

Unwanted Pregnancy and Factors Associated with it among Nigerian Women

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Background and introduction

Illegal abortions arising from unwanted pregnancies constitute a major reproductive health problem in Nigeria. Data indicate that the proportion of women having unwanted pregnancies in this country is increasing: women and couples increasingly want fewer children, and although they are also beginning to bear fewer children, behavior is lagging behind preference.¹ Thus women and couples are increasingly having more children than they want.

Since abortion is illegal under most conditions in Nigeria, an increase in the incidence of unwanted pregnancy is likely to result in a rise in the incidence of unsafe abortions. This in turn is likely to raise the proportion of women with abortion-related morbidity and mortality. The increasing incidence of complications from unsafe abortions can have a substantial impact on the country's fragile health system. In order to prevent these consequences of unsafe abortion on women and on the health care system, it is important to understand both the remote and immediate causes of unwanted pregnancy and to adopt programs and policies that will help couples avoid unwanted pregnancies and consequent unsafe abortions.

The purpose of this study is to examine the incidence of unwanted pregnancy in Nigeria and the factors that are associated with it. How common is this phenomenon and how does the incidence vary by characteristics of women? What proportion of women tried to prevent their unwanted pregnancies? What proportion of women tried to terminate their pregnancies and what were the barriers they faced to effective contraceptive use? Who is at risk of an unwanted pregnancy in the future, and why are these women not using a method of family planning? These are some of the questions that this paper will attempt to answer with a view to providing program planners and policy makers with the information they need to address this problem.

Data and methods

The data used in this paper come from a household-based survey of a sample of women aged 15-49. The survey was conducted in late 2002 to mid 2003 in 8 states in Nigeria.

The states (Ekiti, Gombe, Kano, Kogi, Lagos, Imo and Rivers) were selected such that 2 states came from each of the original 4 health zones (Northeast, Northwest, Southeast and Southwest). Using the rural-urban distribution of women in the 1999 Nigeria Demographic and Health Survey (NDHS) as the basis, a state that was mostly urban and one that was mostly rural was chosen in each of the health zones. To take account of recent change in the zoning of the country, the states were selected such that at least one state came from each of the current 6 geo-political zones (North-East, North-West, Central, South-East, South-West and South-South).

In each state, 20 enumeration areas (EAs), 10 urban and 10 rural, were selected. In each of the EAs, 20 households were randomly selected for interview using a systematic random sampling approach. One eligible woman was selected for interview in each household to yield a total sample size of 3,200 women. At the end of the survey, 3,020 women were successfully interviewed.

Because we chose same number of urban and rural enumeration areas (EAs) and interviewed the same number of respondents in each EA, urban residents were over-sampled in the survey. This is reflected in a comparison of the distribution in our sample with that of respondents surveyed in the same eight states in the Nigeria Demographic and Health Survey (NDHS) conducted the same year as our survey (2003). Our respondents were also more educated than those interviewed in the 2003 NDHS, most likely because of the over-representation of women from urban areas. To correct for this over-sampling, we developed a weight factor to redistribute our sample by residence and education status. The weight variable was created by first comparing the distributions of our respondents to the respondents in the same states in the NDHS data according to residence, education and region, and second increasing or decreasing the proportions of respondents in the different categories of the three variable combinations to reflect the distributions observed for the NDHS sample. (Cite PAA paper for comparison of weighted and unweighted distributions).

Data collection was undertaken through a questionnaire administered by face-to-face interviews. The questionnaire included questions on the following topics: socio-economic and demographic characteristics of respondents; pregnancy and fertility behavior and preferences; contraceptive use history; sexual activity; experiences of unintended pregnancy and induced abortion; and knowledge about abortion laws and attitudes towards induced abortion.

These data are being analyzed analyzed using a cross-sectional study design, employing cross-tabulations and multivariate logistic regression models.

Preliminary results

Table 1 displays the socio-demographic characteristics of the survey respondents by region of residence. Just over half of the respondents (56%) lived in rural areas and nearly 70% were married at the time of the survey. Twenty nine percent had ever used a modern method of contraception and 15% reported having attempted an abortion.

