

Births to Teens in Wisconsin: Targeting High-Risk Populations

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ABSTRACT

Background: Adolescents giving birth represents an important public health issue with social, economic, and health-related consequences.

Objective: Compare birth rates and trends in birth rates among adolescents age 15-19 years in Wisconsin and the United States by race/ethnicity.

Methods: Teen birth rates from 1998-2002, and trends in birth rates from 1995-2002 for Wisconsin and the United States were compared by race/ethnicity using data from the Wisconsin Interactive Statistics on Health and data from the Centers for Disease Control and Prevention.

Results: The general statewide birth rates and birth rates for Wisconsin white teens were lower than national rates, while birth rates for black, Hispanic, and American Indian teens were well above national rates from 1998-2002. Disparities between births to minority adolescents and white adolescents were higher in Wisconsin than in the United States. Although teen birth rates in general have declined nationally and in Wisconsin, rates among Hispanics in Wisconsin have increased during the 1995-2002 period.

Discussion: Racial disparities in teen birth rates in Wisconsin far exceed national disparities. These disparities result from far-ranging, long-term social and environmental differences in underlying determinants of

health that relate to ethnic and cultural beliefs, variation in access to health care that provides family planning and reproductive health services, decreased availability of school-based clinics, lack of role models, education, and variations in income and social status. Wisconsin should focus its teen pregnancy prevention activities on the groups at highest risk.

INTRODUCTION

Teenagers giving birth is an important public health problem affecting the teen parents, their children, and society in general. Pregnancy and parenting in adolescence carry many social, economic, and health-related consequences for teens.¹ Children born to teenage parents are at increased risk for numerous problems including low birth weight, cognitive and behavioral problems, and substance abuse.^{2,3} Teen pregnancy costs taxpayers significant amounts each year.⁴

Given the adverse outcomes associated with teenage pregnancy, it is encouraging that the adolescent birth rate in the United States has generally been declining for the past 50 years.⁵ The nation attained its *Healthy People 2000* objective to decrease the teen birth rate to <50 births per 1000 females age 15-19 years.⁶ This decline is thought to be due to decreasing percentages of high school students who report ever having sexual intercourse,^{7,8} increased use of contraceptives,⁹ and increased use of effective, longer-lasting contraceptives.^{9,10}

The teen birth rate in Wisconsin is lower than the national rate and, similar to national trends, has been declining. From 1980 to 2003, the birth rate per 1000 females age 15-19 years decreased from 40 to 32 in Wisconsin, and from 53 to 42 in the United States. Although Wisconsin's statewide teen birth rate is lower than the US rate, wide variation exists in teen births by race/ethnicity. These differences were recently highlighted in a 2004 report from the Alan Guttmacher Institute, which found that Wisconsin African American teens' birth rates were higher than

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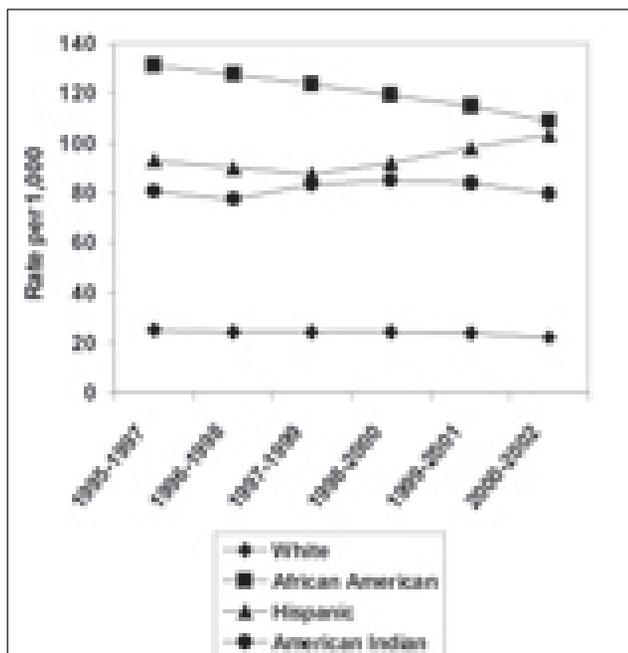


Figure 1. Wisconsin birth rates per 1000 females age 15-19 years by race/ethnicity, 3-year moving averages, 1995-1997 to 2000-2002.

