

ADOLESCENT MOTHERS' NON-UTILISATION OF CONTRACEPTIVES IN ZIMBABWE

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ABSTRACT

Adolescent pregnancies are high-risk obstetric occurrences with far-reaching implications for these mothers' education, employment, general wellbeing and health. Adolescent motherhood could imply lifelong poverty. With available contraceptives, pregnancies can be postponed until the adolescents have completed their schooling and can care for their babies.

The purpose of the study was to identify factors that influenced adolescent mothers' failure to use contraceptives effectively, and to make recommendations to address these factors. A quantitative descriptive research design was adopted, and structured interviews were conducted with 43 adolescent mothers who visited the postnatal or well baby clinics in Marondera district.

Factors that contributed to adolescent mothers' non-utilisation of contraceptives included their lack of timely sex education, lack of knowledge about contraceptives, fears of infertility after the utilisation of contraceptives, lack of knowledge about and the inaccessibility of emergency contraceptives and termination of pregnancy services in the Marondera district.

Adolescents need more knowledge about accessible contraceptives. The possibility of providing emergency contraceptives to women in Zimbabwe should be investigated. Even in the absence of termination of pregnancy services, the accessibility of contraceptives and emergency contraceptives could help adolescents to delay childbearing, providing adolescents with more power to plan their own futures – and those of their future children.

KEYWORDS: adolescent mothers, condoms, contraceptives, emergency contraception, sexual debuts in Zimbabwe

INTRODUCTION AND BACKGROUND INFORMATION

Adolescent pregnancies pose serious public health challenges (Ebeigbe & Charoro, 2007:79). Maternal deaths are five percent higher for females younger than 16 years of age than for females in their twenties (Mlangeni, 2003 *in* Grobler et al., 2007:32). Zimbabwe's maternal mortality rate was reported to be 555 per 100 000 live births during 2005/2006 (MOCHW, 2007:1). Safe motherhood requires high-quality maternal health services during pregnancy, delivery and after the delivery to ensure the safety of the mother and the baby. The four pillars of safe motherhood include antenatal care,

clean and safe assisted delivery, essential obstetric care and family planning (WHO, 2000:23).

Effective utilisation of contraceptives can enable adolescents to develop into mature adults, complete their education, start their lifelong careers, become economically independent and prepare for marriage and childbearing when their personal and social circumstances are favourable. All these activities can be disrupted by unplanned adolescent motherhood, imposing lifelong hardships on the adolescent mothers and their children. “The vicious circle of early motherhood, poor education and poverty, leading to more children and greater poverty, has been well documented in many countries” (Dlamini et al., 2003:75).

RESEARCH PROBLEM

Adolescent mothers failed to use contraceptives to delay their pregnancies. The adolescent mothers in the Marondera district might have lacked contraceptive knowledge and/or accessibility to contraceptives. Having conducted a number of studies on adolescent mothers' non-utilisation of contraceptives in South Africa, the researcher wanted to determine whether adolescent mothers in other southern African countries encountered challenges similar to or different from adolescent mothers in South Africa. A master's graduate, fluent in the local language of the Marondera district, was recruited to conduct the interviews.

PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of the study was to determine why adolescent mothers failed to use contraceptives. This information could be used to design contraceptive teaching programmes for adolescents. In order to contextualise adolescents' possible reasons for non-utilisation of contraceptives, some background information was required, including adolescent mothers' ages; educational status; ages at menarche and when they received sex education and when they had their sexual debuts. Adolescent mothers' knowledge about contraceptives, emergency contraceptives and TOPs was also evaluated.

DEFINITIONS OF KEY TERMS

Adolescent mother refers to any mother aged 19 or younger when her baby was born, irrespective of the pregnancy outcome and irrespective of her marital status.

Condoms in this report refer to male condoms, usually latex sheaths pulled over the penis prior to sexual intercourse. Condoms, if used effectively, can prevent pregnancies and sexually transmitted infections, including HIV/AIDS.

Contraceptives are agents or devices (such as pills, injections, condoms and intra-uterine) that temporarily prevent conception from taking place.

