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Introduction

The HIV/AIDS epidemic is one of the most complex and challenging pandemics ever faced by mankind. In Brazil, the epidemic is dynamic, due to the social and regional contrasts within this country and also because of the responses from the State and from Brazilian society, which have caused significant changes to a scenario that had been shown to be of great concern.

This is not the place to once again go over the success of the actions implemented by Brazil over the course of these three decades of the epidemic, but to reaffirm that controlling the spread of HIV/AIDS is an ever-present challenge that requires accurate and continuous monitoring.

The Brazilian epidemic is made up of distinct regional subepidemics. To understand them, studies with national coverage allowing data collection at different levels of geographical separation are required. Such studies should establish reference parameters for local studies on specific populations of greater vulnerability to HIV/AIDS.

Notwithstanding the existence of Brazilian studies focusing on specific aspects of HIV/AIDS prevention and its interfaces with sexuality, no studies of national coverage documenting changes in sexual behavior among the Brazilian population, including factors associated with HIV prevention, are yet available.

The survey "Sexual Behavior and Perceptions of the Brazilian Population regarding HIV/AIDS", conducted both in 1998 and in 2005, was carried out on the initiative of the National STD/AIDS Program in partnership with the Brazilian Center for Analysis and Planning (*Centro Brasileiro de Análise e Planejamento*, Cebrap) and enabled temporal and geographic cross-sectional comparisons. A preliminary report on the first results from the 2005 survey was presented to the Ministry of Health in 2005.

This supplement of the *Revista de Saúde Pública* presents the results from the 2005 survey, making comparisons between its findings and those of the 1998 survey whenever possible. Changes in sexual representations, behavior, attitudes and practices among the Brazilian population and its knowledge of HIV/AIDS over the last few years, starting in 1998, have been emphasized.

NATIONAL AND INTERNATIONAL CONTEXT OF SEXUALITY SURVEYS

Concern regarding the sexual behavior of individuals and populations has been present in debates relating to population policies and pregnancy prevention programs for four decades. However, with the emergence of the HIV/AIDS epidemic, studies on sexuality have gained legitimacy in a variety of forums and have been definitively incorporated as an instrument for understanding events connected with sexual and reproductive health.

Since sexual transmission of HIV accounts for a large proportion of the AIDS cases in countries affected by this epidemic, it becomes essential to understand which population groups the epidemic has spread in most rapidly; how sexual practices influence the vulnerability of individuals and population groups to the epidemic; and what the barriers to the changes in sexual behavior demanded by AIDS are.

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Within this context, qualitative and quantitative studies have been developed with the aim of producing information capable of reducing the gaps in knowledge that exist in relation to these questions. As part of these efforts, increasing production of data from probabilistic samples of national scope can be seen. In the United States in the 1990s, a national survey on sexual health and behavior was conducted: the National Health and Social Life Survey (NHSLs).¹² In Europe, a series of national surveys on sexual practices and behavior was developed in France, Belgium, Germany, Finland, Spain, Portugal and Norway between 1990 and 2000.^{9,11} In 2001-2002, Australia conducted its first national study.¹⁵

Subsequently, comparative perspectives relating to temporal dimensions and sociocultural contexts have been developed. Hubert et al⁹ and, more recently, Wellings et al¹⁷ examined the behavioral patterns, attitudes and habits prevailing in each country, with the other countries as the backdrop, and explored factors associated with the sociocultural contexts.

In the United Kingdom, the National Survey of Sexual Attitudes and Life Styles (NATSAL) conducted in 1990¹¹ was repeated in 2000, thus making it possible to analyze the evolution of sexual behavioral patterns among the population over time. Likewise, the survey conducted in France in 1992 was repeated in 2006, enabling comparative analyses from which the preliminary data were published as a press dossier in 2007.¹⁰

In Latin America, population-based surveys of national coverage on sexual practices and behavior have been carried out in Brazil, Chile⁵ and Argentina.¹⁴

In Brazil, studies on sexual behavior and perceptions of the risk of HIV, with national coverage, started to appear in the mid-1990s in response to the growth in the numbers of AIDS cases diagnosed and notified to the Ministry of Health. Until then, information on condom use was to a large extent associated with contraception and generally came from surveys among women of reproductive age who were married or in stable relationships. Within this context, condom use was infrequent among the repertoire of contraceptive methods reported by these women.²

A module on STD/AIDS was added to the National Demographics and Health Survey (*Pesquisa Nacional de Demografia e Saúde*, PNDS) in 1996. This dealt with the level of knowledge of the ways in which sexually transmissible diseases are transmitted and self-perceived risk.¹ PNDS-1996 provided health professionals, managers, public policy formulators and the general public with information on condom use as a means of preventing HIV at national level.

