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Youth and reproduction: demographic, behavioral and reproductive profiles in the PNDS-2006

ABSTRACT

OBJECTIVE: Analyze the sociodemographic characteristics and the sexual and reproductive behavior of young women.

METHODS: A cross-sectional nationally representative study was performed about sexual, contraceptive and reproductive behavior with 2,991 women age 15 to 20 years in the National Survey on Demography and Health of Women and Children, 2006. The women were classified into three groups: sexual initiation and pregnancy before the age of 20 (group A); sexual initiation but no pregnancy before the age of 20 (group B) and no sexual initiation (group C). Women until age 25 years were included in the study about reasons for becoming pregnant and the implications for their lives. Statistical analysis considered survey weights and the complex sample design. The association between two categorical variables was assessed by chi-square test. The behavior variables were assessed using a global linear model.

RESULTS: Women in group A were mainly black, poorer and with lower education level. These women had an early sexual initiation, less safe contraceptive behavior and less knowledge of reproduction physiology in comparison with group B; young women in group C were characterized by greater attendance at school and 1/3 of this group claimed to maintain their virginity until marriage. For women up to the age of 25, pregnancy before 20 years was perceived as having more positive than negative impacts upon their love life, spousal relationships, social lives and self-esteem.

CONCLUSIONS: There is a significant association between pregnancy before the age of 20 and higher poverty and lower educational level. In the absence of better living conditions and opportunities, pregnancy, although unplanned, becomes "a plan for life", and is not seen as a lack of life planning.

DESCRIPTORS: Sexual Behavior. Contraception Behavior. Reproductive Behavior. Pregnancy. Socioeconomic Factors. Health Surveys.

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INTRODUCTION

The fertility rate for the age group of 15 to 19 years, which increased 25% between 1991 and 2001 in Brazil,[b] began declining in 2000.[a] Nonetheless, the share of overall fertility has increased for youth in Brazil.[b] The contribution

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[b] Berquó E. [Increasing youth fertility]. In: Encontro Estadual de Políticas Públicas da Juventude, São Paulo: Associação de Apoio ao Programa de Capacitação Solidária; 2004. p.185.

of fertility among women age 15 to 24 years to the total fertility rate (during the entire reproductive period) went from 34% in 1980[a] to 53% in 2006.[c] This increase occurred primarily due to an increased relative participation in fertility among 15 to 19 year olds, which increased from 9% to 23% during the period.

Literature about sexual and reproductive behavioral patterns of adolescents and youth in Brazil, although rich and lengthy,[6,8] lack national level studies and/or household surveys. In addition to the National Demographic Survey on the Health of Children and Women (*Pesquisa Nacional de Demografia e Saúde da Criança e da Mulher*, PNDS) of 2006, performed by the Brazilian Center of Analysis and Planning (*Centro Brasileiro de Análise e Planejamento*, CEBRAP), there are the 1996 PNDS, performed by the non-governmental organization Family Well-Being (Bemfam) and two nationally representative editions of the study on Sexual Behavior and Perceptions of the Brazilian Population about HIV/AIDS, carried out in 1998[d] and 2005.[2]

Studies concerning reproduction among women age 20 years and younger, which represents about 16% of all women of reproductive age,[e] deserve the attention of researchers in diverse fields, especially in the areas of sexuality, gender and reproductive health.

The present article sought to analyze sociodemographic characteristics and the sexual and reproductive behavior of young women.

METHODS

A cross-sectional household survey was performed with 2,991 women of age from 15 to 20 years. The data are from the database of the 2006 PNDS.

The 2006 PNDS is a nationally representative household study with a complex probabilistic sampling design. Sampling units are selected in two stages: primary units, composed of census sectors, and secondary units, composed of household units. The study universe consisted of specific households located in common or "not special" census sectors (including favelas), selected from ten independent sample strata, consisting of a combination of the five macro regions of Brazil and their urban and rural areas. The 2006 PNDS describes the profile of the female population at reproductive age and of children less than five years old in Brazil, as well as identifies changes that occurred in the health and nutritional situations of these two population groups during the previous ten years. The database is available over the internet.[f]

Questionnaires were administered face to face, after taking a complex probabilistic sample that is nationally representative for the five Brazilian regions and for urban and rural settings.[g] The study universe included 14,617 households and 15,575 women from age 15 to 49 years. Each woman was asked about her sexual and reproductive history.

