

## **Stopping, spacing and postponing - Evidence of a uniquely African pattern of fertility decline.**

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### *Extended Abstract*

Not much has been written on the patterns of childbearing and child spacing in Southern and Eastern Africa since Ron Lesthaeghe's seminal edited volume of almost twenty years ago (Lesthaeghe 1989). At the start of the 1990s, Calwell, Orubuloye and Caldwell (1992) suggested that Africa would experience a new type of fertility transition, characterised by declines in fertility at all ages simultaneously. They further argued that this decline would be brought about as a consequence of women adopting modern contraceptive methods as a substitute for traditional practices of post-partum abstinence and lactation. Since then, no significant attempt has been made to validate their hypothesis. Barney Cohen has twice touched on the topic in his reviews of fertility dynamics in the region (Cohen 1993, 1998), but in both instances, the emphasis was on describing the fertility declines (such as they were) in the region rather than on child spacing patterns.

As alluded to in the abstract, we have so far assembled separately two important pieces of the puzzle that seeks to depict and described African fertility. This paper seeks to combine them into a more coherent narrative of the African fertility decline.

### **Stopping, spacing and postponing**

The first piece of the puzzle was published in PDR in September 2008 (Timæus and Moultrie 2008). This work – the final product of a paper first presented in 2003 (Timæus and Moultrie 2003) – sought to untangle the conceptual confusion associated with typologies of birth spacing and fertility control. In particular, we argued that a theoretical distinction could be drawn between spacing (i.e. delayed childbearing contingent on the age of the youngest child) and postponing (delayed childbearing not contingent on the age of the youngest child). We argued that changing proclivities of family formation and childbearing could be identified from changes in the shape of women's hazard of closing their birth intervals, and in the nature of the interaction effects between duration since last birth and the variable(s) of interest.

The theoretical argument was supported with the results of an empirical investigation into women's birth intervals in South Africa using data from DHS surveys which have been reported on in detail elsewhere (Moultrie 2002; Moultrie and Timæus 2002). These results strongly suggest that postponement has been an important childbearing strategy in South Africa, a line of argument further bolstered by the lengthening of median birth intervals in the country to levels previously not encountered in the developing world.

### **Generalised lengthening of birth intervals across sub-Saharan Africa**

The lengthening of birth intervals in South Africa was thought originally to be the unique and path-dependent consequence of South Africa's fractured history (Moultrie 2001). In the intervening period, however, a pattern of lengthening birth intervals has been identified across the region, with fundamental similarities in birth interval dynamics being observed, even though birth intervals elsewhere in Africa have not yet attained South African proportions. Brass-Juárez  $B_{60s}$  and  $P_n$  (Brass and Juárez 1983), and Aoun's extension of the method to allow estimation of projected median birth intervals (Aoun 1989a, b) have been used to document this trend (Moultrie 2005, 2008).

This research is strongly suggestive that there is indeed a uniquely African fertility transition under way.

### **Proposed research in this paper**

The paper proposed for IUSSP2009 sets out to integrate the findings from the two pieces of research outlined above into a more coherent and nuanced account of fertility dynamics during the course of the African fertility transition. Using DHS data from those sub-Saharan African countries that have conducted more than two DHSs, together with DHS data from a few countries in other regions of the developing world (for purposes of comparison and juxtaposition), we hope to document

- The existence of a generalised strategy of postponed childbearing across the region. This will be done using the approach outlined in our recent paper in PDR. Piecewise log-rate models will be applied to the data to derive hazard functions of closing birth intervals. The changes in the hazard functions will be assessed for evidence of the evolution of a pattern of postponement of childbearing. We further anticipate that age of mother and parity will be weakly significant in determining the hazard, if at all;

- That this strategy of postponed childbearing is accompanied by a process of lengthening birth intervals, brought about by the increased uptake of modern contraception. This will be assessed by applying the Brass-Juárez and Aoun methods to the birth history data from the DHSs;
- That the similarities in childbearing patterns are greater between African countries than they are between African countries and other developing countries, and that the patterns of childbearing in Africa are more suggestive of a generalised strategy of postponement;
- That, taken together, new insights into the past, present and future trajectory of African fertility will be unearthed.

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