

Sexual activity among female teenagers: a comparison between two groups of middle class adolescents from a private clinic according to pregnancy status

Atividade sexual em mulheres adolescentes: uma comparação entre dois grupos de adolescentes de classe média de clínica particular de acordo com estado gravídico

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Abstract

Objectives: to investigate patterns of sexual activity among teenagers.

Methods: a cross-sectional study was conducted between July 1998 and September 2000, among 117 sexually active female adolescents from a private clinic, in the city of the Osasco, State of São Paulo, Brazil. They were divided into two groups: one pregnant group (PG) comprised 62 adolescents that were either pregnant (46) or had previously been pregnant (16); another group of 55 female adolescents that had never been pregnant (NPG). During consultations with these subjects, a physician conducted a semi-structured interview. Knowledge, attitudes and practices relating to sexual activity were evaluated. The comparison between the two groups was carried out using Student's *t* test, the chi-square test or Fisher's exact test.

Results: the two groups showed considerable similarities in terms of sexual behaviour, having engaged in the first sexual intercourse at the age of 15 and having had an average number of sexual partners of 1.5. Nevertheless, adolescents in the PG group had initiated sexual life earlier and tended to use less contraceptive methods during the first intercourse. Despite widespread knowledge of contraception, a large number of the adolescents did not use any contraceptive method during first sexual intercourse. In their current sexual life, an average of 81% of the participants referred to attaining orgasm.

Conclusions: knowledge about contraceptive techniques is not enough to avoid unplanned pregnancies, suggesting the importance of investigating other psychosocial aspects of motherhood and maternal identity among teenagers.

Key words Adolescents, Pregnancy, Contraception, Sexuality

Resumo

Objetivos: investigar padrões de atividade sexual em adolescentes.

Métodos: estudo transversal realizado entre julho de 1998 e setembro de 2000, com 117 mulheres adolescentes sexualmente ativas oriundas de clínica privada, em Osasco, São Paulo, Brasil. Foram constituídos dois grupos: um grupo de grávidas (PG) com 62 adolescentes que estavam grávidas (46) ou tiveram gravidez prévia (16); outro grupo não grávidas (NPG), com 55 adolescentes que nunca engravidaram. Uma entrevista semi-estruturada foi conduzida pelo médico durante consulta clínica. Foram avaliados o conhecimento, atitudes e práticas acerca da atividade sexual. A comparação entre os grupos foi feita por meio do teste *t* de Student, qui-quadrado e teste exato de Fisher.

Resultados: os dois grupos eram similares quanto aos aspectos sexuais, sendo a coitarca na idade de 15 e a média do número de parceiros, 1,5. Entretanto, adolescentes no PG iniciaram vida sexual mais cedo e usaram menos métodos contraceptivos na primeira relação sexual. Apesar do grande conhecimento sobre contracepção, parte considerável das adolescentes não usou nenhum método durante a coitarca. Na vida sexual atual, cerca de 81% das participantes refere atingir orgasmo.

Conclusões: o conhecimento sobre técnicas contraceptivas não é suficiente para evitar gestações não planejadas, sugerindo a importância de investigar outros aspectos psicosexuais da maternidade e identidade materna entre adolescentes.

Palavras-chave Adolescentes, Gravidez, Anticoncepção, Sexualidade

Introduction

Adolescents comprise a unique subset of obstetric-gynaecological patients, ranging from those in early adolescence (aged 10-15 years) to those in later adolescence (aged 16-19 years). Adolescence is a period of life characterised by a variety of changes and decisions, many of which are centred on growing awareness and expression of sexuality and individuality.¹ Adults have been always concerned about adolescence sexual behaviour, sexual intercourse and its consequences. Recently, there has been a significant change in parents', health professionals' and educators' ability to prevent the serious consequences of these behaviours and to help adolescents avoid behaviours that put them at risk.² Special attention should be given to specific problems, including sexually transmitted diseases, contraception, and pregnancy.

