

# Marital Status and the Risk of Suicide

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**Abstract:** No recent United States study has previously calculated national suicide rates by marital status for specific age, race, and sex categories in order to better identify high-risk groups for suicide. We used national vital statistics and census data to calculate marital-status-specific rates. Results show that for each marital status group, by age and sex, married persons have the lowest suicide rates and young widowed males have exceptionally high rates. (*Am J Public Health* 1988; 78:78-80.)

## Introduction

Previous research has demonstrated that, in general, married persons have lower suicide rates than persons who have never married or persons who are divorced or widowed.<sup>1-8</sup> However, no recent national-level data have been compiled to more fully examine age-, race-, and sex-specific suicide rates by marital status.

## Methods

Marital-status-specific suicide rates for US residents for the three-year period 1979 through 1981 were calculated by age, race, and sex. All deaths identified as suicide according to ICD-9<sup>9</sup> (codes E950-E959) were extracted from the annual national mortality computer tapes produced by the National Center for Health Statistics for the years 1979 through 1981. The average number of reported deaths was calculated for the three-year period for each marital status, age, race, and sex category. Marital-status-specific population statistics for US residents for 1980 were extracted from census computer tapes produced by the US Bureau of the Census. Four marital status categories were used: married (including currently married with spouse present, currently married with spouse absent, and common-law marriage); never married; divorced; and widowed. In this study, both mortality and population data for self-reported Hispanics were categorized as White including Hispanics who were Black (2.7 per cent of all Hispanics were Black). Marital-status-specific rates were calculated for persons 15 years of age and older by race (White and Black), sex, and 10-year age groups. Age-adjusted rates were calculated by using the direct method of standardization with the 1980 US census population as the standard population.

## Results

For the period 1979-81, of the more than 80,000 persons in the United States who committed suicide, 46.9 per cent were married, 28.7 per cent were never married, 9.2 per cent were widowed, and 15.2 per cent were divorced. While almost half of suicides occurred to married persons, married persons had the lowest rate of suicide (Table 1).

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For males, a comparison of the four marital status groups shows that age-specific suicide rates for married males are consistently lower than the rates for never married males, and that rates for never married males are consistently lower than for widowed and divorced males (Figure 1). Widowed males present the most striking comparison. Suicide rates for widowed males in the three youngest age groups are much higher than the rates for males in any other marital status category, but rates for widowed males declined rapidly with age so that by age 45 the rates for widowed males are approximately the same as for divorced males.

For females, as with males, the lowest age specific suicide rates are for the married followed by the next lowest rates for the never married (Figure 2). However, unlike for males, rates for divorced females are consistently higher than for widowed females. For all four marital status categories, females have the highest suicide rates in midlife.

The pattern of age-adjusted suicide rates for each marital status by race and sex show that married persons have the lowest suicide rates in each of the four race and sex categories analyzed (Figure 3). The very high rate of suicide for widowed males, both White and Black, is evident. Consistently for every marital status category, White males have the highest rate of suicide followed by Black males, White females, and Black females.

The overall relative risk of suicide by marital status based on age-adjusted rates shows that both widowed and divorced persons have an approximately threefold greater risk of suicide than married persons (Table 1).

## Discussion

Three limitations of our data should be noted:

