

ADOLESCENTS' DECISION-MAKING AND ATTITUDES TOWARDS ABORTION IN NORTH-EAST BRAZIL

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Summary. Three groups of adolescents are compared with regard to their own considerations of abortion and when they believe abortion is justified. One group of adolescents terminated their pregnancies ($n=95$), a second became pregnant and carried their pregnancies to term but considered abortion ($n=68$), and the third also carried their pregnancies to term but did not consider abortion ($n=204$). The study was carried out between 1995 and 1998 in Fortaleza, Brazil. Adolescents were interviewed at the time of their hospitalization or their first prenatal visit and again at 6 weeks and 1 year post-abortion or postpartum. Friends and family recommended abortion to at least half of the teenagers in each group. Teenagers who aborted were more accepting of abortion than those who did not abort, while those who considered abortion found the practice more justified than those who did not consider abortion. Teenagers who aborted became less accepting a year later, while those who did not consider abortion became more accepting. A better understanding of adolescent attitudes towards abortion and their decision-making process should help adults and professionals meet the needs of adolescents for support in the process and in the reduction of the number of unintended pregnancies in the future.

Introduction

Since 1940, abortion has been legal in Brazil under two circumstances: if a woman conceives as a result of rape or if a pregnancy places a woman's life at risk. However, not until 1989 was there a legal abortion service in operation (Correa, Piola & Arilha, 1998). Even 10 years later relatively few legal abortions are performed, in part because of the lengthy legal process and the controversial status of abortion. As of April 2000, there were officially only seventeen services providing legal abortion

(Articulando, 2000). In the past several years the debate over legal abortion has been heated as law-makers and activists work to see that the public health system complies with the law. Recent efforts have focused on the decriminalization of abortion.

As in other countries where abortion is illegal, the true prevalence of the procedure is unknown. Estimates range from one to four million abortions each year, but 1.4 million may be the most precise estimate available (Campos *et al.*, 1997; Singh & Wulf, 1991, 1994). The Ministry of Health estimates that a quarter of the abortions occur among adolescents (SOF, 1992). According to one study, as many as 80% of middle- and upper-income teenagers terminate their pregnancies, while less privileged adolescents tend to continue theirs (Rodrigues *et al.*, 1993). Although adolescents do not make up the majority of women hospitalized for abortion complications, they can represent a large proportion of these patients. A study of women admitted to hospitals for abortion complications in Fortaleza, Ceará, revealed that 35% of admissions were to women less than 20 years of age (Misago *et al.*, 1998).

A 1986 study in São Paulo revealed that the fourth leading cause of maternal mortality was attributed to abortion-related complications (Laurenti, 1988). Several Brazilian studies suggest that adolescents are at greater risk than older women of death or disability from illegal abortion (Peres, 1997; Lima, 2000). The younger the adolescent, the more likely she is to delay seeking an abortion, and when she does, the likelihood that she chooses a non-medical provider or that it is self-induced is greater (Hirsch & Barker, 1992). With financial resources a safe and professional abortion can be secured, but adolescents have reported that they did not 'have the courage' to present at clandestine clinics (Barbosa & Arilha, 1993).

The literature on adolescents' attitudes towards abortion tends to come from countries where abortion is legal (Stone & Waszak, 1992; Zelnick & Kanter, 1975; Brazzel & Acock, 1988). Although Brazil is not likely to legalize abortion in the immediate future, the National Conference on Health in late 2000 voted to decriminalize abortion, indicating that government officials, health care providers and professionals and the public are in agreement that abortion should be dealt with as a public health problem. The debate on abortion has remained active in the last 15–20 years and abortion practices have changed dramatically (Costa, 1999), but relatively little research has focused exclusively on adolescents and abortion. A better understanding of adolescent attitudes towards abortion and their decision-making process should help adults and professionals meet the needs of adolescents for support in the process and in the reduction of the number of future unintended pregnancies.

