



Pediatric Development Clinic as a Model to Support Kangaroo Mother Care in the Community

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Early Childhood Development in Rwanda

- ✦ Early childhood (0-5 years) is critical period of brain growth and affects long-term outcomes, thus adequate nutrition is essential
- ✦ Challenges to early childhood development (ECD)
 - 44% of children in Rwanda are stunted (DHS 2010)
 - Few have access to ECD opportunities
 - Minimal opportunities for parental education and support

Improving Neonatal Survival in Rwanda

Significant neonatal mortality with 40% of childhood deaths occurring in neonatal period (DHS 2010)



Since 2010, national strategies focus on improving immediate, **INPATIENT** neonatal survival with neonatal special care units



GAP: No systematic way of providing long term **OUTPATIENT** nutritional support, medical care, or **ECD** opportunities for at-risk infants.

Pediatric Development Clinic Goal

- ✦ Create follow-up clinic for early intervention for the nutritional, medical and developmental needs of at-risk infants:
 - Provide high-quality care through screening, simple interventions, and caregiver counseling to support ECD (*including KMC practice continuation at community level*)

Multidisciplinary work



THE PDC TEAM

- Nurses
 - PDC clinic leaders
- Medical doctors
 - Mentorship during formative phase
- Social workers
 - Social/financial support
 - ECD training
- Milk mothers
 - ECD reinforcement

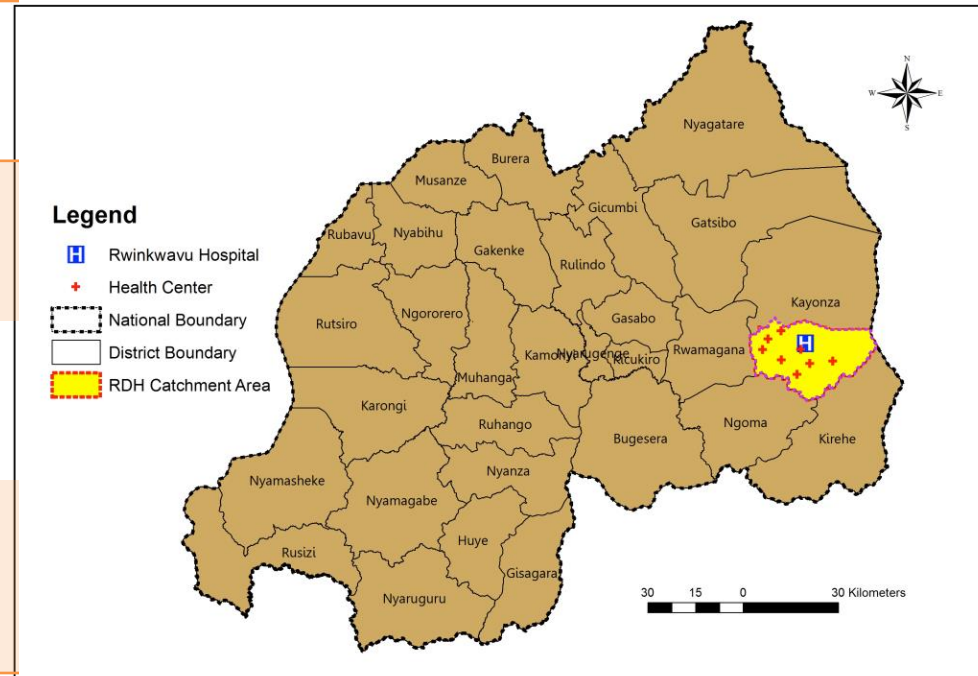
Implementation Setting

Region Southern Kayonza

Hospital Rwinkwavu District hospital

Health Centers 8 (3 provide NCD Services)

Population 188,363 people (2012 Census)



Implementation Status

- ◆ First Clinic at Rwinkwavu District Hospital opened April 2014
 - Quality improvement assessment conducted to evaluate the status of early implementation prior to expansion to additional health centers in August 2014

Assessment Aims

- 1) Describe the patient population served by the PDC
- 2) Evaluate the quality of care provided according to PDC protocol in key domains
 - ✦ **Evaluate the early impact of KMC counseling in PDC on the interval growth of low birth weight/preterm infants at a subsequent visit**
- 3) Qualitatively assess the acceptability and perceived value of PDC from the point of view of the caregivers

