Information about contraception and sexuality among adolescents who experienced a pregnancy*

ABSTRACT
Objective: To describe sources of information about sexuality and contraception used by adolescents who experienced a pregnancy.
Methods: Descriptive study conducted through structured interviews in a sample of 285 adolescents during hospitalization for medical treatment or termination of pregnancy, in four hospitals in Teresina-PI, during the period from January to March 2006.
Results: Before becoming pregnant, 89.5% of teenagers had information about contraception and sexually transmitted diseases and 55% had someone with whom they felt safe to talk about sex and pregnancy. Their friends (36.6%) were the most frequently cited source of information. After pregnancy, 75.5% had received information about contraception and sexuality, and the prenatal service (70.3%) was the primary source.
Conclusion: We detected a change in sources of information, after pregnancy, characterized by the search for sources with a scientific basis.
Keywords: Pregnancy in adolescence; Information; Sexuality; Contraception

RESUMO
Objetivo: Descrever as fontes de informação sobre sexualidade e contracepção utilizadas por adolescentes que vivenciaram uma gravidez.
Métodos: Estudo descritivo realizado por meio de entrevistas com aplicação de formulário em amostra de 285 adolescentes, durante internação, para tratamento clínico ou resolução de gravidez, em quatro maternidades de Teresina-PI, no período de janeiro a março de 2006.
Resultados: Antes de engravidar, 89,5% das adolescentes possuíam informações sobre contracepção e doenças sexualmente transmissíveis e 55% tinham alguém com quem se sentiam seguras para conversar sobre sexo e gravidez, sendo as amigas (36,6%) a fonte de informação mais citada. Após a gestação, 75,5% delas receberam informações sobre contracepção e sexualidade, sendo o serviço de pré-natal (70,3%) a principal fonte citada.
Conclusão: Detectou-se mudança nas fontes de informação, após a gestação, caracterizada pela procura por fontes com embasamento científico.
Descritores: Gravidez na adolescência; Informação; Sexualidade; Anticoncepción

RESUMEN
Objetivo: Describir las fuentes de información sobre sexualidad y anticoncepción utilizadas por adolescentes que vivencieron un embarazo.
Métodos: Estudio descriptivo realizado por medio de entrevistas con la aplicación de un formulario en una muestra de 285 adolescentes, durante su internamiento, para tratamiento clínico o resolución de problemas del embarazo, en cuatro maternidades de Teresina-PI, en el periodo de enero a marzo del 2006.
Resultados: Antes de quedar embarazadas el 89,5% de las adolescentes poseían informaciones sobre anticoncepción y enfermedades sexualmente transmisibles y el 55% tenían alguien con quien se sentían seguras para conversar sobre sexo y embarazo, siendo las amigas (36,6%) la fuente de información más citada. Después de la gestación el 75,5% de ellas recibieron informaciones sobre anticoncepción y sexualidad, siendo el servicio de pre-natal (70,3%) la principal fuente citada.
Conclusión: Se detectó cambios en las fuentes de información, después de la gestación, caracterizada por la búsqueda de fuentes con base científica.
Descritores: Embarazo en la adolescencia; Información; Sexualidad; Anticoncepción

* Study extracted from a research project being developed in a Master's Degree Program of the Universidade Federal do Piauí – UFPI – Teresina (PI), Brazil
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INRODUCTION

In the beginning of the reproductive life, maternity may threaten the well-being and future of adolescents, due to physical, emotional and social risks, and it is associated with poverty, low level of education and negative perinatal results, contributing to the continuance of the cycle of poverty\(^\text{[1-9]}\). Adolescence is frequently viewed as a moment of immaturity and instability, when adolescents experience new situations and must invest in their personal and professional qualification. In contrast, pregnancy requires a mature, stable and structured condition, in economic, professional and personal terms\(^\text{[9]}\). In this way, adolescent pregnancy becomes a serious public health problem, especially because the majority of adolescent pregnancies are not planned\(^\text{[3-6]}\).

Currently, adolescents are more and more involved with risk behaviors, which may have negative consequences, in the short and long term. Unprotected sexual intercourse is among these practices. There are several reasons for adolescents to follow an unprotected sexual behavior, with lack of information standing out\(^\text{[6-8]}\), although some of them may have become pregnant due to the couple’s desire to have children.

