Mortality of Persons with Mental Retardation in Institutions and in the Community

There has been much interest recently in the comparative mortality of persons with mental retardation living in institutions and those living in the community. After adjusting for risk factors, Strauss and Kastner\(^1\) and Strauss, Eyma, and Grossman\(^2\) reported substantially higher community mortality. However, in her recent editorial, Durkin\(^3\) suggested that their methodology would be biased in favor of the institutions if community care resulted in better functioning.

To test the possibility of such a bias, we analyzed data on a category of death that may be considered relatively independent of quality of care. Specifically, we considered all 239 cancer deaths (International Classification of Diseases, 9th revision, codes 140 to 239) not classified by Rutstein et al.\(^4\) as being avoidable. As in the previous studies,\(^5,6\) we controlled for age, gender, and adaptive skills. The sample included all persons with mental retardation aged 40 years or older who received services from the state of California during the period 1985 through 1994. As previously, we used logistic regression ("pooled repeated observations")\(^2,5\) on the 128296 person-years of data.

For these unavoidable deaths, we found slightly higher mortality in the institutions than in the community (odds ratio [OR] = 1.19, representing 19% higher odds of mortality), although the difference was not statistically significant. We then analyzed the remaining 1706 deaths (i.e., after excluding the 239 presumably unavoidable cancer deaths) and found a 98% higher mortality risk in the community than in the institutions (OR=1.98; 95% confidence interval 1.7, 2.3). For all deaths combined, the excess mortality in the community was 79%.

These findings do not support the hypothesis that the methodology favors the institutions. On the contrary, they suggest that the 72% higher community mortality found by Strauss and Kastner\(^1\) may, in fact, underestimate the excess of avoidable deaths.

David Strauss, PhD
Robert Shavelle, PhD

References

The authors are with the University of California, Riverside, Life Expectancy Project.

Requests for reprints should be sent to David Strauss, PhD, University of California, Statistics/Computer Bldg, Room 2638, Riverside, CA 92521-0138.