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## Marital Status and Its Relation to the Use of Short-Stay Hospitals and Nursing Homes

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### Synopsis .....

*Marital status has been associated with a wide variety of health indices and health practices. To better understand the relation of marital status to use of health facilities, discharge data from two surveys conducted by the National Center for Health Statistics—the 1979 National Hospital Discharge Survey and the 1976 National Nursing Home Survey—were examined by marital status, sex, age, diagnosed condition, and, for nursing home data, source of payment.*

*For the four marital status categories considered in this analysis (married, never married, separated and divorced, and widowed), married and never married persons had the lowest overall discharge rates and widowed persons had the highest. Among men in each of the categories, those less than 45 years of age had the lowest rates, while never married and widowed men 45 and older generally had the highest rates. Among persons 45 years of age and older, the married—especially women—had the lowest rates and the never married—especially men—had the highest rates. A consistent finding was that, for never married persons, rates of use for both short-stay hospitals and nursing homes, as measured by discharge rates, increased to a greater degree with age than they did for the other marital groups.*

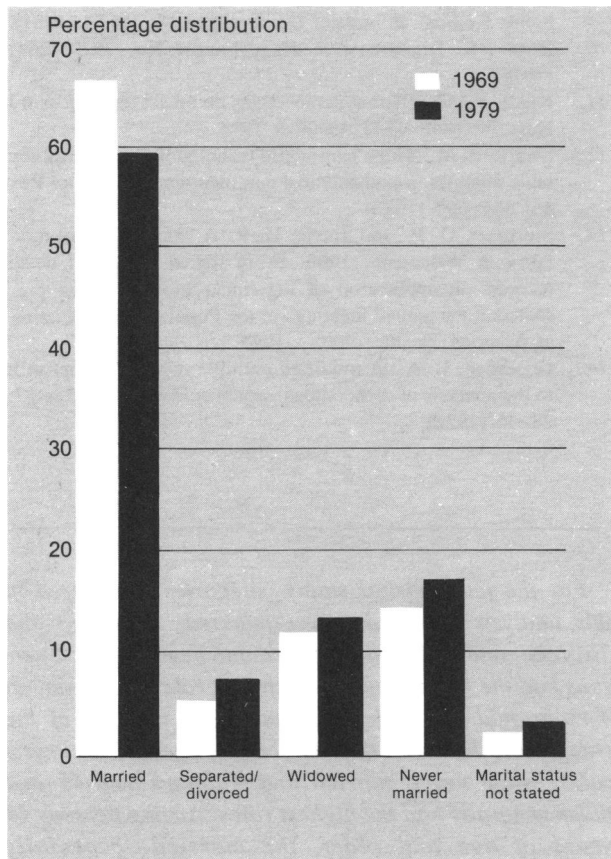
*The possible reasons for the difference in use of health facilities by the different marital groups are discussed and the importance of marital status as a determinant of such use is stressed.*

THE RELATION BETWEEN MARITAL STATUS and health has been the subject of a number of population-based studies in the United States. Evidence has been found that links marital status to such diverse health indices as general mortality, automobile-related fatalities, depressive symptomatology, and alcoholism. The differences in the indices for people in different marital

status categories have generally been explained as resulting from varying lifestyles associated with marital status and the effect of these lifestyles on health.

It is generally recognized that marriage offers security and social support and that married people are often happier than unmarried ones (1-3). Also, the married are believed to enjoy better nutrition and to get more sleep

Figure 1. Percentage distribution of patients discharged from short-stay hospitals, by marital status: United States, 1969 and 1979



SOURCE: For 1969, National Center for Health Statistics: Utilization of Short-Stay Hospitals: Summary of Nonmedical Statistics, Vital and Health Statistics, Series 13, No. 14, Rockville, Md., 1973. For 1979, unpublished data from the National Hospital Discharge Survey for 1979, conducted by the National Center for Health Statistics.

than the unmarried and thus to be less apt to experience illness (4). Moreover, it has been found that the unmarried smoke (5), drink, and in general take more chances than do the married.

Divorced, separated, and recently widowed persons are thought to be at the greatest risk of developing illness because they are subject to highly stressful situations that are believed to make them more susceptible to becoming ill (6–8). Also, destructive behaviors such as excessive drinking, accidents, and suicide are more frequent among the divorced, separated, and recently widowed than among the general population (9–11).

Verbrugge (4), using age-adjusted data from the National Center for Health Statistics (NCHS), the U.S. Bureau of the Census, and health surveys conducted by other Federal agencies, found that married people appeared healthiest, compared with other marital status groups, with lower rates of chronic limitation and disability, and that divorced and separated persons appeared least healthy, with higher rates of acute and chronic

conditions. She also found that rates of residence in nursing homes, mental hospitals, and homes for the aged and dependent were highest for single people and lowest for married ones.

However, data collected through the National Health Interview Survey of the NCHS indicate that income and education account for some of the differences in use of health facilities by persons in different marital status categories (12–14). Also, the characteristics of health facilities affect the availability of health care to different racial, educational, and economic groups (15,16).

