

Changing Patterns of Child-spacing and Abortion
in a Northern Nigerian Town

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Introduction

For many Hausa Muslim women in the town of Zaria in northern Nigeria, abortion is morally reprehensible and should not be openly discussed. Nonetheless, in the past, induced abortion was considered morally preferable to pregnancy prior to weaning a nursing child. Women then used medicinal herbs and other organic materials as abortifacients to maintain intervals between births. More recently, however, shortened periods of postpartum abstinence and reduced child-spacing appear to be altering the practice of abortion in Zaria. These changes are attributed, in part, to women's attendance at government and Islamic schools beginning in the late 1970s where they learned that postpartum abstinence over forty days and that two years of nursing were not necessary. The appearance of a pregnancy within a year of childbirth is no longer considered to be disgraceful. Induced abortion now may be less common for married women although a number of Zaria women reported experiencing spontaneous abortions. Yet if education has led to a decline in induced abortion among married women, it may be contributing to an increase in abortion among unmarried secondary school students. Until recently, many Hausa women married at the ages of 13 or 14, thus precluding the need for abortion. Nowadays, however, young women seeking secondary education may choose to postpone marriage and childbearing until they have completed their schooling--often when they are 17 years old, thus increasing the possibility of premarital pregnancy and abortion. This paper examines these changing patterns of abortion and child-spacing in relation to women's education, based on research conducted in Zaria

from 1994 to 1996.

Research Setting and Methods

Zaria, the largest town in the northern part of Kaduna State, Nigeria, consists of several areas, each with its own distinctive character (Bryant n.d.; Fig. 1). The Sabon Gari ("New Town") area houses many of the town's southern Nigerian residents and has the town's largest market. The Kongo area has a mixed population that includes professionals who teach at a branch of Ahmadu Bello University (the oldest federal university in northern Nigeria) located there as well as at several secondary schools. The old walled area of Zaria known as Zaria City (or Birnin Zaria, "Old Zaria") is the site of the capital of the old Hausa Emirate of Zazzau and is populated mainly by Hausa-Fulani descendants of this kingdom (see Renne 1996).

This study of abortion was conducted in two areas of Zaria, Zaria City and Kongo, and consisted of two parts. The first included interviews with married women in the Zaria City area who were questioned about abortion practices generally and about the reasons for women's aborting pregnancies. In the second part, women secondary students attending school in the Kongo area of Zaria were interviewed in an attempt to clarify the extent to which young unmarried women were aborting pregnancies and precisely how they were going about it. This school was selected because of its predominantly Hausa-Fulani student body (87%) and also because some of its students came from the Zaria City area, providing some connection between the two parts of the study.

Research began in November 1994 when I moved into a house in Zaria City. Through the help of a co-resident family and a young woman research assistant, we began interviews of 100 women residing in Kwarbai Quarter using a survey (in Hausa) on childbirth histories and delivery

practices. Because contraception and abortion were extremely controversial issues¹ in this community, only questions about spontaneous abortion were included in this first survey. Women were selected for interview according to the "snow-ball" method; women in one compound whose husbands permitted interviews were asked to refer (and recommend) us to another house in the quarter. Having this introduction, we interviewed all consenting married women in the compound. From this group in the initial survey, we selected the majority of women who were subsequently questioned (n=30) about abortion in March-April 1995. Additionally, ten older women were interviewed regarding changing postpartum practices in January-February 1995.

These Zaria City interviews suggested that while the need for abortion has declined among married women due to the relaxation of social pressure to maintain three-year intervals between births, abortion might be increasing among unmarried secondary school women. In order to investigate the latter supposition, a survey of 300 women secondary school students, selected by grade and availability, was conducted in July 1996. Another thirty-one secondary students from the same school were questioned about premarital pregnancy, abortion, and their assessment of being a married student in open-ended interviews in August 1996. While the quantitative results of this survey and questionnaire were inconclusive, they do suggest a possible methodology for indirectly estimating secondary school student abortion that will be discussed at the end of the paper.