Youth were classified in three groups: Group A began sexual activity and became pregnant before 20 years (n = 741); Group B began sexual activity and did not become pregnant before age 20 (n = 928); and Group C did not begin sexual activitybefore age 20 (n = 1,314). Eight women could not be classified into these groups due to missing information about sexual initiation.

Socioeconomic and demographic variables included: region (North; Northeast; Central-west; Southeast; South), location of residence (urban; rural), skin color (white, black and other), marital status (married/partnership; no), years of study (0 to 4; 5 to 8; 9 or more), economic class (A + B; C; D + E) and health insurance or health plan.

Age (in years) at first sexual relation (groups A and B), at first pregnancy (group A) and at first partnership (living with your first partner/husband, groups A and B) were the behavioral variables.

The study analyzed knowledge of contraceptive methods, sources and type of contraception utilized at first sexual relation and at time of interview, motivations for not currently using contraceptives, and knowledge of reproductive physiology.

Women age 25 years or younger (n = 1,771) were included in the study about reasons for the pregnancy and its implications on life. Positive and negative aspects of changes to one's love life, conjugal life and social life were addressed.

Statistical analysis was performed considering the weights and the complex sample design.[g] Nonetheless, the number of cases were presented without weights

[c] Wong LLRE. [Fecundity and reproductive aspects]. In Berquó E, Garcia S, Lago T. coordinators. Pesquisa Nacional de Demografia e Saúde da Criança e da Mulher – PNDS-2006. São Paulo: Cebrap; 2008 [cited 2010 Mar 20]. (Final Report). Available from: http://bvsms.saude.gov.br/bvs/pnds/index.php

[d] Berquó E, Loyola MAR, Gomes Pinho MD, Ferreira MP, Correa M, Souza MR, et al. [Sexual behavior of the Brazilian population and perceptions of HIV/AIDS]. Brasília: Ministry of Health. (Evaluation Series, 4).

[e] Brazilian Institute of Geography and Statistics. 2010 Demographic Census. Brasília; 2011.

[f] Ministry of Health (BR). [National Demographic Survey on the Health of Children and Women]. [cited 2010 Jun 15] Available from: http://bvsms.saude.gov.br/bvs/pnds/banco_dados.php

[g] Ministry of Health (BR). PNDS 2006. [National Demographic Survey on the Health of Children and Women]. Database. Brasília; 2008 [cited 2010 Jun 15]. Available from: http://bvsms.saude.gov.br/bvs/pnds/banco_dados.php

in order to provide the actual numbers on which the analysis was based.

The association between the dependent and independent variables was evaluated by a chi-square test adjusted for the sample design. The evaluation of behavioral variables was done with a linear regression model incorporating information on survey weights and the sample design. Statistical significance was assessed at $p < 0.05$.

Analyses were performed using the software programs Stata v.9 and/or SPSS v.14.

The 2006 PNDS was approved by the Research Ethics Committee of the STD-AIDS Reference Center of the Secretary of Health of São Paulo State (3 Oct 2005, Protocol number 029/05).

RESULTS

Of the total sample of young women from age 15 to 20 years, 44.2% had not had sex, 31.1% had sex but did not become pregnant, and 24.8% became pregnant before 20 years.

Group A consisted primarily of young black women, of lower educational attainment and less income (Table 1).

The prevalence of not initiating sex before age 20 varied from 47.4% in the Northeast to 29.9% in the North. The highest percentage of women that did not become pregnant lived in the South region (42.7%), and the highest percentage of women that became pregnant before age 20 was in the North (37.6%).

Although the prevalence of sexual initiation before age 20 years was the same between whites and blacks (41%), black youth had a statistically significant greater proportion of pregnancy before age 20.

Greater education was associated with an increased proportion of women not having sex before age 20 years ($p < 0.001$). The proportion of youth that became pregnant before age 20 years was highest (60.6%) for those with zero to four years of education, decreasing to 17.3% for those with nine or more years of education.

Greater poverty was associated with a greater proportion of sexual initiation before age 20 years (65.1%) for economic classes D and E and 41% for classes A and B ($p < 0.001$). The same association occurred for pregnancy before age 20 years.

Skin color did not interact with the association of education and of economic class to sexual and reproductive behavior (Tables 2 and 3).

Table 1. Sociodemographic variables of women age 15 to 20 years, according to groups A, B and C. Brazil, 2006.

