EARLY MOTHER-TO-CHILD HIV TRANSMISSION RISK AMONGST YOUNG WOMEN: FINDINGS FROM THREE NATIONAL SURVEYS, SOUTH AFRICA, 2010, 2011-12 AND 2012-13

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BACKGROUND

- ≤ 5300 new HIV infections among adults is a 15-year old, of whom:
  - ≤ 47% in women
  - ≤ 56% in young people (15-24)
  - ≤ 20% among young women (15-24)

Prevalence of HIV by birth by age 18, amongst women aged 20-24 years:
- 28% in West and central Africa
- 23% in Eastern and Southern Africa compared with
- 4% in Eastern Europe and Central Asia

Unmet need for contraception amongst women 15-24 years:
- Amongst married women:
  - ≤ 5300 new HIV infections among adults is a 15-year old, of whom:
  - ≤ 21% in western and central Africa
  - 24-26% in east and southern Africa

Amongst unmarried sexually active women:
- 35-47% in western and central Africa
- 24-49% in east and southern Africa

Key question: Is MTCT being eliminated amongst adolescent girls and young women? How far are we?

WHO impact criteria for elimination:
- ≤ 50 new perinatal infections via MTCT per 100 000 live births (case rate)
- ≤ 5% MTCT breastfeeding populations, and ≤ 5% in non-breastfeeding populations

WHO process criteria for elimination:
- ≥ 95% antenatal care coverage amongst all women (at least one visit),
- ≥ 95% of HIV testing of pregnant women,
- ≥ 90% antiretroviral treatment (cART) coverage of HIV-positive pregnant women

AIM

To quantify the differential risks of early MTCT amongst adolescents, young women and adults in South Africa

STUDY DESIGN

Setting: South Africa where HIV prevalence amongst women 15-24 years is 11.4%

MOTHERS AND INFANTS

- Sampled consecutively / systematically
- Enrolment independent of maternal HIV or PMTCT status
- Primary caregiver consented, interviewed and infant DBS taken
- ≤29% in western and central Africa
- 24-26% in east and southern Africa

METHODS

HIV TESTING

- Infants born to reported or EIA positive mothers tested for HIV total nucleic acid (PCR) positive
- DNA PCR positive
- Western blot + additional tests
- Discordance: self-reported vs EIA or PCR positive

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INTEGRITY

- Batch tested with 20% duplicates
- α = 0.05
- Used Stata 14
- Weighted for sample realisation and South African live births

MAIN OUTCOME MEASURE:

- early (6-week) HIV PCR amongst infants born to women aged ≤19 yrs, 20-24 yrs and ≥25 yrs

RESULTS

Aim 1: Weighed univariate analysis for each survey year.
- Continuous variables: two sample t-tests or Wilcoxon rank sum test
- Categorical variables chi-squared tests or Fisher exact tests.

SUMMARY AND CONCLUSION

By the last South African PMTCT survey in 2012-13, adolescent, young and adult mothers had:
- ≥ 95% antenatal care coverage with all women averaging more than 4 visits
- ≥ 80% coverage of pre-pregnancy ART testing
- ≥ 95% ART coverage of HIV-positive pregnant women
- Only 17.4% of adolescents, 84.9% of young women and only 9.4% of adult women were on any PMTCT intervention compared to 94.9% of adult women.

Most importantly amongst adults:
- Reduced from 3.1% in 2010 to 1.7% in 2012-13

But amongst adolescents and young women: No declining early MTCT trend

Extended the study's funded by:

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