This descriptive study focuses on adolescents' decision-making and attitudes towards abortion and when abortion might be justified. A group of adolescents who terminated their pregnancies is compared with two groups of teenagers who carried their pregnancies to term: one that considered abortion and the other that did not. Factors that influenced their pregnancy outcome and how attitudes changed between their first interview and the 1-year post-abortion or postpartum interview are examined. Finally, characteristics associated with their attitudes and the extent to which pregnancy outcome contributes to a change in attitude are looked at.

Methods

A longitudinal study of adolescents was initiated in September 1995, to determine social and behavioural consequences of early pregnancy and how these consequences differed according to pregnancy outcome: abortion or live birth (Bailey *et al.*, 2001). The study design included two cohorts of teenagers who were recruited at the Teaching Hospital Assis Chateaubriand in Fortaleza, capital of the state of Ceará in North-east Brazil. The cohort of teenagers who carried their pregnancies to term was identified at the hospital's Adolescent Clinic attending their first prenatal visit between September 1995 and August 1996. Their first interview took place at that visit. The second group consisted of teenagers hospitalized at the same hospital for complications due to abortion, regardless of whether the abortion was spontaneous or induced. Study recruitment for the abortion cohort was extended until April 1997. Baseline interviews for the abortion patients took place at the time of their hospitalization and subsequent interviews for all teenagers occurred at 6 weeks and 1 year post-abortion and postpartum.

To be eligible for the study, the teenagers had to be 18 years of age or less, nulliparous but not necessarily primagravidae, and live within Greater Fortaleza. The gestational maximum for the abortion group was 22 weeks, and that for the prenatal care group was 28 weeks.

Special precautions were taken to protect the anonymity and privacy of the participants of the study. Interviewers were trained to assure participants of their rights to continue or drop out of the study at any time. The abortion patients gave an oral informed consent (prenatal care teenagers provided written consent) and subsequent interviews were scheduled carefully at the hospital, at home or in a neutral place. The study protocol, consent forms and questionnaire content were reviewed and approved by the Protection of Human Subjects Committee at Family Health International. The study underwent yearly ethical review.

For this study, only adolescents with an induced abortion, or 64% ($n=125$) of the 197 adolescents admitted for complications due to abortion, were examined. None had a legal abortion. The distinction between an induced abortion and a spontaneous abortion was made using four sources of information: the teenager's self-report at her baseline interview, her reports at 6 weeks and 1 year, and her medical chart, in which the attending physician observed whether the abortion was induced (either from physical evidence or self-report). Only about 15 of the 125 induced abortions were not self-reported. More than three-quarters (76% or $n=95$) of the induced abortion group completed an interview 1 year after the abortion. The prenatal care group consisted of 367 teenagers at baseline and 272 (74%) completed an interview 1 year later. In this paper, these teenagers were further divided into two groups: 68 who reported that they considered abortion and 204 who said they did not. Only teenagers who completed a 1-year interview are analysed in this paper.

The analysis focuses first on the baseline differences across the three groups and some of the factors that might influence attitudes about abortion. Secondly, it uses the prospective information to look at changes in attitudes between the baseline interview and a year later. To test for changes within a cohort between two points in time,

McNemar's tests were used while ANOVA and Pearson chi-squared tests were used to determine differences between the abortion and prenatal care groups.

To examine factors associated with a more accepting attitude towards abortion at the first interview and at the 1-year interview, linear regression was used. The dependent variables were the continuous count of justified items listed in Table 3, with the possible range of '0' to '8.' The independent variables at baseline were group (aborters versus the prenatal care group), age, education, marital status, and whether someone recommended abortion to her. The same independent variables were used in the 1-year model, except that marital status reflected marital status at the time of the 1-year interview.