Variables	Grupos (%)			Total	
	A (n = 741)	B (n = 928)	C (n = 1,314)	%	n
Region (p = 0.004)					
North	37.6	32.5	29.9	100.0	568
Northeast	25.3	27.3	47.4	100.0	664
Southeast	23.6	35.5	41.0	100.0	580
South	22.4	42.7	34.9	100.0	557
Central-West	34.8	27.7	37.6	100.0	614
Residence (p = 0.254)					
Urban	25.0	34.2	40.9	100.0	2,093
Rural	30.2	28.8	41.0	100.0	890
Skin color (p < 0.001)					
Black	31.4	27.4	41.2	100.0	1,677
White	18.6	40.1	41.3	100.0	1,068
Years of education (p < 0.001)					
0 to 4	60.6	9.8	29.6	100.0	203
5 to 8	31.5	27.8	40.8	100.0	1,220
9 ou mais	17.3	40.1	42.6	100.0	1,540
Economic class (p < 0.001)					
D and E	40.7	24.4	35.0	100.0	1,136
C	20.0	40.6	39.4	100.0	1,318
A and B	6.4	34.5	59.1	100.0	515
Total	24.8	31.1	44.2	100.0	2,983

Table 2. Education and skin color of women age 15 to 20 years, according to groups A, B and C. Brazil, 2006.

Years of Study	Skin color	Groups (%)			
		A	B	C	Total
0 to 4	Black	63.9	6.4	29.7	100.0
	White	52.6	16.5	30.9	100.0
5 to 8	Black	35.6	25.2	39.2	100.0
	White	26.3	29.6	44.1	100.0
9 or +	Black	21.9	32.8	45.3	100.0
	White	11.5	48.2	40.3	100.0

Table 3. Economic class and skin color of women age 15 to 20 years, according to groups A, B and C. Brazil, 2006.

Economic class	Skin color	Groups (%)			
		A	B	C	Total
D and E	Black	37.6	24.0	38.4	100.0
	White	37.2	28.4	34.4	100.0
C	Black	21.2	31.1	48.6	100.0
	White	19.4	36.3	44.3	100.0
A and B	Black	8.2	35.2	56.6	100.0
	White	8.1	39.0	52.9	100.0

Women that did not become pregnant before age 20 years (Group B) initiated sexual activity later at 15.8 years, a statistically significant greater mean ($p < 0.001$) than the 14.9 years for women that became pregnant before age 20 years (Group A).

The reasons presented by the young women of group C for not having initiated sexual activity were a lack of desire (33.6%), intention to marry as a virgin (29.9%) and not having met a partner (25.2%). Fear of pregnancy (9.2%) and fear of AIDS (2.1%) were among their worries.

Knowledge of contraceptive methods was nearly universal among the groups, just as for all women of reproductive age. The pill and the condom were the most known methods among all groups.

In group A, the level of knowledge about the diaphragm, creams-suppositories and the rhythm method reached lower levels when compared to groups B and C. Youth without sexual experience presented less knowledge about withdrawal (48.5%) than women who had sexual relations (78.0%). This did not differ between groups A and B ($p = 0.840$), and both groups differed from group C ($p < 0.001$).

The day-after pill, although it was infrequently reported in spontaneous responses, was well diffused among youth when questioned, with greater knowledge among those who never became pregnant (86.0%).

Youth that reported not using contraceptives showed a low degree of knowledge in regards to locations for obtaining them (approximately 38%), without statistically significant differences between the three groups. The Public Health System (*Sistema Único de Saúde* – SUS) was the most common location (approximately 90%) followed by pharmacies and health plans.

For current users of contraceptives, pharmacies were the most utilized source by the youth of both groups (56.4%, group A; and 77.3%, group B), followed by the SUS (39.6%, group A; 17.3%, group B). The portion of women that used SUS to obtain contraceptives was relatively greater in group A, which corresponded to poorer youth, with a lower level of education and less access to health plans.

The youth of group A presented a lower percentage of contraceptive-uptake at first sexual relation, with a statistically significant difference of 18.5% in relation to group B ($p < 0.001$) (Table 4). The same situation occurred in regards to condom use: 61.7% of women that did not become pregnant used a condom, a significantly higher percentage than in group A (49.8%; $p = 0.013$). The use of contraceptives at least once was universal. There were statistically significant differences between the groups in regards to current contraceptive usage (72.2% of group B and 56.7% of group A). The same situation occurred for the use of any contraceptive or a condom during the first sexual relation.