Emergency contraception prevents pregnancy from occurring after an act of unprotected sex, by changing the woman's hormone levels to prevent ovulation, ovum transportation and/or endometrial growth. This can be achieved by using "morning-after pills" or pre-calculated high doses of oral contraceptives or by inserting copper-containing intra-uterine devices within five days after unprotected sex.

Pregnancy refers to the period from conception till the birth of the baby.

Sexual debut refers to a person's first experience of sexual intercourse.

Termination of pregnancy refers to ending of a pregnancy, preventing the birth of a live baby. In countries where this procedure has been legalised subject to specifications, the manual vacuum aspiration method is often used or pills (such as misopristol) to bring a final end to a pregnancy. Illegal terminations of pregnancy could be achieved by diverse means, sometimes with risks for the women's lives.

RESEARCH METHODOLOGY

Design

A non-experimental descriptive design was adopted to obtain information about adolescent mothers' non-utilisation of contraceptives.

Population

The population comprised all mothers aged 19 or younger during the data collection phase. The accessible population comprised all mothers aged 19 or younger who attended post-natal or well baby clinics in one district in the eastern part of Zimbabwe and who agreed to be interviewed, and whose parents had no objections to them being interviewed. Convenience sampling was done as every adolescent mother attending one of the participating clinics, while the interviewer was there, was requested to participate in the study.

Research instrument

The structured interview schedule's closed-ended items were obtained from a literature review. The first section (10 items) attempted to obtain biographic information such as the adolescent mothers' ages, education and employment status, ethnic groups, religious affiliations, occupations and incomes.

The second section (18 items) focused on reproductive and contraceptive aspects such as: the adolescent mothers' ages at menarche, their initial sex education sessions, and their sexual debuts. Specific questions were asked about their knowledge concerning contraceptives, emergency contraceptives and termination of pregnancies (TOPs).

Reliability and validity

The instrument's items were judged to have face validity by two nurse researchers who were also knowledgeable about the utilisation of contraceptives among adolescents. The instrument's items were derived from a literature review and refined during a research workshop until the participants agreed that every item was relevant to the adolescent mothers' non-utilisation of contraceptives, amounting to construct validity.

Reliability refers to the consistency with which an instrument measures specific attributes (Burns & Grove, 2005:749). This specific interview schedule had been pre-tested and used in similar studies conducted in four provinces of South Africa. No discrepancies were observed in the interview schedules completed by adolescent mothers in four different provinces of South Africa during these previous studies (Ehlers, 2003a; Ehlers, 2003b). Consequently the reliability of the instrument was deemed acceptable, although no statistics were calculated in this regard. No pre-test of the instrument was done in Zimbabwe as the time was extremely limited to conduct the interviews and as transport was problematic.

Data collection

Only 43 adolescent mothers at the postnatal and well baby clinics agreed to be interviewed. Thus the data collection process had to be concluded at the end of February 2005. The interviews were conducted in English as most Zimbabweans can communicate fluently in English. However, the interviewer could speak Shona, the language spoken mostly in the area, and could translate any term that was not clearly understood. The structured interview schedule was not translated and the adolescent mothers' responses were recorded verbatim, in the few cases where they provided additional information or responded to open-ended questions.

Data analysis

The data analysis was done by using the MSExcel computer program. Descriptive statistical methods were used to summarise and describe the data. Only a few adolescent mothers provided information in addition to their responses to the closed-ended questions. These responses were grouped and treated quantitatively.

Ethical considerations

Permission to collect data was requested from and granted by the Medical Research Council of Zimbabwe and the health care managers of the participating sites. (This study formed part of a study investigating women's reasons for not delivering their babies at hospitals or clinics. Adolescent mothers, who were willing to do so, also answered questions about their utilisation of contraceptives, providing the information for this article). Verbal consent was granted by each interviewee after the purpose of the study had been explained verbally by the interviewer. Adolescent mothers had to discuss their participation in this study with their parents/guardians prior to consenting to being

interviewed. No signed consent was requested, as the adolescent mothers might have doubted the anonymity of the process if they had signed consent forms. Every interviewed adolescent mother was informed that she had the right to refuse to participate, to stop participation at any stage and to refuse to answer any question, without suffering any ill effect whatsoever. Every adolescent mother was also informed that a research report would be compiled about adolescents' reasons for non-utilisation of contraceptives, but that no names would be used, only numbers. No remuneration was paid and no expenses were incurred as adolescent mothers were interviewed at clinics which they had visited.

