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Use of Modern Contraception and Fertility: Some Results about Krenak Indigenous People, Brazil

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Abstract

Indigenous populations living in villages in Brazil have presented high total fertility rates (TFR) that have increased over time, particularly in Amazon peoples. Virtually nothing is known on indigenous fertility levels in villages located in other regions of Brazil. The objective of this article is to examine the use of modern contraception and fertility among Krenak women, who reside in the state of Minas Gerais, Southeast Brazil.The data used in this work were produced from the survey *"Spatial Distribution of Malnutrition of the Child Population and of the Prevalent Nosology for the 2000 to 2006 Period"*. The description of the fertility of the Krenak women was performed by calculating the TFR for the period between 2003 and 2007 and of cohort, and the information about the use of contraceptives was also gathered directly through the questionnaire.The TFR for the period between 2003 and 2007, in the Krenak indigenous land, was 3.6 children per woman, whereas the TFR for cohort – for women aged 50 or more, was 7.5 children. The most common contraceptive method used among Krenak women is the birth control pill (55.6%). Taking into account evidences from Amazon peoples, our results show low level of fertility among Krenak women. Such a result can be partially explained by the relatively high prevalence of contraceptive use of modern methods. Furthermore, it is

probable that other variables could explain such differences, such as education and health access.

Keywords

Fertility, indigenous people, Krenak, Brazil

Introduction

Indigenous populations living in villages in Brazil have presented high total fertility rates (TFR) that have increased over time, particularly among Amazon peoples (Dias Júnior et al. 2008). Virtually nothing is known on indigenous fertility levels in villages located in other regions of Brazil. Taking this gap into consideration, the objective of this paper is to examine the use of modern contraception and fertility among Krenak women in the State of Minas Gerais, southeast Brazil. In Minas Gerais the indigenous population is approximately 12,000 people, according to a census performed by the Federal University of Ouro Preto (UFOP) in 2007. This survey reveals that eight indigenous peoples reside in the State: Xakriabá, Maxakali, Krenak, Pataxó, Caxixó, Xukuru-Kariri, Pankararu and Aranã (Dias Júnior et al. 2008). The data used in this work were produced from the survey "*Spatial Distribution of Malnutrition of the Child Population and of the Prevalent Nosology for the 2000 to 2006 Period"*, coordinated by the Epidemiology Laboratory of the School of Pharmacy, of the UFOP. This investigation is based on Bongaarts analytical framework, which demonstrates that contraceptive use is a proximate determinant of fertility level (Bongaarts, 1978 and 1982). Such a relationship is negative, that is to say, the higher use of contraception the lower the level of fertility.

Data and methodology

The population of the Krenak indigenous land (KIL) is made up of 240 individuals, who reside in 57 houses dispersed over five villages: Pólo Atoram, Pólo Barca, Pólo Cacau, Pólo Cacique and Pólo Eme. Given that the objective of this study is to describe elements of female reproductive behaviour, only women aged 15 or older were selected, residing on KIL, totalling 72 women with 62 in reproductive age (15-49 years old). The fieldwork was carried out among the Krenak in April 2007. The description of the reproductive behaviour of Krenak women was performed by calculating the total fertility rate (TFR) for the period between 2003 and 2007 (for women aged 15-49), and of cohort (for women aged 50 or more). The information about the use of contraceptives was gathered directly through a questionnaire. The questions used were developed from the Demographic Health Survey (DHS) questionnaire. The questionnaire was pre-tested, using a vocabulary - that was easily understood by the target population. As the Krenak people are Portuguese speakers, there was no need to translate the questionnaires into the language Borum (Krenak native language). The questionnaires were administered by undergraduate students from UFOP. All fieldwork was accompanied by indigenous health agents. The study was approved by the ethics committee of the UFOP.

Results

The TFR for the period between 2003 and 2007, in the KIL, was 3.6 children per woman, whereas the TFR for cohort (women aged 50 or more) was 7.5 children. This represents a significant difference of almost four children. The difference may be evidence of the fertility decline among Krenak women; it may also suggests large generational differences towards the reproductive regime. The most common contraceptive method used among Krenak women is the birth control pill. This type represents 55.6% of the answers provided by respondents. It is interesting to highlight that use of the pill is common in all age groups. Another noteworthy point is the percentage of sterilized women (5.6%) and those who use male condoms (5.6%). Comparatively, 27.8% of Krenak women asserted that they do not use contraceptive methods.