My purpose is to examine the relation of marital status to use of hospitals and nursing homes and to identify those variables that interact with marital status in determining use of health facilities. Use of hospitals and nursing homes is measured by rates of discharge (patients discharged alive and discharged dead) and, for hospitals, by average length of stay.

Unpublished data from the National Hospital Discharge Survey (NHDS), for the year 1979, and the National Nursing Home Survey (NNHS), for the year 1976, provide the basis for this report. The surveys are conducted by the National Center for Health Statistics and provide national estimates on discharges from short-stay, acute-care hospitals and on residents in and discharges from the nation's nursing homes.

Information from the medical records of inpatients discharged from a sample of short-stay hospitals in the United States is collected by the NHDS. The NNHS is a nationwide sample survey that covers nursing home facilities; costs; and characteristics of residents, patients discharged, and staff.

In this analysis, four marital status categories—married, never married, separated and divorced, and widowed—are considered.

### Short-Stay Hospitals: Findings

According to estimates based on data from the NHDS, more than 33 million persons 15 years of age and older were discharged from short-stay hospitals in 1979 (17). Married persons constituted approximately 58 percent of the total discharges, down from 66 percent of the total discharges recorded in 1969 (fig. 1). Most of this decrease was due to an increase in the percentages of the separated and divorced and the never married discharged in 1979. This increase, in turn, was due primarily to a 69 percent increase in the rate of divorce since 1969, from approximately 3.2 per 1,000 population to 5.4 per 1,000, and a decrease in the rate of marriage, among unmarried women 15 years of age and older, from 80 to 64 per 1,000 population during the same period (18, 19).

For all marital status categories except the widowed, the rate of hospital discharges per 10,000 population for

women was greater than that for men (table 1). However, the highest rate (5,355.6) was for widowed men 65 years of age and older. The lowest rates were for married and never married men, ages 15–44 years, giving support to the belief that younger persons tend to minimize their need for health care through neglect of symptoms (4).

For all marital groups, younger (under 45 years of age) men had lower discharge rates than younger women, whereas men 65 years of age and older, especially widowed men, had higher rates than women of comparable age.

The overall discharge rate for never married persons was the lowest of the rates for the four marital groupings. However, when rates are examined by age, a different picture emerges. For example, for never married persons ages 45–64 years, the rate of discharge (2,741 per 10,000 population) was substantially greater than that for married persons (1,796 per 10,000) in the same age group. The discharge rate for never married persons 65 years of age and older (4,321 per 10,000) was also notably higher than rates for the married and the separated and divorced. Only in the youngest age group, 15–44 years, was the discharge rate lower for the never married than for comparable age groups in the other marital categories. However, this overall rate may have been low because nearly 79 percent of the never married were between 15 and 45 years of age (unpublished data

*'Despite the differences between the National Hospital Discharge Survey and the National Nursing Home Survey in the populations and institutions sampled, a consistent pattern of differences in use of health facilities among the married, never married, separated and divorced, and widowed was apparent.'*

from the NHDS), making the never married the youngest marital group overall, and because younger persons tend to use fewer health services.

The relatively short average length of stay in hospitals for never married persons ages 15–44 also reflects more limited use of these facilities by a younger population and contrasts with never married persons' relatively longer stays at age 45 years and older. The overall average lengths of stay for married, separated and divorced, and never married men were longer than for comparable women, with men less than 45 years of age having the longest stays relative to women. Widowed men and women had comparable lengths of stay prior to discharge.

Table 1. Rates of discharge from short-stay hospitals and average lengths of hospital stay for persons 15 years of age and over, by marital status, age, and sex: United States, 1979

Marital status and age	Discharge rate per 10,000 population <sup>1</sup>			Average length of stay in days		
	Both sexes	Male	Female <sup>2</sup>	Both sexes	Male	Female <sup>2</sup>
All marital statuses . . . . .	1,999.3	1,602.1	2,361.4	7.5	8.2	7.1
15–44 years . . . . .	1,565.2	962.1	2,148.2	5.2	6.3	4.7
45–64 years . . . . .	1,963.3	1,933.1	1,991.0	8.2	8.1	8.3
65 years and older . . . . .	3,920.6	4,142.2	3,765.3	10.8	10.4	11.0
Married . . . . .	1,970.2	1,633.7	2,306.4	6.9	8.0	6.1
15–44 years . . . . .	1,733.1	899.2	2,471.8	4.9	6.0	4.5
45–64 years . . . . .	1,795.7	1,781.9	1,810.4	7.7	7.7	7.8
65 years and older . . . . .	3,445.2	3,751.1	3,013.9	10.0	9.9	10.0
Separated and divorced . . . . .	1,912.9	1,642.5	2,097.8	7.7	8.7	7.2
15–44 years . . . . .	1,748.6	1,320.3	2,058.0	6.2	7.6	5.8
45–64 years . . . . .	2,026.4	1,996.2	2,047.2	8.8	8.5	9.0
65 years and older . . . . .	2,705.2	2,813.2	2,615.4	11.6	12.1	11.2
Widowed . . . . .	3,613.6	4,462.7	3,455.5	11.0	11.3	10.9
15–44 years . . . . .	2,653.9	2,191.8	2,738.7	6.7	6.8	6.7
45–64 years . . . . .	2,198.2	2,452.1	2,149.7	9.4	10.3	9.2
65 years and older . . . . .	4,247.1	5,355.6	4,036.6	11.5	11.6	11.5
Never married . . . . .	1,346.2	1,082.5	1,659.8	6.6	7.5	6.0
15–44 years . . . . .	1,161.9	895.9	1,484.7	5.5	6.5	4.8
45–64 years . . . . .	2,740.7	2,682.9	2,822.3	9.9	10.2	9.4
65 years and older . . . . .	4,320.9	4,902.4	3,961.4	11.9	11.9	11.9

