



**15<sup>th</sup> South African Child Health Priorities Association Conference**

**CHPA 2024**

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## PLENARY

### Improving Paediatric Procedural Pain Practices at Prince Mshiyeni Memorial Hospital Using Knowledge Translation Strategies

Prasha Doorgapersad, Dr Terisha Hariram (UKZN), Dr Thozamile Madikizela (UKZN), Dr Nontobeko Khumalo (PMMH)

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#### Background and Aim

Unmanaged procedural pain in children can have immediate and long lasting effects. Patient safety and their experience of care may also be affected. Pain from needles is the most commonly reported painful procedure and the worst pain reported by children 1,2 . Procedural pain practices in the department of Paediatrics, Prince Mshiyeni Memorial Hospital (PMMH) are falling short with only 5% of children who had a procedure performed receiving pharmacological measures for pain relief. The aim of our project was to increase the number of children receiving procedural pain relief in the Department of Paediatrics from 5% to 35% for pharmacological analgesia, in a 4 month period ending September 2024.

#### Methods

The quality improvement project was conducted in the paediatric medical department. The neonatal intensive care unit was excluded. Our multidisciplinary team did a situational analysis to map the scale of the problem. Our root cause analysis identified gaps in knowledge, staff forgetting to give analgesia and poor pain assessment skills. Innovative and proven knowledge translation strategies were sought to address the root cause problems and prioritised on a prioritisation matrix. These included small group interactive teaching i.e. "Huddle's", distraction tools, staff reminders and audit and feedback. Using the Plan-Do-Study-Act (PDSA) quality improvement methodology the change ideas were tested.

#### Results

Outcomes were monitored using process and outcome measures. The orders for sucrose solution and EMLA cream increased over the study period. The percentage of children receiving pharmacological measures for pain relief increased from 5% to 63%.

#### Conclusion

Using quality improvement methods we were able to increase the use of procedural pain analgesia in children at PMMH. "Huddles" proved to be an innovative and effective strategy to disseminate knowledge.

## **Empowering the New Generation of Digital Doctors: An Eco-Friendly, Digital Resource for Neonatal Staff Orientation**

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In the high-risk environment of neonatology, timely access to clinical guidelines and essential resources is crucial for delivering consistent, high-quality care. This eco-friendly digital resource toolkit was developed to streamline orientation for new staff, improve protocol accessibility, and reinforce clinical governance standards in a tertiary neonatal unit. Our aim was to create a centralised, user-friendly platform that enhances onboarding experiences while promoting adherence to quality and safety protocols vital for optimal patient outcomes.

The multi-platform digital toolkit includes app-based resources with interactive guidelines, protocols, drug dosages and direct contacts for immediate support, ensuring that crucial information is readily accessible at the point of care. Integrated simulation exercises provide hands-on practice for essential neonatal skills, bridging gaps in traditional orientation by reinforcing learning in a practical, interactive way. This eco-friendly digital format not only supports clinicians in a fast-paced work environment but also aligns with sustainable practices by reducing paper use.

Verbal user feedback highlights the app's positive impact on clinician confidence, preparedness, and protocol compliance. Many users reported that the resource's accessibility and intuitive layout significantly reduced onboarding time, promoting consistent adherence to clinical and governance protocols. A retrospective evaluation is planned to assess the toolkit's impact on past medical interns.

This presentation will outline the development and implementation of this digital resource toolkit. By sharing this innovation, we aim to provide a valuable model for enhancing staff orientation, governance, and quality in neonatal care, ultimately supporting better health outcomes for vulnerable neonates.

## **Evidence Based Planning using bottleneck analysis approach to understand barriers in the delivery, uptake and quality of Severe Acute Malnutrition services in South Africa**

Zandile Kubeka, Gilbert Tshitauzi

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Background: Preventable deaths among children under 5 years of age in South Africa remains a concern, with Severe Acute Malnutrition (SAM) contributing to at least 24% of all children in-hospital deaths.

### **Aims**

In 2023, the National Department of Health in collaboration with UNICEF undertook an Evidence Based Planning (EBP) using a Bottleneck Analysis (BNA) approach. The aim of the analysis was to:

- understand barriers and root causes to delivery and uptake of SAM and Maternal Nutrition services focusing on children under 5 years;
- to explore, identify and document evidence-based context specific solutions for effective coverage in four provinces; and
- to document and share best practices contributing to improvement in quality of care

### **Methods**

The BNA approach applied the Tanahashi model to explore key determinants of effective health services coverage. The seven steps of the BNA approach were applied. The BNA was undertaken in six districts in Gauteng, North West, KwaZulu- Natal and Eastern Cape provinces. Quantitative and qualitative methods were applied to collect data.

### **Results**

The gaps identified range from specific bottleneck in both the supply and demand domains for each district including human resources and capacity to deliver efficient quality services, initial utilization, continuous utilization, stockouts of essential commodities for prevention and management of SAM services, barriers in geographic access. Cross cutting bottlenecks were also identified ranging from poor leadership, coordination, integration and gaps in operational indicators to inform actions and planning.

### **Conclusions**

To efficiently improve delivery, update and coverage of quality services for SAM there is a need for:

- advocacy on implementation human resources legislation and strengthening capacity building;
- scaling-up evidence- based best practices;

- strengthening coordination, integration, referral systems, financing, supply chain management
- and information systems;
- Implementation of continuous quality improvement plans; and
- investment in prevention and strengthening management across the continuum of care.

## **Perceptions and views of key implementers on the implementation of the health promoting school program in the City of Tshwane, South Africa.**

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### **Background**

The health promoting school program has been associated with numerous benefits for school communities where it is well implemented. In Tshwane, the implementation processes have not been evaluated.

### **Objective**

A qualitative research approach based on grounded theory was used to investigate the experiences of twenty-seven health promoting school program implementers across Tshwane.

### **Methods**

Data were collected through a combination of methods, including semi structured interviews, a focus group discussion, field notes from school observations and memos.

### **Results**

A grounded theory was developed which showed that lack of guidance and accountability resulted in poor implementation. This was evidenced in the lack of training of implementers; poor leadership and collaboration; weak accountability structures; and lack of resources and communication.

