

Abstract ID: 3

Is This Autism, Now What? Multidisciplinary Team Outreach Initiatives Within The Resource Constrained Health System In Cape Town, South Africa.

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Objectives: Different models of early identification and intervention for autism are linked to best developmental and educational outcomes in children but are difficult to access in most low-and- middle-income country settings (LMICs). To support the substantial number of children being referred for assessment to tertiary services in Cape Town, South Africa, a team of developmental paediatricians and therapists from the Red Cross War Memorial Children's Hospital (RCWMCH) initiated an outreach service at Victoria Hospital, a large metro district hospital.

Methodology: After discussions amongst the key-stakeholders within the health system, both hospital teams initiated an outreach clinic where doctors and therapists identified specific needs of families and children living with autism.

Results: The team comprised of a developmental paediatrician, four paediatricians, four occupational therapists, two speech therapists and a behavioural therapist together with neurodevelopmental trainees from Ghana and Uganda. Two multidisciplinary group consultations were run concurrently with case presentation, child assessment, discussion and parent feedback. Complexities included difficult diagnoses, challenging counselling, complex behaviour, comorbidities, medication, educational support and socioeconomic impacts. Multidisciplinary strategies were documented on specific case sheets. The outreach strengthened care for children in the community, reducing waiting times management whilst building knowledge, communication and access to local support organizations. The team committed to two new clinics a year to sustain the outreach.

Conclusions: Challenges in LMICs determine how we deliver services within a resource constrained system. Strategic outreach partnerships can timeously address the needs of families and children living with autism and strengthen health care systems.

Program or Model — Intervention/Early Intervention Program

Abstract ID: 8

Neurodevelopmental Outcome Of Infants One Year After Initial Evaluation At The High-Risk Clinic Of A Tertiary Hospital In Metro Manila

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Background: Developmental disabilities are due to impairment on physical, learning, language or behavioral areas.¹These conditions have been related to prematurity, low birthweight, maternal complications during pregnancy and congenital malformation.²Efforts have been made to improve the neonatal intensive care. While dramatic reduction was seen in the neonatal mortality rates, no improvement seen in the neurodevelopmental outcome of the surviving newborns.³

Objectives: This study determined the neurodevelopmental outcome of high-risk infants one year after their initial evaluation. The socio-demographic, clinical profile, and risk factors associated with adverse neurodevelopmental outcomes were identified.

Methods: This was an analytical cross-sectional study design enrolled in the high-risk clinic. Battelle Developmental Inventory-2 Full Evaluation NU was used for developmental assessment. The maternal, perinatal, neonatal, and postnatal factors were collected and analyzed.

Results: Of the 76 patients included, 52 (68.5%) high risk infants were at par for the age. The overall incidence of developmental delay detected was 31.5% (n=24), 9-adverse outcome (6-language, 2-motor, 1-adaptive), 9-GDD, and 6-Cerebral Palsy. HIE stage 2, secondary generalized epilepsy and combined neonatal factors were found to be significantly associated with developmental delay. Higher proportion of breastfeeding was seen in at par children compared to the infants with delay.

Conclusions: Adverse neurodevelopmental outcome was seen in high-risk infants who had hypoxic ischemic encephalopathy stage 2, secondary generalized epilepsy and combined neonatal factors. Breastfeeding is a significant protective factor for at par infants. The study provides baseline data for improving existing healthcare practices and reducing the burden of developmental disabilities.

Research — Risk factors for developmental disabilities

Abstract ID: 11

Evaluating Early Interventions And Children's Outcomes To Reach Marginalized Populations In Bijie, China

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Objectives: Early interventions for 0-3-year-olds in rural, ethnic-minority-concentrated poverty areas boost equitable growth and prevent disabilities. Despite recent gains in China, universal ECD coverage remains elusive in remote areas. The China Development Research Foundation (CDRF) is dedicated to implementing and evaluating early interventions to ensure equitable access and improve outcomes for marginalized populations, particularly ethnic minorities in rural areas.

Methods: Chinese-normed assessment tools are scarce, making it a priority to assess child development variances over time, social classes, ethnic groups, and genders. The ERXIN scale, based on Western models, covers key development domains by age and was normed across China. This scale includes motor, communication (ASD screening), and verbal skills. It aids intervention evaluation, generating evidence to further government expansion to other minority areas.

CDRF conducted a large-scale case-control survey in BIJIE as part of its home-visiting program, using the ERXIN scale to assess and monitor outcomes. The area, home to 46 ethnic minority groups such as Yi, Miao, Bu Yi, and many unrecognized ones, comprises over a quarter of its population.

Results: In areas where the intervention had been implemented for a longer time, the ERXIN scale showed significant differences between the case and control groups. However, within the current intervention group, differences among ethnic minorities and the dominant group were less distinct.

Conclusions: This raises the question of whether the national ERXIN norms are appropriate for rural, ethnic minority populations. How can screening tools be better tailored to reflect outcomes and interventions to effectively reach ethnic minority groups?

Program or Model — Intervention/Early Intervention Program

Abstract ID: 18

Art Group Interventions For Children With Learning Differences: A Method To Maximise Impact

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Learning differences such as attention-deficit/ hyperactivity disorder, autism spectrum disorder, and other communication, learning, intellectual and motor disorders are hidden conditions that often remain undiagnosed and untreated in children in low-resource settings, especially in their milder forms. As a result, many learners do not achieve academically or develop a sense of belonging and industry within mainstream schooling. This jeopardises children's biopsychosocial development and long-term opportunities for career and social success.

Objectives and Methods: Therefore, a systematic review synthesising the evidence for the usefulness of art group interventions for children with neurodevelopmental challenges alongside a pilot study for an 8-week art group intervention, designed by occupational therapists, were conducted to determine whether art group interventions can serve as an effective and feasible intervention method for children with learning differences.

Results: Findings indicated that art group interventions can be an adaptable and resource-conscious method to effectively improve a variety of developmental domains, including cognitive, behavioural, social, emotional and motor outcomes. These findings correspond with those of the pilot study, which indicated a clinically significant improvement in the overall occupational performance of children (aged 8 – 12 years) with learning differences in a low-resource setting on two outcome measures from pre- to post-intervention.

Conclusions: Structured art group interventions following the AR³T principles outlined in the systematic review's practice framework, such as the Create2Grow Program, should be prioritised for clinician and therapy support staff training in low-resource settings to provide a solution to the lack of access to quality supportive interventions for this population.

Research — Intervention/Inclusion

Abstract ID: 19

Vaccine Hesitancy In Families Of Children With Developmental And Medical Risk Factors: A Retrospective Analysis

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Objectives: To examine the relationship between vaccine hesitancy and children's developmental diagnosis, medical conditions, and family health characteristics in a developmental-behavioral pediatrics outpatient population.

Methods: A retrospective chart review was conducted for 895 children who attended the Developmental Pediatrics Clinic at City Hospital between January 2024 and January 2025. Children with missing vaccination information or medical contraindications were excluded. Sociodemographic data, developmental profiles, parental health status, and vaccination adherence were extracted.

Results: A total of 861 children were included. The rate of parental vaccine hesitancy was 2.3% (n = 20). No significant association was found between vaccine hesitancy and children's developmental diagnosis (p = 0.62) or socioeconomic status (p = 0.42). However, children with chronic medical conditions associated with developmental risk were significantly more likely to exhibit vaccine hesitancy compared to children without such conditions (p = 0.041). Maternal chronic illness was inversely associated with vaccine hesitancy (p = 0.030), while paternal or broader family health status showed no significant associations.

Conclusions: Vaccine hesitancy in this developmental-behavioral pediatrics sample was not associated with developmental delays but was linked to parental health conditions. These findings emphasize the need for family-centered counseling approaches when addressing vaccine decisions in developmental pediatric populations.

Research — Intervention/Medical

Abstract ID: 22

Community Knowledge, Attitudes, And Barriers To Cerebral Palsy Rehabilitation Services In Kawempe Division, Uganda

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Objectives: Cerebral palsy (CP) is a leading cause of childhood disability in low-income settings, yet access to rehabilitation services remains limited. This study aimed to assess community knowledge, attitudes, and barriers to CP rehabilitation in Kawempe Division, Uganda.

Methods: We conducted a cross-sectional mixed-methods study involving 306 community members. Quantitative data were collected via structured questionnaires assessing CP-related knowledge, attitudes, and service access barriers. Additionally, we held eight focus group discussions (FGDs) with caregivers and community members, and four key informant interviews (KIIs) with local health workers and leaders.

Results: Only 56.9% of respondents had heard of CP, and just 43.97% were aware of rehabilitation services. Key barriers included financial constraints (73.36%), lack of awareness (62.17%), and transportation difficulties (40.79%). Stigma was prevalent; 43.23% reported that individuals with CP face discrimination. One caregiver shared, "People avoid my child, saying he's cursed." Another said, "The health workers told me there's nothing they can do—just go home." Despite these challenges, 97.05% believed CP rehabilitation is essential for improving children's lives.

Conclusions: There is an urgent need to improve awareness and accessibility of CP rehabilitation services in marginalized urban settings. Addressing stigma and misconceptions, training health workers, and integrating CP support into existing community health systems could enhance service uptake and quality of life for affected children and families.

Research — Intervention/Early Intervention Program

Leveraging Social Media For Culturally-Inclusive Parental Mental Health Support In BIPOC Families

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Due to global crises such as COVID-19, war and racism, BIPOC families face significant challenges in accessing reliable health support. Consequently, many caregivers turn to online platforms for connection, parenting and health guidance. However, existing online parenting resources often lack reliability and cultural-linguistic inclusivity. In response, our team launched Our Kids' Health, a social media-based health initiative delivering free, evidence-based, culturally relevant parenting resources co-designed using community-based participatory methods for 10 cultural-linguistic groups: Arabic, Black-African-Caribbean, Cantonese, Filipino/Tagalog, Hispanic/Latinx, Inuit, Mandarin, Punjabi, Tamil, and Ukrainian. To explore the initiative's impact, a mixed-methods study was conducted to examine its influence on parental empowerment, competence, and mental health. Social media data analysis and pre-post interviews were conducted with caregivers who identified with one of our cultural-linguistic groups and had followed the platform for at least 12 months. Initial findings indicate a substantial need for such initiative. This platform has reached over 900K community members, with over 100M views across more than 40 countries. Through 15 in-depth interviews, caregivers reported: i) increased understanding of child health through new information ii) improved parental mental health by adapting parenting strategies, iii) increased empowerment in health decision-making, iv) enhanced critical thinking around health information, and v) greater trust in health professionals. Our Kids' Health demonstrates promising outcomes in improving health and parenting behaviors, as well as the overall well-being of caregivers. With a high level of global engagement, it contributes to reducing mental health disparities, empowering caregivers, and advancing health equity among marginalized communities.

Program or Model — Intervention/Parent training

Developmental Health And Vulnerability Among Young Children In Pakistan: Findings From A Large-Scale Early Childhood Development Assessment

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Assessing and supporting early childhood development is a global priority—however, our understanding of the developmental health of young children from Low and Middle-Income Countries (LMICs) like Pakistan remains limited. Using an Urdu translation of the Early Years Development Instrument (EDI), this study assessed the developmental health and vulnerability of 9,372 kindergarten-aged children (Mean age = 6.2; SD = 1.1; 53.9% female) in 397 schools in Karachi, Pakistan. We further examined differences in vulnerability in physical, social-emotional and cognitive domains based on the children's sex, family income, and ethnic background. Results from logistic regression analyses revealed that 10% of children were vulnerable in each developmental domain, and 28% were vulnerable in one or more domains. Boys, children from low-income families, and children with ethnic minority backgrounds were more likely to be vulnerable in any of the domains. These findings highlight that children in our study who experienced social disadvantages were more likely to be developmentally vulnerable, which may negatively impact their further development and success in school. Our findings underscore the need for universal and targeted interventions to reduce childhood vulnerability in Pakistan, support subgroups of children who are at an increased risk and promote equity from an early stage in life.

Research — Early Childhood Development

Abstract ID: 27

PADI: Distance Care Platform for the Integral Development of Individuals with Intellectual Disabilities and Autism in Latin America

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Objectives: To reduce barriers to specialized education and therapy for individuals with intellectual disabilities (ID) and autism in Latin America through a scalable, virtual intervention model. The goal is to promote inclusive development, family empowerment, and long-term improvements in quality of life, regardless of geographic or socioeconomic limitations.

Methods: PADI (Programa de Atención a Distancia) is a virtual platform created by the Instituto Neurológico de Guatemala. It delivers personalized, multidisciplinary care plans—including education, adaptive skills training, occupational therapy, speech therapy, physical therapy, and psychosocial support—via online tools. Each plan is tailored based on developmental needs, and families are trained to act as co-educators and co-therapists. A pilot group of 100 users launched in September 2024, with data collected through structured sessions, caregiver feedback, and service tracking tools.

Results: By mid-2025, PADI has reached over 200 active users, with an additional 200 in the onboarding process. Preliminary outcomes show improved daily routines, increased access to previously unavailable services, and greater caregiver engagement. Families report reduced emotional and logistical burden and increased hope for long-term inclusion. The platform's asynchronous content, combined with weekly live sessions, has enabled broad access across rural and underserved communities.

Conclusions: PADI is a pioneering digital inclusion model in Latin America. It demonstrates the feasibility and impact of virtual care in neurodevelopmental disability support. With appropriate partnerships, the program is ready for regional replication and integration into broader inclusive policies and practices.

Program or Model — Intervention/Educational

Abstract ID: 28

The Clinical Patterns And Service Delivery Processes For Attention Deficit Hyperactivity Disorder In Children Referred To A Community-Based Child Development & Family Guidance Facility In Goa, India

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Objectives: To study the clinical patterns and audit the service delivery processes in children diagnosed with ADHD at a community-based Child Development Centre with a view to improve quality of care

Methods: Clinico-epidemiological and treatment data was collected from case records of all children aged 4-18years, diagnosed with ADHD, who attended from January 2023- December 2023. Adherence to the SOP for assessment, diagnosis and intervention was evaluated by listing the various stipulated procedures/actions of the Sethu SOP and documenting professional action for each.

Results and Conclusions: The socio-demographic profile of the families revealed high parental education at graduate level, with a preponderance of extended families. Almost half the families self-referred to Sethu, which can be due to better awareness among educated parents. Combined presentation of ADHD was seen in two-third of cases. More than half of the children had complex ADHD and co-occurring neurodevelopmental conditions, the most common being SLD and ASD. The clinical audit of the ADHD SOP identified good adherence in practices like thoroughness of initial assessment, identification of strengths, completion of parent and teacher checklists, screening for co-occurring conditions, psychoeducation given to families, emphasis on parental mental health and collaborative decision making with titration for medication use. The audit also identified areas for improvement like ensuring hearing and vision assessments, increasing school liaison and improving follow up for behavior management sessions. Clinical audits in ADHD management can assess adherence to protocols and offer strategies to improve quality of care.

Research — Neurodevelopmental disabilities

Abstract ID: 29

Women Who Raise The Future: Trauma-Informed Comprehensive Child Care And Parental Support Worker Training In Türkiye

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Objectives: This pilot program aimed to train women earthquake survivors in Southeast Türkiye as trauma-informed child caregivers and parent support workers to enhance community resilience, support healthy childhood development, and address local employment challenges by creating a new caregiving profession rooted in local needs and global best practices. This program is a part of a broader collaborative model known as the Gaziantep Model.

Methods: In January 2024, 30 women participated in a six-day in-person training in Gaziantep, Türkiye, followed by a week of online learning. The curriculum furthered participants' knowledge and understanding of child development, trauma-informed care, infant and maternal mental health, community building, and cooperative formation. Participants engaged in storytelling, reflection, and skills-based workshops. Post-training surveys were collected from trainees and trainers to evaluate program effectiveness.

Results: Participants reported improved knowledge, confidence, and social connectedness. Several women initiated the formation of a women cooperative. Storytelling, culminating in the exhibit Echoes of Resilience: Unveiling Stories of Devastation, Survival and Hope, fostered healing and community cohesion. Survey responses emphasized the value of mentorship, hands-on practice, and cultural relevance. Identified gaps included limited practicum opportunities.

Conclusions: This interdisciplinary program highlighted the power of combining holistic, trauma-informed training, community building, and economic empowerment to support children and families in post-disaster settings. Storytelling emerged as a vital tool for healing and community building. Future iterations will prioritize mentorship and applied learning to foster sustainable, community-based caregiving ecosystems that are essential to build resilient and healthy societies.

Program or Model — Children in crisis, humanitarian emergencies

Abstract ID: 30

Connections, Communities, and Change: The Echo Autism Revolution in Latin America

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Objectives: To present the implementation and regional impact of ECHO Autism Communities (EAC) in Latin America as a scalable model to reduce diagnostic and intervention gaps, foster professional development, and build sustainable, evidence-based systems in underserved contexts.

Methods: ECHO Autism leverages the Project ECHO model to create virtual, community-based learning networks that link local professionals with global experts at no cost for participants. Through regular tele-mentoring sessions, professionals engage in case-based learning and guided practice. Since 2020, over 20 teams in Latin America have been trained in the ECHO Autism model, including teams of clinicians, educators, and institutional partners. Adaptations were made to meet regional cultural, linguistic, and economic realities. Implementation data, team activity status, and reach indicators were collected through internal monitoring and network reports.

Results: More than 20 programs have been launched in under three years, spanning multiple Latin American countries. These EAC teams have trained hundreds of professionals and initiated local service innovations rooted in evidence-based practices. Teams have reported increased professional confidence, improved local collaboration, and earlier access to care in participating communities.

Conclusions: ECHO Autism has proven to be a high-impact, low-cost strategy for expanding autism expertise in underserved regions of Latin America. The model fosters professional connection, community-based capacity, and system change—even in contexts of economic and structural adversity. Future directions include obtaining sustained funding for local programs to maintain and grow this regional movement, which is already reshaping autism care across Latin America.

Program or Model — Neurodevelopmental disabilities

Abstract ID: 31

Assessing Barriers to Autism Education in Latin America: Results From a Multinational Survey

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Objectives: To identify key barriers that limit access to autism-related training among health and education professionals across Latin America, and to inform policy and capacity-building strategies that strengthen the regional workforce in low- and middle-income countries.

Methods: Using the Minimum Data Set (MDS), a standardized tool developed to evaluate ECHO Autism programs, we assessed access to autism training among professionals participating in programs across Latin America. To gain more detailed information, a supplementary barriers survey was disseminated through ECHO Autism networks, webinars, and affiliated websites. The survey collected responses from over 600 professionals in 18 Latin American countries, including educators, school psychologists, therapeutic companions, and other allied health workers.

Results: MDS data showed that 96% of respondents reported inadequate autism content in their undergraduate education. Additionally, 92% identified a mismatch between the cost of specialized training and compensation for autism-related work. Survey results confirmed the top three barriers: high training costs, limited autism content in formal education, and insufficient availability of training opportunities in the region.

Conclusions: These findings reflect a widespread training gap that directly relates to the long wait lists experienced by families. It also points to a solution. ECHO Autism programs currently operating in Latin America are directly addressing these barriers through accessible, cost-effective, virtual training that builds local capacity. Individually, these programs equip professionals with skills to deliver timely, affirming care. Collectively, as a regional network of mutually supportive teams, they represent a powerful, scalable model for strengthening autism services across the region.

Research — Intervention/Educational

Abstract ID: 34

Expanding Diagnostic Capacity in Marginalized Areas Through the Echo Autism: Advanced Diagnosis Program

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Objectives: To improve access to timely, high-quality autism diagnosis for individuals of all genders and ages—especially those with complex or underrecognized presentations—by training and supporting local clinicians through the ECHO Autism: Advanced Diagnosis (EAC:ADx) program.

Methods: EAC:ADx is a year-long tele-mentoring program designed to strengthen diagnostic capacity among psychologists and physicians in historically underserved and marginalized communities (i.e., rural areas, low-income populations, and racial/ethnic minorities). Participants receive initial training in the ADOS-2 and join bi-monthly virtual sessions to present de-identified cases with a multidisciplinary team. Case presentation forms gather data on age, gender, history, measures used, and final diagnoses. Data were analyzed from 121 cases presented from 2019 to September 2024.

Results: Fifty-seven percent were male and 43% female, with average diagnostic ages of 9.6 (male) and 14.7 years (female). Despite known challenges in identifying autism in females, the program supported a near-equal gender distribution. Of 106 cases with wait time data, 90% were seen within six months, and 73% within three months—substantially shorter than the state and national averages.

Conclusions: EAC:ADx strengthens gender-inclusive autism diagnosis across underserved and marginalized communities by reducing wait times and training local providers. It addresses gaps in care for often-overlooked groups—females, adolescents, adults, and individuals in low-income, rural, or minority populations. Proven effective in diverse U.S. settings and adaptable to various cultural and linguistic contexts, EAC:ADx offers strong potential for LATAM, where barriers to diagnostic access are similarly, and often more severely, pronounced.

Program or Model — Neurodevelopmental disabilities

Abstract ID: 35

Trends Of Healthcare For Children With Down Syndrome (DS) In Resource-Limited Child Development Clinic (CCD), 550-Bedded Children Hospital, Mandalay

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Objectives: To evaluate healthcare for children with DS after insertion of adapted PCHR (personal-child-health-record) Burmese version to overcome the barriers, less access to health services, knowledge of caregivers about schedule of health checks, identified in the previous study conducted in 2020 (study-2020).

Methods: Data extracted from CDC registry (21/03/2024-21/03/2025) were analyzed in comparison with the results of the study-2020 and CDC annual reports (2022, 2023)

Results: A total of 106 DS children (0-18 years old) with 71% aged 0-5 and 52.83% male, were included in this study. Annual total number reached 184 in 2024-2025 from 30 in 2023 and 16 in 2022 with 97 follow-up cases in 2024-2025 from 15 in 2023 and 4 in 2022. Parental characteristics were mean maternal age at conception (35.55 years) and education (40.22% tertiary). More health checks were conducted: cardiac (71.69% vs. 72.89% study-2020), thyroid (69.81% vs. 40.96% study-2020), eye (16.98% vs. 25.3% study-2020), hearing (15.09% vs. 26.51% study-2020), 28.30% dental, 85.84-100% assessment of growth and development. More co-occurring medical conditions were detected: cardiac (73% vs. 53.01% study-2020), thyroid (36% vs. 13.25% study-2020), eye (33.33% vs. 13.25% study-2020), hearing (37.5% vs. 8.43% study-2020) and 80% dental. The leading cause of mortality was cardiac complications (61.11%), and neonatal deaths were 55.55% of total 18 cases.

Conclusions: Recommended health checks for treatable medical conditions are crucial for Myanmar children with DS based on the clinical profile of both studies, previous multi-center (study-2020) and this one-center. Further assessment of growth and development is also essential for the future DS studies.

Research — Intervention/Medical

Abstract ID: 36

Scaling Early Childhood Development Services In Myanmar: A Private Sector Pilot Study From Pun Hlaing Hospital

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Objectives: To evaluate early outcomes from a private sector pilot initiative providing early childhood developmental screening at Pun Hlaing Hospital, Yangon, and to assess the feasibility of expanding such services within the hospital's network.

Methods: The Child Health and Development Clinic (CHDC) introduced routine developmental assessments at key ages ranging from 2 months to 5 years. Parental engagement was facilitated through educational materials, structured consultations, and Myanmar-language home monitoring tools. Screenings were conducted by trained nurses using the Ages and Stages Questionnaire, Third Edition (ASQ-3), with follow-up based on standardized scoring thresholds. Children identified with potential concerns were referred for specialist assessment and therapy. Feasibility for service expansion was examined through staffing and resource review, stakeholder input, and preliminary cost analysis.

Results: From April to December 2024, 319 children were assessed, the majority (58.9%) under one year of age. Developmental concerns were identified in 33 children (10.3%), primarily related to communication. Of these, 22 (66.7%) were referred to pediatric neurology, with diagnoses including autism spectrum disorder (n=5), cerebral palsy (n=2), and ADHD (n=1). Children also received referrals for physiotherapy and speech therapy as appropriate. Most families were based in Yangon, with operational findings supporting adaptation to additional sites.

Conclusions: In a setting where public child development services remain limited or fragmented, this private sector-led pilot demonstrates a practical and effective approach to early identification and intervention. The CHDC model addresses a critical gap and offers a viable framework for expanding developmental services within Myanmar's current healthcare landscape.

Program or Model — Early Childhood Development

Abstract ID: 37

Exploring Freedom And Human Rights Of Children And Young Persons With Albinism In Malawi

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Objectives: Children with albinism are at greater risk of physical and social violence that impacts their education and livelihood., we explored the challenges and opportunities for children with albinism (aged 5+ years) by talking to the children, their teachers and parent-caregivers to understand how 'positive change' can be achieved for multiple beneficiaries.

Methods: Using a multi-method, multi-stakeholder approach we facilitated 3 Focus Group Discussions with teachers (n=15), one-to-one interviews with PCRs (n=8), and 4 FGDs with school-aged learners (n=26) in three schools in central region of Malawi. Learners also completed individual worksheets, using emojis and 'feelings thermometers' to describe various facets of everyday life.

Results: Children considered many day-to-day experiences as joyful, including travelling to-and-from school, making friends, and in-class learning. Bullying inside school and elsewhere was described as "Very Negative". Qualitative findings showed that children are often unable to concentrate on their studies due to fear of being attacked and or kidnapped outside school. Police training on albinism is having a positive influence on young children's lives. Children are being encouraged to wear long sleeve shirts and wide-brimmed hats, although, some are not receiving sunscreen in time or have enough quantity. This exacerbates the risk of contracting skin cancer which is still a major concern.

Conclusions: In spite of the reduction of violence against children with albinism, there is still substantial fear at school level. Thanks to new government measures including police training on albinism and greater sensitisation of the Malawi population about vulnerability of this group of people.

Research — Intervention/Inclusion

Abstract ID: 38

Methodology For Assessing The Relationship Between Indigenous Language Status And Child Development: A Cross-Sectional Analysis Using MICS Survey Data From 40 Countries

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Objectives: Children's access to early education in their primary language is important for development. Speakers of Indigenous/minority languages often experience language discrimination. The impact is unquantified, in part due to methodological difficulties in classifying language status.

Methods: We identified 65 MICS surveys (40 countries) with language variables, corresponding to 217,335 children under 5. We used standardized workflows to assess language status, confirming against Ethnologue V24, a comprehensive language reference tool. We classified all languages using the Expanded Graded Intergenerational Disruption Scale. We defined majority languages as any language with widespread political support or use in formal educational and mass media (EGIDS 0–4); languages without such (EGIDS 5–10) were considered minority/Indigenous languages. We used logistic regression of pooled, weighted survey data to assess the impact of dominant language status on children's Early Childhood Development Index (ECDI) scores, adjusting for covariates.

Results: We successfully classified language status for 216,466 children from 40 countries. We were unable to classify language for 9,702 children, primarily because language was listed as "other" or could not be crossmatched to Ethnologue. In logistic regression models, the odds of on-track development were greater for children speaking a majority language (OR 1.70 [1.57-1.85]). After adjustment for important covariates, this OR was 1.54 (1.40-1.71).

Conclusions: We have successfully developed a standardized method for classifying language status of children in large global datasets. Using this method, we are able to assess the impact of discriminatory language practices on the development of children who speak Indigenous/minority languages.

Research — Early Childhood Development

Abstract ID: 39

Use, Access, And Caregiver Perceptions Of Rehabilitation Services For Children With Cerebral Palsy In Uganda

Objectives: This study assessed the use, accessibility, and caregiver perceptions of rehabilitation services among children with cerebral palsy (CP) receiving care at Mulago and Kawempe National Referral Hospitals in Uganda.

Methods: A cross-sectional mixed-methods design was employed. Quantitative data were collected from caregivers of children aged 1–9 years using structured questionnaires to assess access, utilization, and knowledge of rehabilitation services. Qualitative data were gathered through focus group discussions and in-depth interviews to explore barriers, facilitators, and caregiving experiences. Quantitative data were analyzed using STATA version 16, with descriptive and inferential statistics. Thematic analysis was used for qualitative data.