The survey “Young People and Sexuality” was applied to students, parents and the technical and teaching staff of

schools in 13 Brazilian state capitals^a and in the Federal District by UNESCO in 2000. It produced information on condom use, reasons for using condoms and parents’ attitudes towards their use and distribution in schools.⁴

In Brazil, the first survey on sexual practices and behavior among the Brazilian population aged 16 to 65 years, with national coverage, was conducted by Cebrap between 1998 and 1999, on request from the National STD/AIDS Coordination Office, with funding from the Ministry of Health. This survey, “Sexual Behavior of the Brazilian Population and Perceptions of HIV/AIDS” involved interviews with adults, starting from a multi-stage probabilistic sample that was representative of the Brazilian population living in urban areas of the country. The objective of the survey was to study the sexual behavior, attitudes and practices among the Brazilian population and to evaluate its knowledge of HIV/AIDS and other sexually transmissible diseases, with the aim of formulating public policies for STD/HIV/AIDS prevention. In this respect, the survey provided baseline information on sexuality and STD/AIDS that formed reference parameters for subsequent investigations. The results from this survey are summarized in the book “Sexual Behavior of the Brazilian Population and Perceptions of HIV/AIDS.”³

In 2002, the Pregnancy during Adolescence survey (*Gravidez na Adolescência*, GRAVAD) furnished a detailed panorama of the sexual and reproductive practices and behavior of young people in Salvador, Rio de Janeiro and Porto Alegre.⁸

In 2003, the study “Condom Use: National Survey – Ministry of Health/Ibope” was carried out with the aim of surveying opinions and practices relating to HIV/AIDS prevention among the Brazilian population. The study was based on a probabilistic sample of the Brazilian population aged more than 14 years, and it enabled evaluation of sexual practices and estimation of the prevalence of condom use and access to anti-HIV tests, at national level.⁶

With the aim of constructing indicators for systematic performance assessment, the PN-DST/AIDS together with the Department of Health Information of the Oswaldo Cruz Foundation and the Centers for Disease Control and Prevention of the United States carried out the “Survey of Knowledge, Attitudes and Practices among the Brazilian Population aged 15 to 54 years”, in 2004. This national-level survey based on a probabilistic sample of individuals of both sexes produced information on, among other matters, condom use over the preceding 12 months, in relation to both stable or permanent partners and casual partners, according to age group, and explored the determinants for condom use.¹⁶

^a Belém, Fortaleza, Maceió, Salvador, Recife, Manaus, Cuiabá, Vitória, Goiânia, Florianópolis, São Paulo, Rio de Janeiro e Porto Alegre.

SURVEY "SEXUAL BEHAVIOR OF THE BRAZILIAN POPULATION AND PERCEPTIONS OF HIV/AIDS 2005"

The survey "Sexual Behavior of the Brazilian Population and Perceptions of HIV/AIDS 2005" had the main objective of identifying possible changes among the sexual representations, behavior, attitudes and practices of the Brazilian population aged 16 to 65 years, and its knowledge of HIV/AIDS, between 1998 and 2005. The aim was to obtain elements that would make it possible to reorient the preventive intervention strategies relating to sexually transmissible infections (STI) and HIV. This 2005 survey also had the aim of analyzing the social causes of these phenomena, especially the geographic contexts within which these practices and behavioral patterns take place and their gender, social class, ethnicity and generational dimensions.

Survey team

Under the scientific coordination of Elza Berquó, a team of researchers was formed, which was responsible for drawing up the sampling plan; revising and expanding the questionnaire used in 1998; and data analysis. Although the whole team participated in discussing each stage of the project, each researcher took responsibility for specific dimensions of the study, in accordance with their field of experience, as follows: Wilton Bussab for the sampling plan; Francisco Inácio Bastos for aspects relating to drug use and STI; Ivan França Junior for aspects relating to anti-HIV testing and sexual violence; Vera Paiva, Regina Maria Barbosa and Elza Berquó for the dimensions of knowledge of HIV/AIDS behavior norms and sexual practices. In addition to these researchers, the researcher Sandra Garcia was the project team member responsible for executive coordination of the survey. The coordination team also had technical support from two statisticians, Mitti A. Hara Koyama and Liliam P. Lima.