### **Conclusion**

Implementers were keen on improving the lives of learners—health-wise and academically. It would seem that with proper guidance, support and accountability measures by the government at the district and provincial level, implementation of the program is feasible in the City of Tshwane

## **Outcome of enrolling mothers in monitoring intake and output of hospitalized children by nursing teams in 6 facilities across 5 African countries -Best Practice Project**

Minette Coetzee

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### **Background**

Evidence-based practice in child health is a commitment to best outcomes for children. While not every promising practice is 'best' for Africa, healthcare settings in the region are rich in good practice. Through the integration of evidence, promising practice can be further moved to best practice.

'Best Practice' is a global concept that drives quality by using proven methods or tools to measure and review current practice against the best available evidence. In this project a rigorously adapted evidence based practice protocol(EBPP) was used to actively engage mothers in the monitoring of their child's fluid intake and output in local care settings.

### **Methods**

A Best Practice Project was run between 2022 and 2023. This was followed by a rigorous evaluation process in 2024. The project provided children's nursing teams with the opportunity to: improve quality and safety of care for children and their families; achieve measurably excellent, evidence-based nursing practice; and consolidate a high-performing professional culture of excellence and compassion. The second phase of this quality improvement project envisaged improved fluid intake and output monitoring by actively enrolling mothers. The phase included nursing teams in 6 facilities, across 5 African countries, each guided by a group of specialist-skilled nurses acting as Team Leads.

### **Results**

The EBPP involved active assessment of each infant and child's hydration status on admission. This assessment guided the next action: a. 'at risk' so intake and output monitored by nursing team b. 'sufficiently stable' for mother to track and c. no need for regular fluid monitoring. Additional tools to assist mothers with noticing and tracking volume and colour variations facilitated nurses supporting and prompting mothers' noticing and reporting any changes in her child's condition.

Conclusion: This presentation will describe the tools and outcome data that resulted to measurable improvements in monitoring and managing hydration.

## TRACK 1

### **Moving Best Evidence to Best Practice: Outcomes of implementing a Care-through-Family Approach with nursing teams in eight facilities across five African countries**

[Minette Coetzee](#)

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#### **Background**

Families are a constant presence alongside sick children in hospitals across the region, yet the nature of practice with families remains mostly undescribed. Aspirations of global quality and safety standards and implementation, based mostly on Eurocentric models of service delivery often fall short in regions described as low income or under-resourced particularly in settings where local care practices remain invisible.

An ongoing body of work has described the distinctive practices of nurses working with mothers and families in the care of hospitalised children. We then articulated a conceptual model followed by a self-assessment tool that nurses use to consider their practice and guide practice shifts towards working with families.

#### **Methods**

A 2-year Best Practice Project was run between 2022 and 2023 followed by a rigorous evaluation process in 2024. The project provided children's nursing teams throughout Africa the opportunity to: improve quality and safety of care for children and their families; achieve measurably excellent, evidence-based nursing practice; and consolidate a high-performing professional culture of excellence and compassion. The initial phase involved utilising the Care-through-family tool of this quality improvement project. The project enrolled 10 teams in 8 facilities, across 5 African countries, each guided by a group of specialist-skilled nurses acting as Team Leads.

#### **Results**

The self-assessment tool was utilised to track and consider objective examples of practice, this triggered critical reflection and conversations about gaps between what nurses 'know' and 'do' as they worked with families. Visual representation of data, as a spider diagrams, prompted teams to plan practice improvements, review and track their own progress.

Conclusions: While nursing practices are shaped by organisational cultures of health systems, this project utilised a model developed from authentic and excellent African nursing practice and resulted in a number of measurable improvements as teams shifted how they worked with families.

## **A focused Paediatric Palliative Care Framework. A first in the country!**

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### **Background**

Palliative care includes the prevention and relief of suffering of adult and paediatric patients and their families facing the problems associated with life-threatening illness. In South Africa, the National Department of Health (NDoH) has developed a National Policy Framework and Strategy on Palliative Care 2017 – 2022. Provincially, The Western Cape Department of Health and Wellness has appointed a Palliative Care Task team to ensure implementation of the national policy.

The Red Cross War Memorial Children's Hospital has developed an institutional framework to guide the multi-disciplinary team on the management of children on the palliative care journey.

### **Objectives**

We aimed to explore the iterative development of a Paediatric Palliative Care Framework (PPCF) at Red Cross War Memorial Hospital between 2022 -2023.

Methods: We systematically applied various health care frameworks and root cause analysis tools with role players involved in clinical care and provision of palliative care at RCWMCH to understand the policy context and develop policy content. This was done in a sequence of inter-active meetings, informing the development of the policy. The case study describes the process and key outcomes of the systematic approach followed.

### **Results**

After two years of stakeholder engagements, a final draft PPCF was launched on 10 October 2024. This draft incorporated inputs from a wide range of internal and external role-players to comprehensively address the institutional policy needs. The iterative nature of the policy development allowed innovative practices, including the development of an internal QR code referral pathway for clinicians to refer patients to our palliative care professional nurse.

Conclusions: Leading the team systematically through the drafting process of the PPCF structured the opinions of multiple role players in our complex health care environment. The collective experience in this format, support the usefulness of such a systematic approach in a workplace challenge.

## **Seamless Support and Connecting Care: A Quality Improvement Initiative in Paediatric Palliative Care at CHBAH**

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### **Background**

Despite increasing demand, paediatric palliative care services in South Africa remain limited and unevenly distributed, with restricted access to trained providers. At Chris Hani Baragwanath Academic Hospital (CHBAH), palliative care consultations have traditionally been conducted via telephone with a single paediatric palliative care consultant for the Johannesburg area, even when other members of the palliative care team may be better suited to the management of the patient. The data on consultations, essential for motivating for additional resources, needed to be captured manually. This project aimed to improve palliative care services by enhancing the skills of clinicians, strengthening communication between healthcare teams and improving efficiency of data collection, ultimately leading to better support and care for patients.

### **Methods**

A WhatsApp group was established to facilitate sharing of palliative care educational materials and provide a platform for real-time advice on patient care. Additionally, a Google Form was created for referrals to the palliative care team, allowing team members to allocate the consultation efficiently and have an electronic record of consultations.

