# Association between age at first intercourse, sexual behaviour and sexually transmitted infections among adolescents

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#### Summary

The study explores the relationship between age at first intercourse and sexual behaviour and sexually transmitted infections among adolescents aged 12-19 years olds who are not married at the time of the survey. It focuses on Burkina Faso, Malawi and Uganda. Data come from the 2004 national surveys of adolescents (NSA). The results show that adolescents who have had first intercourse before age 12 are more likely to have an occasional sexual partner during the last twelve months in Malawi, not to use consistently condoms in the last twelve months in Burkina Faso, not to use consistently condoms in the last twelve months in Burkina Faso. In Uganda, adolescents who have had first intercourse before age 12 are less likely to have sex with more than one partner during the last twelve months. The results show that entry into sex before age 12 is more likely to be associated with risk sexual behaviour of unwanted pregnancies, illegal abortions, premature births and sexually transmitted infections.

### Introduction

Age at first intercourse is a marker of risk sexual behaviour and sexually transmitted infections (Greenberg, 1992, Singh et al., 2000). An early age at first intercourse is more likely to be associated to extramarital sex, to a use of multiple sexual partners, to low condom use, to higher risk of sexually transmitted infections and HIV. Research conducted by White and colleagues (2000), in Ivory Coast, Tanzania, city of Lusaka in Zambia and Thailand, establishes that early first intercourse in Ivory Coast and Tanzania is associated with the likelihood of extramarital sex for men aged 15 to 49 years or more. In the rural areas of South Africa (Harrison and al., 2005) and in the region of KwaZulu Natal in the same country (Harrison and al., 2008), men aged 15 to 24 years who have had first intercourse before 15 years are more likely to have multiple sexual partners during the last three years. In Tanzania, people of both sexes aged 15 to 49 years, residing in the rural region of North-West, who have had first intercourse before 17 years old are more likely to have more sexual partners (Konings and al., 1994). In the region of Arusha in Tanzania, it was observed that the entry into sex before age 16 for men and women aged 15 to 54 years, is associated with a greater number of sexual partners (Mnyika and al., 1997). Conversely, this study reveals that the entry into sex before age 16 is associated with condom use during sex. In South Africa, boys aged 15 to 24 years and entered in sex before age 15 are less likely to use condoms at first intercourse while for girls, this relationship is observed among those who were forced to have the first sex (Pettifor, et al., 2009). In Ethiopia, Duncan and colleagues (1990) have shown an association between early sexual activity in women and increased prevalence of sexually transmitted diseases and pelvic inflammatory disease. In Zimbabwe, the risk of HIV infection is higher among women aged 18 to 35 years who experienced their first sexual before 16 years (Pettifor et al., 2004).

The early first intercourse is not a new phenomenon in sub-Saharan Africa. In the past, virginity was valued in many societies and the first intercourse, early or late, was more likely to occur in the context of marriage (Meekers, 1994). Today, the decline in age at puberty and increased in age at marriage predisposed adolescents to early sexual. The result is a greater exposure of adolescents to risk of unwanted pregnancies, illegal abortions and sexually transmitted diseases that have harmful health, social and economic consequences for adolescent, his family and his community.

This study aims to assess the relationship between age at first intercourse and sexual behaviour and history of sexually transmitted infections among adolescents aged 12 to 19 years. To date, little evidence addressing this issue have been established in Africa on adolescents; existing studies focus more on adults. The study focuses on three countries representing three regions of sub-Saharan Africa: Burkina Faso (West Africa), Malawi (South Africa) and Uganda (East Africa).

## Methodology

## Data

The analysis are conducted using data from national surveys of adolescents (NSA) organized in 2004 under the *Protecting the next generation* project. The questionnaires and methodologies used in the NSA, although some local particularities, generally keep a set of key questions identical from one country to another. The target population for this research is composed of adolescents who have had first intercourse and are unmarried at the time of the survey. Their number is 968 in Burkina Faso, 1 102 in Malawi and 1 221 in Uganda. Adolescents who are currently in union are excluded because of the particular context of their sexual life.

