ABSTRACT
Objectives: to analyze the evolution of pre-adolescent and adolescent fertility rates and the profile of teenage pregnancy in Brazil from 1994 to 2014. Method: this is an ecological, epidemiological study, with the temporal trend (retrospective and longitudinal) with a quantitative approach that it will use the pre-adolescent and adolescent population of the five Brazilian regions and their respective states as a unit of analysis. The data will be extracted from the information of the Live Birth Information System available in DATASUS. For the descriptive analyses, they will be transported to Microsoft Office Excel and SPSS. Expected results: to analyze and evaluate the evolution of fecundity rates in pre-adolescents and adolescents, as well as to outline the profile of teenage pregnancy in Brazil, from 1994 to 2014. Descriptors: Pregnancy; Adolescent; Education; Health.

RESUMO
Objetivos: analisar a evolução das taxas de fecundidade em pré-adolescentes e adolescentes, como também o perfil da gravidez na adolescência no Brasil, no período de 1994 a 2014. Método: estudo epidemiológico, ecológico, de tendência temporal (retrospectivo e longitudinal), de abordagem quantitativa, que utilizará como unidade de análise a população de pré-adolescente e adolescente das cinco regiões brasileiras e respectivos estados. Os dados serão extraídos das informações do Sistema de Informação de Nascidos Vivos disponíveis no DATASUS. Para as análises descriptivas, os mesmos serão transportados para Microsoft Office Excel e SPSS. Resultados esperados: analisar e avaliar a evolução das taxas de fecundidade em pré-adolescentes e adolescentes, bem como traçar o perfil da gravidez na adolescência no Brasil, tendo o recorte de 1994 a 2014. Descritores: Gravidez; Adolescente; Educação; Saúde.

RESUMEN
Objetivos: analizar la evolución de las tasas de fecundidad en pre-adolescentes y adolescentes y el perfil de embarazo en la adolescencia en Brasil en el periodo de 1994 a 2014. MÉTODO: estudio epidemiológico ecológico, de tendencia temporal (retrospectivo y longitudinal), de enfoque cuantitativo, que utilizará como unidad de análisis, la población de pre-adolescente y adolescente de las cinco regiones brasileñas y respectivos estados. Los datos serán extraídos de las informaciones del Sistema de Información de Nacidos Vivos disponibles en el DATASUS. Para los análisis descriptivos, los mismos serán transportados para Microsoft Office Excel y SPSS. Resultados esperados: analizar y evaluar la evolución de las tasas de fecundidad en pre-adolescentes y adolescentes, así como trazar el perfil del embarazo en la adolescencia en Brasil, teniendo el recorte de 1994 a 2014. Descriptores: Embarazo; Adolescente; Educación; Salud.
INTRODUCTION

The adolescent is in the development phase, being studied in its circumstantial expression of geographic, socio-cultural, economic and historical character with specific biopsychic, intellectual and emotional characteristics facing all the adversities of a society in a fast process of transformation. Considering the stage between childhood and adulthood, marked by biological, psychic and social transformations, adolescence is a period of great importance for growth and development that culminates the entire process of biopsychosocial maturation of this population.1

In 1989, the General Assembly of the United Nations adopted the Convention on the Rights of the Child, ratified by Brazil in 1990, introducing in normative terms the intrinsic value of children and adolescents as human beings; The need for special respect for their status as a developing person; Recognition as a subject of rights; And its absolute priority in public policies.2

In 1989, the Ministry of Health officialized the Adolescent Health Program (PROSAD), aimed at regulating health actions at the age group of 10 to 19 years old.3 This Program was one of the outcomes of the 42nd World Health Assembly, promoted by the World Health Organization (WHO). PROSAD was the first program to be specifically concerned with adolescent health, representing a breakthrough regarding public health for this population. However, some aspects of the Program were contradictory for the guidelines and focus of action of the Unified Health System (SUS). Gradually, health care was decentralized and sought to approach the idea of health as a social right, understanding that young people are subjects with rights guaranteed by the constitution.4

Ten years after of the PROSAD officialization, the Adolescent and Youth Health Area (ASAJ) was created, which now includes people between 10 and 24 years old. From then on, the new area became responsible for articulating various projects and programs of the Ministry that related to adolescence and youth.5

The specific female fertility rate of 15 to 19 years old is important because it characterizes adolescent fertility. In Brazil, between 2004 and 2014, this indicator increased from 78.8 to 60.5 children per thousand women in this age group, but the participation of this group in total fertility remained high, going from 18.4% to 17.4% in the same period.5

The reasons for the high pregnancy rate and sexually transmitted infection (STI) in adolescence are attributed to the non-use of contraceptive methods adequately due to the adolescent’s own denial of the possibility of conceiving, to casual sexual encounters, fact that for the adolescent, using the contraceptive method represents assuming their active sex life, and the lack of knowledge regarding the methods.6-8