Practices and Beliefs Regarding Abortion

The life-history of the Hausa woman, Baba of Karo, recorded by Mary Smith in the early 1950s,

¹ Abortion is controversial for moral reasons, not for legal ones, even though abortion is illegal (except to save a mother's life) in Nigeria (Okagbue 1990).

provides some information on past abortion practices in northern Nigeria. Of one incident concerning a young wife who became pregnant only eight months after having delivered her first child, Baba remarked:

When Dantambai knew she was pregnant they sent for her mother, but [her mother] was angry and said she would not come. Dantambai and her husband were delighted, but their parents were angry. They said they would give her medicine so that the pregnancy should lie down² but [the husband] refused--he said 'Here is one child, let's have the other one too!' (Smith 1981:149).

She then disdainfully concluded, "If you go back to your husband's hut, what do you expect?"

This incident would have taken place sometime probably in the 1920s and from Baba's response it appears to have been shocking, if uncommon, behavior. Yet it was not going "back to your husband's hut" that was viewed as the crux of the problem. Rather it was the pregnancy conceived soon after an earlier birth and its effect on the mother's milk and subsequent health of the newborn child which were at issue. As Baba put it:

It is not sleeping with the husband that spoils her milk, it is the pregnancy that does that...But it is not right that she should sleep with her husband for two years; if he insists she should wear a kolanut charm (Smith 1981:148).

When abstention or wearing a kolanut charm on a waist string (cf. Jinadu et al. 1997:63) and prolonged lactation were unsuccessful in preventing pregnancy, women could take a range of herbal decoctions and medicines to abort the pregnancy (Madauci et al. 1968:5), avoiding the shameful and dangerous condition of feeding a newborn child "pregnancy milk" (see van de Walle and van de Walle 1991:75). Abortion, in this case, was the lesser of two evils. One older Zaria

² The phrase, "making a pregnancy lie down" refers to the belief that pregnancies may be extended beyond the normal nine-month period through the use of certain herbal medicines. This condition is also known as a "sleeping pregnancy" (*kwantacce*; Kleiner-Bossaller 1993:17; Last 1979:315; Wall 1988:190). Such a pregnancy is believed to be dangerous, however, as women with this condition may die along with the fetus unless the pregnancy is not reanimated by taking countervailing herbal treatments.

City woman described such an occurrence more recently in Zaria:

There was a woman who wanted to abort her pregnancy because at that time, she had not yet weaned the baby and at that time, it was a shameful thing. She asked me what to take to abort the pregnancy. I said, anything that is bitter, so she took *madaci* [mahogany]. Then she had a fever and started bleeding and that's how she aborted the pregnancy.

Another woman suggested that this approach to abortion has been updated:

When the pregnancy is small, if you take *madaci* and *saiwa lalle* [henna root], it will abort the pregnancy. That was what people were using before. But now that hospitals are established, they go there to abort pregnancy. But before it was in the house.

While some women apparently do go to clinics for abortion, interviews with other Zaria City women and secondary school students suggest that many types of non-clinical local methods for aborting unwanted pregnancies are widely known (Table 1) and are still in use. Of these, all three of the most commonly mentioned plants used for abortion are bitter--*madaci*-mahogany, *lalle*-henna, and *tafashiya*-African peach--and contain active pharmacological substances that have emmenagogic or oxytocic³ effects (Table 2).

The extent of induced abortion in Zaria is unknown. None of the women interviewed said that they had aborted pregnancies. However, several Zaria City women knew of women who had aborted pregnancies, mostly young unmarried ones:

I've heard stories of girls aborting pregnancy--even some of them live in Zaria. There is one of our neighbors, she didn't get a husband because she was just sleeping around. She had three abortions--her family has taken her to Kaduna to abort these pregnancies;

In another example, one woman described a relations's experience:

There is one of my uncle's children, she got pregnant when she was a student. So the mother was trying to terminate it for her, they gave her different types of medicine so she would abort it--but nothing happened. So they told her there is a hospital where they normally abort pregnancies. When she went there, they told her N6000 because she was 6

³ The postpituitary hormone oxytocin is sometimes given as an injection to induce contraction of the uterine muscles; substances that produce a similar effect are referred to as oxytocic.

months pregnant and it was N1000 a month. She said that she didn't have that kind of money. Now the girl is at home, she's not yet delivered.