### **Results**

Communication between registrars and palliative care providers was improved. The WhatsApp group enhanced networking and provided easy access to evidence-based guidelines and real-time advice from the palliative care team. The Google Form referral system streamlined consultations, increasing appropriate requests for advanced palliative interventions. It also facilitated improved use of step-down care facilities and simplified data collection for the palliative care team.

### **Conclusion**

The project successfully strengthened paediatric palliative care provision at CHBAH, promoting effective resource utilisation and broadening access to quality palliative care services. Continued efforts are needed to solidify these practices, enhance clinician training, and foster sustained interest in paediatric palliative care.

## **Nudging CHWs To Improve TB Preventative Therapy Among Children Under 5 in Rural Limpopo, South Africa**

Denise Evans, Denise Evans, Aneesa Moolla, Lezanie Coetzee, Vongani Maluleke, Patricia Leshabana, Nthabiseng Masebe, Lesley Bamford, Jacqui Miot

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TB Preventative Therapy (TPT) initiation and completion rates among <5 years remain low, especially for HIV-infected children. Community healthcare workers (CHWs) can effectively provide support and guidance on TB prevention during regular home visits. We used the EAST (Easy, Attractive, Social, Timely) behavioral insights framework to design a sticker (148x210mm) to guide CHW TPT-related activities for <5 years and with caregiver messages to overcome common barriers to TPT uptake. Stickers were placed in the child's medical record kept at the household.

We conducted a pre-post intervention study in Mopani District, Limpopo Province during 2022/2023. CHWs were randomized to an intervention (IG) or control group (CG). CHWs in the IG used TPT stickers during home visits, whereas the CG had "pseudo-stickers". Trained fieldworkers conducted surveys with caregivers ( $\geq 18$  years) at enrolment and end of intervention (6 months). Data were collected from stickers and informal feedback from CHWs. Primary outcomes included: CHW TPT-related activities during home visits; changes in caregiver knowledge and behavior; and the proportion of CHWs that used the stickers. Groups were compared using chi-square test for proportions.

We enrolled 150 intervention and 146 control caregiver-child dyads. The intervention changed CHW's behavior and resulted in more frequent home visits, use of the child's medical record, and increased TPT-related activities at the household compared to the CG ( $p \leq 0.05$ ). In the pre-post analysis, caregiver TPT knowledge improved ( $p \leq 0.05$ ), but barriers to TPT uptake (concerns over side effects, costs, resistance, and stigma) remained ( $p > 0.05$ ). CHWs struggled to complete certain parts of the sticker and were unsure when to refer - highlighting the need for further training.

The tool encouraged CHWs to enhance their TPT-related activities at the household. It prompted CHWs to discuss TPT with caregivers and to inquire about children <5 years old and other people living with HIV in both study and non-study households.

## **Care for the caregiver: how caregiver mortality affects treatment outcomes – an observational cohort study**

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### **Background/Aim**

Despite improvements in HIV management, children and adolescents living with HIV remain vulnerable. Caregiver mortality in a large paediatric and adolescent HIV clinic in Johannesburg are described and the effect of the death of a caregiver on children and adolescents' HIV treatment outcomes was investigated.

### **Methods**

In this secondary retrospective analysis on longitudinal data we included children or adolescents attending clinic between 01 January to 31 December 2021. Data were divided into those with documented primary caregiver mortality and those without (ever documented including before enrolment into care). Viral load, treatment regimens, CD4, and anthropometry were analysed for the year 2021.

### **Results**

Caregiver vital status was recorded in 1171 (93%) of the 1260 patients attending clinic in 2021. In 115 children or adolescents (10%) we found a documented death of caregiver(s). Amongst 1120 mothers, 100 (9%) had died; of 460 fathers, 18 (4%) had died and one (1%) of 100 other caregivers had died. A large number (n=54 [45%]) of the 119 deaths occurred between 2016 and 2021 and 66 (69%) after the child/adolescent's enrolment in the clinic. In 2021, stunting and wasting were seen significantly more in the participants who had a caregiver death than those who had not (p=0.01 and 0.02 respectively). No significant difference was seen between the groups for the viral load, treatment regimens and CD4 counts.

### **Conclusion**

Caregiver death was incompletely captured in the clinic database, suggesting that clinicians were unaware of the death of a caregiver. Children experiencing the death of a caregiver were more likely to be malnourished. We propose increased attention on wellbeing of caregivers in paediatric HIV services.

## **Enhancing Community-Based Care for Children with Special Needs in Tshwane through a Down-Referral Pilot Project**

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### **Background**

As part of the Tshwane District of Excellence (TCOE) for children with special needs initiative, a down-referral pilot project was launched to improve the continuity of care for children with special needs. Children assessed as clinically stable at the Steve Biko Academic Hospital (SBAH) Paediatric Neurology Outpatient Department (OPD) are down referred to local community health centres (CHCs) to receive ongoing treatment closer to their homes. This approach is expected to improve retention, reduce caregiver costs, and support the holistic care of children with special needs within their communities.

### **Methods**

The pilot project focuses on two community health centres (CHCs) in the SBAH cluster: Eersterust and Stanza Bopape. The down-referral process is structured around a multidisciplinary, multi-level engagement, with a digital referral system to streamline care coordination. A down-referral letter and medication prescription are sent via email to designated "champions" at the receiving CHCs. These champions, typically part of the rehabilitation team, play a pivotal role in coordinating the child's care at the PHC site. They manage appointment bookings, oversee medication continuity, and act as a communication link between the PHC team and the SBAH specialist clinic.

To support continuity, ward-based outreach teams assist in tracing patients who miss follow-ups. If the required medication is unavailable at the CHC, it is sourced from the regional pharmacy or directly from SBAH through established channels, coordinated by the champions and pharmacy staff.

### **Results**

Preliminary observations indicate caregiver satisfaction, reduced travel costs, and ongoing compliance. Lessons learned from this pilot will contribute to developing a comprehensive down-referral protocol across Tshwane.