Multiple logistic regression was used to determine the independent effects that predicted a change in attitude. The count scores described above were used, and whether the count increased, stayed the same or decreased over time was determined. In the first model, the dependent variable was coded '1' if the teenager increased the number of items for which she found abortion acceptable and '0' if there was no change or the teenager found fewer items acceptable. In the second model, the dependent variable was defined similarly, but '1' was a decrease in the number of items for which the teenager found abortion acceptable and '0' indicated no change or an increase. The independent variables were group (abortion versus prenatal care group), age, education, marital status at 1 year, and whether someone had recommended abortion.

Results

Baseline characteristics

The three groups were significantly different on most of the characteristics examined (Table 1). A clear pattern emerged where those who considered abortion tended to fall between those who aborted and those who did not consider abortion. The aborting teenagers tended to be older, not partnered, in school, working and more likely to have been trying to use contraception than the other two groups. In other words, they appeared to be more 'independent' despite the fact that they were also more likely to live at home with a parent. Further baseline comparisons between these two groups can be found elsewhere (Bailey *et al.*, 2001; Bruno *et al.*, 1999).

The adolescents were asked with whom they talked concerning the pregnancy and what their family and partners' reactions were to the pregnancy (Table 2). Parental and partner support for the pregnancy followed the pattern already established of aborting teenagers and those who did not consider abortion as opposite ends of a spectrum. Adolescents who induced their abortions had the least support from family or partners and those who did not consider abortion the most. In all groups, fathers tended not to know about the pregnancy and partners were reportedly more supportive than parents.

Support for terminating the pregnancy, as defined by someone recommending abortion, was forthcoming for half of the girls in the abortion group, as well as the group that did not consider abortion. Two-thirds of the group who considered abortion reported this advice. Who recommended abortion varied across the groups.

Table 1. Baseline differences between cohorts

	Abortion cohort (%) <i>n</i> =95	Considered abortion (%) <i>n</i> =68	Did not consider abortion (%) <i>n</i> =204	<i>p</i> -value
Age				
12–16	35	46	58	0.001
17–18	65	54	42	
Mean (SD)	16.7 (1.3)	16.2 (1.4)	16.2 (1.2)	0.003
Marital status				
In union	13	25	56	0.000
Not in union	87	75	44	
Enrolled in school				
Yes	68	59	47	0.001
No	32	41	53	
Years schooling completed				
0–4	29	24	28	0.044
5–8	52	62	65	
>8	19	15	8	
Mean (SD)	6.2 (2.5)	6.0 (2.3)	5.6 (2.2)	0.145
Working for pay				
Yes	33	19	15	0.002
No	67	81	85	
Living with parent(s)				
Yes	67	63	52	0.027
No	33	37	48	
Contracepted at conception				
Yes	18	13	8	0.052
No	82	87	92	

ANOVA tests used for means.

Mothers, fathers and in-laws suggested abortion to about a quarter or more of the adolescents in each group, while nearly half of the groups carrying their pregnancies to term reported that their friends had recommended abortion. Partners featured more prominently among the teenagers who aborted than the other groups.

By definition, everyone in the abortion group considered terminating her pregnancy, as did a quarter of the larger prenatal care group (defined in the tables as those who considered abortion). In fact, 27 girls who considered abortion did attempt to terminate their pregnancy (this small group was not significantly different from the girls who considered abortion but did not attempt it). These 27 girls tended to use less effective means than the teenagers who successfully aborted. Fifteen drank herbal teas thought to be abortifacients, seven said that they took Cytotec (the

commercial name for misoprostol, a synthetic analogue of prostaglandin, approved for treating gastric ulcers, but which stimulates the uterine muscles to contract) and another four said they took other pharmaceutical agents. Eighty per cent of aborting teenagers reported using misoprostol and another 8% used other pharmaceutical agents. The remaining few reported using herbal teas (data not shown.)

Attitudes towards abortion

Hypothetical situations about abortion and when it was justified were presented to all the teenagers. The first two scenarios presented to the teenagers described situations where abortion is legal (Table 3). The third situation of fetal malformation has become increasingly publicized in the media as physicians increasingly perform therapeutic abortions when ultrasound detects a non-viable fetus and the woman wishes to terminate her pregnancy (Tavares, 2000).