A study found that when adolescents and pre-adolescents had their first sexual intercourse, they were not prepared to use a contraceptive method that would prevent them from having an STI or a pregnancy.9

It is important to emphasize that reproductive behavior varies according to the social group. Thus, the fertility curve is more rejuvenated in the less educated groups, as well as in the less favored of the population. Although pregnancy in adolescence occurs more frequently in the poorer groups, it cannot be denied that it occurs in all population strata, but its consequences may be more negative for adolescents whose social insertion allows them less access to material and immaterial goods.10

Brazil has managed to reduce the number of births in adolescents between 15 and 19 years old in the last decade by 30%. However, the age group of 10 to 14 years old remains unchanged, presenting the number of 27 thousand births each year, which represents 1% (one percent) of the total number of births in Brazil.11

The pregnancy in this period of life is highlighted to these adolescents from 10 to 14 years old. The conception that teenage pregnancy constitutes a major risk for both women’s and newborn health
has also contributed to its qualification as precocious and a public health problem.10

When a girl becomes pregnant, her present and future change radically, and rarely for the better. Their education may be disrupted, their employment prospects disappear, and their vulnerabilities to poverty, exclusion, and dependency are multiplied.12

In general, efforts - and resources - to prevent teenage pregnancy have focused on girls 15 to 19 years old. However, girls with the highest vulnerabilities, and facing the highest risk of complications and death due to pregnancy and childbirth, are those aged 14 or younger. This group of very young adolescents is often ignored by national institutions of health, education, and development, or they are beyond their reach because they are often in forced marriages and prevented from attending school or having access to sexual health and reproductive services.12

Therefore, this project aims to contribute to strategies to ensure the rights of these adolescents, including better access to health services and information about the care to be taken when initiating sex life to provide them with a better quality of life.

OBJECTIVES

● To analyze the evolution of fertility rates in pre-adolescents and adolescents, and to analyze the current profile of teenage pregnancy in Brazil between 1994 and 2014.

● To analyze the profile of pregnancy in pre-adolescents (girls aged 10 to 14 years old) in Brazil from 1994 to 2014.

● To analyze the profile of pregnancy in adolescents (young people aged 15 to 19 years old) in Brazil from 1994 to 2014.

● To evaluate the temporal trend of pregnancy in pre-adolescents (girls aged 10 to 14 years old) in Brazil from 1994 to 2014.

● To evaluate the temporal trend of pregnancy in adolescents (15 to 19 years old) in Brazil from 1994 to 2014.

METHOD

This study is ecological epidemiological, with a retrospective and longitudinal trend, with a quantitative approach, to be used as a unit of analysis for pre-adolescent and adolescent population belonging to the five Brazilian regions and their respective States. The space-temporal evolution of pregnancy in adolescence in Brazilian states and regions from 1994 to 2014 will be analyzed.

Ecological studies relate frequency to some characteristics or some effect of interest occurring in a geographic area as they compare the occurrence of the health-related disease/condition and the exposure of interest among aggregates of individuals by geographic area to verify the possible association between them.

The data to be used will be extracted from the SINASC information available in the Department of Informatics of the Unified Health System (DATASUS), which have secondary data of public domain, a system managed by the Department of Health Situation Analysis of the Secretary of Surveillance in Health, together with the State and Municipal Health Secretaries, whose access has no restriction on the research of the available variables. Therefore, this investigation is exempt from the evaluation of ethics and research committee.

All pre-adolescents, from 10 to 14 years old, and adolescents, from 15 to 19 years old, who were mothers in Brazil from 1994 to 2014 and had their live births registered at SINASC, will participate in this study. The period from 1994 to 2014 was chosen because it corresponds to the most recent data available since data from 2014 will only be available in 2020.

The variables will be year, mother’s age, mother’s education, marital status, the female resident population in the age group from 10 to 14 years old and from 15 to 19 years old, from 1994 to 2014, by Brazilian state.

The data will be transported to Microsoft Office Excel and SPSS for descriptive analyses, calculating the relative frequencies and epidemiological measures. Fertilization rates per thousand

English/Portuguese


1960
women from 1994 to 2014 and the rate of growth of fertilization from 1994 to 2014, according to the age range, from 10 to 14 years and 15 to 19 years will be calculated. Pearson’s correlation coefficient (“s” for sample and “p” for population) will be used to correlate the variables, ranging from -1 to 1. Linear regression will be used to analyze data on the variables time and fertilization rate by age group to estimate or predict future values of teenage pregnancy.

**EXPECTED RESULTS**

To analyze and evaluate the evolution of fertility rates in pre-adolescents and adolescents, as well as to outline the profile of teenage pregnancy in Brazil, from 1994 to 2014. Thus, it will contribute to the different health areas by providing data so that plans strategies can be created, improving care for groups of pre-adolescents and adolescents, thus helping professionals to perform their functions.

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Trend of pregnancy in adolescence...