These stories suggest that abortion is not uncommon among unmarried young women in Zaria, some of whom may be secondary students. It is important to distinguish between abortion induced by unmarried secondary school students who want to remain in school and married women's resorting to abortion as a way of maintaining child spacing as in the past. This shift in the rationale for abortion is related not only to increasing numbers of young women attending schools (both Western and Islamic) but also to what they have learned there. It appears that changes in Zaria women's assessment and practice of abortion reflect recent developments in child-spacing practices, in Islamic religious teachings, and in their exposure to western education.

Changes in Postpartum Practices and Religious Beliefs

Passages in the *Qur'an* (Sura II:233, S. XXXI:14, and S. XLVI:15; see also `Abd al `Ati 1982:212) make specific reference to nursing newborns:

Mothers should breast feed their children two full years, provided they want to complete the nursing. The family head must support women and clothe them properly. Yet no person is charged with more than he can cope with. No mother should be made to suffer because of her child, nor family head because of his child (Sura II:233).

This practice of two years of breast-feeding has been widely followed and, to some extent, provides a moral basis for abortion. However, more recent interpretations of this Qur'anic passage, such as the following interpretation made by one Islamic legal scholar, suggest that while spacing is now recommended (*mandub*), it is no longer mandatory (*fard*; Waines 1995:76):

...The Muslims here in Nigeria they adopted this two year [period]. Within these two years the mother will continue to suckle her own child....[Those who advocate change,] their argument is that the *Qur'an* is just advising, because at the end of the verse [it states] ..."to him who wants to complete the two years of suckling period", so they say it is not compulsory, it is optional.

For this man, emphasis on the phrase, "to him who wants...", is critical. His interpretation also suggests that abortion in such a situation would no longer be necessary.⁴

Women in Zaria City gave several explanations for this change in the importance of child-spacing. For example, some saw the change as related to modernity (*zamani*); women who have become educated "know what to do" if children are born within short intervals. According to one woman:

This change started about twenty years ago. They started because before, people were not educated. During that time, women were ignorant, only men went to school. So that's why now, most women know what is happening, that's why these changes started.

Another woman described educated women using special medicines that would prevent children weaned within a year from becoming ill. With these medicines and with better nutrition, weaned children can thrive without an extended period of nursing as one Zaria City woman explained:

These changes started around twenty years ago or maybe more than twenty years ago. Before they didn't used to wean a child before it was two years, [or] two years two months. Then, after weaning the child, the mother will take a long time before getting another pregnancy. But now it's not like that. Some get pregnant when the child is eight months--and the maximum is one year.

I don't know what brought these changes but some people are saying it's part of [progress] because in just a few years, you'll have plenty of children.

Women associate education not only with reduced intervals between births and shortened periods

⁴ This man, however, also believed that Islam is not categorically opposed to abortion (see Sachedina 1990):

All I know is that Islamically...that as a general rule, procreation is one of the aims and objectives of marriage in Islam but as they say to every general rule there is an exception so this is also the case with Islam. For example, where an expectant mother her own health will be impaired, then Islam makes it an exception that if actually there is not any other way of delivery without impairing the health of the mother, well as an exception to the general rule, to save the life of the mother then the mother is advised to stop the creation. This is one. But secondly this exception also applies to a situation whereby even if the mother can be delivered of the child but with difficulty still, on that basis, again she will be advised to stop the creation.

of nursing (Rehan and Abashiya 1981:234) but also with a variety of changes related to childbirth including attendance at antenatal clinics (Trevitt 1973), hospital delivery, and the use of western medicines.