Results: A total of 422 caregivers participated. While 94% reported using at least one rehabilitation service, disparities emerged by site and caregiver background. Caregivers attending Mulago Hospital were five times more likely to report non-use of services ($p=0.045$), and unemployed caregivers were three times less likely to access care ($p=0.03$). Despite high knowledge of rehabilitation benefits, attitudes revealed emotional strain: 86% believed services could be a waste of time, and 52% doubted curability. Common barriers included financial constraints, stigma, transport difficulties, and limited-service availability. Facilitators included peer support, trust in providers, and observed child improvement.

Conclusions: Despite high reported use, caregiver attitudes and socioeconomic barriers hinder consistent access and utilization of rehabilitation services for children with CP in Uganda. Interventions should strengthen caregiver support, reduce structural barriers, and address attitudinal gaps to improve outcomes.

Research — Risk factors for developmental disabilities

Abstract ID: 40

The Autism In Context Of Education-Kenya Survey; Designing A Culturally Responsive Survey And Initial Results

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Background: Autism research in low- and middle-income countries (LMIC), including Kenya, is limited, despite growing global prevalence. Surveys are a primary tool used to understand neurodevelopmental disorders, like autism, in LMICs. However, measures supported by studies in high income countries are often not valid for use in LMICs.

Objectives: This session describes the culturally grounded development process of the Autism in Context of Education-Kenya Survey (ACE-KS) and the results when administered to Kenyan caregivers and teachers of autistic children.

Methods: To develop the ACE-KS, we blended evidence-centered design, a psychometric framework for designing measurement tools, with community-based participatory research, which emphasizes equitable stakeholder involvement. We administered the ACE-KS to 130 Kenyan caregivers and teachers.

Results: The ACE-KS measures six constructs. Psychometric analyses indicate construct validity and scale reliability. Findings from the initial administration revealed insights into how autism is perceived among Kenyan caregivers and teachers. While most respondents endorsed scientifically legitimate causes of autism, many identified other causes such as mothers' exposure to domestic violence, vaccines, and complications during birth. Perceptions varied considerably on appropriate teaching strategies for autistic children. Respondents were evenly split on whether teachers should be responsible for punishing a child with autism.

Conclusions: Merging evidence-centered design with community-based participatory research traditions can enhance the cultural and contextual validity around autism survey instruments in LMIC. Our work offers a replicable model for researchers aiming to develop participatory, culturally responsive tools for deployment in underrepresented contexts and contributes to efforts to improve autism knowledge and support in LMICs.

Research — Neurodevelopmental disabilities

Abstract ID: 42

Cost of Timely Screening and Treatment versus Comprehensive Management of Severe Visual Disability due to Retinopathy of Prematurity

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Retinopathy of prematurity (ROP) is one of the leading causes of preventable blindness worldwide. In Guatemala, a large number of premature infants are born in hospitals outside the capital city and present for evaluation at advanced stages of the disease.

Objectives: To compare the cost of timely screening and treatment versus the total cost of comprehensive management for patients with visual disability secondary to ROP.

Patients and Methods: The cost of the disease was calculated in patients presenting with low vision or blindness secondary to ROP. Direct costs were calculated based on those directly related to disease management: medical care, rehabilitation, education, technical support, transportation, personal assistance, home adaptations, and specialized equipment. These were compared with the costs of timely screening and treatment.

Results: The total cost of managing a child with severe visual disability due to ROP was USD 214,666.37, whereas the cost of timely screening and treatment was USD 1,223.12. This represents an additional cost of USD 213,443.24 for patients who were not screened and treated in time.

Conclusions: The cost of timely screening and treatment represents only 0.57% of the total lifetime cost of managing a child with severe visual disability due to ROP.

Research — Intervention/Medical

Abstract ID: 44

Outcomes Of Children With Developmental Difficulties Who Experienced Turkey's Earthquake: A One-Year Follow-Up Based On The World Health Organization Nurturing Care Framework

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Objectives: Crises in low-and middle-income countries (LMICs) pose major challenges to children with developmental difficulties (DDs). Following the 2023 Turkey-Syria Earthquake, this study aimed to examine the developmental needs of children with DDs using the World Health Organization's Nurturing Care Framework (WHO NCF).

Methods: This longitudinal study included children with DDs who were followed at Ankara University School of Medicine Department of Pediatrics, Developmental Pediatrics Division, and lived in one of the ten affected cities. Semi-structured phone interviews based on the World Health Organization Nurturing Care Framework were conducted at 3-, 6-, and 12-months post-earthquake.

Results: Of 68 eligible children, 4 (5.9%) died after the earthquake. Families of 31 (45.6%), 53 (77.9%), and 57 (83.8%) children participated in the first, second, and third interviews, respectively. Median age was 58.0 (min-max: 9.0–186.3) months, 63.8% was male. Most (74.1%) had chronic health conditions and developmental delay (72.4%). At 3, 6, and 12 months post-earthquake, unsafe living conditions were reported by 27 (87.1%), 14 (26.4%), and 8 (14.1%); inadequate food access was reported by 26 (83.9%), 9 (17.0%), and 13 (22.8%); unmet healthcare needs by 31 (100%), 22 (41.5%), and 22 (38.6%); and lack of early learning opportunities by 31 (100%), 30 (50.6%), and 5 (8.8%) of families respectively.

Conclusions: One year after the earthquake, children with DDs continue to face serious unmet needs across all WHO NCF domains. These findings emphasize the critical importance of sustained, multidimensional support for children with DDs in LMICs during and after crises.

Research — Children in crisis, humanitarian emergencies

Abstract ID: 45

Fifteen Years Of Innovation And Impact: Lessons From Grand Challenges Canada's Saving Brains Program

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Grand Challenges Canada, Toronto, Canada

Over the past 15 years, Grand Challenges Canada's Saving Brains program has supported over 150 innovations across 39 countries, reaching more than 9.6 million children and caregivers and improving the lives of over 5.4 million children and their families. This session will reflect on the program's evolution—from seeding bold ideas to scaling high-impact solutions—and share critical insights on what it takes to drive sustainable, systems-level change for the most vulnerable children. We will spotlight innovations that have demonstrated transformative impact in equity-deserving communities, including:

- ASTRADHE: A community-based early intervention model that integrates responsive caregiving, early learning, and disability-inclusive practices for young children with developmental delays and their families.
- Canal Canoa: A powerful cultural preservation and early learning initiative co-designed with Indigenous communities in the Amazon, using multimedia storytelling to foster intergenerational knowledge exchange and child development.
- Baby Ubuntu: A family-centered, community-led program supporting children with disabilities and their caregivers through psychosocial support, play, inclusion, and health system integration.

These innovations reflect Saving Brains' commitment to advancing equity through inclusion, culturally grounded approaches, and caregiver empowerment. The session will explore what we've learned about reaching Indigenous children, children with disabilities, and those living in marginalized contexts—and how innovation can continue to close equity gaps in early childhood development globally. Participants will engage in a forward-looking dialogue on how to build more inclusive, responsive, and resilient systems, informed by the experiences of innovators and the communities they serve.

Program or Model — Early Childhood Development

Abstract ID: 48

Improving Teaching Skills On Playful Learning For Africa's Youngest (It's Play): Classroom Observations, Parent-Caregiver Surveys, And Direct Observations Of Children

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Objectives: IT'S PLAY supports the implementation of a teacher professional development model to enhance literacy through play in early childhood education. This study involved rigorous school-based fieldwork (classroom observations, parent-caregiver surveys, child direct observations) to explore the impact of IT'S PLAY training.

Methods: Contextually- and culturally-appropriate versions of established tools were utilised: the MELE Classroom Observation Tool; MELQO Caregiver/Parent Report Core Interview; Washington Group/UNICEF Child Functioning Module on Disability, and specific literacy/pre-literacy tasks from the MELQO Direct Assessment.

Baseline data was gathered through May-June 2023. Forty individual schools were visited – 25 that had participated in IT'S PLAY training (Post-Training) and 15 that were scheduled to participate in training in December 2023 (Pre-Training). 777 children and their parent-caregivers were sampled [Pre-Training n=380, Post-Training n=397].

Endline data was gathered in November 2023. 19 Classroom Observations took place (10 Post-Trained, 9 Pre-Trained). 584 children – who all participated at Baseline – were re-sampled [Pre-Trained n=275; Post-Trained n=304].

Results: Classroom Observation data showed a complex picture. When there was cross-phase 'drop-off', this was often smaller for Post-Trained sites. Child Direct Observation data showed improvements in learner-level outcomes across phases; improvement was frequently greater for children in Post-Trained groups. Multivariate analyses revealed a limited contribution of IT'S PLAY training on outcome measures. Parental level of education and children's literacy interest contributed to multivariate models.

Conclusions: IT'S PLAY training resulted in certain successes, e.g., encouragement of groupworking, use of learning corners, and TALULAR. There remain challenges around supporting children who require additional support for learning.

Research — Intervention/Educational

Adaptation And Implementation Of The Global Scales For Early Development (GSED) Tool In Ethiopia

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Objectives: To describe the process and experience of translating, adapting, and implementing the WHO Global Scales for Early Development (GSED) tool in Ethiopia.

Methods: WHO guidelines were followed to translate and adapt the GSED tool to Amharic. Two Ethiopian child health experts were trained as GSED Master Trainers. The tool was forward translated by two independent translators with previous experience in child development assessment, consensus was obtained, and the back translation was reviewed/approved by the WHO. The GSED app was programmed in Amharic and piloted for 40 children aged 6–36 months, followed by its implementation by trained study nurses in a child development study in Bahir Dar. The finalized tool was then administered by trained nurses to 364 children in the same age group. Quality control checks were performed by Master Trainers to assess inter-rater agreement.

Results: Minor adaptations were made to terminologies, and certain items were rephrased in both short and long forms. Modifications were made to physical objects to ensure cultural appropriateness. Local examples were incorporated where necessary. The average administration time was 50–60 minutes. Quality control assessments showed high agreement between Master Trainers and nurses (average agreement: 91%). This study demonstrated the high acceptability and feasibility of the GSED tools.

Conclusions: The preliminary experience with the GSED tool in Ethiopia is positive, with high-competency trained staff and ease of administration. Local contextualization enhanced its cultural relevance. The study demonstrated feasibility, acceptability, and the potential for large-scale use in similar settings.

Research — Early Childhood Development

Strengthening Home-Based Care for Small and Vulnerable Newborns in Indigenous Communities of Guatemala

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Background: Small and Vulnerable Newborns (SVNs)—those born under 2,500 g and/or before 37 weeks—are at high risk for developmental delays and increased morbidity and mortality. In Guatemala, prematurity and low birth weight (LBW) rates are 10.7% and 15.6%, respectively. In our community-based neonatal health program serving Maya Kaqchikel communities, we reach about 700 newborns annually and have observed disproportionately high LBW rates. Due to strong resistance to hospital-based care, we are expanding home-based strategies to reduce complications and promote healthy early growth in SVNs.

Methods: Neonatal Technicians conduct home visits using a smartphone app to track weight, temperature, and other vital signs, providing real-time clinical guidance. They support breastfeeding and help identify danger signs. To improve home-based care for SVNs, we introduced targeted interventions including Kangaroo Mother Care (KMC), passive feeding techniques, and the provision of low-tech equipment such as breast pumps, baby carriers, and infant warmers. We aim to improve thermal regulation, nutrition, and weight gain in the home setting.

Results: From July 2024 to March 2025, over 270 newborns received 2–4 home visits. LBW and prematurity rates were 23.6% and 11.8%, respectively. Neonatal referrals increased by over 100%, primarily due to LBW. Exclusive breastfeeding rates reached 87%. However, uptake of KMC has been limited by cultural modesty norms, and referral acceptance is challenged by deep-rooted mistrust of institutional care.

Conclusions: We describe an expansion of a community-based neonatal program strengthening home-based care for SVNs through targeted, low-cost interventions that can improve developmental outcomes.

Program or Model — Risk factors for developmental disabilities

Abstract ID: 52

Supporting Families' View Of Child Development In Australian Aboriginal Community Paediatric Clinics Through Yarning And Meaningful Reports

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Objectives: This project aims to highlight cultural strengths as the foundation of engagement in the Aboriginal Community Paediatric Clinic Pathway in South Western Sydney, Australia. We seek to support families' understanding of their child's development and behaviours through culturally meaningful communication, including yarning and redesigned clinic reports that reflect shared understanding of identity, wellbeing, and aspirations.

Methods: Practice changes were introduced across clinic sites in July 2025: (1) Shared Decision-Making Tool to guide clinical yarning; (2) redesigned clinic report template to better reflect families' cultural perspectives and social/emotional wellbeing. Families attending Aboriginal Community Paediatric clinics over the next 6 months will be invited to complete a brief post-visit questionnaire, either online or by phone. The questionnaire explores perceptions of cultural safety, developmental support, decision making, and communication. Data will be collected anonymously and analysed descriptively, with thematic analysis of open-text responses.

Results: Data collection is ongoing. Pilot feedback suggests families value having time to yarn about culture and child development and appreciate clinic reports that reflect their child's and family's cultural experiences, cultural connection and their child's voice. Anticipated outcomes include families feeling respected in care decisions, cultural safety during visits, and confidence supporting their child's development.

Conclusions: This project supports culturally inclusive clinical practice by embedding families' perspectives in communication and planning. We share our Aboriginal Community Paediatric Clinic Report template, incorporating family social/emotional wellbeing, cultural identity and connection. Findings will guide improvements to ensure Community Paediatric care reflects cultural ways of knowing, being, and doing.

Research — Intervention/Inclusion

Abstract ID: 53

What Matters Most - Aboriginal Families' Voices In Child Development And Wellbeing: Embedded Yarning Conversations In An Australian Community Paediatrics Setting

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Objectives: This study explores Aboriginal families' perspectives on child health and social and emotional wellbeing through an enhanced culturally responsive approach embedded into routine practice in the Community Paediatrics clinic. It aims to understand: (1) how families define health and wellbeing for their child; (2) the cultural ways of knowing, being, and doing that support their child's development; and (3) their hopes and vision for the future.

Methods: Qualitative data are being collected through yarning conversations using a visual social/emotional wellbeing template as part of routine care with Aboriginal and or Torres Strait Islander families attending a Community Paediatrics clinic in New South Wales, Australia. These non-clinical questions are embedded in the clinic setting to foster culturally safe dialogue. Data are recorded and thematically analysed in partnership with Aboriginal Health Workers.

Results: Data collection is in progress. Preliminary themes suggest that families hold strong aspirations for their children's future, focusing on happiness, inclusion, independence, and healing. Early responses highlight a holistic view of wellbeing, encompassing emotional, cultural, and relational dimensions. Families like sharing insights about their child's social and emotional growth.

Conclusions: Initial findings indicate that embedding yarning-based, culturally grounded conversations into routine Community Paediatric care is both feasible and meaningful. This approach strengthens partnerships between healthcare workers and families and creates rich, strength-based narratives that can guide more responsive and respectful care. Ongoing data collection will further inform practice and service delivery.

Research — Intervention/Others

Abstract ID: 55

Trauma-Informed And Culturally Responsive Developmental & Behavioural Clinics For Aboriginal Children And Families In Sydney: A Service Evaluation

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Objectives: Aboriginal children in South Western Sydney (SWS) are a recognised priority population, having a known burden of early adversities which impact on developmental outcomes. Our objectives were to: develop trauma-informed Community Paediatric clinical pathways for Aboriginal children in SWS; evaluate the outputs from the new clinical services; and set up ongoing service improvements.

Methods: We collected and analysed clinical information on all newly established Community Paediatric clinics for Aboriginal children in SWS, from 2018 to 2025. Using a modified Cultural Audit Tool and group discussions (yarning circles) with clinicians and managers in Indigenous health and welfare services, we documented how culturally responsive and trauma-informed the clinics were. We implemented service improvements in 2022 and re-assessed in 2025.

Results: From 27 children seen in 2018, the clinics grew exponentially, peaking at 645 appointments in 2024. Behavioural (44%), developmental (34%) and learning difficulties (21%) were main concerns, a majority (65%) of children had a trauma history. The cultural audit tool trialed in 2021, revealed our services were trauma-informed, but we lacked Aboriginal clinicians. The recruitment of an Aboriginal Health Practitioner, active engagement with Aboriginal partner organisations and programs led to improved attendance. Assessments were strengths-based, cultural connection always promoted.

Conclusions: Between 2019–2024, there was a four-fold increase in the number of appointments provided via Aboriginal specific clinics, in SWS. While there are challenges in delivering a trauma-informed, culturally respectful service to Aboriginal children in metropolitan Sydney, it can be done if attention is paid to culture, enablers/ barriers identified.

Research — Risk factors for developmental disabilities

Abstract ID: 57

Defining, Researching And Intervening In Infant And Early Childhood Mental Health In Latin America

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Our study sought to define infant and early childhood mental health in Latin America, identify promising research and interventions and provide a framework and set of recommendations for next steps. In addition, we sought to examine how the concept of infant and early childhood mental health was being addressed from an early intervention standpoint. Our methodology including a rigorous examination of the published and grey literature as well as key informant interviews. Results indicated a way in which to define infant and early childhood mental health across Latin American countries, highlights of strong research and intervention efforts, as well as gaps in the research, intervention and policy work across the region. We provide a set of recommendations across all of those categories as well as a framework to better conceptualize infant and early childhood mental health.

Research — Early Childhood Development

Abstract ID: 59

Utilizing Eye-Tracking For Autism Diagnosis In Low- And Middle-Income Countries

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Objectives: While the vast majority of autism research has been conducted in high-income countries (HIC), 95% of the world's autistic children live in low- and middle-income countries (LMIC). A lack of autism expertise and culturally adapted/validated diagnostic tools in LMICs pose a serious challenge to the diagnosis of autism. Thus, there is a clear need to develop efficient, accurate, and scalable methods of autism diagnosis in LMICs. In previous HIC studies, eye-tracking has proven to be a feasible method for identifying toddlers and young children with autism. The objective of this study is to determine whether our eye-tracking biomarkers differentiate children with and without autism in western Kenya.

Methods: To date, eye-tracking biomarker data have been collected from sixty, 24- to 72-month-old autistic (n=21) and non-autistic (n=39) children in Kenya (mean: 3.55 years; 17 females). The eye-tracking battery (10- to 15-minute assessment) measures 6 independent metrics shown to predict autism outcomes in HICs – non-social preference, attentional disengagement, pupillary light reflex, and oculomotor metrics.

Results: Preliminary results from one of the six biomarkers (non-social preference; non-social looking / total looking time) demonstrate that our adapted measure significantly predicts autism outcomes in Kenyan children ($p < 0.0001$). Based on application of an existing threshold (40% non-social looking time), 60% of autistic and 100% of non-autistic children were correctly identified using this single metric.

Conclusions: Data collection and analysis are ongoing; however, preliminary findings are consistent with research in HIC and suggests that eye-tracking biomarkers will have diagnostic utility in LMICs.

Research — Neurodevelopmental disabilities

Abstract ID: 60

Neurodevelopment Beyond Borders: Understanding Autism Across Indian Communities In India And The United States

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Objectives: Studies of autism among Indians in India and the United States are limited. Our objective was to conduct a mixed-methods evaluation of autism knowledge, attitudes, and practices (KAP) to explore factors that impact autism identification and care access in both ethnocultural communities.

Methods: Twenty-three semi-structured interviews (n=13 India, n=10 US) were conducted with caregivers, teachers, and clinicians, and were manually coded using inductive thematic analysis. Interviews informed the development of a KAP survey, which was deployed to Indian caregivers of children (ages 1-10 with and without autism) in India (N=100) and the US (N=44). Survey items assess demographics and general autism knowledge, attitudes and practices, and service system questions for caregivers with autistic children.

Results: Qualitative data revealed challenges, including limited parental knowledge, disability stigma, service system burden, and inadequate community and familial support systems in India and US. Some setting-specific barriers included acculturative stress (US) and lack of standardized diagnostic practices (India). Quantitative data extend these findings. For instance, while caregivers in both settings endorsed limited knowledge about autism and associated services (India: 90%; US: 97%), US caregivers reported more desire to learn about autism (India: 29%; US: 46%), underscoring the need for context driven sensitization efforts.

Conclusions: This is the first global collaboration aimed at understanding autism KAP across Indian communities in India and the US. Our findings suggest shared challenges and setting-specific differences in autism perspectives and highlight the value of bi-directional knowledge exchange for development of equitable autism care solutions across settings.

Research — Neurodevelopmental disabilities

Abstract ID: 63

Prevalence Of Sleep Disorders And Associated Factors In Children With Cerebral Palsy In Tikur Anbesa Hospital Neurologic And Developmental Clinic, Addis Ababa, Ethiopia

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Objectives: Sleep is critical for optimal growth and developmental outcomes in children. Those with cerebral palsy (CP) experience sleep disorders (SDs) at higher rates than neurotypical peers, with disruptions in sleep initiation/maintenance, sleep-wake transitions, excessive daytime sleepiness, and night awakenings being prevalent. These disturbances significantly impair quality of life. The objective of this study was to assess the prevalence of Sleep disturbances and associated factors among children with CP at Tikur Anbesa Hospital's Neurologic and Developmental Clinic in Addis Ababa, Ethiopia.

Methods: Cross-sectional study was conducted involving 119 children with cerebral palsy. Data were collected using the Sleep Disturbance Scale for Children (SDSC), administered by trained personnel, and analyzed in SPSS v25.

Results: The overall prevalence of sleep disturbances was 37% (95% CI: 26.0%–47.9%). The most common subtype was disorders of initiating and maintaining sleep (52.9%). Significant predictors of SDs included spastic CP subtype (AOR = 10.60; p = 0.025), male sex (AOR = 13.23; p = 0.010), urban residence (AOR = 3.15; p = 0.014), and severe motor impairment (GMFCS Level V: AOR = 5.70; p = 0.034; Level IV: AOR = 3.55; p = 0.044). Bed-sharing with caregivers was also associated with increased risk (AOR = 8.39; p = 0.031).

Conclusions: Sleep disorders are common among children with CP, especially those with spastic subtype, male sex, severe motor impairment, urban residence, and those who bed-share. These findings support the need for routine sleep assessments and targeted interventions in this population.

Research — Neurodevelopmental disabilities

Abstract ID: 65

Rx Radio, A Children's Radio Station, Amplifying Voices Of Children Living With Disabilities In South African Communities

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Objectives: RX Radio, at Red Cross War Memorial Children's Hospital in Cape Town, South Africa, is one of the first in the world to broadcast from a hospital, for children by children. Representing tools to include the voice of children living with chronic conditions and disabilities in society, it empowers children with life skills and confidence to voice their opinions.

Methods: Governed by the UN Conventions on the rights of a child, children referred by doctors and therapists, are guided through various trainings in radio production by the station team. This translates into radio diaries, interviews, podcasts and live shows, broadcasted within hospitals and over the internet, opening conversations between peers, family and professionals, forging reciprocal connections and building a shared understanding of health using innovative fun ideas.

Results: Across 3 hospitals, 180 children, between 4 and 18 years, have been trained from 2017. Some reporters are enduring Autism, Cerebral Palsy, Encephalitis or have siblings with disabling conditions. Having covered 100 local events, and conducted interviews around the health calendar, the children secured interviews with their president and local heroes. RX Radio is an agent promoting health, winning the WHO Innovation Challenge in 2020 and attracting partners to fund-raise for its sustainability.

Conclusions: RX Radio advocates for children living with disabilities and chronic conditions ensuring that they speak about issues that are important to them, reflect on their leadership and build opportunities for future employment. "The magic of the mic" inspires and includes everyone, particularly those who may be voiceless.

Program or Model — Intervention/Inclusion

Clinical Profile And Risk Factors Of Global Developmental Delay At Tikur Anbessa Specialized Hospital, Ethiopia

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Objectives: To assess the clinical profile and identify risk factors associated with global developmental delay (GDD) among children aged 1 to 5 years attending the Neurology and Developmental and behavioral pediatrics clinic at Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia.

Methods: A hospital-based descriptive cross-sectional study was conducted from November 2024 to January 2025. Data were collected from 227 children using a pretested structured questionnaire and Ages and Stages Questionnaire (ASQ). Bivariate and multivariable logistic regression analyses were performed to identify factors associated with GDD. Descriptive statistics were presented using tables and graphs.

Results: Of 227 participants (79.6% response rate), 58.1% were aged 25–48 months and 84.6% resided in urban areas; 62% of mothers had primary education. Preterm birth occurred in 29.1%, 47% required resuscitation, and 58.1% were admitted to NICU. The prevalence of GDD was 76%, with communication delays in 73.6% and problem-solving delays in 79.4%. Significantly associated factors for GDD included age 25–48 months (AOR=2.6), female sex (AOR=1.9), and rural residence (AOR=2.8). Cesarean section delivery was protective, reducing GDD risk by 66% (AOR=0.44).

Conclusions: A high proportion of children attending the Neurology and Developmental Clinic exhibited global developmental delays, particularly in communication and problem-solving domains. Maternal health factors, neonatal complications, and socio-environmental conditions were significantly associated with developmental delays. These findings underscore the importance of routine developmental screening and tailored interventions within clinical settings to support at-risk children and improve developmental outcomes.

Research — Early Childhood Development

Beyond Survival: A Partnership To Improve Early Identification And Management Of Neurodevelopmental Delays And Disabilities In Children, Osun State, Nigeria

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Objectives: Nigeria has high rates of preterm births and unskilled deliveries, increasing risk of developmental delays and disabilities. Many affected children go undetected and lack access to early interventions. We aimed to enhance early detection and care through a strategy of developmental screening, referral, and caregiver support for families of children with delays or disabilities.

Methods: From February 2024 to August 2025, Obafemi Awolowo University Teaching Hospital Complex (OAUTHC), in partnership with RCPCH Global, Osun State Ministry of Health:

- Created child-friendly corners in 19 primary health centres
- Trained of 292 health workers in early childhood development (ECD) and the Malawi Development Assessment Tool (MDAT).
- Integrated screening into immunisation clinics and established referral pathways.
- Supported a multidisciplinary (MDT) ECD centre at the tertiary hospital.
- Established caregiver support groups using the “Baby Ubuntu” programme.

Results: 82% of health workers demonstrated improved ECD knowledge. The screening tool was considered simple, effective, and appropriate for resource-constrained settings. 8,100 children were screened, 98.7% showed no concerns, 0.7% presented developmental delays, and 0.6% required further assessment. 84% of children screened were <12 months. Caregiver satisfaction significantly improved regarding health worker ECD knowledge (97.4%, $p=0.011$) and services available (97.4%, $p=0.007$). Participation in support groups led to reported improvements in child development, caregiver confidence, and psychosocial wellbeing.

Conclusions: Integrating low-cost developmental screening into primary services is feasible in low-resource settings and enhances early identification of delays and disabilities. Establishing MDT services and peer-based caregiver programs can positively influence child outcomes and caregiver experiences.

Program or Model — Neurodevelopmental disabilities

Nútrema Centers

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Objectives: To strengthen the competencies of women, their families, and communities in promoting the holistic development of early childhood—from pregnancy through age four—through the “Nútrema Centers” program, an integrated strategy for the prevention of chronic childhood malnutrition.

Methods: An integrated community-based methodology was implemented through “Nútrema Centers,” which serve as learning and support spaces for pregnant women, mothers, and caregivers. The intervention included educational sessions on nutrition, maternal and child health, early stimulation, and self-care. A key component was the SEA model (Sanitation, Family Economy, and Agricultural Activities), which promotes healthy habits, home-based food production, and economic empowerment at the household level. Periodic assessments were conducted to monitor nutritional status, child development, and hygiene practices in the home.

Results: During the evaluation period, the program reached more than 8,000 direct and indirect participants. Improvements were observed in child growth indicators, hygiene practices, dietary diversification, and household economic autonomy. Trained community leaders replicated the program’s content within their communities, fostering sustainable change.

Conclusions: The Nútrema Centers, incorporating the SEA model, proved to be an effective strategy for preventing chronic childhood malnutrition and strengthening early childhood development. The community-based, intergenerational, and multisectoral approach enabled a deep and sustainable impact in vulnerable settings.

