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Social determinants of health and teenage pregnancy: an integrative review

Abstract

According to the World Health Organization, adolescence, which begins at the age of 10 and ends at 19, is full of transformations and is marked by a complex process of biopsychosocial development. Pregnancy in adolescence is seen as precocious and represents one of the most worrying events related to sexuality and health. The aim of this study was to understand the relationship between the SDH and teenage pregnancy, and thus provide scientific support for the development of public policies aimed at this segment of the population. This is an integrative literature review, carried out in the PubMed, Scielo and LILACS databases. Articles published between 2011 and 2021 were selected. Fourteen articles were found, but after applying the eligibility criteria, only eight were analyzed. The results were grouped into categories: social determinants of health and teenage pregnancy, association between health education and teenage pregnancy, level of knowledge of adolescents. There was a relationship between the social determinants of health and teenage pregnancy, and a focus on sex education and access to contraceptive services and methods emerged. Despite these findings, it is still necessary to understand the macro determinants, in which the socio-economic, political and cultural spheres are fundamental and require greater public health interventions.

Keywords: teenage pregnancy, social determinants of health, heath education, public health

Volume 13 Issue 2 - 2024

Maria Helena Ribeiro De Checchi,[1] Carla Fabiana Tenani,[2] Alberto Sumiya,[1] Carolina Matteussi Lino,[3] Vitor De Checchi Garcia[4]

[1]Universidade Federal de Santa Catarina (UFSC)
[2]Faculdade Anhanguera Campinas e Faculdade de Medicina de Jundiaí
[3]Universidade Estadual de Campinas (UNICAMP)
[4]Pontifícia Universidade Católica de São Paulo (PUC-SP)

Correspondence: Maria Helena Ribeiro De Checchi, Universidade Federal de Santa Catarina (UFSC), Email mariahelenard@hotmail.com

Received: February 06, 2024 | **Published:** June 05, 2024

Introduction

According to the World Health Organization (WHO), adolescence is defined as a period of life that begins at the age of 10 and ends at the age of 19. This phase is full of discoveries and transformations and is marked by a complex process of growth and development, both in the physiological and psychosocial spheres.[1] In view of this, teenage pregnancy from a biopsychosocial perspective is seen as precocious and is one of the most worrying events related to sexuality at this stage.[2]

In Brazil, although the number of teenage pregnancies is falling, 1,043 teenagers become mothers every day. And per hour, 44 babies are born to teenage mothers, of which two are between the ages of 10 and 14.[3] Given this scenario, and with the aim of discussing prevention policies, Law No. 13,798 (January 2019) was created, establishing the National Week for the Prevention of Teenage Pregnancy.[4]

Furthermore, around the world, around 12 million girls between the ages of 15 and 19 and at least 770,000 girls under the age of 15 living in developing regions give birth every year.[1] In Brazil, around 75% of teenage mothers were out of school, according to the National Household Sample Survey (PNAD in Brazil).[5] In this respect, teenage pregnancy is an important public health problem, and the likelihood of pregnancy occurring at this stage of life is higher in communities with greater socio-economic fragility, marked by poverty and lack of both education and job opportunities.[6]

There are still an estimated 5.6 million abortions every year among adolescent girls aged 15 to 19. And of these, at least 3.9 million are carried out in inadequate, unsafe conditions, which contributes to maternal mortality, morbidity and lasting health problems.[1] As a result, it has become a public health problem in many countries, since it can lead to obstetric complications, with repercussions for the mother and the newborn, as well as psychosocial and economic problems.[7]

In this context, Social Determinants of Health (SDH) are defined as health inequities caused by the social conditions in which people are born, grow up, live, work and age.[8]

Studies have shown that teenage pregnancy occurs more frequently among girls with lower levels of schooling, income and access to public services, and thus in situations of greater social vulnerability.[3] Furthermore, for many adolescents, the advent of pregnancy can be understood as an attempt to find and maintain some social status, especially in spaces marked by inequalities of gender, race and class.[4] In this scenario, the SDH seem to be decisive when it comes to setting standards.

In addition, there is a lack of studies specifically addressing the relationship between teenage pregnancy and the SDH. Thus, the study and assessment of teenage pregnancy in relation to SDH is extremely important, given that the inseparable implications of this problem both in the social sphere and for the teenager-baby binomial can have family and social implications, with serious effects on the lives of the teenage mother, child and family.[2,9] Given this context, the guiding question emerged: What do studies show about the influence of the SDH on teenage pregnancy? To answer this question, the aim of this study was to understand the relationship between the SDH and teenage pregnancy, and thus provide scientific support for the development of public policies aimed at this segment of the population.