Education for Zaria women presently is available in two forms. There are western-style secular primary schools instituted by the state through the federal government's universal primary education program begun in 1976 and there are Islamiyya schools which emphasize Islamic learning along with instruction in more secular topics (Umar 1993:167). Zaria City women cited both types of education in explaining changing childbirth practices. Some attributed changes to the introduction of western education:

The year that these changes started was the year these schools were established, not Islamiyya [schools]. They say that it doesn't matter if you are nursing a child and you get another pregnancy, it doesn't matter. And there is nothing that will happen to the person;

while others mentioned attendance at Islamiyya schools as the reason for this change:

What brought change is the introduction of religion. These Arabic schools, before people were ignorant then. Now they will say that even though a woman is nursing, a husband can meet his wife...Before, women, normally would go to their parent's house if their husband wants to meet them but now they don't do it.

Since both forms of women's education began in the late 1970s and became more common in the early 1980s and because young girls tend to attend classes in both, it is likely that both have contributed to these changes. Attention is given to Islamiyya schools since they were attended by over half of the Zaria City women and at least a third of the secondary school girls interviewed in this study.

Instruction in postpartum practices at Islamiyya schools

According to one Zaria City woman:

...In school, in their Islamiyya, the teachers will say that after the woman has finished the period of bathing for forty days, the husband can meet her. If the husband should meet her, it's nothing--but before they didn't know anything like that.

Her comment refers to adult education classes for married women taught by Islamic teachers.

These classes give instruction on a range of family matters including proper postpartum conduct.

Women may be told that they should not meet their husbands before the birth blood had finished flowing, but that this was, at maximum, sixty days. After that, they could use masturbation techniques or they could have intercourse but they should avoid pregnancy by using withdrawal (*azal*; see Renne n.d.). If a woman were to get pregnant during this period, it is more likely that she would be encouraged to carry the pregnancy to term rather than to abort as in the past when such pregnancies were considered shameful. This decline in the stigma surrounding closely spaced births was reinforced by another recent teaching. Several women mentioned having been taught that extended periods of breast-feeding were detrimental to the infant:

Because the teachers used to say in Islamiyya that too much breast-feeding blocks the brain of the child. That is why they are telling the parents to wean the child when it is one year, eight months or some say when they are one year.

This medical justification of early weaning counters prior beliefs about the need for extended breast-feeding to build up the child's strength prior to weaning, helping to legitimate shortened nursing periods. One woman, however, described being taught that extended breast-feeding was good:

I go to Islamiyya. I've been going for fifteen years now. They usually tell us that it's good to breast-feed their children, that girls should breast-feed for two years, while boys should breast feed eighteen months.

Her remark suggests that there is some variation of views among Islamiyya teachers on this topic.

Nonetheless, women more often mentioned shortened periods of breast-feeding.

On the one hand, if attendance at Islamiyya classes in Zaria by married women and secondary school students has taught them that lengthy childbirth intervals are no longer necessary or mandatory, then this change would lessen the need for abortions by married women. On the other hand, higher attendance in secondary school may increase the need for abortion by unmarried ones.

Schoolgirls and Abortion

There is considerable social pressure on young unmarried Hausa women to avoid premarital pregnancies, regardless of whether they are in school or not. Even in the 1920s and 30s, the unpleasant treatment afforded to pregnant, never-married Hausa young women was described by Baba of Karo:

...The *kawaye* [close friends] of the girl make songs and the girl feels very ashamed, she drinks medicine.⁵ [They sing:]

‘What have you been eating, you’re swelling up like an okra!

Perhaps it’s sweet potatoes you’ve been eating.

Allah preserve us till harvest

And let us see how the okra swells up!’

After nine months, indeed she’ll bring it forth, you’ll see the okra emerge! They sing songs at her everywhere--where’s the pleasure of it? (Smith 1981:178-179).

This ostracization of women with premarital pregnancies is compounded for unmarried secondary school students because such a pregnancy may end their educational careers. Unmarried women students who become pregnant, technically speaking, often must leave school and often abandon

⁵ Baba’s references to drinking medicine is expanded in the following remark:

If they [young unmarried girls] get pregnant some of them drink henna [*lalle*], they vomit and they get diarrhoea and they usually miscarry. If they take indigo [*shuni*], they get very ill indeed (M.F. Smith 1981:179).

