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Knowledge, Attitudes and Practices of High School Students with Menarche in Parakou/Benin in 2014

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Abstract

Objective: Assess the knowledge level, attitudes and practices of high school students confronted with menarche in Parakou in 2014.

Methods: This study was descriptive and cross-sectional. It was carried out from June 1 to September, 2014. A self-administered questionnaire permitted to collect information.

Results: Upon the appearance of menarche, the mean age was 13.72 ± 1.37 years, Menarche was known by 60.72% of the respondents before it occurs. The main source of information about menarche was mother in 57.75% of the cases. For 90% of them, mother was the preferred source of information about this issue. Fear and anxiety were the feeling that inspired 72.55% of the respondents on the appearance of first menstruation. Towels made with folded fabrics were used by 89.78% of the adolescents and their main fears were menstrual bleeding which may stain their uniforms, and strong odors emanating from that type of towel. During the survey, 61% of the 1,100 girls already had sex for the first time. Upon first sexual intercourse in respondents, the mean age was 16.34 ± 1.84 years.

Conclusion: Parakou high school students' knowledge about menarche and its effects in terms of reproduction and sexuality is insufficient. This explains why they feel anxious when they get their first periods. This also justifies tendency towards ill-prepared sexuality.

Keywords: Menarche; High school students; Knowledge; Attitudes; Practices

Introduction

Menarche is a critical event in adolescent puberty and sexual maturation. Its meanings are varied; they involve adults' responsibilities, freedom and expectations concerning reproduction. On first menstruations mean age varies from a population to another and is known to be a sensitive indicator of population's various characteristics, including nutritional status, geographical location, environmental conditions and magnitude of socioeconomic inequalities within a society [1].

That mean age was correlated at onset of women's sexual life and its decline implies an increased risk of sexual abuse and early pregnancies in adolescents [2]. Some studies indicated that in many countries, a great number of girls start menstruations without accurate information, preparation and care so as to manage periods [3,4]. Most of times, the adolescents do not receive accurate information about menstrual hygiene because of specific cultural practices that direct them towards wrong and unhealthy behaviors.

There are few studies on young girls' attitudes in the context of menarche and menstruation in Sub-Saharan Africa [5]; and more particularly in Benin. This study aimed to assess Parakou high school girl students' knowledge, attitudes and practices when confronted with menarche.

Patients and Methods

It was a cross-sectional and descriptive study carried out over a three-month period from June 1 to September 1, 2014. It took place in the public high schools and grammar school of Parakou (Republic of Benin).Source population was made up of girl students from public high schools in Parakou.

The study involved girls who already had their first menstruations and who accepted to participate to the survey. It excluded girls who did not give their consent to participate to the survey and those who were not at school on the day of survey. A sample of 1,100 high school girl students aged 13 to 18 years participated to the study. A three-stage simple random sampling was applied. The first stage was about public high schools. Based on the list of ten (10) public high schools and grammar schools in Parakou, a simple random sampling was performed. In the second stage, the number of students to be selected by school according to sample size was calculated, taking into account number of students in each school. Then, four classrooms were drawn or selected by lot per level and the ratio to be interviewed by classroom was determined in proportion to the total numbers of students in classrooms selected.

In the third stage, a simple random sampling was performed in order to identify the targets to be interviewed by classroom. Before data collection, a pre-test was done during 10 days, and the questionnaire was administered two times to 25 adolescents eligible for the survey but who were not among the respondents in order to appraise questionnaire reliability, reproducibility and coherence. The study variables were monarchial age, knowledge of menarche prior to its occurrence, source of information about menarche, preferred source of information about menarche according to girls interviewed, knowledge about menstrual flow management and fertility, feeling on occurrence of menarche, fear related to menstrual flow management, age on first sexual intercourse, knowledge of unprotected sex consequences, condom use and reasons for non-use of condom. The data were collected by means of a self-administered questionnaire. The participants were invited to fill in the questionnaire after informed consent and explanations about filling method.

The data were analyzed with Epi info software, version 3.5.1_2008. Before data collection in the field, the relevant authorities at various levels gave their approval, particularly the principals of the high schools involved in the survey. Then, the respondents gave their informed consent in writing before administration of the questionnaire.

Results

The study focused on 1,100 high school girl students living in the town of Parakou. At onset of menarche, mean age was 13.72 ± 1.37 years and 55.80% had their menarche between 12 and 14 years. Menarche was known by 60.72% of the 1,100 girl students interviewed before its occurrence. The main source of information about menarche was the mother in 57.75% of the cases. She is followed by a girlfriend in 22.11%, a sister in 14.19%, class on Life and Earth Sciences in 2.97% and many other sources (father, television).

For 90% of them mother was the preferred source of' information about this topic. By order, the other preferred sources were: sister (5.42%), girlfriend (3.21%), father (0.20%) and many other sources (aunts, physicians, nurses) (1.81%). 78.34% of the high school students claimed that their knowledge about menstruations was insufficient as regards management of monthly menstrual flow, and sexuality risks after appearance of menstruations. 8.55% expressed confidence as regards efficient management of menstrual blood flows.

