Hospitalizations for AIDS, United States, 1984–85

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Abstract: Data from the National Hospital Discharge Survey on hospitalizations for acquired immunodeficiency syndrome (AIDS) were analyzed for 1984–85. During 1984, an estimated 10,000 discharges from short-stay hospitals had a diagnosis of AIDS. In 1985, this figure more than doubled to 23,000. Ninety-seven percent of all AIDS discharges were male and 85 per cent were between the ages of 25 and 44. Hospitalizations for AIDS accounted for 510,000 days of hospital care and lasted an average of 15.6 days each. (Am J Public Health 1987; 77:729–730.)

Introduction

Although diagnosed cases of acquired immunodeficiency syndrome (AIDS) and deaths associated with AIDS are reported by the Centers for Disease Control, no national estimates of the amount of hospital use for AIDS have been published. The purpose of this paper is to present first estimates of the numbers of these discharges with AIDS from non-federal short-stay hospitals for the years 1984 and 1985. Information on the days of care utilized and average length of stay are shown by patient age and sex. The total number and per cent distribution of AIDS discharges are also shown by selected hospital characteristics, principal expected source of payment, and discharge status of patient.

Methods

The statistics in this report are based on data collected by the National Center for Health Statistics by means of the National Hospital Discharge Survey (NHDS), which is a continuous voluntary survey in use since 1965. The data for the survey are obtained from a sample of inpatient medical records from a national sample of short-stay general and specialty hospitals located in the United States. Approximately 192,000 abstracts of medical records were obtained from 407 participating hospitals in 1984, and 195,000 abstracts were supplied by 414 hospitals in 1985. A detailed report on the design of the NHDS was published in 1970.

The NHDS diagnostic data were coded according to the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM). Only records for which there was a specific diagnosis of AIDS were included. There were 204 such records included in this analysis. Unless the year is specified, all analysis was done on the two years of data combined because of the relatively small numbers of cases in the sample. In addition, comparisons are made in the article to the 1985 estimates of general hospital utilization produced by NHDS. These estimates have been published elsewhere. In the NHDS, the unit of analysis is a hospital discharge, not the individual. Individuals may have one or more hospital episodes during a year. In this report, the terms discharge and patient are used interchangeably.

Discussion

The number of cases of AIDS reported by the Centers for Disease Control continues to increase. By the end of 1984 there were over 7,000 cases and 8,000 additional cases had been reported by December 1985 for a total of 14,000 cases.⁴ During 1984, there were 10,000 hospitalizations due to AIDS. The number more than doubled to 23,000 in 1985.

Of the estimated 33,000 discharges in 1984 and 1985, 32,000 (97 per cent) were men and 28,000 (84 per cent) were between the ages of 25 and 44. More specifically, 15,000 (45 per cent) were 25–34 years of age and 13,000 (40 per cent) were 35–44 years of age (Table 1).

The 28,000 patients with AIDS between the ages of 25 and 44 who were discharged from short-stay hospitals used a total of 437,000 days of care. The average length of each stay was 15.8 days, which was over twice as long as the 6.2 days recorded for all males between 25 and 44 years of age who were discharged from short-stay hospitals.

Patients with AIDS were more likely to be hospitalized in the northeast or west regions of the United States (Table 2). Approximately 80 per cent (26,000) of AIDS hospitalizations were in these two regions, 38 per cent in the northeast region and 41 per cent in the west region. Among patients of all ages, only about 40 per cent were discharged from these two regions, 20 per cent from the northeast region and 18 per cent from the west region.

The two principal expected sources of payment indicated for the majority of AIDS hospitalizations were private insurance and Medicaid. Approximately 55 per cent of all AIDS discharges indicated private insurance as their expected source of payment. An additional one-fifth (21 per cent) indicated Medicaid. These figures were significantly different from the distribution of all patients under 65 years of age. A higher proportion (63 per cent) of the total discharges under 65 years of age indicated private insurance as the principal expected source of payment, and a lower proportion listed Medicaid (13 per cent). Medicaid is usually used by lowincome patients who have no other means of paying for

TABLE 1—Number and Per Cent of Discharges, Days of Care, and Average Length of Stay for Patients Discharged from Nonfederal Short-stay Hospitals with the Diagnosis Acquired Immunodeficiency Syndrome (AIDS) by Sex and Age: United States, 1984–85

	Discharges		Days of Care		Average Length of Stay
	No. in thousands	Per Cent distribution	No. in thousands	Per Cent distribution	No. of Days
Total	33	100.0	510	100.0	15.6
Male	32	97.3	485	95.1	15.3
Female	*	*	*	*	*
less than 25 years	*	*	*	*	*
25-34 years	15	44.5	238	46.6	16.3
35-44 years	13	39.7	199	39.1	15.3
45 years and over	*	*	*	*	*

NOTE: An asterisk (*) indicates that the estimate is based on a sample of less than 30 cases and is considered unreliable.

