

TEN YEAR MORTALITY AT FARIBAULT STATE HOSPITAL

Arnold A. Madow
Chief Psychologist

A study of the deaths which have occurred at the Faribault State Hospital from 1959 through 1968 reveals some interesting relationships to the age distribution and death of retardates in the institution's population,

Annual statistical reports of the Department of Public Welfare provided the basic data, not only of mortality rates but also age and severity distribution of the institutional population. The Minnesota Department of Health furnished statistics on the number of deaths by age occurring during the years 1961 through 1967, as well as estimated population statistics for those years. From these, mortality rates by age group for the Minnesota population were calculated.

Institution records for the calendar years 1960 through 1969 were also examined to ascertain the occurrence of deaths during each month of the year.

As might be anticipated, residents over 40 years of age account for more than 50 per cent of deaths in the institution. (T a b l e I) . The over-65 population contributes three times as many deaths as this age group is represented in the institution. Surprisingly, those under 10 years of age (which would more accurately be described as those 6-to-9 years) account for twice as many deaths as would be anticipated from their frequency in the institution population. The possible reason for this will be given below.

Table II shows the mortality rate in the institution by degree of mental retardation, It is apparent here that the severely and profoundly retarded residents account for a disproportionate number of the deaths which have occurred during the 10-year period, Nearly half of all the deaths have been among these residents, whereas they have accounted on the average for only one third of the institution's population,

More than half of the annual deaths seem to occur during the 5 month winter period of December through April, with January showing the largest number of deaths. For some reason there is a dip in the number of deaths during February even when there is an adjustment made for the decreased number of days in that month. However, the mortality rate increases again sharply in March, which is the second most frequent month for death, (Table III)

Tables IV and V compare the institution death rate with the Minnesota death rate during the seven years for which the data were examined, the rate of death in the institution varied from 28 per cent to 115 per cent greater than the Mortality rate for the entire state. The average for the seven years was a 54 percent greater mortality within the institution than in the general population.

However, the risk of death for the different age groups in the institution, as compared with the general population, varied enormously, As seen in Table V, the rate of death of those aged 5 to 9 years within the institution was 86 times the population rate for that age group. The rate gradually decreased for successive age groups until at age 65 and above the rate of death within the institution was actually less than the general population rate. This would indicate that those who have survived the vicissitudes of mental retardation and institutionalization are indeed less likely to die in older age than those outside the institution. Here perhaps the protective role of the institution, the regulation of diet and other

habits, as well as the relative lack of stress may be considered as favoring longevity.

The astounding frequency of death occurring among the young institutional residents is undoubtedly associated with the fact that these residents are generally more severely retarded than the average of the institution as a whole. Analysis of the institution population over the same 10 year period reveals that those 5 to 9 years of age are 2 1/2 times more likely to be severely or profoundly retarded than would be expected from the distribution of such residents in the entire institution. Those 10 to 19 years of age also account for a disproportionate but somewhat lesser frequency of severely and profoundly retarded individuals. It is this association of degree of retardation with the younger age groups which accounts for the extremely high mortality rate of the younger residents. This increased mortality rate is also associated with the fact that the more severely retarded tend to be admitted to the institution at younger ages than those who are not so severely retarded. Without comparable data for these individuals outside the institution it would not be proper to conclude that their higher mortality is "caused" by their institutionalization.

TABLE I

DEATHS , BYAGE , OFFARIBAULTSTATEHOSPITALRESIDENTSFOBTHEPERIOD1959-1963
 COMPAREDWITHPROPORTIONNALDISTRIBUTIONOFAGE S INTHE INSTITUTION POPULATION

Age	No. of 1959-1968	Deaths	% of All Deaths in Institution	Average % of Age in Institution Population
Under	10	57	11.6	5.6
10-19		68	13.	21.4
20-29		47	9.6	20.6
			10.2	16.6
40-64		193	39.3	30.3
—		76	15.5	5.5
Total		491	100.0	100.0

TABLE II

DEATHS BY DEGREE OF RETARDATION OF FARIBAULT STATE HOSPITAL RESIDENTS FOR THE PERIOD 1959-1968 COMPARED WITH PROPORTIONAL DISTRIBUTION OF DEGREES OF RETARDATION IN THE INSTITUTION POPULATION

Degree of Retardation	No. of Deaths	of All Deaths in Institution	Average % of Degree of Retardation in Institution Population
Severe & Profound	226	46.1	32.8
Moderate	176	35.8	48.3
Mild	74	15.1	17.4
Other	35	3.1	1.6
Total	491	100.1	100.1

TABLE I I I

NUMBER AND PROPORTION OF DEATHS BY MONTH AT FARIBAULT STATE HOSPITAL
 YEARS 1960~1969. (PROPORTIONS ARE ADJUSTED TO EQUALIZE NUMBER OF DAYS IN MONTHS)

Month	Per Cent	
	Number of Deaths	Occurring In Month
	67	12.7
	39	8.1
March	62	11.7
	5.3	10.4
	31	5.9
June	33	6.5
	31	5.9
August	37	7.0
Sept	37	7.3
	38	7.2
November	35	6.9
	55	10.4
Total		100.0

TABLE IV

DEATH RATE AT FARIBAULT STATE HOSPITAL FOR THE YEARS 1959 - 1968 ,
WITH MINNESOTA DEATH RATE PER 10,000 POPULATION FOR THE YEARS 1961-1967

<u>YEAR</u>	<u>Institution Death Rate per 10.000</u>	<u>Minnesota Death Rate per 10,000</u>	<u>Ratio of Institution to Minnesota Death Rates</u>
1959	142		
1960	172		
1961	186	95	1.96
1962	169	97	1.75
1963	159	100	1.59
1964	139	100	1.39
1965	125	98	1.28
1966	214	99	2.15
1967	152	98	1.55
1968	192		

TABLE V

DEATH RATES BY AGE OF PARIBAULT STATE HOSPITAL RESIDENTS FOR THE PERIOD 1959-1968,
COMPARED WITH MINNESOTA DEATH/AGE RATES PER 10,000 POPULATION FOR THE YEARS 1961-1967

<u>Age</u>	<u>Institution Death Rate per 10,000</u>	<u>Minnesota Death Rate per 10,000</u>	<u>Ratio of Institution to Minnesota Death Rate</u>
5 - 9	344	4	86.0
10 - 19	107	6	17.8
20 - 29	77	12	6.4
30 - 39	101	15	6.7
40 - 64	215	80	2.7
<u>65+</u>	<u>468</u>	<u>562</u>	<u>.8</u>
Total	166	98	1.7