For a young mother, having an intercourse at an early age, not using contraceptives and having a child are linked to depression, low self-esteem and little sense of control over their lives.³ In addition, adolescent mothers and their infants are at risk because of socio-economic disadvantages, limited job opportunities, the school dropout rate and poor education, lack of access to health care, inadequate parenting skills, and repeated pregnancies. Nevertheless, by the age 19, 71.4% of unmarried women in urban areas report at least one experience of coitus.⁴

The beginning of sexual activity and choice of contraception may be influenced by factors such as gender, and socio-economic and marital status. In the United States, Santelli *et al.*⁵ found a lower risk of young age at first coitus among married women. In Nicaragua, Zelaya *et al.*⁶ observed that age at first pregnancy was lower among those having less formal education.

In Brazil, pregnancy in adolescence is a serious public health problem, associated with low levels of formal education. Nevertheless, there has also been a significant increase in pregnancy rates among teenagers from higher level socio-economic groups. In the city of São Paulo, during the year 2002, there were 22,482 deliveries among adolescents served by the public sector, corresponding to 21.4% of all deliveries.⁷

The objective of our research was to investigate knowledge, attitudes and patterns of sexual activity among middle-class teenagers, attending a private clinic, and to discover whether there are any significant differences between adolescents who have

never been pregnant (never pregnant group) and those adolescents who are pregnant or have previously been pregnant (pregnant group). Data for adolescents from private services may be important, since 36.4% of women, aged between 15 and 24 years, in the State of São Paulo, in 1998, had private health insurance.⁷

Methods

We performed a cross-sectional study between July 1998 and September 2000 involving sexually-active female adolescents from a private clinic, in the city of Osasco, State of São Paulo, Brazil. Osasco is located on the western side of the greater metropolitan area of São Paulo.

The obstetrics-gynecology clinic serves middle-class women, most of them with private health insurance. Participants were recruited among adolescent girls aged 14 to 20, seeking routine gynaecological consultation. Participation in the study was voluntary. All participants were attended by the same professional (AFC). Written informed consent for participation was obtained in all cases. The study was approved by the Ethics Committee of the Renascença Hospital. One hundred and seventeen sexually-active teenagers accepted the invitation. None refused.

After data was collected, patients were divided in two groups, according to pregnancy status. One pregnant group comprised 62 adolescents that were either pregnant or had previously been pregnancy; another comprised female adolescents who had never been pregnant. Results will be presented according to these aspects, given that they are associated with patterns of sexual behaviour.

The physician conducted a structured interview in the course of the consultation. The interview focused on demographic data, obstetrical history, and patterns of emotional and sexual behaviour, knowledge of contraception and the contraception method employed during the first experience of intercourse. Adolescents were asked to classify their parent's attitudes to sexual education into three categories: educator, absent or repressive.

Descriptive and univariate analyses were carried out. Comparison between groups was performed using Student's t test (for continuous data) and the chi-square test or Fisher's exact test (for qualitative data). The level of significance was set at 5%. Statistical analysis was performed using the Stata 8 software.

Results

One hundred and seventeen teenage girls were included: 62 either were pregnant or had a history of pregnancy, and 55 had no history of pregnancy. A comparison of demographic features showed that the two groups were similar. The average age of these patients was close to 18 years old (PG=17.9 x NPG=18.0; $p=0.70$) and menarche had occurred around 12 years of age (PG=12.2 x NPG=12.0; $p=0.24$). The partner's age at first intercourse (PG=21.2 x NPG=20.7; $p=0.59$) and the age of the current partner were similar (PG=24.3 x NPG=22.9; $p=0.12$). There was no difference in level of education between the two groups ($p=0.13$). Nevertheless, living with a partner was commoner in the PG (79.0% x 13.0%; $p<0.001$). Almost all participants were in school at the time of the interview.

In the case of sexual factors, there were few significant differences between the groups. Adolescents in the PG had first had sexual inter-

course at an average age of 15.2, while adolescents in the NPG had had sexual intercourse on average by the age of 16.0 ($p=0.01$). Although 43% of participants said they could foresee the possibility and opportunity of a first sexual relation, over 40% of adolescents in the PG did not take any contraceptive precautions. In the NPG this figure was 13.7% ($p=0.002$). Most teenagers reported that they knew of contraceptive methods at the time of their first experience of sexual intercourse (PG=85.5% x NPG=86.8%). Condoms (45.0%) and oral contraception (23.0%) were the most commonly used methods during the first experience of intercourse. In their current sexual life, over 80% of the adolescents reported having reached orgasm. The teenagers in the PG had sexual intercourse more frequently per month (12.7 x 8.9; $p=0.01$). The average number of sexual partners was 1.5, showing no difference between groups ($p=0.54$). Categorical and continuous data are summarised in Tables 1 and 2.