In general, although sexual life is currently beginning earlier and earlier, adolescents are not consistently informed about sexual health and development\(^\text{[7,9]}\). In addition, they have little access to family planning services and guidance, and their sources of knowledge are usually misconceptions with many taboos, originated from colleagues and friends who did not have access to sexual education either. Thus, lack of information in this sector becomes a vicious circle, which is difficult to break\(^\text{[9]}\). Moreover, it is important to emphasize the situation of parents of adolescents, who do not know how to deal with their children’s emerging sexuality\(^\text{[10]}\). Schools and health services, which should support the family and complement students’ sexual education and self-care, show limitations to the qualification of professionals, when it comes to dealing with adolescent sexuality issues and communicating with adolescents, thus increasing the severity of this situation\(^\text{[11-12]}\).

As a consequence, in view of this vulnerability resulting from unprotected sexual behaviors, which is usually associated with the adolescents’ lack of knowledge, the present study aimed to describe the sources of information about sexuality and contraception used by adolescents who experienced a pregnancy.

METHODS

A descriptive cross-sectional study was conducted with adolescents hospitalized in four maternity hospitals of the city of Teresina, in the state of Piauí, of which three were public and one was private and where approximately 90% of the deliveries recorded in this city are performed. This study is part of a broader research project, which is being developed in a Master’s Degree Program of the Universidade Federal do Piauí. Part of the form originally applied was used in this study, from which socioeconomic, demographic and reproductive variables were selected to meet its objectives.

The sample was comprised of adolescents who had completed at least one pregnancy in the four maternity hospitals included in this study, between January and March 2006. A frequency of pregnancy of 21.5% in Teresina, PI, and the total number of adolescents (N= 5,341) hospitalized for clinical treatment or completion of pregnancy in the four maternity hospitals studied, in 2004, were included in the calculation. The Epi Info 6.04d software (Centers for Disease Control and Prevention – CDC, Atlanta, USA) was used to calculate the sample, adopting a 95% confidence interval, 50% of incidence of event, once there are no studies showing the incidence of adolescents with information about the object of study, in the population studied, 7% accuracy, design effect of 1.5 and 5% significance level. Thus, the proportional stratified and probabilistic sample was estimated to be 285 adolescents.

Data collection was conducted during the hospitalization of adolescents for clinical treatment or completion of pregnancy. A pre-tested, pre-coded and semi-structured questionnaire was used. Adolescents were located through medical record data and invited to participate in this study. Upon their acceptance, they were interviewed without the presence of accompanying adults to prevent them from influencing the responses. The Informed Consent Form was shown or read to the patients and their responsible adults, as established by Resolution 196/96 of the Conselho Nacional de Saúde (Brazilian Health Council). In the case of adolescents being younger than 18 years, the written authorization of a responsible adult was requested. Data were typed into two databases by two different individuals, using the Epi info 6.04d software, to enable possible typing errors to be checked and the due corrections made. Data were analyzed in a univariate and descriptive form.

This research project was approved by the Universidade Federal do Piauí Research Ethics Committee and researchers met the ethical requirements of human research.

RESULTS

Socio-demographic and reproductive characteristics

Of all 285 adolescents participating in this study, approximately 56% were aged between 18 and 19 years and only seven (2.5%) were younger than 15 years. Almost 70% affirmed they lived with their partner and 82.5%
reported they were Catholic. Only a third of participants were studying, the predominant level of education was primary education and only six adolescents (2.1%) had enrolled in higher education. Approximately 70% of adolescents also reported that their mothers had a low level of education, as 38.9% were illiterate and 30.9% had a level lower than secondary education. In addition, about 90% of participants said they did not have paid work (Table 1).

With regard to reproductive aspects, approximately 70% of adolescents were primiparous, although there was the occurrence of up to seven pregnancies and 22% of participants did not have children. However, the majority (60%) reported having one child, including the completion of the current pregnancy. About one of every five adolescents had had at least one abortion (Table 2).

