



المؤتمر الرابع للجمعية العالمية لطب الأطفال التنموى

# Nurturing Children in Crisis رعاية الأطفال في الأزمات

### **ABSTRACTS BOOKLET**



مؤتمر افتراضی | Virtual Congress 2-5 DECEMBER 2021

٦-٥ كانون الأول ٢٠٢١













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### **PROGRAM**

### Friday 3 December, 2021 - Beirut Time (UTC + 2:00)

Room 1: Ilgi ERTEM, Lee	era LOBO	
15:35 - 15:48	ID16 - Estimation of Prevalence of Specific Learning Disabilities Among Middle School Students of Government Schools in Chennai City of South India	Rabindran CHANDRAN India
15:48 - 16:01	<b>ID18</b> - A Model For Delivering Essential Nutrition and Feeding Interventions for Children With Disabilities: Data from Zambia	Zeina MAKHOUL USA
16:01 - 16:14	<b>ID47</b> - Challenges in Identifying Children With Neuro-developmental Disabilities in The Early Years, A Qualitative Account from Malawi, Pakistan and Uganda	Muneera RASHEED  Pakistan  Emmie MBALE Malawi  Harriet BABIKAKO  Uganda
16:14 - 16:27	<b>ID87</b> - Patterns of Feeding Difficulties and Behaviors in Filipino Children with Autism Spectrum Disorder and The Impact of the COVID-19 Pandemic	Francesca Antonina FERNANDEZ Philippines
16:27 - 16:40	<b>ID132</b> - Disseminating F-Words in Child Development to Families of Children With Disabilities in Iran: A Knowledge Translation Study	Zahra MALEKI <i>Iran</i>
Room 2: Ma. Rochelle PA	ACIFICO, Maria DEL PILAR GRAZIOSO	
15:35 - 15:48	ID45 - The Effects of A Childcare Training Program on Childcare Quality and Child Development: Evidence From A Quasi-Experimental Evaluation in Vietnam	Elizabeth HENTSCHEL USA
15:48 - 16:01	ID19 - Feasibility and Acceptability of A Synchronous Online Parent-mediated Early Intervention for Children With Autism in A Low Resource Setting During COVID-19 Pandemic	Sanchita MAHADIK India
16:01 - 16:14	<b>ID54</b> - Palestinian Children With Disabilities: Hope In The Midst of Despair	Dana ISAWI <i>Palestine</i> Jazeel AWAD <i>Palestine</i>
16:14 - 16:27	ID178 - Creating Preschool Participation Opportunities for Children With Developmental Disabilities During COVID-19 Pandemic	Ruchita BHAGADE India
16:27 - 16:40	ID152 - Effects of Pashe Achhi Telecommunication Model on Outcomes of Rohingya Caregiver and Child Dyads in Times of COVID-19	Sakila YESMIN Bangladesh
16:40 - 16:53	ID144 - Implementation of The International Guide for Monitoring Child Development Intervention in Rural India and Guatemala	Abhishek RAUT India





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15:48 - 16:01	ID24 - Effectiveness of Thiruvalla Early Low Intensity Multifaceted Autism Intervention (Telima) for Children With Autism Spectrum Disorder - An Indigenous Model From India	Manju George ELENJICKAL <i>India</i>
16:01 - 16:14	<b>ID68</b> - The Prevalence and Risk Factors of Developmental Delay Among Preschoolers in Turkey; A Multicenter Study	Evin Ilter BAHADUR Turkey
16:14 - 16:27	<b>ID89</b> - Teletherapy for Children With Developmental Disorders During The COVID-19 Pandemic in The Philippines: A Mixed-Methods Evaluation	Catherine M. CAPIO Hong Kong
16:27 - 16:40	ID170 - Linking Lives In Times of Crisis: A Mental Health Support Group For Mothers of Disabled Children	Pravin MADUR <i>India</i> Yashna VISHWANATHAN <i>India</i>
16:40 - 16:53	<b>ID100</b> - Exploring Cultural Adaptation of Wechsler Preschool and Primary Scale of Intelligence for Use in Bangladesh	Shamima SHIRAJI Bangladesh
Room 4: Peter ROHLOFF	, Abhishek RAUT	
15:35 - 15:48	<b>ID74</b> - Young and Preschool Aged Children's Development in Baby Homes in Ukraine: First National Research	Olena RIGA Ukraine
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16:01 - 16:14	<b>ID29</b> - Impact of Package of Intervention Promoting Responsive Feeding Practices on Nutritional Status and Eating Behaviour of Infants and Young Children	Shiv JOSHI
16:14 - 16:27	<b>ID91</b> - Integrating and Early Childhood Development Intervention With Routine Healthcare Visits in India	Reshma SHAH USA
16:27 - 16:40	ID168 - Guriya - Safety of Children from Caste-Based Intergenerational Sex Slavery	Mitali BAROT India
16:40 - 16:53	<b>ID119</b> - Effects of Electronic Screen Removal on Behavior Symptoms Using CARS2-ST and ATEC Among 24-36 Months Old With Autism Spectrum Disorder	Kristyn YATCO Philippines





### **PROGRAM**

### Saturday 4 December, 2021 - Beirut Time (UTC + 2:00)

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16:01 - 16:14	<b>ID160</b> - Parenting Practices and Agression in Childhood Behaviour Disorders	Fatima RAHMAN Pakistan
16:14 - 16:27	ID158 - Content Analysis of Parent Recorded Videos As Key Components of Early Intervention Delivered Through Telehealth During The COVID-19 Pandemic	Selin INCE Turkey
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Room 6: Leera LOBO, R	ajesh MEHTA	
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15:48 - 16:01	ID93 - Klinik Kenit - Positive Impacts of Integrated Early Childhood Development Services on Children and Families With Socio-economic Vulnerability During the Pandemic	N Raihan MOHAMED <i>Malaysia</i> Asma RASLI <i>Malaysia</i>
16:01 - 16:14	<b>ID46</b> - Are Early Childhood Stunting and Catch-up Growth Associated With School Age Cognition? - Evidence From An Indian Birth Cohort	Beena KOSHY India
16:14 - 16:27	<b>ID113</b> - The Telehealth Experience of A Developmental Pediatrics Unit From Malatya, Turkey	Halise Metin BAZ Turkey
16:27 - 16:40	<b>ID150</b> - Awareness Program For Caregivers On Rights of Children With Disabilities: Are They Effective in The Post COVID-19 ERA?	Ruhi PATWARDHAN <i>India</i> Ashwini JADHAV <i>India</i>
16:40 - 16:53	<b>ID134</b> - Impact of The COVID-19 Pandemic on Maternal Mental Health, Early Childhood Development and Parental Practices: A Global Scoping Review	Ana Luiza Penna Rocha MIRANDA <i>USA</i>





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16:01 - 16:14	ID121 - The Quality of Life, Situations and Emerging Concerns of Parents of Children With Neurodevelopmental Disorders in PCMC During The COVID-19 Pandemic	Annelyn Fatima LOPEZ Philippines	
16:14 - 16:27	<b>ID96</b> - Early Childhood Development Services During the COVID-19 Pandemic in Azerbajian, Kyrgyzstan, and Turkmenistan	Revan MUSTAFAYEV Turkey	
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16:27 - 16:40	ID175 - Clinical Mealtime Group To Make The Activity of Eating and Feeding Easy for Caregivers of Children Experiencing Motor Difficulties	Ruchita BHAGADE India Roohina SHAIKH India	





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13:00 - 13:13	<b>ID106</b> - Children's Occipitofrontal Circumference Predicts Their Development and Behavior Concurrently	Mohammad Saiful Alam BHUIYAN <i>Bangladesh</i>		
13:13 - 13:26	ID81 - Home-Based Early Intervention For Children With Special Needs In Rural India, Using Phone Based Application	Nandita CHATTOPADHYAY India		
13:26 - 13:39	<b>ID144</b> - Implementation of The International Guide for Monitoring Child Development Intervention in Rural India and Guatemala	Abhishek RAUT India		
13:39 - 13:52	<b>ID169</b> - Establishment of High Risk Infant Follow-Up and Early Intervention Center In Ankara City Hospital	Iclal Ayrancı SUCAKLI Turkey		
Room 10: Nenad RUDIC	, Terane SEYID-MAMMADOVA			
13:00 - 13:13	<b>ID145</b> - Challenging Behaviors Among Children With Autism Spectrum Disorders Presenting to A Referral Developmental Unit in India - A Cross Sectional Study	Dr.Haneesha PINNAMARAJU India		
13:13 - 13:26	<b>ID90</b> - Timely Identification and Early Intervention Child Development Services in Low Resource Settings In Central Gujarat, India	Rashida JAWADWALA <i>India</i> Urja SHAH <i>India</i>		
13:26 - 13:39	<b>ID156</b> - Stimulation Environment For The Children Aged 6-16 Months In Rural and Urban Bangladesh	Bharati Rani ROY Bangladesh		
13:39 - 13:52	<b>ID141</b> - A Pilot Training Project of The Social ABCs <sup>™</sup> Parent-Mediated Intervention For Toddlers With Autism Spectrum Disorder in Goa, India	Mahera KANTAWALLA <i>India</i> Andre VELHO <i>India</i>		
Room 11: Sachly DUMA	N, Alexandra STOJADINOVIC			
13:00 - 13:13	<b>ID164</b> - Early Care and Support for Young Children with Developmental Disability and Their Caregivers in Uganda: The Baby Ubuntu Feasibility Trial	Carol NANYUNJA Uganda Samantha SADOO United Kingdom		
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13:26 - 13:39	<b>ID125</b> - Shared Reading: Parental Attitudes, Practices and Barriers in a Middle Income Country, Turkey	Pelin CELIK Turkey	
13:39 - 13:52	<b>ID101</b> - Non-Specialists Delivered Parent-Mediated Autism Intervention Adapted for Virtual Delivery in Response to the	Lavangi NAITHANI <i>India</i>	

COVID-19 Lockdown in Delhi, India





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المؤتمر الرابع للجمعية العالمية لطب الأطفال التنموي

# Nurturing Children in Crisis رعاية الأطفال في الأزمات









#### **ORAL PRESENTATION**

Abstract ID Number: 16

# ESTIMATION OF PREVALENCE OF SPECIFIC LEARNING DISABILITIES AMONG MIDDLE SCHOOL STUDENTS OF GOVERNMENT SCHOOLS IN CHENNAI CITY OF SOUTH INDIA

#### **Rabindran Chadran**

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#### **OBJECTIVES**

The objectives were to find prevalence of Specific Learning Disability (SLD) among middle school students in Chennai city, difference in prevalence based on gender and age and relationship between various types of SLD.

#### **METHODS**

A Cross Sectional Survey using Expost Facto research design was adopted. Source population was middle school students of fifth, sixth and seventh standards in Government schools in Chennai City. Study period was between November 2019-November 2020. Random sampling design was used to select samples. Around 344 students were enrolled. IQ Assessment using Raven's Progressive Matrices was done to exclude intellectually defective and those below average. NIMHANS Index of SLD was done. Data was analyzed using SPSS-19 and MedCalc. Quantitative data were analyzed using descriptive statistics. Pearson Product Moment correlation was used to find relationship between various types of SLD. ANOVA and 't' test were used to find significant mean difference in socio-demographic variables.

#### **RESULTS**

Among total study population of 144 students, 13.88% had Spelling Dyslexia, 16.66% had Reading Dyslexia, 7.63% had Dysgraphia, 2.08% had Dyscalculia, 10.41% had memory deficits and 10.41% had attention deficits. All SLD types were more in boys. There was significant gender difference in mean scores of spelling dyslexia and Memory deficit and percentage scores of reading dyslexia and dysgraphia.

#### CONCLUSION

Prevalence of Spelling Dyslexia was 13.88%, Reading Dyslexia was 16.66%, Dysgraphia was 7.63%, Dyscalculia was 2.08%, Memory Deficit was 10.41% and Attention Deficit was 10.41%. There was a statistically significantly positive relationship between test scores on various types of SLD.

#### **TOPIC CATEGORY**

Neurodevelopmental Disabilities





#### **ORAL PRESENTATION**

Abstract ID Number: 18

# A MODEL FOR DELIVERING ESSENTIAL NUTRITION AND FEEDING INTERVENTIONS FOR CHILDREN WITH DISABILITIES: DATA FROM ZAMBIA

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<sup>2</sup>Catholic Medical Mission Board, Lusaka, Zambia

#### **OBJECTIVES**

Children with disabilities impacting feeding experience inappropriate practices (e.g., poor diets, supine feeding), placing them at risk for malnutrition, illnesses, and premature death. These risks, exacerbated by COVID-19, cannot be addressed with the 'status quo' nutrition and feeding interventions. We present a model that combines training with a digital health app called Count Me In to deliver essential nutrition care adapted for children with disabilities in low-resource settings.

#### **METHODS**

Training includes hybrid classroom and online learning in nutrition and feeding. Bridging the training with practice, Count Me In enables caregivers to monitor feeding difficulties, growth, and anemia status of children over time. It generates individualized care plans, including dietary recommendations and feeding techniques, and presents data to assist with decision-making. This model has been implemented in health, community-based rehabilitation, and residential care facilities in Zambia, Uganda, Tanzania, China, and Vietnam. Here we present data from Zambia.

#### **RESULTS**

Sixteen Zambian facilities have received training and implemented Count Me In. To date, 522 children with disabilities have been assessed at least once with Count Me In. The baseline prevalence of stunting, wasting, underweight, anemia, and feeding difficulties were 70%, 23%, 62%, 54%, and 89%, respectively. Over an average of 9 months, the prevalence of wasting and anemia attributed to iron deficiency have decreased by 19% and 47%, respectively.

#### **CONCLUSION**

A model combining training with a tool can build capacity and provide a systematic approach to clinical nutrition care and outcome tracking for children with disabilities, leading to positive health outcomes.

#### **TOPIC CATEGORY**

Intervention: 1g) Nutritional Services





#### **ORAL PRESENTATION**

Abstract ID Number: 19

FEASIBILITY AND ACCEPTABILITY OF A SYNCHRONOUS ONLINE PARENT- MEDIATED EARLY INTERVENTION FOR CHILDREN WITH AUTISM IN A LOW RESOURCE SETTING DURING COVID19- PANDEMIC

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Very few models of affordable, evidence-based parent-mediated intervention (PMI) services are available for children with Autism Spectrum Disorder and even lesser literature that documents their impact exist in India. The COVID -19 crisis has significantly impacted the access to these services even further. During literature review, paucity of research on tele-health models of parent mediated intervention delivered in low resource developing countries were noted. The COVID-19 pandemic, thereby, catalyzed a pilot of an online delivery of an evidence-based parent mediated intervention (Project ImPACT) for children with Autism Spectrum Disorder in Mumbai, India. Context and culture-specific adaptations were made in program structure and a mixed-methods approach was adopted to evaluate acceptability, feasibility and preliminary efficacy of this model. Quantitative results (n = 12) showed excellent completion rates, with significant improvement in parent fidelity to intervention and child social-communication skills. Analysis of qualitative data from focus groups with parents on completion revealed that parents found the online mode convenient and acceptable, found the synchronous model of sessions especially beneficial and perceived improvements in their own parenting skills. Additionally, all parents described an improvement in their children's skills across varied domains, including their expressive language, engagement, imitation, reciprocity, and play skills. Unstable internet connectivity and limited opportunities for generalization of skills acquired by children were some of the challenges faced by the parents. Though piloted in pandemic times, the results from the study have implications for future service delivery models across similar settings in other developing countries.

#### **TOPIC CATEGORY**

Intervention: 1i) Parent Training





#### **ORAL PRESENTATION**

◆ Abstract ID Number: 24

EFFECTIVENESS OF THIRUVALLA EARLY LOW INTENSITY MULTIFACETED AUTISM INTERVENTION (TELIMA) FOR CHILDREN WITH AUTISM SPECTRUM DISORDER - AN INDIGENOUS MODEL FROM INDIA

#### Dr. Manju George Elenjickal, Dr. Abhinav Chandran, Mrs. Joselin Joseph

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#### **OBJECTIVES**

To assess the effectiveness of early, low intensity, center-based, multidisciplinary intervention model on autistic symptoms, developmental domains and language in children diagnosed with autism spectrum disorder (ASD).

#### **METHODOLOGY**

It is an indigenously designed interventional model of 12 months for a resource poor setting, conducted as a prospective observational study, in the Child Development Centre in a tertiary medical college hospital, Thiruvalla, Kerala from December 2017 to May 2019, among 32 children between 2 – 6 years diagnosed with ASD. Initial assessment done using CARS (Childhood Autism Rating Scale), DDST (Denver Developmental Screening Test) and REELS (Receptive – Expressive Emergent Language Scale). Reassessment was done using the same tools after 12 months of intervention period. Statistical analysis was done to evaluate effectiveness and to calculate the test of significance.

#### **RESULTS**

Each child received an average of 5.89 hours of intervention per week for 12 months. The mean CARS score reduced from 35.55 (SD - 1.69) to 31.7 (SD - 1.91) with high significance (p<0.001). There was an improvement in the post interventional development quotients of all 4 domains and the results were statistically significant (p<0.001). Statistically significant improvement in the receptive speech was noticed (p<0.001) but not in expressive speech.

#### CONCLUSION

Thiruvalla Early low Intensity Multifaceted Autism Intervention – TELIMA, is a successful model which can be established in a resource poor setting to reduce the severity symptoms of ASD with improvement in all 4 developmental domains in children between 2 and 6 years.

#### **KEYWORDS**

Autism, Development, Early Intervention, Effectiveness, Low intensity.

#### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





#### **ORAL PRESENTATION**

Abstract ID Number: 29

# IMPACT OF PACKAGE OF INTERVENTION PROMOTING RESPONSIVE FEEDING PRACTICES ON NUTRITIONAL STATUS AND EATING BEHAVIOUR OF INFANTS AND YOUNG CHILDREN

#### **Shiv Joshi**

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#### **OBJECTIVE**

To determine whether a package of an intervention promoting responsive feeding would improve child outcomes in terms of anthropometric parameters and eating behaviours.

#### **METHODS**

In this cluster randomized controlled trial, 22 subcentres were randomized using stratified random sampling into a control (n=280) and an intervention arm (n=280) and mothers having a 4-6-month-old infant were enrolled using a sample proportion to population size. The baseline measurements were made for the mother (maternal responsiveness) at enrolment, for the baby (weight, height and eating behaviours) at 6 months. Intervention promoting responsive feeding was given in the intervention arm before the babies attained 9 months while the babies in the control arm received health education messages on complementary feeding. The evaluation was done for the mother and the baby when the baby became 12 months old and later at 18 months age.

#### **RESULTS**

Intervention promoting responsive feeding improved the child outcomes in terms of the anthropometric measurements (p< 0.001 for Z scores of weight for age, weight for length; p = 0.046 for length for age) as well as the eating behaviours (p<0.001 for food responsiveness, satiety responsiveness, enjoyment of the food, food fussiness; p = 0.01 for slowness in eating).

#### CONCLUSION

Package of an intervention promoting responsive feeding improves Z-scores for weight for age, length for age, and weight for length. Responsive feeding leads to improvement in scores for food responsiveness, satiety responsiveness, slowness in eating and enjoyment of food while it reduces the scores for food fussiness of baby.

#### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





#### **ORAL PRESENTATION**

Abstract ID Number: 40

INDIA EBUS – INDIVIDUALIZED NEWBORN DEVELOPMENTAL INTERVENTION APPLICATION – EVIDENCE BASED & ULTRA SMART - BRAIN ORIENTED CARE IN THE NICU

#### Hemant Nandgaonkar<sup>1,2,3</sup>, Sanika Gawade<sup>1</sup>, Prachi Gangurde<sup>1</sup>

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#### **OBJECTIVE**

There are numerous challenges to implementing a variety of developmentally appropriate interventions in the neonatal intensive care unit (NICU) and after discharge. To address these issues, a digital approach to neurodevelopmental care (INDIA EBUS) is proposed. Technology is used in the NICU to ensure that all team members provide reliable, consistent care and to facilitate professional communication.

#### **METHODOLOGY**

A mixed method approach was used with various stakeholders involved in service delivery. It consisted of an online survey, an in-depth interview, and validation.

#### **RESULTS**

Four major sections of Baby Care, Family Support, Caretaker Education, and Extended Care were included. Each section focuses on the neurobehavioral and neurodevelopmental aspects of care. The ever-changing trends in evidence, as well as clinicians' varying levels of training, can all have an impact on newborn care. To mitigate this, evidence can be updated on a regular basis.

It was discovered to be a very useful assistant during clinical care, caretaker education, documentation, monitoring of care in the NICU and extended care. This model has benefited approximately 500 babies and families, 500 professionals, and three organizations at various stages of development to date. Quick INDIA EBUS has evolved for the experts due to their busy clinical schedule.

#### **CONCLUSION**

It is regarded as a time-saving, organized, and useful aid to the clinical work of neurodevelopmental care in the NICU. It will be useful in guiding, planning, documenting, analyzing, implementing, and monitoring care. Given the scope of the work in this field, the use of technology is essential.

#### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program

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#### **ORAL PRESENTATION**

Abstract ID Number: 45

THE EFFECTS OF A CHILDCARE TRAINING PROGRAM ON CHILDCARE QUALITY AND CHILD DEVELOPMENT: EVIDENCE FROM A QUASI-EXPERIMENTAL EVALUATION IN VIETNAM

#### Elizabeth Hentschel<sup>1</sup>, Ha T.T. Tran<sup>2</sup>, Aisha Yousafzai<sup>1</sup>

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<sup>2</sup>Research and Training Centre for Community Development (RTCCD), Hanoi, Vietnam

#### **OBJECTIVES**

Access to high-quality childcare is essential to promote children's development; however, little is known about the quality of childcare they receive. The current study addresses this knowledge gap by evaluating a childcare training program, delivered by a non-government organization, OneSky, in Vietnam. OneSky trains providers who run Home Based Cares (HBCs), which are private, low-cost childcares.

#### **METHODS**

A controlled quasi-experimental evaluation design was employed in order to compare short- and medium-term outcomes of the training program on the knowledge of the HBC providers, the quality of the HBCs, and the development of the children attending the HBCs. Three cohorts of HBCs were enrolled, (1) HBCs who had completed training 12-15 months prior to evaluation; (2) HBCs who had completed training 1-3 months prior to evaluation; and (3) HBCs who were waiting to be trained (the control arm). The study sample comprised 418 HBCs and 1646 children.

#### **RESULTS**

Regression analyses showed that childcare training was associated with improvements in provider knowledge about infant developmental milestones in the short-term (Beta=5.85, p=0.001). Childcare training was associated with improvements in childcare quality (Beta=7.19, p=0.001), and the impact of the training was maintained over time (Beta=6.56, p=0.001). Childcare quality was independently associated with benefits in young children's development (Beta=0.001).

#### **CONCLUSIONS**

To the best of our knowledge, this is the first formal evaluation of a childcare training program in a low- and middle-income country outside of Latin America. Further research is needed to identify features of childcare implementation associated with high quality.

#### **TOPIC CATEGORY**

Early Childhood Development: -





#### **ORAL PRESENTATION**

Abstract ID Number: 46

# ARE EARLY CHILDHOOD STUNTING AND CATCH-UP GROWTH ASSOCIATED WITH SCHOOL AGE COGNITION? – EVIDENCE FROM AN INDIAN BIRTH COHORT

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#### **OBJECTIVE**

Millions of children worldwide especially in the Asian subcontinent are vulnerable to early childhood stunting. Current study evaluates associations between early childhood stunting, catch up growth and school age cognition.

#### **METHODS**

A community-based birth cohort recruited between 2010 and 2012 from urban slums in Vellore, India was followed up until 9 years of age. Stunting for each individual child was calculated at 2, 5 and 9 years. Cognition was assessed at 9 years of age using the Malin's Intelligence Scale for Indian Children (MISIC). Children were divided into groups based on stunting at each time point as well as catch-up growth, and a regression model was utilised to evaluate their association with cognition.

#### **RESULTS**

Among 203 children included in this analysis, 94/203 (46.31%) children were stunted at 2 years of age, of whom 39.36% had a catch-up growth at 5 years of age, and 38.30% at 9 years. Around 10% of the cohort remained stunted at all time points. In the multivariable analysis, children who were stunted at 2, 5 and 9 years had a significant reduction in verbal and total IQ scores by 4.6 points compared to those who were never stunted. Early catch-up in linear growth before 5 years in stunted children resulted in better verbal and total cognition.

#### **CONCLUSIONS**

Nutritional supplementation during late infancy and early toddlerhood in addition to continuing nutritional supplementation programmes for preschool and school children can improve childhood stunting and cognitive abilities in vulnerable populations.

#### **TOPIC CATEGORY**

Early Childhood Development: -





#### **ORAL PRESENTATION**

Abstract ID Number: 47

CHALLENGES IN IDENTIFYING CHILDREN WITH NEURO-DEVELOPMENTAL DISABILITIES IN THE EARLY YEARS, A QUALITATIVE ACCOUNT FROM MALAWI, PAKISTAN AND UGANDA

### Paul Lynch<sup>1</sup>, <u>Muneera Rasheed</u><sup>2</sup>, <u>Emmie Mbale</u><sup>3</sup>, <u>Harriet Babikako</u><sup>4</sup>, Melissa Gladstone<sup>5</sup>, Helen Nabwera<sup>6</sup>

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Despite good evidence for improving outcomes through early interventions, societal and health systems are still not facilitating early identification of disabilities, and pathways to treatment and support are severely limited. Our objectives in this study were to understand the experiences and perceived pathways, barriers and facilitators to identifying children with disabilities 0-3 years from the; a) perspective of health professional and educators who work with these children in schools, communities and hospitals and b) parents of children with developmental disabilities in the early years.

We conducted a total of 18 focus group discussions and 49 in-depth interviews from a purposively sampled populations in each of the three focus countries. We used thematic analysis with co-developed inductive coding frameworks and identified three themes which relate to lack of "demand" or "uptake" by caregivers; perceptions of childhood disability within the community (stigma), local beliefs of causes of disabilities and lack of information. In addition, three themes relate to the "supply" side; the ability of services to respond to need; lack of perceived value of managing children with disabilities within systems, consistency and training in tools for identification and referral structures and pathways.

To enable change, the acceptance of children with disabilities within communities must be enhanced by providing better information for parents and professionals on how and why it is important to identify children early, create clearer referral pathways that are fully integrated into child health care at institutional level and create a step change in the attitudes of those funding services.

#### **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





#### **ORAL PRESENTATION**

Abstract ID Number: 54

#### PALESTINIAN CHILDREN WITH DISABILITY: HOPE IN THE MIDST OF DESPAIR

#### Dana Isawi<sup>1,2</sup>, Jazeel Awad<sup>1</sup>

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<sup>2</sup>Northern Illinois University, DeKalb, USA

#### **INTRODUCTION**

2021 in Palestine was characterized by the rise in COVID-19 cases in addition to the on- going attacks and human rights violations by the Israeli military forces that killed hundreds and injured thousands. These calamities intensified the daily living challenges faced by families with disabled children. Thus it is important to learn about the needs, resources, and coping strategies of the families.

#### **OBJECTIVES**

This study aimed to examine the effect of war, poverty and COVID-19 on the daily living, emotional and behavioral concerns of children and the effect on the families of children with disabilities.

#### **METHODS**

The participants of the study were 20 parents of children with disabilities from Gaza and the West Bank in Palestine, who were receiving services at the Palestinian Happy Child Centre in the West Bank and children with hearing impairment from ATFALUNA for Deaf in Gaza. In-depth interviews were conducted were participants were asked open-ended questions and were encouraged to share their thoughts about how they coped during this difficult period. Their answers were recorded verbatim by the research team and qualitative analysis was conducted.

#### **RESULTS**

The analysis yielded several themes including poverty, family dynamics, fear and hope, treatment, and education, coping mechanisms, ventilation and recreational activities.

#### **DISCUSSION**

The themes and issues that were seen as most important by parents of children with disabilities in a situation of compounded crises are discussed and recommendations are presented for how to support families of children with disabilities in Palestine.

#### **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -





#### **ORAL PRESENTATION**

#### Abstract ID Number: 62

WHO CAREGIVER SKILLS TRAINING PROGRAMME HAS DEVELOPED THE SOCIAL RELATIONSHIP AND RECIPROCITY, COMMUNICATION AND BEHAVIOUR PATTERNS OF CHILDREN WITH ASD

#### Subhashis Dutta<sup>1</sup>, Reema Mukherjee<sup>2</sup>

<sup>1</sup>IIN, Raiganj, India <sup>2</sup>Sishumangal, Raiganj, India

#### **OBJECTIVES**

The purpose of this study is to evaluate the effect of the WHO Caregiver Skills Training Programme on social relationships and reciprocity, communication and behaviour patterns of children with ASD age 2 to 9.

#### **METHODS**

The research design was a pre and post-test, by analysing the levels of 50 children with ASD age 2 to 9 from West Bengal (i.e. 25 children, whose parents have undergone the WHO Caregiver Skills Training and also the other 25 children, those who went through the treatment as usual who haven't undergone the training).

Measures through the Indian Scale for Assessment of Autism (ISAA-40 Item) which analyzed the difference of the score of both the groups of children.

The children whose parents received WHO-CST training over 9 weeks followed strategies in their everyday activities. The tools were delivered at the beginning and at end of the WHO-CST.

#### **RESULTS**

WHO Caregiver Skill Training programme was found to be effective to decrease ISAA scores in social relationships and reciprocity, communication and behaviour patterns of children with ASD.

#### **CONCLUSION**

This study suggests that young children with ASD improve their life skills by participating in the WHO- CST program through their parents. Further studies are needed to establish casual relationships.

#### **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





#### **ORAL PRESENTATION**

Abstract ID Number: 63

DEVELOPMENT AND VALIDATION OF A TOOL TO ASSESS HOME ENVIRONMENT CONDUCIVE TO CHILD DEVELOPMENT FOR YOUNG CHILDREN IN RURAL INDIA

<u>Sarinkumar Puthenveettil Sivan</u>, Abhishek V Raut, Dharampal G Dambhare, Subodh S Gupta Mahatma Gandhi Institute of Medical Sciences, Wardha, India

#### **OBJECTIVES**

- To develop a tool to assess the home environment of young children (0 to 36 months) in rural India.
- To examine the reliability and validity of the tool.

#### **METHODS**

The study was conducted in rural central India. In-depth interviews of primary caregivers and direct observation of the home environments were done for formulation of the initial item list. The item list underwent content validity by a Delphi panel of experts. A resultant 33 item tool was administered on a sample of 200 homes with young children to establish construct validity and reliability. A subset of the sample homes was assessed again for test-retest reliability and another subset for inter-rater reliability.

#### **RESULTS**

The study yielded a 33 item tool with four sub-scales namely Environment, Play & Communication, Positive parenting and Responsive caregiving. Cronbach's alphas to assess internal consistency for the overall tool was 0.79, indicating excellent internal consistency, and the subscales ranged from 0.26 to 0.71. Intra-class correlation coefficients of the tool for test-retest reliability ranged from 0.59 to 0.91 and for inter-rater reliability ranged from 0.72 to 0.94. On factor analysis using Principal Component method for construct validity, 4 factors with eigenvalue of more than 1 were identified with variance 11.69%, 10.78%, 10.62% and 9.10% respectively.

#### **CONCLUSIONS**

The end product is a novel tool to assess the home environment of young children with acceptable validity and reliability which may be used in child development research in rural Indian settings and similar settings in other developing countries.

#### **TOPIC CATEGORY**

Early Childhood Development: -





#### **ORAL PRESENTATION**

Abstract ID Number: 64

LAUNCH OF EARLY CHILDHOOD PARENTING READINESS AND EDUCATION PROGRAM (PREP) IN TERTIARY HEALTH CARE SETTING OF PAKISTAN: A PROGRAM MODEL

<u>Shelina Bhamani</u>, Mohsina Hussain, Fatima Shafiq, Alyza Muhammad Ali, Hijaan Mitha, Ramla Makhdomi, Lumaan Sheikh

Aga Khan University, Karachi, Pakistan

#### **BACKGROUND**

Covid-19 became a global crisis due to the mounting infection rates triggering severe disease that rapidly led to death while burdening strong health infrastructures and economies. The already ill-equipped health and education systems of resource-struggling Pakistan pressured parenting amidst extended school closures and weakening family income. Especially parents who were expecting their first child or finding it tough to manage home schooling. In such crisis hospitals should step in to support, educate and counsel parents to develop responsive caregiving skills and can act as a hub to support to parents to provide holistic wellbeing to their children.

#### **OBJECTIVE**

To establish an early childhood development (ECD) parenting readiness education program (PREP) at a tertiary care hospital.

#### **METHODS**

In response to address the COVID-19 and caregiving challenges, an inclusive model of early childhood development parenting readiness and education program was launched at a Tertiary care hospital. It entails five major components of support parenting and promote ECD concepts from antenatal education classes, newborn parenting education, ECD outpatient parenting consultation, workforce development on responsive caregiving and systems strengthening.

#### **RESULTS**

The program was initiated last year and we are planning an outcome and effectiveness study around our model. There is some preliminary data around parents perception on the effectiveness and satisfaction of the program. We found parents to be responsive and satisfied on these initiatives from our health care setting.

#### CONCLUSION

Healthcare sector can use this inhouse parenting education model to educate parents to navigate the challenges of the times.

#### **TOPIC CATEGORY**

Intervention: 1i) Parent Training





#### **ORAL PRESENTATION**

#### Abstract ID Number: 66

FAMILY STRESS, HEALTH CARE EXPERIENCES AND SATISFACTION, AND HEALTH SERVICE UTILIZATION AMONG CHILDREN WITH NEURODEVELOPMENTAL DISORDERS AT TERTIARY CENTRE IN SOUTH AFRICA

#### **Florence Oringe**

University of Cape Town, Cape Town, South Africa. Kenyatta University, Nairobi, Kenya

#### **OBJECTIVES**

We evaluated how caregiver stress, health care experiences and level of service satisfaction influence health services utilization (HSU) among children with global developmental delays (GDD) and autism spectrum disorder (ASD) attending services at a tertiary centre in South Africa.

#### **METHODS**

In this retrospective cohort study, we assessed caregiver stress, experiences and service satisfaction using previously validated tools (Brief Family distress scale, 'The brief questionnaire for assessing health care experiences scale,' and the 'Patient satisfaction questionnaire-18'). HSU was determined by a retrospective review of medical records in preceding year. Logistic regression analysis was done. Consent was sought.

#### **RESULTS**

We enrolled 240 children aged 3-8 years, 124 had GDD and 116 had ASD. Overall, mean rating on family distress scale was 3.3 out of 10 (SD 1.2). Most households reported favourable ratings on care experiences, with highest rating reported on communication subscales (3.5 out of 5). Overall mean rating on satisfaction scale was 23.9/ 35 (68.3%), with the lowest recorded on subscales 'time spent with doctor' (2.9), and accessibility (2.7). The mean frequency of service visits was 12.4 (SD 5.7) visits per child per annum, but higher in GDD (13.3), versus ASD (11.5), (p=0.02). Increasing scores on the family distress scale predicted lower HSU, with 1 fewer visit per annum per unit increase in the distress score (p=0.003). A higher satisfaction score predicted a greater HSU.

#### CONCLUSION

Overall, high family stress was associated with lower HSU. Among ASD households, low level of satisfaction predicted lower HSU. Client - oriented services may improve service access.