Methods

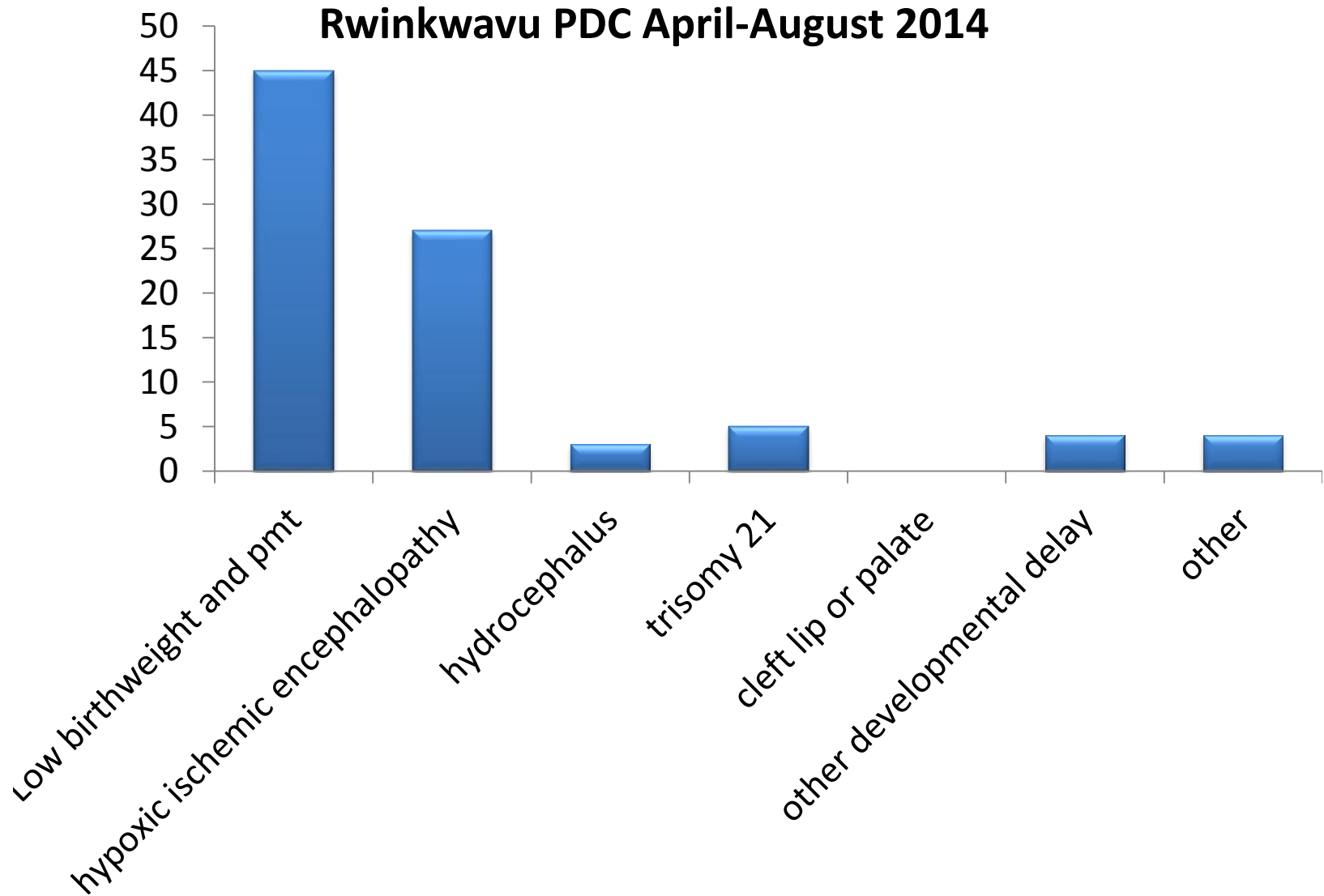
1) Retrospective review of routine medical records of all patient enrolled in PDC

- ✦ Period : April – August 2014
- ✦ 90 charts were reviewed, 40 charts met the inclusion criteria
- ✦ Data was extracted using a structured data extraction form
- ✦ Data was entered into an excel database for univariate data analysis

2) Focus group discussions with caregivers

- Held 2 focus group discussions with 10 participants each
- Selection: Of the patients scheduled for clinic each week, we invited the 11 caregivers whose children had been enrolled in PDC the longest

Results: Populations Served



Results: Low Birth weight/Preterm

Social economic status	100% of low ubudehe status (1-3)
Average birth weight	1,575 grams
Average gestational age	33 weeks
KMC use at first visit	50% (20 infants)
KMC counseling at first visit	90% (36 caregivers)
Adequate Interval growth at the subsequent visit	94.4%

UBUDEHE Category: the lower number denotes a high level of poverty. (this program is used by Rwandan government to classify the population according to the level of different families' income.)

Results: Value of PDC to Caregivers

- Qualitative themes:
 - High value to caregiver in terms of encouraging attachment, bonding, nutrition and developmental knowledge and behavior

Results: Attachment and Stigma

- When I came here, I talked with the social worker and clinician, and they made me feel comfortable. Before I thought that the child would not be alive. I thought the child would die at any time. Now I feel comfortable, and I love my child.
- This clinic is very important because we meet with other moms who have the same problems. I can discuss everything with other moms. I see I am not alone. Before, I would sit alone by myself because I felt shame. Now I see I am not alone in my child having a problem. I do not feel ashamed.

Conclusion

- ✦ The PDC is an effective way to support healthy practices at home for preterm/LBW infants including KMC
- ✦ PDC may facilitate adequate weight gain in outpatients for LBW/PMT infants in Rwanda despite socioeconomic vulnerability.
- ✦ The PDC approach has high value to caregivers in terms of nutrition, development, attachment and stigma reduction

Thank you

Murakoze