**Conclusion**

This pilot demonstrates how structured down-referral pathways and dedicated facility champions can enhance community-based paediatric care for special needs children. By decongesting tertiary facilities and providing care closer to home, this model promotes sustainable, community-integrated care that can be replicated in resource-limited setting

## TRACK 2

### **Counting with Confidence: Implementing Electronic Tools for Enhanced Data Accuracy**

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#### **Background and Aim**

The Chris Hani Baragwanath Academic Hospital (CHBAH) neonatal unit managing 200 patients in the unit and admitting approximately 80 patients per week, previously relied on a paper-based data collection system. This manual process, managed weekly by paediatric registrars, was time-consuming and often inaccurate. We aimed to develop an electronic tool for real-time data collection to improve accuracy and efficiency.

#### **Methods**

A Google Form was created in consultation with consultants and registrars, designed with pre-populated options for easy, consistent data entry. The form was distributed via a shared WhatsApp group and mandated for use, initially alongside the paper-based system, from October 2022. Registrars completed entries on smartphones, with data exported to Excel for analysis. Four weeks post-implementation, we assessed data quality and user acceptability.

#### **Results**

Registrars reported the electronic system as user-friendly and time-saving, expressing a preference for its continued use. However, data quality challenges persisted, with only 60 - 92% of admissions accurately recorded in various areas of the unit.

#### **Conclusion**

This project demonstrated an initial step toward improved data collection, with positive registrar feedback on usability. While the electronic system was well received, it fell short of creating a robust and reliable data framework, highlighting a need for further refinement. To enhance data quality and support meaningful statistics, we recommend further system refinement, including aligning data fields with standard indicators.

## **Improving Neonatal Mortality Rates Using Health Management Skills: A QIP in a Rural Community Service Setting**

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### **Background**

Reduction of neonatal mortality rates in South Africa remains a challenge, especially in settings where lack of experienced practitioners and resources create care limitations. As a community service doctor in South Africa one is likely to care for neonatal patients in such difficult settings. Although experience, skill and resources may be especially limited for the community service doctor, an opportunity to decrease neonatal mortality of patients may lie in using effective health management/leadership soft skills. At no cost, utilising skills which address administrative, health information system and managerial issues may lead to improved neonatal outcomes.

### **Methods**

This quality improvement project (QIP) took place at a regional hospital in the Eastern Cape from January to December 2019. It was developed by Dr Gabriel Nel, the community service doctor in the neonatal wards. A three-phase strategic plan was developed, focusing on utilising only health management soft skills to address technical, administrative and infrastructural issues. The plan required zero financial costs and did not utilise any funding for staff shortages, equipment issues or maintenance of the unit. Data for monitoring and evaluation was collected retrospectively by neonatal ward staff on a quarterly basis.

### **Results**

The annual Neonatal Mortality Rate (NMR) in the unit decreased from a pre-QIP value of 14/1000 in 2018 to 12.8/1000 in 2019. This was the first time the annual NMR had decreased in the unit since 2016.

### **Discussion and Conclusion**

Despite the lack of experience, clinical skill and funding for resources we were able to decrease the NMR for the first time since 2016 using only improved unit management, leadership and administrative integrity. It is suggested that improved health management training in internship and community service may be of benefit, however, further formal studies on the impact of health management and leadership and neonatal outcomes are recommended.

## **Empowering mothers with cardiopulmonary resuscitation (CPR) skills in Kangaroo Mother Care (KMC) before discharge**

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### **Background**

Extreme and very low birth weight babies (ELBW/VLBW) spent several weeks to months in our Nursery. Before discharge these babies will have overcome multiple complications related to prematurity and prolonged hospital stay and will have received multiple interventions. Although most of these babies will have good outcomes after discharge, some of them will develop a complication at home and might die from related cardiopulmonary arrest.

During the death audit of one of our ex-premature baby's death on arrival (DOH) secondary to a respiratory arrest at home, we realised that empowering the mothers with basic resuscitation skills could possibly save some of the babies.

### **Aims**

1. Equip mothers with knowledge on how to resuscitate their babies
2. Encourage help seeking behaviour
3. Educate on common health related challenges within our community
4. Encourage mum to pass this new knowledge and skills on to other community members

### **Methods**

One of our senior Medical Officers then developed a weekly combined CPR and health education training programme.

To remind staff, the training was incorporated in the chronic workup form for premature babies in our unit as one of the requirements before discharge. Mum's exposure to the training was also included in our standardized electronic discharge template.

A video of one of the training sessions was made, allowing mums to now watch the training on their cell phones or on the unit's television screen that is used to display educational programmes.

### **Results**

The CPR and health education training has been well received by mothers and staff alike. Since implementation, two mothers managed to successfully resuscitate their

babies at home before arrival to hospital and one mother initiated resuscitation successfully for an apnea while still admitted in KMC.

**Conclusion**

KMC mothers can be successfully trained on cardiopulmonary resuscitation (CPR) before discharge.

## **Cultivating Child Health Expertise: A Digital Resource for Paediatric Registrar Success**

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### **Background**

The child health and community paediatrics curriculum is a crucial component of paediatric training at the University of the Witwatersrand (Wits), comprising a significant portion of the exit exam for paediatric qualification. However, few registrars rotate through this area, and training remains limited, affecting their preparation for exams and clinical practice. This project aimed to create an engaging, accessible online resource to support Wits paediatric registrars in building strong foundations in child health and community paediatrics.

### **Methods**

A dedicated site was developed on Ulwazi, the Wits learning management system, where child health materials were curated and optimized for interactive online learning. The content was enriched with videos, images, and quizzes to facilitate deeper engagement and reinforce theoretical knowledge through multimedia.

### **Results**

The project resulted in a comprehensive, up-to-date, and user-friendly online resource that enables paediatric registrars to learn essential child health concepts at their own pace. The new format supports registrars' exam preparation while promoting a broader understanding of child health principles that they can integrate into their clinical practice.

### **Conclusion**

This digital resource offers a robust platform for paediatric registrars to explore community paediatrics and child health with flexibility and depth. Future efforts will focus on increasing user engagement and potentially expanding access to registrars outside the Wits training circuit, fostering a stronger paediatric workforce equipped to address child health needs.