#### **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





#### **ORAL PRESENTATION**

Abstract ID Number: 68

# THE PREVALENCE AND RISK FACTORS OF DEVELOPMENTAL DELAY AMONG PRESCHOOLERS IN TURKEY; A MULTICENTER STUDY

<u>Evin Ilter Bahadur</u><sup>1</sup>, Pınar Zengin Akkuş<sup>2</sup>, Mehmet Yan<sup>3</sup>, Miray Yılmaz Çelebi<sup>4</sup>, Mine İnal Akkaya<sup>3</sup>, Remziye Baran<sup>4</sup>, Nuran Çelik<sup>4</sup>, Gökçenur Özdemir<sup>5</sup>, Asena Ayça Özdemir<sup>6</sup>, Ali Kanık<sup>3</sup>, Elif Nursel Özmert<sup>7</sup>

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- <sup>3</sup>İzmir Tepecik Training and Researc Hospital, Izmir, Turkey.
- <sup>4</sup>Diyarbakır Gazi Yaşargil Training and Researc Hospital, Diyarbakır, Turkey.
- <sup>5</sup>Hacettepe University Faculty of Medicine, Ankara, Turkey.
- <sup>6</sup>Mersin University Department of Medical Education, Mersin, Turkey.
- <sup>7</sup>Hacettepe University Faculty of Medicine Department of Pediatrics, Division of Developmental Pediatrics, Ankara, Turkey

#### **OBJECTIVE**

The study aimed to assess the prevalence rates and the potential risk factors of developmental delay (DD) among Turkish preschoolers.

#### **METHODS**

This was a cross-sectional study conducted in three health clinics, between December 2018 - June 2019. The clinics were located in three different region, Diyarbakır, Izmir and Ankara. The Ages and Stages Questionnaires were applied to children via face-to-face interviews by the researchers. The sociodemographic characteristics and daily activities were evaluated using questionnaires that were specifically developed for the present study.

#### **RESULTS**

The study included 300 preschoolers who had no chronic disease. The median age of children was 60 months (IQR:53-66 months, range 48-72 months), 51% (n=153) were boys, 77.3% of mothers were unemployed, about a quarter of parents graduated from university, 27.1% of parents had low income. The prevalence rates of DD were following: language delay 6.3% (n=19), gross motor delay 1% (n=3), fine motor delay 10% (n=30), cognitive delay 6% (n=18), and global DD 29% according to ASQ- 3. Higher parental education, having no siblings were associated with communication; age, higher paternal education, preschool education, and shared book reading were associated with fine motor; age, younger mother, shared book reading, having a bedtime routine, less screen time were associated with personal-social domains.

#### **CONCLUSIONS**

Daily activities as preventable risk factors should be evaluated, as well as sociodemographic factors for the intervention of DD.

#### **TOPIC CATEGORY**

Early Childhood Development: -





#### **ORAL PRESENTATION**

Abstract ID Number: 74

YOUNG AND PRESCHOOL AGED CHILDREN'S DEVELOPMENT IN BABY HOMES IN UKRAINE: FIRST NATIONAL RESEACH

#### Olena Riga<sup>1</sup>, Andriy Penkov<sup>2</sup>, Tetiana Kurilina<sup>3</sup>

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<sup>2</sup>Eastern-Ukrainian Academy of Pediatrics, Kharkiv, Ukraine

<sup>3</sup>Shupyk National Healthcare University, Kyiv, Ukraine

#### **OBJECTIVE**

To assess a development of young and preschool aged children in baby homes in Ukraine.

#### **METHODS**

This study was the Pilot assessment of residential healthcare facilities for children and development of recommendations for reform, funded by the USAID and the UK Government's Good.

Governance Fund in five baby homes in the years 2019-2020. The study included cohort of 406 children from total 415 residents aged from 0 till 6 years 8 months old. Developmental assessment of children was performed by using the Red Flags Early Identification Guide for children aged birth to five years of Children's Health Queensland Hospital and Health Service. There were assessed socio-emotional development, communications, cognition/fine motor and gross motor function.

#### **RESULTS**

Almost all children in the five baby homes had developmental delays: 353 (86.9 %). The deep analysis of holistic children's health helped to distinguish between those with developmental delays due to serious diseases (severe perinatal pathology, central nervous system malformations, microcephaly, hydrocephalus, congenital and hereditary metabolic diseases, chromosomal anomaly, cerebral palsy, etc.) and those whose developmental delays were solely because of deprivation. There were 118 and 235 respectively. A high percentage (86 %) of children with a cognitive impairment suggests about irreversible changes in brain function due to deprivation. Deprivation especially impacts socio-emotional and communication developments.

#### CONCLUSIONS

Developmental delays in children are commonly linked to negative environmental impacts: socio-emotional development, communication, and cognitive development and catastrophically need of national deinstitualisation process. The implementation of tools for developmental delay in routine practics in Ukraine is nessessary.

#### **TOPIC CATEGORY**

Risk Factors for Developmental Disabilities: -





#### **ORAL PRESENTATION**

#### Abstract ID Number: 81

# HOME-BASED EARLY INTERVENTION FOR CHILDREN WITH SPECIAL NEEDS IN RURAL INDIA, USING PHONE BASED APPLICATION

#### **Nandita Chattopadhyayy**

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#### **BACKGROUND**

High prevalence of neuro-developmental disorders among children coupled with scanty facilities for early detection and early intervention (EI) is a major problem in rural India. Moreover, 60-70% of children drop out after one or two visits because of the distance and difficult commute. Our project was conceived to deliver regular service at their doorstep through community workers, with parental involvement, maintaining constant vigilance by specialist team.

#### **OBJECTIVE**

- 1. Home based Early Intervention (EI) service through locally trained Community Workers (CW)
- 2. CW field activities monitored by developmental specialists remotely
- 3. Spaced out specialist clinics

#### **METHODS**

The CWs are trained in EI methods and use of an application which provides end-to-end case management, built-in scheduling & monitoring facilities. The app connects community workers to specialists to ensure high quality EI to beneficiaries. (Courtesy ASSA, from whom app license was purchased).

Initial case detection, assessment and treatment plan done by Specialist and methods demonstrated to CWs.

CWs conduct weekly therapy sessions at home, involving parents, while specialists monitor remotely.

Therapists review patients on-site at clinic every 2-3 months.

#### **RESULTS**

We are being able to reach out to marginalized children from the remotest corners, who were hereto unreachable.

Regularity in therapy and better parental involvement is yielding better results.

More parents showing interest to join the program.

#### **CONCLUSION**

This hybrid program of home-based service using an app along-with spaced out clinic based specialized services is a cost-effective program for LMICs.

#### **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





# **ORAL PRESENTATION**

◆ Abstract ID Number: 87

# PATTERNS OF FEEDING DIFFICULTIES AND BEHAVIORS IN FILIPINO CHILDREN WITH AUTISM SPECTRUM DISORDER AND THE IMPACT OF THE COVID19- PANDEMIC

# **Francesca Antonina Fernandez**

Philippine General Hospital, Manila, Philippines

## **OBJECTIVES**

This study primarily aims to describe the patterns of feeding difficulties and behaviors of Filipino children diagnosed with Autism Spectrum Disorder (ASD). Secondary objectives are 1) to explore the association between these and sociodemographic variables and early child feeding history and 2) to identify the impact of COVID-19 to these.

# **METHODS**

An electronic mealtime survey was administered to caregivers of 3- to 9-year-old children diagnosed with ASD in a Philippine tertiary government hospital. Descriptive statistics and correlation analyses between feeding difficulties and sociodemographic data and early feeding history were performed. The impact of the COVID-19 pandemic to these was analyzed through a binomial test.

## **RESULTS**

All of the 115 study subjects reported at least one problematic feeding behavior, with picky eating being the most frequent (61.74%). Significantly more feeding difficulties were observed among the children whose caregivers were college-graduates and those with reported early feeding difficulties during their 2nd and 3rd year of life. The study was unable to document statistically significant changes in feeding behaviors during the past 6 months of the COVID-19 pandemic.

# **CONCLUSION**

There is a high prevalence of feeding difficulties and problematic feeding behavior among Filipino children with ASD, however no significant changes to these during the past 6 months of the COVID-19 pandemic were documented. Present feeding difficulties and behaviors were associated with high parental level of education, and history of early feeding difficulties, highlighting the need to include feeding difficulties in screening tools and early training programs and interventions for children with ASD.

# **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





# **ORAL PRESENTATION**

Abstract ID Number: 89

# TELETHERAPY FOR CHILDREN WITH DEVELOPMENTAL DISORDERS DURING THE COVID19- PANDEMIC IN THE PHILIPPINES: A MIXED-METHODS EVALUATION

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- <sup>3</sup>Ateneo de Manila University, Quezon City, Philippines

#### **OBJECTIVES**

As a response to the lockdown associated with COVID-19 in the Philippines, therapy services for children with developmental disorders shifted to telehealth (i.e., teletherapy). This study evaluated the delivery of teletherapy in the first year of the pandemic (i.e., 2020) from the perspectives of parents and therapists.

## **METHODS**

Participants consisted of parents (n=47) and therapists (n=102) of children with developmental disorders who were participating in teletherapy sessions during the lockdown. A mixed-methods triangulation design-convergence model was adopted; participants were invited to respond to an online survey with closed- and open-ended questions. Data were gathered from September to October 2020. Quantitative data were analyzed using descriptive and non-parametric inferential tests, while qualitative data were examined using a six-phase process for thematic analysis.

# **RESULTS**

Overall satisfaction with teletherapy was positive, with parents reporting significantly higher satisfaction compared to therapists. Satisfaction was positively associated with the frequency of teletherapy sessions for parents, and with their years of experience for therapists. The top enablers are family participation and effective communication between stakeholders. The main challenges were associated with time constraints, and difficulty with instruction and monitoring due to the two-dimensional nature of teletherapy. The perceived benefits included parents' empowerment and enhanced understanding of their children's needs.

#### CONCLUSIONS

The shift to teletherapy facilitated a heightened focus on family-centered care. The evaluation findings suggest that the general satisfaction with teletherapy and the benefits associated with family-centered care will likely promote teletherapy as a service delivery mode to continue beyond the pandemic.

# **TOPIC CATEGORY**

Intervention: 1k) Others





# **ORAL PRESENTATION**

Abstract ID Number: 90

TIMELY IDENTIFICATION AND EARLY INTERVENTION CHILD DEVELOPMENT SERVICES IN LOW RESOURCE SETTINGS IN CENTRAL GUJARAT, INDIA.

# Rashida Jawadwala, Urja Shah, Ambadas Adhav

SETCO FOUNDATION, KALOL, India

## **OBJECTIVES**

- 1) To assess the improvement in the developmental delay of children by intervention provided by trained Community Health Workers & Child Development Aides as a part of the PAHEL Early Child Development Project.
- 2) To identify the specific areas of delay in the children of Kalol block of Panchamahal district being served by the PAHEL Project.

## **METHODS**

The data was collected retrospectively for a group of children classified as developmentally delayed by the International Guide for Monitoring Child Development (IGMCD) tool. The children who showed typical development as assessed by the IGMCD tool in this cohort after receiving intervention for 3 years were identified. The specific areas of delay in each child and improvement were also recorded.

## **RESULT**

85%, 55%, and 59% of the developmentally delayed children enrolled in the project at the start of 2014, 2015, and 2016 respectively showed typical development at the end of 3 years of intervention provided by the trained Child Development Aides. Speech delay was the most prevalent area of delay among the children in Kalol block of Panchmahal district, Gujarat, India. The program brought about qualitative change in the community's outlook towards developmental disability.

#### CONCLUSION

Community health workers can be trained to identify developmental delay using the IGMCD tool and intervention can be provided through Child Development Aides in rural areas being served at Anganwadis. This increases the accessibility of timely identification and intervention for developmental delay in the children of rural areas in India.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 91

# INTEGRATING AN EARLY CHILDHOOD DEVELOPMENT INTERVENTION WITH ROUTINE HEALTHCARE VISITS IN INDIA

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### **OBJECTIVE**

Evaluate the feasibility and acceptability of integrating Sit Down and Play (SDP), an adapted early childhood development (ECD) intervention, with routine immunization visits in primary health centers (PHCs) serving low-income rural communities in Karnataka, India.

## **METHODS**

Using a static group comparison design, caregivers with infants 6-10 weeks of age were recruited from 2 PHCs: one which delivered the intervention during immunization visits (n=25) and the other as control (n=28; care as usual). Though all caregivers were to be interviewed one month later, due to the COVID19 pandemic and resulting restrictions, there was variability in timing of follow-up interviews. Parenting practices were measured with key items from the UNICEF Multiple Cluster Index Surveys using Generalized Estimating Equation models.

# **RESULTS**

Most caregivers identified as mothers (66%) or grandmothers (32%). No significant differences existed between contact time between groups. We were able to: 1) deliver SDP during all immunization visits in the intervention group; 2) develop training and fidelity measures; and 3) collect outcome measures from all participants (n=53). Our exploratory analyses revealed a significant main effect of time, and an interaction between time and condition favoring the intervention group on cognitive stimulation [group x time estimate 2.52, 95%CI (0.08, 4.95), p=0.043].

#### CONCLUSION

This study suggests integrating an ECD intervention with routine healthcare visits in PHCs is feasible and offers a promising strategy to improve reach of ECD interventions. Futures studies are needed to determine the feasibility of delivery by community health workers and effectiveness of SDP on children's development.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 92

# NEURODEVELOPMENT DEVELOPMENT DELAY AMONG CHILDREN AND RELATED SERVICES AVAILABILITY AND READINESS IN UGANDA

# Harriet BABIKAKO<sup>1</sup>, Ezekiel Musasizi<sup>2</sup>, Ezekiel Mupere<sup>3</sup>, Melissa Gladstone<sup>4</sup>

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- <sup>2</sup>Child and Family Foundation Uganda, Kampala, Uganda
- <sup>3</sup>Department of Peadiatrics and Child Health, College of Health Sciences, Makerere University, Kampala, Uganda
- <sup>4</sup>Department of Women and Children's Health, University of Liverpool, Liverpool, United Kingdom

# **BACKGROUND**

Neurodevelopmental Delays (NDD) affects ~250 million children under five. Uganda's health policy seeks to strengthen the health system so that it is responsive to the health needs of its people, including those with neurodevelopmental disorders. This study described the unmet healthcare needs and the capacity of health facilities to provide the appropriate services to children with disabilities.

# **METHODS**

We enrolled 283 participants and collected data from 143 health facilities (HFs) from Kampala, Wakiso, and Mukono using the WHO Service Availability and Readiness Assessment (SARA) tool. This tool was adapted for identifying gaps in services for child neurodevelopment services and collected data on staff training, amenities, and equipment, analyzed using descriptive statistics.

# **RESULTS**

The mean age was 2.8 years, mostly (52%) boys, and 40% had NDD. 67% of the children reported unmet healthcare needs. More children had a high (82%) proportion of unmet healthcare needs. Most (51.7%) health centers were government-owned. 70% of all HFs didn't have a cadre in charge of child disability nor anyone trained in child development. 6% of the HFs had all the basic amenities (power, communication equipment, access to computer with internet) with only 35% of HFs having basic equipment required for assessing children.

#### CONCLUSION

We describe the inequity that exists in healthcare needs by development status and we demonstrate a large gap in neurodevelopmental service availability and readiness within the Ugandan health system. Child neurodevelopment needs to be prioritized if we are to meet the SDG goals of "all children thriving by 2030".

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

# Abstract ID Number: 93

KLINIK KENIT – POSITIVE IMPACTS OF INTEGRATED EARLY CHILDHOOD DEVELOPMENT SERVICES ON CHILDREN AND FAMILIES WITH SOCIO-ECONOMIC VULNERABILITY DURING THE PANDEMIC.

# N Raihan Mohamed<sup>1</sup>, Asma Rasli<sup>2</sup>, Maryam Hafsah Selamat<sup>1</sup>

<sup>1</sup>Klinik Kenit, Kuala Lumpur, Malaysia.

Hospital Canselor Tuanku Muhriz, Kuala Lumpur, Malaysia

About 43% of children in low and middle-income countries are at risk of not achieving their full potential and the Covid19 pandemic has worsened the situation. Young children need nurturing care which includes health, nutrition and growth, safety and protection, responsive caregiving and early learning opportunity or early developmental stimulation.

# **OBJECTIVES**

Klinik Kenit provides healthcare and intervention services as well as a toy library as a social place for parents' support groups and playgroups. We do developmental screening to identify children with developmental difficulties besides health, growth and nutrition care. We also spend more time with parents to share parenting knowledge and advocating play to enhance children's development. We subsidized the fees to ensure accessibility and affordability to most families.

# **METHODS**

We do a comprehensive assessment and screening for every child and family during the first visit. For those with developmental issues, they were given early supports like parenting program, occupational therapy, speech therapy and play therapy. Then we get the parents' feedback on the services after at least two sessions.

# **RESULTS**

Early identification of developmental issues is much needed as the early years are the period of rapid brain growth. And early interventions give impressive results even in a short duration. Parents reported growth in knowledge related to helping their children to develop and overcoming the negative effects of the pandemic.

# **CONCLUSION**

Integrated child and family services is a revolution in primary healthcare in Malaysia as it gives a positive impact on children and families health and well-being.

## **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 96

# EARLY CHILDHOOD DEVELOPMENT SERVICES DURING THE COVID19- PANDEMIC IN AZERBAIJAN, KYRGYZSTAN, AND TURKMENISTAN

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- <sup>3</sup>International School of Medicine, Bishkek, Kyrgyzstan
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- <sup>6</sup>UNICEF Turkmenistan, Ashqabat, Turkmenistan
- <sup>7</sup>UNICEF Azerbaijan, Baku, Azerbaijan
- <sup>8</sup>UNICEF Kyrgyzstan, Bishkek, Kyrgyzstan

# **OBJECTIVE**

To determine whether early childhood development (ECD) services were sustained through the COVID-19 pandemic in countries with similar centralized healthcare systems.

# **METHODS**

Qualitative methodology was used to obtain information on ECD services in Azerbaijan, Kyrgyzstan, and Turkmenistan. UNICEF leads and ECD champions affiliated with ministry of health were interviewed distantly by a researcher using a semi-structured questionnaire.

# **RESULTS**

Two professionals from Azerbaijan and Turkmenistan each, and four from Kyrgyzstan were interviewed. UNICEF leads reported that ECD services delivered through primary healthcare became sporadic during the pandemic. Referral centers continued to provide face-to face and telehealth ECD services in Azerbaijan and Kyrgyzstan, and face-to-face services only in Turkmenistan. Face-to-face scaling-up of ECD activities were halted but online undergraduate or in-service training continued. The Guide for Monitoring Child Development (GMCD) was the package used most frequent for services and training; its ease of use, comprehensiveness, readiness of the local training package and the confidence and motivation of local trainers and trained healthcare providers were cited as facilitators to sustainability in all three countries. Common barriers were shifts in healthcare priorities, COVID-19 related demands on staff providing ECD services, and lack of mandatory ECD services. Others were insufficient government support, and limited access to telehealth infrastructure.

# **CONCLUSIONS**

Results imply that pre-crisis ECD initiatives are important to sustainability during crises. Primary care appears to be more vulnerable than referral centers when healthcare priorities change. ECD becoming mandated in primary care and improving telehealth ECD services appear important to sustaining ECD services during crises.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

◆ Abstract ID Number: 98

# THE USE OF THE EXPANDED GUIDE FOR MONITORING CHILD DEVELOPMENT FOR EARLY INTERVENTION DURING THE PANDEMIC LOCKDOWN IN AZERBAIJAN

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#### **OBJECTIVE**

We aimed to determine whether the Expanded Guide for Monitoring Child Development (GMCD) could be implemented at Children's Rehabilitation Center in Baku, Azerbaijan to obtain comprehensive intake information that could guide telehealth interventions during the pandemic lockdown.

#### **METHODS**

We digitally sent the Expanded GMCD to families of children referred to Center for the first time during the lockdown and asked for completion and accompanying home videos. The Expanded GMCD is a written open-ended questionnaire incorporating the World Health Organization International Classification of Functioning, Disability and Health (ICF) and Nurturing Care frameworks.

# **RESULTS**

During the 6 month lockdown, the Expanded GMCD was sent to 79 families; 64 (81%) completed it and sent it back, 57 accompanied with parent recorded videos in the homes. Most children were boys (61%); 17 (27%) had autism spectrum disorder,16 (25%) multiple disabilities, 14 (22%) motor disorders, 13 (20%) cognitive and/or language delay. Interventions were initiated based on the Expanded GMCD and the videos for 62 children (97%). After analysing the completed Expanded GMCDs and videos, specialists at Center developed intervention plans together with the families via audio or video communication. If there was a need, the children were sent for diagnostic and laboratory tests and families were asked for videos to monitor the intervention process. Most of the children (87%) received services at Center after the lockdown.

# **CONCLUSIONS**

The Expanded GMCD provided key information required for a remote assessment and enabled initiating interventions at home during the pandemic lockdown in Baku, Azerbaijan.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 100

# EXPLORING CULTURAL ADAPTATION OF WECHSLER PRESCHOOL AND PRIMARY SCALE OF INTELLIGENCE FOR USE IN BANGLADESH

<u>Shamima Shiraji</u>, Syeda Fardina Mehrin, Afroza Hilaly, Dr. Fahmida Tofail, Dr. Jena Hamadani *ICDDR,B, Dhaka, Bangladesh* 

#### **OBJECTIVE**

There is a global commitment to establish early childhood interventions to promote development of disadvantaged children, but lack of indigenous/standardized measures is a challenge in low- and middle-income countries.

We aimed to adapt the Wechsler Preschool and Primary Scale of Intelligence (WPPSI-III) for use in Bangladeshi children.

## **METHOD**

The validation of WPPSI-III was performed in six steps. Translation, back translation, synthetization, expert review, piloting and psychometric properties. Seven subtests of the test viz. blocks design, information, matrix reasoning, vocabulary picture completion and coding were used. Pilot test was conducted on 40 children in Matlab, Bangladesh to prepare the final version of the test. Test- retest reliability was measured on a sample of 60 children at 7 days interval. The test was then administered on 2260 children at 64 months to obtain psychometric properties.

# **RESULTS**

Inter-observer reliability between the tester and trainer was strong (r>0.92). The test-retest reliability showed moderate to strong correlation coefficients (r ranged from 0.45 to 0.96). The correlations between the subtests were mild to moderate (r ranged from 0.29 to 0.60, p<0.001). Concurrent validity showed significant association of full-scale IQ (FSIQ) with maternal education (r=0.43, p<0.001) and depression (r=-0.17, p<0.001). Moderate correlation of FSIQ with Mental Development Index of BSID-II indicated its convergent validity. Furthermore the instrument differentiated between the quintiles of wealth index (p=0.005) supporting its discriminate validity.

# **CONCLUSION**

The WPPSI-III is a valid and reliable tool in Bangladesh. The tool, therefore, may be used to assess the IQ of Bangladeshi children with confidence.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 101

# NON-SPECIALISTS DELIVERED PARENT-MEDIATED AUTISM INTERVENTION ADAPTED FOR VIRTUAL DELIVERY IN RESPONSE TO THE COVID19- LOCKDOWN IN DELHI, INDIA

<u>Lavangi Naithani</u><sup>1</sup>, Priya Sangwan<sup>1</sup>, Shweta Lakhera<sup>1</sup>, Sanjana Guha Roy<sup>1</sup>, Zakiya Azar<sup>1</sup>, Vivek Vajaratkar<sup>2</sup>, Carol Taylor<sup>3</sup>, Vikram Patel<sup>4</sup>, Jonathan Green<sup>3</sup>, Gauri Divan<sup>1</sup>

<sup>1</sup>Sangath, Delhi, India

# **OBJECTIVE**

To examine the acceptability and feasibility of adapting the evidence-based PASS Plus for virtual delivery to families of children with autism spectrum disorder (ASD).

## **METHODS**

Piloting of virtual session was conducted with 50 families. Two thirds of the families (n=34) were already engaged prior to the lockdown through home based, face-to-face delivery while others were recruited after lockdown (n=16). The steps of adaptation of the intervention included i) introduction of additional modules to support digital literacy ii) alteration to the structure of sessions of the intervention iii) documentation of barriers and facilitators in implementing virtual sessions iv) Establishing mitigating strategies to overcome barriers v) development of virtual training and supervision methodologies.

# **RESULTS**

Of the total participants (n=34) receiving intervention before lockdown, half of them (n=17) agreed to virtual delivery. The barriers to virtual delivery for families included i) Personal reasons: e.g. preference for face-to-face sessions (n=4), concern over misuse of shared video for intervention delivery (n=1), lack of space (n=1) and lack of time (n=2) ii) Technology related reasons: poor connectivity (n=1), absence of smartphone (n=2) or low digital literacy (n=1) iii) Families uncontactable (n=3) iv) Financial concern: lack of money for data services (n=2). These factors were considered during adaption, before approaching new participants (n=16) for complete virtual delivery.

# **CONCLUSION**

This intervention was successfully adapted for virtual delivery, with some service provider and user barriers. However, the restricted digital access was the major drawback of virtual sessions which expands the digital divide for already vulnerable families.

# **TOPIC CATEGORY**

Intervention: 1i) Parent Training

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# **ORAL PRESENTATION**

Abstract ID Number: 103

# ASSOCIATION OF PARENTAL EDUCATION AND MATERNAL DEPRESSION WITH CHILD GROWTH AND DEVELOPMENT- A CROSS-SECTIONAL APPROACH

<u>Nur E Salveen, Syeda Fardina Mehrin, Shamima Shiraji, Masuma Kawsir, Mohammed Imrul Hasan, Sheikh Jamal Hossain, Jena D. Hamadani</u>

ICDDR,B, DHAKA, Bangladesh

# **OBJECTIVE**

Low parental education and poor mental health adversely affect children's development. We aimed to explore the association of parents' education and mothers' depression with child growth and development in rural Bangladesh.

# **METHOD**

Growth indicator, length and weight were measured using WHO anthro guideline and developmental indices as cognitive, language and motor development were measured using Bayley-III of 666 children aged 6 to 24 months. Information on socio-economic factors, parents' education employment, quality of home stimulation and maternal depression was collected from mothers. We used linear multiple regression analysis to control for confounders related to child growth and development.

# **RESULT**

Parents who had higher education had less stunted (father: B=0.29, 95%Cl=0.10-0.49, P=0.003,mother: B=0.18, 95%Cl=-0.003-0.36, P=0.054) and underweight (father: B=0.15, 95%Cl=0.005-0.29, P=0.043,mother: B=0.13, 95%Cl=0.001 to 0.27, P=0.047) children. These children had got higher scores in language (father: B=2.91, 95%Cl=1.11-4.7, P=0.002,mother: B=2.1, 95%Cl=0.45-3.8, P=0.013) and motor (father: B=2.69, 95%Cl=0.72-4.7, P=0.008,mother: B=2.0, 95%Cl=0.14 to 3.81, P=0.035) composite scores. Similarly children of better educated fathers were found to be happier (B=0.164, 95%Cl=0.03-0.3, P=0.018). Less educated mothers had more depressive symptoms (B=-3.03, 95%Cl=-4.28to -1.8, P<0.001) and their children scored lower in cognition (B=-0.056, 95%Cl=-0.11-0.000, P=0.050). Children having more toys at home to play and better interaction with adults had higher motor composite scores (P=0.027 to 0.043).

# **CONCLUSIONS**

Parental education and maternal mental well-being are strong determinants of child growth and development. Improving education of the population may lead to lower maternal depression and smarter and happier children.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 105

SCHOOL ATTENDANCE AND PARENTS' ATTITUDE REGARDING SCHOOLING OF CHILDREN WHO PARTICIPATED IN AN EARLY INTERVENTION PROGRAMME A FOLLOW UP STUDY

<u>Masuma Kawsir</u>, Syeda Fardina Mehin, Nur E Salveen, Mohammed Saiful Alam Bhuiyan, Sheikh Jamal Hossain, Jena Derakhshani Hamadani

ICDDR,B, Dhaka, Bangladesh

# **OBJECTIVE**

Parental knowledge and lower quality of home stimulation impact children's schooling. We aimed to follow-up the children who participated in a randomized controlled trial of psychosocial stimulation to determine if the intervention affected their schooling and major morbidities since the end of intervention almost 5 years ago.

#### **METHOD**

We conducted the survey over phone interviews using a structured questionnaire. There were a total of 2452 children in the original study half of whom received intervention. Initially, we conducted unadjusted analysis using student t-test and then liner regression analysis to measure the group differences controlling for confounders.

# **RESULT**

We were able to trace 2292 children (93%) of which 1193 (52%) were in intervention and 1099 (48%) in control group. We found more children in the intervention group (53%) attending school compared to control (47%) (B=0.02, 95%Cl=0.003-0.040, P=0.020). The mothers of intervened children were also more willing to allow their children in after school hour academic intervention (B=0.017, 95%Cl=0.001-0.034, P=0.057). Compared to control group more families in the intervention group owned a computer at home (60%) then the control (40%) (B=0.048, 95%Cl= 0.017-0.079, P=0.002). We found no difference in the history of any major illness or hospitalization in the groups.

# **CONCLUSIONS**

It is likely that early stimulation sustained mothers' interest and awareness in ensuring schooling and proper education of the children. Further follow-up of these children can shed more light on effects of intervention on children's IQ.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 106

# CHILDREN'S OCCIPITOFRONTAL CIRCUMFERENCE PREDICTS THEIR DEVELOPMENT AND BEHAVIOR CONCURRENTLY

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# **OBJECTIVE**

There is inconclusive evidence on the relationship of children's occipitofrontal circumference (OFC) with their development and behavior. We aimed to explore the relationship of OFC with child development and behavior in malnourished children.

## **METHOD**

This is a post-hoc analysis of baseline data of a randomized controlled trial of psychosocial stimulation where 6-24 months old malnourished children (n=1489) participated for one year. We measured children's development using Bayley-III test and rated their behavior on Wolke's ratings. Maternal depression and socio-economic condition were also assessed. We excluded children with OFC z- scores between -3 and -2 SD and compared severe microcephaly (OFC <-3SD) with normal OFC (>-2SD). Statistical analyses were done using Independent sample t-test, Chi-square, bivariate correlation and multiple linear regression analysis. Variables that were correlated to developmental measures were considered as confounders.

# **RESULTS**

In the original study 1489 children participated, out of whom 212 (14%) had severe microcephaly and 712 (48%) had normal OFC. OFC was associated with maternal education, parenting practices, all nutritional and developmental indices, cooperativeness and vocalization. In multiple regression analysis, controlling for relevant confounders, children with normal OFC had higher cognitive (B=1.81, 95%Cl=-0.05-3.67, p=0.057) and motor (B=2.98, 95% Cl=1.54-4.41, p<0.001) scores and were less hyperactive (B=-0.112, 95%Cl=-0.23-0.005, p=0.060) and more co-operative (B=0.11, 95%Cl=-0.003-0.218, p=0.055) but it only approached significance in cognition, activity and cooperativeness.

# **CONCLUSION**

Children with severe microcephaly had poorer cognition and motor development. Using Head circumference as an early diagnostic tool may be a good practice to take corrective measures like psychosocial stimulation.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 109

# HOUSEHOLD VIOLENCE AGAINST WOMEN: PATTERN AND ASSOCIATION WITH CHILDREN'S HOME STIMULATION IN RURAL BANGLADESH

# <u>Sheikh Jamal Hossain</u><sup>1,2</sup>, Bharati Rani Roy¹, <u>Hasan Mahmud Sujon</u>¹, Shamima Shiraji¹, Fahmida Tofail¹, Syed Moshfiqur Rahman³, Jena Hamadani¹

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- <sup>3</sup>Department of Women's and Children's Health, Uppsala University, Sweden, Uppsala, Bangladesh

# **OBJECTIVE**

Violence against women (VAW) can have negative impact on maternal health which may results in inappropriate stimulating environment for children. There is little information on pattern of VAW and its association with children's home stimulation in low-and-middle-income countries. The objective of this study was to understand the pattern of VAW and its association with home stimulation.

#### **METHODS**

It was a cross sectional study, using baseline information of a randomized controlled trial in a rural Bangladeshi setting. Family care Indicators (FCI) was used to measure children's home stimulation. Information on physical, psychological and sexual violence against mothers was collected in the preceding month of the interview. Descriptive statistics were used to understand pattern of violence and multivariable regression model was used to see the association with FCI score. Variation inflation factor (VIF) was used to see if there was any multicollinearity in the regression model.

## **RESULT**

594 mothers having a child aged 6-16 months were interviewed. In total, 21.59% (128/594) mothers experienced violence in the last months, with 8.95%, 13.68% and 7.26% physical, psychological and sexual violence respectively. Husbands were the main perpetrators. Adjusted model of multivariable regression found that depressed mothers and those who experienced households' VAW provided less stimulating activities for their children while better educated mothers offered more psychosocial stimulation to their children. Low VIF score confirmed that there was no multi collinearity in the regression model.

# **CONCLUSION**

Maternal health including prevention of VAW should be considered for improved children's stimulation environment.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 112

# THE IMPACT OF COVID-19 PANDEMIC ON PATIENT ADMISSIONS TO A DEVELOPMENTAL PEDIATRICTS UNIT

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# **OBJECTIVE**

To analyse the impact of Covid-19 Pandemic on the number and diagnosis patterns of patients admitting to Developmental Pediatrics Unit (DPU).

#### **METHODS**

We compared the number and the diagnosis of patients applied to DPU by using ICD-10 codes of Turgut Ozal Medical Center's electronic health record data before and after 18 months from March 16 2020 –the beginning date declared a pandemic in Turkey. The Chi square test was used for statistical analyses.

# **RESULTS**

The number of patients admitted to DPU decreased during pandemic (precovid n=1107, during Covid n=761). There was no significant difference between the ratio of the most common diagnosis (prematurity) for pre and during pandemic period (32%, 30.6% respectively). The admission of children with speech delay (17.4% - 23%, p=0,003) increased with the pandemic while there was a significant decrease in children with Down Syndrome (DS) (11.6% - 6.6%, p<0,001).

## **CONCLUSIONS**

The pandemic has significantly and adversely affected the admisson of patients with developmental difficulties to DPU. Stay at home orders, increase in electronic screen exposures and lack of stimuli in children may have increased the number of children with speech delay. Increased risk for severe illness from Covid 19 has probably decreased the admission of children with DS for developmental follow up. The decrease in admission of patients who require developmental follow-up, reveals additional efforts such as implementing telehealth to our daily practice.

# **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





# **ORAL PRESENTATION**

Abstract ID Number: 113

# THE TELEHEALTH EXPERIENCE OF A DEVELOPMENTAL PEDIATRICS UNIT FROM MALATYA, TURKEY

# <u>Halise Metin Baz, Tugba Yilmaz Gencer, Tugba Karaca Ahat, Umut Durak, Mehmet Akif Buyukavci, Derya Gumus Dogan</u>

Developmental Pediatrics Unit, Department of Pediatrics, Faculty of Medicine, Inonu University, Malatya, Turkey

# **OBJECTIVE**

The use of telehealth has increased with the Coronavirus pandemic. The aim of this study is to share the telehealth experiences and the satisfaction of families at Inonu University Developmental Pediatrics Unit (DPU).

## **METHODS**

As of November 2020, online video calls were started with eligible patients. Four fellows in training DP observed the child's environment and interaction with family and evaluated developmental status by clinical assessment and observation during the interview. Following their telehealth visits, families were invited to complete a 5-item survey about their options and satisfactions from the interview.

#### **RESULTS**

We had video calls with 34 patients. The mean age of the patients was 30.1 months and 22 (68%) of them were boys, 12 (32%) were girls. The diagnosis of the patients were speech delay (32.4%), Down Syndrome (26.5%), prematurity (14.6%), hydrocephalus (11.8%), cerebral palsy (5.9%), and syndromic infant (2.9%). Among all families risk of transmission of Coronavirus (63.3%) was the most important reason for telehealth use. Transportation difficulties (23.3%) and alternative solution for homevisits were other choices (13.3%). Thirty families completed the telehealth satisfaction survey. Twenty eight (93.3%) families were "satisfied" or "very satisfied" and 29 (96.6%) of them reported that they "definitely" or "probably" would use telehealth again.

# **CONCLUSIONS**

Online interview option after the first face-to-face visit, will reduce the number of hospital visits of children with special health care needs, and will be an alternative to home visits, which is an essential part of developmental follow up.

## **KEYWORDS**

Telehealth, satisfaction, developmental behavioral pediatrics.

