Knowledge, Perception and Practice of Emergency Contraception among Female Adolescent Hawkers in Rigasa Suburban Community of Kaduna State Nigeria

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Abstract
Objective: In Nigeria the rate of contraceptive use among sexually active adolescents is about 30%, considerably lower than the rates reported for developed countries. This study aimed to determine the knowledge, perception and practice of emergency contraception among female adolescent hawkers in Rigasa community, a suburb of Kaduna town.

Methods: A cross sectional descriptive study of 1200 adolescent female hawkers aged 15–29 years was carried out in 2008, using both self and interviewer administered questionnaires.

Results: Vast majority of the respondents are divorcees, constituting 92%. About 46% of them have never attended formal school before marriage. Of the 18 participants who were aware of emergency contraception; none correctly identified 72 hours as the time limit for the method’s use. Antibiotics or home remedies such as dye Robin Blue mixed with Coca cola or mixed with lime or lime mixed with potash and salt water were mentioned as unlisted methods of emergency contraception by responders.

Conclusion: It is glaring that there exist a yawning gap of information and knowledge on contraception in general and emergency contraception in particular among female adolescent hawkers. The need to inform this target group about reproductive health generally and unwanted pregnancy in particular would not be out of place.

Key word: Emergency contraception, Female adolescent, hawkers, Rigasa, Nigeria

Introduction
Adolescent pregnancy is a common occurrence in many countries. An estimated 14 million women aged 15–19 years gave birth each year in 1995–2000, with 12.8 million births occurring to adolescents in developing countries (1). More than half the women in sub-Saharan Africa and about one third in Latin America and the Caribbean give birth before the age of 20 (2).

Adolescent pregnancy and childbearing entail a high risk of maternal death for the adolescent, and the children of young mothers have higher levels of morbidity and mortality (3). These adolescents and their children may experience repercussions in the present, as well as far into the future. Pregnancy and childbearing may cut short an adolescent’s education and threaten her economic prospects, employment opportu-
nities and overall well-being. Adolescent mothers may pass on to their children a legacy of poor health, substandard education and subsistence living, creating a cycle of poverty that is hard to break (4).

Adolescent girls face considerable health risks during pregnancy and childbirth, accounting for 15% of the Global Burden of Disease (GBD) for maternal conditions and 13% of all maternal deaths (5). Adolescents aged 15–19 years are twice as likely to die in childbirth and those under 15 are five times more likely to die in childbirth as women in their twenties (6). Infant and child mortality is also higher among children born to adolescent mothers (7).

Adolescents suffer a significant and disproportionate share of deaths and disability from unsafe abortion practices (8). The number of abortions globally among adolescents ranges from 2.2 to 4 million annually (9) because of legal and social restrictions on access to abortions in many parts of the world, adolescents often resort to unsafe procedures administered by unskilled providers (10). Recent estimates suggest that 14% of all unsafe abortions in developing countries are performed on adolescents aged 15–19 years. Of these unsafe abortions in developing countries, Africa accounts for 26% while Latin America and the Caribbean account for 15%. Unintended pregnancy poses a major challenge to the reproductive health of young adults in developing countries. Some young women with unintended pregnancies obtain abortions—many of which are performed in unsafe conditions—and others carry their pregnancies to term, incurring risks of morbidity and mortality higher than those for adult women (11).

Given increasing adolescent sexual activity and decreasing age at first sex in developing countries (12), the use of contraceptives to prevent unwanted pregnancy and unsafe abortion is especially important. In Nigeria, however, contraceptive use among adolescents is low (13). Studies from western and southern Nigeria have found rates of contraceptive use among sexually active adolescents of about 30% (14), considerably lower than the rates reported for developed countries. For example, contraceptive prevalence among sexually active Danish adolescents is 95% (15). As is the case in Kenya (16), the low levels of contraceptive use among adolescents in Nigeria may reflect inadequate contraceptive knowledge and access, as well as the spontaneity of adolescent sexual activities. They may also reflect the notion among youth that it is easier and safer to obtain an abortion than to practice contraception on a regular basis (17).