Among youth of group A, 18.2% reported the use of the day-after pill at least once in their life, a statistically significant lower percentage ($p = 0.036$) than group B (29.7%).

Table 4. Use of contraceptive methods at first sexual intercourse, for groups A and B. Brazil, 2006.

Type of contraceptive methods used at 1st sexual relation	Group A		Group B		
	%	n	%	n	p
No method used	32.4	266	13.9	146	< 0.001
Only male condom	49.8	348	61.7	564	0.013
Male condom + other	8.6	53	13.0	139	0.201
Only other method	9.2	72	11.3	79	0.486
Total	100.0	739	100.0	928	

The p values correspond to chi-square tests adjusted for study design, comparing the percentage of group A and B for each line.
Source: PNDS 2006

The most common reasons for non-use of contraceptive methods were: “have infrequent/few sexual relations” and “not being married or with a partner”, for both groups. Almost 20% of youth from group A did not use contraceptives due to breastfeeding/recent pregnancy, which could expose them to a new pregnancy.

Among the women, 77.3% of group B and 63.7% of group A affirmed that there is a period between menstruations when a woman can become pregnant. This knowledge was significantly lower ($p < 0.001$) among those that never had sexual relations (55%) (data not shown).

A small percentage of correct responses were observed in regards to the likelihood of becoming pregnant during the fertile period. The percentage of correct responses in regards to the menstrual cycle were 22.2%, 34.1% and 28.3% for groups A, B and C, respectively, values that were not statistically different. The adequate use of methods, either traditional or modern, was dependent on knowledge of reproductive physiology.

The average age of first pregnancy for women that became pregnant before age 20 years was 16.3 years (group A). In univariate models, there were statistically significant effects from region, area of residence, skin color, year]s of education, economic class, age at first sexual relation, use of contraceptive methods at first sexual relation, conjugal union and being married while pregnant, all with $p < 0.05$. Greater education and higher economic standing, were associated with an older average age at first pregnancy.

Years of education, age at first sexual relation and married while pregnant remained statistically significant ($p < 0.05$) after adjustment in a multivariate model. One in every four women became pregnant from the first sexual relation. Age at first sexual relation and age at first pregnancy were strongly correlated (0.67). When considered separately, women in partnerships and not in partnerships had correlations of 0.65 and 0.80, respectively.

No difference was found between these women and women that did not become pregnant at first sexual relation, when considering education, income and skin color. The Northeast had the highest percentage of pregnancy at first sexual relation (34.0%), a prevalence that was also higher in rural areas.

Of women that became pregnant before age 20, 18% did not marry before this age. Of those that entered partnerships (82%), the union happened after the first pregnancy in 18.5%, and 35.5% married before becoming pregnant. No sociodemographic variable was significantly associated with first pregnancy occurring before or after the first partnership. The age at first pregnancy and first partnership coincided for the remaining 46%. Since detailed information on age was not available in months or days, it was not possible to identify if the pregnancy happened before or after the first partnership for the above mentioned 54%, in accordance with the criteria used.

The average age at first partnership was 15.9 years for group A, younger than the 16.5 years for women in group B.

Women entered partnerships earlier in rural areas, and greater education, higher economic standing and white skin color were associated with later partnerships, per univariate analysis. Earlier initiation of sexual activity was associated with earlier partnerships.

There were various reasons that best explained pregnancy before age 20 years among the youth of age up to 25 years (Table 5).

Although almost all women of 25 years or younger, reported current familiarity with contraceptive methods, 71% reported that method failure or lack of knowledge about contraception was a reason for pregnancy before age 20 years. There was not a significant association between this variable and the sociodemographic characteristics.

Desire to be a parent was as high as 52.6% with significant differences according to economic class. Lower economic status and lower education, were associated with higher percentages of women reporting the desire to be a mother/parent as a reason that best explained the occurrence of the pregnancy.

Conjugal unions before age 20 years were the reason for pregnancy for 51.1% of all youth and an even greater percentage of youth with a low level of education (63.3%).

Desire to marry was one of the reasons for pregnancy before age 20 years among 38.1% of youth age less than 25 years. This motive was influenced by level of education and economic status, with significantly more influence among youth with four or less years of education (42.7%) and from economic classes D and E (41.9%). A higher percentage of women, who were not at school at the time of interview, reported a desire to marry as a reason (40.9%), when compared to those who continued their studies (26.9%; $p = 0.005$).