## **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





# **ORAL PRESENTATION**

Abstract ID Number: 118

# THE FAMILY SUPPORT GROUP: COLLABORATING WITH CAREGIVERS TO CO- CREATE SAFE SPACES FOR FAMILIES OF DISABLED CHILDREN DURING THE PANDEMIC

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Ummeed Child Development Center, Mumbai, India

#### OR IFCTIVE

This paper presents the family support group model, a much needed safe space, where families come together to connect with each other through shared topics, leisure, fun activities and celebrations and support each other through shared problems, hopes and dreams.

#### **MFTHODS**

The family support group is being conducted online once a month for a duration of 2 hours for the past 18 months. Different topics related to mental well-being like the little things they do to hold on to hope during the pandemic; opportunities for leisure, learning new skills were discussed. The topics were chosen based on the needs shared by caregivers. Festivals and special days were celebrated where caregivers along with their children participated in the fun.

# **RESULTS**

Over 100 caregivers have attended this monthly gathering over the last year. Interviews and video documentation of how caregivers felt about the sessions were captured. Caregivers shared that meeting like-minded people, having a safe place to share their experiences, was very helpful and they did not feel that they were alone in this journey anymore. It is a space that they look forward to coming to every month, the emotional support they received from one-another motivates and re-energises them to face difficulties, to get through the month, to let go of stress and to experience calmness and hopefulness about the future.

# **CONCLUSION**

The family support group model provides a low cost, unique, inclusive and participatory approach to respite for families in middle income countries.

# **TOPIC CATEGORY**

Intervention: 1e) Psychological





# **ORAL PRESENTATION**

Abstract ID Number: 119

# EFFECTS OF ELECTRONIC SCREEN REMOVAL ON BEHAVIOR SYMPTOMS USING CARS-2ST AND ATEC AMONG 36-24 MONTHS OLD WITH AUTISM SPECTRUM DISORDER

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## **OBJECTIVE**

To analyze effects of total versus partial electronic screen removal in improving behavior symptoms among 24-36 months old children fulfilling ASD diagnostic criteria.

# **METHODOLOGY**

Randomized, single-blind controlled study determining effects of electronic screen removal on ASD symptoms prior formal habilitative intervention. Sixty children diagnosed ASD by DSM-5, were randomized into test group (30), which required total removal of all forms of electronic screen use, and control group (30), which regulated use following current AAP recommendations. Childhood Autism Rating Scale (CARS2-ST) and Autism Treatment Evaluation Checklist (ATEC) were accomplished at baseline, after 2 and 4 weeks for analysis.

## **RESULTS**

Fifty-six participants with statistically similar baseline characteristics, completed study. Average exposure of onset and duration were 6 months old and 7 hours/day. Total CARS2-ST within group comparison showed significant improvement in test group after 2nd week (p-value 0.002) and in both groups after 4th week (control p-value 0.002 and test p-value <0.001). Scores comparison after 2 weeks was significant between groups (p-value 0.01284; RR4.8, CI 95%) indicating children without total removal was almost five times more at risk of not improving compared to those with total removal, and beyond 4 weeks, remained to be almost twice at risk of not improving (p-value 0.01609; RR1.9, CI95%). ATEC scores were insignificant between groups.

#### CONCLUSION

Early and prolonged screen exposure is a possible environmental trigger for ASD symptoms. Prior formal intervention, behavior symptoms improved by at least following AAP recommended screen regulation but significantly more if totally removed for at least 4 weeks.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 120

# A MODEL EARLY CHILDHOOD DEVELOPMENT PROGRAM FOR CHILDREN OF ARABIC SPEAKING REFUGEE FAMILIES IN TURKEY

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- <sup>5</sup>Ankara Univesity, Ankara, Turkey

# **OBJECTIVE**

Early childhood development (ECD) services are greatly needed for refugee children globally. We present a model program in Ankara, Turkey, for children of Arabic speaking refugee families.

# **METHODS**

A developmental pediatrics clinic was initiated in a hospital serving large numbers of refugee families. A clinic room was dedicated to ECD services to be delivered by a developmental pediatrician whose native tongue was Arabic. Families were recruited from the general pediatric clinic, developmental pediatrics clinic and pediatric neurology. The international Guide for Monitoring Child Development (GMCD) which includes comprehensive family-centered developmental monitoring, support and early intervention was adapted to Arabic including translation, back-translation, and focus groups on applicability.

# **RESULTS**

The developmental pediatrics clinic initiated one day per week received referrals immediately. Families participated in the family-centered developmental assessment, understood and responded to the GMCD questions, found the assessment useful, stated that they were highly satisfied with the service but did not ask additional questions. All families stated that suggestions for promoting child development were applicable but that they could not apply outdoor activities and participation such as going to the playground due to stigmatization, and going to preschool because of economical constraints.

## CONCLUSION

The findings of this model program indicate that developmental pediatric clinics in tertiary healthcare centers provide easy access to refugee children and that the GMCD package is applicable for Arabic speaking refugee families. Stigmatization and economical constraints must be addressed together with ECD interventions for young refugee children and their families in low and middle-income countries.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

# Abstract ID Number: 121

# THE QUALITY OF LIFE, SITUATIONS AND EMERGING CONCERNS OF PARENTS OF CHILDREN WITH NEURODEVELOPMENTAL DISORDERS IN PCMC DURING THE COVID19-PANDEMIC

# **Annelyn Fatima Lopez, Aileen Marie Vargas**

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The COVID-19 resulted in a public health emergency and quarantine measures which may negatively impact psychosocial and environmental aspects of vulnerable populations. This study intended to determine the quality of life, situations and emerging concerns of parents of children with neurodevelopmental disorders during the ongoing coronavirus pandemic.

Parents of patients seen in the PCMC Neurodevelopmental Pediatrics OPD clinic were recruited to fill out questionnaires on parent and child characteristics, situations and emerging concerns during the coronavirus pandemic and WHOQOL-BREF (Filipino version) for parental quality of life.

Data from 115 respondents showed a lower score in the environmental domain. Child characteristics statistically comparable with QoL scores include sex, severity of ID and ADHD while parent characteristics statistically comparable with the QoL scores include educational attainment, monthly family income, father's employment status and family structure (P-value <0.05). Most respondents reported situations of physical distancing (82.61%) and curfew (80.87%). Inability to access essential services (43.48-74.48%) were further compounded by limited financial resources (51.30%) and public transport (60%). Government policy received included quarantine pass (90.43%), food allowance or relief package (86.09%), disinfection (60.87%), DSWD-SAP (42.61%) and cash distribution (41.74%). Concerns included socio-environmental issues: no available transportation (73.04%), impaired ability to work or earn (70.43%), inadequate rations (50.43%), disruptions in basic social services (47.83%); and patient concerns: access to education (64.35%), medical (44.74%), developmental (33.04%), behavioral (31.3%), nutrition (20%) and sleep (19.13%).

Programs and policies should be planned accordingly to provide improvement of quality of life to parents and their child with neurodevelopmental disorder.

# **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -





# **ORAL PRESENTATION**

Abstract ID Number: 125

# SHARED READING: PARENTAL ATTITUDES, PRACTICES, AND BARRIERS IN A MIDDLE INCOME COUNTRY, TURKEY

# <u>Pelin Celik</u><sup>1</sup>, Zeynep Ozdereli<sup>1</sup>, Meltem Bayram Sen<sup>1</sup>, Ayse Karakutuk<sup>1</sup>, Gokce Baykal Altunkaya<sup>1</sup>, Nuran Celenk<sup>2</sup>

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# **OBJECTIVE**

Understanding the nature of parental shared reading (SR) practices is important for reaching children's developmental potential and subsequent achievement. To address parental attitudes and practices concerning SR, and find out variables and barriers affecting SR.

## **METHOD**

This prospective study enrolled 624 parents of children aged 1-72 months admitted to a tertiary hospital for well-child care or acute minor illness. A questionnaire was filled via face-to-face interview.

# **RESULTS**

41.8% of the parents did not have any books for their children. The median age of starting SR was 12 (0-72) months. Parents with education >8 years, higher socioeconomic status (SES) were more likely to start SR at a younger age (p=0.000). Parents who had not yet started SR reported planning to read at the median age of 20.5 (2-72) months. Daily SR was in 29.5% of the parents and associated with owned >10 child books at home, >8 years of parental education, higher SES, single sibling (p=0.000). The most common parental interactive book-reading techniques were pointing to the pictures and talking about the pictures and story. The most frequent barriers were time constraints and perceiving the child too young to read. 10% of the parents had a recommendation for SR. Receiving a recommendation or parental habit of reading more than one day a week for pleasure leaded reading to their children at an early age and reading daily (p=0.000).

# **CONCLUSION**

Our findings underscore the need for a national strategy integrated into the healthcare system to promote SR, as soon as possible.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 126

# A MODEL OF DEVELOPMENTAL PEDIATRICS FELLOWSHIP TRAINING DURING THE COVID19- PANDEMIC

Bahar Bingoler Pekcici, Ezgi Ozalp Akin, Funda Akpinar, Gamze Hayran, <u>Aysen Akbas</u>, Merve Cicek Kanatli, Sidika Canan Atasoy, Selin Ince, Azize Buyukkoc, Betül Yagbasan, Fatma Zeynep Unlu, Hale Sandikci Iskenderli, Kezban Ozturk, Nuran Celenk, Rukiye Tas, Tugce Guzelkas, Ilgi Ertem Developmental-Behavioral Pediatrics Division, Department of Pediatrics, Ankara University School of Medicine, Ankara, Turkey

## **OBJECTIVE**

Crises in low and middle-income countries calls for rapid adaptation of developmental- behavioral pediatrics training programs. We describe a model program for fellowship training during the pandemic developed and implemented at Ankara University Developmental Pediatrics Division (AUDPD).

## **METHOD**

The AUDPD mission is to nurture fellows' enthusiasm, devotion, and humility to learn, and to serve children and families. Training includes knowledge, skill and attitude building in a) clinical services (promoting development, conducting comprehensive family-centered assessments, using assessment tools, applying individualized interventions to manage developmental difficulties, and coordinating services); b) teaching; c) research; and d) advocacy. We adapted the training program during the first two weeks at the start of the pandemic. The face-to-face clinical services and intensive individual/group supervisions were replaced with hybrid training including telehealth services and supervisions through Zoom.

# **RESULTS**

For the 14 fellows, three academic mentors provided training. Each week 10 hours of face-to-face and online clinical training and 2 hours each of research methodology and advocacy training was provided. Video-recorded assessments and interventions for 175 cases, and 125 parent recorded video- clips showing the child's functioning, activities, and participation were discussed. Mentors provided clinical supervision and seminars on theoretical readings. As a group, fellows conducted two research and one advocacy project. For future viewing, 300 hours of training was recorded. Fellows stated overall high satisfaction but highlighted lengthy screen-time and attending from home as challenges.

# **CONCLUSION**

Where online training and mentorship are available the AUDPD training model can help sustain quality subspecialty developmental pediatrics training during crises.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 132

# DISSEMINATING F-WORDS IN CHILD DEVELOPMENT TO FAMILIES OF CHILDREN WITH DISABILITIES IN IRAN: A KNOWLEDGE TRANSLATION STUDY

# Zahra Maleki<sup>1</sup>, Seifollah Heidarabadi<sup>2</sup>, Ahmad Mohammdi<sup>3</sup>, Saber Azami<sup>4</sup>, Peter Rosenbaum<sup>5</sup>, Andrea Cross<sup>6</sup>, Alice Soper<sup>5</sup>

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- <sup>6</sup>School of Rehabilitatiob Science, McMaster University, Hamilton, Canada

#### **OBJECTIVES**

The change in health definition by WHO along with introducing ICF model are new and important ideas toward the childhood disability. In 2012, CanChild researchers in Canada adapted the ICF framework with six F-words, as a way to operationalize the ICF and bring it to life. F-words was designed to explain a biopsychosocial approach according to disability trying to move beyond the concepts of "fixing" and "being normal". F-words believe that there should be a great attention on whatever children CAN do, not HOW they do it. Parents of children with disabilities are equal members in healthcare team so understanding parents' perspectives and goals can help healthcare providers to provide more meaningful services to families. Using the F-words can help to gain this understanding. To date, no research exploring parents' perspectives on the F-words and ICF framework has been conducted in Iran.

The aim of this research program is: introduce the F-words to Iranian parents who have a child with a disability, and to explore whether the F-words influence changes in their perspectives of their child's abilities, and shift their rehabilitation goals.

# **METHODS**

- 1. Translate, adapt, and create new F-words educational materials to spread awareness and increase parents' knowledge of the F-words in Iran
- 2. Conduct a qualitative pilot study to explore parents' perspectives of their child's abilities and rehabilitation goals prior to and after being introduced to the F-words
- 3. Collect parents' feedback on the adapted educational materials and identify Iranian parents' overall perceptions of the F-words

# **TOPIC CATEGORY**

Intervention: 1i) Parent Training





# **ORAL PRESENTATION**

Abstract ID Number: 134

IMPACT OF THE COVID-19 PANDEMIC ON MATERNAL MENTAL HEALTH, EARLY CHILDHOOD DEVELOPMENT AND PARENTAL PRACTICES: A GLOBAL SCOPING REVIEW

Ana Luiza Penna Rocha Miranda<sup>1</sup>, Camila Machado de Aquino<sup>2</sup>, Maria Suelly Nogueira Pinheiro<sup>3</sup>, Rodrigo Leão Ferreira do Nascimento<sup>4</sup>, Simone Farías-Antúnez<sup>3</sup>, David Augusto Batista Sá Araújo<sup>3</sup>, Marcia Caldas de Castro<sup>1</sup>, Marcia Maria Tavares Machado<sup>3</sup>

<sup>1</sup>Harvard TH Chan School of Public Health, Department of Global Health and Population, Boston, USA

# **OBJECTIVES**

In March 2020, the COVID-19 outbreak was declared a pandemic by the World Health Organization (WHO), generating stark economic and social repercussions that directly or indirectly affected families' wellbeing and health status. This review aims at mapping the existing evidence on the impact of the COVID-19 pandemic on maternal mental health, early childhood development, and parental practices, worldwide, in order to identify evidence gaps and better inform future delivery of care and health policy measures.

# **METHODS**

Following the protocol defined by PRISMA-ScR, this review has systematically searched for relevant studies published between January 2020 and June 2021, selected evidence sources based on pre-established criteria, and extracted data from 537 included publications on all three health domains.

## **RESULTS**

The combined stressors brought forth by the pandemic have exerted a heavy burden on the mental health of mothers and the development of young children, partly mediated by their impact on parental practices.

# **CONCLUSIONS**

We have identified sufficient evidence to conclude that there is an urgent need for more concerted global research efforts and rapid policy responses to timely address severe and pervasive negative impacts of the COVID-19 pandemic on the health of mothers and children at a key developmental stage.

## **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -

<sup>&</sup>lt;sup>2</sup>Federal University of Ceará. Maternal Infant Health Department, Fortaleza, Brazil

<sup>&</sup>lt;sup>3</sup>Federal University of Ceará, Community Health Department, Fortaleza, Brazil

<sup>&</sup>lt;sup>4</sup>Pontifical Catholic University of Rio de Janeiro, Psychology Department, Rio de Janeiro, Brazil





# **ORAL PRESENTATION**

Abstract ID Number: 136

A STUDY OF STRESS AND AFFILIATE STIGMA EXPERIENCED BY PARENTS OF CHILDREN NEWLY DIAGNOSED WITH AUTISM SPECTRUM DISORDER (ASD).

# Chandni Choraria, Dr. Nandita De Souza

Sethu Centre for Child Development & Family Guidance, Goa, India

#### **OBJECTIVES**

Parenting a child with ASD can cause significant stress and stigmatization, leading to adverse impacts on parental mental health, self-esteem and daily functioning.

This study assessed the levels of stress, affiliate stigma and correlation between them in parents of children newly diagnosed with ASD. Various factors associated with increased stress and stigma were also studied.

#### **METHODS**

Parents of young children recently diagnosed with ASD were enrolled in the study. Sociodemographic information, details about child's condition, family medical history and disclosure of child's diagnosis of ASD was gathered. Parents were administered the Autism Parental Stress Index & Affiliate Stigma Scale to quantify the levels of stress and stigma respectively. Descriptive statistics, correlation between stress and stigma, tests of significance were studied.

# **RESULTS**

- 30 parents (20 mothers, 10 fathers) participated in the study.
- Mean stress and stigma score of the participants was  $18.53 \pm 6.75$  and  $42.27 \pm 10.35$  respectively.
- Core autism symptoms, followed by comorbid behaviors like tantrums and physical symptoms like lack of toilet training showed maximum contribution to parental stress.
- Affective factors like sadness played a major role in parental stigma, which were significantly higher in mothers compared to fathers.
- There was moderately positive correlation between parental stress and affiliate stigma.
- Parental stress and stigma levels were significantly lower in parents who had disclosed the diagnosis.

# **CONCLUSION**

Parental stress and stigma in families of children with ASD must be addressed through targeted psychoeducational interventions for family. Training modules should also include information and strategies for disclosure of diagnosis.

# **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





# **ORAL PRESENTATION**

Abstract ID Number: 137

AMPLIFYING ADVOCACY AND PRACTICE OF NURTURING CARE FOR EARLY CHILDHOOD DEVELOPMENT (NC FOR ECD) AMONG PEDIATRICIANS IN INDIA.

# DEEPTI AGRAWAL<sup>1</sup>, PIYUSH GUPTA<sup>2,3</sup>, RAJESH MEHTA<sup>4</sup>

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- <sup>2</sup>President, Indian Academy of Pediatrics, New Delhi, India.
- <sup>3</sup>Head Dept of Pediatrics, University College of Medical Sciences, New Delhi, India.
- <sup>4</sup>Regional Advisor,WHO South East Regional Office, New Delhi, India

## **OBJECTIVE**

Mobilize pediatricians in public and private health sectors across India to practice nurturing care (NC) in their work.

#### **METHOD**

WHO-India Country office and WHO-South East Asia Regional Office partnered with the Indian Academy of Pediatrics (IAP) in 2021 to advocate for implementation of NC for ECD and encourage their 33,000 members to adopt this in their practice to ensure that newborns and children survive, thrive and transform.

# **RESULTS**

Key actions undertaken by IAP:

- Adoption of NC for ECD in the President's Action Plan-2021 for sustained actions.
- Release of 'Mumbai 2021 Call for Action' in February 2021, with related professional associations, ministry of health and UN agencies, committing to adopt the global Framework for nurturing care in pediatric practice.
- Publication of the IAP Position Paper on ECD in official journal, Indian Pediatrics in July 2021 articulating a multi-stakeholder approach.
- Training package on nurturing care developed by IAP experts. This includes well child visits for children under 3 years to provide parenting advice on NC. Nationwide training of pediatricians started with a target to reach 8,000 members over next 3 years.
- Recommendations prepared for strengthening pre-service education on ECD in undergraduate (MBBS) and postgraduate (MD) medical curriculum.
- Commissioned a special supplement of Indian Pediatrics with papers on ECD activities in India from multiple stakeholders to encourage implementation.

# **CONCLUSIONS**

Partnership with IAP has resulted in much-needed momentum towards mainstreaming NC within the pediatric practice in private and government sectors.

# **TOPIC CATEGORY**

Intervention: 1k) Others





# **ORAL PRESENTATION**

Abstract ID Number: 139

CAPACITY BUILDING OF FRONTLINE WORKERS FOR NURTURING CARE: LEARNINGS FROM 'AARAMBH' MODEL FROM RURAL INDIA

<u>Dr. Rahul Pethe<sup>1</sup></u>, Dr. Abhishek Raut<sup>1</sup>, Dr. Pranali Kothekar<sup>1</sup>, Samrat Khandar<sup>1</sup>, Sonali Kamble<sup>1</sup>, Chetna Maliye<sup>1</sup>, Vishal Jadhao<sup>2</sup>, Dr. Subodh Gupta<sup>1</sup>

Dr.

<sup>1</sup>Mahatma Gandhi Institute of Medical Sciences, Wardha, India

#### **OBJECTIVE**

To share key learnings for capacity building of frontline workers (FLWs) on Nurturing care.

#### **METHODS**

'Aarambh' initiative is being implemented since 2019 in Maharashtra. It adopted an Incremental Learning Approach (ILA) based cascade model for capacity building of FLWs. A team of 20 members trained the 120 in-line supervisors of FLWs through 4 cycles of 5-days training each, who, in turn, trained around 3000 FLWs through monthly 1-day training. The FLWs reached 1.25 million caregivers to empower them on Nurturing care utilizing the existing opportunities in their work schedule. The sessions were consultative, interactive, activity-based, and participatory with emphasis on field demonstration by other FLWs. A plethora of simple games, activities, role plays, group discussions, reflection exercises, and hands-on sessions was included to simplify the concepts related to brain development and responsive caregiving. The training sessions were made aspirational embedding Appreciative Inquiry concepts at its core.

# **RESULT**

The aspirational and participatory strategy helped to create excitement among FLWs to learn and deliver nurturing care. Appreciative nature was crucial in boosting their morale, confidence, and enthusiasm. Simple, activity-based nature helped to transfer the training content and skills with minimal loss up to the caregivers. The ILA approach helped to reinforce the concepts in subsequent training cycles and link them with on-field implementation in the intervening period between two cycles.

# CONCLUSION

'Aarambh' provided an innovative, effective, and sustainable model of training for FLWs on nurturing care. It has been accepted by the state Government for scale-up across the entire state.

## **TOPIC CATEGORY**

<sup>&</sup>lt;sup>2</sup>Department of WCD, Govt. of Maharashtra, Parbhani, India





# **ORAL PRESENTATION**

Abstract ID Number: 140

# COMMUNITY NORM BUILDING FOR NURTURING CARE: LEARNING FROM AARAMBH MODEL IN RURAL INDIA

# <u>Dr. Pranali Kothekar</u><sup>1</sup>, Dr. Abhishek Raut<sup>1</sup>, Gaurav Pethe<sup>1</sup>, Atul Katarkar<sup>1</sup>, Prasad Mirkale<sup>2</sup>, Pramod Bahulekar<sup>1</sup>, Dr. Subodh Gupta<sup>1</sup>

<sup>1</sup>Mahatma Gandhi Institute of Medical Sciences, Wardha, India

# **OBJECTIVE**

To share the innovation and learnings from Palak Melawa (Parents' fair) towards community norm building for nurturing care.

# **METHOD**

"Aarambh' initiative is being implemented since 2018 in Maharashtra with an approximate population of 1.25 million. Palak Melawa was conceptualized as a community-level intervention to build the social norm for Nurturing care. It complements the other core interventions of home visits and parents' meetings for empowering caregivers. It is a day-long event organized through resource mobilization from the village in a large open space. Family members of children 0-6 years are the primary beneficiaries. Key stakeholders (frontline functionaries, members of Village Council, Women's self-help groups, adolescent girls' groups, school teachers, and students) not only learn but actively participate in the organization of the event. Age-groups wise stations for psycho-social stimulation and responsive caregiving that connect simple play and communication activities to the science of brain development are the hallmarks of Palak melawa. It is modeled on an aspirational approach and begins with a simple activity called, 'Bhavishyache Zad' (Future Tree).

# **RESULTS**

More than 250 Palak Melawas have been organized and attended by more than 40,000 caregivers. In qualitative inquiry, it was found to be an effective and socially acceptable intervention to engage and empower all concerned stakeholders at the village level for Nurturing care. Being activity- based and experiential, it helps the caregivers to experience the joy of parenting and facilitate building confidence.

# **CONCLUSION**

Engaging key stakeholders helps to create an enabling environment and garner support for child development at the village level.

# **TOPIC CATEGORY**

<sup>&</sup>lt;sup>2</sup>Department of WCD, Government of Maharashtra, Aurangabad, India





# **ORAL PRESENTATION**

Abstract ID Number: 141

A PILOT TRAINING PROJECT OF THE SOCIAL ABCSTM PARENT-MEDIATED INTERVENTION FOR TODDLERS WITH AUTISM SPECTRUM DISORDER IN GOA,INDIA.

# Mahera Kantawalla<sup>1</sup>, Andre Velho<sup>1</sup>, Erin Dowds<sup>2</sup>, Kate Bernardi<sup>2</sup>, Jessica Brian<sup>2</sup>

<sup>1</sup>Sethu Centre for Child Development and Family Guidance, Goa, India

# **OBJECTIVES**

Social ABCsTM is a developmentally informed, parent-mediated intervention developed in Canada to meet the need for evidence-based, manualised and sustainable intervention for toddlers with suspected or confirmed Autism Spectrum Disorder (ASD). The two key targets of this program are directed vocal communication and positive emotion sharing with the caregiver.

This pilot project evaluates the feasibility of running the Social ABCs group program at Sethu and presents the outcomes of successfully training the first cohort of families participating in the Social ABCs™.

#### **METHODS**

24 parent-toddler dyads received the 6 weeks Social ABCsTM Group Program. The program was offered as a hybrid format (a mix of online and in person sessions) to make it feasible for families during COVID-19 pandemic and involved weekly 6 online group didactic sessions and 9 one on one coaching sessions, either in person or online. Video clips of parent-child interactions were taken at baseline and in the 6th week post training. Outcomes were measured using 1) video-coded data to measure parent implementation fidelity and child responsivity 2) Autism Parenting Stress Index administered at intake and post training.

# **RESULTS**

Post 6-week training, improvements were observed in directed vocal responsiveness to parent prompts, child vocal initiations, shared smiling and parent fidelity of implementation as well as decrease in parenting stress.

# CONCLUSIONS

The Social ABCsTM shows promise as an evidence-based early intervention to help improve social communication skills in toddlers with ASD in Goa. Parents who participated also experienced reduction in parenting stress associated with a diagnosis of ASD.

## **TOPIC CATEGORY**

<sup>&</sup>lt;sup>2</sup>Holland Bloorview Kids Rehabilitation Hospital, Toronto, Canada





# **ORAL PRESENTATION**

Abstract ID Number: 144

# IMPLEMENTATION OF THE INTERNATIONAL GUIDE FOR MONITORING CHILD DEVELOPMENT INTERVENTION IN RURAL INDIA AND GUATEMALA

Abhishek Raut<sup>1</sup>, Revan Mustafayev<sup>2</sup>, Roopa Srinivasan<sup>3</sup>, Anita Chary<sup>4</sup>, Ilgi Ertem<sup>5</sup>, Maria del Pilar Grazioso<sup>6</sup>, Subodh Gupta<sup>1</sup>, Vibha Krishnamurthy<sup>3</sup>, Chunling Lu<sup>7,8</sup>, Chetna Maliye<sup>1</sup>, Ann Miller<sup>8</sup>, Bradley Wagenaar<sup>9,10</sup>, Peter Rohloff<sup>4,11</sup>

- <sup>1</sup>Mahatma Gandhi Institute of Medical Sciences, Sevagram, India
- <sup>2</sup>Acibadem Maslak Private Hospital, Istanbul, Turkey
- <sup>3</sup>Ummeed Child Development Center, Mumbai, India
- <sup>4</sup>Center for Indigenous Health Research, Wugu' Kawog, Maya Health Alliance, Tecpán, Chimaltenango, Guatemala
- <sup>5</sup>Ankara University, Ankara, Turkey
- <sup>6</sup>Proyecto Aigle, Guatemala, Guatemala
- <sup>7</sup>Brigham and Women's Hospital, Boston,, Massachusetts, USA
- 8 Harvard Medical School, Boston,, Massachusetts, USA
- <sup>9</sup>Department of Global Health, University of Washington, Seattle, Washington, USA
- <sup>10</sup>Department of Epidemiology, University of Washington, Seattle, Washington, USA
- <sup>11</sup>Division of Global Health Equity, Brigham and Women's Hospital, Boston, Massachusetts, USA

# **OBJECTIVE**

The objective of this model program is a frontline-line worker led implementation of the Guide for Monitoring Child Development (GMCD) intervention and digital application to improve child development and the nurturing care environment in rural India and Guatemala and to assess barriers, facilitators and cost-effectiveness of the intervention. The preparatory phase of this model program will be presented to provide insight into how even interventions that are designed for low and middle-income countries (LMICs) can be adapted to local settings.

#### **METHODS**

The GMCD intervention was prepared to be delivered by frontline workers through the trainings of Anganwadi workers in Sevagram India and the Wu'ku Kavoq Maya Health Alliance in Guatemala using a digital mobile device interface. A cluster-randomized trial and implementation assessment using the Reach, Effectiveness, Adoption, Implementation, Maintenance (RE-AIM) framework was added to assess facilitators, barriers and cost-effectiveness.

#### **RESULTS**

The training package and the digital application was adapted to the rural India and Guatemala context, including changes in language (Marathi, Spanish and local Mayan languages), videos and case presentations. The original training of trainers and users were modified to enable going to scale in resource poor settings. The sustainability of intervention, ownership by the existing system and future scalability were the key points for consideration during the local adaptation without compromising on fidelity of intervention.

# **CONCLUSION**

The GMCD intervention is designed for use in LMICs, but local adaptations are important so that it can help start a local cascade of owning and enriching the intervention.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

# Abstract ID Number: 145

CHALLENGING BEHAVIORS AMONG CHILDREN WITH AUTISM SPECTRUM DISORDERS PRESENTING TO A REFERRAL DEVELOPMENTAL UNIT IN INDIA – A CROSS SECTIONAL STUDY

# Dr. Haneesha Pinnamaraju, Dr. Nandini Mundkur

Centre for Child Development and Disabilities, Bangalore, India

#### INTRODUCTION

The incidence of Autism spectrum disorders (ASD) is reaching epidemic proportions in the recent times. One of the most notorious concerns being their predisposition to challenging behaviors. With paucity of data, we conducted a cross-sectional study to understand the challenging behaviors in our ASD population.

#### OR IECTIVES

The study was designed to study the prevalence of challenging behavior in ASD, their severity, frequency and early predictors.

#### **METHODS**

Cross sectional analytical study, over a 9 month period, including 90 children with ASD from 15months to 84months. Appropriate tools used to diagnose ASD, challenging behavior and data on early predictors.

## **RESULTS**

Among the study population, mean age was 36 months with majority (81%) being boys.

1 or more challenging behavior was noted among 94%, with 40% being moderate to severe in nature. Self-injurious and aggressive behavior seen among 64%, while stereotyped behaviors in 94%. 50% had all 3 behaviors.

Overall, age at diagnosis of ASD, ASD severity, Sensory processing function and Adaptive behaviour functioning were significant variables in predicting challenging behaviour, while the age of the child, gender and cognitive DQ found no role.

# **CONCLUSION**

The prevalence of challenging behaviors, which tend to influence the outcomes, is high among our population of children with ASD. Late diagnosis, Severe ASD, significant sensory processing dysfunction and poorer adaptive functioning were associated with higher, frequent and severe challenging behaviour(s). Understanding this, helps in undertaking early preventive strategies, which helps optimise the child's overall potential, well-being and in turn better functioning in the community.

# **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





# **ORAL PRESENTATION**

Abstract ID Number: 149

# ONLINE FUN CLUBS FOR DISABLED CHILDREN: RESPONDING TO CRISIS THROUGH LEISURE

<u>Aditi Shah</u>, Sayali Parab, Farah Maneckshaw, Mithila Jariwala, Prachi Mehta, Pravin Madur Ummeed Child Development Center, Mumbai, India

## **OBJECTIVES**

This study presents an online fun club model for disabled children conducted during the pandemic in India. The intention was to promote their well-being through leisure in an inclusive space.

# **METHOD**

Around 130 children with disabilities from Mumbai and different parts of India attended the monthly fun clubs in the past 18 months. Two groups - younger (4 to 8 years) and elder (9 to 12 years) were facilitated by Mental Health Team and Occupational Therapy team members. Consulting the participants, monthly themes were planned to explore fun such as games, arts, music, dance, storytelling, short films, cooking, etc.

Focusing on inclusive and diverse fun, sessions were flexibly structured. Activities promoting various skills, such as fine-motor, gross-motor, observational and listening skills were included. The sessions, feedback polls (verbal and visual) and conversations with children and families were documented through reports and photographs.

# **RESULTS**

The fun club became an accessible and inclusive safe space for disabled children which otherwise was not possible due to social, political, economic reasons. The children reported an increased sense of agency in exploring and redefining leisure through their preferred ways. It fostered friendships among children during the isolation period. The children and families shared that fun clubs meant a happy, relaxing and communal space which contributed to their overall wellbeing, during the difficult times of lockdown.

## **CONCLUSION**

The Fun Club model provides an inclusive and accessible space to promote the well-being of disabled children through leisure, in the context of crisis in low-middle income countries.

# **TOPIC CATEGORY**

Intervention: 1k) Others





# **ORAL PRESENTATION**

Abstract ID Number: 150

# AWARENESS PROGRAM FOR CAREGIVERS ON RIGHTS OF CHILDREN WITH DISABILITIES: ARE THEY EFFECTIVE IN THE POST COVID19- ERA?

# Ruhi Patwardhan, Ashwini Jadhav, Imon Basu, Ronit Kumar Naik

Ummeed Child Development Center, Mumbai, India

## **BACKGROUND**

The online Know Your Rights (KYR) & Unique Disability Identification (UDID) program sensitizes caregivers about rights, provisions and process of making the UDID card for Children with Disabilities (CWDs)' in India.

# **OBJECTIVE**

To identify:

- 1. The number of caregivers who obtain a UDID card after attending the programs during the pandemic.
- 2. Any **unique** barriers & facilitators perceived by caregivers.

# **METHOD**

Questionnaires (L1-Participant reaction, Kirkpatrick methodology) to assess facilitators and perceptions about program content.

Semi structured telephonic interviews with caregivers of CWDs (Autism, Cerebral Palsy, Learning Disability, Intellectual Disability, Down Syndrome, Hearing Impairment) aged 0-17 years between **May 2020-March 2021 to identify those** who had a UDID or obtained one after the KYR program. Barriers were identified for those who did not have UDID.

# **RESULTS**

**63 out of 97** who attended the programs could be contacted.

31 (49.2%) already had UDID even before attending the programs.

None of the caregivers were able to obtain UDID card.

# **FACILITATORS**

- 1. Strategies & content discussed in the program were relevant & easy to understand.
- 2. Other caregivers' experience of obtaining and using a UDID.

# **BARRIERS**

- 1. Caregivers health and safety concerns during the pandemic restricted their efforts to complete the paperwork required for UDID.
- 2. Limited access to Government institutions that provide UDID.

# **CONCLUSION**

The pandemic posed additional barriers to accessing rights and provisions for CWD in India. Consistent monitoring and support needs to be provided to caregivers of CWD to improve certification rates in the future.

# **TOPIC CATEGORY**

Advocacy for Children with Disabilities: -





# **ORAL PRESENTATION**

Abstract ID Number: 152

# EFFECTS OF PASHE ACHHI TELECOMMUNICATION MODEL ON OUTCOMES OF ROHINGYA CAREGIVER AND CHILD DYADS IN TIMES OF COVID-19

# **Sakila Yesmin**

BRAC Institute of Educational Development (BRAC IED), Dhaka, Bangladesh

Since May, 2020, BRAC has been implemented the Pashe Achhi Telecommunication model which is a remote learning mechanism to promote both Rohingya caregiver and child wellbeing, and foster child development through play-based learning, positive parenting and self-care practices of caregivers during the COVID-19 crisis in the camps.

An intervention group-based pre-post test design was employed in this study to assess the effects of the model on outcomes of Rohingya Caregivers and their children. Data were collected at two points in time-baseline and endline. A total of 480 mother-child dyads (240 from 2-6 centre-based, 120 from 0-2 home-based, 120 from 2-4 home-based) were randomly selected as the study sample. Play Leaders and Mother Volunteers were included in the study. In this study, ASQ: 3, ASQ: SE-2, Parents KAP, Play Leader KAP, and PHQ-9 were used for data collection.

Results have shown that there is improved overall knowledge, attitude and practices among caregivers in regards to ECD and positive parenting, and significant improvement in children's socio-emotional development. Additionally, there is also a decrease in depressive symptoms among caregivers. Further findings have also revealed that Play Leaders/mother volunteers demonstrated strong competencies when facilitating calls.

