Contraception

Original research article

Unmet contraceptive need among married Nigerian women: an examination of trends and drivers ☆

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Abstract

Objective: The aim of this study is to examine trends in and drivers of unmet need for contraceptives among married Nigerian women between 2003 and 2013.

Methods: This analysis utilized combined data from the 2003, 2008 and 2013 cross-sectional Nigerian Demographic Health Surveys, resulting in a sample size of 54,873 currently married women. Multinomial logistic regression examined associations between trends in unmet need for spacing and limiting, and the demographic, socioeconomic, and reproductive profiles of the respondents.

Results: Women in 2008 were 30% more likely to have an unmet need for spacing, relative to women in 2013. Despite these significant declines in unmet need to space fertility between 2008 and 2013, the adjusted results show that between 2003 and 2013, there was no significant change in the trends in unmet need to space fertility. Unmet need to limit fertility was significantly higher in 2003, adjusted, and 2008 relative to 2013. Younger, low-parity, Muslim women were significantly less likely than older, high-parity, non-Muslim women to have an unmet need to limit fertility. Women residing in the northeast and northwest of the country were significantly less likely than women residing in the south of the country to have an unmet need to limit fertility. Women whose most recent child had died were significantly less likely to have an unmet need to space and limit fertility.

Conclusions: These data suggest that interventions to increase the knowledge of modern contraceptives, to reduce child mortality, and to improve women's decision-making power would all serve to increase demand for contraceptives, even in areas with high-fertility preferences.

Implications: Nigeria has set a goal of a 36% contraceptive prevalence rate by 2018. With a current contraceptive prevalence rate of 15% reaching the additional 16% of women, who have articulated a demand for contraception, will almost reach that goal.

Contraceptive use directly reduces maternal risk; implementing interventions to increase demand for contraception and meeting articulated demands for contraception would not only support women's (and men's) ability to realize their reproductive rights but also, ultimately, may reduce the burden of maternal deaths in Nigeria.

1. Introduction

Increasing contraceptive demand, access, and uptake are key interventions to improve maternal health outcomes and ultimately reduce maternal deaths. Ahmed et al. estimated that family planning use averted almost 272,000 maternal deaths, globally, in 2010 [1]. The authors also estimate that meeting the identified unmet need for family planning would result in an additional 29% reduction in global maternal deaths [1]. Clearly, there is evidence that when family planning needs are met, there is a resulting decline in maternal mortality.

In Nigeria, between 1990 and 2013, the maternal mortality ratio (MMR) declined by 52%, from an MMR of 1100 deaths/100,000 live births to an estimated MMR of 560 [2]. Although there have been declines in maternal deaths over time, too many women in Nigeria still die from pregnancy related causes, and recent MMR estimates from the 2013 demographic and health survey suggest that there has been a stagnation in the decline—with no statistical difference in the directly estimated MMR's between 2008 (MMR: 545; 95% CI: 475–615) and 2013 (MMR: 576; 95% CI: 500–652) [3].

Forty thousand women in Nigeria died due to maternal causes in 2013, accounting for 14% of the global maternal death burden. This is disproportionate, as Nigeria constitutes only 2% of the global population [2,4]. In this high-burden context, contraceptives have served to save mothers' lives; in 2010, contraceptive use reduced the burden of maternal deaths in Nigeria by 26% [1]. Increasing contraceptive use would help Nigeria reach Millennium Development Goals 4 and 5, and allow women and men to achieve their full reproductive and sexual rights. One factor that would facilitate efforts to increase the use of contraception among Nigerian women is a deeper understanding of which Nigerian women would choose contraception, if there were affordable and acceptable methods available.