## The Hearing Screening Initiative at St Joseph's Intermediate Paediatric Care

Lisa Horn, Tessa Jenkins - St Joseph's Intermediate Paediatric Care

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### Background and Aims

Hearing loss can significantly impact a child's development, particularly concerning speech, language, learning, and social skills. At St. Joseph's Intermediate Paediatric Care (SJIPC), many children are at risk of developing hearing loss due to their conditions. It was identified that many of these children were not receiving necessary hearing screenings, leaving them vulnerable to undetected and untreated impairments. In March 2024, the project secured funding from the Japanese Embassy, marking a new chapter in paediatric care at SJIPC. The project's goals are to identify hearing loss as early as possible, facilitate timely intervention, and reduce preventable hearing loss and ear disease in this vulnerable population.

### Methods

With funding secured, a range of specialized equipment was procured, including Screening OAE & AABR devices, a Tympanometer, an Audiometer, and an Otoscope. The project is being run by the Speech Therapy department. Initial stages involved training staff, drafting and finalizing internal protocols, establishing referral procedures, and ensuring follow-up care to maintain continuity and comprehensive care for all identified cases of hearing loss. Following staff training, additional support is anticipated from rehabilitation care workers.

### Results

To date, we have screened 82 patients. Fifteen patients have been referred to Audiology after failing hearing screenings or displaying obvious pathology. As a result of our screening interventions, two children have been diagnosed with hearing loss.

### Conclusions

The hearing screening initiative at SJIPC represents a vital advancement in paediatric care. By identifying hearing loss early and providing timely interventions, the program is making a tangible difference in the lives of at-risk children.

## **Acceptability Of Kangaroo Mother Care Among Mothers With Low-Birth-Weight Babies At Arthur Davison Children’s Hospital NICU, Ndola, Zambia.**

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Low birth weight (LBW) is a global public health concern that pose significant challenges to perinatal care, resulting in an estimated one million deaths annually (Chang et al, 2018). KMC involves LBWB being placed in an upright position against the caregiver’s chest, with early skin-to-skin contact between the caregiver and infant (WHO, 2022).

KMC should be commenced immediately after birth and has to continue for least 8hours or more per day (Hall et al, 2024). Hypothermia is one of the leading causes of death in low-birth-weight babies. KMC helps regulate baby’s body temperature, induces relaxation and stabilises key observations. (WHO, 2023).

Therefore, this study was aimed at assessing acceptability of the KMC among mothers with LBWB at Arthur Davison Children Hospital in NICU.

### **Objective**

To assess factors influencing acceptability of Kangaroo Mother Care (KMC) in NICU at Arthur Davison Children’s Hospital in Ndola, Zambia.

### **Methodology**

A cross sectional quantitative analytical study design was used. The study was conducted at Arthur Davison Children's Hospital (ADCH) in Ndola. A structured closed ended questionnaire was used to collect data from the participants using an interview. Data was analysed using a Statistical Package for Social Scientists (SPSS) software version 26. Multivariate binary logistic regression analysis was used to quantify the relationship between the dependent and independent variables.

### **Results**

Most of the respondents had male babies 77%, 69% of the babies weighed 1000g – 1400g, majority 79% had normal delivery, 71% of the respondents were multigravida and most of the respondents 79% were married. The study reviewed that 85% of those who attained secondary education accepted KMC, 74% of the respondents without monthly income accepted KMC, 80% of the respondents had positive attitude and accepted KMC. 82% of the respondents who had positive perception accepted KMC.

**Conclusion**

Acceptance of Kangaroo Mother Care (KMC) mothers 75% underscores its widespread favourability as a beneficial method for infant care

## TRACK 3

### **Anthropometric status of children 0 – 59 months in Kwa-Zulu Natal**

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Having accurate anthropometric data for infants and young children is critical to inform policy and programme development.

The aim of this study was to determine the district specific prevalence of malnutrition in children under 5 years in KZN between July – November 2022.

A mixed method approach was applied. For the quantitative part, an analytic cross-sectional study design targeting 11 health districts in KZN was conducted. A stratified 2 stage sampling design was used to estimate the sample size to determine prevalence of malnutrition in children attending fixed and mobile clinics.

The information was collected on a pilot tested structured questionnaire administered by trained health workers. Data entry into Microsoft Excel was facilitated by 7 trained data capturers. Nutritional status was determined using WHO AnthroPlus software, based on the WHO Growth Reference Data. Data was analyzed using the Statistical software SPSS version 29.

The valid study population included 4127 subjects aged 0 – 59 months. The gender distribution was comparable with males representing 48.9% (2006) [95% CI: 47.3-50.4), and female 51.1% (2100) [95% CI: 49.6-52.7]. The provincial prevalence was 7.7% (n=306)[95% CI: 6.9-8.5] for underweight & severely underweight, 3.6% (n=135) [95% CI: 3.0 – 4.2] for moderate acute malnutrition, 1.7% (63)[95% CI: 1.3-2.1] for severe acute malnutrition, 19% (n=729)[95% CI:17.8-20.3] for stunting, 15.6% (591)[95% CI:14.4-16.8] for overweight & obesity. The district specific prevalence for all indicators was calculated for each of the 11 districts. Whilst there has been a decreased in stunting and overweight prevalence in children in KZN in comparison to the last survey, there has been an increase in wasting. The study met the objectives of providing valuable insight on district specific prevalence of malnutrition across the Province. The data also provides insight on the change in anthropometric status of the under 5 population since the last survey in 2015.

**Vhembe district Service innovations and quality improvement project in child health-Accelerate the reduction of malnutrition case fatality rate of children under 5 years of age**

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Vhembe district Service innovations and quality improvement project in child health-Accelerate the reduction of malnutrition case fatality rate of children under 5 years of age

In recent years, Vhembe district recorded high acute severe malnutrition case fatality rates ranging from 22.3% in Quarter 2 of 2023/24; then 21.5% in Quarter 4 of 2023/24. Innovations to turn the tide on severe acute malnutrition were scaled up January 2024 and such is recognized to have worked resulting in the reduction of SAM case fatality to 13.5% during Quarter 1 of 2024/25. More concerted efforts were employed throughout, leading to a further reduction in SAM case fatality to 10.1% in quarter 2 of 2024/25. The downward reduction trends of 55% as reflected above signal that the turnaround strategy executed was effective and yielded the expected results though not yet reached the APP target of 7.3%.