<sup>1</sup> Population estimates used in computing rates are based on estimates published by the U.S. Bureau of the Census (reference 21).

<sup>2</sup> Includes deliveries.

SOURCE: Unpublished data from the National Hospital Discharge Survey for 1979, conducted by the National Center for Health Statistics.

*'The available data indicate that marital status, apart from other demographic considerations, plays a significant role in influencing use of health facilities.'*

The tendency for the never married to have relatively low rates for hospital discharges at ages 15–44 years and relatively high rates for discharges at age 45 and older was especially true for never married people ages 45–64 years, who consistently had the highest rates among the four marital groups. Among persons 15–44 years of age, the widowed had the highest rate of discharge (2,653.9 per 10,000 population), followed by the separated and divorced (1,748.6 per 10,000). It should be pointed out that the rates of discharge for the never married and the separated and divorced, age 65 and older, would be still higher but for the fact that they are admitted to nursing homes at earlier ages and thus are less likely to be hospitalized (20).

Marital status groups also differed between the sexes in the diagnostic classifications assigned to them while they were hospitalized. Among patients with neoplasms, the widowed had the highest discharge rate: 331.5 per 10,000 population (table 2). Widowed men with neoplasms had a higher discharge rate than widowed women, in contrast to the other marital groups, in which women with neoplasms had higher rates than men with

that diagnosis. Married men had a low discharge rate for mental disorders (66.7 per 10,000), whereas the separated and divorced, especially men, with mental disorders had high rates of discharge. Among women, there were high rates of discharge for the married and the separated and divorced with a diagnosis of genitourinary system disease, while never married women with this diagnosis had the lowest discharge rate (190.6 per 10,000).

The four marital status categories also differed in the relative frequency of different diagnoses assigned to men and women within each group. Table 3 shows the relative rankings of rates of discharge within selected diagnostic categories, by sex and marital status.

For married, separated and divorced, and widowed men, rates of discharge for persons with diseases of the circulatory system ranked relatively high, in contrast to the rate for never married men with the same diagnosis, which ranked relatively low, reflecting primarily the differing age distribution among each of the marital groups (unpublished data from the NHDS).

Among separated and divorced men, the rate of discharge for persons with mental disorders ranked highest. It is not clear why this was so, but it in part reflects the high rate of alcohol dependency among this group of men, which may be the result of the stresses occasioned by separation and divorce (9).

For never married men, the rate of discharge for persons who had suffered injury or poisoning ranked highest. However, it should be pointed out that the discharge rate associated with the injury and poisoning classification ranked fourth for never married women and third for married men and widowed women. The relatively high

Table 2. Rates of discharge from short-stay hospitals per 10,000 population, for selected diagnostic classifications, by marital status and sex: United States, 1979

Diagnostic classification <sup>1</sup>	Married			Never married			Separated and divorced			Widowed		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Neoplasms . . . . .	147.1	142.8	151.5	59.1	43.6	77.9	132.4	90.2	158.2	331.5	483.3	303.3
Mental disorders . . . . .	67.8	66.7	68.9	114.2	130.0	95.6	232.7	304.9	186.5	116.2	174.8	105.3
Diseases of the circulatory system . . .	287.2	370.1	204.4	83.5	84.2	83.2	199.0	226.6	181.4	1021.4	1300.8	969.4
Diseases of the respiratory system . . .	117.8	134.4	101.2	104.9	88.1	124.8	124.6	126.4	123.5	300.9	534.7	257.5
Diseases of the digestive system . . . .	245.3	256.1	234.6	160.9	160.2	161.8	240.0	226.6	248.2	478.5	591.3	456.5
Diseases of the genitourinary system . .	220.0	138.3	301.3	117.3	55.7	190.6	239.0	94.3	331.8	217.9	313.7	200.0
Complications of pregnancy, childbirth, and puerperium . . . . .	...	...	124.7	...	...	139.7	...	...	86.2	...	...	5.8
Diseases of the musculoskeletal system and connective tissues . . . . .	123.5	123.8	123.4	74.6	66.5	83.7	119.9	94.3	136.3	207.4	149.1	218.2
Injury and poisoning . . . . .	144.8	171.9	117.7	218.2	279.6	151.0	189.6	222.6	167.2	312.3	293.1	315.8
Supplementary classification <sup>2</sup> . . . . .	330.3	17.4	643.0	162.8	16.4	337.0	142.6	16.0	223.8	35.5	20.6	38.3
Females with deliveries . . . . .	...	...	577.7	...	...	308.2	...	...	151.8	...	...	14.4

<sup>1</sup> Based on International Classification of Diseases, 9th Revision, Clinical Modification.