Material and methods

This is an integrative literature review whose purpose is to systematize information, interrelating it objectively in thematic categories.[10] The research was carried out following the stages defined by Whittemore and Knalf[11]: elaboration of the guiding question; selection of the sample; categorization of the studies; evaluation of the studies; discussion of the results; conclusion of the study. The process review was based on the recommendations of the Preferred Reporting

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Items for Systematic Reviews and Meta-Analyses (PRISMA) conference list.

A bibliographic survey was carried out between November and December 2020, in the PubMed, Scientific Electronic Library Online (Scielo) and Latin American and Caribbean Health Sciences Literature (LILACS) databases. The study retrieval period was considered the years 2011 to 2021.

The Descriptors in Health Sciences (DeCS) in Portuguese were used to scan the databases: "Gravidez na adolescência" e "Determinantes sociais da saúde" combined with the Boolean operator "AND", as well as its English and Spanish correlates: "Pregnancy in Adolescence", "Social Determinants of Health" e "Embarazo en la adolescência", "Determinantes sociales de la salud".

The inclusion criteria were: articles published in English and/or Portuguese that presented the relationship between teenage pregnancy and SDH. The exclusion criteria were: incomplete texts and the need to pay to access the work.

First, the title of the work was selected, followed by the abstract. The articles that remained were read in full. The articles were researched and evaluated by two researchers and, in the event of disagreement, the article was discussed for re-evaluation. In order to organize and summarize the information, as well as define a simplified database, the following variables were established: year, authors, title, study design/type, objective, method and outcome. This information was compiled into a table.

The careful analysis of the studies was based on extracting data for the categories and variables in a descriptive manner, interpreting them in the light of the guiding question, with the aim of highlighting the main conclusions. In this way, three categories emerged: SDH in teenage pregnancy; health education and teenage pregnancy; adolescent knowledge related to sexual and reproductive health.

Results

Fourteen articles were found (six in PubMed, three in Scielo and five in LILACS). Of this total, three articles were removed for being duplicates, leaving 11 to read the titles and abstracts. After reading the abstracts, nine articles remained to be read in full. One article was excluded as it did not answer the research question, resulting in eight studies for integrative analysis (Figure 1). The main findings from the studies, considering variables and categories, are shown in Table 1.