Emergency Contraception (EC) refers to a group of birth control modalities that, when used after an unprotected intercourse within defined time limits (usually within 72 hours after an unprotected sex) can prevent an unwanted pregnancy (18).

EC with combined contraceptive pills was initially described in 1974 by Albert Yuzpe, a Canadian physician (19). Emergency Contraception is largely underutilized worldwide and has been referred to as one of the best kept secrets in Reproductive Health (RH) (20). In many low income countries, the lack of knowledge about and access to EC may result in women resorting to unsafe abortions, which contribute significantly to maternal morbidity and mortality (21). Emergency contraception can reduce the number of unwanted pregnancies and is unique in that it is the only immediate option left for somebody who has had unprotected intercourse and is not ready for a pregnancy.

Use of modern contraceptives is uncommon in Nigeria. Fewer than 3% of women use a modern method; only 6% of women and 12% of men have ever used one (22). Sexuality education is not part of the regular school curriculum, either in secondary or in primary schools. However, family planning organizations occasionally provide contraceptive information in 10th-grade classes (23).

Among the various forms of contraception, emergency contraceptives are the only one that can be used after sexual intercourse, offering a second chance to prevent unwanted pregnancy (24). Levonorgestrel-only pills and combined oral contraceptives are the most common emergency contraceptive methods available in Nigeria; they can be obtained over the counter from patent medicine and pharmacy shops.

**Materials and Methods**

Our study was a cross-sectional one conducted in 2008 among female adolescent hawkers aged 15–29 years in Rigasa. The area was chosen for several reasons: The area’s people have undergone rapid increase in population growth during the last 10 years. They show the impressive mix up of ethnic groups typical of fast-growing urban communities and they have high rate of illiterates, high rate of early marriages and frequent divorces.

In September and October 2008, participants were recruited from the famous market in Rigasa called (Taki Zama) a market dominated by adolescent divorcees to obtain a random sample; participants were selected randomly from 3 clusters of the market to participate in the study. After receiving information
about the study, those who volunteered to participate were given the self–administered questionnaire translated into Hausa Language to complete, while for those that cannot read it was read for them.

The questionnaire, which had been pre–tested among 50 non–participants in different local government area, asked about their socio–demographic information, sexual history, contraceptive use, and their awareness and knowledge of emergency contraceptive pills. Participants were asked when emergency contraceptives must be used to be effective, which drugs can be used as emergency contraceptives and the sources where they obtain their information on emergency contraceptives.

Overall, 1200 participants completed the questionnaires and were included in analysis. Data were coded and were analyzed using the SPSS version 11.0 software package. Respondents were separated into subgroups by selected characteristics, such as contraceptive use, sexual activity and level of education.

Statistical test of significance such as Chi–square test was used where appropriate to test for any significant difference between subgroups.

**Results**

Of the 1200 participants, 64% were in 15–19 years, 24% in 20–24 years and 12% in 25–29 years age group (Table 1). The vast majority of participants (92%) are divorcees, while the remaining has never married. It was shown that 46% have never attended any formal school before marriage while 26% attended Islamiyya schools before marriage. Totally 6% of the respondents have completed primary school before marriage and 15% have reached junior secondary school before marriage. Only 6% of the respondents have completed secondary school. About one–third of all participants reported having ever had an induced abortion. Majority of the respondents (70%) have never practiced any form of contraception while 30% of them did (Fig. 1). Out of those who ever used any method of contraception, 45% reported having used condom, 20% the calendar method and 15% the pill.

Results showed that 46% of the divorcees have married four times, 32% three times, 13% twice and 9% only once (Fig. 2).

Of the 18 participants who were aware of emergency contraception; none correctly identified 72 hours as the time limit for the method’s use. An additional 6 thought that emergency contraceptives were effective only when used within 24 hours of unprotected sex.