<sup>2</sup> Includes sterilizations and deliveries.

SOURCE: Unpublished data from the National Hospital Discharge Survey for 1979, conducted by the National Center for Health Statistics.

rate for widowed women reflects susceptibility to injury due to increased age.

Among widowed women, the rate of discharge for those with circulatory disease ranked highest, as it did among widowed men, reflecting the influence of age on this marital group. Diseases of the genitourinary system were relatively common among married, never married, and separated and divorced women, reflecting the fact that these disorders are most frequent among younger women (unpublished data from the NHDS).

The "supplementary" diagnostic classification (condition not classifiable as disease or injury) ranked highest in rate of discharge for married and never married women and reflected primarily delivery-associated discharges.

The relatively large number of delivery-associated discharges among never married women primarily reflects changing social mores and the relatively high proportion of never married women of childbearing ages. In 1979, approximately half of all women 20 to 29 years old were single, compared with only 29 percent in 1960. Also in 1979, 1.3 million households were designated as "unmarried couple" households by the U.S. Bureau of the Census: more than twice the one-half million recorded in 1970. Approximately 50 percent of these households were headed by single (never married) persons. Further, the number of persons less than 18 years of age, living with single parents, increased threefold during this same period (21).

### Nursing Homes: Findings

Estimates based on data from the 1976 National Nursing Home Survey indicate that approximately 1.1 million

*' . . . the sharply increasing discharge rates for the never married with increasing age—especially for men—and the higher rates and longer lengths of stay in hospitals for the separated and divorced and the widowed indicate that being married, per se, is conducive to good health, or at least to a lessened likelihood of being admitted to a hospital or nursing home.'*

people were discharged from nursing homes in that year (22). The majority of those discharged, approximately 64 percent, were women and reflect the relatively high numbers of older widows in nursing homes and in the general population as well. However, men constituted approximately 64 percent of the married persons discharged, and 56 percent of the separated and divorced persons discharged, reflecting higher rates of nursing home use in comparison with such use by married and by separated and divorced women (unpublished data from the NCHS Division of Health Care Statistics).

Of all nursing home discharges in 1976, approximately 56 percent were of widowed persons (fig. 2).

Table 3. Ranking of rates of discharge from short-stay hospitals per 10,000 population, for selected diagnostic classifications, by marital status and sex: United States, 1979

Diagnostic classification <sup>1</sup>	Married			Never married			Separated and divorced			Widowed		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Neoplasms . . . . .	5	4	5									
Mental disorders . . . . .				5	3		3	1	4			
Diseases of the circulatory system . . .	2	1	4		5		4	2.5	5	1	1	1
Diseases of the respiratory system . . .					4			5		4	3	
Diseases of the digestive system . . . .	3	2	3	3	2	3	1	2.5	2	2	2	2
Diseases of the genitourinary system . .	4	5	2	4		2	2		1	5	4	5
Complications of pregnancy, childbirth, and puerperium . . . . .						5						
Diseases of the musculoskeletal system and connective tissue . . . . .												4
Injury and poisoning . . . . .		3		1	1	4	5	4		3	5	3
Supplementary classification <sup>2</sup> . . . . .	1		1	2		1			3			

<sup>1</sup> Based on International Classification of Diseases, 9th Revision, Clinical Modification.

<sup>2</sup> Includes sterilizations and deliveries.

SOURCE: Unpublished data from the National Hospital Discharge Survey for 1979, conducted by the National Center for Health Statistics.

Examination of the data by marital status and age shows a steady increase in the percentage of widowed persons discharged as age increased, from 21.7 percent of all persons discharged at less than 65 years of age to 77.0 percent of all persons discharged who were 85 years of age and older. Since approximately 70 percent of all persons discharged were more than 75 years old, the majority were widowed. However, for those discharged at 65–74 years of age, the married constituted the largest group, followed by the widowed. Of persons discharged

at less than 65 years of age, the never married constituted 25.2 percent, second only to the married (33.5 percent).