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TABLE 2—Number and Per Cent of Discharges for Patients Discharged from Nonfederal Short-stay Hospitals with the Diagnosis of Acquired immunodeficiency Syndrome (AIDS) by Geographic Region, Source of Payment, Ownership, Bed Size of Hospital, and Discharge Status: United States, 1984–85

	Discharges in thousands	Per Cent
Total	33	100.0
Region		
Northeast	13	38.4
Midwest	*	*
South	*	•
West	13	40.8
Source of Payment		
Private insurance	18	54.8
Medicare	*	*
Medicaid	*7	*21.0
All other	*7	*21.0
Ownership		
Non-profit	24	72.4
Proprietary	*	*
Government	8	23.3
Bed Size	-	
Under 300 beds	*5	*16.3
300 beds and over	27	83.7
Discharge Status	- ·	-
Alive	27	81.8
Dead	*6	*18.2

NOTE: An asterisk (*) indicates that the estimate is based on a sample of less than 30 cases and is to be considered unreliable while an asterisk followed by a number indicates that the estimate is based on a sample of 30–60 cases and is to be used with caution.

hospitalization or by those who have exhausted their savings through serious illness.

Patients hospitalized for AIDS and all patients dis-

charged from short-stay hospitals were about equally likely to have been discharged from nonprofit hospitals. Approximately 72 per cent of those hospitalized for AIDS and 69 per cent of all hospitalized patients were hospitalized in nonprofit hospitals.

Persons with AIDS were more likely to be hospitalized in larger hospitals (300 beds or more) than in hospitals having less than 300 beds. About 84 per cent of hospitalizations for AIDS were discharged from hospitals with 300 beds or more while only 48 per cent of all patients were discharged from these hospitals.

As expected, a large number of AIDS hospitalizations were terminated by the patients dying in the hospital. Approximately 18 per cent of AIDS hospitalizations ended with the death of the patient. In comparison, less than 1 per cent of all male hospitalizations in the 25-44 years of age group ended in the patient's death.

REFERENCES

- National Center for Health Statistics (Simmons WR: Development of the design of the NCHS Hospital Discharge Survey, Vital and Health Statistics. Series 2, No. 39. PHS Pub. No. 1000, Public Health Service. Washington, DC: Govt Printing Office, September 1970.
- US Public Health Service and Health Care Financing Administration: International Classification of Diseases, 9th Revision. Clinical Modification. DHHS Pub. No. (PHS) 80-1260, Public Health Service. Washington, DC: Govt Printing Office, September 1980.
- National Center for Health Statistics (Graves EJ): Utilization of short-stay hospitals, annual summary for the United States, 1985 Vital and Health Statistics. Series 13, No. 91 DHHS Pub. No. (DHHS) 87-1752, Public Health Service. Washington, DC: Govt Printing Office, publication pending.
- Centers for Disease Control: Acquired Immunodeficiency Syndrome in the United States: 1986. MMWR December 12, 1986.

Kellogg Foundation Awards Grant for National Gerontology Center

The Kellogg Foundation of Battle Creek, Michigan has awarded a \$1,699,498 three-year grant to the University of Missouri to establish a National Center of Extension Gerontology. Center projects will address the needs of the 27.4 million Americans age 65 or older and the more than 5 million persons who care for elderly parents. Special emphasis will be given to helping rural older persons—who make up 37 per cent of the total elderly population—remain self-sufficient and in their own homes.

The center, to be located at the University of Missouri-Kansas City, will build a national network for delivering programs to rural elderly. It will link state Cooperative Extension Services and private and public community organizations through continuing education programs and other services.

Educational materials and training resources developed at the center will be exchanged among Cooperative Extension Services nationwide through computer, video and satellite communication systems.

Faculty from UM campuses in Columbia, Kansas City, and St. Louis and off-campus field specialists of University Extension will be involved in the project. Establishment of the center culminates a number of nationally oriented gerontology projects conducted by University faculty, including a series of national gerontology summer schools for extension workers from throughout the nation. The center will be administered through the Office of Special Programs of University Extension in Columbia and will be located in the Center for Aging Studies at UM-Kansas City. Project director will be James C. Summers, University Extension director of special programs. Philip Olson, UMKC sociology professor, will serve as center director.