Title

What Are the Sociocultural Determinants of Modern Contraceptive Use across and within Seven West African Countries?

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Abstract

Contraceptive use in west Africa remains low compared to SSA and within this region the use of contraception varies greatly within and across countries. This paper uses Demographic Health Survey (DHS) data from seven west African countries to investigate the role of sociocultural barriers at the contextual level in explaining these geographic variations in modern contraceptive use. Multilevel modelling was used to analyse the factors which account for the geographic variation in contraceptive uptake, taking into account the hierarchical nature of the DHS data. Preliminary results indicate that sociocultural alongside other contextual factors play a significant role in creating the geographic variations observed in modern contraceptive use in west Africa.

PAA Extended Abstract

Introduction

"Contraceptive use in the region of west Africa is the lowest of any region worldwide" (Westoff, 2012, p.5). This analysis will investigate the determinants of contraceptive use in this region of the world. When examining Sub-Saharan Africa (SSA) as a whole Ghana has not proved as successful as other countries such as Botswana and Kenya, considering the early support of family planning which was demonstrated by this country (National Research Council, 1993). Yet, in the region of West Africa Ghana has the highest contraceptive use (GDHS, 2008).

Additionally contraceptive uptake varies widely across regions. Bankole and Singh (1998) suggest that this may be due to variability in the acceptance of sociocultural norms which support large families. This paper hopes to investigate if regional patterns in sociocultural determinants of contraceptive use transcend national borders, by examining neighbouring countries. The seven West African countries which will be examined in this paper are Burkina Faso, Ghana, Guinea, Mali, Nigeria, Senegal and Sierra Leone.

Aims and objectives

The aim of this paper is to extend the research done by Stephenson et al. (2007), using the same techniques to investigate the geographical variation in contraceptive use in the culturally diverse area of West Africa.

This paper explores how the sociocultural barriers are associated with contraceptive use in seven west African countries.

The research questions answered are:

- What are the sociocultural determinants of modern contraceptive use in West Africa?
- How do there differ between and within countries?

Data

The seven countries were chosen as they all had DHS surveys from Phase 5 or 6 which meant that the surveys were more comparable due to similar question structures. The analysis was restricted to seven countries as these countries also have geocodes available, which will help with mapping district-level contraceptive use across the seven countries. Individual data from the DHS was used (Burkina Faso, 2010; Ghana, 2008; Guinea, 2005; Mali, 2006; Nigeria, 2008; Senegal, 2010; Sierra Leone, 2008).

The population used for this analysis was not the entire population surveyed by each DHS. As most births in the region occurred within union only married women were retained. The sample was further reduced to include only current residents of the interviewed household, in order to try and capture the sociocultural experience of those from the community. Additionally, all women who were not at risk of pregnancy, such as post-partum amenorrheic or pregnant women and infecund women were removed from the dataset.

Methods

Firstly, sociocultural barriers were operationalized into viable variables for analysis. Following this, a bivariate analysis was carried out to establish which variables were significantly associated with modern contraceptive use for each country and then a logistic regression was carried out to discover which variables best predicted the overall variance in the levels of contraceptive use at the individual level. Multilevel modelling was then used to account for the hierarchical data structure of the DHS data (individual within primary sampling unit within district), to help estimate the influences of the community and the district on contraceptive use.

Whether or not a respondent was currently (at the time of interview) a modern contraceptive user or not was used as the binary dependant variable. The same independent variables were entered into the models for all seven countries, as separate models were fitted for each country.

Preliminary Results

To date the results show that contraceptive use varies by primary sampling unit. The association between contraceptive use and different sociocultural factors varies both in significance and magnitude across the countries. The analysis so far has only investigated a two level model and will be extended to additionally account for district level variation. Similarly to the finding by Stephenson et al. (2007) it appears that in Nigeria, as in Tanzania, women from communities with higher mean female educational attainment has increased odds of modern contraceptive use. This indicates that education affects contraceptive use at both the individual and community level. Interestingly in both this study and the previous study the mean asset for communities was significantly associated with increased contraceptive use, reflecting a relationship between modern contraceptive use and economic development. This helps to corroborate the robustness of the models as both use different amenities indices but similar outcomes. In Senegal the average number of children ever born in the community was associated with increased modern contraceptive use. The effect of including community level variables needs to be investigated further to explore their effect on both district and community level variation.

Community level religion, exposure to family planning through the media and discussions at the community level will also be investigated.

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