<table>
<thead>
<tr>
<th>Table 1. Distribution of female adolescent hawkers by characteristics (n=1200).</th>
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<tbody>
<tr>
<td>Characteristics</td>
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<tr>
<td><strong>Age</strong></td>
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<td>15–19</td>
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<td>25–29</td>
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<td><strong>Marital status</strong></td>
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<td>Divorced</td>
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<td>Never married</td>
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<td><strong>Level of Education</strong></td>
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<td>Never attended</td>
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<td>Islamiyya</td>
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<td>Primary</td>
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<td>Junior Secondary</td>
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<td>Finish Secondary</td>
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<td><strong>Ever practiced contraception</strong></td>
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<td><strong>Method ever used</strong></td>
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<td>Calendar methods</td>
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<td>Pills</td>
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<td>Emergency contraceptive</td>
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* 360 participants that ever use family planning method

**Figure 1. History of ever practice of contraception.**

**Figure 2. Number of marriages.**
Menstrogen, the drug used in the treatment of conditions related to low hormonal levels such as dysfunctional uterine bleeding—was the drug most often cited in this study as an emergency contraceptive. Another drug mistakenly thought to be an emergency contraceptive is Gynaecosid, which is recommended for the treatment of amenorrhea not related to pregnancy.

Of the 54\% of the 15–19 years old participants, 56\% had 4 children, 25\% had 3 children, 12\% had 2 children and 7\% had only a child.

Given a list of eight drugs, from 5\% of respondents who had ever used emergency contraceptives 42\% identified levonorgestrel only pills as emergency contraceptive methods.

When asked to mention other unlisted methods of emergency contraception, some respondents mentioned antibiotics or home remedies such as dye Robin Blue mixed with Coca cola or mixed with lime or lime mixed with potash and salt water, some even mentioned Neem tree extract, Khaya Senegalenses extracts.

Of the women who were aware of emergency contraception, fewer than half had received their information on the method from trained health providers (2\% from doctors, 5\% from pharmacists and 19\% from nurses). However, 17\% had received their information about emergency contraceptives from female friends, 5\% from their boyfriends and 52\% from patent medicine vendors (PMV) and none of the participants received information from their former husband (Fig. 3).

**Discussion**

Contraceptive use among female adolescent hawkers aged 15–19 years is relatively low in our study; this low level is attributed to lack of awareness or knowledge of sources of family planning information, cost of contraception, social barriers, and the quality of services available. This finding is similar to what was obtain in other parts of Africa (25).

Our findings reflect the lack of correct information on emergency contraceptives available in Rigasa Kaduna Nigeria. Half of the participants who have knowledge of EC get their information from patent medicine vendors. Even more worrisome, less than one-fifth of those aware of emergency contraceptives knew the correct timing for its use. This strongly suggests that many health care providers may not be well informed about emergency contraceptives or that they are not effectively conveying the information to their patients.

Condoms were the commonest method known to most of the participants. This finding is similar to a work done in Port Harcourt among undergraduate students, where the commonest method is condom use (65.2\%) (26).

In the absence of correct information regarding proven emergency contraceptives, some respondents believed that folk methods such as Robin Blue (dye) when inserted in excess through vagina prior to sex or immediately, lime mixed with coke or potash could be used as emergency contraceptives. In addition, a substantial proportion believed that medications not intended to be used as emergency contraceptives, such as metronidazole, could be used to prevent unwanted pregnancies.

The pattern of knowledge of correct timing for emergency contraceptives followed the same trend as that for general knowledge: Participants’ who were sexually active and those who had ever practiced contraception were significantly more likely to know about...
the correct timing of use. It was shown that 33% of participants who were aware of emergency contraception thought that emergency contraceptives were effective only when used within 24 hours of unprotected sex. Although this answer is within the 72–hour limit, such misinformation might inhibit someone who could still prevent a pregnancy from taking emergency contraceptives because they thought they had missed their “window” of effectiveness.

Conclusion
It is glaring that there exist a yawning gap of information and knowledge on contraception in general and emergency contraception in particular among female adolescent hawkers in Rigasa. The need to inform this target group about reproductive health generally and unwanted pregnancy in particular would not be out of place. Thus there is a need to make use of peer educators; community based TBAs, and Patent Medicine Vendors to reach this particular target group.

Maternal and child health and family planning programs should be implemented at all levels. Programs designed to motivate and inform couples interested in making services more accessible to couples should be designed and implemented.

Acknowledgment
There is no conflict of interest.

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