Socio-cultural determinants of fertility in peri-urban Tanzania

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Aim

1. Measure median fertility rate among women with a history of childbirth stratified by age
2. Analyze the relationship between socio-cultural determinants and above median fertility (AMF).

Background — Fertility in Sub Saharan Africa

- The total fertility rate within Sub Saharan Africa (SSA) and Tanzania is 5.2 and 5.4, respectively.
- Policies focus on maternal child health, reduction in unwanted pregnancies and adolescent pregnancy.
- Socio-cultural determinants of fertility in SSA include, history of any child death/stillbirth, polygamy, women status and religion.
- Although maternal and country level factors have been investigated using demographic health surveys and cross sectional surveys, socio-cultural determinants of fertility in a peri-urban setting is scant.

Methods

- Retrospective study of 3029 reproductive aged women (20–49 years) who had given birth prior to survey, in 2012/13
- Dependent variable: age-group specific above-median fertility
- Independent variables: Socio-cultural determinants operationalized by history of any child death, religion, ethnicity and women’s status (index constructed from questions on perceptions about wife beating, a woman’s power to refuse sex, to ask for condoms).
- Model 1: Multivariable logistic regression stratified by age and adjusted for demographic factors
- Model 2: Same as model 1, but adjusted for birth control use (in a subset of 1261 women who had this information available)

Results

- Median overall fertility was 2 (Q1 – Q3: 1 – 4).
- Median fertility rates differed by age group with 20 – 29 years: 2 (Q1 – Q3: 1), 30 – 39 years: 3 (Q1 – Q3: 2) and 40 – 49 years: 4 (Q1 – Q3:3) (p=0.01).

Socio-cultural determinants of Above Median Fertility in the 3 age groups

20 – 29 year old mothers:

Women with history of any child death had 4 times greater odds of having above median fertility (AMF) (OR 3.9; 95% CI (2.6-5.9)) than women whose children all lived (model 1). When adjusting also for birth control use, effect became stronger (OR 6.9; 95% CI (3.0-15.7)). Catholic women also had greater odds of having AMF (OR 2.3; 95% CI (1.1-4.8)) in comparison to women who were Muslim (model 2).

30 – 39 year old mothers:

Women with history of any child death had 6.0 times greater odds of AMF in comparison to women whose children lived (95% CI: 4.0 – 9.0) (model 1). In Model 2, this effect became weaker after controlling for birth control use, with history of child death having a 5.6 times (95% CI: 3.1 – 9.8) greater odds of AMF than women whose children all lived (model 1). When adjusting for birth control use, with history of child death shows that the ‘replacement theory’ of couples making additional children to help with farming and take care of them in their old age is still relevant in our peri-urban context. Future analysis should explore whether mere child absence, rather than death, also predicts AMF.

40 – 49 year old mothers:

Women with a history of child death had 3 times (95% CI: 1.8 – 4.8) greater odds of AMF, in comparison to women with no history of child death. Being part of the Mhehe, Mndamba and Mingindo tribe was also associated with 3.2 (95% CI: 1.04 – 9.6), 2.7 (95% CI: 1.3 – 5.6) and 3.3 (95% CI: 1.04 – 10.2) times greater odds of AMF respectively in comparison to Mpgororo tribe. Lastly, women with low women status index had a 1.9 times greater odds (95% CI: 1.1 – 3.4) of AMF in comparison to high women status (Model 1). After controlling for birth control use, women who had a history of any child death had a 4.8 times greater odds of AMF in comparison to women with no history (95% CI: 2.4 – 9.4) (Model 2).

Conclusion

- The strong and consistent effect of previous child death on AMF shows that the ‘replacement theory’ of couples making additional children to help with farming and take care of them in their old age is still relevant in our peri-urban context. Future analysis should explore whether mere child absence, rather than death, also predicts AMF.
- When designing interventions to increase uptake of family planning and reproductive health services, an ecological perspective is needed to address social norms that shape fertility preferences.

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