Question: Could designing a service innovation package reduce high rates of SAM case fatality rate in the Vhembe district? Service Innovations include a novel approach to the prevention and treatment of children with Acute Severe malnutrition. In April 2024, District MCWH team and Pediatricians from the Tshilidzini Regional Hospital launched innovations for the reduction of SAM Case Fatality rate in Vhembe district. The system revolves around understanding the underlying cause(s) of high SAM case fatality rate in the district in order to find innovative solutions to get to the heart of an issue. The top ranked root causes were isolated for target interventions.

**TARGETED ACTIVITIES THAT BROUGHT ABOUT IMPROVEMENT IN THE DISTRICT**

**Challenges and Interventions**

- 1) Ineffective Growth Monitoring and Promotion practices at public health facilities.

Re-orientation of Nutritionists, Dietitians and Professional nurses at PHC on collecting, plotting anthropometric data and correct interpretation for decision making.

The improvements on proper measuring of weight, height and MUAC facilitated early identification of SAM and treatment thereof.

- 2) Deficiency of the clinician's knowledge on SAM case management

Re-orientation of PHC nurses on case definition of SAM, and adherence to IMCI guideline on SAM management.

The improvement on the correct nutritional classification, eliminated missed opportunities at the point of care and ensured initiation of correct interventions including referral to community social workers

3) Inadequate quantities of Food supplements-Ready To Use Food(RTUF). Empowerment of community members to make homestead garden to increase food security.

Procure adequate quantities of ready to use food.

Report all children with a confirmed SAM diagnose using Form 22 to Social workers. Working with other sectors and traditional leaders had facilitated and ensured a greater support on families with malnourished children.

4) Early interruption of exclusive breastfeeding and poor quality of supplementary feeds

Re establishment of breastfeeding support campaign at PHC facilities and Household especially on the vulnerable women such as teenage mothers ensured sending a message that there is nothing better than breast milk.

Expressed breast milk practices were rekindled at household setting when mothers are at work or school.

Health education providing high energy food to children 6 months and older.

5) Care givers/parents delay seeking medical care. - Re-orientation of mothers and caregivers on danger signs of children less than 5 years.

#### CONCLUSIONS

Severe Acute Malnutrition is both a social and medical condition which characterized by height for weigh of Z score of -3 , MUAC of less than 11.5cm and bipedal edema.

The improved clinical knowledge on GMP practices, SAM management , parents and care givers empowerment on dangers signs or early warning signs of a sick child were key ingredient in the solutions that worked.

## Capacity building on the WHO protocol on severe acute malnutrition in children

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### **Introduction**

Management of SAM according to WHO guidelines can reduce the case-fatality rate by ~55%. Whilst the WHO protocol on the inpatient management of SAM is built into pre-service curricula, experience during internship and training may be limited. The implementation of online modules to cover the 10 steps coupled with professional development as an incentive has the potential to ensure more health workers are capacitated and this may lead to improved implementation and better SAM CFR outcomes.

### **Methods**

The modules were online, with questions derived from the KZN Malnutrition Guidelines, Inpatient management of SAM. Participants answered questions on each of the 10 steps. Participants could complete the course at their leisure, medical interns and community service officers were given a timeframe to complete all modules. Those who passed each module with a minimum of 70% were issued a CPD certificate.

### **Results**

Between 2019 and 2021, 517 health workers completed the training. This constituted medical officers, dietitians and nurses. Hospital participation in the course improved from 44% in 2019 to 69% in 2021. The performance per module assisted with identifying gaps in knowledge per facility and district allowing for facility specific interventions. There were 318 SAM deaths in 2010/2011 and 164 death in 2020/2021. Conclusion: SAM CFR is affected by a multitude of factors, only one of which is the implementation of the WHO protocol on the inpatient management of SAM. The use of an online platform to encourage self – study of the WHO protocol may be useful to improve compliance.

## **Developing a home-based program to mitigate musculoskeletal complications in children with severe cerebral palsy in resource- limited settings: A Modified Delphi Study**

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### **Background**

Children with severe cerebral palsy (CP) are at considerable risk of developing secondary musculoskeletal (MSK) complications such as scoliosis, hip displacement and joint contractures, which can cause substantial discomfort and increase burden of care. Unmitigated, these complications often significantly restrict age-appropriate activities and inclusion in social participation. Current clinical recommendations for the management of CP do not provide adequate guidance to address this issue for children living in resource-limited settings (RLS).

### **Purpose**

To develop the components of a home-based intervention program (HBIP) aimed at limiting MSK complications in children with severe cerebral palsy (non-ambulant or Gross Motor Function Classification System level III to V), suitable for use in RLSs.

### **Methods**

A modified Delphi methodology was used to produce a consensus for a HBIP, using the Appraisal of Guidelines Research and Evaluation (AGREE II) tool. First, a systematic scoping review of the literature was conducted to identify potential program components, using the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) extension for scoping reviews. Next, focus group discussions were facilitated with 15 caregivers of children with severe CP from a peri-urban setting in KwaZulu Natal, South Africa, to explore their contextual needs and goals for a caregiver-delivered intervention. The results of the scoping review and focus group discussions were collated as statements and presented to an expert Delphi panel to rate their agreement on a Likert scale, with three Delphi rounds for modification and re-iteration until consensus was reached. The final proposed HBIP was returned to the caregivers for comment and approval before being finalised.

### **Results**

Fifteen multi-disciplinary healthcare experts participated in producing the final set of 62 consensus statements, concerning the proposed HBIP. These were grouped into five sections: the importance of the intervention; daily program elements and equipment

needs; caregiver training; the roles of the multidisciplinary team members; and community support mechanisms. Panelists agreed that caregivers should be trained in 24-hour postural management, stretching and splinting interventions and the use of relevant assistive devices to prevent MSK deformities; given strategies to assist with activities of daily living (e.g. feeding); and provided with tools for communication, cognitive development, and social participation. Community-based therapists should provide caregiver training, oversight and support, but community health workers already based in RLS should play a pivotal role in supporting program implementation.

### **Conclusion**

This consensus guideline document provides a detailed and actionable home-based intervention suitable for RLS, to mitigate MSK complications in children with severe CP. Implementation studies are recommended to determine feasibility, acceptability, and efficacy in real world settings.

### **Implications**

The lives of children with severe CP living in RLSs can be significantly improved by policies and programs that channel resources towards equipping caregivers to implement programs, and strengthening existing community health structures to support them.