In conclusion, the findings suggest that the model has potential in settings where face-to-face ECD interventions are not possible, and recommends the intervention be scaled up in both humanitarian settings.

#### **KEYWORDS**

Caregiver, child, positive parenting, remote, telecommunication, wellbeing.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 156

# STIMULATION ENVIRONMENT FOR THE CHILDREN AGED 16-6 MONTHS IN RURAL AND URBAN BANGLADESH

# <u>Bharati Rani Roy</u>, Jena Derakhshani Hamadani, Hasan Mahmud Sujan, Shamima Shiraji Sumi, Fahmida Tofail, Sheikh Jamal Hossain

International Centre for Diarrhoheal Disease Research Bangladesh, Dhaka, Bangladesh.

# **OBJECTIVES**

Promotion of development of disadvantaged children is a global priority. The objective of this paper is to compare urban and rural parental practices of early childhood development (ECD) activities.

# **METHODS**

A rural study was conducted in Ullapara sub-district, Sirajgonj and a comparable urban study was carried out in Rangpur city. The participants were mothers from poor families either receiving or eligible to receive maternity allowance from the government of Bangladesh in rural and urban sites. We used the baseline information of these cluster randomized controlled trials. Family Care Indicators (FCI); a measure of ECD activities and socioeconomic information were collected. Independent sample t-test and multiple linear regression analysis were used to measure differences in parenting practices between rural and urban children controlling for age, sex, and BMI.

# **RESULTS**

There were 594 rural and 599 urban children. About half of the participants were female. Total FCI Mean  $\pm$ SD was higher in rural (6.1 $\pm$ 4.0) than urban (5.6 $\pm$ 3.2) (p=0.030). Multiple regression analysis adjusting for confounders showed that the rural caregivers provided better stimulating environment for their children compared to urban caregivers (Beta coefficient=1.01, 95%CI=0.56, 1.45, p $\leq$ 0.001).

# **CONCLUSIONS**

Rural caregivers spend more quality of time and offer more stimulating environment for their children in these low resource settings compared to urban parents. The findings support the need to design comprehensive interventions design for urban children.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 158

CONTENT ANALYSIS OF PARENT RECORDED VIDEOS AS KEY COMPONENTS OF EARLY INTERVENTION DELIVERED THROUGH TELEHEALTH DURING THE COVID- 19 PANDEMIC

# Ezgi Ozalp Akin, <u>Selin Ince</u>, Aysen Akbas, Merve Cicek Kanatli, Sidika Canan Atasoy, Deniz Ertem, Bahar Bıngoler Pekcici

Developmental-Behavioral Pediatrics Division, Department of Pediatrics, Ankara University School of Medicine, Ankara, Turkey

## **OBJECTIVES**

Parent recorded videos may be key components of early intervention programs applied using telehealth. The content of videos parents take in response to interventions during times of crises has not been studied.

# **METHODS**

During the three-month COVID-19 lockdown at Ankara University Developmental Pediatrics Division (AUDPD) clinic, the international Guide for Monitoring Child Development (GMCD) intervention was applied using telehealth to children aged 0-42 months. Clinicians supported parents in promoting children's functioning, activities, and participation and requested them to send home recorded videos by WhatsApp. A researcher blinded to the content of the intervention and study purpose assessed video content using an observational tool.

# **RESULTS**

Videos were asked of 31 children, 109 videos were received for 24 (77%). Of these, 16 (15%) had technical problems, leaving 93 (85%) videos of 19 children (61%). Median child age was 13 months (IQR:7-15), 54% were boys, and 47% attended AUDPD for premature follow-up. All videos included children's functioning in one or more developmental domain: 82% gross, 79% fine motor, 56% receptive, 55% expressive language, 44% play, 44% relating and 13% self-help. In 53% of the videos, the parent was actively providing learning opportunities; in only 7% activities and participation was observed.

## **CONCLUSION**

The content analysis of videos of the GMCD intervention using telehealth during the lockdown implies that the majority of parents sent back videos that included the child's developmental functioning. Research is needed on how to incorporate more emphasis on children's activities and participation in life into the intervention.

# **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 160

#### PARENTING PRACTICES AND AGGRESSION IN CHILDHOOD BEHAVIOUR DISORDERS

#### **Fatima Rahman**

The Children's Hospital & Institute of Child Health, Lahore, Pakistan

#### **OBJECTIVE**

To find out the association between parenting practices and aggression in children with behaviour disorders.

#### **METHODS**

Cross-sectional study conducted at Department of Developmental and Behavioural Pediatrics, The Children's Hospital and Institute of Child Health, Lahore, Pakistan. Eighty five children between the ages of 3 to 12 years with the diagnosis of behaviour disorders (Autism Spectrum Disorder, Attention Deficit Hyperactive Disorder, Social Communication Disorder) and showing aggressive behaviour were enrolled using purposive sampling method. Multidimensional Assessment of Parenting Scale was used to assess positive (proactive parenting, positive reinforcement, warmth and supportiveness) and negative (hostility, lax control, physical control) parenting practices. Modified Overt Aggression Scale was used to assess aggression that included verbal aggression, aggression against property, auto-aggression (towards self), physical aggression (towards others). Correlation and multiple regression analysis were done.

#### **RESULTS**

Among negative practices, it was found leniency and inconsistent parenting (lax control) was a significant positive predictor of aggression (p<.01) in children with behaviour disorders. Supportiveness was significant negative predictor of verbal aggression (p<.01) while physical control positively predicted total aggression (p<.05). Among positive parenting practices, positive reinforcement decreased auto aggression (p<.05) in children with behaviour disorders. Lower maternal education correlated with more aggressive behaviours (p<.05) in these children.

#### CONCLUSION

It is concluded that negative parenting practices may lead to aggression in children with behaviour disorders. While, positive reinforcement by parents may encourage less self-harm in these children and help improve their behaviour problems.

#### **TOPIC CATEGORY**





# **ORAL PRESENTATION**

Abstract ID Number: 164

# EARLY CARE AND SUPPORT FOR YOUNG CHILDREN WITH DEVELOPMENTAL DISABILITY AND THEIR CAREGIVERS IN UGANDA: THE BABY UBUNTU FEASIBILITY TRIAL

<u>Carol Nanyunja</u><sup>1</sup>, <u>Samantha Sadoo</u><sup>2</sup>, <u>Maya Kohil-Lynch</u><sup>2</sup>, <u>Ruth Nalugya</u><sup>1</sup>, <u>James Nyonyintono</u><sup>3,4</sup>, <u>Anita Muhumuza</u><sup>5</sup>, <u>Moses Ssekidde</u><sup>4</sup>, <u>Kenneth Katumba</u><sup>1</sup>, <u>Giulia Greca</u><sup>2,1</sup>, <u>Emily Trautner</u><sup>2</sup>, <u>Brooke Magnusson</u><sup>3</sup>, <u>Daniel Kabugo</u><sup>3,4</sup>, <u>Maria Zuurmond</u><sup>2</sup>, <u>Catherine Morgan</u><sup>6,7</sup>, <u>Deborah Lester</u><sup>3,4</sup>, <u>Janet Seeley</u><sup>1,2</sup>, <u>Emily Webb</u><sup>2</sup>, <u>Christine Otai</u><sup>3,4</sup>, <u>Margaret Nampijja</u><sup>8,1</sup>, <u>Cally Tann</u><sup>2,1</sup>

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- <sup>3</sup>Adara Development Uganda, Kiwoko, Uganda
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- <sup>5</sup>Mulago University Hospital, Kampala, Uganda
- <sup>6</sup>University of Sydney, Sydney, Australia
- <sup>7</sup>Cerebral Palsy Alliance Research Institute, Sydney, Australia
- <sup>8</sup>African Population and Health Research Center, Nairobi, Kenya

#### **OBJECTIVES**

We evaluated the feasibility, acceptability, and costs of the Baby Ubuntu participatory peer-facilitated group early care and support programme for young children with developmental disabilities and their families.

#### **METHODS**

A feasibility trial with two parallel groups was conducted comparing the 10-modular Baby Ubuntu programme with standard care in urban and rural central Uganda. Children aged 6-11 months with moderate-severe neurodevelopmental impairment (developmental quotient (DQ)<70) and their caregivers were recruited, and followed for 12 months. Quantitative and qualitative methods captured information on feasibility (ability to recruit), acceptability (satisfactory attendance) and costs (set up and programme implementation).

#### **RESULTS**

126 infants meeting eligibility criteria (median DQ 28.7) were recruited and randomised over 8 months, demonstrating feasibility; 9 (7%) died during follow-up, 101 (86%) of surviving children were seen at 12 months. Of the 59 with a surviving child randomised to intervention, 51 (86%) attended ≥6 modules meeting acceptability criteria. Qualitatively, the programme was feasible and acceptable to caregivers and programme facilitators. Enabling factors included local community champions, positive and caring attitudes of facilitators towards children with disability, peer support from other caregivers, and accessibility of training and training materials. Total economic cost of delivering the programme was USD 13,054, or USD 207 per child receiving the programme.

#### **CONCLUSIONS**

Mixed methods evaluation of the Baby Ubuntu programme found it to be feasible and acceptable to children, caregivers and healthcare workers in rural and urban Uganda. The cost estimate represents a feasible intervention for this vulnerable group, encouraging financial sustainability at scale.

#### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





# **ORAL PRESENTATION**

Abstract ID Number: 168

#### GURIYA- SAFETY OF CHILDREN FROM CASTE-BASED INTERGENERATIONAL SEX SLAVERY.

## **Mitali Barot**

Accenture, Mumbai, India

#### **OBJECTIVE**

To study the impact of compassionate leadership in eradicating intergenerational prostitution.

#### **METHODS**

Guriya is a 36 member NGO that was pioneered about Ajeet Singh in 1993 to fight sexual exploitation of women and children. Based in Varanasi, Uttar Pradesh, Guriya tackles the issue of human trafficking and focus on young girls and children of sex workers who are pulled into the trade due to their caste, class or inherit it from their mothers. While Guriya focuses on the 12 most vulnerable districts in Uttar Pradesh state they also are open to working for the wellbeing and safety of children in the entire state including the Indo-Nepal borders, 8 state-borders and intra state trafficking. Besides rescue and rehabilitation Guriya runs Non-formal education centers in the red-light areas of Varanasi and Mau, a boat school on the Ganges river, police sensitization programs, rural women's empowerment, activism, and research.

Guriya also runs several programs and campaigns namely, The Worldwide Freedom Now Campaign, art exchanges and exhibits, performing arts to raise awareness and build capacity for working for the cause in holistic ways.

#### **RESULTS AND CONCLUSION**

The programs laid by Guriya have helped rescue and rehabilitate innumerable children over the last two decades. There sensitization programs have enabled dialogue and helped reduce stigma and victim blaming. Innumerable universities and institutions across the globe are inspired by Guriya and adopting their models for safety and development worldwide with focus on vulnerable populations in LMIC and regions.

#### **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -





# **ORAL PRESENTATION**

◆ Abstract ID Number: 169

# ESTABLISHMENT OF HIGH RISK INFANT FOLLOW-UP AND EARLY INTERVENTION CENTER IN ANKARA CITY HOSPITAL

## Pelin Çelik<sup>1</sup>, İclal Ayrancı Sucaklı<sup>1</sup>, Sara Erol<sup>2</sup>, Ayşegül Neşe Çıtak Kurt<sup>3</sup>, Emrah Şenel<sup>4</sup>

<sup>1</sup>Ankara City Hospital Department of Pediatrics Division of Developmental Behavioral Pediatrics, Ankara, Turkey <sup>2</sup>Ankara City Hospital Department of Pediatrics Division of Neonatology, Ankara, Turkey

<sup>3</sup>Ankara City Hospital Department of Pediatrics Division of Child Neurology, Ankara, Turkey

<sup>4</sup>Ankara City Hospital Department of Pediatric Surgery, Yıldırım Beyazıt University, Ankara, Turkey

#### **OBJECTIVES**

The aim of High Risk Infant Follow-Up and Early Intervention Center is to provide and expand the health services to infants and their families who have perinatal and neonatal risks, with a transdisciplinary team as well as to train professionals in Ankara City Hospital, the largest children's hospital in Europe and Turkey, and is a reference center.

#### **METHODS**

We developed a collaborative model including a holistic health and developmental consultancy and support from perinatal period, neonatal intensive care unit and follow-up after discharge. The Center includes experts of developmental behavioral pediatrics, neonatology, pediatric neurology, physical medicine and rehabilitation, opthalmology, perinatology, child development specialist, speech and language therapist, nutritional nursing, and social workers.

#### **RESULTS**

The center was established in June 2021 and served once a week. Children were evaluated by a developmental behavioral pediatrician and a neonatologist based on family-centered care and medical home model, and referred to other team experts in the same day as per need. In 3.5 months 140 infants were evaluated. We observed that major difficulties of families were lack of knowledge about care and follow-up of their children including vaccinations, vitamin and mineral supplementations, screening tests, breastfeeding, appointment issues and care coordination.

#### **CONCLUSION**

High Risk Infant Follow-Up and Early Intervention Center is a transdisciplinary model, that starts from antenatal period, provides care coordination, facilitates access to the health and developmental services, increases family awareness and satisfaction, decreases time and labor loss.

#### **TOPIC CATEGORY**

Intervention: 1b) Medical





# **ORAL PRESENTATION**

Abstract ID Number: 170

# LINKING LIVES IN TIMES OF CRISIS: A MENTAL HEALTH SUPPORT GROUP FOR MOTHERS OF DISABLED CHILDREN

### Pravin Madur, Yashna Vishwanathan

Ummeed Child Development Center, Mumbai, India

#### **OBJECTIVES**

This paper presents a collaborative online mental health support model for mothers of disabled children as a response to the inequities experienced by the families during the coronavirus pandemic

#### **METHODS**

11 mothers of disabled children receiving care at Ummeed, Mumbai were a part of the weekly support group for 7 months, during first wave of coronavirus in Mumbai.

Using components of Narrative Therapy 'people are experts of their lives and are actively responding to difficulties', the group explored conversations around skills and resilience of navigating the crisis, grief and supportive spaces in their lives. This was done using reflective, interactive conversations, activities, movement, games, art, photographs and letters. The sessions were documented through photographs, letters, artwork and notes to hold on to collective wisdom and know-hows. The mothers were consulted monthly for planning, impact and feedback.

#### **RESULTS**

Over the meetings, the group became a safer space for mothers to share struggles, skills of responding to crisis and a support system. Mothers mentioned that the group was especially a space for them to access leisure, share struggles and know-hows of managing difficulties and knowing that they are not alone in this.

This supported the maternal well-being, increased their sense of agency and nurtured a positive identity of them as mothers. It fostered their resilience and helped them in caregiving for their disabled children during the times of crisis.

#### **CONCLUSION**

The mothers' support group model is a collaborative, low-cost, online model that seeks to build resilience through collective support during crisis.

#### **TOPIC CATEGORY**

Intervention: 1e) Psychological





# **ORAL PRESENTATION**

Abstract ID Number: 172

#### RELIABLE INFORMATION ON EARLY INTERVENTION ACCESSIBLE FOR EVERYONE

#### Yanina Besstrashnova, Alexander Shoshmina

Albrecht Federal Scientific Centre of Rehabilitation of the Disabled, St. Petersburg, Russian Federation

One of the objectives of Russian-Norwegian project "Consultative network in the frame of rehabilitation and habilitation" is to provide reliable information to service users and providers. Method used was organisation of online school-seminars on early intervention which allowed to reach many interested professionals and parents of children with special needs.

As a result many participants from different low and middle income countries (e.g. Kyrgyzstan, Moldova, Ukraine, Belarus, Azerbaijan, Russia) and high-income countries (e.g. United Kingdom, Germany, Norway) shared during school-seminars in 2020 and 2021 their experiences in organising early intervention programs, including their experiences of distant work with children and families and experiences of working during COVID-19. These materials are presented on http://cons.center-albreht.ru/

Presentation from Kyrgyzstan was especially interesting for participants from different countries and different regions of Russian Federation, especially for those with low income pre capita. That's why it was decided to invite them to share their experience in working with children and families during COVID-19 in the next school-seminar which will be held in May 2022.

Conclusions are the need to provide better accessibility of early intervention services for different regions of Russian Federation and other countries (e.g. Kyrgyzstan), the need of educating professionals, sharing knowledge between professionals and parents, listening to parents opinions and need of cooperation and exchange of information between different departments and certainly different countries.

#### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





# **ORAL PRESENTATION**

Abstract ID Number: 174

CHALLENGES AND ADAPTATION STRATEGIES OF A SCALING-UP EARLY CHILDHOOD DEVELOPMENT PROGRAMME THROUGH THE GOVERNMENT HEALTH SYSTEM IN BANGLADESH

<u>Bidhan Krishna Sarker,</u> Sheikh Jamal Hossain, Mohammad Saiful Alam, Nur-e- Salveen, Masuma Kwsir, Sheikh Mulkuddin Tipu, Syeda Fardina Mehrin, Jena Derakhshani Hamadani

Maternal and Child Health Division, icddr,b, Dhaka, Bangladesh

#### **OBJECTIVE**

To explore the implementation challenges and mitigation strategies to scale Early Childhood Development (ECD) programme in rural Bangladesh during the Covid-19 pandemic.

#### **METHOD**

We used process documentation by interviewing research team members. The study integrated ECD into the Government primary health services where frontline health workers (FHW) were trained through a cascade model to deliver parenting sessions on ECD to malnourished children. District and sub-district trainers provided training to the supervisors to train the FHWs

#### **RESULTS**

We found a lack of priority settings and less experience of the health staff playing the supervisory roles; inadequate quality of training by trainers, and lack of regular monitoring and supervision by the supervisors. To address these, we initiated more practical training, engaged district- level trainers to monitor the programme; introduced training evaluation and session reporting forms; incorporated supervisory visit reporting system at district meetings. To increase community acceptance,

the FHWs were motivated to raise awareness among community people when providing health services. The Covid pandemic was yet another challenge and we had to reduce the number of trainees in training sessions and the number of mother-child dyads in ECD sessions to maintain social distancing. To mitigate this problem, we increased number of training sessions to accommodate the trainees and increased number of ECD sessions to some extent.

#### **CONCLUSION**

Though the programme faced many challenges, we managed to mitigate those. However, strategies for selecting trainers of trainers, digital monitoring systems, mobilizing community people, and alternatives for the pandemic situation may be given further consideration.

#### **TOPIC CATEGORY**

Early Childhood Development: -





# **ORAL PRESENTATION**

Abstract ID Number: 175

# CLINICAL MEALTIME GROUP TO MAKE THE ACTIVITY OF EATING AND FEEDING EASY FOR CAREGIVERS OF CHILDREN EXPERIENCING MOTOR DIFFICULTIES

## Ruchita Bhagade, Roohina Shaikh, Priti Inje

Ummeed Child Development Center, Mumbai, India

#### **OBJECTIVE**

This model exhibits a hybrid model of a clinical group which supported the Caregivers in making mealtime easy and fun for their children and for themselves.

#### **METHOD**

Post screening on the ABFS-C ,3 families participated in the group. Caregivers' knowledge related to feeding was assessed by a self made knowledge base checklist. The process of feeding was clinically assessed by feeding videos sent by Caregivers . Group lasted for 4 weeks. There was 1 Pre assessment session followed by 8 bi-weekly sessions. Each session lasted for an hour. Post 1 month focus group discussion was conducted to check the sustenance of the skills learnt . Lastly 1 post assessment session conducted after 2 months of the group closure.3 Pre recorded videos containing knowledge about factors affecting eating and feeding (child, caregiver and environment) were shared in advance. Followed by discussion and problem solving around each factor and identifying strategies in each week respectively.

#### **RESULT**

At the end of the weekly sessions, caregivers noticed a shift in the Meal time, reduced stress, and increase in the knowledge about the factors contributing to eating and feeding eventually made the mealtime enjoyable for the caregivers and children.

#### **CONCLUSION**

This online group model is helpful for caregivers of children with motor difficulties and this model can be offered to a larger group of people even in remote areas.

#### **TOPIC CATEGORY**

Intervention: 1k) Others





# **ORAL PRESENTATION**

Abstract ID Number: 178

# CREATING PRESCHOOL PARTICIPATION OPPORTUNITIES FOR CHILDREN WITH DEVELOPMENTAL DISABILITIES DURING COVID-19 PANDEMIC

#### Ruchita Bhagade, Sonam Kamdar

Ummeed Child Development Center, Mumbai, India

#### **OBJECTIVE**

The Ummeed Early Intervention Center (U-EIC) was a center-based preschool program for children with varied developmental disabilities (CWD) before the pandemic. This was adapted to a virtual platform to provide opportunities for children with developmental disabilities to engage in a preschool. This presentation focuses on sharing the online adaptations to the U-EIC program.

#### **METHOD**

The U-EIC is a year-long preschool program run by four community health workers trained in early childhood development under supervision of a physiotherapist and occupational therapist. With onset of the pandemic, this was modified based on:

- Understanding expectations of caregivers of CWDs interested in the program
- Experiential literature from preschool and early intervention programs that provided online services for CWDs
- Conversation with another organization from India working with CWDs, implementing their early intervention program online.
- Discussions within team to identify activities and sections of the program that could be replicated within the home environment

#### **RESULT**

Barring Group Play, the program was modified to an online platform with most activities such as Free Play, Table time, Circle time and Snack time using easily accessible and less expensive resources.

18 CWDs within the ages of 2-6 years attended two one hour sessions with their caregivers. Each child's participation in the program was supported by an individual phone call once a week and monthly learning sessions for caregivers.

#### CONCLUSION

This program provided CWDs an opportunity to participate in preschool during the pandemic. It also opens the possibilities of CWDs from other geographical locations accessing such a service.

#### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





المؤتمر الرابع للجمعية العالمية لطب الأطفال التنموي

# Nurturing Children in Crisis رعاية الأطفال في الأزمات

# POSTER PRESENTATIONS













# POSTER PRESENTATION

◆ Abstract ID Number: 14

# HOW THE PANDEMIC AFFECTED AN INFANT MENTAL HEALTH UNIT: EXPERIENCES FROM A CLINIC IN TURKEY

<u>Gökçe Yağmur Efendi</u>, Didem Behice Öztop, Ayşe Merve Güngör Yüksel, Merve Çıkılı Uytun, Esra Yürümez, Birim Günay Kılıç

Ankara University, Ankara, Turkey

#### **OBJECTIVES**

The COVID-19 pandemic is an emergency the magnitude of which has not been encountered for almost a century. During this challenging time, understanding the changing mental health needs of infants and their parents is crucial to improve existing prevention and intervention strategies.

#### **METHODS**

In our study, we compared the patients who were evaluated at Ankara University infant mental health unit between March 2020-March 2021 (n=180) with patients alike who were evaluated between February 2019-February 2020 (n=197). We assessed the reason for applying to infant mental health care unit, average waiting time until evaluation, quality of mother-child dyadic relationship and the diagnosis made by our infant mental health team.

#### **RESULTS**

There was a significant difference in terms of reason for applying to infant mental health care unit. Between March 2020-March 2021, infants with 'poor social interaction' applied more frequently than the previous year. Also average waiting time until evaluation was significantly shorter than the previous year. There was no significant difference in terms of drop out rates.

#### **CONCLUSIONS**

It is clear that infants have been affected by the pandemic regarding their mental health. As a clinic, we have taken measures to adapt to extraordinary conditions caused by the pandemic. We hope that our study brings a new understanding to infants' mental health needs during the pandemic and sheds a light to changing conditions of an infant mental health unit from a middle income country.

#### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





# POSTER PRESENTATION

Abstract ID Number: 17

#### **NEURO-LINGUISTIC STYLES IN YOUNG ARABIC SPEAKING CHILDREN WITH ASD**

## Gary Diamond<sup>1</sup>, Eman Badir<sup>2</sup>, Shelly Almog<sup>3</sup>, Labwa Jaoussy<sup>2</sup>, Guma Badir<sup>2</sup>, Ashraf Akawi<sup>2</sup>, Lutfi Jaber<sup>4,5</sup>

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- <sup>3</sup>Clalit Health Services, Bene Berag, Israel
- <sup>4</sup>Clalit Health Services, Tayibe, Israel
- <sup>5</sup>Tel Aviv University School of Medicine, Tel Aviv, Israel

#### **PURPOSE**

Identifying specific speech markers of ASD in young Arabic speaking children, would enable parents and caregivers to refer children with suspected speech impairment at an earlier age for evaluation and diagnosis.

#### **METHODS**

Evaluations of all Arabic speaking children, aged 3 to 9 years, with significant speech delays over a 5-year period were reviewed. Identifying the presence of characteristic maladaptive speech pathologies was made according to age-related norms. Our cohort consisted 58 children (78% M, 22% F), 37 (64%) of whom were eventually diagnosed with ASD, and the remaining 21 (36%) were diagnosed with different language impairments. Mean age at diagnosis was 52 months.

#### **RESULTS**

Use of an inordinate degree of words and expressions in classical Arabic as well as English in daily conversation instead of spoken Arabic, was highly associated with ASD, especially among those who were both with a higher mean intelligence quotient (IQ) score (IQ >70), and were > 4 years of age, (Pearson = 7.29, Fisher 2-tailed test, p = 0.015).

The use of out of context speech embedded in ordinary Arabic vernacular was associated with a higher degree of speech stereotypy (p <0.001) among ASD children and was statistically unrelated to the number of hours of screen viewing time, jargoning, or associative speech.

#### **CONCLUSIONS**

Although use of classical Arabic is not the exclusive province of ASD, its daily use appears to be highly suggestive that a social communication disorder should be investigated

#### **TOPIC CATEGORY**





# POSTER PRESENTATION

## Abstract ID Number: 20

THE CONFIDENCE OF PARENTS OF CHILDREN, AGE 2-7, WITH AUTISM SPECTRUM DISORDER IN IMPLEMENTING PARENT MEDIATED HOME INSTRUCTION DURING THE COVID-19 PANDEMIC

#### **Juan Alfonzo Pulhin Dacumos**

Homeschool Global, Manila, Philippines

#### **INTRODUCTION**

The COVID-19 Pandemic has served as the impetus of drastic change. Due to the isolated nature of quarantine, medical professionals had to adapt the approach to ensure the efficacy of intervention despite the status quo. Teleconsultation and teletherapy accompanied with parent-mediated home instruction have served as the widely utilized medium during the pandemic. Parents and caretakers have been required to fulfill a more participative role in the child's intervention.

#### **OBJECTIVES**

The study aims to explore the following, parents' confidence in fulfilling their novel role in their child's intervention, parents' confidence in implementing parent-mediated home instruction during the pandemic, and parents' sentiments regarding the current setup.

#### **METHODS**

The researcher constructed a questionnaire that aimed to gauge how confident the parents are by inquiring about the following dimensions, availability of resources, the nature and effects of the pandemic, novel nature of implementing parent-mediated home instruction, and familiarity with said instruction. As a Google Form, the questionnaire was distributed to the target demographic by Developmental and Behavioral Pediatricians in the Philippines.

#### **RESULTS AND CONCLUSIONS**

The study has found the following; first, parents find resources in a clinical setting to be generally accessible. Second, socio-economic inequity concerning difficulties caused by the pandemic and fulfilling intervention needs exists. Lastly, a degree of confidence exists in administering instructions regardless of familiarity. Despite all of this, there are multiple areas of improvement that need to be addressed to guarantee intervention efficacy during the pandemic.

#### **TOPIC CATEGORY**

Intervention: 1i) Parent Training





# POSTER PRESENTATION

## ◆ Abstract ID Number: 22

# THE PRACTICE OF DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS IN A TERTIARY COVID-19 REFERRAL CENTER IN THE PHILIPPINES

#### **Charlotte Averill Tan, Alexis Reyes**

Division of Developmental and Behavioral Pediatrics, Department of Pediatrics, Philippine General Hospital, University of the Philippines, Manila, Philippines

#### **BACKGROUND**

The COVID-19 pandemic changed the landscape of the Philippine healthcare system. Limiting developmental and behavioral pediatrics (DBP) services, considered by some as a nonessential service during a pandemic, may have significant consequences.

#### **OBJECTIVE**

This study described the practice of DBP in a tertiary COVID-19 referral center in the Philippines.

#### **METHODS**

A focused group discussion among the post-residency fellows of the PGH Division of DBP and a review of medical records of all patients seen at the PGH DBP Outpatient Clinic from June 2020 to May 2021 were conducted to identify changes in the practice of DBP during the COVID-19 pandemic.

#### **RESULTS**

Telemedicine was quickly adapted despite inexperience in its use. There were 1,861 patients seen, majority through video call (93.4%) using Facebook Messenger (82.9%). Challenges such as technical limitations (i.e., poor internet connectivity), lack of appropriate devices, and frequent revisions of workflow algorithms were encountered. Although telemedicine was labor and time intensive, benefits included minimizing exposure to COVID-19, seeing patients in their natural environment, reporting decreased costs of care, and improving accessibility of services for those living in remote areas.

#### CONCLUSION

The PGH DBP Outpatient Clinic implemented various adaptations to provide uninterrupted care for its patients amidst the COVID-19 pandemic. A constant review of workflow processes and protocols should be done to improve healthcare delivery and to continue supporting these patients and their families.

#### **TOPIC CATEGORY**

Use of Technology in Diagnosis: -





# POSTER PRESENTATION

## ◆ Abstract ID Number: 23

# STORYTELLING AND ART ACTIVITIES AS POTENT TOOLS IN ENHANCING THE CRITICAL THINKING SKILLS OF YOUNG LEARNERS

#### **Gretchen Ana Tumaob**

Philippine Women's University, Metro Manila, Philippines

Learners from the 21st century are currently challenged when it comes to developing their critical thinking skills.

This study aimed to focus on developing the critical thinking skills through storytelling and art activities to achieve efficiency and sustainability in the reading program at the Kinder level of the 21st century.

Based on the researcher's experience on using storytelling and art activities, an experimental method was used to compare the results and see the effectivity of the tools to enhance the learner's critical thinking skills in the Kinder level. Respondents were purposively selected since it was hard to find other learners' availability during online learning.

The findings indicated that the use of storytelling and art activities can help improve how they can think critically. It challenged the learners to think beyond their learning capacity. Storytelling and art activities helped the learners gained more understanding not only to the stories but its relation to the real-life situation.

Thus, it can be concluded that the inclusion of storytelling and art activities in the reading program of the Kinder learners are necessary to fully enhance the learner's capacity to think beyond his/her limit. On this basis, it is recommended that educators must engage the learners to some thought provoking questions and activities to further keep their interest and challenge more themselves to think critically. Future research is needed to identify other factors that could strengthen the effectivity of storytelling and art activities.

#### **KEYWORDS**

Critical Thinking, Storytelling, Art activities, Kindergarten learners

#### **TOPIC CATEGORY**

Early Childhood Development: -





# POSTER PRESENTATION

## ◆ Abstract ID Number: 25

KNOWLEDGE OF ATTENTION DEFICIT HYPERACTIVITY DISORDER AMONGST PRIMARY SCHOOL TEACHERS IN GOVERNMENT AIDED PRIMARY SCHOOLS IN BARDEZ TALUKA, NORTH GOA

#### Dr. VIBHA PARSEKAR<sup>1,2</sup>, Dr. Nandita De Souza<sup>2</sup>, Aileen De Souza<sup>2</sup>

<sup>1</sup>District Early Intervention Centre, Mapusa, India. <sup>2</sup>Sethu, Mapusa, India

#### INTRODUCTION

ADHD is a neurodevelopmental disorder amongst children with an incidence of 3% to 5%. Teachers knowledge of ADHD greatly impacts its diagnosis and management.

#### **OBJECTIVES**

- 1. To assess the knowledge of ADHD amongst primary school teachers in the Bardez Taluka of North Goa.
- 2. To assess the change in knowledge of ADHD after a 3 hours teacher training session.
- 3. To co-relate the knowledge of teachers with age, educational qualifications, prior training and school setting i.e. urban or rural.

#### **METHODS**

9 schools (80 teachers 40 urban; 40 rural) amongst 14 which were approached consented to participate in the study. Teachers filled out the Knowledge of Attention Deficit Disorder Scale KADDS (Mark J. Sciutto and Emily Feldhamer, 2005) and a socio demographic data questionnaire. 3 hour training session was conducted covering the definition, subtypes, diagnosis and management of ADHD.

Teachers re-filled the KADDS post training. The total and subscale scores of the KADDS were obtained before and after the training and data was then analysed using SPSS version 20.

#### **RESULTS**

The knowledge of teachers about ADHD is inadequate with a significant difference in urban and rural school teachers (p value 0.00). There is a significant increase in the knowledge of teachers post the training (p value 0.00). The knowledge of the teachers increased across all the 3 KADDS subscales.

#### **CONCLUSION**

There is a need to sensitize teachers about ADHD. Conducting capacity-building sessions for primary school teachers, with the inclusion of neurodevelopmental conditions should be an essential part of the training curriculum.

#### **TOPIC CATEGORY**





# POSTER PRESENTATION

◆ Abstract ID Number: 27

# AWARENESS PROGRAM FOR CAREGIVERS ON RIGHTS OF CHILDREN WITH DISABILITIES: ARE THEY EFFECTIVE?

## Aditi Jha, Roopa Srinivasan

Ummeed Child Development Centre, Mumbai, India

#### **OBJECTIVE**

Know Your Rights(KYR) program for caregiver's builds awareness about rights and provisions for Children With Disabilities' (CWDs) in rehabilitation, education, health, livelihood and accessibility.

To assess

- 1. Number of caregivers who obtain disability certificates and access provisions after attending the KYR.
- 2. Barriers and Facilitators to obtaining a certificate and accessing provisions.

#### **METHOD**

Semi structured telephonic interviews were conducted with caregivers of CWDs (Autism, Cerebral Palsy, Learning Disabilities, Intellectual Disability, Down Syndrome, Hearing Impairment) aged 0-17 years between April 2018-November 2019.

#### **RESULTS**

143 out of 193 who attended KYR could be contacted. 55(38.4%)obtained disability certificate and were availing of provisions post KYR, 31(22%) had initiated the process of getting a disability certificate, 13(9%) had not initiated the process of certification and 44(31%) were not availing of provisions despite obtaining the certificate pre KYR.

#### **FACILITATORS**

- 1. Understanding the role of rights for CWDs, Handouts and Visual aids outlining steps.
- 2. Assistance by KYR facilitators, family and friends.

#### **BARRIERS**

- 1. Conflicting priorities (procuring water, child care at home etc.)
- 2. Lack of government issued identification documents.
- 3. Lack of clarity about the diagnosis and certification process.
- 4. Low literacy and lack of access to computers.

#### **CONCLUSIONS**

Caregiver awareness about the role of rights and practical know-how make programs on rights of CWDs more effective. Steps to mitigate barriers unique to under resourced settings will further enhance impact of such initiatives.

#### **TOPIC CATEGORY**

Advocacy for Children with Disabilities: -





# POSTER PRESENTATION

Abstract ID Number: 28

FATHER'S ENGAGEMENT IN RESPONSIVE CAREGIVING WITH CHILD DEVELOPMENT OUTCOMES: A COHORT STUDY FROM RURAL CENTRAL INDIA

#### Dr. Rutuja Kolhe, Dr. Subodh Gupta

Mahatma Gandhi Institute of Medical Sciences, Sevagram, India

#### **OBJECTIVE**

Mother's role in shaping child's future is well-known, but a fathers' participation in it is less explored. Considering this, a study was conducted in rural Central India to understand better the association between fathers' role in responsive caregiving and child development.

#### **METHODS**

Children aged 3 to 6 months (n=230) from different villages under 3 PHCs were enrolled in this prospective cohort study. The 'Role of Father questionnaire' (ROFQ) and the Home Observation Measurement of the Environment (HOME Inventory) were used to capture fathers' engagement in responsive caregiving in first phase, and in second phase, two aspects of child development were measured – socio-emotional development and attainment of milestones for different domains using SEAM questionnaire and Developmental Screening Test (DST). Data analysis was done in R version 3.6.1.Wilcoxon sum rank test compared socio-demographic variables with different scores and spearman's rho coefficient was used for association between the scores.