Difficulty to access contraceptive methods was reported by 26.4% of women, and greater poverty and lower education were associated with a more difficulty in access.

A desire to leave their parents’ home was reported by 23.4% of youth. At lower levels of education and economic status, greater percentages of youth reported this reason.

Table 5. Women that agree with the reason for becoming pregnant before age 20 , according to sociodemographic variables, Brazil, 2006.

Variables	Desire to marry		Desire to leave parents' house		Desire to be parent/ mother		Does not know contraceptive methods		Difficult access		Married early		No other option	
	%	n	%	n	%	n	%	n	%	n	%	n	%	n
Econotmic class														
D and E	41.9	919	29.5	919	55.8	902	71.3	915	30.4	917	54.0	919	16.9	914
C	35.3	720	19.0	720	52.5	707	69.1	712	20.9	720	47.8	721	14.7	719
A and B	23.6	121	13.3	121	23.5	120	80.2	121	23.1	121	43.9	122	17.4	120
	p = 0.033		p = 0.003		p < 0.001		p = 0.328		p = 0.030		p = 0.214		p = 0.807	
Years of Study														
0 to 4	42.7	341	37.9	341	61.9	333	68.1	340	37.3	340	63.3	341	15.1	338
5 to 8	41.9	811	25.9	811	53.1	800	70.5	804	26.1	811	49.8	812	18.3	809
9 or more	31.2	596	15.5	596	46.8	584	73.8	592	21.3	595	46.3	597	13.4	594
	p = 0.020		p < 0.001		p = 0.056		p = 0.538		p = 0.007		p = 0.011		p = 0.336	
Current student														
Yes	26.9	328	16.5	328	49.5	322	77.1	327	19.3	327	38.5	329	11.1	326
No	40.9	1,427	26.1	1,427	53.1	1,402	69.5	1,416	28.1	1,426	54.2	1,428	17.6	1,422
	p = 0.005		p = 0.038		p = 0.499		P = 0.108		p = 0.052		p = 0.003		p = 0.108	
Employed														
Yes	34.7	593	20.6	593	46.1	586	70.8	588	21.9	593	47.4	595	18.2	590
No	39.8	1,173	26.2	1,173	55.8	1,149	71.2	1,166	28.7	1,171	52.9	1,173	15.5	1,169
	p = 0.241		p = 0.129		p = 0.029		p = 0.929		p = 0.051		p = 0.242		p = 0.436	
Total	38.1	1,766	24.3	1,766	52.6	1,735	71.0	1,754	26.4	1,764	51.1	1,768	16.4	1,759

Notes: Multiple responses valid for women age 25 or less at time of interview and who had live births before are 20 years or became pregnant before age 20 years (n = 1,771 women).
P values for chi-square tests adjusted to sample design
N indicates the total number of cases with information available

The percentage of youth that responded "no other option" (16.4%) was low and without association to the variables analyzed.

The perception of youth in regards to implications that resulted pregnancy upon their love lives and self-esteem was positive, independent of economic class or level of education. In regards to subjective aspects (self-esteem), 96.2% reported thinking of positive implications. Nonetheless, from the perspective of love and conjugal union, there was greater controversy; while 62.6% considered pregnancy as positive, 23.8% saw little or no positive implications (Table 6).

In regards to the totality of the situations considered as negative ("family rejection", "spousal abandonment", "life became more difficult", "lost my friends" and "more difficult to date"), herein referred to as the social dimensions of life, there was a widespread perception of little negative impacts from pregnancy. Although the implications that were considered as negative only reached a low percentage (7.6%), the perception of negative implications was significantly higher among poorer (9.9%) and less educated (10.6%) women.