Respondents in the North were younger on average than those in the South, but nevertheless had a higher average parity. Educational attainment was greater in the South than in the North. Women in the North were more likely to live in rural areas, to identify themselves as Muslim and to be married at the time of the survey compared with women in the South. They were less likely to have ever used a modern method of contraception and less likely to have sought an abortion at the time of their last unwanted pregnancy.

Twenty-eight percent of the 3,020 women in the survey had experienced an unwanted pregnancy at some point in their lives (Table 2). The incidence of an unwanted pregnancy was similar in the northern and southern regions of Nigeria (28.7% and 27.6%, respectively). Women living in rural areas, women who had at least some schooling and those who had never been married were especially likely to report an unwanted pregnancy. Unwanted pregnancies were also more likely to be reported by women who were 30-35 years old at the time of survey, who were not affiliated with a Christian or Muslim faith, and who had used a modern method of contraception either in the past or at the time of survey.

More than half of the women who reported an unwanted pregnancy, representing 15% of the total sample, sought to abort their most recent unwanted pregnancy. Although the incidence of an unwanted pregnancy was similar in the North and the South, the incidence of an attempted abortion was greater in the South (17.5%, vs. 13.5% in the North). Women who sought an abortion tended to be single and nulliparous, to have at least a secondary school education, to be unaffiliated with a Christian or Muslim faith and to have some experience with modern contraception.

Women at risk of an unwanted pregnancy at the time of survey were defined as those who were sexually active, fecund, not pregnant, not desiring a child in the near future, and not using a modern method of contraception. Women were considered infecund if they had been living with a man for at least 5 years, had not had a live birth in that time and have not used a modern method of contraception. It is estimated that 32% of the respondents were at risk of an unwanted pregnancy at the time of the survey. Women living in the North were more likely than those in the South to be at risk of an unwanted pregnancy (36% vs. 26%, respectively). The prevalence of risk was greatest among women with 3 or more prior live births, women with little or no formal schooling and women who did not affiliate with the Muslim or Christian faiths. Approximately 40% of the women at risk of an unwanted pregnancy were using a traditional method of contraception at the time of the survey.

Any woman who had an unwanted pregnancy and sought to terminate it was asked to indicate all the reasons she did not want that pregnancy. The most common reasons cited were that the woman was too young, still in school or not married at the time of the pregnancy (Table 3). Nearly 60% of the respondents cited one or more of these reasons. Forty percent indicated that their partner either did not want the child or had left the woman. Twenty percent said that they were attempting to space births or stop childbearing altogether, and economic reasons were additionally cited by about 17% of the respondents.

Further analyses will shed light on contraceptive use patterns among women who ever had an unwanted pregnancy and reasons for non-use among those women who have never used family planning, by socio-demographic characteristics. We will similarly examine reasons for non-use of contraception among women currently at risk of an unwanted pregnancy. We will also use multivariate logistic regression models to identify the key socio-demographic predictors of unwanted pregnancy and induced abortion, and factors associated with being at risk of an unwanted pregnancy at the time of the survey.

Conclusion

This paper will shed light on the level of unwanted pregnancy among women in Nigeria and the factors that are associated with the phenomenon. The incidence of unwanted pregnancy has been on the rise in Nigeria, as the rate of decline in fertility preferences has outpaced increases in contraceptive use. It is hoped that the findings presented here will help us understand the causes of unwanted pregnancy, identify women at risk of an unwanted pregnancy, and ultimately mitigate the problem of unwanted pregnancy and induced abortion. Policy makers and program providers can benefit from empirical evidence to formulate informed policies and programs that can be effective in helping couples to avoid unwanted pregnancy.