The relatively high percentage of never married persons in the under 65 age group is not the result of a large number of never married in that age group but instead reflects the unusually high rate of discharges per 10,000 population for the never married (table 4). For instance, the never married, for ages 45 to 54 years, had a discharge rate per 10,000 population of 63.0; for ages 55 to 64, a rate of 123.2. These rates were considerably higher

Table 4. Rates of discharge from nursing homes per 10,000 population<sup>1</sup>, by age, marital status, and sex: United States, 1976

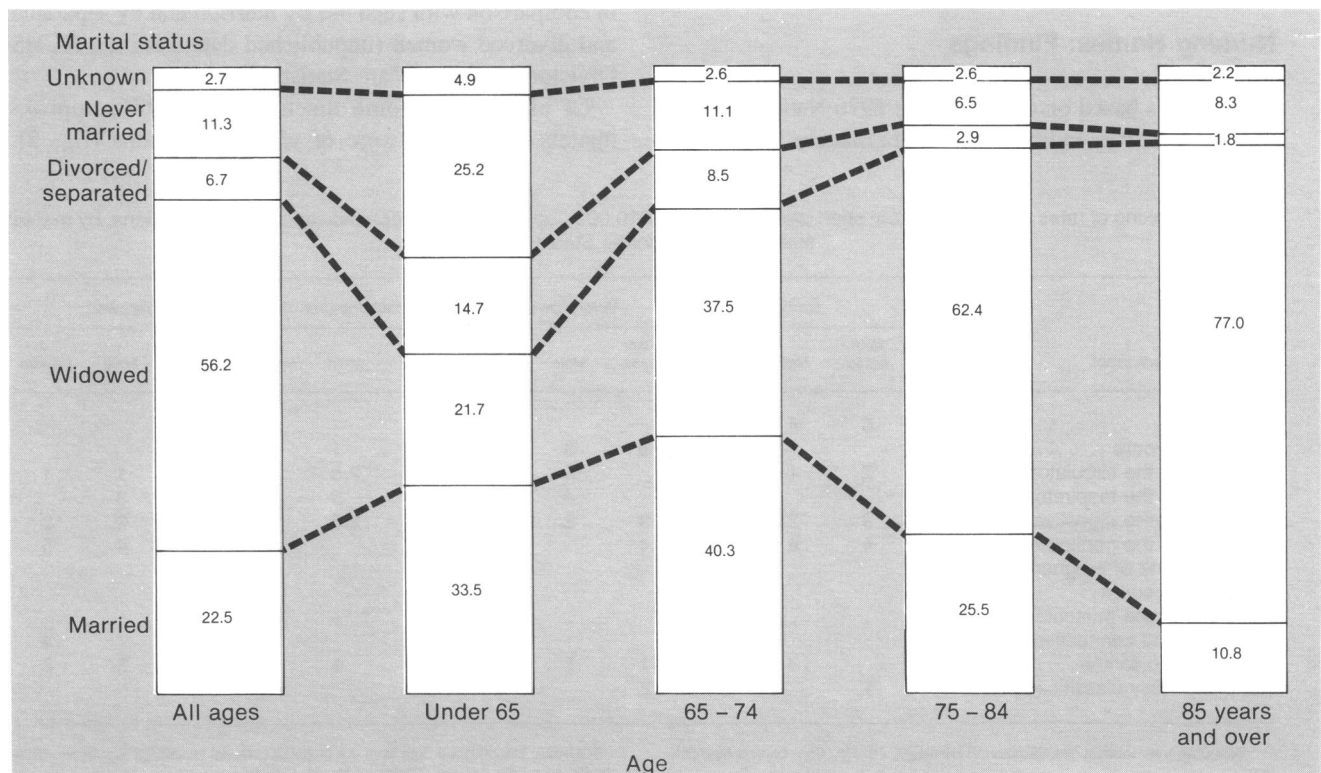
Age (years)	Married			Never married			Separated and divorced			Widowed		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All .....	26.3	33.4	19.3	29.8	26.6	33.6	68.6	102.0	48.4	531.9	721.8	498.0
Under 45 .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	4.4	5.2	3.5	11.9	24.6	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
45–54 .....	4.1	( <sup>2</sup> )	5.8	63.0	( <sup>2</sup> )	( <sup>2</sup> )	57.0	( <sup>2</sup> )	55.8	48.0	( <sup>2</sup> )	( <sup>2</sup> )
55–64 .....	18.1	19.5	16.6	123.2	160.4	( <sup>2</sup> )	90.1	100.1	82.2	60.7	( <sup>2</sup> )	59.1
Under 65 .....	4.6	4.5	4.8	9.0	10.5	7.3	32.3	45.0	24.8	58.3	( <sup>2</sup> )	53.9
65–74 .....	80.6	91.8	65.7	326.8	530.3	215.4	332.3	538.9	185.7	221.2	443.5	185.3
75–84 .....	403.9	392.9	423.4	1198.0	1429.7	1090.2	841.2	( <sup>2</sup> )	( <sup>2</sup> )	890.5	1100.0	848.2
85 and over .....	890.7	1029.6	591.9	2345.8	2436.8	2273.2	1271.8	1502.3	1016.8	2255.4	2276.4	2268.2

<sup>1</sup> Population estimates used for computing rates are based on published estimates of the U.S. Bureau of the Census: Marital Status and Living Arrangements, Current Population Reports, Series P-20, No. 306, Washington, D.C., 1977.

<sup>2</sup> Figures do not meet standards of the National Center for Health Statistics for reliability or precision.

SOURCE: Unpublished data from the National Nursing Home Survey for 1976, conducted by the National Center for Health Statistics.