DISCUSSION

The results of this study support the national and international literature, i.e. where the initiation of sexual activity is occurring at earlier ages.[8,10,13,h] Even so, a substantial portion of youth did not begin sexual activity (44.0%). Increased education and higher economic status have important roles as factors that differentiate these youth from those that already had sexual relations. Studies that explore this behavior have observed the same relationship.[8,10,13]

Sexual and reproductive behaviors appear to be influenced by structural opportunities and by cultural norms. Poorer and less educated women had a lower percentage

[h] Ministry of Health (BR). PNDS 2006. [National Demographic Survey on the Health of Children and Women]. Report. Brasília; 2008 [cited 2010 May 10]. (Final Report). Available from: http://bvsms.saude.gov.br/bvs/pnds/img/relatorio_final_pnds2006.pdf

Table 6. Percentage of women according to the implications that result after they became pregnant before age 20 years.[a]

Implications of changes after pregnancy	%
Love and conjugal life[b]	
Very positive	62.6
Somewhat positive	13.7
Little or no positive implication	23.8
Total (n = 1,727)	100.0
Social life[c]	
Very negative	7.6
Somewhate negative	12.1
Little or no negative implication	80.3
Total (n = 1,752)	100.0
Self-esteem[d]	
Positive implication	96.2
Negative implication	3.8
Total (n = 1,747)	100.0

[a] Responses valide for women age 25 years or less at time of interview and who had live born children before age 20 years.
[b] "Very positive" when the women agreed with at least 3 of the following items: "more respected as a mother", "relationship with husband improved", "married and made a home"; "Somewhat positive" when agreed with 2 items; and "Little or no positive implication" when agreed with only 1 or no items.
[c] "Very negative" when the women agreed with at least four of the following items: family rejection, partner abandonment, life became more difficult, lost my friends and became more difficult to date; "Somewhat negative" when agreed with 3 items; and "Little or no negative implication" when agreed with 2, 1 or no items.
[d] "Positive" when the woman agrees with at least one of the following items: feel better about myself and have reason to live; and "Negative" when they did not agree with either item.

of current contraceptive use and contraceptive use at first sexual intercourse, which demonstrates more risky behavior compared to women of higher social standing. Contraceptive use is one explanation for why women of group B did not become pregnant.

The results on sources for contraception show that women of lower social status have a greater dependency on the Public Health System (SUS) in order to meet their reproductive rights. In the same manner, the significant difference encountered between the economic groups, for the use of the day-after pill, may indicate a greater difficulty in access to emergency contraception among women of group A.

There was a significant association between pregnancy before age 20 years and increased poverty and lower education. On the other hand, not all youth that began sexual activity became pregnant. Among those that became pregnant, the average age of sexual initiation was younger than those that did not become pregnant.

There were various reasons for pregnancy before age 20 years. The majority of youth became pregnant in part due to lack of knowledge about contraception or contraceptive failure, independent of education and economic status. This result can be understood within the context of sexual experimentation,[4,9] which involves negotiating gender norms in addition to the difficulty in managing the appropriate use of contraceptive methods. Compounding this is a widespread lack of knowledge of reproductive physiology, as was also identified by other studies.[5,7] This issue is a shortcoming of both research and interventions, which merits attention.

The occurrence of pregnancy is often considered an absence of a life plan. Access to better education, better living conditions and greater opportunity would favor increased options during youth trajectories.[8,10,13] In the absence of these structural and influencing conditions, pregnancy, although unplanned, constitutes a life plan and not an absence of planning, as found in the present study.

Among the positive and negative implications from pregnancy, women perceived more social and personal advantages from this reproductive decision. International studies show similar results.[1,3] A high percentage of youth reported increased self-esteem, independent of economic class and education. Nonetheless, ambiguities appear in regards to sexual relations and conjugal unions, possibly related to the power dimensions of gender relations.

There have been significant advances over the past 20 years in the public policies directed to youth, such as the creation of the National Council of the Child and Adolescent, the Program of Adolescent Health Care, the Program to Prevent and Control Sexually Transmitted Diseases and the insertion of sexual education in national education curriculum, among others. Non-governmental organizations that address sexual and reproductive health have shown strong performance in increasing awareness and conducting interventions about sexual education and the prevention of HIV.[11]

Despite great advances, it is necessary to contemplate actions that address the diversity of Brazilian youth. In order to better understand the dynamic of youth trajectories regarding the transition to adulthood and its perceived benefits, interventions should consider the economic, social and cultural determinants for preventing pregnancy, sexually transmitted diseases and HIV.[9]

Sexual education programs in public schools have been minimally implemented.[12] In addition to structural and cultural factors, institutional factors that influence reproductive behavior should be considered.

Contraceptive and reproductive decisions are made in the context of illegal abortion, little information and the inadequate provision of emergency contraception in Brazil.[12] After all, would be the benefits for the trajectories of these youth, if both structural and institutional opportunities could be increased?

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