The idea of using blue-black indigo paste as an abortifacient may have been adapted by students, several of whom mentioned using ball-point pen ink (dark blue), laundry blueing, and Omo detergent (blue powder).

hope of white-collar or professional employment (Gyepi-Garbrah 1985:31).

It should be noted here, however, that unlike in southern Nigeria (see Caldwell and Caldwell 1994:282; Oronsaye et al. 1982), married young women in Zaria--even those with children--may register and attend classes (Table 3). This recent revision of education policy in Kaduna State⁶ takes some of the pressure off young women who may solve the problem of acquiring a secondary school education while avoiding the danger of premarital pregnancy and abortion by marrying before they finish their schooling.

Despite this policy change, however, most unmarried women students said that they prefer to finish before marrying. Of the 287 unmarried secondary school girls surveyed in Zaria, only 6% (n=16) said that they wanted to marry before finishing their education (Table 4). Students gave various explanations for why they wanted to complete their educations first. Some said they feared that once married, their husbands would not allow them to continue schooling, others felt that marriage would interfere with their studies, and others described how illness associated with pregnancy would prevent them from attending classes. These impediments might end one's secondary school career, seen by many as a way of preparing for future economic security in the face of potential marital difficulties, as one student explained:

After my father died, my brother called us because there wasn't anyone who would take care of us. He told us that whether we liked it or not, we had to finish school before marrying, just as all my sisters had their diplomas before marrying. If there is anyone among us who wants to marry, [he said], she should stop thinking it. But I wanted to

⁶ I was unable to establish exactly when this policy was implemented, although based on past graduates' experience, it was probably within the last ten years. That education officials were concerned about premarital pregnancies is evidenced in a letter circulated by the Ministry of Education, Kaduna State, dated 21 April 1989:

As a result of rampant cases of illegal pregnancies recurring in our school system, I am directed to inform you that, you are to submit a comprehensive statistics of cases of pregnancies in your zones from January 1988 to March 1989. (No. CNC/I.157/S.I./Vol. II/300).

continue my studies then, talk less of [now]. Because I realize that men have become what they have become. Even if you are married it's a problem, even if you're not married it's a problem, but it's better for you to do your schooling until the time you can get married...[interview AB-6].

This desire to finish secondary schooling raises the age of marriage for 71% of these women to the time when they are 17-20 years old (Table 5). Such postponed marriages are considerably later than the marriages of their mothers as 13-14 year olds (as well as the marriages of some of their non-schooling urban and rural contemporaries). As Bledsoe and Cohen (1993:115) observed:

...education appears to have the effect of elongating the period separating menarche from fertility and marriage--or what women are willing to call marriage--and of expanding the probability that a woman will have a premarital conception.

Exactly how this elongated period is affecting premarital conceptions and abortions among secondary school students in Zaria is unknown.

Indirect Assessments of Schoolgirl Abortion in Zaria

While secondary schooling extends the period for which unmarried women may become pregnant and subsequently get abortions, none of the secondary students interviewed in Zaria said that they had had abortions themselves. However 79% (n=238) reported that they knew of others, mostly fellow students, who had. Excerpts from the 1996 survey include the following examples:

I know of a student here in school who got pregnant, she took some tablets and was seriously bleeding, she later went home for treatment and succeeding aborting it [interview 22].

One schoolmate got pregnant in school and aborted it within school, she is still in school because the school authorities didn't know but [there was] much blood loss [interview 25].

A lady got pregnant and was advised by her parents to abort. She had the abortion at a

chemist and continued with her education [interview 61; see Appendix 1].

A fellow student who got pregnant and had an abortion was expelled and is now living at home with her parents [interview 123].

My schoolmate got pregnant and aborted it. The school doesn't know about it so she continues her studies. She's been sick and thinner than before [interview 206].