### Table 1 - Adolescents according to socio-demographic aspects. Teresina, PI, Brazil, from January to March 2006.

<table>
<thead>
<tr>
<th>Socio-demographic aspects</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age group (in years)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-14</td>
<td>7</td>
<td>2.5</td>
</tr>
<tr>
<td>15-17</td>
<td>119</td>
<td>41.8</td>
</tr>
<tr>
<td>18-19</td>
<td>159</td>
<td>55.8</td>
</tr>
<tr>
<td><strong>Lives with their partner</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>199</td>
<td>69.8</td>
</tr>
<tr>
<td>No</td>
<td>86</td>
<td>30.2</td>
</tr>
<tr>
<td><strong>Religion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>235</td>
<td>82.5</td>
</tr>
<tr>
<td>Without religion</td>
<td>34</td>
<td>11.9</td>
</tr>
<tr>
<td>Others</td>
<td>16</td>
<td>5.6</td>
</tr>
<tr>
<td><strong>Studies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95</td>
<td>33.3</td>
</tr>
<tr>
<td>No</td>
<td>190</td>
<td>66.7</td>
</tr>
<tr>
<td><strong>Level of education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional illiterate</td>
<td>25</td>
<td>8.8</td>
</tr>
<tr>
<td>Primary education</td>
<td>163</td>
<td>57.2</td>
</tr>
<tr>
<td>Secondary education</td>
<td>91</td>
<td>31.9</td>
</tr>
<tr>
<td>Incomplete higher education</td>
<td>6</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>Maternal level of education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>111</td>
<td>38.9</td>
</tr>
<tr>
<td>Primary education</td>
<td>88</td>
<td>30.9</td>
</tr>
<tr>
<td>Secondary education</td>
<td>37</td>
<td>13.0</td>
</tr>
<tr>
<td>Higher education</td>
<td>12</td>
<td>4.2</td>
</tr>
<tr>
<td>Does not know</td>
<td>37</td>
<td>13.0</td>
</tr>
<tr>
<td><strong>Work</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
<td>10.2</td>
</tr>
<tr>
<td>No</td>
<td>256</td>
<td>89.8</td>
</tr>
</tbody>
</table>

### Table 2 - Adolescents according to reproductive aspects. Teresina, PI, Brazil, From January to March 2006.

<table>
<thead>
<tr>
<th>Reproductive aspects</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of pregnancies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>194</td>
<td>68.1</td>
</tr>
<tr>
<td>2 - 7</td>
<td>91</td>
<td>31.9</td>
</tr>
<tr>
<td><strong>Number of children</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>63</td>
<td>22.1</td>
</tr>
<tr>
<td>1</td>
<td>171</td>
<td>60.0</td>
</tr>
<tr>
<td>2-4</td>
<td>51</td>
<td>17.9</td>
</tr>
<tr>
<td><strong>Abortion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>54</td>
<td>18.9</td>
</tr>
<tr>
<td>No</td>
<td>231</td>
<td>81.1</td>
</tr>
</tbody>
</table>

* Eight adolescents who reported not knowing any contraceptive methods were excluded. ** Only participants who had someone to talk to. *** Does not total 100% due to participants being allowed to mention more than one alternative.

### Characteristics involved in obtaining information about sexuality and contraception

A relevant number of participants (89.5%) had some information about how to avoid having children and sexually transmitted diseases (STD) before the pregnancy. Slightly more than half (55.1%) reported having someone with whom they felt safe and comfortable to talk about sex and pregnancy before becoming pregnant. Friends were those most frequently mentioned (36.3%), followed...
by mothers (25.5%) and partners (16.6%).

After the pregnancy, more than 75% of adolescents heard or read about contraceptive methods, with prenatal health service being the most frequently mentioned source of information (70.3%), followed by lectures (43.1%) and school (43.1%) (Table 3).

DISCUSSION

Socioeconomic and reproductive aspects

The fact of an adolescent living with her partner has been shown to reduce one of the risks that appears during adolescent pregnancy, that of such partner abandoning her(13). However, this precocity of conjugal unions can have a negative effect on these adolescents’ perspectives of education and work, as they give up their personal and professional growth to become mothers and housewives8,14.

Adolescent pregnancy has several repercussions, which are not always negative and restrictive. The higher or lower magnitude of these repercussions primarily results from the socioeconomic inclusion conditions of the adolescent mother’s and their partner’s families and from the context in which these different conditions of social inclusion and exclusion occur(19). The present study found a high proportion of adolescents who were not studying at the time of the interview, in addition to a low level of education and absence of paid work, characteristics that point to the relationship among unfavorable socioeconomic condition, poor level of education, adolescent maternity and lack of perspective in life, factors that contribute to the continuance of the cycle of poverty(3). In this age group, education is one of the few options of social inclusion and economic betterment; thus, school evasion associated with early pregnancy has serious consequences for the adolescent, her child and society in general(3).