RESEARCH RESULTS

Although 43 structured interviews were conducted, not all questions were answered and the interviewer respected the adolescent mothers' rights not to answer specific questions. Consequently the number of responses will vary for different questions.

Biographic data

Questions were asked about the adolescent mothers' personal characteristics to contextualise their knowledge about and utilisation of contraceptives against this background information.

Ages and years of completed schooling

The ages of the 42 adolescent mothers who answered this question ranged from 14 to 19, with an average age of 17.2 years, and a standard deviation of 1.129, implying that most ages fell between 16 and 18. The number of years successfully completed at school ranged from 4 to 12 for 41 respondents. In Zimbabwe learners who have successfully completed 12 years' schooling would obtain a qualifications equivalent to level O or level A in the United Kingdom. Reportedly 18 (43.9%) adolescent mothers had successfully completed 12 years' schooling, while 4 (9.8%) had completed 10 years' schooling. However, 17 (41.5%) adolescents only completed from 4 to 7 years' primary schooling, never reaching secondary schools.

Pereira, Canavarro, Cardoso and Mendonça (2005:656) analysed the data of a number of studies conducted among adolescent mothers and concluded that they "*have lower levels of education, lower educational aspirations and performance and higher levels of school dropout*". Almost half of the interviewees in the current study (43.9%; n=18) had reportedly completed their 12 years' schooling. It might be easier for those who completed their schooling to learn about contraceptives than for those with limited schooling. However, the effective utilisation of contraceptives might have enabled more adolescent mothers to advance further with their education before childbearing started.

Marital status

Out of the 43 adolescent mothers, 11 (25.6%) were single and 32 (74.4%) were married. Considering their ages, a large percentage of the adolescent mothers seemed to marry

at young ages. Similar results were reported by a study done in the Bulawayo area of Zimbabwe, indicating that 33.8% of that study's adolescent mothers were married (Chaibva et al., 2009:18). It could not be ascertained from the current study's data whether these adolescents had married before or after they fell pregnant, but adolescent marriages after pregnancies remain a possibility.

Residential areas

All 43 respondents indicated where they lived: only two (4.7%) lived in cities, 20 (46.5%) lived in towns, six (13.9%) lived in rural areas, eight (18.6%) lived in informal settlements and seven (16.3%) lived on farms. Those 22 (51.2%) who lived in cities and towns would presumably find it easier to access health care services, including contraceptives, than those from rural areas, informal settlements and farms.

Ethnic groups

Although 40 adolescent mothers indicated to which ethnic groups they belonged, 21 (52.5%) merely indicated that they were Africans without further specifications. Eighteen (45.0%) were Shonas, while one (2.5%) stated that she was a Shangaan. This question was asked to identify any cultural aspects which might influence adolescents' utilisation of contraceptives. However, viewed retrospectively, this item should have been deleted because Zimbabwe was facing some political instability during the data collection phase and the adolescents might have feared victimisation if they answered this question.

Religious affiliations

Only 37 adolescent mothers indicated their religious affiliations: 13 (35.1%) belonged to the Apostolic Faith Mission; 12 (32.4%) belonged to African religions; 4 (10.8%) belonged to the Anglican and four (10.8%) to the Methodist churches while two (5.4%) were Jehovah's witnesses and one (2.7%) was a Roman Catholic and another one (2.7%) a Muslim. The purpose of this question was to identify whether adolescent mothers belonged to religions which do not support the utilisation of contraceptives. However, even answers to this question might have been influenced by the potentially unstable political situation in Zimbabwe, possibly explaining why 12 respondents indicated that they belonged to African religions without further specifications.