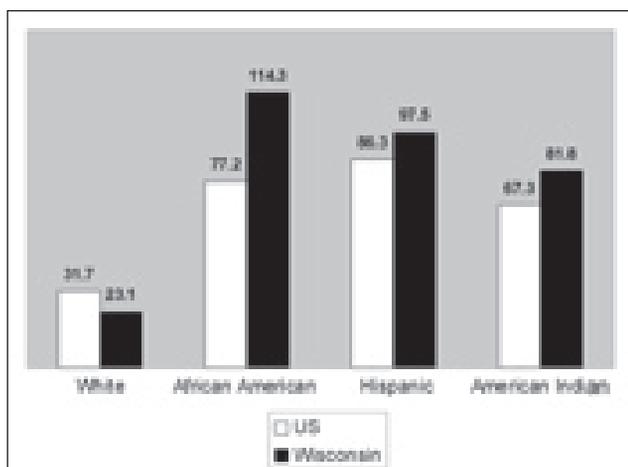


Figure 2. Birth rates per 1000 females age 15-19 years by race/ethnicity, US and Wisconsin, 1998-2002.

those of African American teens in all other states,¹¹ and in the Wisconsin Minority Health Report.¹² The goal of this paper is to analyze teen birth rates and trends in Wisconsin by race/ethnicity, and then compare them to US rates to establish which adolescents in Wisconsin are at highest risk for bearing children. Interventions preferentially involving adolescents and communities at highest risk for pregnancy in Wisconsin may hasten progress in decreasing the state's teen birth rate.

METHODS

We used data from 2 sources: the Wisconsin Interactive Statistics on Health (WISH)¹³ data system and the Centers for Disease Control and Prevention (CDC).¹⁴ We obtained the number of births to teens age 15-19 years in Wisconsin by race/ethnicity from WISH. We used data from CDC to determine numbers of births to teens in the United States. We also used population denominators from CDC for girls age 15-19 years in both Wisconsin and the United States for calculation of birth rates. We stratified our analysis by race/ethnicity using the following groups: non-Hispanic white (white), non-Hispanic African American (African American), Hispanic, and non-Hispanic American Indian (American Indian). We did not include Laotian/Hmong as a separate group in our stratified analysis because a population denominator was not available from CDC. United States and Wisconsin birth rates were calculated and compared by race/ethnicity for the period 1998-2002; we used data from the most recent 5 years in order to obtain more stable estimates for minority populations that may have small numbers of births.

We evaluated disparities between births to white teens and teens of other race/ethnicity in the United States and Wisconsin for the most recent 5 years. Rate ratios were calculated by dividing the rate of births in minority teens by the rate in white teens. We then compared rate ratios for teens in Wisconsin to those for teens in the United States.

Finally, to compare Wisconsin and US teen birth rate trends for the period 1995-2002, we also calculated their respective rates. We stratified birth rates for the period 1995-2002 by race/ethnicity. We then evaluated this time period using 3-year moving averages to allow comparison of trends and to smooth year-to-year fluctuations.

RESULTS

Wisconsin and US Birth Rates

The statewide teen birth rate in Wisconsin, using data from 1998-2002, was 34.8, and was well below the national total teen birth rate of 47.0 for this time period. The 5-year birth rate for white Wisconsin teens was 23.1, compared to a national rate of 31.7 for white teens. In Wisconsin, the white teen birth rate was the major determinant of the low statewide birth rate. Figure 1 shows that births to African American, Hispanic, and American Indian teens in Wisconsin were much higher than births to Wisconsin whites. Figure 2 shows Wisconsin's minority teen birth rates were higher than

their respective peers in the United States. African American teens in Wisconsin had a birth rate almost 1.5 times higher than African American teens in the United States.