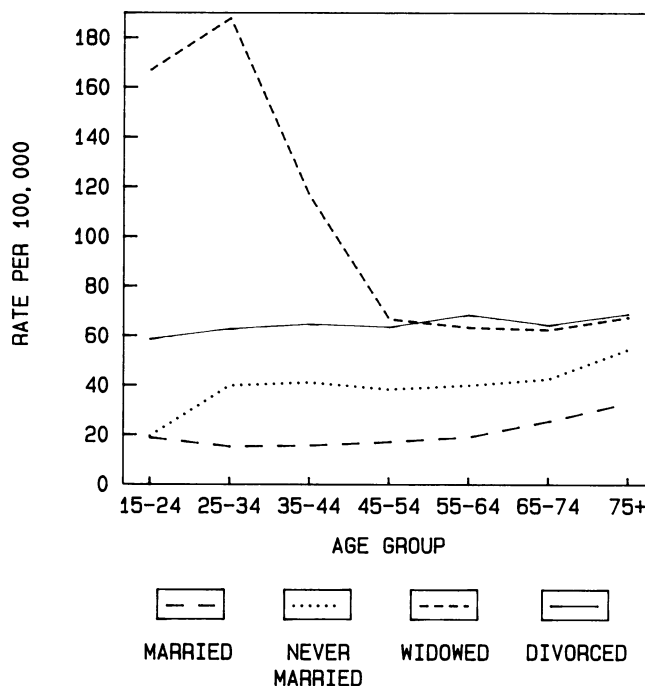


Figure 1—Suicide Rate for All Males by Age Group and Marital Status, United States, 1979-81.

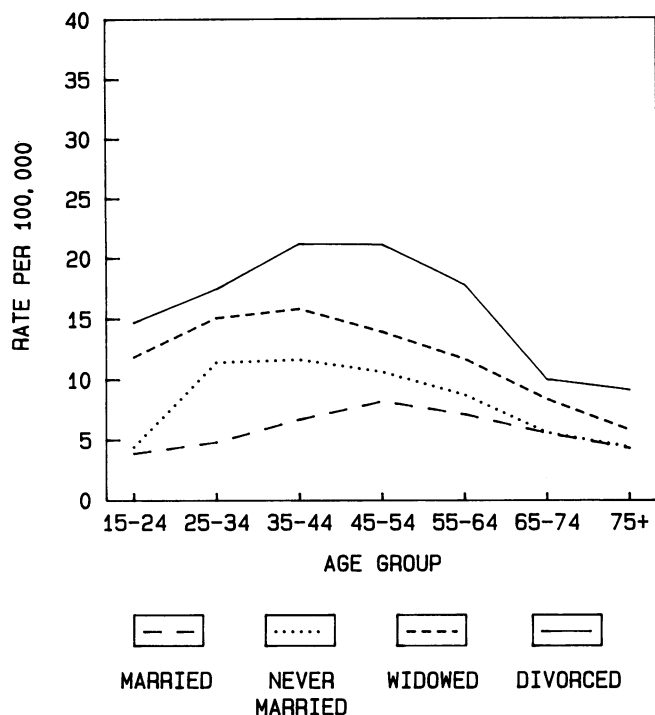


Figure 2—Suicide Rate for All Females by Age Group and Marital Status, United States, 1979-81.

• First, while it is recognized that suicide may be intentionally or unintentionally underreported,<sup>10,11</sup> the magnitude of underreporting of suicide in each marital status category is not known. It is not known whether particular age and marital status categories are subject to different degrees of underreporting.

• A second limitation is the possibility of misclassifica-

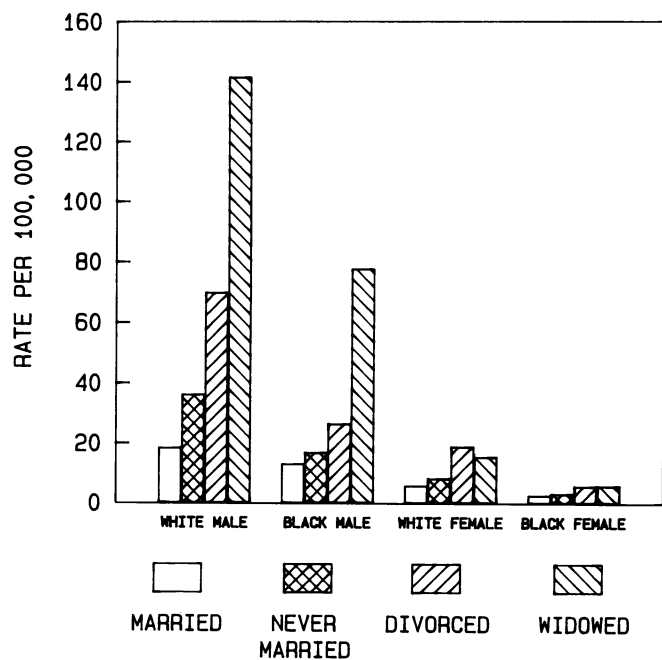


Figure 3—Age-Adjusted Suicide Rates for All Persons by Marital Status, Race, and Sex, United States, 1979-81.

