

## Factors associated with early sexual intercourse among teenagers and young adults in rural south of Benin

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### Abstract

Early initiation to sexual intercourse increases the risk of sexually transmitted infections including HIV/AIDS and early or unwanted pregnancies. This study aimed identifying the factors associated with the early initiation to sexual intercourse among teenagers and young adults aged 10-24, in the south of Benin. A cross-sectional study was conducted in the south of Benin where 360 respondents were selected by random cluster sampling. Multiple logistic regressions was used to find related factors to early sexual intercourse. The significance level for the tests was of 5%. The average reported age of initiation to sexual intercourse was 14.75±2.18. Among the male teenagers and young adults, 41.11% had an early sexual intercourse against 20.24% for the female gender ( $P<10^{-3}$ ). The lack of communication between parents-teenagers ( $P=0.003$ ), level of education of the father ( $P=0.021$ ), exposure to pornographic movies ( $P=0.025$ ), an adverse opinion on premarital sexual abstinence ( $P=0.026$ ) were significantly associated with early sexual intercourse. Communication about health promotion for behavioural change may contribute to delay the age of sexual initiation.

### Introduction

Adolescence is a period of life in which physical, sexual, psychological and social changes occur. Adolescence and youth are periods of life that range from 10 to 24 years and represent risky periods for the teenager and young adult.<sup>1</sup> These different changes, lead the teenagers and young adults to adopt high-risk behaviours, such as the use of psycho-active substances, dangerous behaviours and initiation to sexual intercourse, which have important conse-

quences on adulthood health and also on that of future generations.<sup>1,2</sup> In Benin, the proportion of teenagers and young adults who had sexual intercourse before the age of 15 was estimated at 13% in 2006, according to the data of the demographic and health survey.<sup>3</sup> This prevalence has not changed within the female population between 2006 and 2012. On the contrary, within the male population it has statistically increased from 12.9% in 2006 to 16.8% in 2012 among the 15-19 year old individuals.<sup>4</sup>

Early sexual intercourse increases among teenagers and young adults, the risks of having multiple sexual partners and unprotected sex.<sup>5,6</sup> Teenager (s) having an early sexual intercourse have a higher risk of sexually transmitted infections (STIs) including HIV/AIDS, early and unwanted pregnancies as well as induced abortions.<sup>7-10</sup> Early pregnancies, for example, have an impact on the health of the teenage mother and also that of the new-born. In fact, early pregnancies and motherhoods, cause complications, including maternal mortality, which is the second leading cause of death among girls aged 15-19.<sup>11</sup> These early pregnancies and motherhoods also reduce opportunities for education and other opportunities for the young girl.<sup>12</sup> As for HIV, it is now the second leading cause of death among teenagers and young adults.<sup>11,13</sup> In Benin, teenagers account for 21% of total fertility and the incidence of STIs and HIV/AIDS is estimated at 50% among the young population.<sup>14</sup> This situation justified in 2010, the development of multi-sector strategies aiming at improving sexual and reproductive health for teenagers and young adults. However, the high prevalence, observed according to the demographic and health survey in 2012,<sup>4</sup> proved that effort are still to be made. An understanding of the factors behind an early initiation to sexual intercourse among teenagers may contribute to the implementation of effective strategies. According to studies, the factors that are associated with the early initiation of teenagers to sexual intercourse are numerous; among them, the consumption of alcohol and other psychoactive substances, family structure, peer influence, exposure to pornographic movies, the level of education and the beliefs and values regarding sexuality.<sup>6-8,15-18</sup>

This study aimed to identify the factors associated with the early initiation to sexual intercourse in Benin context, in order to propose effective strategies contributing to the improvement of sexual and reproductive health for teenagers and young adults.

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## Materials and Methods

### Type, period and study population

A descriptive and analytical cross-sectional study was conducted from March 12 to July 14, 2015 among teenagers and young adults of the municipality of Lokossa, in the south of Benin. This municipality is one of the 06 municipalities of the department of Mono in the south of Benin, department where the proportion of girls less than 20 years pregnant or with at less one child is high (15% versus 6,9% in the capital city department).<sup>4</sup> It had a population of 117,708 inhabitants and is divided into 5 districts and 44 areas that are mainly rural. The population of teenagers and young adults of this municipality was estimated at 40,155 in 2015. The study participants were teenagers and young adults aged 10 to 24 regardless of their socio-professional category.

