Trends and patterns in ideal family size in Nigeria: Lessons from Nigeria’s demographic and health surveys in the 21st century

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Nigeria's rapid population growth threatens her ability to ensure decent living standards for the citizens. Homelessness and a huge out-of-school population are common signs that many people have more children than they or the government can provide for. To inform evidence-based policies and programs, this study examines the dynamics of ideal family size in Nigeria from 2003 to 2023. Using data from five rounds of the Nigeria Demographic and Health Surveys (DHS), we analyze responses from men and women to investigate variations in ideal family size over time and across regions. Our analytical methodology includes calculating mean ideal family sizes for Nigeria’s regions, conducting one-way ANOVA to compare regional differences, and repeated measures ANOVA to assess temporal changes within regions. We also employ regression modeling to predict ideal family size, accounting for survey year, region, education, age, and urban/rural residence. This study provides critical insights into how ideal family size has evolved in Nigeria, informing context-specific policy and programmatic interventions to support sustainable population growth and improved well-being.

With a population of over 220 million and a natural increase rate of 2.5%, Nigeria's population is projected to grow to more than 377 million by 2050 to become the world's third largest country.[1] Millions of the citizens currently live in poverty[2] and more than 10 million of schooling ages are out of school[3]. The situation suggests a stage set for a cycle of poverty. Considering that fertility is strongly associated income level[4], tens of millions of Nigeria will live in multi-dimensional poverty, lacking access to the basic necessities of life. Evidence-based policies and interventions are needed to address this problem. By examining trends and patterns in ideal family size, this study contributes to the understanding of Nigeria's demographic transition and informs strategies to ensure decent living standards for its citizens.

The study is grounded in demographic and fertility transition theories, which explore how socioeconomic, cultural, and environmental factors influence family size preferences and reproductive behavior. The Demographic Transition Theory (DTT) and Fertility Transition Theory (FTT) explain changes in population and in the context of economic development and social change. It shows how populations pass through different stages of high birth and death rates (as in pre-colonial Nigeria); declining death rates, high birth rates (as in post-colonial Nigeria, 1960s-1980s); and declining birth rates, and low death rates.[5] Nigeria's fertility transition is not uniform, however, with some regions having higher-than-expected rates despite interventions aimed at providing contraceptive technologies. Some social and cultural norms have persisted, hindering adoption of these technologies. Education influences fertility behavior, but the nation's universal basic education policy is far from being universally adopted. Several policies have been designed to address the challenge of unchecked population growth, but they have been partially successful at best.

Data:

We will extract data from the Demographic and Health Surveys of 2003, 2008, 2013, 2018 and the about-to-be-concluded 2023 survey. The data will include the men and women's surveys for Nigeria. The Nigeria DHS (NDHS) is a nationally representative survey of men 15 – 59 years and women 15-49 years, conducted every five years to provide data on demographic, health, and nutrition indicators. It's thematic coverage includes household background characteristics, education, economic activities reproductive health, fertility, family planning, maternal and child health, etc.

The survey adopts a multi-stage cluster sampling technique and selected household men and women are interviewed in face-to-face interviews using structured questionnaires. The survey is conducted by the National Population Commission (NPC) with technical assistance from ICF International (formerly Macro International). The Federal Ministry of Health and Social Welfare has recently taken a more central role in executing the survey in collaboration with the NPC. There have been seven rounds of the survey, but only the last five, those conducted in the 21st century will be included in this analysis.

Methods

We will use the following methods of analysis to answer the research questions:

1. Descriptive statistics: Calculating mean ideal family sizes for Nigeria's regions
2. Inferential statistics:
   - One-way ANOVA: Comparing regional differences in ideal family size
   - Repeated measures ANOVA: Assessing temporal changes within regions
3. Regression model

Outcome variable: Ideal family size

Predictors:

- Survey year
- Region
- Education
- Age
- Urban/rural residence

Expected Findings

The following are the expected findings of the study:

1. Regional variations in ideal family size across Nigeria
2. Changes in ideal family size over time (2003-2023)
3. Factors influencing ideal family size, including education, age, and urban/rural residence
4. Differences in ideal family size between men and women
5. Insights into the relationship between ideal family size and socioeconomic development

References


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