## Variables

Two questions were used to determine the adolescent status at the first intercourse and age at the event: 1) Have you ever had sex?, 2) When did you have your first sex? Information about entry into sex refers to sex with vaginal penetration. The sexual behaviour refers to four indicators: use of multiple sexual partners during the last twelve months, using a occasional sexual partner during the last twelve months, condom use at first intercourse and condom use for sex last twelve months. The history of sexually transmitted infections has been constructed on the basis of answers to three questions directly related to STI's or their symptoms. The analysis are controlled by age at survey, sex, educational attainment, ethnicity, place of residence, the probable duration of "sexual life", the community level of knowledge about contraception, HIV/AIDS and STI's, and the household wealth index.

### Analysis Strategy

The analyses are bivariate and multivariate; they are performed on samples of adolescents aged 12 to 19 years of Burkina Faso, Malawi and Uganda. The bivariate analysis describe the age at first intercourse with the adolescents characteristics. The multivariate analysis were performed using logistic regression models for dichotomous (using a occasional sexual partner, condom use at first intercourse and history of sexually transmitted infections) and polychotomous ordered (use of multiple sexual partners and condom use during the last twelve months). All tests were performed on weighted data.

### Results

The majority of adolescents in Burkina Faso (70.7%) and more than half of adolescents in Malawi (54.8%) and Uganda (54%) have had first intercourse between 14 and 17 years. Before 14 years, over a third of adolescents in Malawi (37%) and Uganda (38.8%) and over a fifth (20.9%) adolescents in Burkina Faso, not in union at the time of survey, have had the first intercourse. The age at first intercourse varies significantly depending on the characteristics of adolescents.

The multivariate analysis showed that age at first intercourse is significantly associated with sexual behaviour of adolescents in the three countries. This association is however variable according to the behaviour indicator and country. Except the use of multiple sexual partners over the last twelve months, the results of this study are in the expected direction. Adolescents who have had the first intercourse before 12 years are more likely to engage in risky sexual behaviour. In Malawi, they are more likely to have an occasional sexual partner during the last twelve months than their counterparts who have had the first intercourse to 12 or 13 years. They are more likely not to use condoms at first intercourse compared to adolescents who have had the first intercourse from 12 to 19 years in Malawi, from 14 to 19 years in Uganda and from 18 to 19 years in Burkina Faso. In Burkina Faso, they are less likely to use condoms consistently in sexual intercourse during the last twelve months than those who have had the first intercourse to 18 or 19 years.

#### Discussion and conclusion

Despite the differences in results by country, one constant emerges from this study: an entry into sex before age 12 is more likely to be associated with risky sexual behaviour in the three countries.

The issue of early entry into sexuality is linked to the development stage of the organism at first intercourse. Adolescence represents the ages of physical, biological, physiological, immunological and intellectual immaturity. In several countries, there is an age below which an individual is not considered able to consent freely to sexual activity or exercise free and informed choice in this area (Innocenti Digest, 2001). Such laws are designed primarily to deter potential sexual partners of adolescents; they would have little effect in practice and behaviour of adolescents. In the context of sexual health and reproductive programs immaturity of adolescents and sexual health risks that accompany it are taken into account in advocacy and information sent to adolescents, their parents and community stakeholders. This applies to actions that promote the postponement of age at entry into sex, or sexual abstinence, to fight against sexually transmitted infections (STI's), HIV/AIDS and unwanted pregnancies.

Delaying the entry into sexuality could be safer and more secure to protect the sexual and reproductive health in adolescence. But it is established that a program of sexual and reproductive health which advocates abstinence only produce less positive effects on youth (Shears, 2002). The most efficient programs are those that combine abstinence and providing information and services on contraception (Grunseit and al., 1997). Improved implementation of the strategy of postponing the entry into sexuality must go through sex education programs (PRB, 2000) and empowerment of stakeholders who accompany youth in their maturation (Athea, 2001).

The results of this study are dependent on the quality of data on indicators of sexual behaviour and the exclusion of adolescents currently in union from the analysis sample.

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