Discussion

In general terms, high levels of fertility have been observed in the articles published about indigenous peoples living in Brazil, which along with the decline in infant mortality rates provide high levels of annual growth (McSweeney and Arps, 2005; Pagliaro et al. 2007). Santos et al. (2005), for example, analysed data from the censuses and the reproductive history of the Xavánte de Pimental Barbosa women in Mato Grosso, and built a historical record of TFR. In the 1957/1971 period, this TFR declined by 5.9. Subsequently, from 1972/1990, a recovery of TFR was observed and reached 7.9 children per woman. According the authors, Xavánte women claim that in the 1957/1971 period there was an increase in infant mortality, meaning they lost the will to have children because they did not want to see their offspring die. By the 1993-1997 period, among the Xavánte of Sangradouro-Volta Grande, the TFR was approximately 8.6 children, according to Souza and Santos (2001). Data compiled by Souza et al. (2011), reveal that the TFR found among the Xavante people in the period between 1999/2004 was 7.7 children. Campanário (2005) recorded a TFR of 10.1 children per woman among the Kaiabi Indians from the Xingu indigenous park, in the period between 1995 and 2000. According to the author, in the period between 1970 and 1975, the TFR was 5.3 children per woman in this indigenous village. Another case study, focusing on the Sataré-Mawé, in Amazonas State in 2002-2003 and carried out by Teixeira and Brasil (2005), found a TFR of 8.1 children per woman. Among the Kaiamurá, Pagliaro and Junqueira (2007) observed an increase in TFR during the years of 1970-1979 and 2000-2003. According to the authors, in the first period analysed, the TFR was 5.4 children, rising to 6.2 children in the second period. According to Souza et al. (2009), the TFR was 4.3 children in 1993-

1996 among the Bororo of Mato Grosso. Valencia (2010) identified a TFR of 6.3 children among Suruí de Rondônia women.

The aforementioned results from Amazon peoples show the fertility rate is fairly high among indigenous women residing in indigenous land in northern Brazil. This fact is interesting because among Krenak women, the reverse is true. Data from this study reveal that the fertility rate is in decline. In the 2003-2007 period, the Krenak TFR was already at 3.6 children per woman, a value well below those found among the aforementioned Xaváante (Flowers, 1994), Kaiabi (Pagliaro, 2005), Suruí (Valencia et al. 2010) peoples, among other groups. It is expected that regional factors have influenced the decline in Krenak fertility. It is probable that among Krenak women, the volume of information about modern ways of birth control is far greater and much more efficient than that observed among other indigenous peoples (this may be through television, continual contact with white society, or through greater access to health clinics). Another aspect that may explain the reduction in fertility is the percentage of Krenak women of reproductive age that used some form of contraceptive to prevent children (72%), with a large majority choosing birth control pills, a modern and efficient contraceptive and that requires access and a certain degree of knowledge about its use. This factor may be fundamental in terms of explaining the decline observed in the TFR of the Krenak people. As a counterpoint, it was observed that only 5.3% of Kisêdjê women (TFR of 6.7 children) who reside in the Xingu National Park, in Mato Grosso, used hormonal contraceptives in the 2000-2007 period (Pagliaro et al. 2009). Among the Yudjá women, residents of the same indigenous land, the fertility observed in the 2000-2007 period was 8.8, and none of these women were using hormonal contraceptives (Pagliaro et al. 2009).

Conclusion

The reproductive behaviour among Krenak people differs greatly from results obtained from other indigenous people residing in indigenous land. Taking into account evidences from Amazon peoples, our results show low level of fertility among Krenak women residing in Minas Gerais in southeast Brazil between 2003 and 2007. Such a result can be partially explained by the relatively high prevalence of contraceptive use of modern methods in Krenak village (more than 70%). Furthermore, it is probable that other variables could explain such differences, such as education and health access. On this point, future research is necessary to identify if such possible variables exist and to define what the variables are that could explain these differences. We believe that the results of this survey reveal the importance of studies about sexual and reproductive behaviour among indigenous populations. It is important to produce more data, by ethnic group, in

order to identify the reproductive patterns of the indigenous population residing throughout Brazil.

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