Comparisons across the three groups at the first interview show differences in each item (as depicted by the asterisk). Teenagers who terminated their pregnancies found abortion more acceptable than the group who did not consider abortion. However, at 1 year, no differences were found in the first three scenarios. Mean scores ranged from 1.61 to 1.84, with a maximum of 3. Opinions about whether abortion is justified in these first three situations did not change over time for members of the abortion cohort or for the group that considered aborting, but they did change for those who did not consider abortion (as depicted by the double dagger). For this group, the percentage of adolescents who could justify pregnancy termination increased significantly for each of the three items.

The remaining situations describe more personal reasons for abortion. Again, at the first interview, the three groups differed significantly in every case with the abortion group more supportive of each reason than the other two groups. A year later, however, only one item showed a significant difference (as depicted by the dagger): 'if the mother was quite young'. The mean score of these items (maximum of five) at 1 year also showed a significant difference, where the abortion group had a mean score twice that of the other two groups (0.85 vs. 0.41 or 0.42). Within-group comparisons revealed that the abortion group became significantly less accepting of these reasons. Their mean score dropped by half: from 1.6 to 0.8. The other two groups also showed significant but smaller drops in scores.

At 6 weeks post-abortion, 65% of this group reported 'relief' while at 1 year, only 52% reported this reaction, suggesting further a change in attitude and outlook. Also at 1 year, 70% of the aborting teenagers reported having a friend their own age who had terminated a pregnancy (data not shown).

Factors associated with a more accepting attitude towards abortion at the first interview and what determined a more accepting attitude a year later were examined (Table 4, Models 1 and 2). Education was positively associated with a more accepting attitude (as the number of years completed increased so did the level of acceptance). Having someone recommend abortion also predicted a more positive attitude towards abortion, and as the previous analyses showed, having aborted was associated with a more accepting attitude. One year later (Model 2), age was found to be negatively associated with an accepting attitude towards abortion. Like the baseline model,

Table 2. Factors influencing decision-making by cohort

	Abortion cohort (%) <i>n</i> =95	Considered abortion (%) <i>n</i> =68	Did not consider abortion (%) <i>n</i> =204	<i>p</i> -value
Support for pregnancy				
Mother ^a				
Supportive	32	42	60	0.000
Unsupportive/other	45	49	36	
Didn't know	23	9	4	
	(93)	(65)	(198)	
Father ^b				
Supportive	8	33	48	0.000
Unsupportive/other	47	47	39	
Didn't know	45	20	13	
	(74)	(45)	(140)	
Partner ^c				
Supportive	52	66	90	0.000
Unsupportive/other	34	26	9	
Didn't know	14	7	2	
	(94)	(68)	(204)	
Did someone recommend abortion?				
Yes	50	66	48	0.026
No	50	34	52	
Recommended by whom?				
Mother, father, in-laws	28	31	23	0.021
Friends	23	47	47	
Relatives	23	9	23	
Partner	23	13	6	
Other	2	0	1	
	(47)	(45)	(97)	

^aEleven teenagers never knew their mothers or their mothers were deceased.

^b108 teenagers never knew their fathers, had no current relationship with them, or their fathers were deceased.

^cOne teenager gave no information about her partner.

education was positively associated with a more accepting attitude and adolescents who aborted found abortion more acceptable than the prenatal care group 1 year later.

The only factor found to be associated with a change in attitude (towards a more acceptable attitude: Model 3) was marital status: adolescents who were in union were 74% more likely than single teenagers to find abortion more acceptable over time. No variable predicted change in the other direction (an attitude of decreased acceptance: data not shown).