Data collection instrument

The study used a standardized questionnaire that was applied by means of face-to-face interviews. The questionnaire applied was adapted from the 1998 edition, in order to ensure comparability between the data. For this, the basic modules were maintained but some were expanded and developed (Table). In the end, the modules in 2005 included: identification, opinions on sexuality and sexual norms, sexual experiences and sexual initiation, condom use (female and male), sexual practices and behavior, knowledge and prevention of HIV/AIDS, reproduction and health, and testing for HIV, STD and drug use. A new module on the topic of sexual violence was introduced, with the name "life experiences". This module was based on a questionnaire developed by the World Health Organization.⁷

Pretesting and survey fieldwork

Pretesting of the field instruments was done by the Vox Populi Institute, in the municipalities of Sousa (State of Paraíba) and Itajaí (State of Santa Catarina), respectively with high and low HIV infection rates. 299 interviews were held: 149 in Sousa and 150 in Itajaí. The survey coordination office was responsible for planning, methodological discussions, training of coordinators and field interviewers, following up the process of critical review and data consistency assessment and analyzing the results. From analysis of the quality of the interviews and the difficulties encountered (refusals and failure of interviewees to understand specific questions), the strategies adopted were redefined and the field instruments were refined.

The survey fieldwork was carried out by the Brazilian Institute for Public Opinion and Statistics (*Instituto Brasileiro de Opinião Pública e Estatística*, Ibope), under supervision from Cebap, between June and August 2005. Interviews were held with 5400 men and women aged 16 to 65 years.

During the fieldwork, the men and women were interviewed by same sex researchers. Before the interview, the interviewer read out explanations about the objectives of the project. The interviewees signed an informed consent form. For interviewees under the age of 18 years who were not married or in stable relationships, agreement from an adult responsible for this individual was needed, by means of signing a specific consent statement. Insofar as possible, the interview was held under conditions of privacy.

During the training process, all the interviewers involved in the project received a manual containing guidance about the field procedures, ways of dealing with the questions and concepts relating to the topic.

Likewise, guidance regarding the criteria for listing and replacing households was given by the technical team of the project. The residents aged 16 to 65 years in each household that was drawn were placed in order according to sex and age, using the following criteria: the oldest man was put in first place, with the number 1, followed by the next oldest with number 2, and so on until reaching the youngest woman. After placing the residents in order, the person to be interviewed in the household was selected by using draw tables suitable for households of varying sizes.¹³

Database preparation

The work of ensuring consistency and preparing the databases to enable comparison of the data with what was obtained in 1998 took place between October 2005 and July 2006. The project coordination team at Cebap was in charge of this, in partnership with Ibope.

Variables common to all the analyses were categorized by the coordination team and used by the researchers responsible for the analyses.

The characteristics of the sampling plan and the results from the analyses on the various topics covered will be presented in the articles of this supplement.

Table. Comparison of the modules and dimensions investigated in the questionnaires applied in 1998 and 2005.

Module	Dimensions investigated	
	1998	2005
Identification	Identification of the household Characteristics of the household group Personal identification	Identification of the household Characteristics of the household group Personal identification
Opinions on sexuality and sexual norms	Meanings relating to experiencing sexuality and sexual practices Sexual norms inside and outside of marriage Relationship between risk and sexual experience	Meanings relating to experiencing sexuality and sexual practices Opinion relating to sex education for young people Sexual norms inside and outside of marriage Relationship between risk and sexual experience
Sexual experiences and sexual initiation	First sexual intercourse and source of information Sexual practices over the course of life	First sexual intercourse and source of information Sexual practices over the course of life
Condom use (female and male)	Questions about male condom use over the course of life, distributed throughout the questionnaire	Male condom use over the course of life Male condom use over the course of life [repetição!] Ways of acquiring condoms Use of emergency contraception
Sexual practices and behavior	Sexual practices and condom use with a stable partner Sexual practices and condom use with a casual partner	Picture regarding partners, sexual practices, partner's sex and condom use over the last 12 months Sexual practices and condom use with a stable partner Sexual practices and condom use with a casual partner Sexual practices and condom use during last sexual intercourse Sexual practices and condom use with a partner of the same sex
Knowledge/prevention of HIV/AIDS	Perception of risk Knowledge of ways of transmitting and preventing HIV Sources of information	Perception of risk Knowledge of ways of transmitting and preventing HIV Sources of information Prejudice in relation to HIV/AIDS
Life experiences	Questions about sexual negotiation distributed throughout the questionnaire	Sexual negotiation Domestic violence Sexual violence during childhood and adulthood
Reproduction and health	Number of children Reproductive intention Use of contraceptive Undergoing HIV test and reason why Knowledge of STD Occurrence of STD (self-reported)	Number of children Reproductive intention Use of contraceptive
HIV testing	-	Undergoing HIV test and reason why Number of tests performed Place where last test was performed and quality of attendance
STD	-	Knowledge of STD Occurrence of STD (self-reported)

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