Table 1

Characteristics of sexual activity of female teenagers from both groups (categorical data) (number and percentage).

Aspects	Pregnant Group		Never Pregnant Group		Significance level (<i>p</i>)
	n	%	n	%	
Contraception knowledge at first intercourse	53	85.5	46	86.8	0.84
Foreseen (first Intercourse)	27	43.5	24	43.6	0.99
Any contraception use at first intercourse	27	57.4	38	86.3	0.002
Same partner since first intercourse	61	98.4	50	90.9	0.06
Orgasm	49	85.9	38	80.8	0.48
Desire	54	94.7	47	97.9	0.39
Arousal	52	91.2	47	97.9	0.14
Masturbation	8	13.3	7	12.9	0.95
Father					
Educator	17	33.3	18	35.3	0.64
Absent	19	37.3	22	43.1	
Repressive	15	29.4	11	21.6	
Mother					
Educator	35	57.4	33	61.1	0.78
Absent	17	27.9	12	22.2	
Repressive	9	14.7	9	16.7	
Living with partner	49	79.0	7	13.0	0.00
Educational level					
First grade	11	27.5	7	14.6	0.13
Second grade/university	29	72.5	41	85.4	

Table 2

Characteristics of sexual activity of female teenagers from both groups (continuous data) (mean and standard deviation).

Aspects	Pregnant Group	Never Pregnant Group	Significance level (<i>p</i>)
Age	17.9 (1.55)	18.0 (1.58)	0.70
First intercourse (years)	15.2 (1.59)	16.0 (1.69)	0.01
Menarche	12.2 (1.3)	12.0 (1.2)	0.24
Partner's age at first intercourse	21.2 (5.1)	20.7 (3.5)	0.59
Monthly frequency of sexual relations	12.7 (8.6)	8.9 (7.1)	0.01
Number of partners	1.48 (0.78)	1.6 (1.19)	0.53
Age of current partner	24.3 (4.0)	22.9 (4.9)	0.12

Discussion

This study compares the knowledge, attitudes and practices of the two groups of adolescents: one that was (or had been) pregnant (pregnant group) and another of nulliparous women (never pregnant group). Before presenting our data, we should mention that our paper has a number of limitations. The study design does not allow any conclusions to be drawn regarding the causal relationship between the adolescents' socio-demographic characteristics and previous attitudes and the risk of becoming pregnant. Since most participants were students at the time of interview, we could not obtain any information about income. Another factor is that some of the responses may be "socially acceptable". We would expect that adolescents with a large number of partners to feel too embarrassed to mention this fact. Finally, the study involves only a small sample of adolescents that are covered by private health insurance. These results could be different for other groups of adolescents.

The results for the characteristics of sexual activity among female teenagers reveal five relevant features. First, although these teenagers initiated sexual activity around the age of 15, this did not necessarily lead to subsequent extensive sexual experimentation, given the mean number of partners of 1.5. Over 90% of the adolescents had had the same partner since their first experience of intercourse. In the NPG this figure was as high as 98.4%, which borders on the statistically significant ($p=0.06$). Research among other Latin American populations has found similar results.⁸ However, authors have observed an even lower mean age for first coitus, in the United States⁹ and Africa.¹⁰ A large number of sexual partners may be limited to a

small group of adolescents. It is possible that a small subset of adolescent girls that report having multiple sexual partners are more likely to report other problem-prone health behaviours (such as cigarette use and drinking).

Second, despite the widespread knowledge of contraception, over 40% of adolescents in the PG did not use any contraceptive method during their first experience of sexual intercourse. It is possible that, at this time (first intercourse), this attitude of "taking less precaution" may suggest that the teenagers thought that there was only a very small chance of pregnancy occurring on this occasion. The hypothesis also needs to be considered that some of these patients either did not mind whether they got pregnant or unconsciously desired to become pregnant. It is possible that magical and omnipotent defensive thoughts and defensive mechanisms interfere in such behaviours. Nevertheless, an association between lower level of education and pregnancy has been observed.⁶ On the other hand, the fact that the PG adolescents initiated sexual activity earlier and used less (or no) contraceptive methods suggests there are some differences between these two groups of teenagers. It can at least be speculated that adolescents in the PG were less worried about pregnancy in the early stages or at the beginning of their sexual life. Given the fact that both groups of teenagers come from the same environment and share the same demographic background, it is hard to establish the influence of specific psychological characteristics of the PG adolescents that contribute to a different form of sexual behaviour. The fact is that studies in Brazil have shown changes in the social status of teens that became pregnant, at least in the lower socio-economic strata of the population. Motherhood and married status are associated with higher status in