Figure 2. Percentage distribution of patients discharged from nursing homes, by age and marital status



SOURCE: Unpublished data from the National Nursing Home Survey for 1976, conducted by the National Center for Health Statistics.



than those for the other three marital categories—especially the married, whose corresponding rates were 4.1 and 18.1 per 10,000 population.

Separated and divorced people more than 65 years old had significantly higher discharge rates than married people in the same age group. In fact, for all age groups, the never married and the separated and divorced had higher rates than the married.

For all discharges, females had a higher rate (83.5 per 10,000 population) than males, whose rate was 52.5 per 10,000 (unpublished data from the NNHS). However, when rates are considered by marital status (table 4), it is seen that, with the exception of the never married, the overall discharge rate for males is higher than that for females in each marital status group, and that, with the exception of the married, this difference is fairly consistent for all age groups. The overall high discharge rate for females reflects the preponderance in nursing homes of older widowed women relative to males—a preponderance in turn explained by the longer life expectancy of women.

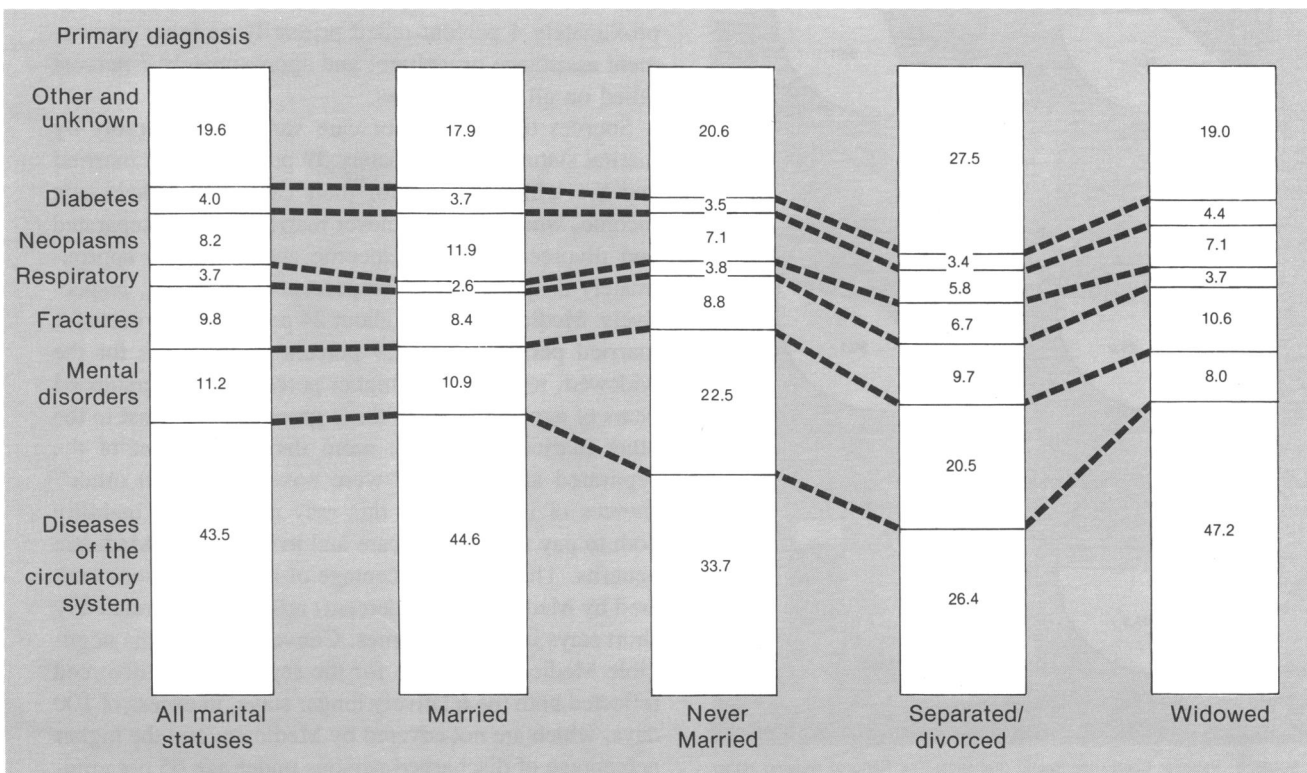
For all persons discharged from nursing homes, diseases of the circulatory system accounted for approximately 43 percent of the conditions treated prior to discharge (fig. 3). However, only 33.7 percent of the never married and 26.4 percent of the separated and divorced were treated for these conditions, primarily

because of their younger ages relative to the married and the widowed. Primary diagnoses for never married and for separated and divorced persons discharged from nursing homes included higher percentages of mental disorders, disorders characteristic of younger persons, and disorders conducive to longer lengths of stay as well as more intensive nursing care (20).

Examination of rates of discharge according to major diagnostic groupings—diseases of the circulatory system, mental disorders, and all other diagnoses—shows that married persons consistently had the lowest discharge rates, and that the never married typically had the highest rates for each of the age groups 65 years and older (table 5). Rates of discharge were also high for the never married with mental disorders. For all marital statuses, the higher rates of discharge for persons 85 years of age and older, with mental disorders, result primarily from the high incidence of chronic brain syndrome and senility generally found among the elderly population. The high rates of discharge associated with “all other” diagnoses for the never married and the widowed, age 85 and older, reflect their high rates of musculoskeletal disorders and fractures (unpublished data from the NNHS).