### Sampling

The sampling methodology was probabilistic and cluster sampling technique was used. Villages or neighbourhoods were our sampling frame. The size of the sample was determined by the formula of Schwartz. We have taken into account the 1.5 cluster

effect and used a 10% response rate. The prevalence of early sexual intercourse used was 16.8%.<sup>4</sup> The final sample size was 360. Thirty (30) clusters were surveyed. The villages were selected proportionally to the number of teenagers and young adults. The choice of the respondents in the households was made randomly. In each household, teenagers and young adults were identified and from a simple random draw, a topic was chosen for the survey. Teenagers and young adults aged 10 to 24, residing in the municipality of Lokossa for at least six months at the time of data collection, were included in our study and those residing for less than six months were not included.

### Technique and data collection tool

The method was a questionnaire survey. Four surveyors, trained for this purpose, were responsible for collecting data from teenagers and young adults in households. The questionnaire designed in French was translated and pre-tested with the surveyors. The questionnaire was completed in French and local languages by the surveyors. These latest were supervised in the field. Data to be collected involved the following independent variables: socio-demographic characteristics, family structure, parents-teenagers communication (related to information about sex) and parental control, exposure to pornographic movies, influence of peers, self-esteem, age of puberty, late-night outings, consumption of alcohol and opinion of teenagers and young adults about abstinence before marriage.

### Data analysis

After collection, the sheets were counted manually in order to verify the completeness of the data to be collected as well as their consistency. The data were then entered using Epi Info 3.5.4 software and analysed with Stata 11 software. The different variables were described by the param-

eters of central tendency or dispersion and by their ratio. A univariate analysis was performed to assess the different links between the dependent variable and the different independent variables at the 5% threshold. In multivariate analysis, the variables with P-value <0.20 were included in the initial logistic regression model. In the final model, variables with P-value <0.05 were selected. The adequacy of the final model was sought with the Hosmer-Lemeshow test.

### Definition of variables

The dependent variable was the early sexual intercourse. It was determined from the reported age of the first sexual intercourse. The first sexual intercourse, meaning penetration of the penis in the vagina, that occurred before age 15 were considered early. The communication between parents-teenagers and young adults and parental control, were evaluated based on Claes *et*

*al.* scales of parental educational practices measurement.<sup>19</sup> Self-esteem was measured using Rosenberg scale.<sup>20</sup>

### Ethical considerations

Prior approval had been obtained from the health, administrative and local authorities. The questionnaires were administered upon verbal consent of respondents. In order to respect the anonymity of the respondents, the questionnaire did not mention their identity and confidentiality was guaranteed by interviewing respondents in a place isolated from the other members of the households.

## Results

### Sample's description

A total of three hundred and sixty (360) teenagers and young adults from 10 to 24 years old were surveyed, including 163

**Table 1. Personal and familial features of teenagers and young adults, Benin, 2015.**

	Frequency	Weighted percentage
Age (years)		
10 to 19	255	70.64
20 to 24	105	29.36
Gender		
Female	163	45.33
Male	197	54.67
General level of education		
Not schooled	13	03.79
Primary school or more	347	96.21
Marital status		
Married	24	6.64
Single	336	93.36
Occupation		
Artisan/apprentice/others	101	27.19
Students	259	72.81
Father's level of education		
Not schooled	105	28.09
Primary school or more	247	71.91

**Table 2. Multivariable analysis: related factors to early sexual intercourse within teenagers and young adults, Benin, 2015.**

Independant variables	Frequency	Weighted percentage	Adjusted OR [CI95%]	P-value*
Father's level of education				0.021
Not schooled	247	71.91	2.55 [1.16-5.61]	
Primary school or more	105	28.09	1	
Communication parents-teenagers				0.003
Insufficient	197	51.97	3.16 [1.52-6.55]	
Acceptable/good	163	48.03	1	
Opinion about premarital sex				0.026
Agree	191	53.41	2.25 [1.11-4.56]	
Not agree/Do not know	169	46.59	1	
Exposition to pornographics movies				0.025
Never	158	43.25	1	
Occasionally/2 times or more per week	202	56.75	2.16 [1.11-4.21]	

\*P-value test Hosmer-Lemeshow=0.3783. Non-significant test.

females and 197 males. The sex ratio was 1.2. The average age of respondents was  $17.75 \pm 3.31$  years. The minimum age was 11 and the maximum was 24. The majority were students *i.e.* 72.89% (Table 1). Nearly 56.75% watched sexual movies, pornographic movies in particular, either occasionally or regularly. For 51.97% of teenagers and young adults, communication with parents was insufficient. Subjects regarding sexuality were little discussed (23.28%) or not at all (71.61%).