Table 1. Socio-demographic characteristics of survey respondents by region of residence.

| Characteristic | Total % | North % | South % | p-value |
|----------------------------------|------------|------------|------------|---------|
| Age | | | | |
| < 20 | 17.8 | 22.0 | 12.4 | |
| 20-24 | 22.1 | 22.8 | 21.2 | |
| 25-29 | 18.9 | 18.1 | 19.9 | |
| 30-34 | 15.4 | 15.2 | 15.8 | |
| 35-39 | 11.8 | 10.8 | 13.0 | |
| ≥ 40 | 14.0 | 11.2 | 17.7 | <.0001 |
| Parity | | | | |
| nulliparous | 30.5 | 27.5 | 34.4 | |
| 1-2 live birth | 24.3 | 23.9 | 24.9 | |
| ≥ 3 live births | 45.2 | 48.7 | 40.7 | <.0001 |
| Educational status | | | | |
| none | 26.8 | 43.0 | 5.7 | |
| some or all primary school | 30.7 | 31.4 | 29.8 | |
| some or all secondary school | 31.8 | 19.1 | 48.5 | |
| some or all university | 10.7 | 6.6 | 16.0 | <.0001 |
| Residence | | | | |
| urban | 44.1 | 32.8 | 58.8 | |
| rural | 55.9 | 67.2 | 41.2 | <.0001 |
| Religion | | | | |
| catholic | 16.9 | 10.0 | 25.9 | |
| protestant/spiritual/pentacostal | 37.4 | 23.5 | 55.6 | |
| muslim | 40.6 | 60.0 | 14.9 | |
| traditional/other | 5.2 | 6.4 | 3.6 | <.0001 |
| Marital status | | | | |
| single | 25.5 | 20.7 | 31.8 | |
| married | 68.5 | 71.2 | 65.0 | |
| divorced/separated/widowed | 6.0 | 8.1 | 3.2 | <.0001 |
| Ever used contraception | | | | |
| yes | 28.7 | 20.1 | 40.2 | |
| no | 71.3 | 79.9 | 59.8 | <.0001 |
| Ever had an abortion | | | | |
| Yes | 15.2 | 13.5 | 17.5 | |
| No | 84.8 | 86.5 | 82.5 | 0.003 |

Table 2. Percent of women who have ever had an unwanted pregnancy, who ever had an induced abortion, and who are at risk of an unwanted pregnancy, by socio-demographic characteristics.

| Characteristic | Ever had unwanted pregnancy | | Ever had an abortion | | Currently at risk of an unwanted pregnancy | |
|----------------------------------|-----------------------------|---------|----------------------|---------|--|---------|
| | % * | p-value | % * | p-value | % * | p-value |
| Total | 28.3 | | 15.2 | | 32.4 | |
| Age | | | | | | |
| < 20 | 28.5 | | 16.6 | | 30.4 | |
| 20-24 | 24.0 | | 13.2 | | 27.5 | |
| 25-29 | 23.8 | | 13.4 | | 33.3 | |
| 30-34 | 35.3 | | 18.3 | | 37.6 | |
| 35-39 | 30.1 | | 16.1 | | 31.8 | |
| ≥ 40 | 31.5 | <.0001 | 15.2 | 0.16 | 35.5 | 0.01 |
| Parity | | | | | | |
| nulliparous | 24.8 | | 19.3 | | 25.7 | |
| 1-2 live birth | 31.1 | | 14.3 | | 28.6 | |
| ≥ 3 live births | 29.1 | 0.01 | 13.0 | <.0001 | 38.9 | <.0001 |
| Educational status | | | | | | |
| none | 23.7 | | 10.3 | | 38.5 | |
| some or all primary school | 29.5 | | 12.2 | | 35.2 | |
| some or all secondary school | 30.3 | | 19.7 | | 27.6 | |
| some or all university | 29.6 | 0.01 | 22.1 | <.0001 | 21.5 | <.0001 |
| Residence | | | | | | |
| urban | 23.4 | | 14.5 | | 31.1 | |
| rural | 32.1 | <.0001 | 15.7 | 0.37 | 33.4 | 0.19 |
| Region | | | | | | |
| north | 28.7 | | 13.5 | | 36.8 | |
| south | 27.6 | 0.52 | 17.5 | 0.003 | 26.8 | <.0001 |
| Religion | | | | | | |
| catholic | 42.4 | | 22.1 | | 31.2 | |
| protestant/spiritual/pentacostal | 27.3 | | 16.4 | | 28.8 | |
| muslim | 18.2 | | 8.7 | | 34.6 | |
| traditional/other | 65.6 | <.0001 | 35.0 | <.0001 | 43.3 | <.0001 |
| Marital status | | | | | | |
| single | 34.4 | | 22.7 | | 21.7 | |
| married | 26.4 | | 12.4 | | 38.1 | |
| divorced/separated/widowed | 23.6 | <.0001 | 14.8 | <.0001 | 12.2 | <.0001 |
| Ever use of contraception | | | | | | |
| modern | 47.5 | | 31.0 | | 17.2 | |
| traditional | 38.5 | | 21.7 | | 41.6 | |
| none | 21.1 | <.0001 | 9.4 | <.0001 | 36.7 | <.0001 |
| Current contraceptive use | | | | | | |
| modern | 49.6 | | 30.8 | | 0.0 | |
| traditional | 38.5 | | 24.3 | | 55.0 | |
| none | 23.9 | <.0001 | 11.9 | <.0001 | 36.4 | <.0001 |