Studies have proved the relationship among level of education, level of knowledge and use of contraceptive methods to prevent early pregnancy9,16-17. However, it should be emphasized that, despite their level of education and reasonable knowledge about sexuality, adolescents cannot translate this into protected sex and behavioral changes9. Thus, information alone is not sufficient for adolescents to be sexually protected, because both unplanned pregnancy and AIDS continue to spread among them12,18. As observed in the state of Piauí, AIDS cases among adolescents rose from 1.7%, in 2004, to 6.8% in 200899, despite the intense prevention campaigns and promotion of male condom use(20).

The analysis of the level of education of participants’ mothers indicated a high proportion of illiterate women. This fact is worrisome, once mothers are an important source of information about family health and, in this case, about adolescent sexuality and contraception, and they should be prepared to provide due guidance in an appropriate manner(20-21).

With regard to reproductive characteristics, the majority of participants reported having only one pregnancy and one child alive, including the expected completion of the current pregnancy, as they are adolescent mothers8,10,17. However, pregnancy was recurrent in a significant number of adolescents. In the majority of cases, it could be observed that, like the first pregnancy, the subsequent ones had an undesirable nature for that particular moment in the adolescent’s life(6), in addition to the possibility of having negative repercussions on the mother’s and newborn’s health(22-24).

With regard to abortion, this practice among adolescents could be reduced if the gap between knowledge and use of contraceptive methods decreased with the joint action of the family, school and health service. Adequate health education could have a positive effect on maternal morbidity and mortality indices, associated with the practice of abortion in this age group(17). Once an abortion has occurred, preventive measures should be taken, aiming to avoid the repetition of this practice and to postpone a future pregnancy(25).

Information about sexuality and contraception

The present study showed that almost all participants already had information about how to avoid a pregnancy and STD before becoming pregnant. This fact is mostly due to the intensification of campaigns to fight AIDS and the promotion of male condom use. However, there is a lack of trust in the quality of such information, because adolescents still have important questions(7,10,20,26-27). Moreover, this knowledge is not always translated into safe practices. A study conducted in the city of Cotia, SP, showed that six out of every ten adolescents who had mentioned a pregnancy reported knowing a certain type of contraceptive method, although only one out of every ten said that they had used one of these methods17. This shows that, despite being a key aspect, information alone is not sufficient for the consistent use of contraceptive methods by adolescents.

It is believed that the use of contraceptives by adolescents includes five stages and that the acquisition of scientific knowledge is only the first of them. Next, adolescents must recognize the probability of their being involved in a sexual relation. After that, they must choose, obtain and learn how to correctly use the method selected and communicate their decision and choice to their partner. The last stage implies the effective and competent use of the method selected. It should be emphasized that obstacles to the use of contraceptives can occur at any of these moments(20).

A study conducted with adolescents of both sexes, who lived in three Brazilian capitals and had experienced
at least one pregnancy during adolescence, found several reasons, pointed out by participants, for interruptions, changes or failure to use contraceptive methods, such as: the unexpected restart of broken-up romantic relationships without the necessary protection; adolescent’s fear or shame of revealing their own sexual practice, being publicly exposed in the family or community; side effects of hormonal methods; lack of contraceptive care; health services’ lack of preparation; and “failure” of contraceptive methods. Reasons associated with the male universe were also pointed out: the concept of paternity as an affirmation of virility and masculinity; use of preservatives with “unknown” partners only; and use of coitus interruptus. In addition, a study conducted with adolescents with a lower socioeconomic level, living in the city of Belém, PA, observed that girls value pregnancy/maternity as these translate into a change in social status and a confirmation of plans to change this status in the future.

Before becoming pregnant, slightly more than half of adolescents had someone with whom they felt safe and comfortable to talk about sex and pregnancy. Friends were the ones most frequently mentioned, followed by mother and partner. Among adolescents, having the father as a source of information about sexuality, STD/AIDS prevention and contraception, and feeling comfortable about talking about their father’s sexual life with their mother were positively associated with consistent use of contraceptives. With regard to friends, a study conducted with adolescent students found, through these adolescents’ reports, that conversations about sexuality among friends are usually interesting in the beginning, but subsequently become vulgar, thus compromising content validity and seriousness of dialogue.