#### **RESULTS**

Socio-emotional development improved as the number of tasks carried out by fathers increased (rs = 0.13, p<0.05), fathers age and occupation were also associated to responsiveness (rs = 0.14, p<0.05) and SEAM score (rs = 0.13, p<0.05). However, no statistically significant association was found between father-child interaction and socio-emotional development (rs = 0.03,p = 0.57)

#### **CONCLUSION**

Children endure several changes during early childhood. Our findings suggests that engaging a father in responsive caregiving improves responsiveness and socio-emotional outcomes. More research, however, is needed to have a deeper understanding of the influence that a father can play in a child's development.

## **TOPIC CATEGORY**

Early Childhood Development: -





# POSTER PRESENTATION

## Abstract ID Number: 31

PREDICTABILITY OF GMA (PRECHTLES MANOEUVRE) IN ASSESSMENT OF CEREBRAL PALSY: TRIAL ON HIGH RISK NEONATE AT CHILD DEVELOPMENT CENTRE, SEMI URBAN AREA

#### Nilanjan MUKHERJEE, Utsab GUHA

Sishumangal CDC, Raiganj, India

#### **OBJECTIVE**

To segregate the high risk newborn and follow up properly.
To implement GENERAL MOVEMENT ASSESSMENT on them.
Early diagnose possibility of cerebral palsy and arrest it at stage of evolution.

#### **METHOD**

We made a team (all trained on GMA), contacted SNCU of nearby Government medical College to allow us to visit the kids at the routine follow-up clinic. The study took place for 1 year (July 2018 - June 2019).

We started with both term and preterm neonate not before 34 weeks of gestational age. With the baby positioned supine, movements are video-recorded and analysed by us to categorise the movements according to their fluency, complexity and variability.

A total number of 67 children were enlisted for the study, selected according to high risk category, of which 12 guardians were absent for regular visits and defaulted. 5 parents were noncompliant.

All the children taken in first three months (n=50) were observed twice, 6 and 9 months of age (corrected age in case of preterm).

#### **RESULT**

It came to our notice that among this 50 number of children history wise 26 from birth asphyxia with variable HIE I&II, 6 from kernicterus encephalopathy, 16 preterm low-birth weight, 2 with early onset seizure. Among these, 34 children demonstrated typical movement pattern at the 1st observation and 31 of them destined to be CP at 6-9 months age.

#### **CONCLUSION**

Beside a sensitivity and specificity of 95% each, the assessment of GMA is quick, noninvasive, even nonintrusive, and cost-effective compared with other techniques





# POSTER PRESENTATION

Abstract ID Number: 32

# PARENTAL PERCEPTION REGARDING THEIR HOME-BASED PHYSIOTHERAPY DELIVERY TO CHILDREN WITH SPECIAL NEEDS UTILIZING TELEREHABILITATION SUPPORT DURING THE PANDEMIC

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Composite Regional Centre for Skill Development Rehabilitation and Empowerment of Persons with Disabilities – Kozhikode, Kerala, India, Kozhikode, India

#### **OBJECTIVES**

The pandemic had disrupted the regular physiotherapy services to children with special needs. To overcome this situation and to ensure uninterrupted physiotherapy services, tele-rehabilitation utilizing various online and social media platform was adopted. Parents were trained to be physiotherapy provider partners with regular feedbacks through tele-rehabilitation. This was a novel approach in our setting and the efficacy of this, need to be established. Hence qualitative research was conducted with the objective of exploring parental perception regarding home-based physiotherapy delivery to their children with regular online tele-rehabilitation support by the physiotherapist.

#### **METHODS**

Qualitative research with phenomenological approach was used. Semi-structured interview with validated interview guide was conducted after obtaining oral consent from the participants. The interviews were audio-recorded. The recorded interview was transcribed verbatim and translated.

#### **RESULTS**

Data saturation was reached with the 10th participant. Themes and sub-themes were derived using thematic analysis. Majority of the participants felt that tele-rehabilitation support made their home-based physiotherapy more effective. The themes extracted from the thematic analysis were "more of positivity", "active participation", "became enlightened", "honest expressions", "self-confident", "convenience", "good therapy relationship", "usefulness", "when child is ready", and "not fit for all". Most of the participants expressed the need to continue tele-rehabilitation even after regular physiotherapy services commences.

#### CONCLUSION

Majority of the participants felt that tele-rehabilitation support made their home-based physiotherapy more effective and recommends continuing the same even after regular physiotherapy services resumes.

#### **KFYWORDS**

Tele-rehabilitation, Qualitative, Parents of children with special needs, Perception, Pandemic.

#### **TOPIC CATEGORY**

Intervention: 1i) Parent Training





# POSTER PRESENTATION

◆ Abstract ID Number: 35

# USE OF CAREGIVER REPORTED EARLY DEVELOPMENT INSTRUMENTS (CREDI) TOOL TO EVALUATE INFANT DEVELOPMENT IN MAYA GUATEMALAN CHILDREN: THE SAQMOLO'STUDY

<u>Gabriela Montenegro-Bethancourt</u><sup>1,2</sup>, Gabriela V. Proaño<sup>2</sup>, Elizabeth Yakes Jimenez<sup>3,2</sup>, Taylor C. Wallace<sup>4,5</sup>, Alison Steiber<sup>2</sup>, George P. McCabe<sup>6</sup>, Peter Rohloff<sup>1,7</sup>

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- <sup>6</sup>Purdue University, West Lafayette, USA
- <sup>7</sup>Brigham and Women's Hospital, Boston, USA

#### **OBJECTIVES**

Guatemala has a high prevalence of stunting, which negatively impacts child development; rural Maya children are disproportionately affected. Feasible and validated tools are needed to measure child development in various settings and contexts. The Caregiver Reported Early Development Instruments (CREDI) is an internationally validated population-level tool assessing motor, language, cognition, social-emotional, and mental health. The CREDI validation study included a sample of Guatemalan Mam and K'iche' Maya speakers. Understanding how the CREDI performs with other ethnic groups in Guatemala is important. We aimed to assess the feasibility of using the CREDI long form to measure differences in global development scores in a randomized-controlled, comparative effectiveness trial of an egg intervention for rural Maya children (Sagmolo' Study).

#### **METHODS**

We collected CREDI long form data for 37 Kaqchikel Maya children age 6-19 months. The CREDI tool was completed with the child's primary caregiver in Kaqchikel or Spanish.

#### **RESULTS**

Overall mean  $\pm$  SD CREDI Z-score -0.91 $\pm$  0.87 (range -2.78, 1.18). Subdomain mean scores were motor: -1.17 $\pm$ 1.03 (range -3.06, 1.38); cognitive: -0.58 $\pm$ 0.96 (range -2.37, 1.18); social-emotional: -0.43 $\pm$ 0.87 (range-2.46, 1.18); and language: -0.86 $\pm$  1.08 (range -3.23, 1.16). Mean scores were below the international reference population for all subdomains. Administration required careful adaptation of keywords and culturally appropriate examples/prompts.

#### CONCLUSION

In this pilot, the CREDI tool was feasible to use in evaluating child development in rural Guatemala. CREDI z-scores were distributed as expected with respect to the CREDI international reference standard, given the high prevalence of stunting in the study area.

#### **TOPIC CATEGORY**

Early Childhood Development: -





# POSTER PRESENTATION

Abstract ID Number: 37

# THE EFFECTS OF WHO CAREGIVER SKILLS TRAINING ON PSYCHOLOGICAL WELL-BEING AND DEPRESSION OF PARENTS OF CHILDREN WITH ASD

#### Subhashis Dutta<sup>1</sup>, Reema Mukherjee<sup>2</sup>

<sup>1</sup>IIN, Raiganj, India <sup>2</sup>Sishumangal, Raiganj, India

#### **OBJECTIVES**

The purpose of this study is to evaluate the effect of a parent-mediated intervention WHO Caregiver Skills Training Programme on depression and psychological well-being of parents of children with ASD age of 2 to 9.

#### **METHOD**

The research design was a before-after study, by analysing the mental health status of parents (both mother and father) of 40 children with ASD from West Bengal (i.e. parents of 20 children who have undergone the WHO Caregiver Skills Training and 20 treatment as usual who haven't undergone the training).

Measures included Ryff's Psychological Well-Being Scales (PWB), 42 Item versions which measures six aspects of wellbeing and happiness: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Beck Depression Inventory was used for depression.

The parents who received WHO-CST training over 9 weeks followed strategies in their everyday activity. The tools were delivered at beginning and at end of the WHO-CST.

#### **RESULTS**

WHO Caregiver Skill Training programme was found to be associated with positive changes in psychological well-being and also reducing depression of parents of children with ASD.

#### **CONCLUSION**

This study suggests that parents of young children with ASD improve their well-being on participating in the WHO-CST program. Further studies are needed to establish casual relationships.

#### **TOPIC CATEGORY**





# POSTER PRESENTATION

## Abstract ID Number: 38

EFFECT OF ENVIRONMENTAL ENRICHMENT ON MOTOR PROFICIENCY IN INSTITUTIONALIZED AND NON-INSTITUTIONALIZED CHILDREN AMONG 8-4 YEARS- AN EXPERIMENTAL STUDY

## Roohina Shaikh, Sanjiv Kumar, Vinuta Deshpande

Kaher Institute of Physiotherapy, Belagavi, India

#### **OBJECTIVE**

Children who grow in orphanages are at risk in numerous functional fields, including their physical, socio-emotional and cognitive development and it leads to poor growth, delayed development and lower balance scores compared to non-institutionalized children. Early stimulation in the form of Environmental Enrichment (EE) can modulate brain development pathways and can cause long-term changes in the neural circuits. It has been shown to improve neuroplasticity and promote memory and motor control in animal studies, but the effect is less known in humans. To evaluate the effect of EE on motor-proficiency in institutionalized children and non-institutionalized children.

#### **METHODS**

32 children among 4-8 years were included from orphanages and schools for institutionalized and non-institutionalized groups respectively. Motor-proficiency was assessed using BOT2-MP pre and post-intervention. Tailor-made intervention based on EE strategies was given as intervention in institutionalized group for 6-days per/week for 12weeks and parental counselling on how to improve the motor-proficiency of their child was given as intervention in non-institutionalized group.

#### **RESULTS**

Ri386.3.5.1.Statistical software was used for analysis and level of significance was set at 5%- level. Intervention demonstrated substantial gains in both the subsets of BOT2 MP and Total Motor Composite except for the Balance subset of institutionalized group. In non-institutionalized group, mean- scores of all subsets and Total Motor Composite showed significant increase except Fine Motor Precision subset after 12-weeks.

#### **CONCLUSION**

The present study concludes that 12-weeks of EE improves motor proficiency in institutionalized and non-institutionalized groups among 4-8years. But EE showed better improvement in enhancing motor-proficiency than parental counselling.

#### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





# POSTER PRESENTATION

Abstract ID Number: 39

# EVIDENCE SYNTHESIS ON CHILDHOOD CHROMIUM LEVEL AMONG NORMAL AND COGNITIVELY IMPAIRED CHILDREN

#### GM Islam<sup>1,2</sup>, Mohammad Rahman<sup>3</sup>, Mohammed Hasan<sup>4</sup>, Amare Tadesse<sup>5</sup>, Davidson Hamer<sup>6,7</sup>

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- <sup>6</sup>Department of Global Health, Boston University School of Public Health, Boston, USA
- <sup>7</sup>Section of Infectious Diseases, Department of Medicine, Boston University School of Medicine, Boston, USA

#### **OBJECTIVES**

Due to the scarcity of reliable information on the relationship of chromium (Cr) exposure and childhood cognitive function, we aimed to investigate the association between chromium levels among normal and cognitively impaired children.

#### **METHODS**

We searched electronic databases including PubMed, Embase, Web of Science and CINAHL to identify case-control studies that reported childhood Cr exposure and problems with cognitive development. Cr levels were compared among the normal and cognitive defect children, and a random effect meta-analysis was performed using Stata version 16.

#### **RESULTS**

Initially, we identified 61 studies, among which 12 studies were met eligibility criteria. Child hair, serum and urine Cr measurements were reported by seven, two and one studies, respectively. In addition, one study reported both serum and hair Cr exposure and another reported urine and hair Cr exposure. The pooled standard mean differences (SMD) showed that hair Cr levels were non-significantly lower among children with cognitive defects (-0.01  $\mu$ g/g, 95%Cl: -0.04, 00, p=0.27). On the contrary, in serum and urine, the pooled SMD was higher in children with cognitive defects compared with normal children (0.32  $\mu$ g/g, 95%Cl: -0.78,1.42, p=0.56 and 0.64  $\mu$ g/g, 95%Cl: -0.07,1.36, p=0.08; respectively).

#### **CONCLUSIONS**

This systematic review found low level hair Cr and high serum and urine Cr levels between children with cognitive defects and healthy control children. Larger studies using standardized criteria and longitudinal assessment of cognitive development are needed to determine whether there is a dose-response effect of childhood Cr exposure on the cognitive function of children.

#### **TOPIC CATEGORY**

Risk Factors for Developmental Disabilities: -





# POSTER PRESENTATION

Abstract ID Number: 41

# MORPHOMETRIC ANALYSIS OF CORPUS CALLOSUM IN AUTISTIC AND TYPICALLY DEVELOPING INDIAN CHILDREN

Samuel Berkins, <u>Beena Koshy</u>, Roshan Livingstone, Anitha Jasper, Hannah Grace, Ekta Rai Christian *Medical College, Vellore, India* 

#### **OBJECTIVES**

Corpus callosum (CC) is the largest commissural white matter bundle in the brain, and its abnormalities have been reported in individuals with autism spectrum disorder (ASD). There is limited literature evaluating CC in Indian population. This study aimed to investigate the variation in CC between ASD and TD children in the Indian population, and any association between the CC morphometry and the severity of ASD.

#### **METHODS**

We studied 61 children with ASD and 61 typically developing children matched for sex using magnetic resonance imaging (MRI) Brain. The thickness of rostrum, body and splenium of CC, the anterior to posterior length and the maximum height of CC were measured on the midsagittal MRI slice using ITK-SNAP (v 3.6) software. A multivariate analysis was utilised.

#### **RESULTS**

The rostrum (F1,100 = 18.86, p < .001) and body (F1,100 = 9.13, p = .003) of the CC were significantly thinner in children with ASD, when compared to TD children. We also observed reduction in the anterior to posterior length (F1,100 = 6.97, p = .009) and the maximum height (F1,100 = 5.08, p = .02) of CC in ASD children compared to TD children. In children with ASD, we did not observe any association between the autism severity scale and any of the morphometric measures of CC. These findings remained consistent in the sensitivity analysis.

#### **CONCLUSIONS**

Our results demonstrate that children with ASD exhibit a significant reduction in CC measure compared to TD children irrespective of the ethnic group, indicating suboptimal interhemispheric connections.

#### **TOPIC CATEGORY**





# POSTER PRESENTATION

Abstract ID Number: 42

# CLINICAL PROFILE OF PATIENTS WITH NEURODEVELOPMENTAL CONDITIONS LIVING IN GEOGRAPHICALLY ISOLATED DISADVANTAGED AREAS

#### Andrea Martha Bagain, Joselyn Eusebio, Jocelyn Sanchez

Section of Developmental and Behavioral Pediatrics, National Children's Hospital, Quezon City, Philippines

#### **OBJECTIVE**

To describe the demographic and clinical profile of patients with neurodevelopmental conditions in Marinduque, Philippines seen via Telemedicine Consultation from 2015-2020.

#### **METHODOLOGY**

A descriptive cross-sectional study was done among 139 patients with neurodevelopmental conditions, seen via Telemedicine.

#### **RESULTS**

Out of the 139 patients, 50.4% were diagnosed with Intellectual Disability, followed by Cerebral Palsy (21.6%) and Autism Spectrum Disorder (10.8%) The most common presentation was learning difficulty (44.6%) followed by motor delay(25.6%). The mean age of diagnosis was 8.1 years (SD 3.99) with male predominance (66.9%). Concerns on behavior, feeding and sleep were reported at 15.1%, 15.1% and 10.8%, respectively. Majority were born full term (87.8%) via normal spontaneous delivery (91.4%), 42.4% delivered at home. About 53.3% had malnutrition, low birth weight (20.9%) and asphyxia (15.8%). Maternal history of multiparity (9.3%), illnesses (8.6%), advanced maternal age (12.9%) and teenage pregnancy (7.1%) were also seen. A family history of disability, seizure or developmental concerns was present in 58.2% while a greater proportion (69.1%) had unremarkable medical history.

#### **CONCLUSION**

The possible implication of the results of this study provides a starting point in evaluating their needs. The most common conditions identified were Intellectual Disability and Cerebral Palsy with a background history of maternal illness, asphyxia, LBW and malnutrition. These preventable variables should be prioritized through provision of adequate maternal care and access to health services. This study also pioneered Telemedicine in Developmental and Behavioral Pediatrics in the Philippines and has helped children from remote areas be evaluated by an expert in the field.

#### **TOPIC CATEGORY**





# POSTER PRESENTATION

Abstract ID Number: 48

# HIDDEN CRISES IN PLAIN SIGHT: HIGH LEVELS OF MULTIPLE CHILD ADVERSITIES MEASURED IN RURAL ZIMBABWE

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- <sup>1</sup>Zvitambo Institute of Maternal and Child Health Research, Harare, Zimbabwe
- <sup>2</sup>Queen Mary University of London, London, United Kingdom

#### **OBJECTIVE**

There is a pressing need to understand and mitigate the impact of child adversities on child development. This pilot study aimed to characterise the prevalence of multiple adversities within school- age children in subsistence farming households and their associations with school-age growth and cognition.

#### **METHODS**

An adversity scale was developed by combining local knowledge and recent literature. After extensive community sensitisation, village health workers identified eligible families from within Shurugwi district, Zimbabwe. 80 children aged 7 years were randomly selected. The primary caregiver was interviewed and the child's anthropometry, physical fitness, and cognitive function were measured.

#### **RESULTS**

A high prevalence of adversities among the 80 households was reported, with a mean of 5 (SD 3.1) events. The most common adversities affecting households were crop failure (N=60; 75%), business failure (N=40; 50%), loss of family possessions due to hardship (N=27; 34%), household death (N=26; 33%), job loss (N=22; 28%), household alcohol problem (N=16; 20%) and debt (N=16; 20%). Child medical adversities were relatively rare: only 17 had ever been admitted to hospital in their lifetime. There was no association between the adversity score and child cognition measurements, although years of schooling was highly significant.

#### **CONCLUSIONS**

Subsistence farming families in rural Zimbabwe face multiple simultaneous adversities. Although there was no clear association by age 7 with the adversity scale, the data may have a cumulative effect as the child ages and continues to be exposed to adversities. Further work is needed to understand the cumulative impact of these on child development.

#### **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -

<sup>&</sup>lt;sup>3</sup>University of Liverpool, Liverpool, United Kingdom





# POSTER PRESENTATION

Abstract ID Number: 49

# PARENTAL EXPECTATIONS FROM HEALTH CARE PROVIDERS OF PEDIATRIC WARDS IN TERTIARY CARE HOSPITAL ON THE BASIS OF FAMILY-CENTERED APPROACH

## <u>Dr. Prachi Gangurde</u>, Dr. Hemant Nandgaonkar

Seth G.S.M.C. & K.E.M.H., Mumbai, India

#### **BACKGROUND & OBJECTIVE**

Implementation of Family centered (FCC) approach is required for better outcome of child health during hospitalization. For implementation of Family centered approach evaluation of parental expectations & present perspectives is required. The objective of the study was to assess parental expectations & need of Family-centered approach.

#### **METHODOLOGY**

Mixed method approach was used with the parents of child admitted in pediatric wards between ages 3-12 years. 200 participants for quantitative (MPOC-56) & 85 for qualitative study (in- depth interview) were recruited from the pediatric wards of tertiary care hospital.

#### **RESULTS**

It was found that parents experience higher satisfaction in Respectful & supportive care and comparatively less satisfied about providing specific information about their child during hospitalization. In- depth interview revealed themes like Family expectations, Expectations from staff, Live through, Perception, Knowledge about intervention, Awareness about child health obtained. Both subpart of study shows similar findings on the basis of FCC principles that Respect and dignity is highly followed in this tertiary care hospital as well as information sharing is lacking subsequently in current practice.

#### **CONCLUSION**

For the family-centered approach to be successful, health-care faculty must be properly educated, and management reforms must be implemented.

#### **KEYWORDS**

Family-centered approach, Parental expectations.

## **TOPIC CATEGORY**

Advocacy for Children with Disabilities: -





# POSTER PRESENTATION

Abstract ID Number: 50

# RISK FACTORS FOR HEARING IMPAIRMENT AMONG PRIMARY SCHOOL DEAF CHILDREN IN GAZA STRIP, PALESTINE

#### **Hatem Eldabbakeh**

Palestine Red Crescent Society, Gaza, Palestine

#### ΔΙΜ

This study was carried out to determine the risk factors associated with hearing impairment among primary school deaf children in Gaza Strip

#### **METHODOLOGY**

This was a retrospective study of preschool deaf children. It was conducted over a period of 4 months (February to June 2017). Data was collected from consented parents by using a pretested structured interview questionnaire. Data was entered, managed, and analyzed by using SPSS software version 19.

#### **RESULTS**

The participants' response rate was 74% response rate. The mean age of the participants was 11.5 years  $\pm$  3.8. 71.6% of parents were closed relatives, 82.4% of the children were discovered as deaf before the age 3 years, and 63.5% have another deaf child or more in the family. The common type of hearing impairment was sensorineural hearing loss 64.9%, 18.9% had profound hearing impairment, and 78.4% were using hearing aids and this reflect the highest percentage of sever to profound hearing loss. The most common identified risk factors associated with hearing impairment rather than consanguinity marriage include: recurrent otitis media and exposure to high noise/explosions 39.1% for each, earwax impaction 29.7%, neonatal jaundice and mother took medicine during pregnancy 24.3% for each, child infected with chickenpox 23%, recurrent tonsillitis 21.6%, ear surgery 17.6%, febrile illnesses 14.9%, and birth asphyxia.

#### CONCLUSION

This study shown that consanguinity marriage, recurrent otitis media, exposure to noise, earwax impaction, neonatal jaundice and mothers had medicine during pregnancy are risk factors for hearing impairment among school deaf children in Gaza Strip.

#### **TOPIC CATEGORY**

Risk Factors for Developmental Disabilities: -





# POSTER PRESENTATION

Abstract ID Number: 52

RISK FACTORS AND EARLY BEHAVIOURAL DIFFICULTIES ASSOCIATED WITH AUTISM SPECTRUM DISORDER IN A UNIVERSITY HOSPITAL CHILD DEVELOPMENT CENTRE IN KUALA LUMPUR, MALAYSIA

Norazlin Kamal Nor, Azimatun Noor Aizuddin, Afiq Nizam Zahir Hussain, Yun Yee Ting, Aida Ameilia Abd Rahman, Satvinder Kaur, Nur Hanim Narisa Idris

Universiti Kebangsaan Malaysia Medical Faculty, Kuala Lumpur, Malaysia

#### **OBJECTIVES**

Children with ASD were compared with typically-developing (TD) children to determine association of ASD risk factors including maternal illness, medication use during pregnancy, prematurity, low birth weight, birth order, and family history of neurodevelopmental conditions. The association between ASD and behavioural difficulties in infancy was also assessed.

#### **METHODS**

A cross-sectional study was conducted at the Universiti Kebangsaan Malaysia Child Developmental Centre (CDC), paediatric clinics and nursery on children aged 18 months to 18 years. Data collection used parent-reported questionnaire in TD and medical records in ASD children. TD children recruited between 1st February to 31st July 2020 underwent ASD screening. Medical records of ASD children followed-up in CDC between 1st January to 31st December 2018 were obtained. Univariate and multivariate analyses were utilized to assess the association between risk factors and early behavioural issues comparing ASD with TD children.

#### **RESULTS**

Recruited children were matched for sex and age (ASD, n=301; TD, n=68). Firstborn children (p= 0.004, OR 2.44, 95% CI: 1.33, 4.50), co-existing neurodevelopmental diagnoses (p= <0.001, OR 3.55, 95% CI: 1.94, 6.52), and family history of developmental delay (p= <0.001, OR 7.12 95% CI: 3.31 to 15.34) were associated with increased ASD risk. There was increased risk of abnormal behaviours reported in infants with ASD (p= 0.003, OR 6.08 95% CI: 1.83 to 20.30).

#### **CONCLUSION**

There was increased risk of ASD in firstborn children, those with co-existing neurodevelopmental diagnoses, and family history of developmental delay. ASD children had increased risk of abnormal behaviour from infancy.

#### **TOPIC CATEGORY**

Risk Factors for Developmental Disabilities: -





# POSTER PRESENTATION

Abstract ID Number: 53

# TELECONSULTATION FOR CHILDREN WITH DEVELOPMENTAL DISABILITIES DURING THE CORONA PANDEMIC: CAREGIVER'S EXPERIENCE

## <u>Urmila Dahake<sup>1</sup>, Jaya Prasad Tripathy<sup>2</sup></u>

<sup>1</sup>Associate Professor, Dept. of Pediatrics, ALL India Institute of Medical Sciences, Nagpur, India <sup>2</sup>Assistant Professor, Dept. of Community Medicine, ALL India Institute of Medical Sciences, Nagpur, India

#### **OBJECTIVES**

The unprecedented situation due to COVID-19 lockdown necessitates the need for tele-consultation with caregivers of children with disabilities. The objective of this study was to explore the acceptability, satisfaction, perceived relevance and barriers to tele-consultation from caregiver's perspective.

#### **METHODS**

A descriptive qualitative study (telephonic interviews) involving in-depth interviews (IDIs) with the caregivers of children with developmental disabilities who received tele-consultation. Manual content analysis of transcripts of IDI was done.

#### **RESULTS**

Eight IDIs were conducted with the caregivers of children with Cerebral Palsy, Autism and Developmental Delay. The respondents expressed increased challenges in managing the child during the pandemic and the need for professional consultation. They also expressed difficulty in accessing professional help during the pandemic due to poor health care access and fear of getting Covid-19. "For almost a year we couldn't take her for the therapy" "We were unable to take him to therapy which resulted in increase in tightness of him limbs, he became more irritable". All the respondents preferred video teleconsultation during lockdown due to flexible timings, ease of communication and no travel restrictions. But caregivers of children with physical ailments preferred face-to-face consultation. "I can benefit from tele- consultation because she does not have any physical problem"

#### **CONCLUSIONS**

Teleconsultation was found to effectively support the treatment and rehabilitation of children with disabilities during the COVID-19 lockdown, although direct face-to-face consultation was preferred by children with physical ailments. The use of modern mobile/digital technologies creates new opportunities to improve the quality and accessibility of such services.

#### **TOPIC CATEGORY**

Intervention: 1b) Medical





# POSTER PRESENTATION

Abstract ID Number: 55

# WEARABLE SENSORS FOR EARLY IDENTIFICATION OF POOR NEURODEVELOPMENT IN GUATEMALA

## Beth Smith<sup>1,2</sup>, Federico Gennaro<sup>1</sup>, Peter Rohloff<sup>3</sup>

<sup>1</sup>Children's Hospital Los Angeles, Los Angeles, USA <sup>2</sup>University of Southern California, Los Angeles, USA

<sup>3</sup>Wuqu' Kawoq, Tecpán, Guatemala

#### **OBJECTIVES**

In rural Guatemala, the number of infants at risk for impaired development is among the highest in the world, due to high rates of undernutrition, poverty, and limited preventive health care. The situation is compounded by suboptimal accuracy of detection of atypical development. As limb movements are one of the earliest outputs of the developing central nervous system, our goal is to quantitatively differentiate typical and atypical early limb movement patterns in infants at risk for developmental disability due to stunting in rural Guatemala using wearable motion sensors. We propose that wearable sensor assessment will be more accurate than current clinical assessments in predicting developmental outcomes.

#### **METHODS**

We are collecting full-day wearable sensor data of leg movements from 30 infants on 3 days each between 0-6 months of age. We are determining proportion of time asleep, quantity, acceleration, and variability/repeatability of leg movements. Developmental outcomes will be assessed at 12 months of age.

#### **RESULTS**

Preliminary analysis demonstrates that the infants average around 200 leg movements per hour of awake time at 1 month of age and increase to an average of around 900 leg movements per hour of awake time at 4 months of age.

#### **CONCLUSIONS**

Infants are moving more as they grow and develop. We do not yet know how leg movement rates relate to developmental outcomes. Our novel approach has the potential to improve health outcomes for Guatemalans and other LMIC citizens through earlier identification of atypical development, supporting earlier intervention and improved neurodevelopmental outcomes.

#### **TOPIC CATEGORY**

Use of Technology in Diagnosis: -





# POSTER PRESENTATION

Abstract ID Number: 56

# PROOF OF CONCEPT OF A DIGITAL COGNITIVE ASSESMENT TOOL, DEVELOPMENTAL ASSESSMENT ON AN E-PLATFORM (DEEP), FOR PRESCHOOL CHILDREN

<u>Supriya Bhavnani</u><sup>1,2</sup>, Debarati Mukherjee<sup>2,3</sup>, Sunil Bhopal<sup>4,5</sup>, Kamal Kant Sharma<sup>1</sup>, Jayashree Dasgupta<sup>1</sup>, Gauri Divan<sup>1</sup>, Seyi Soremekun<sup>6</sup>, Reetabrata Roy<sup>1,4</sup>, Betty Kirkwood<sup>4</sup>, Vikram Patel<sup>7,8</sup>

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- <sup>7</sup>Department of Global Health & Social Medicine, Harvard Medical School, Boston, USA
- <sup>8</sup>Department of Global Health and Population, Harvard T H Chan School of Public Health, Boston, USA

#### **OBJECTIVES**

To fill the gap of scalable neurodevelopmental assessment tools for preschool children by establishing the proof-of-concept of a tablet-based tool, Developmental Assessment on an E-Platform (DEEP), comprising gamified neuropsychological tasks for cognitive assessment.

#### **METHODS**

Data on DEEP and anthropometry was collected from 1359 3-year-old-children. DEEP data from 200 children was used to train a machine learning algorithm to predict their Bayley's Scale of Infant and Toddler Development (BSID-III) cognitive domain score. DEEP score of the remaining 1159 children was predicted using this algorithm to examine associations between cognition at 3-years and a) growth at 1, 1.5 and 3 years, b) early life adversities and c) hair cortisol concentration, a measure of chronic stress, at 1 year.

#### **RESULTS**

BSID-III cognitive domain score was predicted using DEEP metrics with a mean error of <10%. The concurrent positive association between height-for-age (HAZ) and BSID-III (0.20, CI=0.06, 0.35) and DEEP (0.26, CI=0.11, 0.41) z-scores was similar. The prospective association between growth at 18 (0.21, CI=0.17, 0.26) and 12-months (0.18, CI=0.13, 0.23) and 3-year DEEP z-score was also similar. The relationship between growth and cognition interacted with socioeconomic status. Cumulative adversities and hair cortisol concentration at 1-year were inversely associated with DEEP z-score at 3 years (-0.08, CI=0.11, -0.06 and -0.09, CI=-0.16, -0.01 respectively).

#### **CONCLUSIONS**

Positive and negative associations of the DEEP cognitive z-score with HAZ and early life adversities respectively provide proof-of-concept of DEEP as a scalable cognitive assessment tool for preschool children. Further validation in diverse and larger datasets are underway.

#### **TOPIC CATEGORY**

Use of Technology in Diagnosis: -





# POSTER PRESENTATION

Abstract ID Number: 57

# PARENT-CHILD INTERACTIONS DURING THE COVID19- PANDEMIC: A COMPARISON OF THE VIEWS OF INDIAN MOTHERS AND FATHERS

## Megha Dhillon<sup>1</sup>, Chehak Gidwani<sup>2</sup>, Kritika Chaudhary<sup>3</sup>

<sup>1</sup>Lady Shri Ram College for Women, New Delhi, India <sup>2</sup>Tata Institute of Social Sciences, Mumbai, India <sup>3</sup>University of Delhi, New Delhi, India

This qualitative investigation aimed to explore the perceptions of working mothers and fathers regarding the impact of COVID-19 on the relationship with their children and coping mechanisms employed by them in the ongoing pandemic. Sample consisted of 10 mothers (mean age =37.5 years) and 10 fathers (mean age =35.3 years) residing in Indian joint families. Convenience and snowball sampling techniques were used. Participants belonged to an upper middle socioeconomic stratum having children younger than 15 years of age. Semi-structured interviews were used to unearth perceptions regarding the impact of pandemic on family routines, parenting styles, levels of parent-child conflict and cohesion. Thematic analysis (Clarke & Braun, 2006) was used for analysis. Findings indicated major changes in family routines due to strict lockdown at the onset of pandemic. Parental involvement in child's school activities increased exponentially once school education shifted online. Parents felt a sense of loss on behalf of their children who had lost access to peer interaction and space of play (e.g., playgrounds) and attempted to compensate for these losses. One perceived benefit was increased family time. Parents also expressed fears of their children acquiring the coronavirus. Family support, yoga, meditation, exercise, reading and reappraisal of the situation as a temporary one were critical to cope with changes. A comparison of mothers and fathers indicated that there was more potential for conflict between mothers and children. While fathers focused on avoiding boredom in their child's life, mothers were more inclined towards helping children find their inner strength.

#### **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -





# POSTER PRESENTATION

Abstract ID Number: 58

# PARTICIPATION OF MOTHERS OF CHILDREN WITH NEUROMOTOR DISABILITIES- A CROSS- SECTIONAL SURVEY

#### **Joel Anison**

Hamad Medical corporation, Doha, Qatar. University of Cape Town, Cape Town, South Africa

#### **OBJECTIVE**

The aim of the study was to explore the participation of mothers of Arab descent having children with disabilities as surveyed with the Arabic version of the 'Life Participation for Parents' (LPP) questionnaire.

#### **METHODS**

A convenience sample of 115 mothers of children with Arab-descent having neurodevelopmental disability attending the Physiotherapy Outpatient tertiary clinic in Qatar was recruited. LPP questionnaire was completed by all mothers. Descriptive statistics was used for analysis.

#### **RESULTS**

Out of the 115 mothers, the majority i.e. 48% were between 31 to 40 years. Majority of the mothers were expatriates from Arab speaking countries. Many among the expatriates were from Low and middle income countries. The more prominent areas as identified in the questionnaire where relatively better participation was noted were; feeling good doing the job of a teacher/therapist - (106, 92%), managing child's physical needs- (102, 89%), arranging services for the child- (85, 74%), meeting child's emotional needs (76,66%), managing chores while caring for the child (71, 62%). The three most important challenges expressed by mothers in the survey were related to spending more time for: child's personal needs (79, 69%), carrying out therapist's role (78,68%) and arranging child's services (73,64%). The next most prominent challenge identified among many others were 'the difficulties in doing the personal activities of the mother' (58%).

#### CONCLUSION

This study is the first family centered study carried out to identify the participation characteristics of Arab mothers of children with neuromotor disability, by utilizing the LPP questionnaire.

#### **TOPIC CATEGORY**





# POSTER PRESENTATION

◆ Abstract ID Number: 59

# MEDICAL ENCOUNTERS FOR INDIVIDUALS WITH AUTISM SPECTRUM DISORDER (ASD): PERCEPTIONS AND PRACTICES OF FILIPINO PHYSICIANS

#### Ma Kriselda Alonzo

Philippine General Hospital, Manila, Philippines

#### **BACKGROUND**

Given the increasing prevalence of Autism Spectrum Disorder (ASD) with the presence of co-morbidities, more patients with ASD will be encountered by different physicians in the clinical setting.

#### **OBJECTIVES**

This mixed-methods, cross-sectional study aimed to assess the knowledge, perceptions and attitudes of Filipino physicians and describe their medical encounters with patients with ASD.

