POSTNATAL CARE AND NEWBORN FEEDING PRACTICES IN 15 SUB-SAHARAN AFRICAN COUNTRIES

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Introduction – Newborn feeding

• Newborns reap many benefits from **early and exclusive breastfeeding**
  – Reduce under nutrition and mortality
  – Improve newborn immunity
  – Reduction of diarrhoeal disease

• Prelacteal feeding (feeds other than breastmilk in the first few days of life)
  – Increase risk of diarrhoeal disease
  – Reduced maternal milk production
Introduction – Postnatal care

- Recent call by WHO-UNICEF to improve Postnatal Care (PNC) for all newborns
- PNC for improved **survival** and **health**
- Some elements of PNC:
  - Promotion of early and exclusive breastfeeding
  - Thermal care
  - Hygienic cord care
- PNC literature based on trials and interventions. What about customary care?
Research question

• Is PNC associated with newborn feeding practices?
  – **Hypothesis 1**: PNC is associated with higher levels of early initiation of breastfeeding
  – **Hypothesis 2**: PNC is associated with lower levels of prelacteal feeds

• Aux. analysis: Are all provider types (trained and untrained) suitable to provide PNC?
  – **Hypothesis**: Only trained providers are suitable to provide PNC
Data

- Demographic and Health surveys data from 15 sub-Saharan African countries

- **Outcomes:**
  - Breastfeeding within 1 day
  - Prelacteal feeds (within first 3 days of life)

- **Independent variable:**
  - PNC within 1 day
Methods

• Multi-level, multivariate models for two binary outcomes
  – Adjusts for clustering of data within countries
  – Adjusts for individual and country-level characteristics and correlates
  – Individual correlates: age, birth interval, parity, C-section, ANC, Skilled delivery, tetanus toxoid, education, marital status, media access, wealth, residence
  – Country correlates: GDP per capita, expenditure on health, density of physicians and nurses, HIV prevalence.
Results

- Breastfeeding within 1 day: 81% (range: 66-94%)
- Prelacteal feeds: 39% (range: 11-65%)
- PNC within 1 day: 15% (80% provided by nurses)
Bivariate results

Percentage of newborns breastfed within 1 day of birth by post-natal care within 1 day

*significant at the 0.05 level
Bivariate results

Among ever breast-fed newborns, percentage who had a prelacteal feed by post-natal care within 1 day of birth

*significant at the 0.05 level
Multivariate results

• PNC within 1 day **significantly** associated with breastfeeding within 1 day
  OR: 1.35, *p-value*: 0.000, 95% CI: 1.27-1.44

• Provider of PNC **significantly** associated with breastfeeding within 1 day (except for physicians)
  – Physicians: OR: 0.93, *p-value*: 0.269, 95% CI: 0.81-1.06
  – Nurse/Midwife: OR: 1.39, *p-value*: 0.000, 95% CI: 1.29-1.50
  – TBA/CHW/Other: OR: 1.95, *p-value*: 0.000, 95% CI: 1.60-2.36
Multivariate results

- PNC within 1 day **not significantly** associated with breastfeeding within 1 day
  - OR: 1.04, *p*-value: 0.195, 95% CI: 0.98-1.09

- Provider type: no association with prelacteal feeds except for
  - TBA/CHW/Other OR: 1.20, *p*-value: 0.017, 95% CI: 1.03-1.39
Implications: take home messages

• PNC through customary care can improve breastfeeding within 1 day

• Need to further tailor PNC to reduce prelacteal feeds, and hence, increase exclusive breastfeeding

• Trained and untrained persons can provide PNC to improve breastfeeding within 1 day: low cost, new opportunities to engage TBAs, CHWs
Limitations & ongoing work

- Low levels of PNC within 1 hour
- PNC content not known
  - UNICEF testing of PNC content questions in Nov: Belize MICS field test
- Gap in skilled delivery and PNC: real or not?
  - DHS: short set of questions
  - MICS: elaborate and more detailed questions
  - Points to potential issue in DHS data
- Further analysis of MICS data on PNC
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