Program or Model — Intervention/Early Intervention Program

Play Based Early Childhood Interventions To Promote Development In Children Residing In Migrant Shelters

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Objectives: Children and families living in migrant shelters have likely experienced significant trauma, Pediatricians can intervene to encourage age-appropriate development in children ages 0-5 residing in these shelters through play-based interactions with caregivers.

Methods: Refugee Health Alliance is a non-governmental organization that provides medical care to children living in migrant shelters in Tijuana, MX. During these weekend visits, caregivers and children are given age-appropriate toys and activities to promote development in the five areas of childhood development: cognitive, social and emotional, speech and language, fine motor, and gross motor development.

Results: Initial observations suggest the use of play-based strategies improves connection and interaction between caregivers and children in this migrant shelter. Formal study plans to monitor development using the Child Social-Emotional Competence Checklist and the Survey of Well-being of Young Children (SWYC)TM

Conclusions: Play-based interventions for children and caregivers living in migrant shelters can improve social-emotional skills and perhaps mitigate developmental delay seen with these children.

Program or Model — Early Childhood Development

Abstract ID: 75

Inclusive Hearing Health Model For Children In Guatemala: A Sustainable Approach To Development, Education, And Participation

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Objectives: This initiative aims to reduce the exclusion of children with hearing disabilities in Guatemala by providing comprehensive, sustainable services that promote development, education, and social inclusion. It addresses systemic gaps in health, education, and employment access for children with hearing loss.

Methods: The program operates through a multi-sectoral model combining local and international partnerships. Services include early hearing screenings, free hearing aids, audiological care, speech therapy, inclusive education support, and vocational guidance. Local teams identify children in need and provide long-term follow-up within their communities. The program is financed through a national lottery, ensuring financial sustainability and continuity.

Results: The initiative has reached thousands of children across the country, enabling access to communication, inclusive education, and future employment. Positive changes in public perception and institutional behavior have been documented, particularly among schools and health centers. Advocacy efforts have prompted initial conversations on integrating hearing care into public health and education systems. The program contributes directly to the achievement of SDGs 3, 4, 8, and 10.

Conclusions: This model demonstrates that with local ownership, sustainable financing, and strategic partnerships, it is possible to build inclusive systems even in low-resource settings. It offers a replicable solution for other countries facing similar challenges, proving that hearing disability does not have to be a barrier to development or inclusion. The initiative breaks the cycle of disability and poverty by turning systemic exclusion into opportunity and participation.

Program or Model — Intervention/Inclusion

Abstract ID: 77

Building Health Literacy And Empowerment In BIPOC Youth Through A Culturally-Inclusive Digital Health Youth Fellowship Program

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Global crises such as COVID-19, war, and racism have intensified barriers for BIPOC families in accessing reliable health support. As a result, youth and caregivers increasingly rely on online platforms for health information and connection. However, many existing online health resources lack reliability and cultural-linguistic inclusivity.

In response, Our Kids' Health launched the Digital Health Youth Fellowship Program, a 6-month online training program delivering free, evidence-based, and inclusive workshops to BIPOC youth from nine cultural-linguistic groups: Arabic, Black-African-Caribbean, Cantonese, Filipino/Tagalog, Hispanic/Latinx, Mandarin, Punjabi, Tamil, and Ukrainian. Co-developed with marginalized youth and facilitators, the program aimed to build health and media literacy while fostering culturally responsive dialogue around youth health issues.

To evaluate the program outcomes, a post-program survey was conducted. Of the 18 youth who completed the program, 12 responded and preliminary findings indicate highly positive experiences. Youth reported i) increased health and media literacy, ii) deeper understanding of inclusive youth advocacy, iii) broader awareness of global and diverse health needs, iv) stronger sense of belonging and community, and v) greater confidence in sharing lived experiences and promoting health within their communities.

The Digital Health Youth Fellowship Program demonstrates strong potential in empowering BIPOC youth and advancing culturally relevant health literacy. These results highlight the need for scalable digital health initiatives that amplify voices and experiences of youth from marginalized communities.

Program or Model — Intervention/Educational

Motor Stimulation Program In Early Childhood Centers: “Proemoji”

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Objectives: To detect and address early sensorimotor development needs—gross and fine motor—in infants aged 6 to 24 months attending JUNJI centers in Biobío in 2025. PROEMOJI promotes daily body-based strategies, evidence-based practices, updated educational teams, and inclusive neurokinesiobiological approaches with active family participation.

Methods: An applied exploratory study in nursery and toddler classrooms structured in three phases: assessment, intervention, and education. A functional observational tool based on WHO developmental milestones and ICF difficulty levels—adapted with performance criteria and a risk “traffic light” system—is used to guide individualized and group interventions. These include enriched environments, music therapy, and age-appropriate materials.

Educational staff receive certified training, and families access the “tempranamente.funcas.cl” app as a developmental support and alert tool.

Results: The project aims to promote integrated development across sensory, motor, cognitive, emotional, and sociocultural domains—supporting bodily expression, neuroplasticity, and interaction with the environment.

Justification is based on both literature and prior experience of the project team, alongside UNICEF data (18% of Latin American children at risk of not reaching developmental potential) and national statistics (18.3% of Chilean children under five with functional delays, ENS CHILE 2017). These highlight the need for ongoing presence of physical therapists in early childhood settings.

Pre- and post-intervention surveys will assess impact on family and staff knowledge and practices.

Conclusions: PROEMOJI enhances early childhood care from an inclusive perspective, fostering meaningful developmental experiences in nurturing, protective educational environments.

Program or Model — Intervention/Early Intervention Program

Developing A National Autism Program In Guyana: A Tiered Approach To Care And Workforce Training

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Introduction: The Guyanese Ministry of Health (MOH) recently launched a national autism program focused on establishing a sustainable, equitable system of care for all Guyanese children, while addressing key challenges, such as a lack of pediatric-trained rehabilitation specialists. We outline the development of its national roadmap for autism detection and treatment, a tiered model for service delivery, and an integrated capacity-strengthening strategy.

Methods: The program was developed through a consultative process led by the MOH, with technical support from experts at the Mount Sinai Health System’s Arnhold Institute for Global Health. A national roadmap was created to guide multi-sectoral initiatives across various levels of care, aligning services within the existing health system—from community health workers to pediatric specialists.

Capacity strengthening is planned for late 2025-early 2026, employing a blended approach of virtual sessions, interactive case-based learning, and in-country training across ten regions.

Results: The roadmap received official MOH endorsement and was incorporated into Guyana’s national child health agenda in 2025. Complementary materials including a parent brochure, health worker handbooks, and training curricula were developed. An estimated 250+ providers—including physicians, nurses, therapists, and community health workers—will be trained in autism recognition, referral, and basic intervention strategies, extending support to all children, including those in indigenous and hinterland communities.

Conclusions: Guyana’s national autism program demonstrates that with strategic planning, cross-sector collaboration, and targeted training, systems can be built within South America to improve early diagnosis and care for children with autism. Regular monitoring is planned for measuring impact and sustainability.

Program or Model — Neurodevelopmental disabilities

Implementation Of Child Development Screening In A School-Based Health Program: Description Of Guyana National Program

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Introduction: Until recently, Guyana lacked a national system for identifying developmental concerns in children. In response, the Government of Guyana launched a nationwide school-based health screening program in 2022, marking the first effort to include neurodevelopmental screening for nursery and primary school children. This initiative aims to facilitate early detection of developmental delays and expand access to care, especially in remote hinterland regions where many Indigenous children reside.

Methods: In collaboration with the Mount Sinai Health System's Arnhold Institute for Global Health, the Ministry of Health implemented the Comprehensive Child and Youth Health Program. The goal was to screen all children in Guyana's 1,200 schools by 2025. Screenings encompassed physical, dental, vision, hearing, and neurodevelopmental assessments, with additional mental health and puberty screenings for primary students. Conducted through schools, health centers, and community outreach—primarily by trained school health teams and community health workers—the program emphasized early childhood development, particularly in Indigenous hinterland areas. Training on communicating screening results to parents was also provided.

Results: By June 2025, 68,637 children aged 3–12 were screened, including 15,158 from hinterland communities. Concerns for seizures and autism were identified, along with high referral rates for speech therapy, dental and audiology services. The findings prompted additional national training and increased investment in child disability services.

Conclusions: Guyana's integration of developmental screening into a national health program demonstrates the feasibility of large-scale early identification and referral systems. This model paves the way for more equitable access to developmental support, particularly in low-resource settings.

Program or Model — Early Childhood Development

Strengthening Community-Level Systems For Early Childhood Development In Tanzania: A Qualitative Systems Thinking Study

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Rationale: In Tanzania, there is significant political commitment to early childhood development (ECD) evidenced by development and implementation of a National Multi-sectoral ECD Programme. However, this has not yet translated into integrated ECD service delivery and access at the community level.

Objectives: This study aims to map community-level ECD systems and identify and understand the systemic barriers and enablers that influence access to integrated ECD services at the community level in Tanzania.

Methods: This formative qualitative research study is being conducted across four purposively selected regions of Tanzania, representing different geographical contexts, availability of ECD services, and Early Childhood Development Index 2030 performance. It involves focus group discussions and interviews with community-based ECD service providers and village leaders. Thematic analysis will be undertaken using both deductive and inductive methods. Using a systems lens, the study explores how access is shaped by formal and informal rules, everyday practices, resource flows, coordination, power dynamics, and prevailing mindsets. Participatory systems mapping and thematic analysis will visualise relationships and identify barriers, opportunities and possible solutions across settings.

Results: Data will describe community-level ECD systems and service provider perspectives of barriers and enablers to integrated ECD service provision and access. Data collection is scheduled for August 2025.

Conclusions: By capturing the perspectives of frontline workers, this study will generate practical insights to support more equitable and effective implementation of ECD policy. Findings will be relevant for other low- and middle-income countries working to close the gap between national commitments and community-level implementation.

Abstract ID: 86

Interventions To Promote Early Child Development In The Middle East And North Africa Arab Countries: A Scoping Review

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Objectives: To review the landscape of interventions to promote early child development (ECD) in children (0-5 years) in the Middle East and North Africa (MENA) Arab countries.

Methods: EMBASE, PsycINFO, Medline OVID, Scopus databases, and grey literature were searched for trials reporting ECD promotive interventions in children below five years in MENA Arab countries in any language from inception to December 2024. Two authors screened titles and abstracts and reviewed full texts. Data on study design, participants characteristics, setting, intervention, and primary and secondary outcomes were independently extracted. Risk of Bias (RoB) for randomized trials was assessed using the Cochrane RoB tool. Discrepancies were discussed in fortnightly team meetings. This scoping review adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Scoping Review guidelines.

Results: From 15400 studies, 218 full texts were reviewed and 18 were found eligible for inclusion comprising diverse interventions, ranging from parenting programs to mass media, clinical therapies, or early stimulation. Most interventions were for parenting support. The majority of studies (n=10) targeted typically developing children and the rest targeted children with neurodiversity. There was a significant impact for child-focused primary outcomes. Parent-focused secondary outcomes were more variable and less frequently significant.

Conclusions: In the MENA Arab countries, some interventions are promising. However, less than half demonstrated significant improvement across all reported primary outcomes and rely on less robust trial designs. There is a need for more randomized trials evaluating the impact of early childhood interventions.

Research — Intervention/Others

Abstract ID: 87

Multi-Country Cluster Randomised Controlled Trial Of The EN-REACH Parent Intervention To Improve School Readiness In LMICs

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Objectives: To evaluate the effectiveness of the EN-REACH parent group intervention in improving school readiness and related outcomes for children aged 4–6 years, including those with functional difficulties, across Bangladesh, Nepal, and Tanzania.

Methods: We conducted a cluster randomized controlled trial (cRCT) involving 1,550 parent-child pairs across 160 geospatially defined clusters, randomized to either intervention or standard of care (SOC). The intervention comprised nine group sessions delivered over five months. Primary outcomes were school readiness (MELQO scores) in children without cognitive difficulty and functioning (PEDI-CAT) in children with functional difficulty. Secondary outcomes included IQ (WPPSI), quality of life (PEDS-QL), and caregiver mental health (HSCL-25). Analyses followed intention-to-treat principles using linear mixed-effects regression models.

Results: A total of 1,380 (89.0%) pairs completed the trial. While school readiness scores improved in both arms, the between-group effect was modest and not statistically significant overall (adjusted $\beta = 1.36$; 95% CI: -2.95, 5.66; $p=0.54$). Notably, children not attending pre-primary education showed larger gains (adjusted $\beta = 8.94$; 95% CI: -0.65, 18.52; $p=0.07$). No significant changes were observed in IQ or functional outcomes, although quality-of-life trends were positive for children with disabilities.

Conclusions: EN-REACH demonstrated feasibility and high parental engagement across diverse settings. Findings support the need for targeted interventions for vulnerable families (e.g. with children who are not in pre-school) and underscore the importance of integrating parent-focused programs with primary school systems to close programming gaps between health and education, particularly for children aged 4–6 and those with disabilities.

Research — Intervention/Parent training

Abstract ID: 88

Diagnosis And Prevention Of Sleep Disorders In Children With Paralytic Syndromes: Second Stage Of The Study.

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Objectives: The aim of the second stage of the study was to assess objective sleep parameters in children with paralytic syndromes using screening somnography and compare them with the indicators of children without paralytic syndromes, as well as to clarify the role of screening diagnostic methods in the early detection of sleep disorders.

Methods: A survey of 24 children aged 4–12 years was conducted: 12 children with paralytic syndromes (GMFCS III–V) and 12 children without paralytic syndromes. Screening somnography (monitoring of breathing, saturation, body position, heart rate) was performed in groups of children. The indicators of apnea/hypopnea, sleep fragmentation, saturation and duration of sleep stages were analyzed. Parents were also surveyed using the original questionnaire (98 questions, 7 domains)

Results: 83% of children with paralytic syndromes had sleep-disordered breathing (AHI index >1.5), 58% had desaturations <90% for more than 5% of total sleep time. Significant sleep fragmentation was also observed. In the control group, similar changes were not detected or were isolated

Conclusions: Children with paralytic syndromes have a high risk of respiratory and structural sleep disorders, which can be effectively detected even with screening somnography. It is recommended to include such studies in the multidisciplinary management of children with neuromotor disorders, as well as to develop prevention and early diagnosis protocols.

Research — Neurodevelopmental disabilities

Abstract ID: 89

Process Evaluation Of Multi-Country School Readiness Intervention Using The RE-AIM Framework

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Objectives: To evaluate the implementation and contextual drivers of the EN-REACH parent group intervention—a school readiness program for children aged 4–6, including children with disabilities—across Bangladesh, Nepal, and Tanzania, using the RE-AIM (Reach, Effectiveness, Adoption, Implementation, Maintenance) framework.

Methods: This mixed-methods process evaluation was embedded within a cluster-randomized trial of 1,550 parent-child pairs in 160 clusters. The eight-session intervention promoted early learning and inclusion. Quantitative data on participation and outcomes were integrated with qualitative insights from caregivers, facilitators, and stakeholders, analysed thematically and mapped to RE-AIM domains.

Results: Reach: The intervention reached 93.7% of the target population, with strong enrolment across diverse settings. Participation was supported by school sensitization and stakeholder endorsement. Effectiveness: Positive trends were observed in caregiver-child interaction, inclusive practices, and school readiness, particularly among children not attending pre-primary education. Adoption: Ministries of Education in all three countries supported implementation, and local facilitators endorsed embedding the model into government and NGO schools. Implementation: High fidelity was achieved (>90% session attendance). Culturally adapted, play-based sessions and flexible delivery supported engagement. Barriers included community stigma and limited disability-friendly infrastructure. Maintenance: Caregivers and facilitators expressed strong support for institutionalising the intervention in school curricula. Longer term follow up and implementation is needed to understand maintenance.

Conclusions: Parent-focused interventions are feasible and inclusive in LMICs. Targeted support for vulnerable families and integration with primary school systems can bridge service gaps for children aged 4–6, especially those with disabilities.

Research — Intervention/Parent training

Abstract ID: 91

Harnessing The Power Of Expert Parents: Pathways To Scale For Early Care And Support For Young Children With Developmental Disabilities

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Background and objectives: Globally, 53 million children under five live with developmental disabilities, mostly in low-income countries with limited access to services. Baby Ubuntu is an 11-module group programme co-facilitated by expert caregivers and healthcare providers. It promotes inclusion and participation, maximising development, health and quality of life, promoting caregiver empowerment through peer support and information sharing, addressing stigma and promoting child human rights. We aim to synthesize the programme's evidence base on successful implementation using WHO building blocks as framework.

Methods: Baby Ubuntu draws on mixed-method evaluations, feasibility trials, economic evaluation, and an ongoing cluster randomized trial. Evidence shows feasibility, acceptability, and positive impacts on caregiver knowledge, skills, and attitudes. Using WHO Health Systems Building Blocks, we share key research findings on successful, sustainable implementation.

Results: Successful implementation requires local ownership through stakeholder engagement (leadership and governance); blended funding for scale-up (financing); integration within community health systems to support accessibility and acceptability (service delivery); tiered training and mentorship for fidelity (human resources); routine monitoring systems for data collection and sharing (information systems); and addressing gender, stigma, and poverty barriers while engaging families and communities to transform beliefs about disability (family and community).

Conclusions: Integrated, inclusive approaches to early child disability must align with broader ECD initiatives and health policies. Baby Ubuntu offers evidence-based, low-cost, community-based solution to improve care and inclusion for millions of disabled children in low- and middle-income countries, ensuring no child is left behind.

Research — Intervention/Parent trainin

Abstract ID: 94

Voice Of 'Ubuntu': An Exploration Of The Power Of 'Togetherness And Belonging' For Children With Developmental Disabilities And Their Families

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Background and objectives: 'Voice of Ubuntu' seeks to explore the power of community for children with developmental disabilities and their families through storytelling and portrait photography. 'Ubuntu' is a pan-African term embodying a true sense of 'togetherness and belonging' that is described by the families participating in our Baby Ubuntu programme and related research. This project seeks to give a voice to those caring for a child with developmental disabilities, providing an opportunity to hear their stories, and explore their narratives around hope and resilience to shift the narrative from negative social experiences to one of true togetherness and belonging.

Methods: A one-day workshop (Sept 2025) with Baby Ubuntu families will explore their lived experience through group discussions, co-facilitated by expert parents and youth researchers with disabilities. Small group discussions, storytelling and inclusive play activities will capture stories, quotes and photography embodying the sense of 'togetherness and belonging'.

Results: Project outputs will include: an 'Ubuntu storybook' featuring the full-length family stories; an online exhibition of portrait photography around the theme of 'togetherness and belonging'; and a 'story-telling toolkit' to guide implementation partner organisations in collecting their own caregiver and family stories.

Conclusions: Capturing and sharing the lived experiences of families of children with disabilities is crucial for deepening our understanding family's needs. Capturing family experiences with dignity and ensuring families are recognized as experts in their own lives is essential. Family narratives that highlight resilience, belonging, and joy can help in transforming community beliefs and creating truly inclusive communities.

Research — Intervention/Inclusion

Abstract ID: 95

Community Care Groups And Improved Behavioral Outcomes For Caregivers And Children With Cerebral Palsy In Kawempe Division

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Background/Introduction: Cerebral palsy (CP) is a lifelong neurological condition that impairs movement and coordination. In Uganda, mothers of children with CP face complex challenges, including managing disabilities, accessing healthcare services, and coping with social stigma and isolation. In response, the Child and Family Foundation introduced a community-based intervention using the Family Care Group Model to promote behavioral change and improve outcomes for both children and caregivers in Kawempe Division, Kampala.

Program Description: The program established five Family Care Groups across the division, enrolling 80 children with CP. Common etiologies included hypoxic-ischemic encephalopathy (60%), low birth weight (13%), prematurity (10%), congenital anomalies (6%), malnutrition (6%), seizures (53%), and CNS infections (3%). Twenty caregivers were trained and mentored as lead mothers to facilitate peer support and learning within their communities. The program utilized surveys and FGDs with 30 participating mothers to assess changes in knowledge, behavior, and emotional well-being. Results showed a marked improvement in CP knowledge (50% pre-test vs. 97% post-test), coping skills (61% vs. 92%), and self-efficacy (44% vs. 89%). Mothers also reported reduced feelings of isolation and stress due to the peer support and solidarity fostered by the groups.

Conclusion: Community care groups are an effective, low-cost strategy for improving caregiver knowledge, emotional well-being, and parenting practices. Empowering mothers through peer-led support fosters confidence, social connection, and sustained behavioral change.

Program or Model — Early Childhood Development

Abstract ID: 96

Caregiver And Facilitator Perspectives On An Inclusive Preschool Readiness Intervention In Three LMIC Settings

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Objectives: To explore child, caregiver, and facilitator experiences of a disability-inclusive school readiness intervention for children aged 4–6 years, implemented in Bangladesh, Nepal, and Tanzania, within the EN-REACH cluster-randomized trial. This qualitative study aimed to assess acceptability, inclusiveness, and perceived impact of the program, with a focus on children with disabilities.

Methods: Sixteen focus group discussions and 31 interviews were conducted with 142 participants across three countries, including caregivers, parent and teacher facilitators, and children. Data were analysed thematically using the Ecological Systems Theory framework to explore child-, caregiver-, and facilitator-level interactions that influence school readiness.

Results: At the child level, caregivers reported perceived gains in pre-academic skills, communication, independence, and self-care across all children. For children with disabilities, increased social engagement and confidence were also noted.

At the caregiver level, parents described improved parenting practices, greater confidence in supporting children with developmental needs, and enhanced advocacy skills—particularly for school inclusion. However, stigma and lack of family support remained key barriers. At the facilitator level, both teacher and parent co-facilitators reported increased knowledge and confidence in inclusive early education. They valued play-based approaches and teamwork but highlighted challenges such as diverse learning needs and session logistics.

Conclusions: The intervention was well-received and fostered meaningful change in caregiver and facilitator perspectives. Culturally adapted, disability-inclusive parenting programmes can support more equitable preschool transitions. Embedding such approaches into early education systems and strengthening community engagement are critical to advancing inclusion in LMICs.

Research — Intervention/Parent training

Child And Caregiver Outcomes Amongst Children At Risk Of Developmental Disabilities In Rwanda: Baseline Assessment Findings From The PDC/Baby Ubuntu Trial

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Objectives: Early childhood interventions are crucial for children with developmental disabilities and caregivers. The PDC/Baby Ubuntu cluster randomised trial is evaluating the effectiveness and implementation of a programme of early identification, care and support for young children at risk of developmental disabilities, integrated into government health systems in Rwanda. We report findings of the trial baseline assessment.

Methods: At-risk children, aged 0-59 months, were recruited between March-July 2024. After written informed consent, data were collected on baseline sociodemographic and clinical characteristics. The Malawi Development Assessment Tool was administered to identify those with developmental disabilities. Child and caregiver outcomes were assessed at baseline using a structured standardised survey, administered by trained research staff. Primary outcomes were child participation and family quality of life.

Results: Overall, 1472 at-risk children were recruited; 843 with developmental disabilities. Developmental disabilities were associated with lower levels of participation in home and community activities, lower child functioning and lower nutritional z-scores, when compared to at-risk children without disabilities (all $p < 0.001$). Caregivers of children with disabilities reported lower family quality of life including physical, emotional and social functioning, higher levels of psychological distress and affiliate stigma, and lower confidence in caring for their child (all $p < 0.001$). However, access to services was low for caregivers: 67% had never received information on child disability and 90% had never received parental support training.

Conclusions: Childhood developmental disabilities have a substantial impact on the participation, well-being and quality of life of children and caregivers in Rwanda. However, service provision is limited.

Research — Intervention/Early Intervention Program

Baby Ubuntu From Pilot To Scale: Early Care And Support For Children With Developmental Disabilities And Their Caregivers

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Objectives: To synthesise implementation research and evaluation findings from the Baby Ubuntu programme—an early intervention designed to support young children with developmental disabilities and their families in low- and middle-income countries.

Methods: Using the RE-AIM framework, we analysed data from eight studies conducted between 2013 and 2026 in Uganda and Rwanda. Studies included qualitative research, mixed-methods evaluations, a feasibility trial, and economic analyses. The programme, co-designed with expert caregivers, consists of 11 co-designed modules facilitated by expert parents promoting inclusion, development, and caregiver empowerment.

Results: The programme demonstrated strong demand and feasibility in rural and urban settings, with >80% attendance despite stigma and financial barriers. Evaluations showed 20–25% improvements in family quality of life and increased caregiver confidence, hope, and child developmental progress. Healthcare provider training significantly improved knowledge and referral practices. Implementation was cost-feasible (~\$161 per participant), and all 26 eligible health centres in the ongoing Rwanda trial adopted the intervention. Key enablers included community sensitisation, transport facilitation, and co-facilitation by caregivers. Barriers included geographic access, caregiver isolation, and workforce constraints. Knowledge gaps remain on scaling within government systems and sustaining long-term impact.

Conclusions: Baby Ubuntu offers a replicable and sustainable early intervention model supporting children with neurodevelopmental disabilities and their families. Findings inform integration strategies into health systems and ongoing evaluation in Rwanda.

Research — Intervention/Parent training

Abstract ID: 102

Language Exposure And Infants' Preferential Looking Toward Native Versus Foreign Language Speakers: Evidence From English And Minority Language Speakers

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Previous research has shown that 5- to 9-month-old infants spend more time looking at adults who are speaking their native language compared to adults who are speaking a foreign language (Colomer et al., 2024). However, it remains unclear whether linguistic background impacts infants' social responses to individuals from different linguistic groups. Understanding the interaction between linguistic background and infants' social responses is especially important in settings where children who speak minority languages may be otherwise disadvantaged in terms of access to early education and stimulation opportunities. Thus, this study examined infants' looking time at videos of individuals speaking either Spanish (a minority language in the USA) or English, including both monolingual and non-monolingual infants. Spanish speakers represent one of the largest marginalized groups in the United States, and the infants in this study had a range of vulnerable language backgrounds, from Russian to Tagalog. To refine the distinction between monolingual and non-monolingual, we only included infants with English as their primary language (>70% exposure), categorizing monolinguals as those with 95–100% English exposure. We also extended the age range to 8–12 months to capture infants with slightly longer language exposure. Infants were shown four videos of the same individual speaking Spanish or English while either approaching the camera or playing peekaboo. Their looking behavior was recorded as they viewed the videos, and time spent looking away was assessed using DataVyu. Preliminary ANOVA analysis in R has found that monolingual infants paid more attention to native than foreign language speakers, whereas non-monolingual infants showed similar levels of attention to both types of speakers. More broadly, this highlights the role of an infant's linguistic background in forming looking preferences and suggests that future research should expand on these findings by exploring whether socialization mechanisms remain consistent regardless of exposure to multiple languages, thereby helping clarify how infants develop language-based social biases in early developmental stages. This research may assist in identifying new ways to better support the development of infants from minority linguistic communities.

Research — Early Childhood Development

Abstract ID: 103

The Role Of Social Media On Ukrainian Refugees' Stress Levels During The War

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Purpose: This study investigates how social media affects the mental well-being and resilience of Ukrainian families displaced by the ongoing war. Specifically, it looks at how social media impacts the stress levels and coping strategies of parents who faced the Russian invasion that began on February 24, 2022.

Methods: We conducted detailed interviews with 12 caregivers who regularly used social media while in Ukraine and during their relocation period. The purpose of these interviews was to understand how social media impacted their experiences during displacement, resettlement, and stress management. The data was analyzed through a thematic approach, focusing on patterns and themes in the participants' responses.

Findings: Initial results from interviews with five participants demonstrate that social media played a crucial role in their experiences. It provided essential communication, information, and emotional support, which helped in building resilience, maintaining well-being and navigation during the conflict. These early findings suggest that social media can be a key resource in coping with displacement and war-related stress. Further investigation is needed to fully understand the detailed experiences and outcomes related to social media use among Ukrainian refugees.

Results: Preliminary findings indicate the significant role of social media in helping refugees adapt and cope in crisis situations, suggesting that it could be a valuable resource in supporting mental health and resilience during conflicts. Ongoing research will continue to explore these themes in order to provide more comprehensive insights.