Employment status

All 43 adolescent mothers replied to the question about their employment status. Only four (9.3%) were working; two worked as general labourers and two were farm workers. Thus 39 (90.7%) adolescent mothers had no jobs. Chaibva et al. (2009:18) reported that 87.5% of the adolescents in a Bulawayo study had no jobs. These two studies' findings indicate that almost all adolescent mothers had no jobs in different areas of Zimbabwe.

Personal and family monthly incomes

Only the four adolescent mothers who worked, earned personal incomes of approximately Z\$100 000 per month. Only 30 respondents indicated their families' monthly incomes. These varied from Z\$100 000 to Z\$ 1 000 000 per month, but only five (16.7%) indicated that their monthly family incomes exceeded Z\$500 000. (At the time of the study Z\$100 were equal in value to US\$1.)

Poverty among adolescent mothers is a global concern. The WHO (as cited in Akukwe, 2000:643) "... declared poverty to the number one 'disease' in the world because of its ubiquitous effects on the health status of individuals and communities. The WHO estimates that poverty is directly responsible for the annual deaths of 12 million children under age five and the untimely demise of 500 000 women from complications associated with childbirth ... Poverty is a strong predictor of prostitution, teenage pregnancy, HIV/AIDS, malnutrition and poor preconception health status in developed and developing countries".

Sex education

Reportedly the adolescents' ages at menarche ranged from 11 to 17 (see table 1) implying a range of six years, but for 20 (46.5%) this happened between the ages of 13 and 15. However, if some girls started menstruating at the age of 11, they should have received sex education when they were ten years old. As indicated by the means in table 1, the average age of menarche was 14 and the average age of receiving sex education was 14.1, implying that sex education was probably delayed until after menarche.

Table 1: Adolescent mothers' significant ages (n=43)

Age in yrs	Age of mother	Age at menarche	Age: sex education received	Sexual debuts	First used contraceptives
11		2	1		
12		4	5	2	
13		13	3	6	
14	2	7	7	5	
15		10	5	9	
16	11	5	3	10	1
17	12	2	3	5	1
18	8			4	
19	9			1	1
Mean	17.2	14.0	14.1	15.3	17.3
TOTAL (n)	42	43	27	42	3

All 43 adolescent mothers indicated the ages of their sexual debuts, ranging from 12 to 19 (see table 1), with the average sexual debut age of 15.3. Sex education should thus be

provided to girls before they turn 11. Receiving sex education after becoming sexually active, might have limited value for the adolescent girls to protect themselves against unplanned pregnancies and sexually transmitted infections, including HIV/AIDS.

Only 20 (46.5%) adolescent mothers indicated which persons provided sex education to them: teachers (55.0%; n=11), friends (20.0%; n=4); nurses and doctors (10.0%; n=2); parents (5.0%; n=1); and grandmothers (5.0%; n=1). This finding indicates that more than half of the adolescent mothers had received sex education from their teachers. Friends were more frequent sources of sex information than doctors and nurses while only one obtained sex education from her parents and another one from her grandmother. The ages at which sex education was received ranged from 11 to 17 (see table 1), but reportedly only one girl received this information at 11 and only five at 12 years of age. This implies that some girls probably received sex education after they had started menstruating, or even after their sexual debuts, putting them at risk of unplanned pregnancies due to ignorance.

Out of the 39 adolescent mothers who provided reasons for their sexual debuts, 13 (33.3%) did so because they wanted to experience sexual intercourse, eight (20.5%) were forced to engage in sex by their boyfriends, while eight (20.5%) consented to sex with their boyfriends, six (15.4%) did so after marriage, and 4 (10.3%) did not know why they engaged in their first sexual encounters.