With respect to funding for care received in nursing homes, the Medicaid program, designed to provide medical care for the poor, was the primary source of payment

Figure 3. Percentage distribution of patients discharged from nursing homes, by marital status and primary diagnosis



SOURCE: Unpublished data from the National Nursing Home Survey for 1976, conducted by the National Center for Health Statistics.

Table 5. Rates of discharge from nursing homes per 10,000 population<sup>1</sup>, by age and marital status, according to major diagnostic groupings: United States, 1976

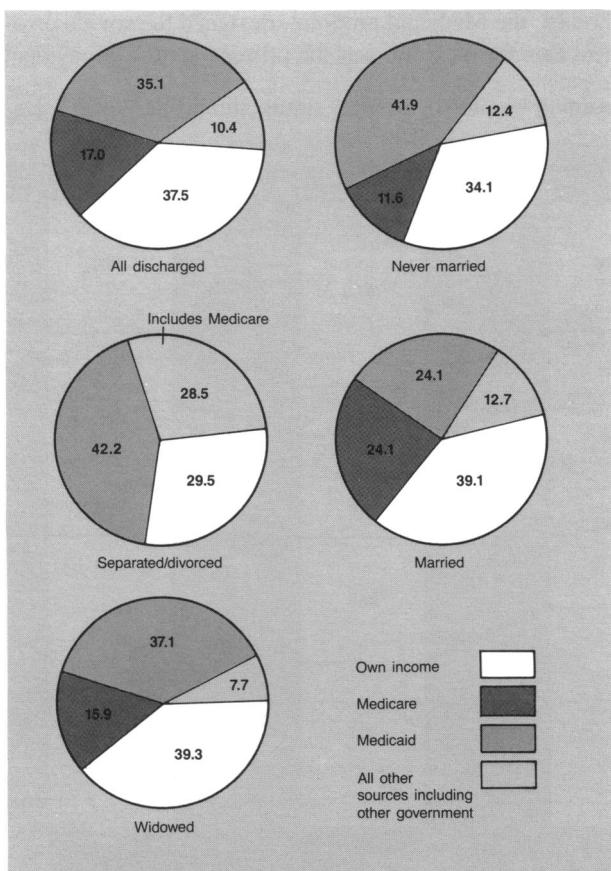
Diagnostic grouping and age (years)	All marital statuses	Married	Never married	Separated and divorced	Widowed
<b>Diseases of the circulatory system:</b>					
Under 65.....	1.7	1.0	1.5	( <sup>2</sup> )	13.7
65-74 .....	60.8	39.3	131.5	104.2	82.4
75-84 .....	344.3	204.1	424.1	349.3	436.7
85 and over .....	949.7	402.2	1,163.3	737.5	1,144.2
<b>Mental Disorders:</b>					
Under 65.....	2.7	1.0	4.0	9.7	( <sup>2</sup> )
65-74 .....	16.5	6.7	53.3	51.8	22.8
75-84 .....	57.7	32.8	166.8	( <sup>2</sup> )	62.6
85 and over .....	167.4	114.5	239.5	( <sup>2</sup> )	177.8
<b>All other diagnoses:</b>					
Under 65.....	4.8	2.6	3.4	18.7	30.0
65-74 .....	69.2	33.8	139.6	173.8	112.5
75-84 .....	300.1	160.7	596.5	390.0	369.8
85 and over .....	758.5	364.7	843.9	379.8	890.0

<sup>1</sup> Population estimates used for computing rates are based on published estimates of the U.S. Bureau of the Census: Marital Status and Living Arrangements, Current Population Reports, Series P-20, No. 306, Washington, D.C., 1977.

<sup>2</sup> Figures do not meet standards of the National Center for Health Statistics for reliability or precision.

SOURCE: Unpublished data from the National Nursing Home Survey for 1976, conducted by the National Center for Health Statistics.

Figure 4. Percentage distribution of patients discharged from nursing homes, by primary source of payment and marital status



SOURCE: National Center for Health Statistics: The National Nursing Home Survey: 1977 Summary for the United States, Vital and Health Statistics, Series 13, No. 43, Hyattsville, Md., 1979.

for approximately 35 percent of all persons discharged (fig. 4). Personal income or family support was the primary source for about 38 percent of all persons discharged.

Medicare, designed to cover all persons 65 years of age and older, and several designated high-risk groups, for up to 100 days of extended care services, provided assistance for 17 percent of all patients discharged. Approximately 4 percent relied primarily on other government assistance or welfare, and approximately 7 percent relied on all other sources.