Research — Children in crisis, humanitarian emergencies

Autism In Children With And Without HIV Exposure In Western Kenya: Diagnostic Outcomes And Agreement Among Standard Measures

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Objectives: Children who are HIV exposed but uninfected (CHEU) are at risk for poor neurodevelopmental outcomes. No study has examined autism in CHEU in Africa where most of these children live. Study objectives were to: 1) examine autism outcomes in CHEU and children who are HIV unexposed and uninfected (CHUU), and 2) to explore agreement among standard autism diagnostic measures.

Methods: To date, 104 children (54 CHEU, 50 CHUU) ages 24-48 months (mean: 2.73 years; n=54 females), were recruited from a longitudinal study of >850 children. Children and their caregivers participated in an evaluation conducted by research-reliable personnel in which Swahili-translated Autism Diagnostic Observation Schedule (ADOS-2), Toddler Autism Symptom Inventory (TASI), and Social Responsiveness Scale (SRS-2) were administered. Autism diagnostic outcomes were confirmed by expert clinicians based on clinical judgment.

Results: Eight of 104 children (8%; n=3 CHEU; n=5 CHUU) had an autism outcome. No group (CHEU/CHUU) differences were found among ADOS-2 Total or Social Affect domain, TASI, or SRS-2 Total scores (all $p > .05$). There was a trend toward higher ADOS-2 Repetitive Behavior domain scores ($p = .05$) in CHEU. Across groups, total scores on all measures were significantly correlated ($p < .01$). There was fair categorical autism agreement ($\kappa = .30$) between ADOS-2 and TASI and poor agreement ($\kappa = .10$) between TASI and SRS-2 scores.

Conclusions: Preliminary results demonstrate: 1) elevated autism prevalence CHEU and CHUU, and 2) agreement between observational and caregiver-report measures may be limited. Investigation into how LMIC context and perinatal exposures influence autism phenotype is ongoing in this study.

Research — Neurodevelopmental disabilities

Birth Size As A Predictor Of Resting-State EEG Power Among 24-Month-Old Children In Rural Ethiopia

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Objectives: Infants born preterm or growth-restricted are at increased risk for poor neurodevelopmental outcomes, especially in low-resource settings. Resting-state electroencephalography (EEG) offers an objective tool for early detection of brain function differences. This study examined whether preterm birth and birth weight-for-age z-score (BWZ) predict resting-state EEG power at 24 months in rural Ethiopia.

Methods: Within the Longitudinal Infant Growth and Development (LIDG) study (NCT06296238), we collected EEG data using a 32-channel Enobio system from children at 24 (± 3) months. Preterm birth was defined as < 37 weeks gestation. BWZ was categorized per INTERGROWTH-21st standards: < -2 , ≥ -2 to < -1 , ≥ -1 to ≤ 1 , and > 1 . EEGs were processed using an adapted miniMADE pipeline, and alpha (6–11 Hz) and beta (20–30 Hz) absolute power were computed for frontal and posterior regions. Quantile regression (median) was used to estimate associations, adjusted for sex and corrected age. Spectral parameterization examined periodic components.

Results: Out of 187 EEGs, 169 (90%) were analyzable. Of these, 14 were preterm. No significant EEG power differences were found between preterm and full-term children. However, children with $BWZ > 1$ had significantly higher frontal ($\beta = 2.97$, 95% CI: -0.06 to 6.00) and posterior ($\beta = 6.23$, 95% CI: 2.42 to 10.05) alpha power compared to the reference group ($BWZ \geq -1$ to ≤ 1). Spectral analysis confirmed stronger 1/f-adjusted alpha peaks in the $BWZ > 1$ group.

Conclusions: Larger birth size may be linked to increased resting-state alpha power at 24 months, suggesting early neurodevelopmental advantages detectable via EEG in low-resource settings.

Research — Early Childhood Development

Abstract ID: 108

Community- Engaged Development And Preliminary Implementation Of A Peer-Delivered mHealth Program For Kenyan Caregivers Of Autistic Children

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Objectives: In low- and middle-income countries (LMICs), limited access to autism knowledge and interventions contribute to stigma and poor outcomes. Caregivers need support to improve their autism knowledge and reduce caregiver isolation. The objective of this study was to develop Takia, a mobile health (mHealth) autism education and peer support program for caregivers of autistic children in western Kenya.

Methods: Takia was developed by adapting the content and format (group to mHealth) of a caregiver well-being and behavioral intervention program developed by our interdisciplinary US-Kenya research team. Weekly team meetings and two program development sessions with 10 Kenyan caregivers to autistic children were held. Takia includes nine structured educational modules delivered via WhatsApp covering basic autism education, caregiver coping strategies, and behavioral interventions. Ten caregivers were trained as Autism Information Navigators (AIN) and provided education and peer support to caregivers and community members. Iterative adaptations were coded using the Framework for Reporting Adaptations and Modifications-Expanded. Implementation data is documented via AIN logs and Google Analytics.

Results: Thirty-two adaptations were made during development; 78% (n=25) were guided by caregivers. Since March 2025, AINs have delivered Takia to 11 caregivers and provided autism education to 269 community members. To date, 97 active users have accessed the Takia modules online. Data collection is ongoing.

Conclusions: Takia's co-development highlights the importance of engaging caregivers in developing and implementing culturally grounded interventions. This work lays the foundation for further scale up and implementation of sustainable, community-driven interventions to fill critical autism resource gaps in LMICs.

Program or Model — Intervention/Parent training

Abstract ID: 109

Catalyzing Systems Change For Early Childhood Development: Innovations For Equity And Impact

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Across diverse global contexts, children face persistent barriers to achieving their full developmental potential, especially those affected by poverty, disability, displacement, or systemic exclusion. Addressing these challenges demands more than programmatic interventions: it requires systems-level catalysts that shift how early childhood development (ECD) is resourced, prioritized, and delivered.

This session examines how catalytic strategies, such as social innovation funding, community co-design, and cross-sector collaboration, have enabled inclusive, resilient, and scalable change. Through this session, participants will explore and understand the characteristics of the catalyst 'role' when it comes to shaping systems so that they can deliver services to children and families, centered in dignity and respect. We will dive into three different approaches that could catalyse systems to become 'innovative' in themselves:

1. Program implementers evolving into systems catalysts: the example of CEDI-FMUSP, enabling the Brazilian home visiting program to be delivered with particular attention to caregivers and families who are most vulnerable (indigenous families, families facing violence)
2. Organisations designed to catalyse systems: the example of Instiglio, driving forward results-based approaches for Early Childhood in Colombia
3. Pooled funding approaches that can bring together implementers, government stakeholders and communities to design systems and processes that meet everyone's needs, the example of CoImpact.

Highlighted innovations include culturally embedded learning programs, disability-inclusive care models, and caregiver empowerment strategies that have redefined how systems support the most vulnerable children. Through this lens, we discuss what it takes to seed and scale equitable ECD solutions, build system responsiveness, and close persistent equity gaps.

Abstract ID: 111

Advancing Training Opportunities In Infant And Early Childhood Mental Health (IECMH): Development Of Three Virtual Certificate Programs To Expand IECMH Workforce Diversity And Expertise

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Objectives: Timely mental health support to young children and their families in the context of adversity provides a crucial opportunity to promote lifelong positive mental health for marginalized and low-income communities. Efforts to expand access to infant and early childhood mental health (IECMH) intervention are limited by inadequate workforces who are well trained in key concepts of IECMH and in culturally responsive practices. We describe the creation of three new virtual certificate programs that provide low-cost, accessible, and scalable paths to training that are relevant to LIC and MIC.

Methods: We describe the development of three training programs: (1) IECMH clinical practice for mental health professionals; (2) IECMH consultation to early care and education programs; (3) and community health worker training with specialization in IECMH. We emphasize the co-creation process between parents, clinician-researchers, and educators in program development. We highlight our focus on culturally responsive practices and health equity, share an overview of syllabi and course plans, and describe demographic data and qualitative survey results from program graduates.

Results: Demographic data demonstrate significant racial, ethnic, cultural, linguistic, and geographic diversity. Retention and completion rates across the three programs exceed 90%. Graduates plan to work in a range of clinical and educational settings. Satisfaction with educational experiences is very high.

Conclusions: The educational programs described in the presentation represent a promising strategy to expand training opportunities for individuals looking to join the IECMH workforce. The affordability, accessibility, and scalability of the programs indicate promising opportunities to expansion to LIC and MIC.

Research — Intervention/Psychological

Abstract ID: 112

Sociodemographic And Clinical Factors Associated With Language Development And Nurturing Care In India And Guatemala: GMCD Trial Baseline Data

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Objectives: To describe associations between baseline sociodemographic/clinical characteristics and child development and nurturing care endpoints in families enrolled in a hybrid type-1 cluster-randomized trial of the International Guide for Monitoring Child Development in India and Guatemala.

Methods: Child development was measured during study visits through the Bayley Standard Infant Development IV language scaled score. Nurturing care was measured through proportion of yes items endorsed on HOME-IT tool at baseline. We conducted mixed effects models for both endpoints for sociodemographic and clinical characteristics with a random effect for cluster.

Results: Overall, 626 children ages 0-24 months were enrolled; 311 (49.6%) from Guatemala, 315 (50.4%) from India. In the pooled analysis, lower wealth quintiles and maternal illiteracy were associated with both poorer child language development ($\beta = -9.97$ 95% CI -14.90- -4.81 (wealth) and $\beta = -4.17$ 95% CI -7.62- -0.72 (maternal illiteracy)) and nurturing care ($\beta = -0.12$, 95% CI -0.156- -0.075 and $\beta = -0.039$ 95% CI -0.06- -0.01 respectively). Additional factors negatively associated with child language development included preferred indigenous language ($\beta = -5.16$ 95% CI -9.39- -0.92) and stunting ($\beta = -4.18$ 95% CI -6.16- -2.31), while higher maternal education was positively associated ($\beta = 5.83$, 95% CI 3.82-7.84). Additional factors associated with poorer nurturing care included greater number of under-5 children ($\beta = -0.020$ 95% CI -0.084- -0.003) and low birth weight ($\beta = -0.020$, 95% CI -0.036- -0.005), while married/cohabiting was positively associated ($\beta = 0.060$, 95% CI 0.033-0.095).

Conclusions: Nurturing care interventions should target high-need groups including lower wealth quintiles, illiteracy, low birthweight children and tight birth spacing. Primary prevention policies targeting poverty and attendant risks are needed.

Abstract ID: 113

FUNCAS-ESCOLAR Battery: Biopsychosocial Profile And Educational Supports For Inclusion And Performance In Chilean Students

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Objectives: To present the validation of FUNCAS-ESCOLAR, a web-based biopsychosocial assessment battery grounded in the ICF framework. The tool identifies support needs for inclusive education by considering both context and family, using a universal language to describe student needs.

Methods: The battery was applied to 55 students (ages 4–24) across four types of schools in the Biobío Region, Chile. It assesses sociodemographic and health factors, student functioning (dependence, autonomy/participation, sensorimotor skills), and contextual facilitators (school and family). Analyses included Cronbach's alpha for reliability, exploratory factor analysis, non-parametric correlations, and cluster analysis.

Results: FUNCAS-ESCOLAR showed excellent internal consistency ($\alpha = 0.890$). Significant correlations were observed between dependence and other functioning dimensions (e.g., dependence–autonomy $\rho = 0.487$; dependence–context $\rho = 0.553$). Key predictors of student functioning included sleep quality, perceived safety, chronic health conditions, and school attendance. The tool successfully distinguished levels of student dependence and availability of contextual supports across different school types ($p < 0.001$).

Conclusions: FUNCAS-ESCOLAR is a reliable, comprehensive tool for personalized planning of supports in inclusive education. Its digital format facilitates accurate identification of biopsychosocial needs and enhances communication among educators, families, and professionals. The tool supports targeted intervention design and offers system-level insights, linking data from policy to practice for more inclusive, equitable education.

Research — Intervention/Educational

Abstract ID: 115

Early Childhood Development In The Next 1000 Days: An Analysis Through The Lens Of Nurturing And Sensitive Care

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Objectives: To analyze the association between a minimally adequate nurturing care index and early childhood development (ECD) during the next 1,000 days in Mexico.

Methods: Using data from the 2021–2024 Continuous National Health and Nutrition Survey (Ensanut), we estimated the prevalence of a minimally adequate nurturing care index, defined as access to at least one of two indicators in each of the five domains of the Nurturing Care Framework: health, adequate nutrition, responsive caregiving, early learning opportunities, and safety and security. Early childhood development was measured using the ECDI 2030 (Early Childhood Development Index). Poisson regression models accounting for the complex survey design were used to assess associations.

Results: Among children aged 24 to 59 months, 19.3% had not reached their full developmental potential. Girls (PR=0.65; 95% CI: 0.51–0.82), as well as children from households with high well-being conditions (PR=0.58; 95% CI: 0.42–0.81), showed a significantly lower likelihood of not reaching their full developmental potential.

Conclusions: The next 1,000 days are critical for fostering nurturing environments, healthy behaviors, and opportunities for holistic development. In Mexico, the prevalence of a minimally adequate nurturing care index highlights the urgent need to implement actions that promote the full adoption of the Nurturing Care Framework, especially among population subgroups with lower access to its components.

Research — Early Childhood Development

Empowering Punjabi-Canadian Families: Inclusive Parenting Resources

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Objectives: This study aimed to explore the unique parenting experiences, challenges, and resource needs of Punjabi-Canadian families, particularly regarding child and youth health and mental well-being. It sought to inform the development of culturally responsive parenting resources and improve access to support services for intersectionally marginalized groups within the Punjabi community.

Methods: A qualitative, community-engaged research design was used, led collaboratively by Punjabi Kids' Health and Laadliyan. Semi-structured focus groups were conducted with care providers and community leaders working with Punjabi families in Ontario. Discussions were facilitated using a culturally sensitive guide and analyzed using thematic analysis. A codebook was developed to identify major themes and inform curriculum design.

Results: Five key themes emerged: (1) Cultural silence, stigma, and system distrust; (2) Gendered socialization and intergenerational expectations; (3) Language and parenting literacy barriers; (4) Fragmented access to resources and structural exclusion; and (5) Need for community-driven, inclusive, and practical supports. Participants emphasized the value of peer networks, plain-language education, and culturally resonant tools. Recommendations included the development of toolkits, social media campaigns, and flexible workshop-based programming tailored to Punjabi caregivers.

Conclusions: Punjabi-Canadian families face complex and layered barriers to accessing culturally appropriate parenting support. Community-informed, culturally safe approaches are essential to improving service delivery and building trust. This study offers a framework for developing inclusive parenting resources and highlights the need for participatory knowledge mobilization strategies that can be adapted for other racialized and immigrant communities across Canada.

Research — Intervention/Inclusion

Internal Consistency And Transcultural Adaptations Of An Early Childhood Assessment In Guatemalan Rural Areas

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The assessment of neurodevelopment is relevant to demonstrate the impact of economic and social factors associated with poverty and inequity. However, the cultural appropriateness of the instruments has sparked reflection on how this impact is analyzed (McHenry et al., 2021; Quesada et al., 2023). This study aimed to evaluate the internal consistency of the BSID-III as an instrument to assess neurodevelopment in Guatemalan children from two vulnerable populations. According to Cáceres and Benavides (2019), child development outcomes are influenced by sociocultural factors, making it essential to examine the psychometric properties of the BSID-III in these contexts. Cultural adaptations were made to ensure the validity of the cognitive, motor, and language scales, including item adaptation, back-translations into two Mayan languages, and training of native Mayan-speaking translators (Martínez et al., 2016; Webb et al., 2020). The results showed internal inconsistency when comparing the adaptations for the Kaqchikel and Q'eqchi populations, although internal consistency was confirmed within each group individually. This discrepancy highlights the need for culturally adapting the translation, application, and evaluation of neurodevelopmental tests. Furthermore, it is crucial to culturally sensitize evaluators and translators working in such diverse contexts as Guatemala. Finally, the importance of critically using instruments that acknowledge the specific characteristics of populations without imposing a Westernized framework is emphasized (Martínez et al., 2018).

Research — Early Childhood Development

Comparison Between Percentiles Of Weight/Age Growth Curves For Healthy Population And Curves For Cerebral Palsy In Guatemala

Charis Gudiel, Scott Tschida

Wuqu' Kawoq, Tecpán Chimaltenango, Guatemala

Objectives: The growth curves created by the World Health Organization (WHO) based on healthy populations are standards for evaluating children around the world regardless of their ethnic origin, socioeconomic status, and type of diet. The objective was to compare the weight-for-age (WFA) percentiles of the WHO growth curves with curves for people with cerebral palsy (CP) that take into account the Gross Motor Function Classification System (GMFSC).

Methods: We examined data from nine patients with CP under the care of Wuqu' Kawoq in rural areas. We calculated percentiles: (1) according to WHO standards for P/E using the Anthro and Anthro plus packages in R and (2) according to growth curves for children with CP in the United States.

Results: There were four males and five females (mean (standard deviation (SD)) age 7.6 (5.3)). Three subjects who were outside the age range were excluded. According to WHO standards, all six had a percentile below one. According to the PC curves, two had a percentile below one and four had a mean (SD) percentile of 9.0 (8.0).

Conclusions: The WHO curves are not useful for monitoring the growth of people with CP in Guatemala, given that all of them were below the 1st percentile; the curves for CP indicate that they are underweight for their age. In children with CP, it is necessary to use the corresponding curves for an adequate anthropometric assessment. In children with CP, the corresponding curves must be used for an accurate anthropometric assessment.

Program or Model — Intervention/Nutritional services

Adaptation And Validation Of The Young Children's Participation And Environment Measure (YC-PEM) In Rwanda

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Objectives: Early childhood disability may profoundly affect participation in daily activities, particularly without environmental accommodation. We performed a cross-cultural adaptation and validation of the Young Children's Participation and Environment Measure (YC-PEM) to measure participation in Rwanda.

Methods: This adaptation and validation was conducted within a cluster-randomised trial examining the impact of the PDC/Baby Ubuntu programme on participation of children at risk of developmental disabilities in Rwanda. To inform adaptation, we conducted semi-structured interviews with healthcare providers and caregivers of children with disabilities. Thematic analysis guided adaptations (item, conceptual, semantic and operational dimensions) according to published adaptation guidelines. We implemented the adapted tool with 1472 caregivers of at-risk children aged 0-59 months, including 843 meeting criteria for developmental disabilities. Discriminant validity of YC-PEM scores was assessed between children with and without developmental disabilities. Inter-rater reliability was calculated from 21 dual assessments.

Results: 52/56 items (93%) of home and community YC-PEM items were adapted for semantic or conceptual equivalence. Children with disabilities were significantly less likely to participate in home and community activities (both $p < 0.001$), and when they did, they were significantly less involved than children without disabilities (both $p < 0.001$). Participation increased with age, although the gap between disability groups widened as children aged. Inter-rater reliability was excellent ($\kappa=0.999$)

Conclusions: The adapted YC-PEM demonstrated discriminant validity as a measure of child participation among young children with disabilities in Rwanda, with strong inter-rater reliability. The tool is now a primary outcome measure in the PDC/Baby Ubuntu trial in Rwanda.

Research — Neurodevelopmental disabilities

Abstract ID: 122

Beliefs And Psychological Well-Being Among Primary Caregivers Of Children With Neurodivergences In Guatemala City

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This research employs a quantitative, non-experimental, descriptive design with the aim of observing and describing the psychological well-being and beliefs held by primary caregivers of neurodivergent children in Guatemala City. The children under the care of these primary caregivers are undergoing treatment and have a formal diagnosis. The sample consists of 38 caregivers, recruited through an intervention center in Guatemala City, medical clinics, social media, and among adults who have participated in parental psychotherapy sessions with the researcher. The study seeks to describe how caregivers' beliefs are expressed and to assess their psychological well-being. The Ryff Scale provides information on psychological well-being, while the Questionnaire for the Assessment of Parental Misconceptions about Autism offers insights into the expectations and beliefs of primary caregivers. The findings of this study focus on the mental health of primary caregivers and their grieving processes following the diagnosis. Caregivers of neurodivergent children are at higher risk of developing mood disorders. The study revealed that these caregivers need access to professionals trained not only in neuropsychiatry but also in parenting support. Additionally, there is a need for the development of specific literature to protect caregivers from misinformation and prevent harmful approaches. Finally, mental health treatment for these adults should consider alternative therapeutic modalities, such as group therapy or art therapy.

Research — Intervention/Parent training

Abstract ID: 124

Autism Management At A Specialist Clinic In Jamaica: Identifying Gaps To Improve Care

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Autism spectrum disorder is rising globally. Access to diagnostic and interventional services is often limited. Psychotropics and polypharmacy are often utilized to manage comorbidities. There remains a dearth of research on autism in low- and middle-income countries in the Caribbean.

Objectives included to determine the number of patients with autism, sex, age ranges, parish of residence, diagnoses, medications and services being utilized at the only public specialist developmental clinic in Jamaica. A retrospective docket review of new patients between 2019-2022 was done. Descriptive analyses were done using STATA; level of significance was a p-value of 0.05. Ethical approval was obtained from the Mona Campus Research Ethics Committee. There were 402 children who received a diagnosis of ASD during the study period; males were represented 3.5x more than females. Eighty percent (80%) of children resided within a 50 km radius of the diagnostic facility. The median age of presentation and diagnosis of ASD was 47.9 months IQR (37.5-67.6). Males presented significantly later than females ($p=0.006$). The most used interventional service was general developmental services (45%). Behavioural and speech and language services were used by 2% and 5% of participants respectively. Medication was prescribed in 11% with 9 % of prescriptions being for psychotropics. Diagnostic services must be expanded beyond the current reach of 50 km . Reasons for gender disparity at diagnostic age needs to be elucidated. Equitable access to high quality interventional services needs to be developed within the clinic through collaborative efforts with private, public and governmental organizations.

Research — Neurodevelopmental disabilities

Costs Of Adapting The International Guide For Monitoring Child Development (GMCD) For Community Health Workers In Guatemala And India

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Objectives: To assess the economic cost of a participatory co-creation adaptation of the International Guide for Monitoring Child Development (GMCD), an early childhood development (ECD) intervention, for use by community health workers (CHWs) in rural Guatemala and India.

Methods: We developed survey instruments to capture costs, from health system and societal perspectives, of adaptation by both local partners and international experts in the two sites respectively. The costs include spending on human resources, information technology, and infrastructure and logistic support. To improve the transparency and comparability of cost estimates, we also reported required resources for adaptation, such as time and expertise of human resources, and the name, quantity, function, and usage time of the used items.

Results: The adaptation took 14 (India) and 18 (Guatemala) months to complete, respectively. Total costs by site were: US\$ 35,849.08 in Guatemala, US\$ 39,284.90 in India, and US\$ 78,909.76 for international consultants. Local sites accounted for approximately 50% of total adaptation costs. Human resources was the largest contributor to the adaptation costs in both sites (93.9% in Guatemala, and 95.0% in India), followed by infrastructure support, and information technology.

Conclusions: These findings provide much-needed cost estimates to policymakers and other stakeholders for adapting the GMCD intervention for use by CHWs. Now that the GMCD training package has been adapted for use by CHWs in two countries, we anticipate that future country adaptations will require less time and resources and likely only require minor adaptations to suit the local context.

Research — Early Childhood Development

Design And Implementation Of Bebeapp: An Application To Support Parenting In Rural Communities

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Objectives: To develop and test a mobile application to support first-time caregivers in monitoring and promoting their child's development.

Methods: An agile design framework was used to develop a mobile application, BebeApp, for Android smartphones with a focus on accessibility, simplicity, and cultural relevance. The design team included app developers, researchers, clinical staff from Wuqu' Kawoq, and volunteer end-user caregivers. The app offers evidence-based guidance on sleep, activity, and feeding. Iterative focus groups, one-on-one co-design sessions, and at-home usability testing were conducted. A six-month pilot tracked user interaction with BebeApp.

Results: Between January and December 2022, a beta version of BebeApp was developed. Six focus groups were held (two with Wuqu' Kawoq clinical staff and four with first-time caregivers). Additionally, five caregivers used BebeApp at home for one month. Early users reported a positive experience, highlighting that most tips were new and useful in their daily caregiving practices. The app was perceived as a trustworthy tool that strengthened parental knowledge in key early childhood development areas. In the pilot, users opened the app a median of 11 times per month, indicating frequent engagement.

Conclusions: BebeApp is an innovative digital intervention that demonstrated high acceptability among caregivers by expanding access to essential child development information in rural areas, suggesting strong potential for scale-up to marginalized communities.

Research — Early Childhood Development

Abstract ID: 131

Participation Trends And Impact Of “Echo Autism” – An Online Capacity-Building Platform For Physicians In Autism Care For Children In India.

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The initial feasibility, acceptability, and effectiveness of the online ECHO (Extension for Community Healthcare Outcomes) Autism model in addressing gaps in physician training regarding autism management, through virtual case-based discussions and expert-led didactics, has been demonstrated in resource-limited settings.

Objectives: To examine sustainability of ECHO Autism program in India by evaluating long-term reach and impact on clinical practices of physicians more than one year after participation.

Methods: A mixed-methods study analysed participation metrics of 219 physicians across three consecutive cohorts of ECHO autism training (2021-2023) and conducted semi-structured in-depth interviews with 20 physicians to explore (1) implementation of knowledge into practice, (2) barriers to implementation, (3) professional growth and capacity building, and (4) perceived impact on children and families. Quantitative analysis included descriptive demographic analysis and ANOVA; transcripts were analysed through inductive content analysis to identify themes.

Results: Enrolment remained stable across the three cohorts. Sixty percent (n=132) attended at least 50% sessions. Attendance rates declined as sessions progressed. There was no significant difference in attendance based on physicians' specialty or region of practice. Participants described continued confidence in diagnosing autism and co-occurring conditions, adopting a strengths-based and family-centred approach, and improving documentation. Systemic barriers, including time constraints and lack of access to a multi-disciplinary team, hampered implementation. Participation in ECHO motivated further autism-specific learning and fostered professional networking.

Conclusions: ECHO Autism has sustained in the community with lasting positive impact on physicians' self-efficacy in implementing autism care and continues to be a vital platform for ongoing collaboration and learning.

Program or Model — Neurodevelopmental disabilities

Abstract ID: 133

Perception Of Vulnerability Among Mothers Of Young Children With Eating Disorders From A Middle-Income Country, Turkey

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Objectives: To assess the mother's perceived vulnerability and related factors for their young children with eating disorders.

Methods: This cross-sectional study was conducted over a twelve-month period starting April 1, 2023, at Ankara University School of Medicine Department of Pediatrics Developmental-Behavioral Pediatrics Division. Children aged 0-60 months with “undereating disorder” diagnosis according to the DC:0-5 Diagnostic Classification of Mental Health and Developmental Disorders Criteria in their first admission. The Expanded Guide for Monitoring Child Development, the Child Vulnerability Scale, Patient Health Questionnaire-2 and State-Trait Anxiety Inventory were used.

Results: Of 716 children aged 0-60 months in the study period; the sample consisted of 62 (8.7% of the recruited sample) children with a median age of 19.5 (4.0-60.0) months (53.2% boys). Twenty-three (37.1%) had developmental delay. Twenty-one mothers (33.9%) perceived their children as “vulnerable” (score ≥ 10). In the multivariable logistic regression model, maternal feelings of depression (OR=22.94, 95%CI:3.22-163.02, p=0.002) (the strongest contribution, Cohen's $f^2 = 0.375$), an increase in the number of siblings (OR=3.94, 95% CI:1.54-10.05, p=0.004), and an increase in the state anxiety score (OR=1.11, 95% CI:1.01-1.21, p=0.032) (Nagelkerke $R^2=0.464$) were independent factors associated with maternal perception of child vulnerability.

Conclusions: Perception of vulnerability is common and should be addressed through a strength-based, holistic approach to children with eating disorders and their families.

Research — Early Childhood Development

Family Context And Indigenous Children's Early-Literacy Development In Yucatán Mexico

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Objectives: This study examined associations among family context, home-literacy activities, and development of early-literacy skills in young children residing in Indigenous Maya communities in Yucatán Mexico. Family context variables of interest included maternal educational attainment and home language use (Mayan, Spanish) and their associations with children's literacy activities and development.