Knowledge about and utilisation of contraceptives

Only 14 (32.6%) of the 43 adolescent mothers reportedly knew about different contraceptive methods. Out of these 14 adolescent mothers, six knew about condoms, pills and injections; four knew about pills and injections; while one respondent mentioned condoms and pills; pills; condoms; and injections respectively. It could not be ascertained why every adolescent mother did not know about condoms, but they might not have regarded condoms as a contraceptive method, rather as a method for preventing HIV/AIDS infection. Out of these 14 adolescent mothers, five were informed about contraceptives by nurses; two by friends; two by radio/television broadcasts; and one by a grandmother, sister, aunt, village health worker and teacher respectively. All adolescents should be knowledgeable about condoms. Although knowledge does not guarantee the regular use of condoms, knowledge enables adolescents to make informed decisions. Agha et al. (2001:144) reported that subsequent to implementing a programme on condom use in Mozambique, the use of condoms with non-regular partners increased.

Out of the 14 adolescent mothers who knew about contraceptives, four had utilised contraceptives for three to four months only. They started using contraceptives after the age of 16 when the average age for their sexual debuts was 15.3 years of age. This implied that some adolescents were sexually active without using contraceptives.

The 28 adolescent mothers who supplied reasons for not using contraceptives indicated that did not know about contraceptives (60.7%; n=17); wanted to have one baby before using contraceptives (25.0%; n=7); feared that contraceptives would make them sterile (7.2%; n=2); did not want to use contraceptives (3.6%; n=1) and was told by an aunt to marry the man (3.5%; n=1). A study done in Bulawayo also indicated that 50.0% of the adolescent mothers did not use contraceptives correctly because they lacked knowledge and encountered problems to access contraceptive services (Chaibva et al., 2009:19). Similar results were reported about South African adolescent mothers' lack of knowledge and failure to use freely available contraceptives effectively (Mbambo et al., 2006:229).

It could not be ascertained from the adolescent mothers' information why some deemed it desirable to have a child before they would consider using contraceptives. Speizer, Hotchkiss, Magnani, Hubbard and Nelson (2000:13) reported that contraceptive providers in Tanzania limited contraceptive access for young unmarried women. No similar studies could be traced that were done in Zimbabwe, but the possibilities of similar barriers to contraceptive utilisation should not be discounted. Stanback and Twum-Baah (2000:37) reported that contraceptive providers in Ghana feared that contraceptives, especially injections, could cause permanent infertility and supplied contraceptives only to women with proven fertility. However, nurses in Zimbabwe might not regard the utilisation of contraceptives sufficiently seriously, because 75.0% of audited adolescent antenatal records in Bulawayo lacked any contraceptive information (Chaibva, 2007:67).

In a South African study, 90.2% of the adolescent mothers reportedly used contraceptives subsequent to their babies' births (Ehlers, 2003a:20). This finding indicated that knowledge and accessibility could enhance contraceptive utilisation.

Emergency contraception and termination of pregnancy services

Out of the 41 adolescent mothers who responded to this item, nobody knew about emergency contraceptives. Consequently none of these 41 adolescents could have used emergency contraceptives to prevent an unplanned pregnancy.

Only three (7.0%) out of 43 adolescent mothers knew about termination of pregnancies and two would have utilised these services if they were available and if they had known about them. According to Ngwena (2004:340), legal TOPs are only available under specific circumstances in Zimbabwe, and are not readily accessible. However, this situation is not unique to Zimbabwe. Despite the availability of free contraceptives, free emergency contraceptives and free TOP services in South Africa, many adolescent mothers failed to use these, reportedly due to a lack of knowledge (Ehlers, 2003b:229).

CONCLUSION

Most adolescent mothers' babies were born when they were aged 16-18, implying that they should have had knowledge about and access to contraceptives before they were 15 years old. Of the adolescent mothers, 43% never reached secondary schooling, 33.8% were married, and 51.2% lived in urban areas. These findings indicate that at least half of the adolescent mothers should have been able to access contraceptives in their urban areas. Effective utilisation of contraceptives should have enabled some adolescent mothers to postpone childbearing to complete their schooling and/or delay their marriages. The adolescent mothers belonged to diverse ethnic and religious groups without definite identifiable influences on their contraceptive utilisation. Most respondents were jobless and their household incomes implied that most lived in poverty, making the effective utilisation of contraceptives essential for their own and their children's survival.