## **Physiotherapy and Outreach Program Lesotho: Creating Assistive Equipment in a Low Resource Setting**

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### **Aims**

The provision of affordable equipment for children with disabilities in low resource settings is challenging [1]. Appropriate paper-based technology (APT) can be used to create bespoke assistive cardboard equipment in low resource settings using locally available waste materials [2]. This technology can be tailored to the individual child's needs to maintain comfortable functional positions in order to prevent contractures and improve participation. APT technology has already been shown to have a positive effect on quality of life in Kenya [3].

### **Methods**

Our aim was to review the output of a new APT workshop in Lesotho established in February 2023 [3]. A log of all children with cerebral palsy that had received cardboard chairs from the workshop since 2023 was analysed using Office Excel. Additional demographic data was recorded for all the children based in the Leribe district.

### **Results**

A total of 84 children with cerebral palsy have received cardboard chairs from POP Lesotho since 2023. This total included 40 children in Leribe district, 25 children in Maseru district, and 18 children in Butha Buthe district.

In Leribe district, the average age of the children was 3 years old (range 1 month – 14 years) with 18 females and 22 males. GMFCS level was five in 29 children, four in 5 children, and three in 6 children. Most children (32, 80%) received a 90-degree chair whilst the rest received a reclining chair (8, 20%). Adaptions of the basic chair pattern were made for 21 children. Six children needed a replacement chair.

### **Conclusion**

The establishment of this new APT workshop in 2023 has provided affordable seating for children with cerebral palsy in Lesotho. This program has the potential to be rolled out across the whole country in future. Formal analysis is needed to evaluate and guide the future development of this program.

### **References**

1. Clinton Health Access Initiative Lesotho, Assistive Technology Capacity Assessment Lesotho, 2022.

2. Westmacott J, Assistive Cardboard Equipment using Appropriate Paper-based Technology (APT), Cerebral Palsy Africa, 2015.
3. Barton C, Buckley J, Samia P, Williams F, Taylor SR, Lindoewood R. The efficacy of appropriate paper-based technology for Kenyan children with cerebral palsy. *Disabil Rehabil Assist Technol.* 2022 Nov;17(8):927-937.
4. POP Lesotho website. Available at [www.poplesotho.org](http://www.poplesotho.org). Accessed on 16/09/2024.

**To look into the issues of Child Health which contribute negatively and also to look into possible enablers of good Child Health within**

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**CHILD HEALTH MORTALITY AND MORBIDITY IMPROVEMENTS AREAS.**

**Background**

Child Morbidity and Mortality The triggers of illness or injuries vary with individuals. The availability of services within communities is also inconsistent in terms of availability, in terms of distance, and accessibility. Accessibility varies in the kind of accessibility. A Facility may be accessible in terms of the building but not accessible in terms of Cost for hospitalization. The problems range from availability of Drugs and Surgicals,Diagnostic Services. Most of the poor cannot afford many of these fail to access

This area has revolved simultaneously over the years for modernization. concern is the availability of Critical Equipment for that Child who needs care. It has sort of become normal for relatives to hold list of requirements per patient requirements for the Medication and also Surgicals . Some shortage of basic equipment e.g. Proper equipment for other administration of care the patient with correct calibrations .Shortage of New Equipment is needed for administration and also.

The health staff been continuously changing offering services due to staff attrition.Many migrating to better or greener pastures.

Nutrition which are facing inclusion of too many snacks and children's appetite is strained to select sweet snacks and a good nutritious plate of porridge.

**Aim**

To improve the Child Health in the Communities in the country by reducing morbidity and mortality in children.

**Sampling Frame, Methods, Data Collection**

1. Authority for the exercise.
2. Literature review.
3. Designing of Questionnaire for Data Collection.
4. Pretesting of the Questionnaire
5. Identification of sampling areas.
6. Review of Data past 5 years morbidity.
7. Review of data past 5years mortality.
8. Data Collecting Tools Questionnaires.

9. Review of Data submitted.
10. Review of some records.
11. Consolidation of Data.
12. Consolidation of Data.
13. Report Writing and Submission.

## VIRTUAL POSTERS

### **Improving preterm feeding and Kangaroo Mother Care (KMC) practices in the neonatal nursery at Prince Mshiyeni Memorial Hospital (PMMH) - a Quality Improvement Project**

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#### **Background**

In 2022 - 2023, prematurity accounted for 44.4% of neonatal deaths at PMMH. KMC and feeding are key interventions for preventative and promotive care in preterm infants according to recent WHO recommendations.

#### **Problems identified**

1. Growth of preterm babies not monitored.
2. Delayed identification and referral of extra – uterine growth restriction (EUGR) in preterm babies.
3. Feeds not fortified as prescribed.
4. No oral transition feeding guideline in preterm babies.
5. Poor scores on KMC skills audit.

#### **Aims**

1. Monitor preterm growth trends.
2. Early identification of EUGR and referral.
3. Align preterm feeding practices with provincial guidelines.
4. Improve and upscale KMC in all babies, including critically ill newborns.

#### **Methods**

1. Procuring scales, tape measures, growth charts and training of staff on accurate measurements.
2. Educational training of staff on EUGR.
3. Preterm nutrition audit - tool created and findings shared with staff.
4. Prescription of fortifiers on feed charts.
5. Implement Preterm Oral Feeding Readiness Checklist and Management Checklist for Preterm Oral Feeding.
6. Involve a MDT – role of the speech therapist in teaching oral stimulation exercises to staff and mothers.
7. KMC wraps procured, skills audits and training of staff, including high care.
8. Swallowing and breastfeeding workshop.

#### **Results**

- All preterm babies are weighed daily and recorded on daily assessment and weight chart.
- All preterm babies' lengths and head circumferences are measured weekly.
- Oral readiness and management tool implemented.
- MDT approach implemented for feeding preterm babies.
- KMC practices in our unit has improved – 41% to 74%.

**Conclusions**

- Preterm growth monitoring, identification of growth failure and early referral has improved.
- Early onset oral stimulation for preterm babies is becoming a standard of practice.
- Oral readiness and management tool implemented for transitioning preterm babies on tube feeds.
- The practice of KMC continues to improve as per audit scores.