As a result, the use of informal communication by adolescents usually leads them to incomplete and erroneous information. However, these interpersonal channels of communication could be better used, through adequate guidance and training of natural community leaders and the adolescent’s own family, and not only of teachers and health professionals. With this purpose, the Brazilian Health Ministry Department of Health Policies created a strategy to qualify adolescents as health educators, so they can develop health promotion and protection actions among their peers.

In this study, there was a reduction in the percentage of participants who heard or read about how to prevent a pregnancy after becoming pregnant, which shows that not all of them were concerned with seeking information about how to avoid a new pregnancy, even after becoming pregnant during adolescence.

Among adolescents who had received some information after becoming pregnant, the majority mentioned the prenatal health service as a source of information, a finding that does not agree with the results found by other studies, where health professionals are rarely mentioned as sources of information. This divergence probably occurred because most studies related to sources of information about sexuality among adolescents are not conducted among those with previous pregnancies, once a pregnancy brings them closer to health services to receive prenatal care and health professionals take advantage of such occasion to provide information about sexuality and contraceptive methods, especially when it comes to pregnant adolescents.

When adolescents who have experienced a pregnancy are approached, there is a behavioral change when they seek health services, because there was the fear of judgment and lack of confidentiality of information by health professionals before their pregnancy. However, these arguments are not mentioned after a pregnancy.

In contrast, even when collaborating to reduce medical complications in the pregnancy-childcare cycle, prenatal care has not achieved the expected results in the sexual and reproductive education of adolescents and, as a result, in the prevention of recurrence of adolescent pregnancy, once pregnancy was recurrent in a relevant number of participants of this study.

As the subject to be understood becomes more complex, there is a higher percentage of adolescents seeking clarifications from health professionals. A study conducted in the state of São Paulo showed that 45.6% of boys and 41.4% of girls reported asking questions about sex to their friends more frequently; however, when questions were about STD/AIDS prevention, this percentage decreased, totaling 22.2% and 17.2% among boys and girls, respectively. Whereas the number of adolescents who asked questions about STD/AIDS to their friends decreased, the percentage of those who reported seeking health professionals to ask such questions increased.

Schools and their lectures were the second most frequently mentioned source of information among adolescents in Teresina, PI. Schools have stood out as a source of information about sexuality and contraception among adolescents. Such confirmation could be made in this study, where authors observed the school as a promoter of sexual education, once 85.9% of adolescents interviewed reported they had already participated in groups with educational activities aimed at sexuality.

Although schools were one of the most frequently reported sources of information, there is an irregularity in the use of such source, because the majority of adolescents in this study did not attend such schools anymore. Although schools were considered to be an
excellent source of information by pregnant adolescents, access to this environment is not possible, because they usually do not restart their studies after a pregnancy. The school is the adequate place to develop sexual education, so that a sense of self-responsibility and commitment to one’s own sexuality is promoted among adolescents. Teachers must be qualified, because the analysis of the school’s and teachers’ approach to sexual education has shown that they recognize the importance of this theme, although the majority of them do not have sufficient knowledge to provide sexual guidance to adolescents, focusing on the biological aspects of sexuality, rather than on the feelings and values involved.

Essentially, the debate over sexuality, pregnancy and STD/AIDS in adolescence needs to be a collective action, not only focused on individual responsibility, so that adolescents have access to information that promotes their change of attitude towards an efficient and preventive use of contraceptive methods. In this way, the school, health services and family need to be partners in actions that promote sexual and reproductive health among adolescents.

**CONCLUSION**

The present study showed that obtaining information about sexuality and contraception decreased after a pregnancy. However, there was a change in adolescents’ sources of information, because they primarily received information from the prenatal health service, school and lectures, after their pregnancy, in contrast to the information provided by friends, mothers and partner, which predominated as source of information before the pregnancy. A change in sources of information was observed after the pregnancy, characterized by the search for sources with a scientific basis. It is recommended that sexual education actions be directed towards adolescents as early as possible and that their social-familial network be involved in such actions, so that they feel supported in their decision of avoiding a pregnancy or not.

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