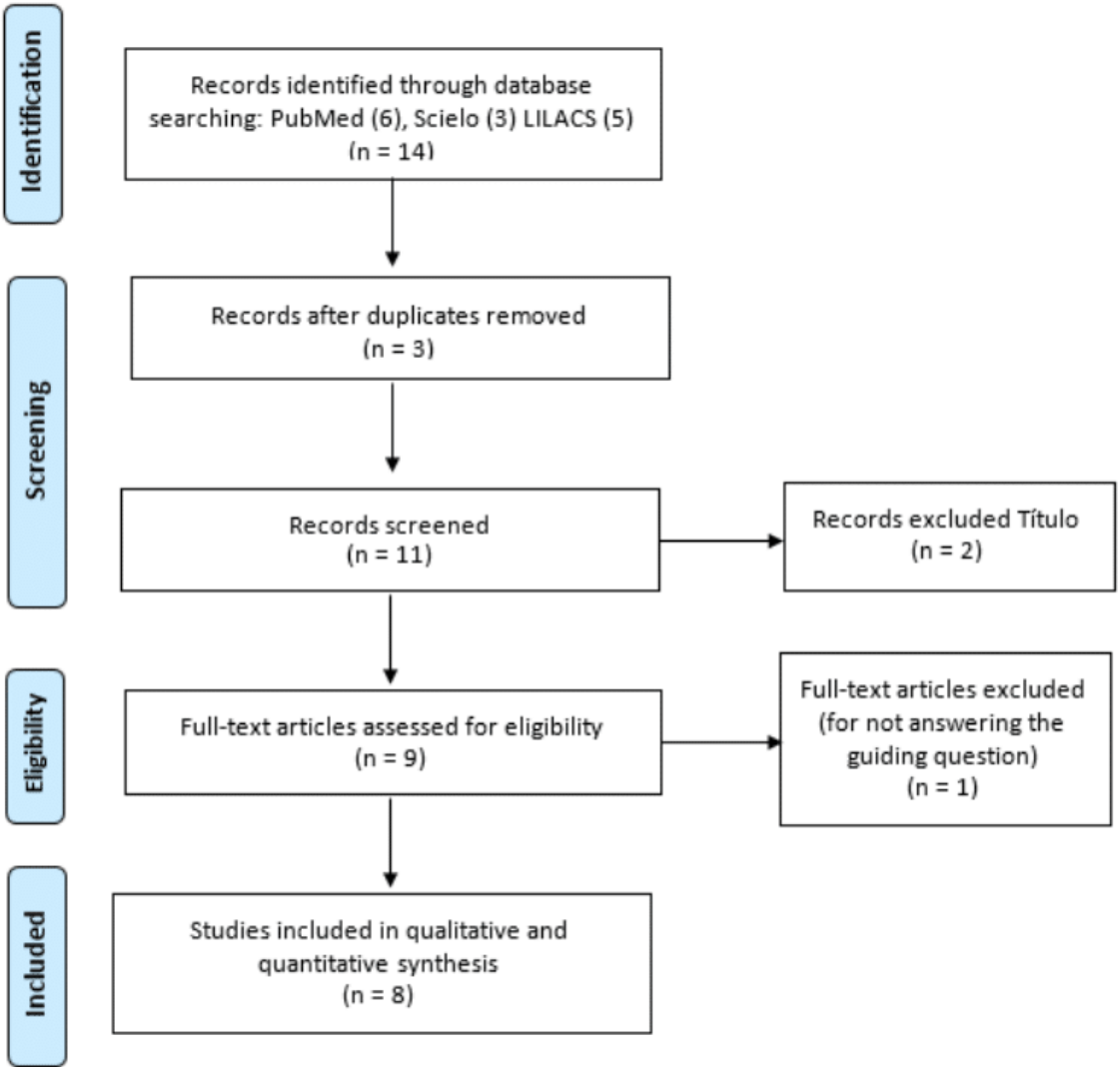

Figure 1 Flowchart of the selection of included studies.

Citation: De Checchi MHR, Tenani CF, Sumiya A, et al. Social determinants of health and teenage pregnancy: an integrative review. *MOJ Public Health.* 2024;13(2):111–115. DOI: 10.15406/mojph.2024.13.00447

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Table 1 Findings of the studies, after applying the eligibility criteria

Authors	Year	Journal	Objective	Design	Conclusion
Fandiño, et al.,[14]	2012	*Revista Cuidarte*.	To characterize the living conditions from the perspective of the social determinants of health in a group of adolescent mothers in Suba.	Quantitative descriptive study and implementation of a survey of an intended sample of 92 participants. It was carried out between January 2010 and June 2011.	Living conditions are important indicators in measuring the quality of life of teenage mothers, as this is a population that is in a state of vulnerability.
Odejimi, et al.,[11]	2014	*Journal of Human Growth and Development*.	To identify the social and economic influencers of teenage pregnancy in order to support the development of best practice approaches to reduce its incidence in Africa.	Data sets from the World Bank Organization between 2008 and 2010 specific to 51 African countries were used in the study. Independent t-tests, Spearman's correlation and regression analysis were carried out.	It was concluded that a practical approach to reducing the rate of teenage pregnancy in Africa is to implement strategies and policies aimed at improving a country's female literacy rate, healthcare expenditure and GDP per capita.
Gómez, et al.,[5]	2018	*Pan American Journal of Public Health*.	To determine the association between teenage pregnancy and socioeconomic factors and to estimate social inequalities among adolescents in Mexico in 2015.	A study based on 2015 birth records of female adolescents aged 15 to 19.	The study concluded that marginalization and poverty have a significant association with pregnancy and fertility rates in adolescents.
Seth, et al.,[15]	2018	*Ochsner Journal.*	To identify the social determinants related to child marriage that were extracted from two patients seen by the authors while providing mobile health services to the community in rural Mewat, India.	An exploratory and participatory case study. The consent forms were translated into Hindi (the local language). In keeping with societal norms, a woman was present during the interview as the interviewer was a pediatrician trained in the United States. The author visited two family homes to observe first-hand the social determinants related to child marriage.	The social determinants of child marriage identified in these case studies are indicative of a patriarchal system that prevents women from getting an education, earning a living and becoming citizens. Preventive measures and anticipatory guidance to prevent child neglect, abuse and child marriage must become a part of routine medical management.
França, et al.,[4]	2020	*International Journal of Environmental Research and Public Health*.	To assess the health literacy of young pregnant adolescents (ages 13-18) and a comparable group of young pregnant women (ages 23-28) from a rural area in northeastern Brazil and to examine associated factors such as socioeconomic conditions, adequacy of prenatal care and social support from family and friends.	An exploratory cross-sectional analysis of the Adolescent and Motherhood Research (AMOR) project evaluated the health literacy of adolescent and young adult pregnant women in a rural area of northeastern Brazil and associated factors such as socioeconomic conditions, adequacy of prenatal care and social support from family and friends.	Lower health literacy was found among pregnant adolescents compared to adults. Worse results were also associated with self-perception of school performance compared to peers equal to others or worse and worse perceptions of income sufficiency.
Mejía de Arce, et al.,[9]	2019	*Universidad del San Salvador*.	To understand the social determinants that influence the frequency of pregnancy in adolescents aged 10 to 19 and to identify the relationship between social determinants of health and teenage pregnancy.	This was a descriptive observational study using a database of registered pregnant women and interviews with the participants.	It was shown that the adolescents studied have family, economic and social instability. Poverty, low school quality and the ability to decide and control their own life plans put this group at greater risk of pregnancy and early motherhood
Jaramillo-Mejía, et al.,[8]	2019	*Cadernos de Saúde Pública*.	To study teenage pregnancy in Colombia and suggest possible policy interventions.	A study based on univariate and multivariate analyses examining trends and correlations in adolescent births and infant mortality in Colombia between 2001-2011 using complete vital statistics.	The study showed that early childbirth in adolescence is a growing challenge. These mothers are at greater risk of losing their babies while they are poor and remain poor.
Brindis et al.,[3]	2020	*Adolescent Health, Medicine and Therapeutics*.	Conduct a retrospective review of the field of teenage pregnancy, to highlight lessons learned in each area and present ideas for future directions for the field.	Review article that summarizes trends and strategies around teenage pregnancy prevention, provides lessons learned and best practices, and presents ideas for future directions.	Future efforts include improving the content, quality and sustainability of education programs; using technology intelligently to improve health literacy; expanding access to services through telehealth and other delivery options.