Methods: Data were collected from 674 3- to 5-year-old children and their caregivers. More than half of the children lived in homes where Mayan was either the main (12%) or equal spoken language with Spanish (43%). Data included caregiver questionnaires and direct assessment of children's literacy skill (alphabet knowledge and print awareness). Data were collected by trained local assessors. We used multilevel path analyses predicting child literacy skills from family context variables and included testing for mediation by literacy activities.

Results: Higher maternal educational attainment was positively associated with frequency of caregiver-led home-literacy activities and child alphabet knowledge. Bilingual home language use was positively associated with both caregiver-led and child-led home-literacy activity frequency. When predicting child literacy skills, linkages between bilingual family context and child literacy skills were fully mediated by caregiver-led literacy activities. The positive effect of higher maternal education on child literacy skills was not mediated by home-based literacy activities.

Conclusions: Study findings contribute to research that supports the importance of celebrating and encouraging bilingual, as well as Maya language use, while simultaneously removing structural barriers, such as parental schooling and access to other resources, among families with children in Yucatán, Mexico.

Research — Early Childhood Development

Preschool Education Access And Barriers For Children With Chronic Health Conditions In A Middle-Income Country: Parent Perspectives From Turkey

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Objectives: Children with chronic conditions in low- and middle-income countries (LMICs) face persistent inequities in early childhood education (ECE) access. We aimed to investigate preschool education rates, associated factors, and parental perspectives on barriers to preschool participation among children with chronic health conditions in Turkey, an upper-middle-income country.

Methods: We retrospectively analyzed children aged 36–60 months evaluated for developmental difficulties (DDs) at Ankara University School of Medicine Department of Pediatrics Developmental Pediatrics Division during 2022. To assess preschool participation and barriers, data from the Expanded Guide for Monitoring Child Development (Expanded GMCD), incorporating WHO ICF and Nurturing Care Framework was used. Bivariate analyses examined associations between preschool attendance and child, family, and contextual characteristics.

Results: Of 978 children with DDs, 110 (11.2%) with chronic conditions comprised the study sample (61.8% boys; median age 45.0 months (range:36-60) Most prevalent diagnosis was autism spectrum disorder (26.4%), Of these 29 (26.4%) children. attended preschool. Attendance was associated with age ≥ 48 months (OR=3.10; 95% CI: 1.29–7.46, p=0.010), presence of maternal employment (OR=3.74; 95% CI: 1.36–10.28, p=0.008), and maternal education >high school (OR=3.79; 95% CI: 1.53–9.43, p=0.003). Reported barriers included child being “too young” (63.0%), financial difficulties (21.0%), health-related issues (19.8%), family reluctance (6.2%), school refusal (3.7%), and lack of local services (2.5%).

Conclusions: ECE participation among Turkish children with chronic conditions was very limited in our study. Parent-reported barriers underscore age-related, socioeconomic, and systemic challenges, highlighting the urgent need for inclusive, context-specific early education policies in LMICs.

Research — Advocacy for children with disabilities

Abstract ID: 136

Factors Associated With Participation Of Children With Rare Metabolic Diseases And Developmental Delays

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Objectives: To explore the participation of children with rare metabolic diseases and developmental delays, and associations with child-, family- and environment-related factors.

Methods: This cross-sectional study was conducted with children aged 2–8 years with rare metabolic diseases, who were followed at Ankara University Medical School, Department of Pediatrics, Developmental-Behavioral Pediatrics Division. Participation and environmental context were measured via a semi-structured, comprehensive interview based on the Expanded Guide for Monitoring Child Development. The Patient Health Questionnaire-4 (PHQ-4) was used to assess maternal depression and anxiety symptoms.

Results: The sample comprised 39 children (mean age 73 ± 27 months; 61.5% male), 46.2% had significant developmental delay in at least one domain. Nineteen children (48.7%) engaged in 10–20 minutes of daily interactive book reading, 13 (33.3%) had <1 day/week visits with friends or relatives, and 20 (51.3%) participated in physical activity ≥ 1 day/week, 22 (56.4%) exhibited an increase in screen time exceeding the American Academy of Pediatrics recommendations. Maternal employment was associated with more frequent interactive book reading (OR=7.12; 95%CI=1.01-50.09, $p=0.049$). Maternal depression and anxiety symptoms (scoring ≥ 3 on the PHQ-4) were associated with reduced book reading (OR=0.04; 95%CI=0.01-0.30, $p=0.001$) and limited social interactions (OR= 4.25; 95%CI = 1.02-17.73, $p=0.047$).

Conclusions: International Classification of Functioning, Disability and Health (ICF)-based clinical, research and advocacy strategies are needed to promote participation for the children with rare metabolic diseases. Our results showed that signs of maternal psychosocial conditions significantly shaped participation in life for children with rare metabolic diseases.

Research — Early Childhood Development

Abstract ID: 137

A Model Program For Transdisciplinary Follow-Up Of Children With Down Syndrome In A Tertiary Center In Turkey

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Objectives: To describe the implementation and outcomes of a theory- and framework-based model for transdisciplinary follow-up of children with Down syndrome (DS) according to the American Academy of Pediatrics guideline, implemented in newly established Developmental-Behavioral Pediatrics (DBP) Division at one of Turkey's largest hospitals.

Methods: Prospective program ran February 2023–February 2024, coordinating follow-up across DBP, pediatric genetics, cardiology, endocrinology, neurology, gastroenterology, rehabilitation, ophthalmology, and otolaryngology clinics. At each DBP visit, children's medical and developmental status and psychosocial risks were assessed within a holistic, family-centered, ICF-based framework; guideline follow-ups were reviewed and referrals provided. Individualized, home-based early intervention approaches were planned. Data were collected in July 2025 from DBP notes and family interviews.

Results: Of 2997 new DBP admissions, 49 (1.6%) had DS, 37 were studied; median age at first admission was 8 months (SD 21.4, range 1–103), 59.5% boys. Two-year follow-up, 59.4% remained under observation, 63.6% by a single DBP specialist. While 54% of mothers reported anxiety and need for psychological support, only 45% accessed services. Among children, 75.6% required follow-up in ≥ 3 organ systems, all per guidelines. Repeated vision screening was performed in 81%, hearing assessment in 37.9%. Physical therapy was received 97.2% before 12 months, cognitive education 86.4% before 18 months, and speech therapy 40.5% before 24 months.

Conclusions: Model demonstrates that guideline- and theory-based care is feasible and sustainable. Psychological support for families, hearing follow-up and speech therapy access remain critical gaps. Improvement in these areas is key priority for strengthening DS care models.

Program or Model — Intervention/Early Intervention Program

Abstract ID: 138

Lived Experience To Advocacy: Driving Early Intervention For Autism And Developmental Disabilities Through Access, Support And Assistive Technology In Kenya.

Objectives: To share a caregiver's journey into advocacy, highlighting how lived experience informed the design and implementation of early intervention strategies for children with autism and developmental disabilities in Kenya (LIC/MICs). The aim is to demonstrate the impact of timely access to information, tailored services & appropriate assistive devices on developmental outcomes in both home & school settings.

Methods: Drawing on personal caregiving of two children with neurodevelopmental disabilities and professional leadership at Andy Speaks 4 Special Needs Persons Africa, Special Needs Resource Hub & Nexus Therapy Centres, a multi-pronged approach was implemented:

- Parent and caregiver training on early signs, interventions, & navigating services. Support groups & mental health support.
- Collaboration with schools to integrate inclusive educational practices & adaptive equipment.
- Establishment of Nexus Therapy Centres offering multi-disciplinary early intervention services, including occupational, speech & sensory integration therapies, with assistive technology embedded in care plans.
- Individualized case management for clients, combining home strategies with therapy & school-based interventions.

Results: Children receiving early, targeted interventions—supported by tailored assistive devices—showed measurable gains in communication, independence, and participation. My own children transitioned from significant developmental delays to achieving milestones enabling inclusive education placement. Similar outcomes were replicated among clients, with improved readiness for mainstream education, reduced caregiver stress, and enhanced learning engagement.

Conclusions: First-hand caregiving experience, when combined with structured advocacy and service provision, can bridge systemic gaps in early intervention. Integrating assistive technology, training caregivers, fostering inclusive school and communities partnerships Developmental disabilities.

Program or Model — Intervention/Early Intervention Program

Abstract ID: 140

Sustaining Community Implementation Of A Caregiver-Mediated Intervention- Learnings From WHO-Caregiver Skills Training In India

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Objectives: Parent-mediated intervention models that promote the development of young children with disabilities have been shown to be feasible and acceptable globally. However, evidence on the long-term sustainability of such interventions in lower-middle-income countries (LMICs) remains limited. This study examined stakeholders' perspectives on sustaining the implementation of the World Health Organization's Caregiver Skills Training (WHO-CST) program in India.

Methods: Employing a cascade supervision model, Master-Trainers trained facilitators across community-based organizations in 10 Indian cities, who in turn trained caregivers to implement CST strategies through play and home routines with their children (2-9 years) with autism and other communication delays. Twenty-eight semi-structured interviews were conducted with organizational leaders (n=9), course facilitators (n=10), and caregivers of children with developmental disabilities (n=9). An iterative and inductive qualitative analysis generated four overarching themes.

Results: 'Bridging the Gap' highlighted how stakeholders enhanced their knowledge and skills. 'Always about Logistics and Time' reflected persistent implementation challenges, whereas 'Support and Investment' emphasized the importance of local adaptations, strategic resource allocation, and committed leadership in fostering sustainability. Finally, 'Nothing, nothing was in Vain' underscored that, regardless of current implementation status, the WHO-CST program left a positive impact in communities.

Conclusions: This study contributes to the growing body of literature from LMICs by demonstrating that while the WHO-CST program is widely recognized as effective, sustaining its long-term implementation in India remains a significant challenge. Phased training models, systemic capacity building, integration into public health systems, and enabling policy reforms are essential for enhancing the program's long-term viability and scalability.

Program or Model — Intervention/Parent training

Abstract ID: 142

After-Hours Developmental And Behavioral Pediatrics Clinic Model To Reduce Inequities In Access To Assessments

Objectives: Developmental and behavioral difficulties are increasingly prevalent, yet access to developmental and behavioral pediatrics (DBP) services is limited. Long waiting times, daytime clinic crowding, and scheduling conflicts with school or work hinder families' ability to attend. This study aimed to present an after-hours DBP outpatient clinic model designed to improve access, reduce inequities, and support timely developmental assessments.

Methods: In 2024, a tertiary education and research hospital in Turkey implemented an after-hours DBP outpatient clinic. The clinic operated once a week between 17:00–20:00. Ten patients were scheduled per session, allowing for comprehensive assessments and reducing waiting time. Observational data regarding family attendance, cancellations, and preferences were recorded.

Results: Over the first year of implementation, the model demonstrated improved attendance, with families showing strong preference for evening appointments. Cancellation rates were low, and extended consultation time was achieved due to the limited daily patient load. Although systematic patient satisfaction surveys were not conducted, observational findings indicated that families valued the convenience of evening sessions.

Conclusions: An after-hours DBP outpatient clinic offers a feasible model to address access inequities, reduce missed appointments, and facilitate timely evaluation of children with developmental and behavioral concerns. This approach may be particularly relevant in contexts where daytime barriers restrict care. Broader, outcome-oriented studies including patient satisfaction are warranted to further evaluate the clinical and societal impact of such models.

Program or Model — Advocacy for children with disabilities

Abstract ID: 143

Assessment Of Participation In School-Aged Children With Down Syndrome From Turkey

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Objectives: To report participation of school age children with Down syndrome (DS) and its relationship with adaptive functioning from Turkey, an upper-middle income country.

Methods: In a cross-sectional observational design, children with DS aged 5–12 years who were followed in Ankara University School of Medicine Department of Pediatrics, Developmental Pediatrics Division (AUDPD) between Jan 1st, 2020- Jan 1st 2025 were recruited. Expanded Guide for Monitoring Child Development (Expanded GMCD), the Participation and Environment Measure for Children and Youth (PEM-CY), Vineland Adaptive Behavior Scales Second Edition were used for this study.

Results: Of total 53 children, 47 (88.7%) children comprised the sample (mean age of 102 ± 24 months and 51.1% boys). Most of the children (74.5%) had an additional chronic health condition and all had delay in adaptive functioning. Most mothers (61.7%) received >12 years of education. The average frequency of participation in PEM-CY was higher at home, compared to school and community ($p < 0.001$). Most of the mothers expressed desire for change in school preparation (72.3%), classroom activities (70.2%) and involving getting together with other children (70.2%). Children who had significant adaptive functioning delay had lower mean frequency of participation at home (mean: 4.98 ± 1.0) and in community (mean: 1.76 ± 0.84), than children with delay.

Conclusions: School age children with DS had limitations in participation in life which was related to lower adaptive functioning from an upper middle-income country, Turkey. Interventions should aim supporting adaptive functioning as well as participation especially for children with DS and their families.

Research — Intervention/Inclusion

A Two-Generation, Community-Based Model To Prevent Early School Dropout In South Africa

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Background: In South Africa, nearly four in ten learners drop out of the school system before completing Grade 12. This early loss of engagement undermines children's learning, mental health and sense of belonging, whilst reinforcing intergenerational poverty, developmental challenges and neglect. To counter these risks, innovative approaches that combine prevention, early intervention and contextual and cultural relevance are required.

Objective and Methods: With a mission to prevent school dropout amongst primary school learners, Khula Development Group has addressed this challenge for over twenty years through a two-generation, school-embedded model that strengthens the well-being of learners, caregivers and teachers alike. Central to its SAGo2School Programme are safe-space classrooms led by facilitators trained and supervised by occupational therapists and social workers. Here, children access consistent social-emotional and developmental support. Teachers benefit from training in trauma- and neurodiversity-informed practices, while families are reached through home visits and psychosocial services that reinforce nurturing care. This integrated framework removes barriers both in households and classrooms, enabling children to remain engaged in their education.

Results: Findings from nine partner schools show that 84% of Foundation Phase learners initially identified as at-risk through Early Warning Systems successfully exit the programme, either due to good progress or after receiving the case management support required for further intervention.

Expansion: The model, rooted in local community structures, demonstrates strong potential for national expansion. By linking schools, families and external services, Khula's approach reframes schools as centres of holistic development, fostering equity and resilience for families in vulnerable contexts.

Program or Model — Intervention/Complementary and alternative

Spina Bifida Global Learning Collaborative: The Development Of A Network To Educate The Next Generation Of Clinicians, Researchers, And Advocates

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Objectives: The 2023 Spina Bifida (SB) World Congress's Global Health Symposium served as the official launch of the Spina Bifida Global Learning Collaborative (SBGLC), a transnational, multi-disciplinary group of advocates, graduate students, clinicians, and investigators dedicated to SB-related global health education from around the world.

Methods: The SBGLC aims to educate future researchers, clinicians/advocates on the professional standards developed by the major international organizations in SB, to enable knowledge exchange about treatments or care systems, what may or may not have worked in different contexts, and to connect people and science where needed.

Results: Through monthly zoom-meeting the SBGLC has inspired several activities around the globe. The SBGLC welcomes colleagues with an interest in SB care with a social justice lens and with a global health framework. Some of the activities the collaborative has led thus far are: 1) "Disability Day" in Sweden 2023 (MPH event which explored the intersection of disability and health in order to promote inclusion, advocacy, and critical reflection), 2) "After Care Needs Assessment" in Ethiopia 2024 (survey developed in collaboration with the Reach Another Foundation), and 3) "Wheelchair Provision in Theory and Practice" in New York, US 2025 (workshop focusing on practical skills for wheelchair services in global health settings).

Conclusions: The challenge often lies not in technology, but in the lack of sustained transnational collaboration to uphold practice standards and facilitate open dialogue across programs. Working together can help integrate specialized care with community support for individuals with SB more effectively and equitably.

Program or Model — Neurodevelopmental disabilities

Impact Evaluation Of The Early Childhood Program Crecer Jugando In Chile

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Objectives: This study evaluated the impact of Crecer Jugando, a preventive and promotional parenting support program for families with children aged 0–48 months in vulnerable contexts in Chile. The evaluation aimed to determine its effects on parenting skills, caregiver–child bonding, child development, parental stress, and social support networks.

Methods: A randomized controlled trial was conducted with 600 caregiver–child dyads, of which 324 completed the process. The program consisted of 10 weekly group sessions and a digital forum, implemented in both face-to-face and online formats. Impact was measured using standardized instruments (E2P, PSI-4-SF, ASQ-3, PICCOLO). Analyses included Intention-to-Treat (ITT), Local Average Treatment Effect (LATE), heterogeneous and marginal effects, as well as cost-effectiveness estimation.

Results: The program showed significant improvements in parenting skills, especially reflective and formative dimensions, and increased caregiver–child interactions (reading, singing, playing). Parental stress was consistently reduced by over 0.4 standard deviations across dimensions. Positive effects were also observed in child socio-individual development and caregiver–child bonding (teaching dimension). Effects became significant after at least three sessions. No major differences were found between online and face-to-face formats, except for slightly higher perceived social support in the latter. Cost-effectiveness ratios proved competitive compared to international benchmarks.

Conclusions: Crecer Jugando effectively strengthens parenting practices, reduces parental stress, and supports child socio-emotional development. Its flexible delivery model and cost-efficiency reinforce its scalability and sustainability. Longitudinal follow-up is recommended to assess cumulative effects on child development.

Research — Intervention/Early Intervention Program

Association Between Height-For-Age And Early Childhood Development Among Indigenous Children Aged 12-15 Months In Guatemala

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Objectives: To estimate the association between height-for-age and domains of early childhood development among indigenous children aged 12–15 months.

Methods: We analyzed data from The Saqmolo' Project, a randomized controlled trial in rural Mayan communities of Guatemala. The trial enrolled 1,200 infants aged 6–9 months at baseline. For this secondary analysis, 1,088 children with complete endline data were included. Height-for-age z-scores (HAZ) were the exposure, and developmental domain z-scores (cognitive, motor, language, social-emotional) were outcomes, assessed with the Caregiver Reported Early Development Instruments (CREDI). Descriptive analyses summarized characteristics, and multivariable linear regression estimated associations between HAZ and outcomes. Models adjusted for age, sex, poverty, food insecurity, breastfeeding, and caregiver education.

Results: Overall, 48.2% of children had stunting (HAZ < -2). Mean age was 13.0 months, and mean HAZ was -1.99 ± 1.07 . The motor domain had the lowest mean score -1.27 ± 0.75 , followed by cognitive -1.04 ± 1.04 , language -1.03 ± 0.96 , and social-emotional -0.90 ± 1.05 (all values mean $\pm$ SD). A one SD increase in HAZ was associated with improvements of 0.10–0.15 SD in developmental scores, with strongest associations in motor ($\beta=0.14$, 95% CI: 0.10–0.18) and cognitive ($\beta=0.13$, 95% CI: 0.07–0.19), and a notable association in social-emotional ($\beta=0.14$, 95% CI: 0.07–0.20). Results were consistent across sexes, with motor remaining the lowest-performing domain.

Conclusions: Higher HAZ was significantly associated with better performance across developmental domains. Findings highlight the link between nutrition and early development and underscore the need for integrated interventions promoting growth and child development in vulnerable populations.

Research — Early Childhood Development

The Transformative Power Of Love: Disability Care For Refugee And Displaced Children Through The Luvora Framework

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Children with disabilities in refugee and displaced families face a dual vulnerability: they must navigate the developmental challenges of disability while enduring trauma, instability, and exclusion caused by displacement. Standard humanitarian responses often prioritize immediate survival needs but overlook the deeper psychosocial dimensions that enable resilience and growth. This study explores unconditional love as a healing force, positioning it as a transformative and measurable principle within disability care. The objective was to conceptualise love as a therapeutic and developmental resource, examine its contribution to resilience and inclusion, and propose a love-informed framework for humanitarian settings. A qualitative narrative review was conducted, drawing on peer-reviewed studies, case reports, and program evaluations published between 2010 and 2024, focusing on refugee children with disabilities in low- and middle-income countries. The LUVORA model (Love, Uniformity, Virtue, Openness, Resilience, Acceptance) provided the analytical framework for synthesis. Findings indicate that love-centred caregiving promotes emotional regulation, strengthens adaptive functioning, and enhances social participation. Families engaged in love-informed practices reported reduced psychological stress, deeper caregiver-child bonds, and improved confidence in caregiving. Community-level initiatives embedding compassion and dignity into rehabilitation services also reduced stigma and advanced inclusion. The conclusion emphasizes that unconditional love is not merely a sentiment but a healing force capable of reshaping developmental outcomes in displacement. Embedding love-informed principles into humanitarian and disability-focused programs can enhance flourishing, restore dignity, and transform the lives of marginalised children and their families.

Research — Intervention/Psychological

Love-Informed Disability Programs: Case Studies Of Community-Based Rehabilitation Programs Embedding Compassion And Love As Therapeutic Principles

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Children with disabilities in low- and middle-income countries (LICs and MICs) face systemic challenges including stigma, poverty, and limited access to rehabilitation services. Conventional approaches often emphasize functional recovery while neglecting the profound psychosocial needs of belonging, dignity, and unconditional acceptance. This study applies a narrative analysis of 18 peer-reviewed papers published between 2010 and 2024 to examine how community-based rehabilitation (CBR) programs can embed love-informed practices, compassion, acceptance, and relational warmth into disability care. The LUVORA framework (Love, Uniformity, Virtue, Openness, Resilience, Acceptance), developed by the author, served as the guiding lens to interpret the evidence. Findings indicate that when caregivers and practitioners prioritize love-centred interactions, such as empathetic listening, shared play, and emotional affirmation, children demonstrate enhanced resilience, improved adaptive functioning, and greater social participation. Families engaged in these programs reported lower psychological stress, strengthened caregiver-child bonds, and increased confidence in navigating disability-related challenges. Moreover, community-level initiatives grounded in compassion were shown to reduce stigma, foster inclusive attitudes, and mobilize local resources for sustainable support. The analysis underscores three key contributions: (1) love-informed therapeutic practices can reshape rehabilitation outcomes beyond clinical gains, (2) culturally grounded strategies are essential to embedding compassion in service delivery, and (3) policy frameworks should recognize love as a measurable and strategic force in child development. The conclusion affirms that unconditional love is not peripheral but transformative, offering a pathway to flourishing for marginalized children and families in resource-constrained contexts.

Research — Intervention/Psychological

Universal Love As A Framework For Child Flourishing: A Pilot Project Introducing Luvora-Inspired Approaches To Child Development In LICs And MICs

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Across many low and middle-income countries (LICs and MICs), children with developmental disabilities are among the most marginalized, too often defined by deficits rather than possibilities. What is frequently missing in intervention models is not skill or knowledge, but a recognition of the humanising power of love to unlock resilience and growth. This pilot project introduces Universal Love as a practical and measurable framework for advancing child development, operationalized through the LUVORA model: Love, Uniformity, Virtue, Openness, Resilience, and Acceptance. The project's objectives are to (1) demonstrate Universal Love as a catalyst for developmental progress, (2) embed love-informed practices into caregiver, classroom, and community settings, and (3) evaluate outcomes for children and families using both qualitative and quantitative methods. A mixed-method design will be applied in two community-based rehabilitation centres and one inclusive school, combining narrative accounts from caregivers and teachers with pre- and post-intervention measures of resilience, adaptive functioning, and participation. Expected findings include enhanced self-efficacy, emotional regulation, and social participation among children, alongside reduced caregiver stress and strengthened family bonds. At the community level, it is anticipated that compassion-driven practices will reduce stigma and encourage greater inclusion. The study concludes that Universal Love is not an abstract philosophy but a scalable and culture-sensitive intervention strategy. By embedding LUVORA principles into real-world disability programs, this pilot aims to offer policymakers and practitioners a transformative model to reimagine care, education, and inclusion in underserved contexts.

Research — Intervention/Psychological

Clinical And Developmental Profiles Of First-Time Attendees To Developmental And Behavioral Pediatrics Clinics: A Multicenter Study From Türkiye

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Objectives: Developmental and behavioral difficulties are common in childhood; however, national-level data on children presenting to developmental and behavioral pediatrics (DBP) units remain scarce. This multicenter, prospective cross-sectional study examined demographic, clinical, and developmental profiles of children attending DBP outpatient clinics for the first time in Türkiye.

Methods: Eleven tertiary hospitals from diverse regions participated, with one center per city to ensure geographic representation. Only hospitals affiliated with the Ministry of Health were included. Children presenting for their first DBP visit over a three-month period were enrolled. Data were collected using a standardized online form and analyzed descriptively.

Results: A total of 3,077 children were analyzed. The median age was 21 months (IQR: 6–38). Based on Hollingshead classification, 66.5% of families were in lower socioeconomic classes (III–IV), while only 1.6% belonged to the highest class (I). Referral patterns varied by age: neonatology accounted for 33.6% (n=566) of referrals among children ≤24 months, while family-initiated referrals constituted 18.1% (n=252). Sources of referral also differed across centers, reflecting a lack of standardized criteria. Regarding developmental diagnoses, gross motor delay was most common in younger children (24.6%), whereas expressive language delay predominated in older children (62.4%).

Conclusions: Referral reasons relied heavily on clinical judgment rather than standardized approaches, resulting in significant heterogeneity across centers. These findings underscore the developmental burden across age groups in Türkiye and highlight the urgent need for nationwide standardization in referral and surveillance practices for DBP services.

Research — Advocacy for children with disabilities

Adapting The Ubuntu Program To Support Children With Disabilities And Their Caregivers In An Urban Indian Clinical Setting

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Objectives: To adapt and pilot the Baby Ubuntu and Ubuntu caregiver support programs (for children with disabilities under 10 years) in an urban Indian clinic.

Methods: The Baby Ubuntu and Ubuntu programs are well-established, low-cost, community-based interventions to support caregivers of children with complex neuro-disabilities in LMICs. Ten facilitators (nine clinicians and one parent expert with lived experiences of caring for a child with disability) from our clinic were trained in Ubuntu program. Using the WHO-CST adaptation and implementation guide, we adapted these programs for cultural and contextual relevance. We conducted a pilot of the adaptation at our clinic with caregivers of seven children with disabilities.

Results: Key adaptations to training material: translation into local language (Hindi), addition of culturally appropriate content (icebreakers, disability rights in India, and local toys), and merging of manuals into a single resource (enriched with local stories, images, videos, and caregiver testimonials). Adaptations to implementation for program feasibility and acceptability: incorporating caregivers' recommendations (scheduling weekly sessions at preferred times), including children in sessions, and an additional home visit. Six caregivers (all university graduates) participated in a post-pilot discussion, highlighting empowerment through peer support and unique value-add of the parent expert's experiences.

Conclusions: This pilot demonstrated that adaptation is feasible, culturally relevant, and acceptable in an urban clinical setting with higher caregiver education levels; and deliverable in ways that meet caregivers' needs. It has strong potential for scale-up in similar urban Indian clinical settings, and generalizability of this adaptation to rural settings needs to be assessed.

Program or Model — Intervention/Early Intervention Program

How Education Workers Support Young Children In Venezuelan Refugee Communities

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Early childhood education can serve as a protective mechanism against the lasting adverse effects of forced displacement on a child's development and well-being. Educational workers play a crucial role in supporting young children's emotional development during this critical period. This study interviews five early childhood education workers from refugee camps in Boa Vista, Brazil, about their practices to support the emotional well-being and development of Venezuelan refugee children. The primary strategies used by education workers to support children's emotional needs included but were not limited to identifying signs of concern, building trust, using affirmation and acting with affection, using play as a pedagogy, fostering relationships with the community, sharing responsibilities with other staff members, and acting with cultural sensitivity and self-awareness. These findings align with the strategies observed by previous studies in the field. However, it should be noted that these practices require a considerable amount of emotional investment on the part of educators, who must be institutionally supported and at the policy level.

Research — Children in crisis, humanitarian emergencies

Associates Of Maltreatment In Children With Developmental Difficulties And Associated Factors From A Middle-Income Country, Turkey

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Objectives: Children with developmental difficulties are more likely to be maltreated globally, but the associated factors for maltreatment of children with developmental difficulties in low and middle-income countries (LMICs) are unknown. We aimed to determine the associates of child maltreatment in children with developmental difficulties (DDs) from Turkey, a middle-income country.