#### **RESULTS**

Among 315 physicians, 87% described an ASD encounter. Most of patients were <18 years of age with only 14% of patients being adults with ASD. The top reasons for consult were for general and unspecified concerns, psychological, neurological and respiratory concerns. Filipino physicians have adequate knowledge on autism and its early signs, characteristics and co-occurring behaviors. This is related to the number of ASD patients seen, region of practice and presence of training. Although having adequate knowledge, they gave themselves low self-ratings for confidence and efficacy in their medical encounters. Although more than half of the respondents had personal experience with individuals on the spectrum, this was not correlated to increased knowledge, confidence and self-efficacy in their medical encounters. Pediatric providers were significantly more confident and employed more strategies in their encounters. Majority believed that there are barriers and challenges to the care of patients with ASD citing the need for 1) training 2) preparation 3) resources 4) hospital and clinic accommodations and 5) establishing a referral system.

#### **CONCLUSION**

Specific recommendations for training and the development of clinical practice guidelines with regards to best care practices of patients with ASD are further discussed.

#### **TOPIC CATEGORY**





## POSTER PRESENTATION

## Abstract ID Number: 60

## DISTRIBUTION OF T-LYMPHOCYTE SUBSETS AND THEIR CYTOKINES IN -5-2 YEAR-OLD INDIAN CHILDREN WITH AUTISM SPECTRUM DISORDER

## <u>Sharmila Mukherjee</u>, Ibakular Nongrang, Anu Maheshwari, Anita Nangia, Dipti Kapoor, Suvasini Sharma

Lady Hardinge Medical College, New Delhi, India

### **OBJECTIVE**

To measure T-lymphocyte subsets (Th1, Th2, Th17, and T Reg cells) and their cytokines (IFN  $\gamma$ , IL 4, IL 17, and TGF  $\beta$ ) in Indian children with autism spectrum disorder (ASD).

### **METHODS**

A hospital-based, cross-sectional observational study was conducted over 17 months (November 2018 to March 2020). Children aged 2-5 years with ASD diagnosed by standard criteria were enrolled (calculated sample size 80). A convenient sample size of 20 similarly aged, typically developing siblings of children with ASD and 20 unrelated children were included for comparison and generating baseline immunological data respectively. Those with known immunodeficiency, or recent acute febrile illness, steroid use, or vaccination were excluded. Blood samples were collected for immunophenotyping and ELISA for measuring T-lymphocyte subsets and cytokine levels, respectively, respectively. Descriptive statistics were used.

### **RESULTS**

Eighty children with ASD, 10 siblings of children with ASD, and 20 unrelated 2–5-year-old children were enrolled. CD4+25+127- T regulator cells were significantly lower in ASD (1.28  $\pm$  1.4%) and siblings (1.10  $\pm$  0.7%) compared to unrelated children (3.77  $\pm$  2.8%). Autistic children had significantly higher CD8+IL4 levels (12.74  $\pm$  14.5%) than unrelated children (4.18  $\pm$  3.7%).

#### **CONCLUSIONS**

The significant decrease in T regulatory cells in ASD and siblings of children with ASD indicates a pro-inflammatory immune milieu. This supports the hypothesis of immune dysregulation resulting in ASD in genetically predisposed individuals. Increased CD8+IL4 levels indicate greater involvement of T helper 2 and cytotoxic pathways and depressed cell-mediated immunity which is commonly seen in autoimmune disorders. The role of these as biomarkers and/or targets for immunomodulation requires further exploration.

### **TOPIC CATEGORY**

Risk Factors for Developmental Disabilities: -





## POSTER PRESENTATION

Abstract ID Number: 61

## BUILDING AND SUSTAINING TRAUMA-SENSITIVE SCHOOL SYSTEMS DURING THE COVID-19 PANDEMIC

## Chetna Duggal<sup>1</sup>, Sadhvi Krishnamoorthy<sup>1</sup>, Anvita Walia<sup>2</sup>

<sup>1</sup>Tata Institute of Social Sciences, Mumbai, India.

The outbreak of the COVID-19 pandemic has led to a wide array of challenges for the mental health and well-being of children and adolescents in India. While the likelihood of children contracting the infection has been relatively low; this humanitarian crisis has subjected young people to traumatic situations inducing stress, confusion, anxiety, and other overwhelming feelings. The prolonged closure of schools, strict guidelines for social distancing, lack of interpersonal interactions, economic adversity, grief and loss in families have negatively impacted the physical, socio-emotional, and academic development of children and adolescents. Moreover, some groups have been more vulnerable than others based on their socio-cultural identities. For many children, these effects have been further exacerbated by experiences of violence and abuse during the lockdown. Amidst these uncertain and trying times, there is a pressing need for school leaders, school educators, school counsellors, and caregivers, to recognize and collaboratively respond to alleviating, and preventing the adverse impact of the pandemic on children and adolescents.

### **OBJECTIVES AND METHODS**

Based on the online sessions conducted for schools across India through the School Initiative of Mental Health Advocacy (SIMHA) in 2020 and 2021, this paper will aim to map the impact of the COVID-19 pandemic on children in India and discuss practices for building trauma- informed/sensitive school systems.

## **RESULTS AND CONCLUSION**

The paper will propose how the integration of trauma-informed care within educational systems could ensure safety for young people, bolster psychosocial care and also empower young people themselves with skills to face the ongoing crisis.

## **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -

<sup>&</sup>lt;sup>2</sup>One Future Collective, Mumbai, India





## POSTER PRESENTATION

Abstract ID Number: 65

## ELECTRONIC INTERACTIVE BOOKLETS FOR EARLY AND INTERMEDIATE CHILDHOOD

## **Zahra Jradi**

Taaheel-Lebanese Association for Rehabilitation and Development, Beirut, Lebanon

Covid-19 pandemic conquered the whole world and confined all educators and parents in their homes.

The Ministry of Education took a brave step by advocating teaching on-line. Unfortunately, this step was faced by many difficulties especially for young learners. Thus, Taaheel team thought of preparing "I Play and Learn," taking into consideration the required skills for preschool, and first, second and third grades. The main objective is to enable the child to learn while playing, the best way of learning.

The booklets are full of activities and exercises in Arabic, English, Math and Science. When using these booklets, the learner cannot proceed from one level to the other without mastering the previous level. After mastering the skill, a word of praise is given to the child for motivation.

The program needs the supervision of parents. Some activities are enriched by voice-over that gives clear directions. The learner gains self-confidence and at the same time awareness of his abilities.

The activities can be accelerated, he can move in that sense, to a higher level. The mastery of the skill is evaluated by his success regardless of the learner's age and condition. The parents can follow his performance from the activities he finishes.

### **TOPIC CATEGORY**





## POSTER PRESENTATION

◆ Abstract ID Number: 67

## BIOCHEMICAL ASSESSMENTS OF THYROID PROFILE AND COGNITIVE LEVEL AMONG CHILDREN WITH AUTISM IN A TERTIARY CARE CENTER OF BANGLADESH

## Jannatara Shefa, Shaheen Akhter

Institute of Paediatric Neurodisorder and Autism (IPNA), Bangabandhu Sheikh Mujib Medical University(BSMMU), Dhaka, Bangladesh

## **BACKGROUND & OBJECTIVES**

The causation of autism is still unknown. Thyroid hormones are important for brain development of a child, which also have immunomodulatory actions. The objectives of this study was assess the thyroid profile and cognitive level among children with Autism to find out the correlations between them.

### **METHODS**

This was a Cross-Sectional study, 63 children were taken (2 to 12 years) randomly. ASD children were selected from out-patient department of Institute of Paediatric Neurodisorder and Autism (IPNA) Bangabandhu Sheikh Mujib Medical University (BSMMU). Autism Spectrum Disorder was diagnosed by DSM-5 criterias. After selecting cases, sample of blood was collected and examine for Biochemical assays of thyroid function in the form of free triiodothyronine (FT3), free tetraiodothyronine (FT4), thyroid-stimulating hormone (TSH) were done by using commercially available enzyme-linked immunosorbent assay (ELISA) kits. Cognitive level of ASD children was measured by assigned psychologist with The Bayley Scales of Infant and Toddler Developme (BSID-III), The Wechsler Intelligence Scale for Children – Revised 4th Edition (WISC-R IV) and The Wechsler Preschool and Primary Scale of Intelligence Fourth Edition (WPPSI-IV).

#### **RESULT**

Biochemical parameter of thyroid hormone of ASD children was within normal range but abnormality was present . In case of cognition BSAID III was used among 98.4 % children. 41.3% children had mildly delayed cognition level.

### CONCLUSION

From the result of this study, it may be concluded that there were presence of Thyroid hormone level abnormalities among children with autism spectrum disorders with mild impairment of Cognition level.

#### **KEYWORDS**

Autism Spectrum Disorder(ASD), Thyroid hormones, Cognitive level

## **TOPIC CATEGORY**

Risk Factors for Developmental Disabilities: -





## POSTER PRESENTATION

## Abstract ID Number: 69

## THE EFFECTIVENESS OF PHYSICAL THERAPY USING TELEREHABILITATION IN IMPROVING BALANCE OF AN -8YEAR-OLD CHILD WITH CEREBRAL PALSY

## **Laarni Cruz**

Center for Developmental Pediatrics, The Medical City, Pasig City, Philippines. Ther@health Multi-Therapy Center, Inc., Mandaluyong City, Philippines. Kids Can Therapy Center, San Fernando City, Philippines

## **OBJECTIVE**

The objective of this case study is to describe the effectiveness of physical therapy delivered via telerehabilitation to an 8-year-old child diagnosed with cerebral palsy spastic diplegia in improving balance.

### **METHODS**

JB is an 8-year-old child diagnosed with cerebral palsy spastic diplegia and he received physical therapy once a week via telerehabilitation from December 2020 to March 2021. The goal of JB's family is to improve his walking outside their house in preparation for going back to face-to-face classes after the pandemic. The physical therapist assessed JB using the Pediatric Balance Scale (PBS). The physical therapist instructed the caregiver and JB with the exercises and activities. The exercises include strengthening of core and leg muscles, gait training, stretching and balance training.

#### **RESULTS**

Improvements in PBS scores were observed. In the assessment performed in December 2020, he scored 21/52 (40.38%). Re-assessment was done in March 2021 using the same assessment tool and he scored 31/52 (59.62%). Specific items that he improved are sitting to standing, transfers, standing (feet together) and turning 360 degrees which are mostly dynamic balance.

## **CONCLUSIONS**

Conducting physical therapy using telerehabilitation is still effective in improving balance of an 8-year-old child with cerebral palsy, spastic diplegia. JB improved his scores in PBS by almost 20%. This improved score is also reflected in his walking outdoors as reported by the caregiver.

## **TOPIC CATEGORY**

Intervention: 1h) Use of Adaptive Equipments/Gadgets/Devices





## POSTER PRESENTATION

◆ Abstract ID Number: 70

## MEDICAL CHARACTERISTICS OF CHILDREN WITH FEEDING PROBLEMS AND MATERNAL DEPRESSION-ANXIETY-STRESS LEVELS

## Emel Ömercioğlu, Ayşe Mete Yeşil, Buse Şencan Karakuş, Elif Nursel Özmert

Hacettepe University Department of Pediatrics Division of Developmental Pediatrics, Ankara, Turkey

#### INTRODUCTION

Feeding problems in children are associated with parents' depression-anxiety symptoms. Our study aimed to evaluate the depression-anxiety-stress levels of mothers of children with feeding difficulties.

#### **MATERIAL AND METHODS**

Children aged 1-6 years who applied to the Developmental Pediatrics outpatient clinic due to feeding problems were included in the study. Problematic eating behaviors were questioned with researchers created-scored a 3-point Likert scale. The mothers filled the Depression-Anxiety-Stress Scale short form (DASS).

### **RESULTS**

Most of the 42 patients included in the study had normal percentile values of body weight,height and head circumference. It was determined that 88% of the patients ate with screen, the average daily screen time was 1.92±1.8 hours, and the screen time was positively related to the problematic eating behaviors score and maternal depression. The median age of starting solid foods was 8 months; it was positively correlated with screen time and problematic eating behaviors score. In laboratory examinations, patients; hemoglobin in 95%, ferritin in 78%, vitamin B12 in 93% were normal. Stress in 83.3% mothers, anxiety in 42.9%, and depression in 54.8% mothers were above the cut-off point of DASS scores.

## **CONCLUSION**

The normal anthropometric measurements and laboratory values of children don't mean that there is no feeding problem. Older age to start solid foods may lead to problematic eating behaviors. The proportion of significant maternal stress, anxiety and depression symptoms scores and the fact that screen time exposure is increased in depressed mothers demonstrates the importance of handling mothers in this context. Thus, it's possible to prevent the children from chronic and damaged mother-child feeding interaction.

## **TOPIC CATEGORY**





## POSTER PRESENTATION

## ◆ Abstract ID Number: 71

ADAPTIVE LEVEL PROFILE DIFFERENCES BETWEEN CHILDREN WITH AUTISM SPECTRUM DISORDER (ASD) AND SOCIAL COMMUNICATION DISORDER (SCD) IN MOTOR AND DAILY-LIVING-SKILLS (DLS) DOMAIN

## Dr. Deepika Jain(MD)

Shishu Child Development & Early Intervention Centre, Ahmedabad, India. LG Hospital, AMC-MET Medical College, Ahmedabad, India

## **OBJECTIVE**

SCD is characterized by difficulty in use of communication for social interaction. ASD comprises restrictive/repetitive behaviours with social- communication difficulties. Adaptive levels are the skills needed to function in the society. The present study attempts to examine differences in Motor (overall, gross, fine) and Daily-living-skills (overall, personal-DLS) adaptive skills between ASD and SCD children.

#### **METHODS**

This cross- sectional study was done in 250 children, 192-ASD and 58-SCD on DSM-V criteria, between 2.6-7 years of age from February 2019-April 2021. Vineland-III scale was used to calculate the standard- score for domains and v-scale-score for subdomains. A qualitative adaptive level was also assigned to the score bands.

## **RESULTS**

The mean standard-score for Motor-domain was 83.32 (Moderately-Low) for ASD and 87.60 (Adequate) for SCD children. For sub-domains, mean v-scale-score in ASD group was 11.81 for Gross and 11.17 for Fine-motor (both Moderately-Low), while for SCD group mean v- scale-score was 13.43 for Gross-motor (Adequate) and 12.66 (Moderately-Low) for Fine-motor skills.

For Daily-living-skills, mean standard-score was 77.70 (Moderately-Low) in ASD and 85.17 (Adequate) in SCD children. In Personal-DLS, mean v-scale-score was 9.26 (Low) for ASD and 10.93 (Moderately-Low) for SCD group.

## CONCLUSION

The study indicates differences in adaptive level in Motor & Daily-living-skills domain between ASD and SCD groups with SCD children having better adaptive level. Social-Communication skills being the core deficit in ASD, most intervention strategies focus on them. Studies are needed to determine whether improvement in Motor and DLS skills will lead to better social- communication outcomes in ASD children.

## **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





## POSTER PRESENTATION

◆ Abstract ID Number: 72

## PROMOTING RESILIENT OUTCOMES AMONG INTERNATIONALLY ADOPTED CHILDREN FROM CHILD CARE INSTITUTES IN INDIA: ROLE OF THE LIFE STORY

## **Prahbhjot Malhi, Bhavneet Bharti**

Post Graduate Institute of Medical Education and Research, Chandigarh, India

#### **BACKGROUND AND OBJECTIVE**

International adoptees from child care institutes experience several attachment disruptions and stress about building secure and enduring relationships with their new adoptive transracial families. To briefly trace the stories of three internationally interracially adopted children to identify some factors that can promote resilient outcomes.

## **METHODOLOGY**

The pediatric adoption clinic in a tertiary care centre facilitates adoption of children from government run child care institutes. The qualitative narrative methodology was used to explore how internationally adoptive families navigate the adoption process in order to improve and enhance the probability of optimal adoption outcomes. Descriptions of the qualitative interviews and discussions regarding the families' experiences and struggles of adopting children from India are presented.

#### **RESULTS**

The Indian Adoption Regulations of 2017 allows for documentation and permission for sharing memory albums and interests of the child with adoptive families, however, child care institutes generally do not maintain any records and have little to share with the adoptive families. The three families interviewed expressed a desire to maintain an association with the child's culture and sought guidance on how they could help their adoptive children develop an ethnic identity that supports their psychological well-being. Maintaining records and chronicling the child's biographic pre-adoption history is one way to help children to understand their personal stories and develop a stable identity.

#### **CONCLUSION**

Adoption agencies and associated professionals should encourage and facilitate all activities that enhance attachment and creates emotional bonds between transracial adoptive parents and the adoptees.

## **TOPIC CATEGORY**

Intervention: 1j) Inclusion in School and Community





## POSTER PRESENTATION

## Abstract ID Number: 73

REVIEW OF EFFECACY OF NDT( NEURO DEVELOPMENTAL THERAPY) BASED INTERVENTION ON MPAIRMENT IN CHILDREN IN CEREBRAL PALSY.

## Vinay Kumar<sup>1</sup>, Saumen Gupta<sup>2</sup>, Dr. Ashish Pradhan<sup>2</sup>, Dr. P.P Mohanty<sup>1</sup>

<sup>1</sup>SVNIRTAR, Cuttack, India. <sup>2</sup>Sikkim Manipal Institute of Medical Sciences, Gangtok, India

#### **OBJECTIVES**

To review the litterature to explore the efficacy of Neuro Developmental Therapy on outcome measure in the different domain of ICF.

#### **METHODS**

Varoius literature databased (Pubmed, Google Scholer) were sereached using combination of keywords for studies where interventions based on NDT was used to manage impairments in individuals with cerebral palsy . Studies with all research design except expert opinion published in english and recruited participants till 18 years of age were included.

## **OUTCOMES MEASURES**

The outcome of NDT based interventions was reported on outcome measure developed under various ICF domain viz. Body Structure, Function , Activity ad Participation . Functional ourcome recorded in Dressing skill, Transitional movement, Patterns of movement, Hand Function etc. were included along with sophisticated recording techniques.

## **RESULTS**

This review focoused on children with cerebral palsy and NDT. Total 16 articles meet the criteria and included in the study, from the baisi of study it has also been seen that NDT is helpful to improve the development of the child and enhance his paticipation at different level like family, school and play with their peer.

### **CONCLUSION**

Studies which incorporated NDT based intervention using improved research methodoligy were found to report impressive gains in participation of children at different functional level. NDT based interventions are recommended to children with cerebral palsy for the overall development of the child.

### **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





## POSTER PRESENTATION

Abstract ID Number: 75

## PROBLEMS OF NUTRITIONAL STATUS IN CHILDREN WITH DISABILITIES

## Natalia Orlova, Olena Riga

Kharkiv National Medical University, Kharkiv, Ukraine

#### **OBJECTIVES**

Assessment of nutritional status and nutritional support in children with congenital malformations of brain.

### **METHODS**

17 children were recruited for the study who took part in the department of Palliative Care. There were 9 (53%) young children (0-36 months) and 8 (47%) pre-schoolers (3-6 years). The average age was 3.6±2.1 years.

## **RESULTS**

The sample included 9 males and 8 females. There were 14/17 children with paralytic syndromes (I-V level of Gross Motor Function Classification System). Severe cognitive impairment was established in 8/17. Prevalence of oromotor dysfunction was in total sample, and was distributed as "mild" in 2/17 children, "moderate" in 4/17 and "severe" in 11/17 children. Severe oromotor dysfunction is associated with microcephaly, cognitive impairment and V level of Gross Motor Function Classification System. The feeding time was different in 5 tube-fed children compared with 12 bottle-fed or spoon-fed 12 children (median 11 min vs 32 min). There were no significant differences in correlation of oromotor dysfunction severity, sex or age.

### **CONCLUSION**

The study demonstrated moderate and severe nutritional disorders in young children and pre-schoolers with congenital malformations of brain: Z-score BW for age in total cohort was -3.2, H/L for age was -2.7 in LMICs. The importance of drawing up individual plans for the energetic consumption of the children with congenital malformations of brain with training of caregivers and rehabilitative and palliative team was shown.

## **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





## POSTER PRESENTATION

Abstract ID Number: 76

## CREATING A CULTURALLY SENSITIVE SOCIAL MEDIA HEALTH PROMOTION CAMPAIGN TO SUPPORT PARENTING PRACTICES FOR FAMILIES OF PUNJABI BACKGROUND

Pardeep Kaur Benipal<sup>1</sup>, Isha Babra<sup>1</sup>, Gurpreet (Preety) Salh<sup>2</sup>, Mandeep Mahal<sup>2</sup>, Chandandeep Bal<sup>3</sup>, Bhavan Panghali<sup>4</sup>, Clara Juando-Prats<sup>1</sup>, Aisha Yousafzai<sup>5</sup>, Channan Sanghera<sup>1</sup>, Sawinder Dhillon<sup>6</sup>, Ripudaman Minhas<sup>1,4</sup>

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- <sup>4</sup>University of Toronto, Toronto, Canada
- <sup>5</sup>Harvard University, Boston, USA. <sup>6</sup>Punjabi Kids Health, Toronto, Canada

## **OBJECTIVE**

Punjabi families experience health disparities and it is crucial to have information platforms in which Punjabi caregivers feel confident to utilize when seeking advice surrounding their parenting practices. The lack of inclusive social media parenting content is alarming. The objective of this study is to describe the users of @PunjabiKidsHealth (PKH) and to gather data in order to tailor content for this virtual health promotion campaign.

## **METHODS**

Social media analytics and engagement tools were used to describe participant demographics and to gather data in order to identify topics of interest for families of Punjabi background.

#### **RESULTS**

PKH has gained over 41,000 followers across 3 platforms in its first 8 months since rollout. PKH has members across the global Punjabi diaspora with 53.3% across Canada, 11.6% from USA, 10.1% from the UK, 9.7% from India and 6.5% from Australia. 77.4% of individuals identify as women and a majority of individuals (84.1%) range from 25 to 44 years of age. Engagement metrics show that PKH is at 15-20% engagement, while industry standards are at 1-3%. Using social media engagement tools, the following topics of interest were identified: speech delay, feeding difficulties, parental mental health, LGBTQ2S+ issues, speaking with adolescents, anti-racism, behaviour management, trauma and school advocacy.

## **CONCLUSION**

PKH is allowing families of Punjabi background to receive evidence-based, bilingual information from health care professionals. Subsequent phases of this project will involve conducting focus group discussions with the PKH community in order to evaluate this family support resource.

## **TOPIC CATEGORY**

Intervention: 1i) Parent Training





## **POSTER PRESENTATION**

Abstract ID Number: 77

## EFFICACY OF HIGH-TECH AAC (AVAZ) ON CHILDREN WITH DISABILITIES – A QUALITATIVE CASE STUDY IN NORTHERN INDIA

## **Diya Nair, Aarti Nair**

Latika Roy Foundation, Dehradun, India

#### **OBJECTIVES**

The current study aims to check the effectiveness of Avaz app (a picture-based learning and communication tool) for children with ranging disabilities from 8-18 years of age.

#### **METHODOLOGY**

6 participants were selected for the current study, 2 children between the age range of 6-14 years and 4 children between the age range of 15-18 years. The children were selected on the basis of their financial status (low to middle socio-economic strata), cognition of the participants selected (average intelligence), motor abilities (extremely poor motoric abilities led to exclusion), family support and education background of families. Participants were introduced to Avaz in the classroom by the speech therapist and special educator. They were initially taught about yes/no words and which further went on to different parts of grammar depending on the individual's level.

### **RESULTS**

The current study proved to show Avaz as a reliable mode of communication for individuals with various disabilities ranging from Language disorders such as autism spectrum disorder to Neuromotor disorders namely Cerebral Palsy. It revealed that using the app improved social skills in addition to overall expressive communication.

## **CONCLUSION**

Avaz app can certainly be a recommended mode of intervention for several children over a wide age range with different disabilities and/or impairments. The apps' abilities to improve an individuals social and communication adeptness along with it being an educational tool aids in an all-inclusive therapy setup.

### **TOPIC CATEGORY**

Intervention: 1h) Use of Adaptive Equipments/Gadgets/Devices





## POSTER PRESENTATION

Abstract ID Number: 78

## USING TELEMEDICINE TO SUPPORT DEVELOPMENTAL PEDIATRICS IN LOW AND MIDDLE INCOME COUNTRIES

<u>Sue Woolfenden</u><sup>1</sup>, Anneka Parker<sup>1</sup>, Titus Nasi<sup>2</sup>, Thyna Orelly<sup>3</sup>, George Aho<sup>4</sup>, Braghmandita widya Indraswari<sup>5</sup>, Sally Whitaker<sup>6</sup>, James Weaver<sup>7</sup>, Sue Phin<sup>8</sup>, Ruth Baker<sup>8</sup>, Kathryn Currow<sup>6</sup>, Kate Milner<sup>9</sup>, ilisapeci Tuibeqa<sup>10</sup>, Mei Neni Sitaresmi<sup>5</sup>

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- <sup>4</sup>Department of Paediatrics, Vaiola Hospital, Nuku'alofa, Tonga
- <sup>5</sup>University of Gadjah Mada, Yogyakarta, Indonesia
- <sup>6</sup>Taking Paediatrics Abroad, Sydney, Australia
- <sup>7</sup>Sydney Local Health District, Sydney, Australia
- <sup>8</sup>Sydney Children's Hospitals Network, Sydney, Australia
- <sup>9</sup>Royal Children's Hospital/MCRI, Melbourne, Australia
- <sup>10</sup>Colonial War Memorial Hospital, Suva, Fiji

### **OBJECTIVE**

Children with neurodevelopmental disabilities experience a higher burden of disease, exacerbated by global inequity limiting access to health care. Hardworking health-care professionals in under-resourced countries may face impediments to continued education or sub-specialty training in developmental pediatrics. Collaborations have been developed between high-income and low- and- middle-income countries to support continuing education in developmental pediatrics. These collaborations face challenges of high financial costs, difficulties creating long-term sustainable change, and with the emergence of the COVID-19 pandemic, border closures preventing fly-in volunteers. This presentation explores using these telemedicine models in a global pandemic to support developmental pediatrics in low and middle income countries, their implementation and challenges, and opportunities for the future.

## **METHODS**

In this presentation we describe the development of three innovative, pediatric-specific models of care for training and support between high- and low-income countries for children with neurodevelopmental disabilities using telemedicine-Taking Paediatrics Abroad Ltd, Indonesia - Australia Developmental Pediatric partnership; and the Colonial War Memorial Hospital, Fiji, Developmental Paediatric model of care.

## **RESULTS**

The three models support reciprocal learning and mutually beneficial relationships between Australian pediatric health-care professionals and pediatric health-care professionals in the Asia Pacific region through regular hour long telemedicine case discussion. Approximately 30 developmental pediatric sessions have occurred since the start of the pandemic with over 100 participants in 7 countries.

## **CONCLUSION**

In line with the Sustainable Development Goals to move children from surviving and thriving, telemedicine offers an opportunity to support health workforce training in developmental pediatrics in low and middle income countries.

## **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





## POSTER PRESENTATION

Abstract ID Number: 79

ASSESSMENT OF PEDIATRICIAN AWARENESS AND IMPLEMENTATION OF THE DEVELOPMENTAL SURVEILLANCE AND SCREENING GUIDELINES IN THE PHILIPPINES

## Marichelle Sanchez, Ma. Rochelle Pacifico, Wilfredo Santos

De La Salle University Medical Center, Dasmarinas, Cavite, Philippines

#### **OBJECTIVES**

This study aimed to describe awareness and implementation of developmental surveillance and screening guidelines and to identify factors associated with implementation among pediatricians in the Philippines.

#### **METHODS**

A cross-sectional study design (survey) was used to assess the knowledge, attitude, and practices of the members of the Philippine Pediatric Society (PPS) regarding developmental surveillance and screening, Descriptive statistics and multivariate analysis were utilized to examine association of different sociodemographic factors of participants to developmental screening practices.

### **RESULTS**

Pediatricians (N=397) who participated were mostly females (85%) with a mean age of  $51.55 \pm 9.98$  years old. Majority (86%) used clinical screening or non-standardized methods to identify children at-risk. About 28% used standardized screening tools with PEDS and M-CHAT as most widely used. Time limitations in practice, and lack in confidence, formal training, and medical staff to perform screening, are main barriers to standardized screening. Significant associations were found between likelihood of screening for developmental problems and pediatricians' age, sex, location of and years since completion of pediatric residency.

## **CONCLUSIONS**

Only one third of pediatricians use standardized screening tools resulting to late identification and referral for intervention of children with developmental concerns. Periodic use of standardized screening tools in pediatric practice must be imposed as it is a key component of essential childcare. PPS guidelines on developmental surveillance and screening must be revisited to form new policies and improve clinical algorithms to achieve universal screening and optimize developmental trajectories for children with delays in the Philippines.

### **TOPIC CATEGORY**

Advocacy for Children with Disabilities: -





## **POSTER PRESENTATION**

**→** Abstract ID Number: 80

## HINDRANCES TO EARLY CHILDHOOD DEVELOPMENT IN RURAL INDIA

## **Nandita Chattopadhyay**

MGM Medical College, Kishanganj, India. Udbhaas Child Development Centre, Kolkata, India

#### **BACKGROUND**

Enabling young children to achieve their full developmental potential is a requisite for sustainable development, but globally 43% of children are still at risk to do so. The problem is grave among the under-privileged rural population in India.

### **OBJECTIVES**

Early Childhood Development (ECD) is influenced by multiple factors and the Nurturing Care Framework (NCF) encompasses the five major components for promoting ECD. As the prevalence of risk factors varies in different communities, strategy planning for nurturing care will also depend on evidence-based identification of specific threats. This study is an attempt to identify major threats in a marginalized rural community.

#### **METHOD**

Cross-sectional observational study through random sample survey of 609 households with children 0-6 years conducted in a rural district of West Bengal, India, using a MICS III based questionnaire, focusing on the key threats to ECD. The data was analyzed to identify the major threats prevalent in the study area.

## **RESULTS**

Lack of stimulatory home environment, poor learning opportunities and inadequate responsive parental care were major hindrances. Cumulative effect of multiple other health and hygiene factors was also hindering ECD. Most factors are strongly influenced by poor maternal education and awareness. Poor utilization of resources was a greater problem than non-availability.

## **TOPIC CATEGORY**





## POSTER PRESENTATION

## Abstract ID Number: 82

## VIRTUAL MIGRATION OF THERAPY FOR BELOW POVERTY LINE SPECIAL NEEDS CHILDREN DURING CORONA PANDEMIC

## **Dr. Jagmeet Kaur Chawla**

Aadhaar Centre for Child Development, Psychological and Career Counselling, Bhopal, India

## **OBJECTIVES**

In view of corona pandemic our special needs children especially below poverty line(BPL) were bearing the brunt very badly and regressing.

#### **METHODS**

We digitised all our content and our therapies by regular brainstorming and tremendous handwork. Every activity was modified and customised for online delivery.

Special strategies were implemented for families living Below Poverty Line (BPL), who were taught how to use wa with smartphones.

In a very systematic approach and using things readily available at home, the therapists used their innovation and creativity and made lesson plans which they sent to parents one day before the session. Simultaneously, they kept the same things with them and took the sessions. The parents were taught activities and were encouraged to send videos made of children doing these activities and post these videos. IEP review meetings with the parents of our children to ensure that the online therapies continue smoothly. As the children were at home with their parents on a 24/7 basis, we prioritised ADL goals like toileting, eating, dressing, grooming based on needs of each child.

## **RESULTS**

The response obtained was fantastic and the parents became partners and cocreators.

## **CONCLUSION**

No child left out.if you can dream it, you can conceive it.

### **TOPIC CATEGORY**

Intervention: 1d) Educational





## POSTER PRESENTATION

Abstract ID Number: 83

## THE EFFECTIVENESS OF CARE FOR CHILD DEVELOPMENT PROGRAM ON SENSITIVITY AND RESPONSIVENESS SKILLS OF MOTHERS

## Seifollah Heidarabadl<sup>1</sup>, Ali Bahari Gharehgoz<sup>2</sup>, Hamid Alizadeh<sup>3</sup>, Mohammad Asgari<sup>3</sup>, Nasrin Baraheni<sup>1</sup>

1Tabriz University of Medical Sciences, Tabriz, Iran 2Allameh Amini Farhangian University of Tabriz, Tabriz, Iran 3 Faculty of Psychology & Education Allameh Tabataba'i University, Tehran, Iran

#### **OBJECTIVES**

The present study aimed to analyze the Impact of the "Care for Child Development" program on the sensitivity and responsiveness skills among mothers of children at risk of developmental delay.

## **METHOD**

This study is quasi-experimental research planned in pretest-posttest with experimental and control groups. The statistical population included all mothers with children at risk of developmental delay in Tabriz. 50 mothers were selected through purposive sampling. Then, they were divided into two groups of 25 (one experimental group and one control group) using simple random sampling. The experimental group received training about the program of "Care for Child Development", while the control group did not receive the same training. The social-emotional assessment/evaluation measure family profile (SEAM TM family profile) and maternal caregiving quality scale were the research measurement tools. The obtained data were evaluated by analysis of covariance (ANCOVA) and independent t-test using SPSS software version 20.

## **RESULTS**

The results of the study indicated that there is a significant difference between the experimental and control groups in maternal caregiving quality and responsiveness, provision of appropriate activities, predictable programs, and provision of play environment and safe home (P < 0.05).

## **CONCLUSION**

The results showed that the care for child development program has positive effects on sensitivity and responsiveness skills of mothers of children at risk of developmental delays and could be considered and applied as a practical plan in national health policies.

## **TOPIC CATEGORY**

Intervention: 1i) Parent Training





## POSTER PRESENTATION

Abstract ID Number: 84

# UNDERSTANDING THE EDUCATIONAL ACCESS AND SUPPORT NEEDS OF CHILDREN WHO EXPERIENCE COMMUNICATION DISBAILITY, IN RWANDA'S REFUGEE COMMUNITIES: AN INTERPRETIVE DESCRIPTION

## Helen Barrett<sup>1</sup>, Julie Marshall<sup>1</sup>, Juliet Goldbart<sup>1</sup>, Evariste Karangwa<sup>2</sup>, Amy Hughes<sup>3</sup>

- <sup>1</sup>Manchester Metropolitan University, Manchester, United Kingdom
- <sup>2</sup>University of Rwanda, Kigali, Rwanda
- <sup>3</sup>University of Manchester, Manchester, United Kingdom

## **AIM AND OBJECTIVES**

The aim was to map the opportunities and barriers to accessing appropriate ECD and Inclusive Education (IE) services, for refugee-children who experience communication disability, in Rwanda, through documenting:

- 1. The opportunities and barriers to the educational inclusion of refugee-children who experience communication disability
- 2. ECD and education service-providers' views of opportunities and barriers to their inclusion
- 3. Current and future ECD and IE service-users' views of opportunities and barriers to their inclusion

## **METHODS**

This study utilised an Interpretive Description methodology and multiple qualitative research methods. Data were generated from documents, interviews, and focus group discussions, and analysed using thematic analysis (framework method and thematic networks).

## **RESULTS**

Data suggest that refugee-children who experience communication disability are systematically excluded from educational opportunities from an early stage. Factors including stigma, lack of recognition of communication disability in policies and tools, and a lack of support to implement change, contribute to their ongoing exclusion and failure to realise their right to education. At the nexus of this is the widespread lack of understanding of the causes, nature, and impact of communication disability on children's development, well-being, education, and life chances.

## **CONCLUSIONS**

Exclusion from educational opportunities violates children's right to education under global conventions. There is a notable gap between policy and practice, with reference to communication disability. The root causes of exclusion have the potential to be addressed through collaborative innovations with the organisations responsible for service provision.

## **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -





## POSTER PRESENTATION

**→** Abstract ID Number: 85

## **COVID IN THE EYES OF A CHILD/ADOLESCENT**

## Mary Ann Joy Aguadera, MD<sup>1,2</sup>, Gianina Loisa Guillermo, MS<sup>2</sup>

<sup>1</sup>National Children's Hospital, Manila, Philippines

Facing COVID-19 made everyone, of all ages, continuously experience increased level of distress, fear and anxiety. Due to uncertainties of events, children/adolescents have developed a different level of understanding of what is happening around them and the people that they love, respect and trust. Thus, they tend to derive their emotions, feelings and behavior based from what they observe from these people. It is then very important for these children/adolescents to interact, discuss and express themselves to their parents or to individuals they trust. For them to be fully informed, understood and be heard in order to ease up their fear and anxiety.