TABLE 1—Number and Per Cent of Suicides, Age-adjusted Suicide Rates, and Relative Risks of Suicide by Marital Status, US 1979-81

Marital Status	Number	Per Cent	Age-adjusted Rates	Relative Risk
Married	37,844	46.9	11.9	1.0
Never married	23,100	28.7	22.4	1.9
Widowed	7,385	9.2	33.2	2.8
Divorced	12,280	15.2	34.9	2.9
Total	80,609	100.0		

tion of marital status in the population data from the Census, especially for persons 15-44 years of age. Persons who are actually widowed or divorced may be misclassified as married or single<sup>12</sup>, causing excessively high rates for persons in the widowed and divorced categories at younger ages.

• A third limitation is that the length of time a person was in a particular marital status category prior to death by suicide cannot be determined from the death certificate. Information on marriage duration and temporal association of the suicide event and the marriage dissolution (by divorce or death) may be important,<sup>13</sup> not only to identify better the persons at highest risk of suicide, but also to help explain why rates differ by marital status.

One purpose of this research was to define further the characteristics of persons at high or low risk of suicide. We know, for example, that the risk of suicide is higher for males than for females and higher for whites than for blacks.<sup>14</sup> Our findings confirm those of earlier studies that married persons, in general, have a lower risk of suicide,<sup>1-8</sup> and also show more specifically that married persons, regardless of sex and age, have a lower risk of suicide.

At least three general hypotheses have been put forth to explain the low risk of suicide for married persons compared with nonmarried persons:

• the married population as a whole has greater immunity to suicide because married persons may be more integrated into a supportive social network than nonmarried persons<sup>1,2</sup>;

• the married population may have lower suicide rates because of matrimonial selection, i.e., those people who are successful at getting and staying married may be more sound mentally and physically than those who do not<sup>1,2</sup>;

• lower suicide rates within the married population relative to other marital status groups may reflect more the unique circumstances of divorce and widowhood such as the experience of loss rather than factors which are peculiar to the married population.

On the basis of our findings, we recommend that suicide prevention and intervention strategies should take into account the higher relative suicide risk faced by: 1) the surviving spouse (especially the surviving male spouse) when one partner of a young married couple dies, and 2) divorced persons of all ages.

#### ACKNOWLEDGMENT

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## NIH Consensus Development Conference on Dental Implants

A consensus development conference on the newest approaches to dental implants will be held June 13-15, 1988 in Masur Auditorium of the National Institutes of Health Clinical Center, in Bethesda, Maryland. The conference is co-sponsored by the National Institute of Dental Research, the Food and Drug Administration, and the NIH Office of Medical Applications of Research.

The use of dental implants in or on the jawbone to replace missing teeth is becoming an important component of modern dentistry that is expected to increase dramatically in the future. Implants are now available for patients who have lost all of their teeth or only a few. It is not clear, however, whether there is an implant device appropriate for every patient's condition, nor have the long-term efficacy and safety of the most widely used implants been clearly established. Conference participants will address these and other key issues.

This meeting will bring together dentists—including oral surgeons, prosthodontists, and periodontists—and pathologists and experts in orthopedics, bone biology, statistics, biomaterials science, bioengineering, and members of the public. Following 2 days of presentation by medical experts and discussion by the audience, a consensus panel will weigh the scientific evidence and formulate a draft statement in response to several key questions:

- What is the evidence that dental implants are effective for the long term?
- What are the indications and contraindications of various types of dental implants?
- What are the requirements for surgical, restorative, and periodontal management of patients with dental implants?
- What are the health risks of dental implants?
- What are the future directions for research on materials and designs of dental implants and on clinical management?

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