Methods: In a retrospective study design, of all children with DDs aged 0-18 years newly assessed at Ankara University School of Medicine, Department of Pediatrics, Developmental-Behavioral Pediatrics Division between Jan 2020-Aug 2024 and children who have legal records on any kind of maltreatment were recruited. Developmental risk factors were conceptualized according to bioecological theory.

Results: The sample comprised of 68 children who had a record on a kind of maltreatment (50% girls, median age: 31 (25-75%=9.0-47.8) months). Most of the families reported financial problems (73.5%) in the Expanded Guide for Monitoring Child Development. Twenty-two children (32.4%) had a chronic health condition, 37 (54.4%) had developmental delay. Emotional abuse was the most common maltreatment type (61.8%), followed by physical abuse (22.1%) and medical neglect (26.5%). Children with hearing loss and malnutrition experienced significantly more medical neglect (OR:6.9; %95CI:1.1-41.4 and OR:7.2; %95CI:1.9-26.7, respectively).

Conclusions: The results of this study showed that the most common legally reported maltreatment was emotional abuse for children with DDs from a tertiary care clinic, Turkey. Comprehensive research should be conducted on methods to prevent and detect all maltreatment types in children with DDs especially with hearing loss and malnutrition.

Research — Neurodevelopmental disability

Development And Validation Of The Nurturing Parenting Beliefs And Behaviors Scale (NPBBS): Measuring Parenting In High Andean Peru

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Objectives: Shifting parents' beliefs and behaviors to provide more nurturing care can strengthen early child development (ECD). Despite growing interest in supporting parents' provision of nurturing care globally, few parenting measures have been validated for use outside of Minority World contexts. Instruments that capture parents' beliefs and behaviors can offer a practical, scalable, and cost-effective way to monitor nurturing care, which can improve children's outcomes. This study aims to develop, describe, and provide validity evidence for an efficient, culturally relevant instrument to measure local nurturing parenting beliefs and behaviors regarding responsive caregiving and early learning within a sample of caregivers of 2- to 5-year-olds in Cajamarca, Peru.

Methods: We developed the self-reported parenting instrument, Nurturing Parenting Beliefs and Behaviors Scale (NPBBS), by conducting qualitative interviews, focus groups, cognitive testing, and quantitative pilot testing. The sample included 2,274 mothers of children (mean age = 29.41 months, 49.56% female) from Cajamarca, Peru. We used exploratory and confirmatory factor analysis to examine the factor structure of the instrument, and correlations and regressions to validate it against parenting and child development outcomes.

Results: Results indicate a two-factor structure reflecting nurturing parenting beliefs and behaviors. Both parenting beliefs and behaviors subscales correlated positively with parental stimulation and learning materials and positively predicted early childhood development.

Conclusions: Programs can use the NPBBS to assess how they shift parents' beliefs and behaviors to strengthen children's development. This instrument can be used as a starting point for measuring parenting in other Majority World contexts with similar caregiver characteristics.

Research — Early Childhood Development

DAKA: Innovative Technology-Based Strategy For Evaluation, Diagnosis, And Comprehensive Support For Autism Across The Lifespan

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Objectives: The DAKA model (Developmental Assessment Key Approach) addresses the complexity of autism through a biopsychosocial and clinically specialized lens, providing timely support to families in low-resource settings. It integrates early detection, evaluation, diagnosis, intervention, caregiver training, and the strengthening of support networks through a flexible, evidence-based system that combines digital and in-person modalities.

Methods: From 2021 to 2025, a mixed-methods approach was implemented, combining quantitative and qualitative user satisfaction data. The COVID-19 pandemic prompted the incorporation of telematic tools such as Zoom, enabling continuity of care and expanded territorial reach. Tools such as QChat and FUNCAS were used for early detection, while diagnostic assessments and therapeutic interventions included strategies like Relationship Development Intervention (RDI) and online caregiver training.

Results: A total of 243 early detection processes, 118 diagnostic evaluations, and 16 therapeutic support processes were recorded. Four complementary programs—family training, intersectoral capacity development, family accompaniment, and a volunteer-based respite care system—showed high user satisfaction and improved access in underserved areas.

Conclusions: DAKA has proven to be an effective and scalable strategy for low- and middle-income countries. The telematic approach, initially adopted in response to the pandemic, has demonstrated high impact in terms of sustainability and replicability of the model across diverse contexts.

Program or Model — Neurodevelopmental disabilities

Transforming Early Childhood Development At Scale: AI-Supported, Cost-Effective Alternatives For LMICs

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Objectives: More than 250 million children in low- and middle-income countries (LMICs) fail to reach their developmental potential due to poverty and inadequate early childhood support. Substantial gaps persist despite in-person national early childhood development (ECD) programs, increasing the need for scalable, cost-effective alternatives to complement or extend services. This study evaluated whether a cellphone-based, AI-supported platform can deliver such support in resource-constrained settings.

Methods: The study was a 3-arm cluster randomized controlled trial, focusing on mothers with children 3-9 months of age in Cajamarca, Peru. Clusters were randomly assigned to control (no intervention), digital parenting intervention (DI), and home visiting (HV) intervention. DI received ECD activities and advice through the Afini digital platform. HV received in-person visits following the national ECD HV curriculum. The primary outcome was children's overall development at 2.5 years.

Results: Among 2,461 caregiver-child dyads, both the DI and HV programs significantly improved ECD (effect sizes: DI +0.10 SD; HV +0.16 SD). DI achieved gains at less than 5% of the cost of HV, making it a highly cost-effective, scalable alternative for expanding personalized ECD services.

Conclusions: AI-supported digital platforms can deliver meaningful and cost-effective improvements in ECD at scale. Beyond this trial, the Afini platform has reached more than 250,000 families across 9 countries and is supported by the UNICEF Innovation Fund. This highlights the potential of digital innovation to complement national ECD programs and provide a viable policy option for governments and international agencies to close persistent gaps in ECD across LMICs.

Research — Intervention/Early Intervention Program

Measuring Caregiver-Perceived Attachment In Low-Resource Settings: Development Of A Short Questionnaire In The Peruvian Andes

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Objectives: Caregivers' perceptions of their attachment relationship with their child can influence and reflect the success of home visiting and early stimulation interventions. However, the lack of effective assessment tools limits understanding of these dynamics. The Attachment Relationship Inventory—Caregiver Perceptions 2–5 years (ARI-CP 2–5), a 48-item caregiver-report questionnaire, measures perceived attachment in children aged 2–5 years but has not been validated for caregivers with low literacy in remote low- and middle-income (LMIC) settings. This study aimed to develop a culturally adapted short form of the ARI-CP 2–5 for caregivers in the Peruvian Andes.

Methods: We used mixed methods to refine the questionnaire through qualitative methods and psychometric testing via confirmatory factor analysis (CFA) in a validation sample of N=1,000 mothers (mean age=28.28, SD=6.75) of children aged 24–36 months.

Results: A simplified two-factor model (secure vs. insecure attachment) showed strong reliability and predictive validity for child outcomes. A four-factor model including all four attachment styles can be retained for added theoretical insights.

Conclusions: The final 21-item questionnaire provides a practical, culturally adapted, and valid tool for assessing caregivers' perceptions of attachment relationships in an understudied population. We emphasized simplified language, positive phrasing, and reduced response options to improve clarity. Beyond its utility in research and practice, the study offers a framework for adapting self-report assessments for settings with participants who have less familiarity with rating scales. This tool can support future research and programs by providing reliable insights into caregiver-child attachment in LMIC contexts.

Research — Early Childhood Development

Community Health Promoters: A Strategy to Promote Early Childhood Development in Jalpatagua, Guatemala

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Objectives: To promote community health and early childhood development through the training of community health promoters, complemented by pediatric outreach clinics and individualized interventions in rural communities of Jalpatagua, Guatemala.

Methods: The program was implemented in six rural communities with high prevalence of malnutrition and poverty. Local residents were trained as health promoters, responsible for monitoring child growth and promoting early development. Interventions included home visits and medical outreach sessions. Children received micronutrient and macronutrient supplementation and follow-up from community health promoters.

Results: Forty-seven cases of child malnutrition were identified. After the intervention, 20% of children reached normal nutritional status, and 47% showed improvement in growth indicators. Beyond physical recovery, the intervention fostered caregiving practices that strengthened stimulation and early development. The close support provided by health promoters ensured adherence to treatment, restored family confidence, improved responsiveness to health risks, and raised awareness of the importance of early childhood development.

Conclusions: By improving nutritional status, key processes in children's development, learning, and social interaction are strengthened. The role of community health promoters proved decisive: their belonging to the community built trust and allowed for consistent family follow-up, ensuring the sustainability of caregiving practices. This represents an effective and replicable strategy for vulnerable rural communities.

Program or Model — Intervention/Nutritional services

Addressing Early Childhood Development And Developmental Difficulties (ADDECD): A Regional Program For Service Providers

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Objectives: In this Model Program, we present experiences from an online training program titled "Addressing Early Childhood Development and Developmental Difficulties (ADDECD)" for service providers in the UNICEF Europe and Central Asia Region (ECAR) on early childhood development (ECD) and developmental difficulties.

Methods: In collaboration with UNICEF ECA Regional Office and an expert team from the International Developmental Pediatrics Association (IDPA), the ADDECD training package was constructed. The expert team comprised of five experienced regional ECD experts. The eight ADDECD modules were developed to cover the conceptualization of ECD; partnering with parents to support ECD; addressing common health-related and psychosocial developmental risks; addressing common developmental difficulties; feeding and sleep difficulties; and non-evidence-based practices specific to the region. Each module was supplemented with real case stories and videos, handouts, additional resources, and hands-on exercises promoting changes in service delivery.

Results: The ADDECD program was delivered over eight consecutive weeks in 2025 via online two-hour sessions in English with simultaneous translation to eight regional languages. Participation was capped at 200 service providers, representing 21 ECAR countries. All materials and recorded translated sessions were made available by UNICEF for self-paced learning and integration into national systems for professional development. Experiences from the training and results of the pre/post training adapted Self-Assessment Questionnaire will be presented.

Conclusions: Lessons learned from UNICEF-IDPA collaboration in a regional online training program may provide input on the feasibility and application of online training to address the training gaps of service providers regarding ECD and developmental difficulties.

Program or Model — Early Childhood Development

Children's Spanish And Mayan Vocabulary Scores And Home Language Environment In Yucatec Mayan Communities: A Pilot Study

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In Yucatec Mayan communities, Mayan language use is rapidly declining, particularly among children (INEG, 2018). There is limited research on Yucatec children's bilingual language development. The current study focused on examining young Mayan children's language development by exploring their language use at home and measuring their Spanish and Mayan vocabulary. Thirty mothers in rural Yucatec Mayan communities completed questionnaires and their children (M=4.33 years, SD=0.23) completed Spanish and Mayan receptive vocabulary assessments. Notably, the research team developed these new Mayan assessments in collaboration with local organizations. Analyses were conducted to evaluate children's performance in both language assessments and then examined whether and how scores differed by language used at home. Children's receptive vocabulary scores were significantly lower in Mayan (M=7.71, SD=8.12, n=24) than Spanish (M=26.46, SD=10.68), $t=6.62$, $p<.001$, $d=1.35$. Children whose mothers reported they spoke a little Mayan (n=9) had higher receptive Mayan vocabulary scores (M=14.11, SD=8.55) than those who spoke no Mayan (M=3.00, SD=3.19, n=13), $t=3.72$, $p=.004$, $d=1.87$. Children who communicate with their mothers mostly in Spanish and a little in Mayan (M=15.40, SD=9.79, n=5) scored higher in Mayan receptive vocabulary than those who spoke only in Spanish with their mothers (M=5.24, SD=6.03, n=17), $t=2.88$, $p=.009$, $d=1.46$. Using newly developed assessments, our results reflect that while Mayan is not being used much at home in Yucatec Mayan communities, the home language environment influences children's Mayan receptive vocabulary scores. More language research in Yucatec communities is necessary to better design interventions and prevent language and culture loss.

Research — Early Childhood Development

Abstract ID: 171

Risk Of Hearing Loss And Its Impact On The Development Of Low-Birth-Weight Neonates In Guatemala.

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Objectives: To identify risk factors associated with hearing loss in low-birth-weight neonates admitted to the National Neonatology Unit of Hospital Roosevelt, Guatemala.

Methods: An analytical cross-sectional case-control study was conducted. Cases included 63 low-birth-weight neonates (1.5–2.4 kg) who did not pass neonatal hearing screening with otoacoustic emissions in two consecutive evaluations. Controls were 63 low-birth-weight neonates who passed the screening. The study was carried out between January 2022 and December 2023. Clinical and perinatal data were collected from medical records and analyzed using Microsoft Excel and Epi Info.

Results: Among cases, 60.3% were male. Most were late preterm (73%) and 93.6% had low birth weight. The most frequent clinical conditions were prematurity (25.4%), perinatal asphyxia (15.9%), neonatal respiratory distress syndrome type I (15.9%), neonatal pneumonia (14.3%), and neonatal jaundice (11.1%). No statistically significant associations were identified ($p>0.05$). However, clinically relevant trends were observed with Apgar score <4 (OR = 1.71), aminoglycoside exposure (OR = 1.56), and neonatal jaundice (OR = 1.28).

Conclusions: These findings highlight the importance of systematic neonatal hearing screening programs and early follow-up in vulnerable neonatal populations, as they enable timely detection and intervention to improve long-term outcomes.

Research — Risk factors for developmental disabilities

Abstract ID: 172

Unmet Health Care Needs Of Healthy Co-Twins Whose Sibling Has A Chronic Health Condition From Turkey

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Objectives: Co-twins of children with chronic health condition (CHC) may have unmet needs which has not previously studied. We aimed to examine the unmet needs of co-twins whose sibling has a CHC.

Methods: Using a cross-sectional observational design, families whose one of the twins aged 1-8 with a CHC and a healthy co-twin that were followed up at the Ankara University School of Medicine Department of Pediatrics, Developmental Behavioral Pediatrics Division between January 1,2022-January 1,2025 were invited to this study to assess the healthy co-twin for unmet needs. The Expanded Guide for Monitoring Child Development was used to gain comprehensive information.

Results: Of 65 twin pairs followed in the study period; 24 (36.9%) were not included as both siblings had CHC. Remaining 33(50.7% of the recruited sample) children, whose parents provided informed consent for this study were included in the sample, (60.6% boys, mean age:51±17.8months). Twenty-six (78.8%) co-twins with CHC were born as preterm with a median gestational age of 34 weeks (IQR:26-38). Most (54.5%) mothers reported feelings of depression. Fifteen (45.5%) children had unmet needs in health care such as routine childhood health care, and 12 (36.4%) in education needs. Eighteen (54.5%) co-twins play with other kids <1 times a week.

Conclusions: Co-twins of children with CHC in Turkey, an upper middle-income country experience unmet needs in health, activities, participation and education. Clinicians and policy makers should make sure that “healthy” co-twins of children with CHC receive proper holistic care.

Research — Early Childhood Development

Evaluating The Accuracy Of Face2Gene Phenotyping Tools In South African Children With Neurodevelopmental Disorders

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Objectives: Computational phenotyping tools, like Face2Gene, are increasingly used to support genetic diagnosis by analysing facial features. These tools perform well in Global North populations but are less accurate in other groups. This study aimed to assess the performance of Face2Gene's DeepGestalt, FeatureMatcher, and D-Score in South African children with neurodevelopmental disorders (NDDs) and unaffected controls.

Methods: Facial photographs of 301 children from the NeuroDev South Africa study were analysed including 36 children with NDDs with a confirmed molecular diagnosis, 176 with NDDs without a confirmed molecular diagnosis, and 89 controls. Diagnostic accuracy of DeepGestalt and FeatureMatcher was assessed by the presence of the correct diagnosis among the top-1 and top-10 ranked suggestions generated. D-Scores across sub-groups were compared to determine the tool's sensitivity, specificity, and predictive value for detecting dysmorphia.

Results: Among children with genetic diagnoses, 19% had the correct condition ranked within the top-1 and 34% within the top-10 suggestions. Accuracy improved to 33% (top-1) and 61% (top-10) when limited to conditions included in the DeepGestalt training set. Compared with clinician assessment of dysmorphism, the D-Score showed 78% sensitivity and 42% specificity. It had a low positive predictive value (21%) but a high negative predictive value (91%), making it reliable for ruling out dysmorphia, but not ruling in.

Conclusions: Face2Gene tools show promise, but current performance in South African children limits clinical utility. These findings underscore the need for datasets that represent children from diverse populations to enhance diagnostic accuracy of computational phenotyping tools

Research — Use of technology in diagnosis

Scaling Disability-Inclusive Early Childhood Development (ECD) Services Through Government Systems: A Pilot Model From Rural India

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Objectives: To describe the design and learnings from implementation of a model for early childhood development (ECD) promotion, early identification, and intervention of developmental delays and disabilities in children under six years of age, embedded within and strengthening existing government systems.

Methods: Government departments partnered with nonprofits experienced in training frontline workers (FLWs) in ECD and community-based disability interventions to deliver the Inclusive ECD Program, a three-year pilot in rural India. Partners co-designed and implemented training, provided post-training support, and applied a systems lens to assess strengths and challenges within government structures. A cascade model was developed: FLWs were trained as peer trainers to deliver the Guide for Monitoring Child Development (GMCD), while government health officers were trained as trainers on Ubuntu packages—which are evidence-based, family-centred interventions supporting caregivers of children with developmental disabilities.

Results: Fifty-four FLWs were trained as GMCD trainers and 18 health officers as Ubuntu trainers. These trainers subsequently trained 827 FLWs in GMCD, who have begun implementing ECD promotion, early identification, and intervention in the field. For the Ubuntu component, training of government health officers as trainers has been completed, with training of frontline functionaries planned. Government ownership and structured post-training support sustained FLW motivation, addressed systemic and individual challenges, fostered interdepartmental coordination, and streamlined referral pathways.

Conclusions: Strong government ownership and active partnerships are essential for developing replicable, systems-based models for disability-inclusive ECD services. The Inclusive ECD Program demonstrates potential for scalability and adaptability, offering a roadmap to strengthen early intervention across India

Program or Model — Early Childhood Development

Comparison Of Medical Model And ICF-Based Reports For Children With Special Needs In Serving The Children And The Families

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Objectives: We aimed to examine a critical gap by comparing the content of the two national disability reporting systems in Turkey: a medical model-based “Disability eligibility report (ESKR which was valid till 2019)” with the World Health Organization International Classification of Functioning, Disability and Health (ICF)-based “Report for children with special needs (COZGER)”.

Methods: In a retrospective design, this study recruited ESKRs from the first four months of 2016 and COZGERs from the first four months of 2023 that were reported from Ankara University School of Medicine Department of Pediatrics and compared.

Results: The sample included 566 children (36.2% girls) with 289 (51.1%) COZGER and 277 (48.9%) ESKR reports. The median age of children who had COZGER was 77.0 (min-max:1-203) months and was significantly lower than those with ESKR (median:88.0 min-max:1-255), $p=0.001$. COZGER incorporated 49 pediatric-specific diagnoses that were not included in the ESKR regulation such as child metabolism, immunology, and genetics. The identification rate of high-level special needs that enables the child and the family the most extended financial and social rights and benefits was 50.7% in COZGER system which was significantly higher than 22.4% in ESKR system ($p=0.001$).

Conclusions: Our results imply that the COZGER assessment provided rights and benefits to children with special needs at earlier age, with more coverage of children with chronic diseases and more eligibility for social rights when compared to ESKR and offer potential implications for other low- and middle-income countries.

Research — Intervention/Inclusion

Understanding Variation In Implementation Of The Guide For Monitoring Child Development Early Intervention Program In India And Guatemala: A Qualitative Analysis

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Objectives: To Identify key implementation determinants distinguishing higher- versus lower-performing clusters in delivering the Guide for Monitoring Child Development (GMCD) intervention in India and Guatemala within a hybrid type 1 effectiveness-implementation trial.

Methods: We purposively sampled clusters based on clinical effectiveness (Bayley and HOME) to enable comparison. We conducted interviews with 21 community health workers (CHWs) and 13 supervisors across selected clusters in India and Guatemala. We used template analysis guided by the constructs from Consolidated Framework for Implementation Research. Each transcript was double-coded and agreed upon by an anthropologist and one of eight GMCD experts, all blinded to cluster performance during coding.

Results: Interviews revealed similar salient constructs at both sites, yet these explained variation in cluster performance only in India, not Guatemala. In India, in high-performing clusters CHWs reported adapting the GMCD questions to ease comprehension by caregivers and relocating to health centers when home responsibilities disrupted caregiver engagement (adaptability). Also, Indian CHWs described families' receptivity and motivation to participate, and shared specific praise strategies and reminders of children's progress to encourage participation (engaging/innovation recipients). In low-performing clusters, barriers to engaging included caregivers' migration, and expectations of financial incentive (engaging/innovation recipients). Across sites and clusters, facilitators included positive perceptions of the GMCD and its alignment with implementing organizations' core missions.

Conclusions: Findings highlight the importance of organizational culture, perceived value of the GMCD, adapting to contextual factors, and engaging relationships with recipients for implementation outcomes. Cluster heterogeneity in Guatemala, unlike in India, likely hindered identification of explanatory factors.

Research — Intervention/Early Intervention Program

Availability Of Services Supporting Child And Family Wellbeing In Adiyaman, Hatay And Kahramanmaraş Provinces In The Aftermath Of 2023 Türkiye-Syria Earthquake

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Objectives: To map the availability of services supporting child and family wellbeing in 2023 Türkiye-Syria earthquake affected provinces in Türkiye.

Methods: Desk review, development of interview guides and mapping tools, field visits, semi-structured interviews and focus group discussions with established contacts, including families and children. To ensure methodological consistency, field visits and interviews were conducted by the same researcher with technical assistance of UNICEF Türkiye in June-July 2024. Open-ended questions and inductive approach were used to interview providers and administrative staff from local municipalities, health, education, social protection sectors and not-for-profit organizations operating in three provinces. The availability of services was mapped and summarized using developed tools.

Results: Results were informed by visit to 56 sites (healthcare facilities, play areas, sports complex, service hubs, container cities, rehabilitation centers, schools, living spaces) and 81 interviews lasting 20-90 minutes. Developmental monitoring, daycare and early education, responsive caregiving, promotion of parenting competence and fatherhood, and mental health services were less available in comparison to other types of services. Overall, services that support children with developmental difficulties and their families were largely insufficient to meet the needs. Services focusing on 0-3 age group and fatherhood, compared to 4-6 age, preadolescence and adolescence, motherhood, and lactation period were the scarcest.

Conclusions: Strengths: High internal validity supported by interviewing diverse respondents well-positioned to describe service availability and by consistent data collection by a single researcher. Limitations: Results biased towards provincial centers and engaging participants. Results were used by UNICEF to inform subsequent early childhood development programming.

Research — Children in crisis, humanitarian emergencies

Age Correction For Interpreting Developmental Assessments Of Young Children With Unknown Birth Weight And Gestational Age

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Objectives: To pilot a pragmatic approach for correcting age in developmental assessments when birthweight and gestational age are undocumented.

Methods: This approach relies on two principles: caregivers can typically recall birthweight within broad intervals, and evidence suggests similar developmental outcomes whether preterm subgroups are defined by birthweight or gestational age. Caregivers were sequentially asked: "Was your child born smaller than 2500 g?"; if yes, "Smaller than 2000 g?"; if yes, "Smaller than 1500 g?". Reported values of 2500, 2000, or 1500 g were coded as 2499, 1999, or 1499 g to account for "heaping" at multiples of 500. Corrected age was assigned by subtracting four weeks for recalled birthweight 2001–2500, eight weeks for 1501–2000, and twelve weeks for ≤1500 g, approximating the 50th percentiles of fetal growth curves.

Results: The approach was introduced to community health workers (CHWs) delivering the Guide for Monitoring Child Development in rural India and Guatemala. Initial challenges included grasping the rationale for age correction, but once understood, CHWs reported the method was simple, practical, and helpful in addressing systemic documentation gaps and the complexity of conventional age correction.

Conclusions: This pragmatic approach provides a feasible solution where gestational age and precise birthweight data are unavailable. It will occasionally classify growth-restricted term children as preterm but offers flexibility by moderating developmental expectations in higher-risk children. Validation studies are needed to determine whether correcting "exactly" versus "approximately" alters outcomes, and adaptations may be required in populations with varying prevalence of small-for-gestational-age births and maternal anthropometrics.

Program or Model — Early Childhood Development

Resilience And Its Associates In Young Children With Medical Complexity From Turkey

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Objectives: Resilience can counterbalance difficulties even in case of significant medical conditions. We aimed to assess resilience and associates among young children with medical complexity in Turkey.

Methods: In this cross-sectional study, 2-6 year old children with medical complexity (meeting all criteria: a)chronic health conditions affecting multiple organ systems, b)functional impairments, c)requiring high healthcare services, d)reliance on medical tool/technology) followed at Ankara University School of Medicine Developmental Pediatrics Division between June 1st2021-June1st2025 were invited and whose families provided consent were included. The Expanded Guide for Monitoring Child Development and the Resilience Scale for Young Children were used to assess resilience and related factors.

Results: Of 3918 children followed during the study period 61(1.6%) had medical complexity and 39(63.9%) comprised the sample (median age: 52.0months, min-max:24-74,51.3% girls). The most common diagnosis was cerebral palsy (19children,48.7%) and most prevalent reliance of medical tool was having a nasogastric tube in 15(38.5%) children followed by tracheostomy (35.9%).Most children(94.9%) exhibited developmental delays in multiple domains. Fifteen (38.5%) mothers reported feelings of depression, and this was associated with the child's lower ability to focus (OR=5.70,95%CI:1.37-23.26,p=0.013) in the resilience scale. Children whose mothers had<12 years education showed a significantly lower frequency of having their own favorite toys/books (OR=3.93,95%CI:1.03-14.99,p=0.041) and were less frequently observed to appear cheerful (OR=5.50,95%CI:1.22-24.81,p=0.020)

Conclusions: Our results imply that mother's education and depression are associated with their child's resilience and the importance of providing biopsychosocial interventions to promote resilience.

Research — Neurodevelopmental disabilities

Smartphone-Based Support For Child Development In A Rural Setting: An Individually Randomized Pilot Trial In Guatemala.

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Eva Tuiz

Objectives: Test the feasibility of a smartphone app, BebeApp, that provides child development advice in a rural area of Guatemala.

Methods: We conducted a pilot randomized trial to evaluate the feasibility of implementing BebeApp, an app delivering evidence-based, age-specific advice on breastfeeding, complementary feeding, sleep, and developmental support. The trial took place in Tecpán, Chimaltenango, with two groups: the intervention group used the app, while the control group received a printed child development advice sheet. Inclusion criteria: literate caregiver with an infant aged 0-28 days. A mixed-methods evaluation was conducted using the RE-AIM framework to assess usability, usefulness, and satisfaction through questionnaires and semi-structured interviews.

Results: Forty-one dyads were enrolled; 40 completed the study. Usability was acceptable, though no statistically significant differences were found between pre- and post-surveys. In interviews, caregivers reported initial difficulties using the app but gained confidence after a training session. Responses regarding usefulness and satisfaction were positive. Caregivers often noted that BebeApp was their only source of child development information outside their family.

Conclusions: Caregivers in Guatemala responded positively to BebeApp. Given the need for child development programs in low-income rural settings, apps may provide a feasible method to deliver services directly to caregivers.

Research — Intervention/Early Intervention Program

Factors Associated With Social Communication Functioning In Children With Autism Spectrum Disorder From Turkey

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Objectives: To identify factors associated with social communication functioning (SCF) in young children diagnosed with ASD in Turkey, an upper-middle income country.

Methods: Using a cross-sectional design, we recruited children newly diagnosed as ASD aged 24-60months who were admitted to Ankara University School of Medicine Developmental Pediatrics Division (AUDPD) between January 1st2025-September 1st2025. All children received a comprehensive developmental assessment including the Expanded Guide for Monitoring Child Development, the Autism Social Communication Functioning: Social Communication and the Childhood Autism Rating Scale–Second Edition (CARS-2).

