

Explaining geographic variations in the use of health facilities for childbirth in East and West Africa

Aim

To identify influences on sub-national variations in women's use of a health facility for childbirth within six African countries (Burkina Faso, Ghana, Ivory Coast, Kenya, Malawi and Tanzania).

Methods

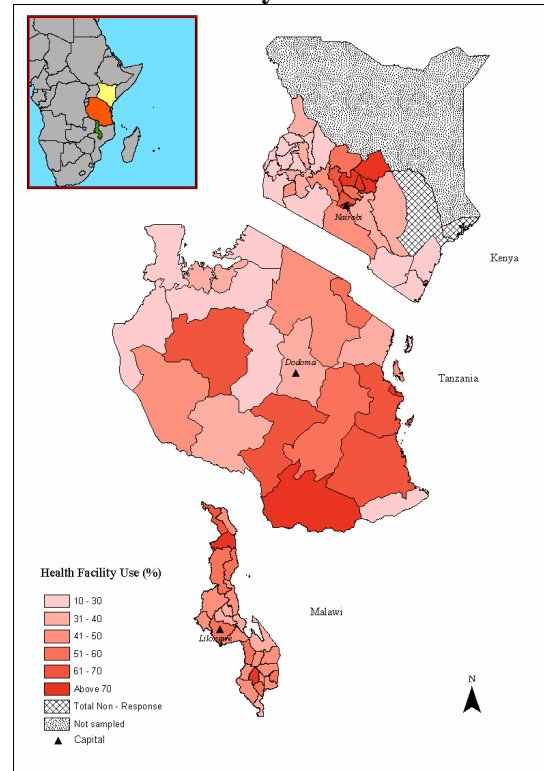
Variation was measured at the community (survey sampling area) and district (administrative area) levels. An innovative combination of Demographic and Health Surveys (DHS) and contextual data sources, plus multilevel modelling and Geographic Information System techniques, were used to perform the analysis.

Findings

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

- Women aged over 30 and those of lower parity (East Africa)
- Household has more basic amenities
- Use of antenatal care and having a previous birth in hospital
- Knowledge of family planning through mass media (East Africa)

Percentage of women using health facilities for delivery: East Africa



Source: DHS

Contextual influences on the use of health facilities for childbirth were found to vary between countries. They were:

- The percentage of women in the community who had their previous delivery at a health facility (all countries)
- Urban residence (four countries)
- Partner approval of family planning within the community (Kenya and Tanzania)

Availability of Reproductive Health Services

- The percentage of females secondary educated (Malawi and Ghana)

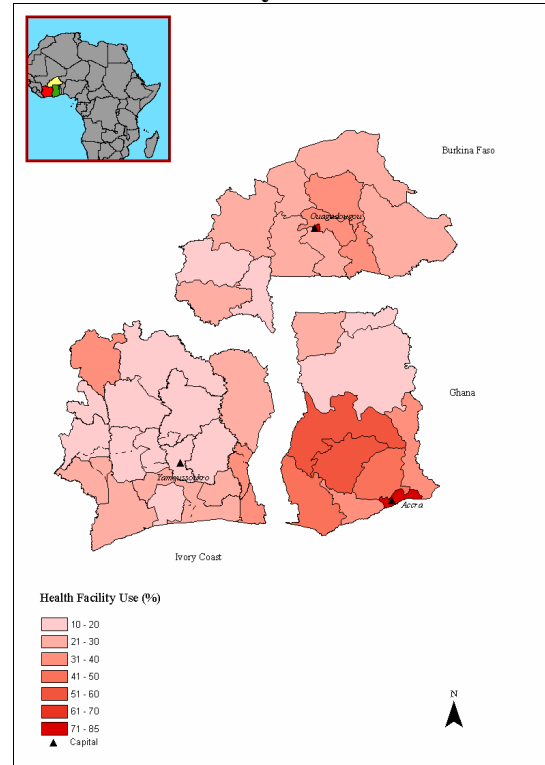
The results confirm that adding contextual factors to the models further explains both the district and community variation in the majority of countries. For the district variation in place of delivery, non-health contextual factors, such as partner's approval of family planning within the community, are the most prevalent in explaining the variation (Ghana, Kenya and Tanzania). For the community variation, previous use of health facilities for delivery within the community is important in all countries except Kenya.

Policy Implications

- Contextual factors are important for explaining the geographic variation in place of delivery.
- Both service provision and cultural acceptance in using services are important. 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 uptake of delivery facilities. 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 use of health facilities 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 place of delivery in Africa.

Percentage of women using health facilities for delivery: 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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