Sources of payment for care varied considerably by marital status. Approximately 39 percent of the married and the widowed paid for their care out of their own income, whereas for the never married and the separated and divorced, personal income accounted for approximately 34 percent and 30 percent of payment, respectively. Medicare covered about 24 percent of the costs for married persons and 15.9 percent of the costs for the widowed, reflecting the higher percentage of persons 64 years of age and older in these groups. In contrast to the other marital categories, more than 28 percent of the separated and divorced were covered by "all other" sources of income, and this may reflect their inability both to pay for medical care and to qualify for Medicare benefits. The higher percentage of married persons covered by Medicare (24.1 percent) reflected their relatively short stays in nursing homes. Conversely (22), the negligible Medicare coverage for the separated and divorced reflected both the relatively longer stays, in excess of 100 days, which are not covered by Medicare, and the higher percentage of discharged persons under age 65 not eligible for Medicare.



## Summary and Discussion

Despite the differences between the National Hospital Discharge Survey and the National Nursing Home Survey in the populations and institutions sampled, a consistent pattern of differences in use of health facilities among the married, never married, separated and divorced, and widowed was apparent. Generally, the following patterns of use for the four marital categories were observed:

- Married and never married persons had the lowest overall discharge rates, and widowed persons had the highest.
- Men less than 45 years of age had the lowest discharge rates in all marital groupings. However, never married and widowed men 45 years of age and older had the highest rates.
- For discharges of persons 45 years of age and older, the married—especially women—had the lowest rates and the never married—especially never married men—had the highest rates.
- The never married and the separated and divorced had the highest rates of mental disorders.
- The rate of use of health facilities, as measured by the discharge rate, increased to a greater degree with age among the never married than it did for the other marital groups.

The available data indicate that marital status, apart from other demographic characteristics, plays a significant role in influencing use of health facilities. For example, the sharply increasing discharge rates for the never married with increasing age—especially for men—and the higher rates and longer lengths of stay in hospitals for the separated and divorced and the widowed indicate that being married, per se, is conducive to good health, or at least to a lessened likelihood of being admitted to a hospital or nursing home. The relatively low rates of discharge for the never married less than 45 years of age do not support the belief that people who do not marry tend not to do so because of bad health and are therefore less healthy to begin with than those who are married (12).

The high rate of mental disorders among the separated and divorced persons discharged gives support to the belief that the termination of marriage puts considerable stress on a person's health, especially in the case of men (6). The high rates of injury and poisoning among the relatively younger separated and divorced and never married men support the belief that their lifestyles are detrimental to good health. The overall higher rates of injury and poisoning for elderly never married men might be

explained by poorer health resulting from relative neglect of health in their younger years.

Data on source of payment for care of persons who were discharged from nursing homes do not indicate that payment source influenced rates of use of health facilities by the different marital status groups. For example, married persons, although able to pay for their care and to qualify for Medicare, had relatively low rates of use, in contrast to high rates for widowed persons with the same source of payment.

It has been pointed out that one reason for the high rates of use of nursing homes by the never married and the separated and divorced is that they are less likely to have someone at home to care for them and thus are more apt to be admitted to a nursing home (20,23). However, living arrangements still do not explain why their rates were higher than those of the widowed in the 45- to 74-year age group, who presumably in many instances also had no one to care for them. One possible explanation is that the widowed are cared for by their children at home. However, this explanation does not account for the relatively high rates of discharge among the widowed 85 years of age and older—rates higher than those for the separated and divorced but lower than those for the never married.

Marital status is clearly related to use of short-stay hospitals and nursing homes. This relation is even more pronounced when age is considered. The extent to which marital status directly influences health is not clear. Other factors, such as income and education, affect use of health facilities, and the effect of marital status apart from income and education needs to be clearly determined. Also, the influences of living accommodations, apart from designated marital status, need to be better understood.

The extent to which marital status does influence use of health facilities must be considered by health planners. If the divorce and marriage rate trends of the past 10 years continue, the proportion of married persons will significantly decrease, with a corresponding increase in the use of hospitals and nursing homes by the never married and the separated and divorced.

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## Prescribing Estrogen During Menopause: Physician Survey of Practices in 1974 and 1981

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### Synopsis .....

A physician survey was conducted in 13 counties surrounding Albany and Syracuse, N. Y., to determine estrogen prescribing patterns for treatment of problems associated with menopause. A case history of a 51-year-

*old woman was included in questionnaires sent to the physicians, who were asked how they would treat her in 1981 and how they would have treated her in 1974. Of the 717 questionnaires mailed to gynecologists, internists, and family practitioners, 584 were returned, a response rate of 81 percent.*

*When asked how they would treat the woman, who was described as having frequent, severe hot flashes and other menopausal symptoms, 65 percent of the physicians practicing in both 1974 and 1981 would prescribe estrogen for the patient in 1981; 82 percent would have done so in 1974. Although 87 percent of the gynecologists would have prescribed estrogen both years, the gynecologists surveyed would have decreased daily estrogen doses of 1.25 mg by 72 percent and increased daily doses of .625 mg and .3 mg by 68 percent. Overall, 19 percent of the physicians surveyed would prescribe a daily estrogen dose of 1.25 mg or more for more than 6 months or .625 mg daily for 3 or more years in 1981, compared with 48 percent in 1974.*