In this module, it aims to promote psychosocial well-being of children/adolescents to cope during this very challenging time of COVID-19. It consists of three activities wherein children/adolescents will be given the chance to interact with their parents or to people that they can trust; to express oneself, for them to be heard and for them to listen altogether. At the end of the activity, it would give them the opportunity to raise their questions, understanding and perspectives that would enable them to acknowledge their feelings and be validated. In return, for these children/adolescents to share and express what they understood, they would express their gratitude toward other people, especially the frontliners – our modern day heroes. In conclusion, it is imperative for all to feel that no one is alone and that they are being supported, trusted and respected.

#### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program

<sup>&</sup>lt;sup>2</sup> Hospicio De San Jose (Orphanages), Manila, Philippines





## POSTER PRESENTATION

## Abstract ID Number: 86

## EFFECTIVENESS OF ONLINE GUIDED INTERVENTION PROGRAM BASED ON PARENT FEEDBACK DURING COVID 19 FOR CHILDREN WITH COMMUNICATION DISORDERS

## **Shambhavi Seth**

Bright Beginnings child development centre, New Delhi, India. BLK Max hospital, New Delhi, India

#### **OBJECTIVES**

Parent perception of effectiveness of online interventions given to a set of children with communication delays and disorders.

## **METHODS**

A subset of 10 children was selected who were diagnosed with communication disorders and delay (4 children with autism spectrum disorder, 5 with social communication disorder & one with language delay). After initial functional evaluation, an individualised plan was made focussing on holistic development goals including language/social& cognitive skills.

The parents were guided as how to execute the plan with child &in turn share videos and call the team for any difficulties encountered.

A separate what's app group of each family along with professionals including a development paediatrician, occupational therapist, language therapist and special educator was created for exchange of information which was monitoredon a daily basis.

At end of 6-12 weeks parent shared their feedback form scored from 0-10.

## **RESULTS**

Parental response was reported as: very good (>7 on a scale of 0-10) by 30% (3), good (5-7 out of 10) by 60% (6) fair (2-4 out of 10) by 10%(1) None of the families reported "no change".

Parents' main area of challenges was to deliver plan involving speech sounds & extreme behaviour issues

## CONCLUSION

Hands on therapies in children with NDD has been a traditional practice but during covid times with limited resources, online mode of interventions with higher parental involvement and training did make a difference. It's a huge arena for treatment delivery where access of specialised services is limited more so in low & middle income countries.

## **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





## POSTER PRESENTATION

Abstract ID Number: 88

## CAREGIVERS FUN CLUB: CO-CREATING SPACES OF WELLBEING FOR CAREGIVERS OF DISABLED CHILDREN

## Prachi Mehta, Shahid Shaikh, Mithila Jariwala, Aditi Shah

Ummeed Child Development Center, Mumbai, India

#### **OBJECTIVE**

This model explores an online leisure group for caregivers of disabled children in Mumbai, India conducted during the global pandemic. The purpose was to support caregivers' mental health by co-creating spaces of leisure and creating interactive communities.

#### **METHOD**

The group consisted of 25 caregivers of disabled children from various parts of Mumbai. Hourly online sessions were conducted fortnightly for 7 months. The facilitators and participants explored different strategies of fun and leisure through monthly themes such as games, storytelling, music and dance, photography, cooking and art. The caregivers shared their skills of leisure with each other and engaged in fun activities with laughter and joy. The sessions were documented and photographed. Caregivers were interviewed to explore the influence of the overall model on themselves and their families.

## **RESULTS**

The sessions helped the caregivers in exploring leisure for themselves through various themes and strategies. It fostered friendships and promoted sharing of leisure skills among the group. The caregivers reflected increased self-awareness about the importance of leisure - for themselves as well as their disabled children. They mentioned how this safe community space supported their mental health in the midst of crisis, with restricted access to resources and other therapeutic services.

## CONCLUSION

This paper provides a low cost, collaborative model of supporting mental health of marginalized caregivers and families through leisure, during the crisis in low and middle income countries.

### **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -





## POSTER PRESENTATION

◆ Abstract ID Number: 94

## CHILD DEVELOPMENTAL PROGRAMS IN THE IRANIAN HEALTH SYSTEM

## Hamidreza Lornejad<sup>1</sup>, seifollah Heidarabadi<sup>2</sup>, Naria Abolghasemi<sup>3</sup>, Raheleh Toghyani<sup>3</sup>

<sup>1</sup>Child Health Office – Ministry of Health, Tehran, Iran

<sup>2</sup>Assistant Professor, Tabriz University of Medical Sciences, Tabriz Children's Hospital, Tabriz, Iran

<sup>3</sup>Child Health Office – Ministry of Health, Tehran, Iran

#### INTRODUCTION

The early years of life are the most important period of brain development. Support and care of child, environmental enrichment, early detection, parent about child development are important to improve the development status of children.

#### **OBJECTIVES**

This article introduces child development programs of Iranian health system.

### **CONCLUSION**

The clinical algorithm has been prepared in the children's health service package for primary health care worker to enable them to evaluate, classify and manage of children development.

16 care have been defined for each child under 5 years, starting of 3-5 days after birth up to 60 months. The evaluation of developmental status of children is done based on red flag at the age of 2, 6, 18 and 48 months and screening, using a nationally standardized questionnaire (taken from ASQ) at the age of 6, 12, 24, 36 and 60 months. In addition, in every visit, parents are educated about communication and play with child. These questionnaires is also completed for any child who has one of the red flags. Then the score obtained will be compared with the Iranian children cut of points. If any child needs to be referred, he / she will be referred to the physician health service center .Developmental Diagnostic test (taken from [SH1] BayleyIII, GARS....) is performed for referred children. Finally, if they need any intervention, action is taken according to the child's age and parents will be educated appropriate to the child's age for improve her/ his development.

## **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





## POSTER PRESENTATION

## Abstract ID Number: 95

## AT RISK IDENTIFICATION IN VACCINATION UNIT(ARIVU): A DISABILITY MODIFICATION MODEL FOR MIDDLE- AND LOW-INCOME COUNTRIES

## Binoy Mathew K V1, Maryelizabeth Walarine2

<sup>1</sup>Lecturer- Physiotherapy, Composite Regional Centre for Skill Development Rehabilitation and Empowerment of Persons with Disabilities – Kozhikode, Kozhikode, India

The largest segment of children with disability across the world resides in middle- and low-income countries. Many children with disabilities, including developmental disabilities, are found to exhibit disability-related signs and symptoms in the infancy period. Definitive diagnosis of many disabilities is possible after 3 years of age. Early identification and intervention are found to reduce the disability- related symptoms because of the neuroplasticity of brain in the initial years. Because of the limited resources, expertise and lack of disability screening and monitoring system, most of the disabilities are identified at later years in such countries. Many such countries have well established universal vaccine delivery system for children. The children visit these vaccination centers at frequent intervals, especially during the initial years. Considering these facts, the authors would like to propose a disability identification and surveillance model titled At Risk Identification in Vaccination Unit (ARIVU).

Through ARIVU, all the children visiting Vaccination Units for immunization program will be screened by a trained Physiotherapist, Occupational Therapist or Nurse. This system will help in identifying "at risk" children for disability. "At risk" children will be referred to early intervention centers, where the parents of children receive intensive stimulation and intervention training and tele-rehabilitation follow-up support. Tele-rehabilitation mode of continuous support will help in parental empowerment and therapy effectiveness. These children will be re-evaluated at specific intervals. Such a cost-effective model will increase the efficiency of disability early identification, specific intervention, thus reducing disability severity, medical expenses and caregiver burden.

## **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program

<sup>&</sup>lt;sup>2</sup>Department of Medical Surgical Nursing, MIMS College of Nursing, Malappuram, India





## POSTER PRESENTATION

## **→** Abstract ID Number: 97

A HYBRID MODEL THAT LEVERAGES TECHNOLOGY AND OVERCOMES THE BARRIER OF THE PANDEMIC TO TRAIN COMMUNITY WORKERS IN CHILD DEVELOPMENT AND DISABILITIES

## **Anushree Sane**, Priti Inje, Priyamvada Das

Ummeed Child Development Center, Mumbai, India

#### **OBJECTIVES**

To present a hybrid training model that used technology and made it possible to train individuals in child development and disability during the pandemic with a focus on enhancing children's participation.

## **METHODS**

The pandemic has been a barrier to in-person delivery of training community workers in child development and disabilities. Lack of direct access to children due to lockdown was another barrier. Hence, a hybrid version (with synchronous and asynchronous components) was devised to deliver the training.

Online platform was synchronously used to deliver theory, certain practical components (like use of monitoring tool, video observations for assessing children, etc.), supervise, and evaluate participants. Assignments and some practical with families were completed asynchronously by participants. The practical curriculum of promoting development and intervention for disabilities (focused on enhancing participation of children by modifying the children's' environment) could be implemented online by the participants with children and families they work with.

## **RESULTS**

The hybrid model ensured that the training met its objectives of creating resources at the grass root level to promote development and work with disabilities. We were able to train community workers from far corners of the country, who otherwise may have been unable to participate in in-person training because of geographic and financial constraints.

## **CONCLUSION**

Leveraging technology and modifying the existing curriculum enabled delivery of the training program online, in times when access has been more limited than usual. This has opened up new vistas/avenues to reach out to individuals in remote locations and more children and families.

#### **TOPIC CATEGORY**





## **POSTER PRESENTATION**

Abstract ID Number: 99

## "GOING PLACES THROUGH READING DESPITE THE PANDEMIC"

## Elisha Monica Recilla, Ma. Rowena Lynn Inovero-Ong

Pasig City General Hospital - Department of Pediatrics, Pasig, Philippines

When the COVID-19 pandemic started, it posed major adjustments and changes in the ways we conduct the "Reach Out and Read" program in our community to ensure safety among both the participants and the doctors who facilitate the activity. The goal in mind is to promote sustainability and continuity of our "Reach Out and Read" program while observing proper health and safety protocols being implemented during this pandemic.

During the first few months of the COVID-19 pandemic where an Enhanced Community Quarantine was imposed in NCR, we established a Facebook page to reach out to the Villa Raymundo community amidst this pandemic. Promotion of our various programs including Reach Out and Read was done through the FB page by posting various instructional videos on how to conduct Reach Out and Read in the safety of their homes with their kids likewise promoting the importance of spending time with their kids while learning how to read at the same time.

When the quarantine restrictions were eased to General Community Quarantine, we were able to bring back "Reach Out and Read" in our community Villa Raymundo. The community rotator for the month would go to the community at least once a week to conduct ROR, encourage new participants, and follow-up on our existing participants on how they are doing with their ROR at home.

#### **TOPIC CATEGORY**





## POSTER PRESENTATION

Abstract ID Number: 102

EFFECT OF INCORPORATING ECD PROGRAMME INTO THE EXISTING MONITORING AND TRAINING SYSTEM OF GOVERNMENT PRIMARY HEALTH CARE SERVICES IN BANGLADESH— A CRCT

<u>Syeda Fardina Mehrin</u><sup>1</sup>, Helen Baker Henningham<sup>2</sup>, Imrul Hasan<sup>1</sup>, Nur-e Salveen<sup>1</sup>, Masuma Kawsir<sup>1</sup>, Mohammad Saiful Alam<sup>1</sup>, Fahmida Tofail<sup>1</sup>, Jena Derakhshani Hamadani<sup>1</sup>

<sup>1</sup>ICDDR,B, Dhaka, Bangladesh

<sup>2</sup>Bangor University, Bangor, United Kingdom

#### **OBJECTIVE**

An evidenced-based psychosocial stimulation curriculum was shown to have a strong effect on the development of rural children under 5 years. To sustain the programme, we aimed to explore the feasibility of incorporating this programme into the primary health care facilities of the Bangladesh Government

#### **METHOD**

We randomly selected sixteen Unions from two sub-districts of Mymensing district and randomly allocated to intervention and control. A total of 48 Community Clinics (CCs) under these unions had been selected. In intervention clinics, twenty-four mothers of children aged 6-24 months living close to each CC were invited to attend the session in the CCs. Government Frontline health workers were trained and monitored by their government supervisors to conduct parenting sessions in community clinics fortnightly for six months. A sub-sample of 384 mother-child dyads (n=192 intervention, n=192 control) were assessed on the quality of home stimulation using Family Care Indicators. We also measured burn-out of CC staff using Maslach burn out questionnaire in intervention and control clinics.

#### **RESULT**

60% of the mothers attended all sessions. The home stimulation significantly increased in the intervention group with an effect size of 0.43 SD (95%CI; 0.23 to 0.64, P<0.0001). There was no difference in staff burn-out (p=0.74).

## **CONCLUSION**

Our findings suggest that it is feasible to integrate a parenting programme into government health services to promote the development of disadvantaged rural children. Mother attendance was good, the additional work did not lead to an increase in staff burn-out and significant benefits were found for mothers' parenting practices.

## **TOPIC CATEGORY**





## POSTER PRESENTATION

Abstract ID Number: 104

## PARENTAL ACCEPTANCE AND EFFECTIVENESS OF THE TELE-ASD-PEDS IN THE ASSESSMENT OF AUTISM, DURING THE COVID 19 PANDEMIC

## **Jessica Pinto**

Sethu Centre for Child Development and Family Guidance, Saligao, Goa, India

#### **OBJECTIVES**

Delay in diagnosis is a well-recognised concern in the management of Autism Spectrum Disorder (ASD), worsened with the imposition of social restrictions during the COVID-19 pandemic. The TELE-ASD-PEDS is an open source, novel tele assessment tool designed by the TRIAD team at the Vanderbilt Kennedy Centre in U.S.A. for remote assessment of ASD.

The study objectives included:

- 1) Assessing parental acceptance and satisfaction with the use of TELE-ASD-PEDS in diagnosis of ASD
- 2) Determining the effectiveness of the TELE-ASD-PEDS in enhancing diagnostic certainty.

#### **METHODS**

Children aged 16 to 36 months with speech delay or other features suggestive of ASD were initially reviewed via telephonic history and home videos. Based on this information, a provisional diagnosis was made and provider certainty was recorded. Families participated in the TELE-ASD-PEDS evaluation through Google Meet. During the assessment, parents were instructed to interact with their children, using the TRIAD administration guidelines, with local adaptations. The social communication, play and behavior of the children was scored and the diagnosis of ASD present or absent assigned. The certainty of the diagnoses before and after TELE-ASD-PEDS assessment was evaluated. Parental satisfaction with the assessment process was elicited.

## **RESULTS**

26 children and families were assessed using the TELE-ASD-PEDS tool. It enhanced diagnostic certainty significantly. Parents were 'satisfied' or 'extremely satisfied' with the assessment.

## **CONCLUSIONS**

The TELE-ASD-PEDS tool can be applied in low resource settings, to improve the reach of ASD diagnostic services as it is acceptable to parents and enhances the assessor's diagnostic certainty.

## **TOPIC CATEGORY**

Use of Technology in Diagnosis: -





## POSTER PRESENTATION

Abstract ID Number: 107

"THE COMPARISON OF PERFORMANCES OF IRANIAN CHILDREN ON BAYLEY-III SCALE USING IRAN AND UNITED STATE STANDARDIZED NORMS"

## Nahideh Hasani Khiabani

Tabriz University of Medical Science, Child Development Center, Tabriz, Iran

#### **OBJECTIVE**

The aim of this study was comparing of performance of Iranian children on the Bayley Scales of Infant and Toddler Development- third edition (**Bayley III**) with the standardized norms of Iran and United State. A total of 248 Iranian children [L1] at the ages of 1-42 months were participated in this study. The Bayley III was administered to evaluate the cognitive, language and motor development of these children.

## **RESULTS**

The mean scores of Iranian children on the subtests of receptive communication and fine motor were lower when using Iranian standardized norms comparing to use of American children standardized norms (p<0.05). On the base of these results, if the United State cut-off points are used to evaluate of the developmental status of Iranian children, it would lead to under-referral of children who need intervention.

[L1]From which cities

## **TOPIC CATEGORY**





## POSTER PRESENTATION

Abstract ID Number: 110

## PARENT SATISFACTION WITH TELEHEALTH SERVICES FOR CHILDREN WITH AUTISM SPECTRUM DISORDER (ASD) DURING THE COVID-19 PANDEMIC

## Shubham Roy, Koyeli Sengupta

Ummeed Child Development Center, Mumbai, India

Access to interventions in LMICs is often impeded by concentration of services in metropolitan cities and affordability. The COVID-19 pandemic forced providers to increase utilization of telehealth services in lieu of face-to-face encounters.

#### **OBJECTIVES**

to measure satisfaction level among parents/caregivers of children with Autism Spectrum Disorder(ASD), seeking telehealth interventions.

#### **METHODS**

A multi-centric cross-sectional observational study conducted at three centers in Mumbai. Parents of children with ASD who had participated in at least 1 telehealth therapy session and completed online survey questionnaire were included. Descriptive and analytical analyses were employed to determine satisfaction level with Telehealth usage and to explore clinical/demographic predictors of satisfaction.

## **RESULTS**

80 caregivers were recruited. Demographic data and satisfaction scores were recorded in seven satisfaction categories (Efficiency, Cost-effectiveness, Reliability, Ease of use, Usefulness, Quality of interaction, Intention to use) and overall score. Mean age of study population was 5.78 years±2.42 with 75% males, and mother attended telehealth sessions on most occasions (93.75%). Satisfaction scores were calculated and clinico-demographic predictors determined for each. The mean satisfaction score was 3.55±0.49 (on 5-point Likert scale, 1=very unsatisfied to 5=very satisfied) with significant predictors being city of residence (p=0.004), mode of service delivery being Parent coaching (p=0.014), fee charged (p=0.004) for session.

## **CONCLUSIONS**

Telehealth services have increased access to therapies for people living in remote areas and were better satisfied. Parents were more satisfied with free or lesser-charged telehealth services. Implications of findings on how telehealth services can be delivered in the future will be discussed.

## **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





## POSTER PRESENTATION

Abstract ID Number: 111

## EVALUATION OF IMPACT OF THE "CARE FOR CHILD DEVELOPMENT" (CCD) PROGRAM ON THE DEVELOPMENTAL SKILLS OF ORPHANAGE CHILDREN

Nasrin Baraheni<sup>1</sup>, Zahra Maleki<sup>2</sup>, Fatemeh Azhdarzadeh<sup>3</sup>, Dr.Seifollah Heidarabadi<sup>1</sup>, Nahideh Khiabani<sup>1</sup>, Ali Bahari Gharegoz<sup>4</sup>, Sheida Shafiei Kohnehshahri<sup>1</sup>, Soheila Allafi<sup>1</sup>

- <sup>1</sup>Tabriz university of Medical Sciences, Tabriz, Iran
- <sup>2</sup>MSc of Occupational therapy, Tabriz, Iran
- <sup>3</sup>Neurosciences Research Center Tabriz University of Medical Sciences, Tabriz, Iran
- <sup>4</sup>Department of Educational sciences, Farhangian University, Tehran, Tabriz, Iran

#### **OBJECTIVES**

Child development refers to the progressive increase in the skills and functional capacity in different domains, that means qualitative change in the child's functions. Developmental process initiates prior to birth and proceeds throughout the lifespan. The object of this study is to evaluate impact of the "Care for Child Development "program on the developmental skills of the orphanage children.

### **METHOD**

In this project, after obtaining the required permission from the orphanage manager, infants from 4 to 42 months of age were randomly selected and replicated by means of convenience sampling in the two orphanages of East and West Azarbayjan. A group of volunteers trained in CCD (8 hours workshop), performed CCD interventions according to the child's chronological age for three 2-hour sessions. After the intervention, children were evaluated by Bayleylll and the "Ages and Stages questionnaire".

## **RESULTS**

According to t-test, there was a meaningful difference (P value < 0.05) between the two groups in the domains of communication, motor and personal- social except for cognitive domain (p value > 0.05).

## **CONCLUSIONS**

The quality of residence place and how the caregiver interacts with orphanage children has an important role in the behaviors and functions of them who are deprived of home and family and brought up in the orphanage. According to this study, the orphanages can be considered as a settings where some interventions like "Care for Child Development "program can be applied for promotion of the child's developmental skills.

#### **KEYWORDS**

Development," Care for Child Development "program, orphanage, developmental skills

#### **TOPIC CATEGORY**

Intervention: 1i) Parent Training





## POSTER PRESENTATION

Abstract ID Number: 117

MOTIVATIONAL FACTORS FOR PARENTAL INVOLVEMENT IN SPECIAL EDUCATION DISTANCE LEARNING OF THEIR CHILDREN DURING THE COVID-19 PANDEMIC

## Hazel Manabal-Reyes, Ma. Rochelle Pacifico, Wilfredo Santos

De La Salle University Medical Center, Dasmarinas, Cavite, Philippines

#### **OBJECTIVES**

To determine factors motivating home and school involvement of parents of students ages 6 to 13 versus 14 to 25 years old in special schools during the pandemic.

## **METHODOLOGY**

An analytical cross-sectional study using the Hoover-Dempsey framework and Sandler's Model on parental involvement through interviews (92%) and survey (8%) method.

#### **RESULTS**

Regression analysis showed parents of younger students were receptive to the new curriculum and participated when child specifically requests their involvement. For parents of older students, involvement depends significantly on the general invitation from the school. Varying expectations and goals of parents depending on child's age and emerging abilities influence involvement, whether they become more pro-active in responding to cues usually from younger children as they learn, or pull-back support as older SpEd children gain independence and autonomy. With apparent progress parents tend to be less participative unless required by the school, or sometimes dissuaded by discrepancy between appropriateness of content and their child's ability. Overall, a child being mainstreamed in regular school impacted parental involvement during this period as this suggests increasing the child's potential. Nevertheless, results still indicated less home-based involvement than what was expected.

## **CONCLUSIONS**

The pandemic's effects on parental involvement showed importance of mainstreaming as an overall motivating factor for involvement of Filipino parents. Also contributing are the three factors from the Hoover-Dempsey framework which are parental belief, specific invitation from the child and school. Focusing on these factors may strengthen program development in special education and parental involvement.

#### **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -





## POSTER PRESENTATION

Abstract ID Number: 122

# CAREGIVER SATISFACTION WITH TELEHEALTH DELIVERY OF THE INTERNATIONAL GUIDE FOR MONITORING CHILD DEVELOPMENT (GMCD) INTERVENTION DURING THE LOCKDOWN IN TURKEY

Ezgi Ozalp Akin<sup>1</sup>, Sidika Canan Atasoy<sup>1</sup>, Selin Ince<sup>1</sup>, Aysen Akbas<sup>1</sup>, Merve Cicek Kanatli<sup>1</sup>, Revan Mustavayev<sup>2</sup>, Bedriye Tugba Karaaslan<sup>3</sup>, Bahar Bingoler Pekcici<sup>1</sup>, Ilgi Ertem<sup>1</sup>

<sup>1</sup>Developmental-Behavioral Pediatrics Division, Department of Pediatrics, Ankara University School of Medicine, Ankara, Turkey

<sup>2</sup>Department of Pediatrics, Acibadem Maslak Hospital, Istanbul, Turkey.

### **OBJECTIVES**

Early intervention using telehealth is invaluable during crises. We examined long-term caregiver satisfaction with the international Guide for Monitoring Child Development (GMCD) intervention delivered through telehealth during the pandemic.

#### **METHODS**

Using mixed-methods design, we recruited children aged 0-42 months who were seen at Ankara University Developmental Pediatrics Division (AUDPD) only once before the pandemic if they had an appointment to be seen during the lockdown. Four developmental pediatricians used the GMCD intervention to assess and support children's development over the telephone. Caregiver satisfaction was assessed during a telephone interview one year later by blinded researchers.

## **RESULTS**

Of 135 eligible children, 122 (90%) received the intervention, one-year interviews were conducted with 102 (84%) caregivers. Median child age was 15.5 (IQR: 8.7-27.2) months and 51% were girls. Most (98%) caregivers remembered the intervention content and the clinician's name (76%); %92 reported that the intervention was useful and %70 reported implementing most of the recommendations. Qualitative analysis revealed that caregivers' reasons for satisfaction were related to receiving a) information on how to support their child's development; and b) psychological support including being held in their clinician's mind. Parents' suggestions for improvement of the intervention included increasing telehealth frequency and using video calls. Most families (80%) stated not receiving distant services from other sources during the lockdown.

## **CONCLUSIONS**

Our findings indicate that the GMCD intervention applied through telehealth during the pandemic lockdown was remembered, appreciated and applied by most caregivers. Further research is needed to examine the effectiveness of the intervention.

## **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program

<sup>&</sup>lt;sup>3</sup>Department of Child Development, Izmir Katip Celebi University, Faculty of Health Sciences, Izmir, Turkey





## POSTER PRESENTATION

Abstract ID Number: 123

## USING COMIC STRIPS TO BUILD AWARENESS ABOUT DEVELOPMENTAL DISABILITIES AND MENTAL HEALTH

## Shenessa Barreto, Helene Menezes, Andrea Gonsalves, Seniz Rego

Sethu Centre, Goa, India

Social media is a computer-based technology that facilitates the sharing of experiences and information through virtual networks. When used effectively, it is a powerful tool to build awareness.

#### **OBJECTIVES**

To use a comic strip based on a family theme, to build awareness through social media, about parenting, child development, disabilities, and mental health and create a community that is more knowledgeable, accepting, and inclusive.

### **METHOD**

In October 2020, during the Covid 19 pandemic, the social media team at Sethu Centre, Goa, created a comic strip around a family called 'The Sethus', to connect with the families we serve. For wider appeal, The Sethus included two parents and three children, each with unique strengths and quirks. The focus was on information about the newly launched teletherapy services, parenting tips, inclusion and various aspects of child development. Content design was built on stories of strengths and difficulties that families share with us, important milestones in child development and the celebration of significant days on the social calendar.

## **RESULTS**

'The Sethus' have something important to say every week! The comic strips have highlighted new programs at Sethu, preschool development, teenage issues, online learning, safety during the Covid 19 pandemic and social issues. The engagement and number of followers across various social media platforms has increased.

#### CONCLUSION

Comic strips are a powerful way to catch the public attention and imagination. Feedback from families and viewers shows that when people identify with comic strip characters, the message is more effectively transmitted.

### **TOPIC CATEGORY**

Advocacy for Children with Disabilities: -





## POSTER PRESENTATION

Abstract ID Number: 124

PREVENTING VIOLENCE AGAINST REFUGEE CHILDREN: AN APPRECIATE INQUIRY STUDY IN 6 NON-FORMAL EDUCATION CENTERS IN LEBANON

## Maha Shuayb, Rasha Halat, Rana Makki

Centre for Lebanese Studies, Beirut, Lebanon

This research aims to generate evidence from within non-formal education centers (NFE) on the efficacy of particular approaches in the prevention of violence against children, through identifying children's needs and developing teachers' skills. It builds on the positive experiences of participating NFEs, and seeks to answer the following main question: what are the various successful child-protection strategies adopted in and around NFEs? We posit that the practices of teachers within the classroom affect the feeling of safety among refugee children and that the needs of children guide the actions to be followed within the center.

The research adopts an appreciative inquiry methodology. Researchers interviewed teachers and conducted focus group discussions with students from 6 non-formal education centers in Lebanon.

Findings showed that children's needs vary from basic needs to higher-level ones like self-actualization, depending on various factors such as the socio-economic background of the family, the children's experiences in other educational contexts, any physical or learning disabilities that children have. All NFEs must be aware of these needs and design their activities accordingly. Through the teachers' interviews, several good and implemented practices that fall under positive discipline and personal relationship building were identified as prerequisites for securing a safe learning environment for children. Based on the findings, it is recommended that education centers hold regular professional development meetings focused on equipping teachers with the identified skills. To succeed in creating a safe environment, NFEs must also embed violence prevention practices within their systems.

## **TOPIC CATEGORY**

Intervention: 1d) Educational





## POSTER PRESENTATION

Abstract ID Number: 127

EARLY IDENTIFICATION PROGRAM FOR AUTISM SPECTRUM DISORDER (ASD) IN IMMIGRANT AND REFUGEE CHILDREN: A LOW-COST GENERALIZABLE MODEL INCLUDING COMMUNITY PROVIDERS

## Roula Choueiri, William Garrison, Valerie Tokatli

University of Massachusetts Chan Medical School, worcester, USA

The identification of ASD in immigrant and refugee young children is complicated by experience in the country of origin, cultural beliefs, and access for evaluation.

We present a program that we have been developing over the last 3 years, in collaboration with community early childhood providers in Worcester, Massachusetts (MA). Approximately 35% of families in Worcester speak a language other than English, and close to 40% are non-White. Immigrants and refugees come from South America, Nepal, Vietnam, Ghana, Nigeria, and Iraq. The goals of the program are to: 1)- Improve the identification of ASD using the **Rapid Interactive Screening Test for Autism in Toddlers (RITA-T)**, and 2)-Support immigrant and refugee families after a new diagnosis of ASD. We trained providers in Early Intervention (EI) programs on the RITA-T. When a child is suspected to have ASD, they administer the RITA-T, discuss concerns with families, and bring them to the evaluation.

The RITA-T is a low-cost, interactive screening test that is easy to train, and is administered and scored within 10 minutes. It has excellent correlation with a diagnosis of ASD. It has/is being translated into Arabic, Turkish, Hindi, French, Portuguese, and Spanish. In 3 years, 270 toddlers were evaluated. Almost half were non-White and a third required language interpreters. We also developed a free toolkit to train providers on cultural perception of ASD and immigration trauma: Project ANCHOR (Autism. Network. Culture. Healthy Outcomes. Resilience).

This program can integrate easily within low-resource communities to improve early identification of ASD.

#### **TOPIC CATEGORY**





## POSTER PRESENTATION

Abstract ID Number: 128

## DE-STRESS SIGNAL – HOW A SIMPLE MESSAGING APP BUILT AN ONLINE COMMUNITY OF FAMILIES OF CHILDREN WITH AUTISM SPECTRUM DISORDER

## Nandita DeSouza, Andre Velho, Chaitanya Varma

Sethu Centre for Child Development & Family Guidance, Goa, India

Families of children with Autism Spectrum Disorder (ASD) endure high levels of stress and benefit greatly from participating in parent support groups (PSG). Unfortunately, the restrictions of the Covid 19 pandemic precluded physical meetings, creating a need for other approaches, including the use of online platforms.

### **OBJECTIVES**

The online PSG was offered to enable parents to communicate with each other through the difficult times of the C19 pandemic to reduce their isolation and provide support.

#### **METHODS**

An online parent support group (PSG) for families of children with ASD at Sethu was initiated in December 2019. In the interests of data safety, in April 2021, it was relaunched using Signal messaging app in April 2021 as a platform for support. An online survey was conducted among the participants to elicit feedback about their experiences.

## **RESULTS**

The daily posts with lively exchange of information, personal sharing, success stories and problem solving was remarkable. With 50 members initially, the PSG increased in size by 300% in 6 months, with 151 members currently. An analysis of the posts from April to June 2021 revealed three notable thematic areas – information about resources and training programs, discussion of problems and solutions and celebration of success stories. The survey showed that the vast majority of parents benefited greatly from being a part of the online group.

## **CONCLUSIONS**

Online supportive and empowering connections can be easily created, despite the challenges of the continuing pandemic. These learnings can be replicated by other organizations working with children with neurodevelopmental disabilities.

## **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





# POSTER PRESENTATION

Abstract ID Number: 129

# CREATION OF THE GLOBAL SCALE OF EARLY DEVELOPMENT (GSED) FOR VALIDATION IN SEVEN COUNTRIES ACROSS FOUR CONTINENTS

### **GSED Team**

World Health Organisation, Geneva, Switzerland

### **INTRODUCTION**

With over 250 million children not meeting their developmental potential, sustainable development goal 4.2.1 aims to measure the "proportion of children developmentally on track" across countries. The Global Scale of Early Development (GSED) an ambitious cross-national, multi-language measure of child development for 0–3-year-old childrenacross countries. The project has been undertaken by an experienced team of international researchers led by the World Health Organisation.

### **METHODS**

The GSED was designed using a data from over 100,000 children, on 22 tests and 2275 items. A modified Rasch model was used to jointly model data and select a subset of 807 items showing stability across countries. Eight subject matter experts (SME) made judgements on correlation of items, domains measured and feasibility and appropriateness of items which was synergised alongside the quantitative data for robust item selection of items for creation of the GSED-SF (GSED short form) and GSED-LF (GSED long form). Tools have then been piloted in three countries (Bangladesh, Pakistan and Tanzania), revised and now data collected on children from 0 – 42 months across each country with inter- rater and intra-rater reliability, concurrent validity data, construct validity as well as other measures of adversity across settings.

### **RESULTS & CONCLUSION**

We have created the first data-driven tools for measuring child development both by parent report and by direct observation in children from 0-42 months across countries. This can be used to provide better monitoring and information at population and programmatic level for early child development to meet goals for "all children thriving".

### **TOPIC CATEGORY**

Early Childhood Development: -





# POSTER PRESENTATION

Abstract ID Number: 130

# EMOTIONAL INTELLIGENCE AS A MEDIATING VARIABLE BETWEEN STYLE OF PARENTING AND THE PERCEPTION OF MALTREATMENT AMONG CHILDREN

### Sabri Seha

Minia University, Minia, Egypt

The study investigates emotional intelligence as a moderate variable of parenting styles (authoritative, authoritarian and permissive) and children recognition of maltreatment. The researcher uses the connective descriptive methodology. The sample of the study consists of 334 students between 13 – 15 years old including 163 male student (48.8%), and 171 female students (51.2%). Sample is of students in second preparatory in three public preparatory schools in Tahta, Sohag, Egypt, in 2016. The tools of the study includes emotional intelligence measurement of "Schutte, et al. 1998", parenting style "Buri 1991", and children recognition of maltreatment measuring prepared by the researchers. The findings of the study show that there is no difference between the two sexes regarding emotional intelligence, parenting style and children recognition of maltreatment. The study also proved that emotional intelligence is a moderate variable among all parenting styles including permissive, authoritative and authoritarian of father and authoritative and authoritarian of the mother and the child recognition of verbal abuse and realization of deprivation and threatening.

In all communities, children maltreatment takes different shapes. One way or another, maltreatment is common in all countries of the world. In general, Arab and International efforts have been increasing in order to provide child protection against maltreatment, neglecting and all shapes of exploitation. The study examines the relation between parenting styles (Authoritative, Authoritarian and Permissive), children perception to maltreatment according to the variable of emotional intelligence. This may contribute towards putting limits to child maltreatment in our communities.

### **TOPIC CATEGORY**

Intervention: 1e) Psychological





# POSTER PRESENTATION

Abstract ID Number: 131

CHILD DEVELOPMENTAL ASSESMENT AND INTERVENTION IN PEDIATRIC GASTROENTEROLOGY OUTPATIENT CLINIC: A PILOT STUDY

<u>Pınar Yamac Dilaver</u><sup>1</sup>, Haticenur Kirar<sup>1</sup>, Berfin Hilal Urun<sup>2</sup>, Zehra Şelte<sup>2</sup>, Isranur Kebeli<sup>2</sup>, Gokhan Baysoy<sup>1</sup>

<sup>1</sup>Istanbul Medipol University Department of Pediatric Gastroenterology, Hepatology and Nutrition, Istanbul, Turkey

<sup>2</sup>Istanbul Medipol University Faculty of Health Sciences, Division of Child Development, Istanbul, Turkey

### **OBJECTIVES**

Paediatric gastroenterological diseases cause malnutrition, growth delay, and maternal stress affecting child development. In this pilot study we reviewed our experience with child developmental assessment/intervention in paediatric gastroenterology outpatient clinic.

