

## Explaining geographic variations in modern contraceptive use in East and West Africa

### Aim

To identify influences on sub-national variations in modern contraceptive use within six African countries (Burkina Faso, Ghana, Ivory Coast, Kenya, Malawi and Tanzania).

### Methods

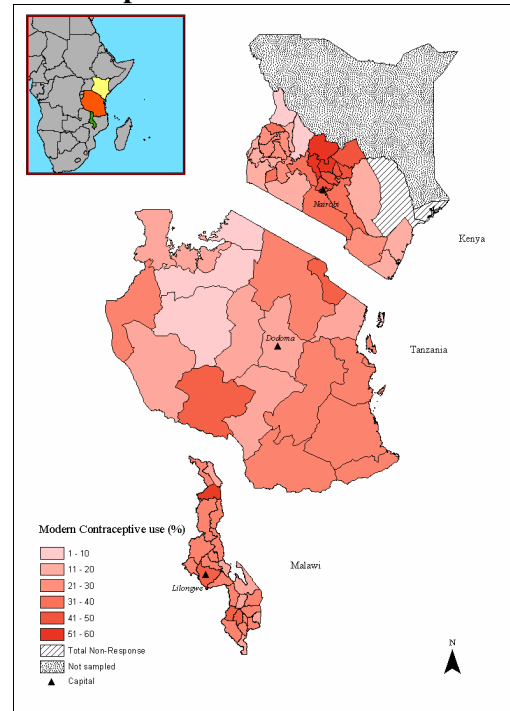
Variation was measured at the community (survey sampling area) and district (administrative area) levels. An innovative combination of Demographic and Health Surveys (DHS) and contextual data sources, plus multilevel modelling and Geographic Information System techniques, were used to perform the analysis.

### Findings

There are large sub-national variations in modern contraceptive use (see maps) within the six African countries studied. A range of common influences on modern contraceptive use at the individual and household level were identified:

- Aged 20 to 29
- Of higher parity
- Formerly or never married
- Secondary Educated
- Aware of family planning through media messages
- Living in a household with more basic amenities
- Aware their partner approved of Family Planning
- Discussing family planning with their partner

### Percentage of women using modern contraception: East Africa



Source: DHS

Contextual influences on modern contraceptive use were found to vary between countries. They were:

- The percentage of females approving of family planning within the community (all three East African countries and Ghana)
- Females secondary educated within the community (Tanzania)
- More households with basic amenities in the community (Burkina Faso)
- Predominate religion is Protestant Christianity (Malawi)

## Availability of Reproductive Health Services

- Partners approving of family planning within the community (Kenya)
- Higher rainfall (Kenya)

The results of this study confirm that the inclusion of contextual factors in the analysis further explains both district and community variation in modern contraceptive use, than was previously possible. Contextual factors, such as approval of family planning with the community, were the key influences on district variation, particularly in East Africa. For the community variation in contraceptive use, the factors that were key influences varied. Demographic and biological factors, such as parity and fecundity, were important in four countries and contextual factors in three.

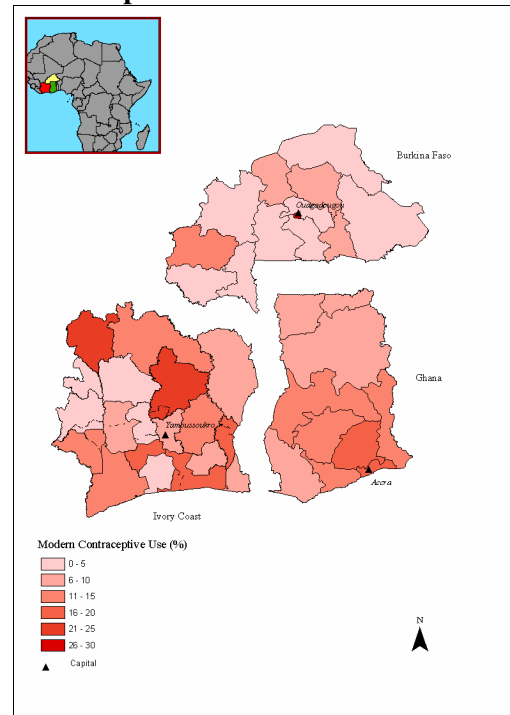
### Policy Implications

- Contextual factors are important for explaining the geographic variation in modern contraceptive use.
- Both service provision and cultural acceptance in using services are important influences on contraceptive use. This emphasizes that exposure to services can influence health seeking behaviour and that aspects of the community can be harnessed to increase service use.
- This research has generated new knowledge regarding spatial variations in the use of modern contraception. This will assist service providers in targeting those groups who wish to use these facilities but are currently underutilising them.
- The study has also highlighted areas where existing modern contraceptive use is above or below expectation, and thus may be examples of good

practice or where suitable interventions are required.

- Overall, the new approach and combined use of DHS and contextual data, multilevel models and GIS has achieved a greater understanding of the factors associated with geographic variation in modern contraceptive use in Africa.

### Percentage of women using modern contraception: West Africa



Source: DHS

Further details of this study are available at: <http://www.socstats.soton.ac.uk/choices/AreaVariationsReport.PDF>



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