Unadjusted data from the Nigerian Demographic and Health Surveys show the percentage of currently married women with an unmet need for contraception increased between 2003 and 2008, and declined between 2008 and 2013 (Fig. 1) [3,5]. This indicates that, over time, fewer married women in Nigeria have an unmet need for contraceptives to space or limit childbearing. This has occurred in a context where there have been minimal changes in modern contraceptive use among currently married women (7.8% in 2003, 9.7% in 2008, and 9.7% in 2013) and minimal declines in the number of married women who are not using any method of contraception at all (87.4% in 2003, 85.4% in 2008, and 84.9% in 2013) (Fig. 2) [3,5]. Providing women who want contraceptives with access to them is a key intervention to improve maternal outcomes. This analysis is aimed at identifying what the characteristics of these women are and identifying factors that may be driving these trends in the demand for contraceptives.

2. Methods

This analysis utilized combined data from the 2003, 2008, and 2013 Nigerian Demographic Health Surveys, resulting in a sample size of 54,873 currently married women. The outcome of interest, unmet need for both spacing and limiting childbirth, utilized the revised definition of unmet need, developed by Bradley et al. [6]. The outcome variable was dummy coded, so that all associative findings can be interpreted as an unmet need for contraception to space childbearing versus no unmet need, and an unmet need to limit childbearing versus no unmet need.

This analysis incorporated explanatory variables derived from public health literature on maternal health, fertility preferences, and women's autonomy. Beyond the standard socioeconomic variables (age, parity, urban/rural and region of residence, wealth quintiles, and educational level), we included other key determinants of contraceptive demand. For example, there has been literature linking higher-fertility preferences among Muslim populations in Nigeria [7], and there is quite robust literature linking child mortality to high-fertility preferences and shorter birth intervals [8,9].

In addition, we endeavored to examine women's status as a predictor of unmet need for contraception [10]. Three variables were used to proxy this: employment status [11], decision-making power [12], and attitudes toward intimate partner violence [13]. Finally, the associations between the knowledge of modern contraception and increased demand for contraception were examined. All variables were reference coded, and odds ratios are interpretable relative to the reference group. Table 1 presents an overview of how these variables were defined and operationalized in these analyses.
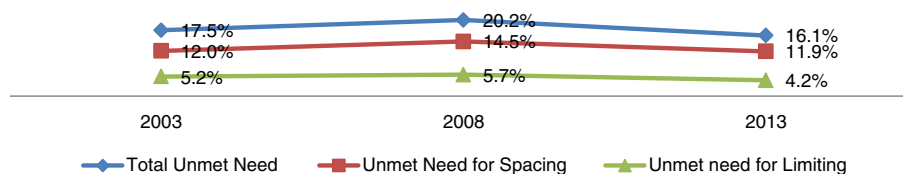
Multinomial regression was used calculate individual and adjusted odds ratios of independent variables on unmet need to space and to limit childbearing. Analyses were conducted using SAS version 9.3 (SAS Institute Inc., Cary, NC, USA), and all analyses were adjusted for survey design, sampling errors, and uneven weights using the SAS survey procedures [14].

This study was granted exempt status from the Harvard School of Public Health Institutional Review Board.

3. Results

Table 2 presents the weighted distribution of each of the predictor variables. The study population was 67% rural, with approximately 52% of women reporting four or more births and 8% reporting that their most recent child had died. Forty-nine percent of the population had no education, and 65% of them had been employed in the year preceding the survey. The majority of women (61%) reported that they played no part in decisions regarding their health, and 45% felt that intimate partner violence was justifiable under certain conditions.

Fig. 1 shows the weighted trends in unmet need between 2003 and 2013. These unadjusted results show an overall

17.5%   20.2%   16.1%
12.0%   14.5%   11.9%
5.2%   5.7%   4.2%

2003   2008   2013

—◆— Total Unmet Need   —■— Unmet Need for Spacing   —▲— Unmet need for Limiting

Sources: http://www.statcompiler.com/; 2013 Nigerian Demographic and Health Survey

Fig. 1. Trends in unmet need for contraception among married Nigerian women: 2003, 2008, and 2013.