*Columns do not add up to 100% in each category.

Table 3. Distribution of women who attempted to terminate the last unwanted pregnancy according to reasons for not wanting the pregnancy, by age, education, religion and residence (n=458).*

| Characteristic | To stop or space births | p-value | Partner did not want or left | p-value | Too young/ in school/ not married | p-value | Economic reasons | p-value | Other* | p-value |
|----------------------------------|-------------------------------|---------|------------------------------------|---------|---|---------|---------------------|---------|--------|---------|
| Total | 21.9 | | 40.0 | | 59.3 | | 16.6 | | 12.2 | |
| Age | | | | | | | | | | |
| < 20 | 13.5 | | 23.6 | | 85.4 | | 9.0 | | 5.6 | |
| 20-24 | 10.3 | | 50.6 | | 78.2 | | 11.5 | | 12.5 | |
| 25-29 | 17.3 | | 49.3 | | 64.0 | | 18.7 | | 14.7 | |
| 30-34 | 22.6 | | 47.1 | | 49.4 | | 22.4 | | 16.5 | |
| 35-39 | 36.8 | | 31.6 | | 36.8 | | 15.8 | | 8.8 | |
| ≥ 40 | 40.6 | <.0001 | 35.9 | 0.001 | 25.0 | <.0001 | 25.0 | 0.05 | 15.6 | 0.24 |
| Educational status | | | | | | | | | | |
| none | 34.1 | | 21.0 | | 43.9 | | 12.2 | | 17.1 | |
| some or all primary school | 35.4 | | 35.4 | | 45.1 | | 23.0 | | 10.6 | |
| some or all secondary school | 11.6 | | 50.8 | | 69.8 | | 17.5 | | 11.6 | |
| some or all university | 14.1 | <.0001 | 40.8 | <.0001 | 70.4 | <.0001 | 11.3 | 0.12 | 9.9 | 0.47 |
| Residence | | | | | | | | | | |
| urban | 22.3 | | 51.3 | | 58.0 | | 22.8 | | 15.6 | |
| rural | 21.8 | 0.90 | 32.1 | <.0001 | 60.0 | 0.67 | 12.5 | 0.003 | 9.4 | 0.05 |
| Religion | | | | | | | | | | |
| catholic | 17.0 | | 42.5 | | 58.9 | | 17.0 | | 11.6 | |
| protestant/spiritual/pentacostal | 19.5 | | 52.4 | | 62.5 | | 24.5 | | 14.7 | |
| muslim | 38.3 | | 21.7 | | 43.4 | | 4.7 | | 13.2 | |
| traditional/other | 9.1 | <.0001 | 29.1 | <.0001 | 78.2 | <.0001 | 12.7 | <.0001 | 3.6 | 0.18 |
| Region | | | | | | | | | | |
| north | 24.5 | | 25.3 | | 54.8 | | 10.9 | | 11.7 | |
| south | 19.3 | 0.18 | 54.8 | <.0001 | 63.6 | 0.06 | 22.8 | 0.001 | 12.7 | 0.75 |

*Columns do not add up to 100% in each category. Responses are not mutually exclusive.

** Includes health reasons, rape and pregnancy was caused by someone other than regular partner.

¹ Alan Guttmacher Institute, 2003, Special tabulations of 1990 and 1999 NDHS.