A student at my college got pregnant, she went for D&C immediately she realized she was pregnant and continues with her school, it was all very secret [interview 229].

These survey excerpts suggest that unmarried women students who want to continue their schooling may abort pregnancies and attempt to keep this information secret. The fear of being expelled from school is increased by their dread of their classmates' treatment, described by one student:

Their friends will run away from them, they will not talk to them. They will say so-so is pregnant. You will see that no one wants to have anything to do with them, you will see them in the class being quiet, they don't want to speak with anyone in the class. Their life is turned to being alone. Even the teachers don't want to talk with them. Those who have patience, they used to stay and continue; some who are not patient--if the thing is too much for them, they will stop coming to school.

The reason why we are treating them like that, we see what they did was not proper. That is why we are doing that to them. If a person is not married, she should protect her respect.

Although one runs the risk of being detected and expelled from school, abortion is one solution to the problem of premarital pregnancy. Because of abortion's inherent ambiguity, there is some latitude in this situation since unless a student admits to having aborted, school officials and classmates may choose to cast a blind eye when the situation warrants it. It should not be surprising, then, that some young unmarried secondary school students would resort to aborting such pregnancies as premarital pregnancy is so detrimental to their futures.

Estimating secondary student abortions in Zaria

Since unmarried secondary school students have good reason to abort premarital pregnancies and to hide the fact that they have done so, quantifying the extent of abortion among them is difficult. This difficulty is compounded by the likelihood that many students attempt to self-abort, using traditional herbal medicines and patent medicines (see Pittin 1986:46), rather than going to clinics or hospitals. Yet despite the fact that students interviewed would not admit to having abortion themselves, there were certain things that they would talk about, suggesting some avenues for future research.

Students would, for example, talk about what they would do if they got pregnant in the immediate future. Twenty-nine percent (n=87) of these secondary school women said that they would abort the pregnancy (Table 6). They would also talk about other students who had had abortions. Since they would and did talk about other's abortions, one possible way of getting an estimate of schoolgirl abortion would be to ask about classmates who had gotten pregnant in the last school year. This approach was attempted with a small group of women students (n=31) in August 1996. As part of a larger open-ended questionnaire, they were asked about the number of unmarried women students in their grade who had gotten pregnant over the past school year. Of this number, they were then asked how many of these women had given birth and how many had aborted. An example of this question-answer sequence went as follows:

Q: Of your set [grade], how many were unmarried girls [who got pregnant this year]?

A: The unmarried girls who are pregnant are five.

Q: How many of them gave birth?

A: One gave birth.

Q: What happened to her after she gave birth?

A: When she gave birth, maybe the child died inside--when she gave birth and the child was born, it was lifeless. She's stopped coming to school now, maybe she's changed.

Q: How many of them aborted the pregnancy?

A: Those who aborted the pregnancy are three--the one who is still pregnant is the one in my class.

Q: What happened to them?

A: Three of them who aborted their pregnancies, they are coming to school now (interview AB-13).

While this interview was fairly straightforward, others were less informative. Some students said they didn't know who had been pregnant or had aborted, others did not include aborted pregnancies among the number of unmarried pregnant students, and others gave confusing answers which the interviewer sometimes failed to follow-up. Thus there was considerable variation in numbers given and the results from this very small sample of 31 students are inconclusive.

Yet this method may yield more accurate results if certain changes are made and a larger sample of students is interviewed. For example, if questions had been more precisely formulated, if informants had been more thoroughly probed, and if at least 50 women had been interviewed from each of six grades (or sets), then a greater convergence of numbers might have been seen.