The adolescents started menstruating from the age of 11, with the average age at menarche being 14, and the average age for receiving sex education being 14.1, implying that sex education was probably provided when menarche occurred. Teachers provided sex education to 55.0% of the adolescents. The average age for their sexual debuts was 15.3, about three years prior to the completion of 12 years' schooling. Four (9.3%) respondents had used contraceptives for a few months only. Consequently none of the 43 adolescent mothers had used contraceptives effectively for sustained periods of time. They did not use contraceptives because they lacked knowledge (60.7%), wanted to prove their fertility by having a baby prior to using contraceptives (25.0%) or feared that contraceptives would make them sterile (7.2%). Nobody knew about emergency contraceptives and only two (4.7%) would have used TOP services if these were available.

Despite easier access to contraceptives in South Africa, similar challenges were encountered by adolescent mothers in Zimbabwe and in South Africa (Ehlers, 2003a; Ehlers 2003b) to use contraceptives effectively. In both countries, adolescent mothers could benefit more knowledge about easier access to contraceptives.

RECOMMENDATIONS

The number of adolescent pregnancies in the Marondera district of Zimbabwe could be reduced (even without legal TOP services) if sex education could be provided from the age of ten; girls could be motivated to postpone their sexual debuts; contraceptives (condoms, pills and injections) would be freely available to adolescents; emergency contraception could be made available.

As no adolescent mother had used contraceptives effectively, education about contraceptives should be provided as a matter of urgency by all nurses who come into contact with women. Mothers, teachers and community leaders should be informed about

contraceptives so that they can supply correct information to adolescents. Contraceptive posters and information brochures should be available at all clinics, hospitals and public offices. Efforts should be made to address contraceptive issues during radio broadcasts.

Further research should be conducted to compare the contraceptive knowledge and utilisation of adolescent mothers with girls of similar ages who are not mothers. Specific research should be conducted to identify the reasons why adolescents feared that contraceptives could make them infertile. Case studies of adolescents who had used contraceptives successfully for a number of years prior to their pregnancies might help to combat potential contraceptive myths.

Nurses and doctors should receive in-service education about the effective utilisation of contraceptives and about Zimbabwe's policies in this regard.

LIMITATIONS OF THE STUDY

The sample of 43 adolescent mothers who were interviewed imposed some limitations on the generalisability of the research results. All 43 respondents had delivered their babies in hospitals and attended post-natal and/or well baby clinics. It is possible that adolescent mothers who delivered their babies at places other than hospitals might have had different perceptions about reproductive health and contraceptives.

Adolescents who were not mothers, might have used contraceptives successfully, and experienced the utilisation of contraceptives differently from the adolescent mothers interviewed during this study. More valuable data might have been obtained if a group of adolescent mothers could have been compared with a group of adolescents who were not mothers.

Only structured interviews were conducted, yielding quantitative data. In-depth individual interviews might have produced valuable additional qualitative data. The structured interviews were conducted by a nurse. Although the interviewer attempted to wear clothes similar to those worn by the adolescent mothers, some of them might have recognised her and provided answers deemed desirable by the nurse.

The unstable social and political situation in Zimbabwe might have caused suspicions about any interviews, and might have influenced some answers provided by the adolescents, specifically about their ethnicity and religious affiliations.

CONCLUDING REMARKS

“Adolescent pregnancy and parenting remain a major public health concern because of their impact on maternal-child health and on the social and economic well-being of the nation ... community-based nursing intervention programs [can] improve health

and social outcomes for disadvantaged adolescent mothers and promote their self-sufficiency” (Koniak-Griffin et al., 2000:130).

The prevention of, as well as consequences of, adolescent pregnancies would be best addressed by multi-disciplinary approaches and intersectoral collaboration (Dlamini et al., 2003:74). Co-operation between the departments of education and health and social welfare could enable more adolescents to postpone childbearing until their circumstances are favourable. Without knowledge, and without easy accessibility to contraceptives, adolescent pregnancies are unlikely to decline in the Marondera district of Zimbabwe.

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