Among the 1,100 high school girl students interviewed, 9.80% were inspired by a feeling of joy, 17.80% were indifferent as to the issue and 72.55% were inspired by a feeling of fear/anxiety at the onset of first menstruations. Sanitary towels bought at pharmacy were used by 10.22% of the girls and 89.78% used towels made with folded fabrics and mainly feared menstrual leakages which may stain their uniforms, and strong odors that emanate from this type of towel.

During the survey, 61% of the 1,100 girl interviewed had had sex for the first time. The respondents' mean age while having sex for the first time was 16.34 ± 1.84 years. And 76.1% of the girl students who had experienced their first sexual intercourse during the survey did not know with accuracy the consequences related to early sexual relationships after onset of menarche, and unprotected sex. 29.1% of them had used condom during their first sexual intercourse. The non-use of condom was, in 44% of the cases, due to a lack of information, in 28% of the cases to sexual partner's refusal, in 20% of the cases to the reduction of sexual pleasure that it would entail. As well, in 8% of the cases it was due to many other reasons (lack of condoms, unexpected sexual intercourses).

Discussion

The data collection technique used is self-administration of questionnaire. This method seemed to be the most appropriate, due to the fact that students' spare time was very limited so that they could not participate to a direct conversation. Moreover, the survey refers to a sensitive topic; a great deal of discretion and confidentiality is therefore required.

Information biases were limited due to the fact that data were collected by us and students trained for the purpose. 13.72 ± 1.37 years. Our result is near those of several authors who investigated on menarches in Africa [6, 7]. But it is higher than the one of Padez [8] who had found out that menarcheal age was 12.32 in girls born in 1983 in Portugal [8] which is a country with living standards higher than the ones of African countries. Studies showed that menarche tends to appear earlier in life when a society's health, nutritional and economic conditions improve [9,10].

In our study 57.75% of the respondents had been informed about menarche by their mothers as preferred source of information in 90% of the cases. In several studies, the adolescents get most of their information about menstruation from their mothers [11,12]. However, the cultural taboos that surround menarches and adolescents' sexuality in many areas of Africa lead mothers to provide their daughters with little information about menstruation management and sexuality. Many girls start menstruations while being poorly informed and ill-prepared for managing them [3,4].

Therefore, they denounce the lack of understanding of the relationships existing between menstruation occurrence and fertility [13, 14]. This way, in our study 72.55% of girl students were inspired by a feeling of fear and anxiety on the appearance of first menstruations and 78.34% of them considered that their knowledge about menstruations were insufficient. In our research work on menarches, the expressions emerging from interviews with adolescents were: lack of preparation for menarche, maturation and sexual vulnerability, menstruations considered as disease, secrecy, skin and shame about menstrual leakages [15].

Therefore, each adolescent should be correctly prepared for menarche occurrence, since, as pointed out by several authors, starting menstruations in ignorance and fear may weaken girls' self-esteem and skills [16,17]. The fear of menstrual leakages and teasing that this may cause and the strong odors that would be due to the type of protection used by 89.78% of girl students lead many of them to miss classes during menstruations. In addition, they do not focus their attention on classes taught by the teachers. This result is found out in other studies where girls argue that they hide appearance of menstruations and miss classes because of fear about menstrual leakages [18]. Therefore, the adolescents should be given a full access to information, especially information concerning sexuality and related risks.

In our study, 61% of the girl students interviewed had already had their first sexual intercourses and 76.10% of them did not know with accuracy the consequences of unprotected sex after onset of menstruations. This would result in occurrence of unintended pregnancies that may cause of clandestine abortions with very serious consequences.

Evidences existing in high income countries show that girls who reach puberty without adequate emotional support are likely to engage in subsequent sexual relationships and drug addiction which are risk factors for pregnancies among adolescents and other negative outcomes on their health [19,20].

Adolescents' preparation for menstruations occurrence and other changes following puberty should enable the young girl to understand and be empowered to manage all phenomena and changes likely to affect her body. Families and public authorities should get involved in adolescents' preparedness so that young girls could go through that period without emotional and physical traumas. It is a period of time in which the adolescent could have a better understanding of its reproductive health. Studies pointed out the efficiency of health education campaigns among high school girl students and even among primary school girl students [21,22]. Furthermore, as argued by some authors, menstruation may be a natural gateway to start educating girls on their reproductive capacity and contraceptive choice [18].

Conclusion

As regards menarche and its consequences in terms of reproduction and sexuality, high school girl students' knowledge is insufficient in Parakou. This explains the anxiety inspired by first menstruations occurrence and tendency towards ill-prepared sexuality.

Any initiatives intended for ensuring and enhancing adolescents' capacity and understanding of menarche should be sustained since girl students deserve to be adequately informed and assisted so as to go through this period without fear.

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