Specifically, this method should include:

- 1) Asking 10-15 students to estimate pregnancies and abortions by class, for all the classes in a single grade, in order to get a more accurate estimate. Since there are approximately 50 students in each class (see Table 3), the chances of fellow students knowing what was going on in their own class would be better than asking them to estimate the number of pregnancies and abortion for students in an entire grade of 300 or more women. For example, if 10-15 women from each class in SS1 (equivalent to 10th grade) were to be interviewed, this procedure would require interviewing a minimum of 60 women for this grade (which consists of 6 classes);

- 2) Probing to find out the total number of pregnancies among classmates and whether the

informant is including abortions in this figure. Apparently, some students do not consider someone who has had an abortion to have been pregnant. By carefully following-up on informant responses with questions about pregnancies, abortions, and outcomes, this problem should be clarified. Since these interviews will be taped, these discussions can be compared for verification; and

3) Finally, as a check on duplication, a student should first be asked the number of pregnancies and abortions in her class in the past school year. She could then be asked if she was one of these people. We would expect a slight underestimate, as students would be unlikely to admit their own abortions, so that the number in the class would include the informant herself in the non-pregnant/non-abortion category. However, in the unlikely event that she said she was either pregnant or had aborted, this fact would need to be taken into account.

By taking the sum of the data collected on abortion from the women interviewed in each class for one grade and then dividing this figure by for the total number of women for this grade midway in the school year, a reasonable estimate of the number of pregnancies aborted by students for one secondary school in Zaria for one year may be obtained.⁷ While there is certainly room for error in this method, I do think that for the relatively small number of students in each class (normally 50), we may get fairly accurate information from cooperating students. And since many of the examples cited in the survey interviews suggest that many Zaria secondary students are attempting to self-abort pregnancies through the use of tablets and traditional herbs rather by D&Cs obtained through clinics (Appendix 1), these estimates may be the closest we can get to obtaining baseline data for assessing changes in abortion rates among secondary school students

⁷ Finding greater numbers of pregnancies and abortions in the more senior grades, where women are

and evaluating the extent to which abortion is a reproductive health problem for them in this northern Nigerian town.

Conclusion

Over the past twenty years, women's education in Zaria appears to be affecting patterns of abortion in at least two ways. First, it has provided alternative advice on child-spacing which has indirectly reduced the need for abortion by married women.⁸ Second, the need for abortion may be increasing for secondary school women who want to complete their education before marrying. For them, the expanded period between menarche and marriage, increases the possibility of premarital conception and abortion (Gage and Meekers 1994).

This hiatus, sometimes referred to as the "bio-social gap" (Gyepi-Garbrah 1985:30), may be addressed in several ways. The situation in Zaria women's secondary schools is particularly interesting because it differs somewhat from school policies elsewhere in Nigeria aimed at addressing the problem of adolescent women's fertility and educational attainment. In Zaria, married women (who may be pregnant or may have children) are allowed to attend secondary school whereas in most secondary schools in Nigeria, married students are not allowed to enroll and pregnant girls are expelled (Nichols et al. 1986:100).

In Zaria, religious leaders, educators, and parents students have attempted to devise a scheme whereby young women can marry and become pregnant, without postponing or irrevocably stopping their educational careers. Despite the fact that several unmarried secondary students

generally older (see Appendix 2), would be another check on the accuracy of these estimates.

⁸This change does not mean that married women no longer have reason to abort pregnancies. Evidence from local clinics (Appendix 1; see also Ujah 1991) suggests that economic hardship may lead married women to seek abortions by D&C.

have decided that they "want to finish school before marrying and have a good job," as one secondary school woman put it, the policy to allow married students to attend classes expands the options of some women to acquire a secondary education. Thus while some parents may want their daughters to marry early, this policy enables them also to encourage their daughters to attend secondary school without fear of premarital pregnancies.

This growing appreciation of the value of women's education in northern Nigeria was expressed during a conference on early marriage and education sponsored by the Muslim Sisters Organisation of Nigeria, Zaria Branch, in August 1996:

When [western education] was first introduced, parents refused their daughters to partake in it because of their suspicion that it would turn their daughters loose. Later, girls started benefitting from it and the majority of those of us here are living testimonies to its usefulness....

The challenge before us is that making sure that we are able to sift the benefits derivable from Western Education and utilise them within the realms of our beautiful religion of Islam. As mothers, we want to be able to have daughters that are not only B.Sc., M.Sc. and Ph.D. holders, but who are also happily married within the Islamic context (Muhammed 1996).

