

Exploring geographical variations in unmet need for contraception in Ghana

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Abstract

The importance of meeting unmet need for contraception as a prerequisite for meeting the Millennium Development Goals has been reaffirmed recently with the introduction of a new indicator on unmet need as part of MDG5- improving maternal health. Nowhere is this more urgent than the countries of sub-Saharan Africa where stalled fertility declines are seen and unmet need can affect more than 20% of women. In Ghana, fertility has been seen to be falling in some parts of the country but not in others. Local contexts are therefore important and information at sub national level are useful for building effective family planning policies. This paper uses small area estimations of contraceptive use to shed light on the locally defined nature of the fertility decline in Ghana and to inform strategies to reduce unwanted births in a country with a high maternal mortality rate. The estimates help in understanding the need for methods to limit as well as to space births. To arrive at the estimates we used a special case of the Generalized Linear Mixed Model with logit link function (Breslow and Clayton, 1993) which Saei and Chambers (2003) have established in the context of small area estimation.

Fertility decline in Ghana

The pace of the Ghanaian fertility transition in the near future is likely to be very slow without targeted policies. Indeed modern contraception usage in Ghana has not even kept up pace with the decline in fertility. For the TFR to fall below 4 births per woman there is a need to tackle the high number of estimated unwanted births. Subnationally, the fertility transition has different characteristics in the different regions – and the link with poverty is not always apparent (Agyei-Mensah 2005). Policy measures should reflect local and regional realities of the fertility transitions as well as the service configuration.

Methods-Estimating for small areas

DHS data sets have without doubt given much insight about recent reproductive changes. Clearly these data are important and revealing sources of evidence. But we also need to build more robust research designs that are conducted at the local level and attuned to local context. Such research will increase our understanding of the reproductive and local service situation subnationally.

The field of small area estimation is emerging field – but surprisingly the techniques are not often applied in developing countries apart from in the context of poverty maps and despite widespread availability of data with low levels of non-response. To estimate unmet need for contraception we used DHS data from 2003 and Census area estimates (2000) applied to a special case of the Generalized Linear Mixed Model (GLMM) with logit link function (Breslow and Clayton, 1993) which Saei and Chambers (2003) described in the context of small area estimation.

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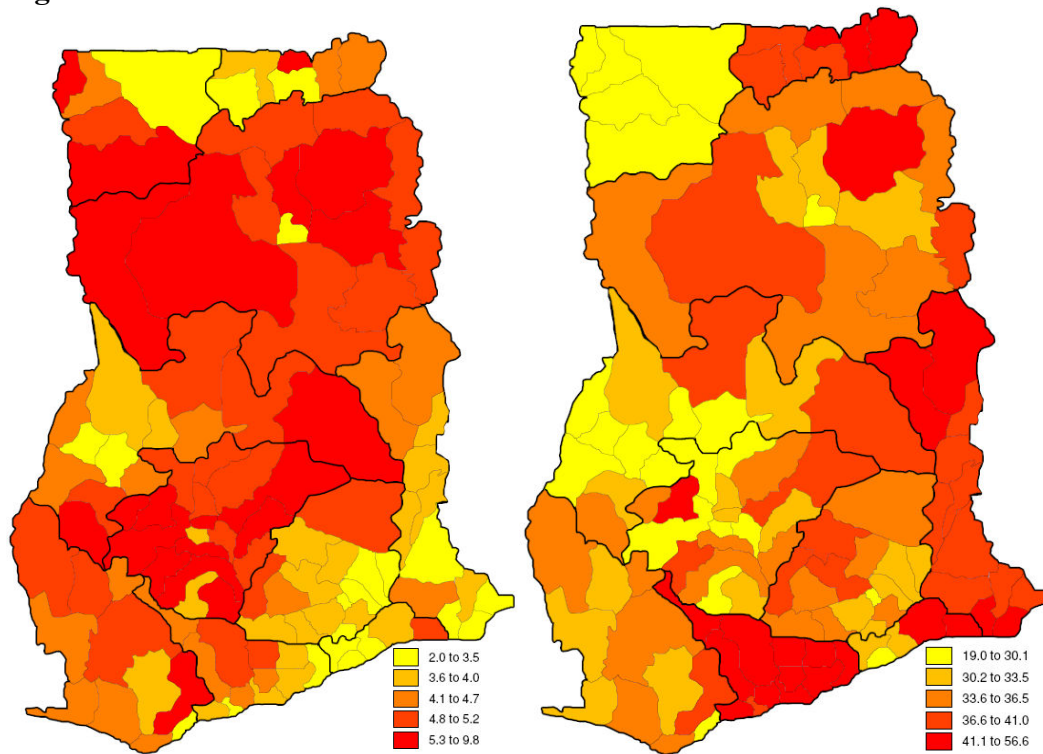
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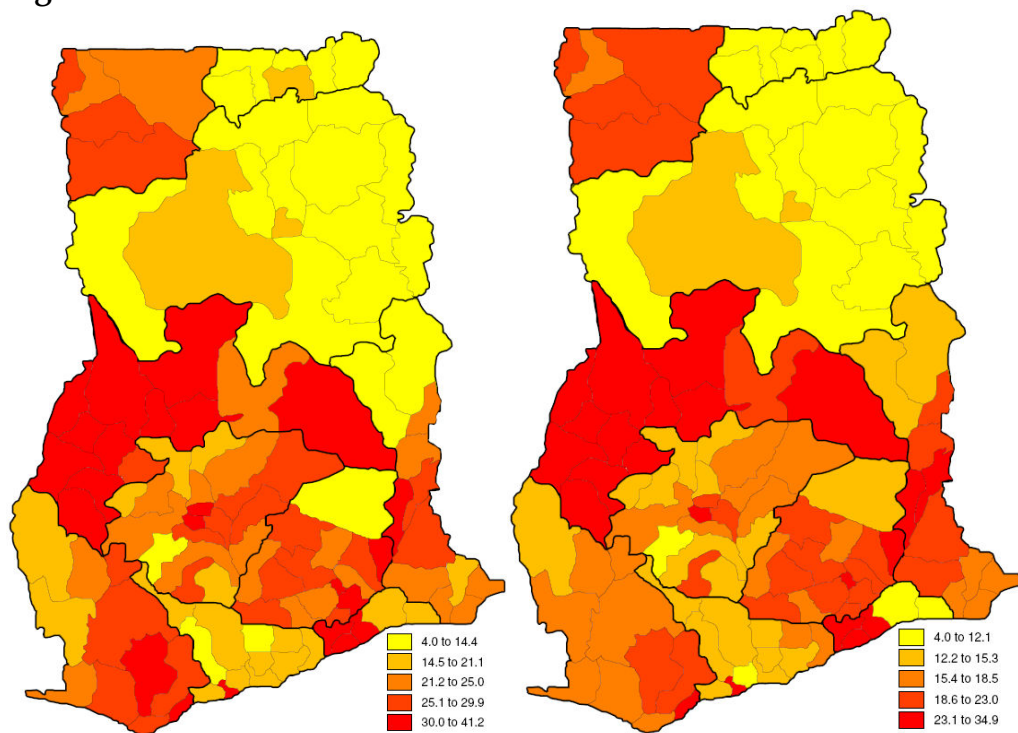
Results

Figure 1



Total fertility rate (Census) and percentage of women with unmet need (small area estimates).

Figure 2



Percentage of women using any method of contraception and using modern methods of contraception (small area estimates)

References

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