependent on the infrastructure, in particular internet connectivity as highlighted in this programme. Besides that, more effort is needed to improve the delivery of service provision through virtual means to ensure better outcomes for children with disabilities during a pandemic, especially capacity building for both practitioners and caregivers to adopt this method of service delivery.

Future programmes of this nature should consider initiatives to reach out to hard-to-reach communities, i.e. rural communities, poor and underprivileged families. Alternative means of providing service besides via virtual means also needs to be considered for children with disabilities who may not benefit from such mode of intervention. Similar programmes that require access to internet should also consider providing internet subscription as well as laptops or tablets to families and practitioners who lack such resources to ensure access.

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Annex A: Survey questions

Example of some questions used in the survey to elicit parents and practitioners' thoughts about their experience with the programme.

Children's experience

- 1) How well do online therapies / educational sessions support your child's emotional development?
- 2) How well do online lessons meet your child's needs throughout MCO?
- 3) How comfortable does your child feel attending the online lessons?

Caregivers' experience

- 1) How well do you feel supported via teletherapy sessions throughout MCO?
- 2) Please rate your confidence level mediating online sessions between the practitioner and your child (not confident all to very confident).
- 3) How easy is it to obtain the resources you need for your child/children's teletherapy sessions during MCO?

Practitioners' experience

- 1) Please rate your current confidence level hosting teletherapy between 1 to 5 (not confident at all to very confident).
- 2) Please rate your current expertise level providing interventions through virtual methods between 1 to 5 (least to expert).
- 3) Please evaluate your current competency and experiences on the following: (from not at all - very familiar)
 - a. Delivering virtual group therapy or educational sessions
 - b. Delivering virtual individual sessions
 - c. Parent coaching
 - d. Providing psychological first aid
 - e. Responding to gender-based violence disclosure
- 4) Please rate the adaptability of children/parents under your care towards teletherapy.
- 5) Please rate your competency level to overcome technical issues that arise when delivering virtual intervention support throughout the project.
- 6) Did the Facebook Discussion Group give you an opportunity to ask questions and provide feedback?
- 7) How did you overcome the barriers to providing remote support? Please share your experiences in 1-2 sentences.

Annex B: Practitioner and Caregiver testimonials

“Before, my daughter was difficult to manage by myself and I was worried that I could not take her to therapy. But with online sessions, the therapist taught me to guide her and explained how to quiet her down. This interaction helped me recognize how I can guide my daughter further.”

– A mother using an online Early intervention Centre (Penang, Malaysia) about her 7-year-old daughter.

“After attending the speech therapy sessions online, my son is chattier. He speaks in longer sentences (4-5 words); and is better at understanding what we talk about. He can now engage in simple conversation. I am very happy with this improvement throughout this period.”

– A mother in Sarawak (Malaysia) about her son now accessing regular speech-language therapy.

“Initially, we had to troubleshoot a lot of technical problems with parents. Now after a few sessions, we become more familiar and learn to be flexible. We prepare parents in advance, remind parents that it’s OK to change expectations, etc. It’s good that the children can continue early intervention sessions because it helps them maintain some routine.”

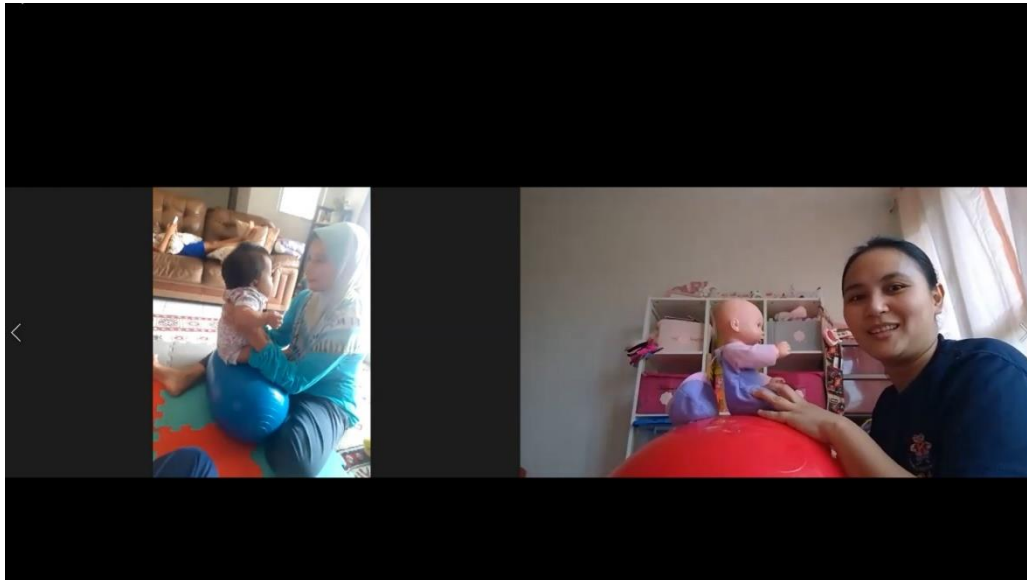
– A practitioner in an early intervention centre in Kuala Lumpur (Malaysia)

“Children with disabilities living in remote areas that have traditionally been the hardest to reach, would now be able to access therapy services that they need. Teletherapy has the potential to equalise access to services for families living in remote areas”

– Dr Wong Woan Yiing, President of NECIC.

Annex C: Images of teletherapy in action

Photo 1



Caption 1: Nur Liana, mother to Nur Nuhaa, a 7 month old infant with Down Syndrome, is coached through online video call on the use of a therapy ball by physiotherapist Hazel Joy. Teletherapy helps Nur Liana to continue therapy during MCO to develop her daughter’s reflexes and to improve head and neck control.

Credit 1: Nur Liana Bin Mohammed Ghouse, May 2020

Photo 2



Caption 2: The closest speech therapy service is 2 hours 30 min boat ride away followed by a 45 min car ride to Hospital Sibul for children from Song, Kapit, Sarawak, Malaysia. The teletherapy project by UNICEF and NECIC has enabled Mohammad Khairi, aged 3, who is on the autistic spectrum disorder to attend an online initial assessment session with Network, an early intervention centre based in Perak. He has since been able to receive teletherapy focusing on his language skills, play skill, interactive play and activities to promote longer attention span facilitated by a nurse at Klinik Kesihatan Song.

Credit 2: Nurse Nurulhasfahani, 29th April 2020