Results: Of 661 children admitted to AUDBP as in the study period, 57(8.6%) were diagnosed as ASD and 41(6.2%) that aged 2-5 comprised the study sample (87.8% boys) with a median age of 28(min-max:24-60) months. Almost all children had expressive language delay (97.6%) and 26(63.4%) had cognitive delay. Daily performance for SCF were Level-IV for 20(48.8%) children, the best capacity for SCF were at Level-III for 22(53.7%) children. Daily screen exposure>4hours was significantly associated with lower level in the capacity of SCF (OR=0.222,95%CI:0.056–0.889; p=0.028). The CARS scores showed a very strong negative correlation with performance ($\rho=-0.713, p=0.001$) and a strong negative correlation with capacity of SCF ($\rho=-0.610, p=0.001$). Severe cognitive delay was correlated with lower performance($\rho=-0.488, p=0.001$) and capacity($\rho=-0.470, p=0.002$) of SCF.

Conclusions: We found a gap between young children's capacity and performance in SCF from Turkey. To improve SCF, family-centred interventions must target lowering screen exposure as well as supporting cognitive and relating development of young children with ASD.

Research — Neurodevelopmental disabilities

An After-School Care Model To Expand Holistic Development Of Children And Adolescents In Chihuahua, Mexico

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Background: Children and adolescents (NNA) in Chihuahua often fail to reach optimal development in rural and marginalized urban areas due to structural barriers limiting access to healthy food, psychological support, quality education, and sports and cultural activities.

Objectives: To enhance the holistic development of children aged 3–15 in Chihuahua in physical, academic, emotional, and cultural domains through the Ampliando el Desarrollo de la Niñez (ADN) Model.

Methods: ADN provides healthy meals, psychological care, and cultural, sports, and academic workshops in public schools, shelters, daycare centers, or community centers, for four hours daily, Monday to Friday, in after-school hours. To evaluate impact, a structured questionnaire was applied at the beginning and end of the 2023–2024 school year in 27 communities with 4,666 children. A paired t-test was used, with significant changes at $p < 0.05$.

Results: Since 2007, the program has reached 74,217 children in 314 sites. Evaluation of the last school year showed increases in fruit consumption (4.14 → 4.38, $p=0.022$), handwashing before meals (4.41 → 4.52, $p=0.029$), physical activity (60 min/day: 3.28 → 3.57, $p=0.000$), homework completion (4.06 → 4.21, $p=0.011$), teacher motivation (4.30 → 4.40, $p=0.047$), conflict resolution without harming others (3.96 → 4.11, $p=0.022$), and resistance to negative influences (3.95 → 4.09, $p=0.051$). Screen time decreased from 2.53 → 2.40 ($p=0.07$).

Conclusions: The ADN Model demonstrated a positive impact on health habits, physical activity, school environment, and social support.

Program or Model — Intervention/Complementary and alternative

Abstract ID: 185

Evaluation Of The Fidelity Of Community Health Workers To The International Guide For Monitoring Child Development (GMCD) In Guatemala

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Aim: The International Guide for Monitoring Child Development (GMCD) is a monitoring and intervention package for supporting early childhood development (ECD) and addressing developmental difficulties. As part of a clinical trial task-shifting the GMCD to community health workers (CHWs) in Guatemala, we aimed to evaluate CHWs' fidelity to the GMCD protocol.

Methods: We trained CHWs from non-governmental organizations over six days in the use of the GMCD. We collected sociodemographic data. To evaluate fidelity, we created a checklist containing 34 rules that should be followed for optimal implementation. The checklist was broken down into 3 sections, rules that apply before the GMCD implementation, during and after. The fidelity evaluation was carried out during the CHW's first implementation after training. We performed a lineal regression analysis to investigate the correlation between CHW education level and fidelity.

Results: Of 50 trained CHWs, we evaluated 36. The overall fidelity of the GMCD protocol was 72%. Fidelity before the intervention was 85%, 73% during and 61% after. Simple lineal regression analysis showed no statistically significant differences in CHWs fidelity and educational level ($p=0.64$)

Conclusions: We found that CHWs had acceptable fidelity to the GMCD rules after training and that education did not have a significant impact on fidelity. Furthermore, our results suggest that rules in the after section may need additional focus in the training. Our analysis demonstrates that CHWs can implement the GMCD with satisfactory fidelity which could be an avenue to expanding ECD services in low- and middle-income countries.

Research — Early Childhood Development

Abstract ID: 186

Implementing The Nursing Child Assessment Satellite Training (NCAST) Scale With Primary Caregivers In Rural Areas Of Guatemala

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Objectives: Share lessons learned from implementing the Nursing Child Assessment Satellite Training (NCAST) scale in rural areas of Guatemala.

Methods: As part of a clinical trial, we implemented NCAST with primary caregivers to evaluate caregiver–infant interaction during feeding. Assessments were conducted in the caregiver's home at four time points (newborn, 6, 12, and 18 months). Throughout the trial, the team met regularly to discuss and address challenges that arose.

Results: From January 2024 to July 2025, 217 NCAST assessments were completed with caregivers and their infants. Initially, caregivers often avoided interacting with their babies, hid their faces while being recorded, or detached their infants from the breast to end the video. As infants grew, they began noticing our presence, which distracted them. Our solution was to move to a space where the infant could not see us, allowing caregiver–infant interaction to occur more naturally. Caregivers also expressed embarrassment about the food they provided. At times, infants had already been fed; to address this, we began scheduling visits according to caregivers' reported feeding times.

Conclusions: Although NCAST was originally developed in the United States, we successfully adapted it to support authentic caregiver–infant interactions. Our experience demonstrates the feasibility of implementing NCAST in rural Guatemalan settings.

Program or Model — Intervention/Behavioral

Abstract ID: 187

Impact Of The Ampliando El Desarrollo De La Niñez (ADN) Model On The Educational, Physical, And Psychosocial Wellbeing Of Children In Chihuahua.

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Background: Children and adolescents in Chihuahua often fail to reach optimal development in rural and marginalized urban areas due to structural barriers limiting access to healthy food, psychological support, quality education, and sports and cultural activities.

Objectives: To assess, from the perspective of children aged 3–15, the impact of the ADN Model on their educational, physical, and psychosocial development.

Methods: The intervention provided healthy meals, psychological care, and cultural, sports, and academic workshops for four hours daily, Monday to Friday. A non-experimental, cross-sectional design was used. A structured questionnaire was administered at the beginning and end of the 2023–2024 school year in 27 communities with 4,666 children. A paired t-test was applied, with significant changes defined as $p < 0.05$.

Results: Fruit consumption increased from 4.14 → 4.38 ($\Delta=+0.24$, $p=0.022$); handwashing before meals from 4.41 → 4.52 ($\Delta=+0.11$, $p=0.029$); daily physical activity (60 min) from 3.28 → 3.57 ($\Delta=+0.29$, $p=0.000$); perception of smoking risk from 3.63 → 4.02 ($\Delta=+0.39$, $p=0.018$); homework completion from 4.06 → 4.21 ($\Delta=+0.15$, $p=0.011$); teacher motivation from 4.30 → 4.40 ($\Delta=+0.10$, $p=0.047$); conflict resolution without harming others from 3.96 → 4.11 ($\Delta=+0.15$, $p=0.022$). Screen time decreased (2.53 → 2.40, $\Delta=-0.13$, $p=0.07$). Resistance to negative influences also improved (3.95 → 4.09, $\Delta=+0.14$, $p=0.051$).

Conclusions: The ADN Model demonstrated a positive impact on health habits, physical activity, school environment, and social support among children in Chihuahua.

Research — Intervention/Complementary and alternative

Abstract ID: 188

Lessons Learned From Implementing The HOME Scale In Indigenous Communities Of Guatemala

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Objectives: Share lessons learned from implementing the HOME Scale (Home Observation Measurement of the Environment) in Indigenous communities in Guatemala as part of a clinical trial.

Methods: The HOME Scale measures the child's home environment, focusing on support and stimulation received. It includes 45 items for children under age 3 and 55 items for older children. The scale is administered with the primary caregiver in the home, with items verified through observation, questioning, or both. After coding, we documented lessons learned from implementation, including challenges encountered and solutions applied.

Results: From January 2023 to July 2025, the HOME Scale was administered with 311 families across six departments (Quiché, Sololá, Chimaltenango, Suchitepéquez, Sacatepéquez, and Guatemala). Families sometimes lacked the exact item referenced, but when the purpose was explained, alternatives were often identified. For example, colors were taught using threads for weaving güipiles. While specific items may not exist, families frequently had culturally relevant substitutes that should be acknowledged as valid.

Conclusions: We successfully implemented the HOME Scale in rural Guatemalan communities. Although not originally designed for this context, the tool proved understandable and relevant. Administering the scale in Mayan languages was particularly valuable, improving caregiver comprehension and yielding more authentic assessments.

Program or Model — Early Childhood Development

Abstract ID: 189

Lessons Learned Training Frontline Workers In The International Guide For Monitoring Child Development In Guatemala

Background: More than 40% of children in low-income countries are at risk of not reaching their developmental potential, highlighting the need for early childhood interventions. Our objective is to share our experience training frontline workers in the International Guide for Monitoring Child Development (GMCD).

Methods: The GMCD is a monitoring and intervention package for early childhood development based on an interview technique with 10 open-ended questions. As part of a clinical trial, from November 2022 to August 2024, 50 workers were trained in the use of the GMCD. Training covered: (1) introduction and philosophy of the GMCD, (2) GMCD milestones, (3) individualized interventions, (4) additional support for children and families, (5) disability-focused support, and (6) integrating GMCD into service delivery. Lessons learned during the training process were documented.

Results: Training was delivered one day per week for six weeks. Prior contextualization of materials for frontline workers in Guatemala facilitated comprehension. Some topics required more time than initially planned. For example, one day dedicated to developmental milestones and GMCD use proved insufficient, so a review session was added on the following day.

Conclusions: Our experience suggests that frontline workers can successfully implement a child development intervention when provided with structured and contextually adapted training.

Program or Model — Early Childhood Development

Abstract ID: 190

Implementation Of Healthy Eating Habits For Proper Development And Growth In Rural Communities Of Guatemala

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Objectives: Promote the importance of supporting early childhood by providing caregivers with tools and knowledge to encourage nurturing care and improve the environment of children in rural areas of Guatemala.

Methods: Children's growth and development largely depend on caregivers. This program implemented individualized home visits that included growth monitoring and counseling on child development within the framework of nurturing care. Visits were conducted monthly for eight months. Counseling was tailored to each child's needs, using a booklet with contextualized images and delivered in caregivers' native language. Core principles of the intervention were respect, empathy, and trust between caregivers and health workers.

Results: Caregivers and children who received individualized interventions improved parenting practices, and positive eating habits were observed after the program. These interventions contributed to better child growth and development.

Conclusions: Individualized interventions are successful when focused on the strengths of children and families, delivered with empathy, cultural respect, and tailored support for diverse situations. Building strong connections between caregivers and health workers is crucial for the success of these interventions.

Program or Model — Intervention/Early Intervention Program

Abstract ID: 191

Impact Of Caregiver-Directed Interventions On Child Development In Rural Areas Of Guatemala

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Objectives: To present the impact of caregiver-directed interventions on child development in rural areas of Guatemala.

Methods: Group sessions were conducted with mothers of children under two years in four communities, with a total of 95 participants, including breastfeeding and pregnant mothers. Sessions followed a participatory and culturally responsive approach, using native language and visual materials, and included both theoretical and practical components. Each session lasted three hours. Pre- and post-training questionnaires were applied to assess caregivers' knowledge. Topics covered included nutrition and early childhood development.

Results: From 2022 to 2024, 111 mothers began training and 95 graduated; some did not complete due to various factors. Results showed increased knowledge among caregivers and notable changes in child-rearing practices. Most households adopted the recommendations provided, improving support for their children's development.

Conclusions: Caregiver-directed interventions in Indigenous communities must be participatory, contextualized, and culturally responsive, with emphasis on the use of native language to ensure comprehension. Group sessions became spaces for learning and community building, strengthening support networks among caregivers.

Program or Model — Intervention/Nutritional services

Abstract ID: 192

Navigation And Accompaniment In Cases Of Children With Disabilities In Rural Areas Of Guatemala

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Objectives: To present the impact of accompaniment by community health workers (CHWs) for children with disabilities in rural Guatemalan communities in accessing specialized services.

Methods: Interventions were delivered by CHWs through home visits in the local language. During these visits, developmental delays or disabilities were identified. In both cases, CHWs provided continuous follow-up, individualized referrals, accompaniment to specialized services, and nutritional support.

Results: From 2022 to 2025, navigation and care support were provided to 50 children with developmental delays or complex conditions such as cerebral palsy, Down syndrome, and seizure disorders. CHW accompaniment was vital for patients and their families, ensuring understanding of treatment and follow-up instructions through the use of local languages, while also serving as emotional support throughout the process.

Conclusions: In rural and Indigenous communities of Guatemala, follow-up and support for children with disabilities remain challenging. However, culturally respectful accompaniment and navigation models can enable access to services and help overcome barriers to care for Indigenous children with disabilities.

Program or Model — Risk factors for developmental disabilities

Caregiver Perceptions About Inclusive Learning Environment For Children With Developmental Disabilities In Schools

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Inclusive education is critical for addressing inequities faced by children with developmental disabilities (DD), yet significant implementation gaps exist in India's national education policies. Caregivers play a vital role in facilitating inclusive education, but their voices are often overlooked in decision-making processes.

Objectives: This study aimed to understand caregivers' perceptions of an inclusive learning environment for children with DD aged 6–12 years.

Methods: Caregivers of children with DD receiving services at a child development center in Mumbai were surveyed using the “My Child's School” Index for Inclusion questionnaire. Responses were scored on a 3-point Likert scale to assess perceived inclusiveness in their child's school.

Results: Out of 149 responses, autism and intellectual disability (ID) were the most common diagnoses. Sixty percent of children with ID attended special schools, while 56% of children with autism were in mainstream or inclusive settings. Notably, 89% of children in inclusive schools were not receiving individualized support services. Caregivers' perception of inclusiveness decreased significantly as the child's age increased. The average inclusiveness score was lower for mainstream or inclusive schools (82.60) compared to special schools (85.69); however, the difference was not statistically significant.

Conclusions: The study shows that older children with DD face greater academic, social, and cognitive challenges, highlighting an urgent need for targeted, individualized services in all school settings. Caregivers view special schools as more inclusive, likely because of the specialized support they offer. Enhancing inclusive practices and including caregiver perspectives are essential steps towards building truly inclusive education systems in India.

Research — Intervention/Inclusion

Developmental Outcomes Of Young Children With Shaken Baby Syndrome

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Objectives: Shaken baby syndrome(SBS) is a condition that represents a severe form of child abuse while knowledge on long-term outcomes are limited. We aimed to evaluate the long-term developmental outcomes of children with a history of SBS from Turkey.

Methods: In a longitudinal follow-up design children diagnosed with SBS who were followed by the Ankara University Department of Pediatrics Child Protection Unit and Ankara University School of Medicine Department of Pediatrics, Developmental Pediatrics Division between January 2011-August2025 were invited to this study. A comprehensive developmental assessment included the Expanded Guide for Monitoring Child Development, the Vineland Adaptive Behavior Scales Third Edition, and for≤42 months the Bayley Scales of Infant and Toddler Development Third Edition(Bayley-III).

Results: Ten children comprised the sample(70% male). The median age was 54 (IQR:27–104) months, and the mean follow-up duration was 75.1±28.1 months. Most mothers (70%) had<high school education. Institutional care or foster placement was noted in 30%, and 10% of children lived with a single parent. Half of the children (50%) had cerebral palsy, 20% had epilepsy, 20% had attention deficit and hyperactivity disorder, and 10% had optic atrophy and visual impairment. Developmental delay in adaptive functioning was observed in 40% of the sample. Among children older than 3 years(n=5), 40% attended kindergarten. Special education and rehabilitation services were received by 20% of the sample.

Conclusions: Long-term transdisciplinary and family-centered care is needed to provide holistic support for children with a history of SBS and their families.

Research — Intervention/Medical

Adaptive Functioning Of Children Followed Up Due To Hyperphenylalaninemia At 72 Months Based On A Holistic Framework

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Objectives: Despite early diagnosis and treatment, limited information is available regarding the long-term functioning and participation outcomes of children with hyperphenylalaninemia (HPA). We aimed to examine the long-term adaptive functioning outcomes of children with HPA based on the World Health Organization International Classification of Functioning, Disability and Health Framework (ICF).

Methods: This cross-sectional study included 72-month-old children who were followed up at Ankara University School of Medicine Department of Pediatrics Developmental-Behavioral Pediatrics Division with a diagnosis of HPA. Comprehensive developmental assessments included ICF-based methods. Vineland Adaptive Behavior Scales-Third Edition (VABS-III) and the Expanded Guide for Monitoring Child Development (Expanded GMCD) were used as assessment tools.

Results: The sample included 22 children 14 (63.6%) girls. Most (81.8%) received early diagnosis (under 3 months); 63.6% had phenylketonuria, 6 (27.2%) had additional health conditions. In the environmental context, 8 families (36.3%) reported financial difficulties, 3 (13.6%) mothers reported feelings of depression in the Expanded GMCD. Overall adaptive functioning delay were identified in 5 children (22.7%); 6 (27.3%) had delay in communication domain, 4 (18.2%) in daily living skills, 3 (13.6%) in socialization. Half of the sample were attending school/preschool according to their developmental condition.

Conclusions: In addition to the health and developmental challenges experienced by children diagnosed with HPA from Turkey, a middle-income country, limitations in their environmental context and participation in life was reported in our study. ICF-based assessments and interventions in a medical home model are urgently needed in the management of children with HPA.

Research — Neurodevelopmental disabilities

Evaluation Of Developmental Risk Factors In Children With Developmental Difficulties In Early Childhood Within The WHO-Nurturing Care Framework

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Introduction: Early childhood is a critical period for the development of language, cognition, motor skills, social interaction, and emotion. The World Health Organization (WHO) and UNICEF's Nurturing Care Framework (NCF) outlines five key domains essential for optimal early development: good health, adequate nutrition, responsive caregiving, early learning opportunities, and safety/security. This study evaluates developmental risk factors in children with developmental difficulties through the lens of the NCF.

Methods: A retrospective review was conducted and analyzed on the medical records of children aged 0–8 years diagnosed with developmental difficulties at Ankara University School of Medicine Developmental Pediatrics Department between January 2021 and January 2023.

Results: A total of 937 children (67.4% male; mean age: 33.3 months) were included. Risk factors identified: (a) Health: 46.3% had chronic illnesses, 36.1% had prior hospitalizations, 7.4% had anemia, and 30.7% of mothers were at risk for depression. (b) Nutrition: 10.7% showed stunting, 13.1% had iron deficiency. (c) Responsive caregiving: 27.4% experienced adequate stimulation, 66.8% were exposed to familial stressors, 58.2% of caregivers lacked social support. (d) Early learning: 50.7% lacked a Special Needs Report- formal documentation for special educational needs, 44% had no access to developmental services. (e) Safety/Security: 7.8% lived in substandard housing, 36.3% of families had incomes below the minimum wage.

Conclusions: Children with developmental difficulties face intersecting risks across all NCF domains. The findings underscore the urgent need for integrated, family-centered interventions that address both medical and psychosocial determinants of child development.

Research — Risk factors for developmental disabilities

Abstract ID: 197

Mapping Motivation Using Participatory Learning And Action Tools: Frontline Functionaries' Aspirational Engagement In Nurturing Care Interventions

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Introduction: Benefits of engagement in early childhood development (ECD) interventions extend beyond child outcomes, enhancing provider wellbeing, strengthening family relationships, and fostering supportive community ties. According to self-determination and empowerment theories, training that is participatory, aspirational, and appreciative can foster intrinsic motivation and professional identity. This study explored these dynamics among frontline functionaries (FLFs) within a model for delivering nurturing care interventions in Maharashtra (Aarambh), using participatory learning and action (PLA) tools.

Methods: PLA tools were used with Anganwadi Workers in ten rural blocks of Maharashtra. River of Life traced motivational trajectories, Well-being Maps compared pre- and post-Aarambh perceptions, and Force Field Analysis identified enablers and barriers. Visuals and narratives were transcribed, thematically coded, and analysed comparatively.

Results: Rivers of Life revealed motivation as an evolving process, with Aarambh training representing a turning point of enhanced confidence, skills, and recognition. Well-being Maps showed a marked reduction in low wellbeing categories and a rise in medium/high states, driven by recognition, peer support, and family encouragement. Force Field Analysis highlighted enablers, such as intrinsic joy of child engagement, community trust and recognition, supportive supervision, countered by systemic barriers like delayed honorarium, infrastructure gaps, and family pressures.

Conclusions: Findings show that motivation keeps changing and is shaped both by personal aspirations and by external conditions. Aspirational and appreciative training enhanced intrinsic drivers and strengthened resilience, but sustained motivation requires parallel systemic reforms. Integrating such approaches within government systems can strengthen frontline functionaries and enhance delivery of nurturing care interventions in rural India.

Research — Intervention/Early Intervention Program

Abstract ID: 198

Implementing The Hammersmith Infant Neurologic Examination (HINE) For Early Detection Of Cerebral Palsy In Ethiopia: A Feasibility And Knowledge Translation Study

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The average age for detection of cerebral palsy (CP) in Ethiopia is 5.6 (SD3.6) years. We aimed to shift the age of detection of CP to less than 12 months in Tikur Anbessa Specialized Hospital (TASH) in Ethiopia by incorporating the Hammersmith Infant Neurologic Examination (HINE) into clinical practice. The HINE tool has been identified as vital for early CP identification as per an international clinical practice guideline, particularly in low to middle-income settings. Implementation strategies were identified using the 'Knowledge to Action' framework. Paediatric staff and 54 residents received HINE training and administered it in selected clinics which included the Pediatric Neurology, Developmental and High-risk infantile clinics. Based on HINE global score, infants were classified into 1) above the 10th percentile score, 2) between the 10th% and high probability of CP cut-off score, and 3) below the high probability of CP cut-off score. Among 117 children assessed, ninety-eight infants with CP risk factors were classified on clinical reasoning and the HINE global score: 48 (49 %) scored above the HINE 10th% score, 15 (15 %) scored between and 35 (36 %) scored below the high probability of CP cut-off score. Children meeting criteria for high probability of CP were referred to community rehabilitation centers (mean age at referral 10.6 months (SD 6.6, range 3–23 months). Implementing the HINE in Ethiopia enabled earlier detection of CP/high probability of CP and timely referral to rehabilitation services. This practice supports future knowledge translation and improve clinical practices for infants with CP in Ethiopia.

Research — Intervention/Early Intervention Program

Abstract ID: 199

Cerebral Palsy In Children: Subtypes, Motor Function And Associated Impairments In Addis Ababa, Ethiopia

Although there is no population-level data in Ethiopia, a previous retrospective hospital-based study identified cerebral palsy (CP) as the most common developmental disability in children. This study aims to describe the clinical spectrum of CP at Tikur Anbessa Specialized Hospital in Addis Ababa, including CP subtype, motor function, associated impairments, and possible risk factors in children aged 2 to 18 years. A hospital-based descriptive cross-sectional study was conducted in 2018 among 207 children with suspected motor symptoms. The Surveillance of CP in Europe (SCPE) decision tree guided inclusion, and evaluations were performed using standardized questionnaires and clinical examinations. Statistical analyses included descriptive, bivariate, and multivariate methods, with Chi-square tests, crude associations, and adjusted odds ratios with 95% confidence intervals. Of the 174 children who met the clinical criteria, 50.6% were under 5 years old, with a mean age of 5.6 years (SD 3.6); 55.2% were male. The majority had bilateral spastic CP (60.4%), followed by unilateral spastic CP (21.8%), dyskinetic CP (10.4%), and ataxic CP (3.4%); 4% were unclassifiable. Speech difficulties were present in 95.4%, learning disabilities in 87.4%, epilepsy in 60.9%, visual impairment in 24.7%, and hearing impairment in 8.6%. On the GMFCS and MACS scales, 75.3% had level IV and V impairments. Over 80% of mothers had delivery complications, and neonates faced immediate post-birth challenges. In conclusion, severe forms of CP predominate, with most children dependent on parents for daily activities and communication. These findings argue strongly for improving maternal-child healthcare and Multidisciplinary focused habilitation services.

Research — Neurodevelopmental disabilities

Abstract ID: 200

Malnutrition And Functional Severity In Children With Cerebral Palsy In Addis Ababa, Ethiopia

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Malnutrition is a common comorbidity in children with cerebral palsy (CP), especially in low-resource settings. Feeding difficulties, poor dietary intake, and severe motor impairments contribute to poor nutritional outcomes. This study describes the nutritional status of children with CP in Tikur Anbessa specialized Hospital (TASH), Addis Ababa and explores its association with motor function and feeding ability. A hospital-based cross-sectional study was involving 174 children aged 2–18 years with confirmed CP. Anthropometric measurements were taken using WHO standards. Feeding history, ability, and difficulties were assessed through caregiver interviews. Motor function was classified using GMFCS and MACS. Statistical analyses included descriptive, bivariate, and multivariate methods. Half were above the age of 5 years with a mean age of 5.6 (SD 3.6) years; 60.4% bilateral spastic, 21.8% unilateral spastic, 10.4% dyskinetic, and 3.4% ataxic CP. Feeding difficulties affected 59.8%, chewing difficulty (76.4%) and drooling (61.3%). Only 13.2% could feed themselves. Nutritional indicators included underweight (56.9%), stunting (63.2%), wasting (31%), and microcephaly (65.1%). Moderate to Severe malnutrition affected 30% of children. Stunting was significantly associated with lower feeding frequency (AOR = 5.8) and underweight with CP subtype (AOR = 2.2). GMFCS IV–V was strongly associated with manual ability limitations (AOR = 27.2). Malnutrition was most prevalent among children with bilateral spastic CP and those unable to feed themselves. This underscores the need for routine nutritional screening in children with severe CP and highlights the critical role of early CP identification before severe impairments develop to enable timely nutritional and rehabilitative interventions.

Research — Intervention/Nutritional services

Implementation Of The Neurodevelopment And Early Intervention Unit At The Association For People With Cerebral Palsy (APAC)

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General Objective: To implement the Neurodevelopment and Early Intervention Unit at the Association for People with Cerebral Palsy (APAC).

Specific Objectives:

- Identify risk factors in children from birth
- Assess neurodevelopment through standardized screening and diagnostic tests in children
- Provide intervention for neurodevelopmental disorders in the APAC population
- Establish a referral team to external institutions

Methods: A multidisciplinary care model was designed with the following steps: 1) Initial evaluation, 2) Neurodevelopmental assessment, 3) Application of specific scales, 4) Conducting complementary studies (EEG, MRI, BAEP, VEP), 5) Evaluation and management by medical specialists (rehabilitation medicine, general medicine, orthopedics, genetics, cardiology, as needed) and intervention (PT, ST, OT, CEMS, neuropsychology), 6) Referral to necessary external units, 7) Multidisciplinary follow-up of progress and objectives.

Results: Since its implementation, the Unit has enabled the detection and follow-up of the following neurodevelopmental conditions in our beneficiaries: attention deficit hyperactivity disorder, autism spectrum disorder, learning disorders, specific language disorder, global developmental delay, and intellectual disability, through the use of neurodevelopmental tests with consequent detections and timely referrals, improving the quality of life and overall functioning of our beneficiaries.

Conclusions: The Neurodevelopment Unit has allowed for integration and proper multidisciplinary care of neurodevelopmental disorders that frequently occur in the APAC beneficiary population within the Early Intervention program.