The mean of puberty's age was  $12.95 \pm 1.48$  years with minimum of 9 and maximum of 16. About peers influence, 48.47% of the teenagers and young adults were encouraged to sexual intercourse and 17.68% to alcohol consumption. For late-night outings, 62.74% of surveyed teenagers had 1 or 2 late-night outings per week and 35.74% had more than 2.2 late-night outings per week. Average score of self-esteem was  $28.50 \pm 3.72$  for maximum expected of 40. Concerning familial structure, about 62.05% of teenagers and young adults were living close to their parents.

### Prevalence of early sexual intercourse

Approximately 31.66% of the respondents had sex before the age of 15. The prevalence of early sexual intercourse was significantly higher ( $P < 0.000$ ) for male teenagers and young adults (41.11%) than for those of the opposite gender (20.24%). The reported age of the first sexual intercourse ranged from 9 to 24 with an average age estimated at  $14.75 \pm 2.18$ . Male teenagers initiated themselves at an earlier age 14.27 compared to the females 15.38 ( $P < 0.000$ ).

### Factors related to early sexual intercourse

The multivariate analysis showed that the lack of communication between parent-teenagers and young adults as well as father's level of education increased significantly the probability of early initiation to sexual intercourse. The occasional or regular exposure to pornographic movies also increased the probability of early sexual intercourse. Teenagers and young adults who do not favour abstinence before marriage were 2.25 times more likely to have early sexual intercourse than those who had a different opinion (Table 2).

## Discussion

This study helped in identifying the factors associated with the early initiation to sexual intercourse. The prevalence of early

sexual intercourse among teenagers and young adults in our study was estimated at 31.66% with a significantly higher male prevalence (41.11%) than female prevalence (20.24%). These 02 prevalences are much higher than those found in the 2011 Demographic and Health Survey (DHS) of Benin that were respectively about 16.8% for the male gender and 13% for the female one,<sup>4</sup> in the same band of age. This high prevalence in that municipality could be explained by the lack of services provided to that category of the population, both in public health units and schools. It could also be explained by insufficient communication between parents and their children, from an early age, and also by the influence of the media especially pornographic movies. In general terms we notice a higher male prevalence than female. Doyle *et al.* also found similar results in Lesotho (26% for males and 9% for females).<sup>21</sup> This could be justified by cultural considerations that favour boys' early acquisition of independence compared to girls who remain more reserved. In our study, the probability of having an early sexual intercourse was very high when there was insufficient communication between parents, teenagers and young adults. This could be explained by the fact that in our context as in most African countries in the South of Sahara, sexuality is regarded as a taboo subject that is difficult to discuss with children. This difficulty could also be due to limited knowledge of parents on questions about the sexuality of teenagers and young adults. For some parents, discuss sexual matters with their children would be understood as encouraging them to have sexual intercourse. In this regard they obtain information from their peers and through media that are not always good source of information for teenagers and young adults. Exposure to pornographic movies, in our study as in studies conducted in Ethiopia,<sup>6,7</sup> increased the probability of having early sexual intercourse.

The possible limitations of our study consisted of selection and information biases. Selection biases may be related to non-participation in the survey given the sensitivity of the issue addressed. To minimize it, investigators had to reassure the respondents, win their trust and guarantee the confidentiality of the information that they will be provided with. Information biases are also to be considered; they would be linked to social desirability with risk of underestimation or overestimation of certain characteristics. Finally, being cross-sectional, our study enable us neither to judge the priority of the influence of these factors on early sexual intercourse, nor to establish causal

relationships. However, the results can help to implement effective actions and serve as a basis for further studies.

## Conclusions

Informative communication about sex between parents and teenagers or young adults is an important aspect of the sexual education of teenagers and young adults. It allows building a trust relationship between parents and children. It strengthens the values and reduces for the latter influences of all kinds. Actions to promote the sexual and reproductive health of teenagers and young adults must take into account the important role that parents and educators can play.

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