these communities for the adolescents, particularly for women.¹¹

A qualitative study involving Latin American adolescents has shown that, when there is a lack of information and family beliefs prohibiting birth control use and sexual activity, sexually active teenagers have higher rates of contraceptive non-use and rely on irregular use of condoms and withdrawal for pregnancy prevention.¹²

Condoms (45.0%) and oral contraceptives (23.0%) were the most commonly used methods during the first intercourse. Overall, almost 30% of adolescents did not use any method on this occasion. According to a Brazilian study carried out in São Paulo with students aged between 12 and 18 years, in 1998, one of the forms of behaviour that brings the highest risks for health among public schools students was not using a condom during the last sexual intercourse (34% among those sexually active).¹³ Other studies have also addressed the issue of knowledge and attitudes regarding sexuality among various samples of teenagers and young adults. In a quali-quantitative study, of 925 university students, Pirota and Schor¹⁴ found that 80% of females had their first intercourse by the age of 19. Considering the group as a whole, 44.5% and 16.4% were using condom and oral contraceptive, respectively. Only 4.0% of the sample was not using any method. Belo *et al.*¹⁵ carried out a study involving 156 pregnant teenagers aged 19 or over. The first sexual intercourse was at the age of 14.5 and almost 70% were not using any contraceptive method before getting pregnant. Interestingly, the main reason reported for not using any contraceptive method was "wanting to get pregnant". Similar to our results, both studies have shown that most adolescents are well aware of the importance of contraceptive methods, particularly condoms and oral contraception. Nevertheless, one study clearly showed that there is a significant decreased in condom use from the first sexual intercourse to the most recent one. Prevalence of condom use drops from 80.7%, for females, and 88.6%, for males, at the beginning of sexual life, to 38.8% and 56%, respectively, on the occasion of the last act of sexual intercourse.¹⁶

Third, in all three groups, 60% of adolescents did not foresee their first sexual relation, suggesting that impulsive behaviour may play a role in initiating sexual activity. However the complexity of this

subject is well known. For instance, according to Brazilian teenagers, the beginning of sexual activity is not restricted to the first intercourse, but occurs over an extended period involving a variety of sexual practices. Moreover, female teenagers have to deal with their partners and with their own beliefs in order to decide on a specific contraceptive method. In this way, the inadequate (or lack of) use of any contraceptive method may be regarded as a vulnerable moment in a specific social context and particular relationship.¹¹

Fourth, the adolescents seem to be satisfied with their sexual life, as suggested by the high numbers reporting attaining orgasm. It seems that, even though the beginning of their sexual life was not planned, somehow they managed to adapt to it and enjoy it. The adolescents in the PG had a higher frequency of monthly sexual relations. This may be explained by the fact that they frequently started living together once they got pregnant, shortly after initiating sexual activity. A planned marriage is very uncommon among these adolescents.

Finally, we could not find any association between the way the adolescents see their parents regarding sexual education and risk of having had a pregnancy. Few papers have described the importance of connectedness to family and father's participation in adolescents sexual education as a protective factor, associated with diminished risk-related behaviour and the initiation of sexual activity.^{8,17} A Brazilian study involving pregnant adolescents showed that over 70% of them were in the care of their mothers.¹⁸ Likewise, adolescents that are able to discuss sexual matters with their mothers have a lower risk of becoming pregnant.¹⁹

Conclusions

We may conclude that knowledge of contraceptive techniques is not enough to avoid unplanned pregnancies, suggesting the importance of investigating other psychosocial aspects of motherhood and maternal identity among teenagers. In this middle class group of teenagers, pregnancy was associated with age and use of any kind of contraception during first intercourse. It is possible that once they get pregnant, adolescents started living with the partner and began to have intercourse more. Programs addressing sexual activity and risk-related behaviour among teenagers are needed to tackle this issue.

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