Table 3. Hypothetical conditions for practising abortion: percentage of adolescents who reported that abortion was justified, by cohort and interview period

Reason for abortion	Abortion cohort (%)			Did not consider abortion (%)		
	n=95		n=68		n=204	
	Baseline	1-year	Baseline	1-year	Baseline	1-year
The life or health of the mother would be at risk if she continues the pregnancy*	68	67	62	66	52	64‡
The mother became pregnant when she was raped*	62	65	53	68	41	56‡
The child is deformed or has problems*	55	50	47	50	31	41‡
Subtotal mean score*	1.85	1.82	1.62	1.84	1.24	1.61‡
The mother doesn't want the pregnancy*	42	20‡	26	15	23	12‡
The mother and father of the child have serious economic problems*	34	20‡	21	13	17	13
The mother is quite young*†	32	19	9	3	8	4
The mother wants to work at an interesting job*	28	15‡	9	7	8	7
The mother wants to study*	25	12‡	7	3	6	6
Subtotal mean score*†	1.61	0.85‡	0.72	0.41‡	0.61	0.42‡
Total mean score	3.46	2.67‡	2.34	2.25	1.85	2.03

Note: answers of 'don't know' were recoded as 'no'.

*Baseline estimates significantly different at $p < 0.05$, using chi-squared tests and ANOVA for means.

†One-year estimates significantly different at $p < 0.05$ using chi-squared tests and ANOVA for means.

‡Change between baseline and 1-year estimates, significant at $p < 0.05$, using McNemar's tests and paired sample t-tests.

Table 4. Summary of multivariable regressions modelling attitudes towards abortion

Independent variables	Model 1: baseline		Model 2: 1-year		Model 3	
	Linear regression		Linear regression		Logistic regression	
	Attitude towards abortion	Significance	Attitude towards abortion	Significance	Becoming more accepting	95% CI
	B		B		Odds ratio	
Age (continuous)	2.731×10^{-3}	0.969	-0.144	0.016	0.86	0.72-1.03
Education (continuous)	8.171×10^{-2}	0.043	7.353×10^{-2}	0.035	0.98	0.88-1.09
In union status at baseline (single/in union)	7.419×10^{-2}	0.690	na	na	1.74	1.07-2.83
In union status at 1 year (single/in union)	na	na	-4.099×10^{-2}	0.801	na	na
Abortion recommended (yes/no)	-0.273	0.045	7.319×10^{-2}	0.533	1.21	0.77-1.88
Group (abortion/prenatal care group)	-1.399	0.000	-0.571	0.003	1.52	0.85-2.75
R ²		0.150		0.051		na

na = not applicable.

Discussion

This study reveals some of the ambivalence about abortion in Brazilian society that this sample of teenagers faces. Although illegal, abortion was recognized by many as a solution for an unwanted pregnancy, not just by the study participants themselves, but also by family and friends. Other studies about adolescents and abortion decision-making have shown, albeit in countries where abortion is legal, that when parents exert pressure on their daughters, they tend to encourage rather than discourage abortion (Rosen, Benson & Stack, 1982). The literature also supports the evidence that fathers are less likely than mothers or partners to be included in the decision-making process (Clarey, 1982; Rosen, 1980; Resnick *et al.*, 1994).

Not surprisingly, teenagers who terminated their pregnancies or considered abortion tended to justify abortion in more of the hypothetical circumstances than teenagers who did not consider abortion. It was also noted that the abortion group became less accepting of abortion over time. As time passed, the young women may have felt less defensive of their behaviour and their stated attitudes may have 'reverted' closer to what their attitudes might have been prior to the pregnancy. The decrease in reporting of relief also suggests a distancing from the emotional turmoil that surrounded the abortion event.

Over time a tendency was observed for all the adolescents to move in a common direction (towards the mean). The more accepting attitude on the part of the adolescents who did not consider abortion (all of whom were mothers at 1 year) may have come about at the recognition of how their lives had changed as a consequence of having a child. Now that they were mothers their motivation to not have a subsequent pregnancy may have intensified, and terminating a pregnancy under these conditions was simply more acceptable than a year earlier.