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Discussion

According to França et al.,[12] globally, adolescent mothers aged between 10 and 19 are responsible for 11% of all births. As for medical care, the study found that this group has fewer prenatal visits than mothers aged between 20 and 35 and their babies are at greater risk of neonatal death than babies of older mothers. This lower demand for prenatal care may be related to factors such as denial about the pregnancy, rejection by family and society or even ignorance of the complexity of the gestational period.

Thus, teenage pregnancies are usually accompanied by high-risk biological complications.[13,14] For the mother, it can have serious consequences, such as severe anemia, miscarriage, premature birth, increased risk of pre-eclampsia, eclampsia, hemorrhage, among others. In terms of the child's health, this can include low birth weight, intrauterine growth retardation, perinatal complications and even death.[12,13,15] This has therefore become a major public health problem, due to the biological and psychosocial cost it entails and because it is a current issue that has been little studied, as stated by Arce and Platero et al.[13]

In addition, Brindis et al.,[16] state that the difference in teenage pregnancy rates between high-, middle- and low-income regions reflects broader social disparities, such as educational level, poverty, structural and interpersonal racism. In this way, the state of vulnerability and conditions of marginalization are shown to be factors that are significantly associated with teenage pregnancy.[12,14,17] In this sense, the correlation between pregnancy and precarious social conditions can be considered the only option available to adolescents to obtain a social space and build their life project, based on gender stereotypes and family models that are generally perpetuated.[16]

In addition, in many societies with weak social determinants, where there is a shortage of cultural resources, sex is often one of the few forms of fun and contentment for adolescents, and perhaps this issue is one of the main pillars of this scenario around the world. In Brazil, this phenomenon seems to occur to the detriment of what is recommended in Article 4 of the Statute of the Child and Adolescent (ECA, in Brazil), which guarantees that the state provides food, education, health, leisure, professionalization, culture, dignity and respect for all children and adolescents.

In addition to the impact of socioeconomic conditions in this context, the lack of knowledge about health care and access to services, as well as contraceptive methods, are important barriers to preventing teenage pregnancy.[14] Thus, these factors are related to less healthy choices, riskier health behavior and inadequate use of health services, as evidenced by Brindis et al.[16]

Gómez & González.,[14] point out that adolescents' knowledge of health services in several Latin American countries is limited. In this sense, the low level of sexual and reproductive health literacy among young people seems to influence the occurrence of pregnancies during this period, which are therefore directly associated with poor health outcomes for the mother-baby binomial.[16]

Furthermore, despite Brazil having the highest rates of teenage pregnancy in Latin America (Ministry of Health, 2021), measures to solve this problem are still not very effective. Poor educational conditions, unprepared families and insufficient public health policies for the most vulnerable populations are just some of the factors that foster the sad reality of the majority of teenage pregnant women. Consequently, it is essential to take a holistic and empathetic look at these women who, despite their age, face intense pain that in some cases lasts a lifetime.[18–20]

Conclusion

It can be inferred that the SDH are associated with teenage pregnancy, and that this phenomenon is accentuated in contexts of greater vulnerability and in the presence of unfavorable biopsychosocial factors. Therefore, in addition to focusing on sex education and optimizing access to services and contraceptive methods, it is necessary to understand early pregnancy in its macro determinant aspect, in which the socio-economic, political and cultural spheres are fundamental and require greater interventions.

Acknowledgments

None.

Conflicts of interest

The authors declare there is no conflict of interest.

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Citation: De Checchi MHR, Tenani CF, Sumiya A, et al. Social determinants of health and teenage pregnancy: an integrative review. *MOJ Public Health.* 2024;13(2):111–115. DOI: 10.15406/mojph.2024.13.00447