Racial Disparities in Birth Rates

Figure 3 shows the disparities between white births and minority births were substantially higher in Wisconsin than in the United States. The largest Wisconsin to United States disparity was for African American teens; in Wisconsin, African American teens were almost 5 times as likely as white teens to give birth, whereas in the United States African American teens were about 2.5 times as likely. Similar results were seen for Hispanic and American Indian teens.

Trends in Birth Rates

Trends in teen birth rates statewide from 1995-2002 generally paralleled national declines. For whites and African Americans, the decline in Wisconsin was similar to the national decline during this period. However, American Indians in Wisconsin had a slower rate of decline than they did nationally. Wisconsin American Indians went from a birth rate of 80.5 in 1995-1997 to a rate of 79.4 during 2000-2002, while in the United States they went from a rate of 76.6 to 65.1 for this same time period. The trend for Hispanics in Wisconsin was opposite that in the United States as a whole. Although nationally Hispanic birth rates decreased from 94.5 in 1995-1997 to 85.7 in 1999-2002, in Wisconsin the rates increased from 92.6 to 103.1 during this same time period (Figure 4).

DISCUSSION

In Wisconsin, as in the United States, racial disparities exist in teen birth rates. African Americans, Hispanics, and American Indians are at considerably higher risk for having a baby in adolescence compared with whites. However, the disparities for these minority groups compared to whites in Wisconsin are substantially larger than disparities in the United States. Birth rates in minority populations are an important issue that must be addressed in order to improve the health of children and adolescents in Wisconsin.

Many underlying determinants exist for racial and ethnic disparities in adolescent birth rates. Contributors may include differences in ethnic and cultural beliefs, variation in access to health care that provides family planning and reproductive health services, decreased availability of school-based clinics, and lack of role models, education, income, and social status.

There are many approaches to reducing teen preg-

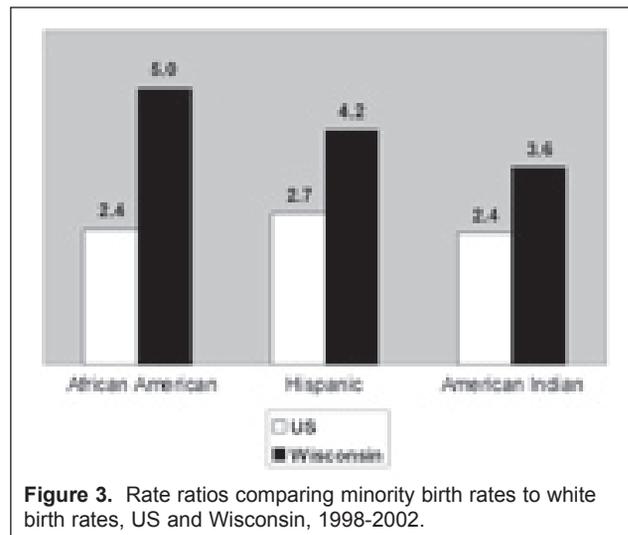


Figure 3. Rate ratios comparing minority birth rates to white birth rates, US and Wisconsin, 1998-2002.

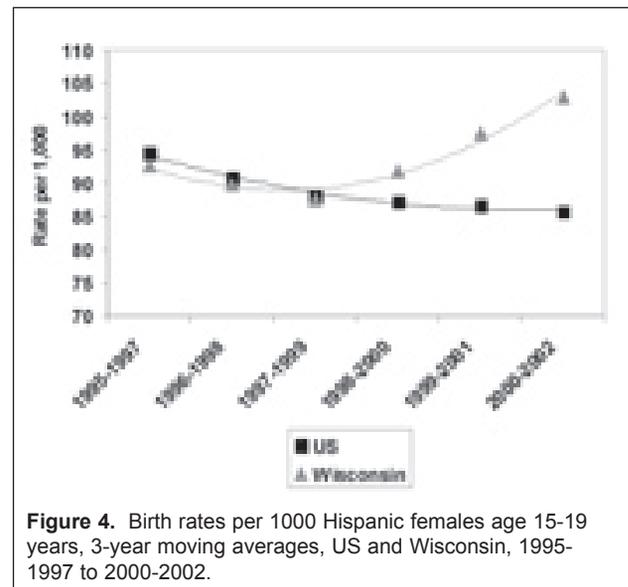


Figure 4. Birth rates per 1000 Hispanic females age 15-19 years, 3-year moving averages, US and Wisconsin, 1995-1997 to 2000-2002.