The reasons for which abortion was found acceptable divided roughly into two groups: those in which a relatively large percentage of adolescents found abortion justified and the others that relatively few teenagers found acceptable. The first group constituted the grounds on which abortion is currently legal or widely performed (mother's life is at risk, conception occurred due to rape, and fetal malformation). Either the adolescents knew that abortion was legal under these conditions, or they simply found these reasons more justifiable than the others. Although teenagers were not asked about their knowledge of the legal status of abortion, it is speculated that it is unlikely that many teenagers were familiar with the law. In contrast, the second group consisted of more personal reasons. In fact, these scenarios probably overlap with why some in the abortion group terminated their pregnancies (one adolescent reported that she conceived as a result of rape). Unfortunately, other hypothetical situations were not asked about, such as a parent who pressured her/his daughter to terminate the pregnancy, or a partner who threatened to abandon the pregnant teenager if she did not seek an abortion.

Pregnancy outcome (having an abortion) was a predictor of a more accepting attitude to abortion at the first interview, as well as at the 1-year interview, as was education, which might reflect a greater awareness of when abortion is legal. However, pregnancy outcome did not contribute to a change in attitude about abortion once other variables were controlled for. The only contributing factor to a

change in attitude about abortion (to a more accepting attitude) was marital status, and it is not clear why teenagers who were in union should find abortion increasingly acceptable while those who were single did not. Perhaps being in a relationship provided a realistic perspective about the difficulties of married life and family building, or the relationship may have provided support to express views that are not socially or publicly condoned.

Understanding adolescents' attitudes towards abortion, some of the circumstances surrounding their decision-making, and how they choose to induce abortion is important for health care professionals and providers who work with adolescents. Health care professionals must recognize that abortion is not an uncommon practice and that some, perhaps many, adolescents when faced with an unwanted pregnancy contemplate abortion. The most stressful period of the abortion experience has been described as occurring before the decision to abort has been made (Adler *et al.*, 1990). Not all adolescents in this study talked to their parents or their partners about their pregnancy or abortion, but health care professionals can play an important sympathetic role. However, too often this contact occurs too late to prevent behaviours to reduce unwanted pregnancies and unnecessary morbidity or mortality.

This study reinforces the need for contraceptive services for teenagers in general. It also reflects the need for post-abortion care. In addition to emergency treatment of abortion complications, referral for ongoing care and links to comprehensive reproductive health services, post-abortion care must emphasize counselling that encourages an open discussion of women's ambivalence and the negative feelings that can accompany abortion. This is important for women regardless of their age or the legal status of abortion. Finally, post-abortion care must stress services to prevent unwanted pregnancies. Given the prevalence of the use of misoprostol, emergency contraception, which is now available in Brazil under the brand name Postinor-2, should be promoted to women of all ages for its accessibility and effectiveness.

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References

- ADLER, N. E., DAVID, H. P., MAJOR, B. N., ROTH, S. H., RUSSO, N. F. & WYATT, G. E. (1990) Psychological responses after abortion. *Science* **248**, 41–44.
- ARTICULANDO (2000) *Esquentando os tambores*. Veículo de Informação da Articulação de Mulheres Brasileiras, No. 3, April.
- BAILEY, P., BRUNO, Z. & CHEN-MOK, M. (2001) Adolescent pregnancy one year later: the effects of abortion versus motherhood in NE Brazil. *J. Adolesc. Hlth* **29**(3), 223–232.
- BARBOSA, M. & ARILHA, M. (1993) The Brazilian experience with Cytotec. *Stud. Fam. Plann.* **24**(4), 236–240.
- BRAZZELL, J. & ACOCK, A. (1988) Influence of attitudes, significant others, and aspirations on how adolescents intend to resolve a premarital pregnancy. *J. Marriage Fam.* **50**, 413–425.