These revised ways of thinking about women's education and marriage are reinforced by Kaduna State Ministry of Education officials who are promoting women's education through policy changes, publicity,⁹ and speeches. One woman official, for example, from the local Zonal Office of the Ministry of Education gave a speech at a girls' secondary school in Zaria that stressed the importance of women's education which "cannot be achieved without societal cooperation and parental support" (Shehu 1996:2). Allowing married women to attend secondary school is one way of addressing societal concerns about premarital pregnancy, even if most

⁹A poster (produced by Planned Parenthood Federation of Nigeria) displayed in a local government health clinic office in Zaria City depicted a young woman holding a baby, looking longingly out the window at a group of uniformed schoolgirls, saying, "Had I known I would have waited to finish my

unmarried women students prefer not to take this route. Another way of addressing the problem of premarital pregnancy is through abortion. By estimating the rate of secondary student abortions, the extent to which this problem exists may be more clearly assessed and appropriate solutions formulated.

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APPENDIX 1.

Summary of abortions performed (n=35) in four clinics/private rooms in four parts of Zaria, from 1 August-1 September 1996^a

Age	n	Ethnicity	n	Occupation	n	Marital status	n
15-19	4	Hausa	4	Student ^c	20	Not married	32
20-24	11	Igbo	4	Civil ser	6	Married	3
25-29	7	Jaba	3	Applicant	2		
30-34	1	Fulani	2	Foodseller	2		
DM	12	Idoma	2	Prostitute	2		
		Ninzam	2	Trader	2		
		Yoruba	2	Housewife	1		
		Misc ^b	15				

Mo. preg.	n	Amount Paid	n	Who paid	n	Reason	n
1 month	16	Free	2	Boyfriend	22	Not married	7
2 months	7	N100-999	18	Husband	1	Unwanted preg ^d	7
3 months	7	N1000-1999	11	Herself/	6	Schooling	5
4 months	4	N2000-2999	2	other		No money	4
6 months	1	N3000+	2	DM	6	Family honor	3
						Parents	2
						Suff.children	2
						Misc ^e	5

^aInformation from abortion providers was collected by them in August 1996. They carried out abortion by D&C in both private clinics and in private rooms. This information is not based on a representative sampling of Zaria clinics but is provided to give readers some sense of who is currently going for abortions, their situations, and reasons for doing so.

There are some similarities in these data with an earlier 3-month study of abortions performed (n=108) in one private clinic in Zaria in 1985 (Ujah 1991). For example, the mean age of women was 21.8 years compared with 22.6 years in the study described above. Fifty-seven percent of those seeking abortions were students in both studies. Also in both studies, abortions were performed on women from several ethnic groups; the most common reasons given for aborting pregnancies was schooling and not married.

^bMiscellaneous ethnic groups represented (with one women in each) include: Bajju, Ebira, Ebusa, Gwadana, Gwari, Igala, Kagoro, Kaje, Kalabari, Kanikon, Kataf, Kilba, Mangu, Tangale, and Tiv.

^cOf these students, 12 are university level, 8 are secondary level.

^dOf the 7 women who had "unwanted pregnancies," 5 were students which means that schooling is the likely more specific reason.

^eMiscellaneous reasons (one each) include: parents' advice, new

job, not decided on having children yet, avoid future obstacles, and hotelier refuses her entry.

Appendix 2.

Ages of students by grade for one Zaria secondary school (n=300)

<u>Grade</u>	<u>Range</u>	<u>Mean</u> (in years)	<u>Median</u>
JSS1 (n=40)	11-18	13.7	14
JSS2 (n=37) ^a	12-17	14.1	14
JSS3 (n=73)	12-18	15.2	15
SS1 (n=59)	10-18	15.9	16
SS2 (n=56)	14-27	16.9	17
SS3		----DATA MISSING----	
TC3 (n=35) ^a	15-23	18.7	19

^aAge data missing on 1 student in each of these grades.

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