### **METHODS**

Two child developmental specialist (CDS), and 1 junior CDS student worked in paediatric gastroenterology clinic. CDS applied developmental inventories and gave advices about the domains that child has delays. Within 2-4 months of admission, mothers were phoned and requested to rate the satisfaction from meeting with CDS from 1 to 5, and success of following recommendations by rating themselves.

### **RESULTS**

36 patients (19 of them <3 years of age) were evaluated. Most common diagnoses were feeding difficulties (n=9), constipation (n=8), cystic fibrosis (n=3), and vomiting, cirrhosis, and diarrhoea (n=6). There were 6 patients with neuromuscular and genetic diseases who had significant delays in all domains of development. Another 6 patients had delays in multiple domains (cognitive=3, language=2, social=2, motor=2). They were given specific advices. 30 mothers could be reached by phone and rated the satisfaction from CDS interview as 4.7 points, and gave themselves 4.2 points for following the recommendations.

### CONCLUSION

This pilot study shows that there is substantial amount of developmental delay in children with chronic conditions. Developmental assessment/intervention is acceptable by mothers. Patients at risk should be determined and targeted developmental assessment/intervention should be provided in subspecialty clinics caring for children with chronic diseases. Determination of the effectiveness of developmental interventions on the disease course and children's progress should be undertaken.

### **TOPIC CATEGORY**

Intervention: 1k) Others





# POSTER PRESENTATION

Abstract ID Number: 135

BEYOND TELEREHABILITATION: REACHING CHILDREN WITH DISABILITIES DURING COVID-19 PANDEMIC IN A COMMUNITY-BASED EARLY INTERVENTION PROGRAM IN RURAL SOUTH INDIA

Navamani Venkatachalapathy<sup>1</sup>, Dinesh Krishna<sup>1,2</sup>, Marie Brien<sup>1,2</sup>, Sankara Raman Srinivasan<sup>1</sup>

<sup>1</sup>Amar Seva Sangam, Ayikudi, India

### **OBJECTIVES**

COVID-19 imposed challenges to the provision of face-to-face developmental services and continuity of care, compounding existing barriers faced in lower resource settings. We describe a community-based early intervention program in rural Tamil Nadu that harnessed digital technology to ensure continuity of therapeutic services for children with developmental disabilities while supporting families.

#### **METHODS**

A multipronged approach was developed to optimize use of technology and community resources, including: (1) 'Stay-connected'- cell phone calls and messaging regarding pandemic precautions and resources, child's health and therapy needs, family wellbeing, (2) Telerehabilitation sessions- with therapy demo videos and discussion exchanges between parents and multidisciplinary rehab team, (3) Telemedicine visits with medical specialists, (4) WhatsApp parent support groups-sharing lived experiences and peer-guidance, and (5) Family-centered outreach for engagement of siblings and extended family nurturing of the child in their household.

### **RESULTS**

During the 10 months of COVID-19 lockdowns during two waves of the pandemic in India, 94 % of families (2359 children and 5001 caregivers) in the program received therapeutic guidance without any gap in services, with 25% of families being reached through videoconferencing on their smartphone, while 6% had no access to phones and were not reachable. In total, 66,549 tele-rehab sessions and 297 medical specialists' consultations occurred and 255 participated actively in WhatsApp parent support groups.

### **CONCLUSION**

Families of children with disabilities benefitted from technology-supported family-centered services during the pandemic. Low-tech connectivity and digital platforms were successfully used in a rural low- income setting to support child developmental needs, family well-being, and peer connections.

### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program

<sup>&</sup>lt;sup>2</sup>Handi-Care Intl, Toronto, Canada





# **POSTER PRESENTATION**

Abstract ID Number: 142

# OPTIMIZING DEVELOPMENTAL OUTCOMES BY SETTING SMART GOALS INDIVIDUALISED HOME PROGRAM FOR CHILDREN WITH DISABILITIES DURING COVID-19

### **Aarti Nair, Diya Nair**

Latika Roy Foundation, Dehradun, India

### **OBJECTIVES**

COVID-19 pandemic posed as a huge danger to the lives and prosperity of millions of individuals around the world. The weakest segments of society were missed in this large scale crisis[i]. Covid pandemic presented a phenomenal chance for families of children with disabilities to act in fortitude and transform this emergency into a force to accomplish the objectives and enhance result for children[ii].

### **METHODS**

Customised online services for children during the pandemic. Maintain mental wellbeing of parents/caregivers.

### **RESULTS**

We feature the home management programs that were setup by staff at Latika Roy Foundation (LRF) during the pandemic for families of children with disabilities. Families worked hard during lockdown and their children showed improved outcomes by the individualised home programs that were set for each child attending online services

### **CONCLUSION**

The pandemic led to shift from regular services to online mode of service and displayed clearly that necessity is the mother of invention. When accessibility to essential services was difficult, children with disabilities and their parents were the high-risk group for various physical and mental health issues, and needed appropriate guidance and support. As the world navigates the pandemic the LRF staff continued to work for the most vulnerable sections of society fostering the idea of practice and participation.

[1][i] The latest COVID-19 news and resources, as well as tips to protect you and your family.UNICEF

[3] Leaving no one behind during the pandemic: Children with disabilities and COVID-19 Back to Unicef.orgTop of FormBottom of Form

### **TOPIC CATEGORY**





# POSTER PRESENTATION

Abstract ID Number: 143

# APNA ADDA (OUR MEETING PLACE): AN ONLINE SUPPORT GROUP FOR DISABLED YOUNG PEOPLE

### Yashna Vishwanathan, Farah Maneckshaw

Ummeed Child Development Center, Mumbai, India

#### **OBJECTIVES**

The paper intends to present an ongoing online collaborative, inclusive support group for disabled young people. The goal is to foster community support and wellbeing, and disability-inclusive advocacy.

### **METHOD**

17 disabled young people from ages 15-20 receiving care at Ummeed Child Development Center, Mumbai are recruited. Hourly-online sessions are conducted fortnightly and the sessions are facilitated in Hindi, English and Indian Sign Language.

Holding on to, 'nothing about us without us', disabled young people were consulted on their expectations from a support group. Drawing from narrative therapy, the sessions were structured to include games and movement, conversations around friendships, love, disability, gender, consent and mental health. These conversations were supplemented by picture-books, audio-visuals, break-out room activities.

### **RESULTS**

Over the meetings, 'Adda' came to be a safer, collaborative space for young people to share their lived-experiences, while collectively upholding values of respect, inclusion and support.

Disabled young people mentioned looking forward to the space for connections, leisure and sharing experiences, considering there seldom are spaces that are inclusive and community-led. The group members also connect outside of the group and this has nurtured support, interdependence and a sense of agency among them.

The members are consulted to shape the sessions, discussion topics and collective understandings around what disability advocacy means to them.

### **CONCLUSION**

This paper presents an inclusive, cost-effective model of co-creating community and collective advocacy with disabled young adults.

### **TOPIC CATEGORY**

Advocacy for Children with Disabilities: -





# POSTER PRESENTATION

Abstract ID Number: 146

EFFECTS OF COVID-19 ON CAREGIVER-CHILD RELATIONSHIP AND CHILDREN'S BEHAVIOR IN THE CONTEXT OF MAJOR ADVERSITIES: A CROSS-SECTIONAL SURVEY

# Rawan Korman, Dana Hazimeh, Lama Charafeddine, Rayan Hojeij, Durriyah Sinno

American University of Beirut, Beirut, Lebanon

In addition to the disruption caused by COVID-19 pandemic, families of young children have been affected by increasing political and economic crisis in Lebanon. We aimed to investigate the effects of the COVID-19 lockdown amid the Lebanese crisis on the caregivers' practices and children's behavior.

### **METHODS**

An online anonymous survey using social media was open for caregivers of children aged 5 years or less living in Lebanon since October 2019. We developed a questionnaire using the "scale of positive experiences in parent–child relationship during the COVID-19 lockdown" and the validated Arabic version of the strengths and difficulties questionnaires (SDQ). Demographic data and potential confounding factors were also collected. Descriptive analysis was done using SPSS version 25.

### **RESULTS**

To date, 84 of 170 respondents were analyzed. 26% had children 0-2 years and 58% 3-5years. After COVID, employment status changed for 25% of respondents while 38% reported working full time from home.

Of the 84 respondents, 45% reported spending 8 hours daily with their children, 45% were able to maintain a specific routine and 47% reported their children spending 1-3 extra hours daily using electronics. The Beirut blast affected 44.1% of the respondents' children and 35.9% had high scores on the SDQ emotional scale. The parent-child relationship's mean score was 25 ( $\pm$  4.2) depicting positive experiences.

The COVID 19 pandemic amid Lebanon's major adversities had a significant negative impact on the children's behavior however the parents-children relationship remained positive. Factors explaining these findings have yet to be explored.

### **TOPIC CATEGORY**

Risk Factors for Developmental Disabilities: -





# POSTER PRESENTATION

Abstract ID Number: 151

VIRTUAL SCHOOL, THE NEW NORMAL, BUT ... THE GREAT UNKNOWN ... A MODEL FOR TEACHERS, STUDENTS AND PARENTS OF A SPECIAL SCHOOL

### Fionika Sanghvi, Kashmira Vazifdar, Jasmine Sajnani, Priya D'souza

SPJ Sadhana School, Mumbai, India

During the pandemic, the education of students with Special Educational Needs received little priority. The students were in a lockdown within a lockdown of their numerous challenges. To provide value and in spite of the unfamiliarity, SPJ Sadhana School plunged into virtual schooling from June 2020.

### **OBJECTIVES**

- To develop a model that would provide meaningful engagement for the students through a virtual platform.
- To retain and reinstate concepts.
- To address their educational, skills-training, and social-emotional needs.
- To empower the triad of teachers, therapists and parents.

An archetype was created by adapting the school's multi-intelligence curriculum. Methods such as small-group teaching; customizing time-tables and syllabi to work on academics, skills, leisure, recreation; and providing therapeutic interventions, were used to help transition.

Simultaneously several staff challenges had to be addressed:

- Transformation to a digital medium overnight
- Invasion of privacy
- Management with limited resources
- Teach students and train on-looking parents

### Parent challenges:

- Adjusting personal schedules
- Transforming the home space for classroom work
- Providing digital devices

Thus parents were trained to take on the role of shadow teachers; and numerous capacity-building workshops were conducted to equip the staff.

### **RESULTS**

Meticulous and detailed planning has resulted in the implementation of virtual schooling. There has been no pause or interval in the students' education and holistic development. Student progress has been evident, parent appreciation has been forthcoming and staff morale has been maintained.

The outcome was to BE INVOLVED TO EVOLVE. It was an exchange - to explore and connect together towards change.

### **TOPIC CATEGORY**

Intervention: 1d) Educational





# **POSTER PRESENTATION**

Abstract ID Number: 153

# INTEGRATING A PROGRAMME OF EARLY CARE AND SUPPORT FOR YOUNG CHILDREN WITH DEVELOPMENTAL DISABILITIES INTO THE RWANDAN PUBLIC HEALTH SYSTEM

<u>Mathieu Nemerimana</u><sup>1</sup>, Rachel Lassman<sup>2</sup>, Erick Baganizi1, Tracey Smythe<sup>3</sup>, Ancille Musabende<sup>1</sup>, Jules Ubarijoro<sup>1</sup>, Jessica Edwards<sup>1</sup>, Betty Nyangoma<sup>2</sup>, Lucy Mbabazi<sup>2</sup>, Emily Webb<sup>3</sup>, Fiona Beckerlegge<sup>2</sup>, Kirk Catherine<sup>1</sup>, Cally Tann<sup>4,5,3</sup>

- <sup>1</sup>Partners in Health/Inshuti Mu Buzima, Kigali, Rwanda
- <sup>2</sup>Kyaninga Child Development Centre, Fort Portal, Uganda
- <sup>3</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom
- <sup>4</sup>University College London Hospitals NHS Trust, London, United Kingdom
- <sup>5</sup>MRC/UVRI & LSHTM Uganda Research Unit, Entebbe, Uganda

### **OBJECTIVES**

To integrate the 'Baby Ubuntu Bundle', a programme of early identification, care and support for young children with developmental disabilities and their caregivers, into government health systems in Rwanda

### **METHODS**

The Baby Ubuntu Bundle is a 10-modular, participatory group rehabilitation programme, facilitated by expert parents alongside healthcare workers and embedded within government health facility Pediatric Development Clinics (PDCs). Facilitator training and supervision were provided for expert parents and healthcare workers who co-facilitate the programme. Pre- and post-training assessments evaluated knowledge, confidence, facilitation skills and fidelity of delivery. Mixed-methods evaluation examined feasibility, acceptability and impact on family quality of life (QoL).

### **RESULTS**

In 2019-20, 10 PDCs enrolled 109 families to 12 participatory groups, providing evidence of feasibility. Acceptability was evidenced by satisfactory attendance (≥6 modules attended) in 95.4% of participants. Facilitators demonstrated improved scores in knowledge (median 65% pre vs. 85% post), confidence (median 3.9 vs. 4.5) and facilitation skills (median 4.3 vs. 4.7). Fidelity checklists showed high-level facilitation skills in most areas. The median total family QoL score (PedsQL, Family Impact) was 62.5 at baseline vs. 79.9 at end-line (median difference,+12.5 (p<0.001)), representing a 20% increase post- intervention. Significant improvements were seen in physical, emotional, and social functioning, worry, communication, daily activities and family relationships (p<0.05).

### **CONCLUSION**

Our integrated Baby Ubuntu Bundle of early identification, care and support for children with developmental disabilities was feasible, acceptable and led to improved family QoL. Participatory training improved facilitator knowledge, confidence and skills, and promoted partnership between healthcare workers and expert parent facilitators.

### **TOPIC CATEGORY**





# POSTER PRESENTATION

Abstract ID Number: 155

LIVELIHOOD SUPPORT FOR CAREGIVERS OF CHILDREN WITH DEVELOPMENTAL DISABILITIES: FINDINGS FROM A SCOPING REVIEW AND STAKEHOLDER SURVEY

<u>Eva Loucaides</u><sup>1</sup>, Maria Zuurmond<sup>1</sup>, Mathieu Nemerimana<sup>2</sup>, Catherine Kirk<sup>2</sup>, Rachel Lassman<sup>3</sup>, Albert Ndayisaba<sup>2</sup>, Tracey Smythe<sup>1</sup>, Erick Baganizi<sup>2</sup>, Cally Tann<sup>1,4</sup>

<sup>1</sup>London School of Hygiene & Tropical Medicine, London, United Kingdom

### **OBJECTIVES**

Poverty amongst families with children with disability adversely impacts child and family quality of life. We aimed to identify existing approaches to livelihood support for caregivers of children with developmental disabilities in low- and middle-income countries.

### **METHODS**

This mixed-method study incorporated a scoping review of the published literature and an online stakeholder survey. We utilised the WHO community-based rehabilitation (CBR) matrix as guiding framework for our knowledge synthesis and descriptively analysed the included articles and survey responses.

### **RESULTS**

We included 11 peer-reviewed, 6 grey literature articles and 49 survey responses received from stakeholders working in 22 countries. Identified programmes commonly targeted multiple elements of the livelihood component of the WHO CBR matrix; particularly skills development, access to social protection measures and self-employment. Livelihood support was frequently offered in collaboration with expert partners, and as one component of a wider intervention. Most worked with a broad age range of children. Self-help groups were common to many initiatives. No publications examined effectiveness of livelihood support approaches in mitigating poverty, with most describing observational studies at small scale.

### **CONCLUSION**

Whilst stakeholders describe a variety of direct and indirect approaches to livelihood support for caregivers of children with disabilities, overall, there is a lack of published and unpublished literature on content, process and impact of livelihood support. There is much scope for advances in policy, practice and research to tackle this important issue, with potential for substantial impact on the lives of children with disability and their families.

### **TOPIC CATEGORY**

Intervention: 1k) Others

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# POSTER PRESENTATION

Abstract ID Number: 159

# CHANGES IN REFERRAL PATTERNS TO DEVELOPMENTAL PEDIATRICS DURING THE PANDEMIC IN TURKEY

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Developmental-Behavioral Pediatrics Division, Department of Pediatrics, Ankara University School of Medicine, Ankara, Turkey

### **OBJECTIVE**

Information on changes in referral patterns to developmental-behavioral pediatrics during crises is crucial to inform and prepare these services. We aimed to compare referral patterns to Ankara University Developmental Pediatrics Division (AUDPD) before and after the pandemic.

### **METHOD**

Referrals to AUDPD of children aged 0-36 months during the first nine months of the pandemic in 2020 was compared to the corresponding nine months in 2019 and 2018. Referral sources and child characteristics were analyzed from the AUDPD database and compared across groups using the 2- sample-Z test of proportions.

### **RESULTS**

Of 1498 children referred during the study months, 573 (38%), 555 (37%), and 370 (25%) were in years 2018, 2019 and 2020, respectively. Child sex was similar across the years (male; 59%, 59%, 54% in years 2018, 2019, 2020, respectively) but the proportion of referred infants (0-12 months) was larger in 2020 (57% compared to 45% and 49% in years 2018 and 2019). Smaller proportion of referrals came from the outpatient clinic (14% in 2020 versus 38% and 24% in 2018 and 2019, respectively) while proportion of inpatient referrals increased over two-fold (28% in 2020 versus 12% and 13% in 2018, 2019, respectively). There were no significant differences in the diagnoses of children referred.

### **CONCLUSION**

Our findings indicate that during crises, referrals to developmental pediatrics may decrease and changes in referral patterns may occur. Analyses of referral patterns may enable adaptation of infrastructure, training and services, particularly for outpatient clinics where attention to child development may decrease further during crises.

### **TOPIC CATEGORY**

Children in Crisis, Humanitarian Emergencies, War Refugees and Its Impact on Development: -





# **POSTER PRESENTATION**

Abstract ID Number: 162

### STRUCTURE AND OUTCOMES OF A PILOT ONLINE PREWRITING GROUP

### Vrushali Kulkarni, Sonam Kamdar

Ummeed Child Development Center, Mumbai, India

### **OBJECTIVE**

This study aims at describing the structure and outcomes of the online pre-writing group conducted in September 2021 with caregivers of children with developmental disabilities.

### **METHOD**

The caregivers of four children participating in the pre-writing group were trained over a period of 4 weekly one-hour online group sessions. The focus was to help them identify their child's strengths/ challenges, environmental supports/ barriers to plan activities at home. This was achieved in three parts: introducing the pre-writing skills, brainstorming for activities at home in context of a child's likes/ dislikes and availability of resources, and scaffolding and problem-solving during the process. At the end of the group, the outcomes were assessed using a semi-structured interview which underwent thematic analysis.

### **RESULTS**

Three themes that emerged:

- 1. Online Versus Offline: Caregivers discussed benefits and pitfalls of the online format. This theme captures what seemed to have helped them during the online group sessions as well;
- 2. Shared learning: Though virtually, caregivers appreciated the sharing of ideas and solidarity during the problem solving.
- 3. Way ahead: Caregivers gave suggestions about improvisation of the group

### **CONCLUSION**

This group provides a structured approach to build on the child's prewriting skills while leveraging the environmental factors during COVID times.

### **TOPIC CATEGORY**





# **POSTER PRESENTATION**

Abstract ID Number: 163

# WORKING WITH WRITING SKILLS DURING COVID TIMES THROUGH ONLINE WRITING MADE EASY TRAINING PROGRAM: A RETROSPECTIVE ANALYSIS

### Sonam Kamdar, Vrushali Kulkarni

Ummeed Child Development Center, Mumbai, India

### **OBJECTIVE**

To describe the structure of Writing Made Easy (WME), a training program for caregivers, professionals and teachers working with children experiencing writing difficulties in the age range of 3 to 16 years involving multidimensional approach highlighted by International Classification of Functioning, Health and Disability (ICF)

### **METHODS**

'Writing' as an occupation was analyzed by three Occupational Therapists and trainers to understand required skills and environmental factors. Adult learning principles were incorporated to decide on delivery methods. The WME handout involved visuals along with simple explanations to accommodate for varied literacy levels of participants. During the COVID outbreak, 5 consecutive rounds of WME were run for parents, professionals and teachers from April 2020 to March 2021. The participants' immediate reaction was assessed using a multiple choice questionnaire.

### **RESULTS**

Exploring the activity of writing through the 'participation' lens seemed to shift focus from skills to also including environmental factors. Such discussions opened possibilities for the participants to explore alternate ways like using technology, knowing the child rights and advocating for the children to support them in the activity. Out of a group of 110 participants, 30 were caregivers, 60 therapists and 20 teachers. The immediate reaction for participants was 96.6 %.

### **CONCLUSION**

For children to participate in life situations, thinking beyond therapy rooms is needed. Training programs targeting children's proximal social environment, is one such setting. Keeping 'participation' in the focus opens multiple possibilities and ways to reach the end goal. Such a training was well accepted by the participants.

### **TOPIC CATEGORY**





# POSTER PRESENTATION

Abstract ID Number: 165

CHARACTERISTICS OF NOUN AND VERB MORPHOLOGY PRODUCTION AMONG -3YEAR-OLD TAMIL-SPEAKING CHILDREN: LANGUAGE-SPECIFIC MARKERS FOR LANGUAGE DELAY

### Adhirai Garibaldi<sup>1</sup>, Lakshmi Venkatesh<sup>1</sup>, Jayashree Bhat<sup>2</sup>, Prakash Boominathan<sup>1</sup>

<sup>1</sup>Sri Ramachandra Institute of Higher Education and Research (Deemed to be University), Chennai, India <sup>2</sup>Manipal Academy of Higher Education (Deemed to be University), Manipal, India

### **OBJECTIVE**

To examine profiles of noun and verb morphology among Tamil-speaking 3-year-old children using picture-elicited morphology tasks

#### **MFTHOD**

A group of 100 three-year old children participated in the study. Children were classified as having typical language or language delay based on comprehensive developmental and speech-language assessments by a Speech Language Pathologist (SLP) and parent report of language skills. Picture-based expressive morphology tasks for a range of noun and verb inflections developed and piloted with 15 children were used for assessment of morphosyntax in Tamil. Convergence and divergence across tasks to identify measures that could serve as reliable indicators of language delay were analyzed.

### **RESULTS**

There were high associations between parent report of language and SLP assessments of language. Children with typical language demonstrated a range of noun and verb inflections. Increased omissions of noun inflections in comparison to substitutions were observed. With respect to verb morphology, the simple present tense (high frequency of occurrence in Tamil) was the most accurately used verb tense among both groups of children. Children with language delay demonstrated considerable usage of verb inflections. Substitutions comprised of simpler and the most frequently occurring inflections in Tamil. In contrast to English, the usage of bare stems of verbs among Tamil- speaking children with language delay was rare.

### **CONCLUSION**

This is the first study with a large sample to explore morphosyntax in Tamil among children as early as 3-years of age. Potential clinical markers of language delay in Tamil will be discussed and future directions will be outlined.

### **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





# POSTER PRESENTATION

### Abstract ID Number: 166

EFFECTS OF AN INTEGRATED EARLY-INTERVENTION PROGRAM ON CHILDREN WITH MODERATE TO SEVERE DEVELOPMENTAL DISABILITY: CASE STUDY IN BENGALURU, INDIA

### Vaishali Pai

Tamahar Trust, Bengaluru, India

### **OBJECTIVES**

To investigate the effects of an integrated early intervention program delivered to 3 children with moderate to severe developmental disability due to brain damage.

### **METHODS**

The children were enrolled into Early-Intervention program at Tamahar Trust, Bangalore where they underwent one-on-one and group therapy sessions beginning in 2018. The program is an outcome of trials of integrated therapy approaches ensuring ease of understanding for the child. The intervention methodology is based on Carolina Curriculum (Assessment & Goal Setting), Montessori Method, Applied Behavioral Analysis, Dr. Stanley Greenspan's Floortime Method and Seven key principles - Looks like/ doesn't look like statements developed by OSEP. All children were assessed at the time of enrollment using which served as a baseline for all future assessments. Intervention outcomes like improvement in developmental age, emotional development were measured periodically and compared against baseline.

### **RESULTS**

All 3 children showed sustained improvement across major developmental categories at varying rates. No regression was observed over the course of the therapy. There was a marked improvement in the emotional development of the children corresponding to the improvement in the developmental levels.

### **CONCLUSION**

The significance of Early Intervention services for children with disabilities and their families has been firmly established across the world. However there is a need for an indigenously developed Early Intervention model in LMIC settings. Improvement in the children in this case study may provide valuable insights towards development of such a model and warrants further research into its efficacy.

### **TOPIC CATEGORY**

Intervention: 1a) Early Intervention Program





# **POSTER PRESENTATION**

Abstract ID Number: 171

# EFFECTIVENESS OF AN INDIVIDUALIZED INTERVENTION PACKAGE IN IMPROVING MARITAL PARTNER RELATIONSHIP OF MOTHERS OF DISABLED CHILDREN ATTENDING A TERTIARY CENTRE

### Riya Lukose<sup>1,2</sup>, Shyamal Kumar<sup>1</sup>, MKC Nair<sup>1</sup>

<sup>1</sup>NIMS Spectrum CDRC,NIMS Medicity, Thiruvananthapuram, India

<sup>2</sup>Amala Institute of Medical Sciences, Thrissur, India

### **OBJECTIVES**

To assess the marital relationship among mothers of developmentally disabled children attending the centre using PAST (Partner Relationship Assessment Scale Trivandrum-Standard) and to evaluate the effectiveness of the individualized intervention package in improving marital relationship by comparing the pre and post test scores on PAST.

### **METHODOLOGY**

Mothers of all children with neurodevelopmental disorders attending the clinic, who are married and living together were selected. PAST score was taken and individualized intervention package that included counselling services based on the domains of PAST (which are spousal relations, intrafamily relations, financial security, spousal behavioral traits and family health) and the needed referral services was administered. PAST scores after intervention was compared to the pre-intervention scores.

### **RESULTS**

Prevalence of marital disharmony among mothers of developmentally disabled children was found to be 40% with 95% CI 27.61, 52.3. 50% of the mothers were found to have lower scores in the spousal relationship domain. Mean PAST score before intervention was 37.94 (Sd 10.84) and after intervention was 39.88 (Sd 12.06). Median pre and post intervention PAST scores were 42.50 (IQR 32.50, 45.25) and 44.50 (IQR 35.00, 48.00). The observed improvement in scores was found to be significant Z value= -3.168 p= 0.002. Hence it was inferred that the intervention elicited a statistically significant change in marital harmony.

### **CONCLUSIONS**

Marital relationship of all mothers of developmentally disabled mothers should be evaluated and intervention given for improvement of theirs and their children's development.

### **TOPIC CATEGORY**

Intervention: 1e) Psychological





# POSTER PRESENTATION

Abstract ID Number: 176

### IMPACT OF SCREEN MEDIA USAGE ON EARLY CHILDHOOD DEVELOPMENT

### Dr. Muneeba Malik

Children's Hospital & Institute of Child Health, Lahore, Pakistan

### OR IFCTIVE

To see the impact of screen media usage on early childhood development.

### **STUDY DESIGH**

Case control study

### PLACE AND DURATION OF STUDY

Developmental-behavioural Paediatrics department, The Children's Hospital and The Institute of Child Health, Lahore and filter clinic of outpatient department at the Children's hospital, Lahore from October 2020 to December 2020.

### **METHODOLOGY**

This study included a total of 100 children, chosen through consecutive sampling with age range between 15-36 months and divided in two groups, Group 1 was children with communication behaviour disorders (CBD) (n=50) and Group 2 was typically developing (TD) children (n=50). ShaMaq Developmental Screening Tool (SDST) was administered to children to screen their development. Childhood behaviours were rated on a scale of 0-10 on a Behaviour rating scale.

### **RESULTS**

Children with CBD had poor eye contact, response to name, poor imitation, poor pointing and poor one-step command following (p<0.001) as compared to typically developing children. Children with CBD had poor eating habits (p<0.01), they were more restless (p<0.001) and had developmental delay (p<0.001) on SDST as compared to the other group. In children with CBD, extent of screen media exposure (M=6 hours/day) was significantly correlated with restlessness (p<0.05) and poor pointing (p<0.01).

### **CONCLUSION**

Exposure to screen media at an early age and prolonged use of screen can lead to adverse developmental outcomes and behaviour issues in children. This is more evident in children with CBD as compared to typically developing children.

### **KEYWORDS**

communication behaviour disorder; early childhood development; screen time; ShaMaq developmental screening tool; typically developing children.

### **TOPIC CATEGORY**

Early Childhood Development: -





# POSTER PRESENTATION

Abstract ID Number: 177

### ONE DISPENSARY EVERYWHERE TO SUPPORT THE FUTURE

### Adelaila El Masri

Private, Beirut, Lebanon

The importance of the role of the dispensary in each community as a complete multidisciplinary center with the potential of growth new healthy generation even poverty. The objectives of the program show and refresh the importance of the community dispensary as a effective centre to allow acces to doctors services, teaching activities and healthy food programs in the same place. The methods: incentive campagnes to promote the governmental inversion on this importante centres. Results: oppurtunity of a second home for every child into a more healthy environment. Conclusions: a dispensary can be a school, a health centre and a home for every child in disability.

### **TOPIC CATEGORY**

Intervention: 1f) Complementary and Alternative





# POSTER PRESENTATION

### Abstract ID Number: 179

ASSESSMENT OF CHILDREN WITH CEREBRAL PALSY ISING COMMON BRIEF CORE SET OF IINTERNATIONAL CLASSIFICATION OF FUNCTIONING, DISABILITY AND HEALTH FOR CHILDREN & YOUTH

### **Ammara Hina, Shazia Maqbool**

The Children Hospital and Institute of Child Health, Lahore, Pakistan

### **OBJECTIVE**

To assess children with cerebral palsy using the Common Brief Core Set of International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY).

### **STUDY DESIGN**

Cross sectional study

### PLACE AND DURATION OF STUDY

The Children's Hospital & Institute of Child Health, Lahore, from November 2020 - January 2021.

### **METHODOLOGY**

Fifty-nine children with cerebral palsy (CP) between the age of 0-18 years were included. Common Brief Core Set of International Classification of Functioning, Disability, and Health in Children and Youth (ICF-CY) was administered to children with cerebral palsy to assess their functional status. Strengths and weaknesses in areas of body structure, body function, activity & participation and environmental factors were evaluated using Common Brief Core Set of ICF-CY. Statistical analysis was performed using SPSS version 25.

### **RESULTS**

Mean age (in years) of study participants was  $5.49 \pm 2.71 \text{SD}$ ). Majority n=38 (64.4%) were spastic quadriplegic. Periventricular leukomalacia was noted in n=36 (67.9%) cases on MRI brain. Moderate to severe impairment was noted in body functions like intellectual function n=46 (78%). n=26 (44.1%) children with cerebral palsy had mild to moderate impairment in walking while n=4 (6.8 %) could walk without any impairment. Social attitudes, construct and design of buildings were the major barriers affecting the functionality of children with cerebral palsy.

### **CONCLUSION**

It was found out that Common Brief Core Set of ICF-CY in children with different types of cerebral palsy is a useful tool for assessing their functional level.

### **KEYWORDS**

Cerebral Palsy, Common Brief Core Set, ICF-CY

### **TOPIC CATEGORY**

Neurodevelopmental Disabilities: -





# POSTER PRESENTATION

Abstract ID Number: 180

# RAISING READERS OF TOMORROW: A PARENT'S GUIDE TO EFFECTIVE STORYTELLING FOR PUROK ILUGIN

Luis Miguel B. Co<sup>1</sup>, <u>Gabriel C. Delos Santos</u><sup>1</sup>, Marion Emmanuel P. Lopez<sup>1</sup>, Patricia Mae C. Magallanes<sup>1</sup>, Emmanuel Enrique A. Manlutac<sup>1</sup>, Bryan Nemwarc A. Pallatao<sup>1</sup>, Beatrice Sophia C. Parma<sup>1</sup>, Daniel Gerald D. Quelapio<sup>1</sup>, Phoebe Antoinette B. Renegado<sup>1</sup>, Nicole L. Reyes<sup>1</sup>, Francis Ric A. Villasis<sup>1</sup>, Jesus B. Acantilado<sup>1,2</sup>, Margarita Luisa A. Alfonso<sup>1,2</sup>, Marthony P. Basco<sup>1,2</sup>, Jocelyn Y. Echiverri<sup>1,2</sup>, Sarah D. Mendoza<sup>1,2</sup>, Mary Katherine M. Morales<sup>1,2</sup>, <u>Rhinna V. De Veyra<sup>2</sup></u>

<sup>1</sup>Ateneo de Manila University School of Medicine and Public Health, Pasia City, Philippines

### **OBJECTIVES**

This project aims to provide a simple, easy to understand booklet guide for parents of children in a low resource community enrolled in the Reach out and Read Program that will reiterate the what, how and when to read and its benefits during this challenging times.

### **METHODOLOGY**

This pilot project included 6 parents of enrollees of the ROR program. Baseline Reach Out and Read Assessment(RORA) results were obtained. Research studies on effective storytelling techniques in children and its benefits were gathered. All data were analyzed and synthesized to make a colorful and engaging parent guide booklet using the Filipino language supplemented with a live seminar and a recorded video of the seminar. Evaluation was done using a Likert scale. Content, usefulness and simplicity of the booklet and the activity were assessed.

### **RESULTS AND DISCUSSION**

Age-based strategies for effective storytelling and its benefits were included in the booklet. The helpfulness of the seminar, appropriateness of the use of Zoom for its delivery, and the usefulness of the booklet each received a mean score of 5.83 (n = 6). Positive feedback were obtained.

### **CONCLUSION AND RECOMMENDATIONS**

The guide booklet seeks to reinforce the daily habit of reading to children. The pilot project yielded high evaluation ratings. Use of the Zoom platform for the content delivery and usefulness of the booklet received high scores. This booklet shall be used for the remaining enrollees and similarly evaluated. This guide can be used by non-enrollees as well in the future.

### **TOPIC CATEGORY**

Early Childhood Development: -

<sup>&</sup>lt;sup>2</sup>The Medical City Institute of Pediatrics, Pasia City, Philippines





# POSTER PRESENTATION

Abstract ID Number: 181

FOR THE PARENT, BY THE PARENT: CREATING A PROGRAM TO EMPOWER PARENTS OF REFUGEE BACKGROUND USING NOVEL PARTICIPATORY APPROACHES

Pardeep Kaur Benipal<sup>1</sup>, Bernice Ho<sup>1,2</sup>, Tanvir Kaukab, Meb Rashid<sup>3,2</sup>, Ashna Bowry<sup>1</sup>, Aisha Yousafzai<sup>4</sup>, Ripudaman Minhas<sup>1,2</sup>

<sup>1</sup>Unity Health Toronto, Toronto, Canada.

<sup>2</sup>University of Toronto, Toronto, Canada.

<sup>3</sup>Women's College Hospital, Toronto, Canada.

<sup>4</sup>Harvard University, Boston, USA

### **BACKGROUND**

Families of refugee background have complex, multigenerational mental health and developmental needs that are not accounted for in current programming frameworks. Providing appropriate support services and educational resources that address the concerns of families of refugee background will address these challenges. This study gathers data about the experiences of parents of refugee background in order to develop a novel parenting program model using Community-Based Participatory Research (CBPR) principles.

### **METHODOLOGY**

This was a qualitative, CBPR study. In-depth interviews (IDIs) were conducted with parents of refugee background and care providers that work closely with this population. Data were recorded, transcribed, and coded using deductive and inductive coding methods by two independent coders.

### **RESULTS**

A total of 20 IDIs were conducted (7 parents and 13 care providers). The main topics that were identified to be incorporated into the program include features of child development, how to address resettlement issues, child advocacy, and parenting in the Canadian context. Participants felt that tackling the language barriers, addressing the overlapping responsibilities of the mothers attending the sessions, providing incentives, increasing awareness of the program, and using an anti-racist and anti- oppressive approach is key to the program's success. Participants emphasized the need for trauma- informed mental health support within the program model.

### **CONCLUSION**

This study describes the key considerations for a parenting program for families of refugee background, by engaging them as key stakeholders in the program design process. Future iterations of this project would involve a pilot and evaluation of the program.

### **TOPIC CATEGORY**