- BRUNO, Z., BAILEY, P., BEZERRA, M., QUEIRÓS DE MORAIS, I., CORDEIRO LOBO, R. C., DE OLIVEIRA, C. M. & CHAGAS OLIVEIRA, F. (1999) Fatores de risco que podem levar ao aborto induzido na adolescência. *GO Atual* **8**(8), 35–45.
- CAMPOS, C., GUENA, M., DE MARI, J., GUSMÃO, M., OLTRAMARI, A., VILELA, R., ALMEIDA, R. & PAIXÃO, R. (1997) Nós Fizemos Aborto. *Veja* **1513**, 26–33.
- CLAREY, F. (1982) Minor women obtaining abortions: a study of parental notification in a metropolitan area. *Am. J. publ. Hlth.* **72**, 283–285.
- CORRÊA, S., PIOLA, S. & ARILHA, M. (1998) *Brazil: Reproductive Health in Policy and Practice*. Population Reference Bureau.
- COSTA, S. H. (1999) Aborto provocado: a dimensão do problema e a transformação da prática. In: *Questões da Saúde Reprodutiva*. Edited by K. Giffin & S. H. Costa. Editora Fio Cruz, Rio de Janeiro.
- HIRSCH, J. & BARKER, G. (1992) *Adolescents and Unsafe Abortion in Developing Countries: A Preventable Tragedy*. International Center for Population Options/International Clearinghouse on Adolescent Fertility, Washington, DC.
- LAURENTI, R. (1988) *Mortalidade de Mulheres de 10 a 49 anos no Município de São Paulo, com ênfase na Mortalidade Materna*. Final report. CBDC/PAHO, Mimeo, São Paulo.
- LIMA, B. (2000) Abortion-related mortality in Brazil: decrease in spatial inequality. *Pan Am. J. publ. Hlth* **7**(3), 168–172.
- MISAGO, C., FONSECA, W., LUCIANO, C., FERNANDES L. M. & CAMPBELL, O. (1998) Determinants of abortion among women admitted to hospitals in Fortaleza, North Eastern Brazil. *Int. J. Epidemiol.* **27**, 833–839.
- PERES, A. (1997) Aborto na adolescência. *Claudia April*, 6–12.
- RESNICK, M., BEARINGER, L. H., STARK, P. & BLUM, R. W. (1994) Patterns of consultation among adolescent minors obtaining an abortion. *Am. J. Orthopsychiat.* **64**(2), 310–316.
- RODRIGUES, A., SOUZA, M., CALVACANTI BRASIL, R. & CARAKUSHANSKY, G. (1993) Gravidez na Adolescência. *Fêmeina* **21**(3), 199–223.
- ROSEN, R. H. (1980) Adolescent pregnancy decision-making: are parents important? *Adolescence* **15**, 43–54.
- ROSEN, R. H., BENSON, T. & STACK, J. M. (1982) Help or hindrance: parental impact on pregnant teenagers' resolution decision. *Fam. Relations* **31**, 271–280.
- SINGH, S. & WULF, D. (1991) Estimating abortion levels in Brazil, Colombia and Peru, using hospital admissions and fertility survey data. *Int. Fam. Plann. Perspect.* **17**, 8–13.
- SINGH, S. & WULF, D. (1994) Estimated levels of induced abortion in six Latin American countries. *Int. Fam. Plann. Perspect.* **20**, 4–13.
- SOF (SEMPREVIVA ORGANIZAÇÃO FEMINISTA) (1992) *Gravidez na adolescência. Não dê as costas pra isso*. The Women's Committee of São Bernardo do Campo (information pamphlet).
- STONE, R. & WASZAK, C. (1992) Adolescent knowledge and attitudes about abortion. *Fam. Plann. Perspect.* **24**, 52–57.
- TAVARES, E. P. (2000) *Anteprojeto do Código Penal – Um Avanço*. Fêmea, Year **VIII** (84), 9.
- ZELNICK, M. & KANTNER, J. F. (1975) Attitudes of American teenagers toward abortion. *Fam. Plann. Perspect.* **7**, 89–91.