nancy and births. Programs aimed at primary-prevention (avoiding the first pregnancy) and secondary-prevention (avoiding repeat pregnancies) can include strategies such as education about sexuality and sexually transmitted diseases, promotion of abstinence, promotion of contraception, availability of emergency contraception, job training, scholastic encouragement, community service, and mentoring by role models. Although many programs have not been evaluated adequately, and some that have been studied do not appear to be effective, some successes do exist.^{1,15} The most successful interventions thus far have been those that are initiated at an early age and implement a multi-faceted approach, including sexuality education and youth development.¹⁶

It is also important to acknowledge that many con-

tributors to pregnancy and birth in adolescence are underlying determinants of racial/ethnic disparities but may not be directly addressed by programs designed to reduce teen births. Because of the complexity of these underlying determinants, individual minority communities themselves must participate in and lead efforts to reduce teen births at the individual, school, and community level.

Reduction of adolescent pregnancies is a focus of the Wisconsin Department of Health and Family Services (DHFS). DHFS has 2 stated goals: to delay initiation of intercourse among adolescents by encouraging abstinence, and to increase use of contraception among sexually-active adolescents. To meet these goals, DHFS works with a host of state and community partners in groups such as the department's Family Planning Council, the Adolescent Pregnancy Prevention Committee, the Wisconsin Abstinence Initiative for Youth, and the HIV Prevention Community Planning Council. These groups provide important policy and program guidance that is essential for success in this effort.

To specifically address DHFS's first goal, the abstinence program supports activities that help increase the number of Wisconsin adolescents who delay sexual activity, with an emphasis on reaching minority youth through several community grants targeting African American, Hispanic, and American Indian teens. These community programs are aimed at primary prevention of teen pregnancy by enlisting measures that promote abstinence, family connection, career goals, scholastic achievement, community service, and mentoring by role models.

To meet their second goal, DHFS has implemented the Wisconsin Medicaid Family Planning Waiver for reproductive-age women (ages 15-44 years) with personal incomes less than 185% poverty who need contraceptive services. Additionally, DHFS supports the development of partnerships among community-based organizations and mechanisms that assure services for sexually-active adolescents, including dual protection (effective contraceptive and STD methods).

Although *Healthiest Wisconsin 2010* has a goal of decreasing adolescent sexual activity and decreasing unintended pregnancy, both of which may affect teen births, no specific goals exist for teen birth rates of minority adolescents.¹⁷ A specific goal for reduction of teen births to minority adolescents in Wisconsin may be instrumental in implementing programs to bring about change.

How would we set such a goal? The ideal goal

would be to eliminate racial disparities in adolescent birth rates. In this case, the Wisconsin teen birth rate would drop to the most recent 5-year rate for white teens of 23.1 per 1000 females age 15-19 years—a 33% decline in the most recent 5-year statewide teen birth rate. A more conservative yet still challenging goal might be to decrease disparities in Wisconsin to US levels, which would result in a state teen birth rate of 28.5, representing an 18% decline in the statewide teen birth rate. Alternatively, at a minimum, Wisconsin could aim to decrease minority teen birth rates to US rates, resulting in a Wisconsin birth rate of 31.2, a 10% decline in the statewide teen birth rate. Whatever the goal, it is clear from this analysis that reduction of teen birth rates for minority adolescents in Wisconsin is imperative to the health of minority adolescents and children in the state and to the overall health of Wisconsin.

CONCLUSION

Wisconsin's low statewide teen birth rate is driven by a low birth rate among whites, which masks substantial racial and ethnic disparities that far exceed US disparities. It is critical to the health of minority children and adolescents in the state, and to the overall health of the people of Wisconsin, to explore potential causes for, and solutions to, this problem. Wisconsin needs considerable improvement just to bring minority teen birth rates down to national rates, and can, we hope, go beyond this basic goal toward the ultimate goal of completely eliminating racial disparities in this important health indicator.

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