Program or Model — Neurodevelopmental disabilities

Diagnostic Profile Of Autism Spectrum Disorder In Childhood And Adolescence In Brazil In 2025

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The diagnosis of Autism Spectrum Disorder (ASD) is carried out through clinical observation and the application of scales and monitoring instruments. This study aimed to evaluate the diagnostic profile of ASD in childhood and adolescence in Brazil. A cross-sectional, exploratory, retrospective, and quantitative study was conducted based on partial results of the MAPA Autism Brazil 2025. The study universe comprised 1,329 individuals; 76.07% were children. The mean age of diagnosis was 5 years, median 3 years. Only 23.7% of diagnoses were made in the public health system. At diagnosis, 66.37% were between 0–4 years, 22.2% between 5–9 years, and 7.83% between 10–14 years. The diagnostic hypothesis was suggested by families in 57.94%, health professionals in 25.58%, educators in 14.9%, and self-reported by autistic individuals in 1.05%. Manifestations leading to diagnosis included communication disability (79.68%), restricted interests (63.28%), stereotypies (61.4%), limited reciprocity (59.67%), self- or hetero-destructive behaviors (29.5%), feeding selectivity (4.36%), and sensory sensitivity (1.35%). In conclusion, ASD diagnosis is influenced by family, school, and society, and must be made early to ensure proper therapies are implemented.

Research — Neurodevelopmental disabilities

The Profile Of Autism Spectrum Disorder In Childhood And Adolescence In Brazil In 2025

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Autism Spectrum Disorder (ASD) is a neurodivergent condition with repercussions on communication, social interaction, and sensory aspects. The present study aims to evaluate the profile of ASD in childhood and adolescence in Brazil. A cross-sectional, exploratory, retrospective, and quantitative study was carried out, based on partial results from the MAPA Autismo Brazil in 2025. Currently, the platform has 1,699 records, of which 78.2% correspond to childhood and adolescence. Of these, 27.31% are between 0 and 4 years old, 41.38% between 5 and 9 years, 20.39% between 10 and 14 years, and 10.91% between 15 and 19 years.

The average age of diagnosis was 5 years, with a median of 3 years. Most diagnoses were established before the age of 10: 66.37% between 0 and 4 years, and 22.2% between 5 and 9 years. Among children and adolescents, 74.69% are verbal and 25.36% are non-verbal. Regarding support levels, 51.02% belong to level one, 35.36% to level two, and 8.5% to level three. Of these, 79.08% receive therapy, while 20.92% do not have this support. It is concluded that ASD significantly impacts the quality of life and development of children and adolescents.

Research — Neurodevelopmental disabilities

Building Bridges In Developmental Pediatrics; A Virtual Collaborative Teaching And Capacity-Building Model From Ethiopia To Canada

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Children with disabilities in low-resource settings face significant barriers to early identification, intervention, and participation. Ethiopia had no formal engagement in the field of developmental pediatrics, and childhood disability care was not prioritized within the health system. In 2019, a developmental pediatrics clinic was established at Tikur Anbessa Specialized Hospital (TASH), Ethiopia, led by Dr. Selamenesh Tsige Legas with mentorship from seniors. The initiative began with weekly clinics and outreach to global experts for mentorship and patient care consultations. The Hammersmith Infant Neurological Examination (HINE) was implemented for early CP detection in TASH. A structured HINE training program was delivered to TASH residents with ongoing mentorship and integration into clinical practice. In parallel, monthly virtual teaching sessions were launched for pediatrics residents at Ayder Tertiary Hospital in Mekelle, Tigray, serving war-impacted and underserved populations covering a wide variety of developmental pediatrics topics inviting global experts to teach the pediatrics residents. Subsequently, the developmental pediatrics faculty at Western University is engaged in regular teaching of the pediatrics residents at Mekelle University. GMCD training was provided to the Pediatrics residents by the developers, with ongoing translation into two local languages. Overall, this model has improved diagnostic accuracy, early referrals, and ignited more interest in the field of developmental pediatrics. Participation barriers in low-resource setting such as lack of tools, training, and coordinated care, have been addressed through clinic-based mentorship, tool adaptation, curriculum integration and community linkage. This initiative demonstrates how locally led, globally supported models can transform education and disability care.

Program or Model — Intervention/Educational

This Is Me! An Interview Tool For Disabled Children For Self Awareness And Collaborative Decision Making In Family Centred Care

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Goals: Neurodevelopmental disabilities (NDD) are best conceptualised within the ICF's biopsychosocial framework. CanChild's F-words (Functioning, Fitness, Fun, Family, Friends and Future) encourage strengths-based, family-centred care, yet structured tools for direct child participation are scarce. This study evaluated This Is Me (TIM), an adapted child-interviewing tool, for feasibility, acceptability, and its role in enhancing self-awareness and collaborative goal-setting in young children with disabilities.

Methodology: A prospective, cross-sectional, mixed-methods study was conducted among children aged 6–11 years with NDD attending Sethu, a community-based Child Development Centre in Goa, India from January to May 2025. TIM was used to elicit children's strengths, supports and barriers, followed by selection of goals and formulating action plans with families which they could implement with support. Child and parent feedback was obtained after two months.

Findings: Thirty-four children with autism, ADHD, specific learning disability, intellectual disability, or epilepsy participated. Children identified a range of strengths, interests and supports across the established F-words framework. The additional area (Fences) to explore barriers elicited interpersonal difficulties with siblings and peers, academic challenges, and fears. Child-selected goals focused on relationships, preferred activities, and academic support. At follow-up, most families implemented the action plans, and both children and parents reported positive experiences.

Conclusions: The TIM is a feasible, acceptable child-friendly tool that lends itself to interventions that strengthen child participation in neurodevelopmental care. It supports self-awareness, goal setting, and shared decision-making with families, offering a real-world model to integrate the perspectives of young children with disabilities in community based clinical services.

Program or Model — Neurodevelopmental disabilities

Pragmatic Adaptations Of The Bayley Scale Of Infant Development IV (BSID IV) In Rural Settings: Experiences From India And Guatemala

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Introduction: The Bayley Scales of Infant Development (BSID) is widely recognized for assessing early childhood development. However, its use in rural, low-resource settings is often challenged by cultural, linguistic, and contextual differences. This study aimed to document field challenges and adaptations during BSID IV administration in rural India and Guatemala.

Methods: Before implementation, translation and cultural adaptations of BSID IV were assessed for content validity by intense discussions with the team of paediatricians and psychologists within the study team at each country site taking into consideration the unique cultural characteristics and environmental factors specific to the community of children enrolled in the study. Adaptations were implemented iteratively through field feedback, focusing on language adjustments, substitution of locally relevant items, and contextual modifications while maintaining developmental constructs. A comparative qualitative matrix was developed to capture domain-wise challenges and adaptations for all domains of BSID.

Results: The matrix gave an outline of the domain-specific challenges and corresponding solutions from rural India and Guatemala. In the cognitive and communication domains, unfamiliar images, objects, and names/ vocabulary were common challenges which required contextual substitutions such as using local vocabulary or culturally relevant pictures. For motor domains, the challenges were mainly related to material and demonstration issues, which prompted modifications aligned with community practices.

Conclusions: Across both sites, pragmatic adaptations were helpful in child comprehension and engagement while maintaining the tool's developmental focus. This underscores the importance of culturally responsive strategies in standardized assessments to balance the fidelity of BSID IV with contextual relevance.

Research — Intervention/Use of adaptive equipment

Abstract ID: 211

Person-Centered Care Model For Vulnerable Maternal And Child Populations In Primary Care Centers In Santiago, Chile

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Objectives: Chile faces high levels of inequality and child poverty, which negatively impact long-term development and health. The rise in non-communicable chronic diseases and mental health issues—many of which originate in childhood—calls for preventive, person-centered approaches starting early in life. This paper presents the design and pilot implementation of the Person-Centered Care Model for Maternal and Child Populations (MACEP-MI) in primary health care (PHC).

Methods: MACEP-MI was designed based on principles of person-centered care, nurturing care, and the life-course approach. The transformation involves integrating tools, professional skills, and organizational changes to enhance actions for comprehensive child development. The pilot implementation is being carried out in three PHC centers located in vulnerable areas of Santiago, Chile.

Results: The model introduces a primary care professional who accompanies the family from pregnancy onward, promoting continuity and focusing on family strengths. The population is categorized according to biomedical and psychosocial parameters, adjusting the frequency of check-ups and types of services based on identified risk levels, thereby redistributing resource use. Institutional change management strategies and competency strengthening are incorporated through team training. Implementation is phased, beginning with pregnant women.

Conclusions: MACEP-MI reorganizes care for maternal and child populations in Chile's PHC system, promoting continuity, early risk detection, and stronger bonds between families and health teams. It represents an innovation with scalability potential to improve child development and prevent future health issues from early stages.

Program or Model — Early Childhood Development

Abstract ID: 212

Feminist Migrant Justice And Adolescent Development: Evidence Of A Gap In Colombia

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Objectives: To demonstrate how the gap between feminist migrant justice and Colombian migration policies affects the adolescent development of Venezuelan migrants in an irregular situation, and to propose a tool to translate the ethical framework into clinical and service decisions.

Methods: Conceptual and normative-argumentative study based on feminist migrant justice (Wolf) and oppression/double bind theory (Frye), with a narrative review of Colombian literature and regulations illustrated by public domain testimonies (RTVC) to exemplify sexual exploitation, oppression mechanisms, and their transit towards developmental affectations.

Results: We identified the Development Justice Gap (DJG), which represents the distance between what the feminist migration framework demands and what policies and services guarantee to sustain development outcomes. The mechanisms that widen the DJG include access routes conditioned to regularization, the focus on emergencies, and insufficient articulation with education/protection, sustaining double binds that interrupt trajectories in four developmental domains: socioemotional, cognitive-behavioral, physical-SSR, and educational. As an applied contribution, we propose the "4x4 Developmental Justice Matrix" which operationalizes the feminist framework in four dimensions (access, safety/SRH, continuity, and cultural competence) and four levels (migration policy, service, clinic, and adolescent).

Conclusions: The gap generates avoidable harm and truncates the dignified development of adolescent migrants. The DJG offers an evaluable construct and the matrix a practical guide to close this gap, offering a bridge between ethics and practice in MIC/LAC contexts. Hypotheses and indicators are outlined for future validation.

Research — Children in crisis, humanitarian emergencies

Determinants Of Neurodevelopment And Preschool Trajectories In A South African Birth Cohort

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Many children in low- and middle-income countries face adversities that put them at risk of not reaching their developmental potential. We investigated risk and protective factors influencing cognitive, language, and motor development at 5 years of age in a South African birth cohort and assessed which early-life factors shaped developmental trajectories between 2-5 years.

Methods: In the Drakenstein Child Health Study, 728 mother-child dyads were followed from the antenatal period through 5-years. Neurodevelopmental domain outcomes were measured at 5-years using standardized instruments. Random forest models identified key predictors of each domain, these were then examined in multivariable linear regressions. Longitudinal trajectories from 2-5 years were explored with latent class growth analysis; random forest and post-hoc logistic models examined determinants of class membership.

Results: Higher maternal education was the strongest socioeconomic factor associated with better cognitive scores ($\beta = +5.0$, $p < 0.001$; 95%CI: 2.74,7.27) and language outcomes ($\beta = +2.92$, $p < 0.001$; 95%CI: 1.49,4.34) with increased birthweight the strongest physical factor associated with higher cognitive scores ($\beta = +2.34$, $p < 0.026$; 95%CI: 0.28,4.40) at 5 years. Maternal psychosocial stressors, including depression ($\beta = -0.46$; $p = 0.002$; 95%CI: -0.75, -0.17) and physical health, including HIV-exposure ($\beta = -0.51$, $p < 0.001$; 95%CI: -0.80, -0.23), were associated with lower expressive language scores. Trajectory analysis revealed 8.8–16% of children demonstrated developmental catch-up between 2-5 years, with female sex and supportive home environment (better parental teamwork, less crowding) predicting membership in this group.

Conclusions: Alongside factors predicting neurodevelopment variance at age 5-years, trajectory analysis identified developmental catch-up among at-risk children, with maternal and home factors predicting recovery

Research — Early Childhood Development

Strengthening Support Systems For Children To Grow, Develop, And Thrive: A Multisectoral Collaborative Approach

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Objectives: Rural and Indigenous women and children in Guatemala face persistent challenges. Our project has established strategic partnerships and is working to develop an integrated, cross-sector approach to implement the Nurturing Care Framework (NCF) in these areas. The NCF promotes healthy environments for children to grow, develop, and thrive by ensuring nutrition, responsive caregiving, early learning opportunities, safety, and security. The long-term goal is to reduce infant and maternal mortality rates and improve nutritional markers among children.

Methods: Researchers and faculty from the University of Minnesota have collaborated with the University of San Carlos–Extension in Guatemala City for four years. Together with multidisciplinary student teams, local community organizations, and municipal leaders, we have conducted needs assessments, community asset mapping, identified priorities, and conceived a conceptual model.

Results: This initial phase revealed critical gaps that must be addressed for successful implementation:

- Trained family life educators who can support children and parents in areas of nutrition, education, and nurturing care.
- Establishment of a monitoring and evaluation system to track intervention outcomes.
- Assuring key stakeholder commitments to ensure collective impact.

Conclusions: These efforts have laid the foundation for an implementation model of the NCF designed for long-term scalability and sustainability that is a comprehensive, culturally responsive, and collaborative approach with multiple partners to improve the environments in which Guatemalan children grow and develop.

Program or Model — Intervention/Others

Nidos De Lactancia: Designing Dignified And Safe Spaces To Promote Child Development And Maternal Well-Being

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Objectives: To design and develop portable prototypes of dignified, safe, and comfortable spaces for breastfeeding and milk expression, integrating perspectives from design, nutrition, education, and health. The goal is to protect the mother-child dyad—historically overlooked in public spaces—and to promote early childhood development through continuous, high-quality breastfeeding.

Methods: Positive Design and Design Thinking approaches will be applied in three phases: (1) review of legislation, scientific evidence, and assessment of existing spaces, along with surveys and interviews with breastfeeding mothers to identify needs and barriers while raising awareness about the importance of breastfeeding for child development; (2) creation of prototypes ensuring comfort, hygiene, accessibility, and privacy, incorporating cultural and health considerations; and (3) pilot testing in public health settings, collecting user feedback and iteratively refining designs.

Results: The project is expected to produce validated, user-centered prototypes adapted to the Latin American context. In the short term, improved comfort and safety for breastfeeding are anticipated. In the medium term, adherence to breastfeeding recommendations is expected to increase, enhancing nutrition, bonding, and early development. In the long term, the initiative aims to improve maternal and child health, reduce inequities in breastfeeding support, normalize this essential practice, and generate new knowledge.

Conclusions: The development of portable lactation spaces through an interdisciplinary approach seeks to protect and promote breastfeeding, provide inclusive solutions for the mother-child dyad, and strengthen knowledge during a critical stage of child development.

Program or Model — Intervention/Inclusion

Tuimani-A Pilot Study Of A Toilet Training Intervention For Children With Autism In Western Kenya

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Objectives: Assess feasibility of a toilet training intervention for caregivers of children with autism in western Kenya and to refine intervention materials/protocols.

Methods: Participants were recruited by convenience sampling from child development clinics at Moi Teaching and Referral Hospital in Eldoret, Kenya. Caregivers who met eligibility criteria (primary caregiver of a child with autism aged 2-7 years, spoke English or Swahili, child without urinary or fecal continence) were invited to participate. Participants completed a baseline interview, four training sessions (three in-person and one in-home), biweekly calls, and a post intervention interview. Trainers were also interviewed. Training sessions took place over one month and biweekly calls took place until six months post training.

Results: Three caregivers participated and completed all intervention components. The children included two males and one female with a mean age of 5.25 years. Caregivers found the materials to be easy to understand, trainings to be helpful and check-ins to be informative. Two of the three children achieved urinary continence and one achieved both urinary and fecal continence by pilot end. All participants reported their children could communicate their toileting needs by pilot end. Trainers found the workload to be manageable, materials easy to present and support from the study team accessible and educational.

Conclusions: A novel group-based caregiver intervention for toilet training children with autism was feasible in western Kenya. Both caregivers and trainers found the intervention accessible, educational, and helpful. Based on this, a larger study is ongoing to assess effectiveness.

Research — Neurodevelopmental disabilities

Abstract ID: 221

Cultural Adaptation of the Dream Warmer as a Complement to the Kangaroo Mother Care Method in the Prevention of Neonatal Hypothermia and the Promotion of Child Development in Indigenous Riverine Communities of Guainía, Colombia

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Objectives: To introduce and culturally adapt the Dream Warmer™, a reusable thermal blanket designed to prevent neonatal hypothermia and promote early childhood development in indigenous riverine communities of Guainía—the Colombian department with the highest neonatal mortality rate.

Methods: Using a Participatory Action Research approach, an implementation strategy will be co-designed with indigenous families, midwives, traditional healers, health personnel, and the Guainía Departmental Health Secretariat in three phases: (1) participatory assessment of current neonatal care practices and cultural frameworks; (2) training of health workers, midwives, and traditional healers in initial neonatal care, APGAR scoring as a predictor of neurological development, and use of the Dream Warmer™; and (3) pilot implementation during home births, out-of-hospital deliveries, and neonatal transport. Feedback will be collected through focus groups, field diaries, and an iterative adaptive process, along with clinical monitoring of neonatal status.

Results: The study is expected to demonstrate the feasibility and acceptability of the Dream Warmer™ as a complementary tool to the Kangaroo Mother Care Method. In the short term, outcomes will include prevention of neonatal hypothermia, improved survival during river transport, and reduced postnatal complications—critical factors for healthy child development. In the medium term, the project aims to strengthen intercultural neonatal care, empower local caregivers, and improve trust between communities and health systems.

Conclusions: This project seeks to address neonatal mortality in marginalized indigenous populations by culturally adapting a proven life-saving technology to support early childhood development and create a replicable model for other regions of the world.

Program or Model — Children in crisis, humanitarian emergencies

Abstract ID: 222

Sentido'S® Model: Transcomplex Intervention For Adaptive Behavior Acquisition In Children With Neurodevelopmental Challenges In Patagonia, Argentina

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Objectives: To describe the impact of the Sentido'S® Model on adaptive behaviors in children aged 3-7 years with autism spectrum disorder and neurodevelopmental challenges in Patagonia, Argentina, evaluating its effectiveness as a manualized intervention contextually appropriate for middle-income countries.

Methods: Prospective longitudinal study (NCT06477666) with pretest-posttest design and 17-week follow-up. Participants: 24 children with autism spectrum disorder diagnoses according to DSM-5. Transcomplex intervention integrating Applied Behavior Analysis, Ayres Sensory Integration, and Psychoneuroimmunology, structured across nine bio-neuro-sensory-psycho-social-spiritual-occupational-nutritional-ecological dimensions, six fundamental premises, and three intervention strata (children, caregivers, professionals). Implementation: 14 weeks (4 weekly sessions, 60 minutes) with systematic family inclusion (12 structured sessions). Measures: Vineland-3 (adaptive behaviors), Goal Attainment Scaling (individualized objectives), Family Outcome Survey (family competencies). Analysis: Repeated measures ANOVA with Bonferroni post-hoc comparisons.

Results: Statistically significant improvements are expected in Vineland-3 ABC composite scores from baseline to follow-up, with maintenance of post-intervention skills and improvements in family competencies. Preliminary results will be available for presentation.

Conclusions: This model represents a methodological innovation for middle-income countries, providing the first manualized transcomplex framework integrating evidence-based approaches with culturally appropriate principles. Findings will contribute to inclusive public policy development and evidence for effective, replicable programs in resource-limited contexts.

Program or Model — Intervention/Behavioral

Nutrition Program For Cleft Lip And Palate Improves Surgical Eligibility And Child Development In Rural Guatemala

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Objectives: In rural communities of Guatemala, infants with cleft lip and palate face a high risk of malnutrition, mortality, and developmental delay. Inadequate nutrition prevents them from being eligible for corrective surgery, which is essential to improve health and development. This study evaluated the effectiveness of a program designed to optimize growth, surgical eligibility, and child development.

Methods: From January to August 2025, a total of 184 infants across 14 departments received 908 home visits conducted by community health workers. The intervention included growth monitoring, counseling in Mayan languages, early stimulation, basic speech therapy exercises, nutritional supplementation, specialized feeding bottles, breast pumps, and lip taping. Data were recorded in a digital platform, enabling real-time follow-up.

Results: Fifty-two percent of infants achieved adequate weight and height for surgery. The prevalence of growth retardation decreased by 7.6%, reflecting linear improvement and a favorable prognosis for cognitive development. Among infants older than 6 months, 96.6% had started complementary feeding before 9 months of age. Caregiver counseling was associated with better nutritional outcomes, greater surgical readiness, and progress in early stimulation. A total of 125 speech therapy workshops were conducted to prevent compensatory patterns and strengthen home communication.

Conclusions: The program represents a comprehensive intervention for child health and development among children with cleft lip and palate. The combination of nutritional support and counseling in Mayan languages enhances early development and lays the foundation for school readiness. This model is replicable and culturally appropriate for vulnerable settings.

Program or Model — Intervention/Nutritional services

Descriptive Outcomes Of The NCAST-Feeding Scale In Rural Guatemala

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Objectives: The Nursing Child Assessment Satellite Training – Feeding (NCAST-Feed) scale provides a systematic way to observe the interactions between an infant and their caregiver during a feeding. It has been widely used in research, clinical and real-world environments, but limited is its application in countries identified as low-and middle-income countries, such as Guatemala. The current project aims to describe the outcome of dyad's performance on the NCAST-Feed.

Methods: Dyads from rural Guatemala were recruited when infants were 0-4 weeks of age (n=128). The data are from a larger study, from which the quality of infant-caregiver interaction was observed at baseline visit. Quality of caregiver-infant interaction was assessed using the NCAST – Feed distributed among six sub-scales.

Results: Descriptive analysis was used to examine trends in mother-infant interaction quality during feeding. On average, the dyads scored a total NCAST score mean of 49.85 (SD=5.20). Sub-scales means were observed as: (1) sensitivity to infant cues (M = 12.93, SD = 1.71), (2) response to child distress (M = 10.44, SD = 1.33), (3) fostering social-emotional growth (M = 8.82, SD = 1.51), (4) fostering cognitive growth (M = 3.59, SD = 1.55), (5) infant clarity of cues (M = 10.55, SD = 1.55) and (6) responsiveness to caregiver (M = 3.52, SD = 1.14).

Conclusions: The NCAST-Feed scores observed for fostering social-emotional and cognitive growth were notably lower than normative data (Oxford & Findlay, 2015). Further analysis and consideration for confounding variables will need to be evaluated in this specific population for further interpretation.

Research — Early Childhood Development

Abstract ID: 225

The Therapeutic Profile Of Children And Adolescents With Autism Spectrum Disorder In Brazil In 2025

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In Autism Spectrum Disorder (ASD), therapies have a significant influence on prognosis. This study aims to evaluate the therapeutic profile of children and adolescents with ASD in Brazil. A cross-sectional, exploratory, retrospective, and quantitative study was conducted using partial results from the MAPA Autismo Brasil platform in 2025, focusing on children and adolescents diagnosed with ASD. The research sample includes 1,329 records, of which 79.08% receive therapy and 20.92% do not have access to this resource. Among those who receive therapy, 81.92% attend psychotherapy, 69.84% speech therapy, 64.99% occupational therapy, 43.1% educational therapy, 27.12% music therapy, 17.6% receive nutritional follow-up, and 15.89% attend physical therapy. Regarding the number of weekly therapy hours, 33.78% receive between 1 and 5 hours, 17.08% between 5 and 10 hours, and 17.83% more than 10 hours. Concerning monthly therapy costs, only 6.09% use the public health system; 36.73% pay between R\$100 and R\$1000; 28.54% between R\$1001 and R\$3000; 11.51% between R\$3001 and R\$5000; and 8.42% pay more than R\$5000. Regarding health insurance coverage, 12.37% have no coverage; 32.92% have partial coverage; only 37.87% have full coverage; and 16.65% do not have health insurance. It is concluded that access to therapies remains insufficient, costly, and inaccessible for many people with ASD.

Research — Neurodevelopmental disabilities

Abstract ID: 226

The Profile Of Human Rights Violations Against Children And Adolescents In Brazil In 2025

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Human rights are basic fundamental rights and freedoms essential to preserving human dignity, and are recognized as prerequisites for peace, justice, and democracy. The current study aims to analyze the profile of human rights violations against children and adolescents in Brazil. A cross-sectional, exploratory, retrospective, and quantitative study was conducted using records available from the National Human Rights Office (ONDH) between January and September 2025. According to ONDH, violations of children's rights account for 47.8% of complaints and 40.07% of registered violations, with an average of 828 complaints and 4,958 violations per day. During that period, 207,006 complaints and 1,239,502 violations were registered, with a ratio of six violations per complaint. Violations of personal integrity were identified in 98.74% of complaints; violations of liberty were present in 15.6%, failure to fulfill social rights in 6%, and 0.4% of reports involved attacks on life. Regarding the location of the violations, 71.6% occurred in a home shared by the victim and the suspect, 11.86% in the victim's home, 4.7% in the suspect's home, and 4.1% in educational institutions. In terms of frequency, 76.57% of the violations occurred daily, 7.8% weekly, and 4.4% occasionally. It is concluded that fundamental rights violations continue to be significantly present, with incalculable individual and social harm.

Research — Children in crisis, humanitarian emergencies

Food-Based Dietary Guidelines from Agri-Food Systems: A Strategy to Promote Early Childhood Development in Guatemala

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Introduction: Guatemala has one of the highest prevalences of chronic child malnutrition (46.5% among children under five), alongside a growing incidence of overweight and obesity from early ages. This double burden affects child development by increasing the early risk of noncommunicable diseases (NCDs) and preventing children from reaching their full developmental potential.

Objectives: To demonstrate how the update of the *Food-Based Dietary Guidelines from Agri-Food Systems* (GABSA), led by the Ministry of Public Health and Social Assistance, serves as a strategy to promote healthy environments and establish the conditions needed to foster child development in Guatemala.

Methods: The FAO methodology was applied, integrating nutritional diagnostics, agri-food system analysis, and a life-course approach to child development. The first 1,000 days and preschool stages were prioritized, considering three dimensions: supply chains, food environments, and consumer behavior.

Results: The updated guidelines strengthen the links with breastfeeding, complementary feeding, and dietary diversification in children. They also promote healthy school environments for early childhood. Together with other interventions, these measures aim to break the intergenerational cycle of malnutrition, reduce the risk of NCDs, and promote child development from early stages.

Conclusions: The updated GABSA are a key public health tool for creating favorable conditions to strengthen early childhood development in Guatemala, reducing inequities, and promoting comprehensive, healthy, and sustainable growth.

Program or Model — Intervention/Nutritional services

A Systematic Review Of Caregiver-Focused Interventions For Children With Cerebral Palsy In Low-And Middle-Income Countries

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Introduction: Cerebral palsy (CP) is the most common motor disability among children in low- and middle-income countries (LMICs). Unlike in high-income settings, families in LMICs often lack access to rehabilitation services and therefore serve as the primary providers of therapeutic care. However, little is known about caregiver-focused interventions available in these contexts. This systematic review aimed to summarize such interventions for children with CP in LMICs.

Methods: Following PRISMA guidelines, we searched eight electronic databases, most recently in February 2024. Eligible studies described caregiver-led interventions for children ≤ 18 years with CP, performed in LMICs, and reported child or caregiver outcomes. Two reviewers independently extracted data, assessed risk of bias using the NIH Study Quality Assessment Tool, and qualitatively synthesized findings. The heterogeneity of outcomes and interventions prevented a meta-analysis.

Results: From 16,485 titles screened, 250 full-texts were reviewed, and 16 met inclusion criteria. These studies were conducted in 10 LMICs, primarily in Asia and West Africa. Most interventions (n=12) were group-based and facilitated by trained health workers or community volunteers. Outcomes targeted caregivers (n=5), children (n=5), or both (n=6). Child motor function (n=10) and caregiver mental health or wellbeing (n=11) were the most common measures. Benefits included improved caregiver adaptability and knowledge, alongside enhanced child physical function. Study quality was rated fair (n=9) or good (n=7).

Conclusions: Caregiver-focused interventions in LMICs can improve caregiver wellbeing and child outcomes. Group-based delivery appears feasible and effective. Future work should explore sustainable implementation strategies to broaden reach and impact.

Research — Intervention/Parent training