## **Are children at the center of policies and what data supports their needs in multi-sectoral programming: Exploratory analysis of the Western Cape, South Africa**

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### **Background and Aims**

Global initiatives for child health and wellbeing have promoted accountability tools, such as dashboards, as a way to improve data-driven policy decision-making across sectors. However, little is known about how child well-being data are used across sectors at the subnational level. This study set out to explore how child health and wellbeing indicators and linked data are used to drive change through multisectoral policy processes in the Western Cape, South Africa.

### **Methodology**

The study was exploratory and descriptive utilising multiple qualitative methods of data. Data collection took place between October 2023 to May 2024 and included: 15 key informant interviews, a desk review of over 30 government resources, and four non-participant observations of meetings. Data analysis was conducted inductively and deductively using the health policy triangle framework.

### **Results**

The Western Cape Government (WCG) includes child well-being indicators in their policies. The strong data ecosystems in health and education enable these and additional indicators to inform decision-making, yet the early childhood development period has few routine indicators. Within sectors, dashboards are widely used to inform decision-making; but not across sectors. Opinions about the need for a multisectoral dashboard related to children to inform policy decisions were mixed. Multisectoral structures exist and use data to inform policy decisions at strategic levels (i.e. thematic management committees convened by the Premier's office) and operational levels (i.e. Child Death Reviews). There are no formal multisectoral mechanisms to share data about an individual child hindering a holistic response to their needs.

### **Conclusions**

The WCG has incorporated multisectoral indicators for child wellbeing within policy and has various structures in place to enable multisectoral data-driven decision-making. With the start of a new government, there is an opportunity to address the gaps in multisectoral data-driven decision-making.

## **Developing holistic in-hospital care for children admitted with severe acute malnutrition: making a lasting change.**

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### **Background**

In-hospital care for children with severe acute malnutrition is traditionally focused on the medical treatment according to the WHO 10 steps. Once the patient improves this guideline advocates to prepare for discharge by providing sensory stimulation and emotional support to the child (step 9) and follow-up (step 10). The input of the multidisciplinary team (MDT) including social worker, physiotherapist, speech therapist and occupational therapist is invaluable. But once the patient is fit for discharge, no real change has been made in the home environment of the child and readmissions for malnutrition are common.

### **Aims**

The aim of this quality improvement project was to improve quality of in-hospital care for children with malnutrition by developing a package of care summarised in a discharge checklist.

### **Methods**

Over the years the care for children with malnutrition in our hospital has developed into a bundle of care including common interventions as a special cubicle for SAM patients, weekly MDT rounds, a bimonthly hospital malnutrition meeting, linkage to clinics and community healthcare workers and sensory stimulation like the toy making project. However, through the dedication of individual healthcare workers additional actions have been added over the years. For HIV positive mothers and children we strongly advocate for a family meeting to disclose the status. Our social worker takes the caregivers to the Department of Home Affairs and SASSA to apply for ID cards and the appropriate grants. Form 22 is filled for all SAM readmissions and send to the Department of Social Development via our social worker. The caregivers are stimulated to receive long acting reversible contraceptives via our GOPD. A local NGO provides decent food parcels for three months after discharge. Interactive meetings are held weekly by our social worker, dieticians, occupational therapists and speech therapists with the mothers in our unit for information sharing.

### **Results**

The package of care has been summarised in a discharge checklist which aids the junior staff in preparing for discharge.

Conclusion

The holistic care for children with malnutrition in hospital is mostly medical orientated, but there are changes that we can make in the circumstances of the child at home by making use of existing services and passionate advocates for the wellbeing of the child.

## Improving quality of care in compassionate extubation by using a checklist

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### Background

As most quality improvement projects (QIPs) this project started with a negative experience as one of our doctors involved in compassionate extubation experienced conflicting emotions after the procedure. In our setting in the paediatric ICU we regularly encounter the clinical scenario where all options for further treatment are non-viable and further continuation of life-sustaining treatment like ventilation is futile and not in the best interest of the patient. Many steps have to be taken to make sure the compassionate extubation is then performed in the correct manner and also taking the wellbeing of family and healthcare workers into consideration.

### Aims

To make sure all staff is aware of the steps in the procedure of compassionate extubation.

### Methods

A checklist was drafted and implemented in our Paediatric Department after input from several healthcare workers from our institution.

### Results

As most procedures in the medical field the checklist is started with a time-out where all staff involved checks if all items are performed. Actions included in the checklist are amongst others proper documentation in the patients file regarding decision making, documented counselling with the family, brain imaging, psychological support for family, brain death checklist performed, prayer meeting, memory making, presence of caregivers during extubation, person performing the extubation and debriefing.

### Conclusion

Compassionate extubation is a challenging and emotional procedure for family and healthcare workers involved. The development of a checklist aids in following the correct procedures and gives support to the healthcare workers by preparing them adequately.

## QR-code link to autism resources website for parents and caregivers

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Autism spectrum disorder (ASD) is increasingly common; developmental specialists and rehabilitation therapist are not widely available. Doctors may be able to recognise speech delay and autistic behaviour meeting DSM criteria, but do not have access to speech and occupational therapy for ongoing management. There is concern that information given at diagnosis may be forgotten, and that the caregiver may struggle to explain the child's condition and prognosis to the rest of the family. Some families have specific concerns (eg tantrums) and it is difficult to address these adequately in brief clinic visits. The World Health Organisation (WHO) has produced 15 videos for families of children with developmental delays, but these are widely accessible. Other online resources are available but may be misleading or incorrect.

A simple parent resource website was created, which contained basic autism information in 3 languages, links to credible websites and approved YouTube clips, as well as the 15 WHO videos. The website was linked with a QR code. When doctors counsel families and caregivers, they have the website open on the computer or on their phone, and demonstrate the resources and videos. The parent is given a slip of paper with the website URL and the QR code to scan in when they have internet access. If they have a smartphone, the QR code is scanned immediately and the resources website is opened on their phone before they leave the clinic. Parents are encouraged to share the resources website with their families, friends and school teachers; the website has been viewed over 1000 times.

Counselling families affected by ASD can be daunting. Having access to resources and information means doctors feel less pressure to tell the family too much information initially, and can spend more time listening to and engaging with caregivers.