Abstract

OBJECTIVE: To evaluate the impact of repeated community-wide mass health examinations on cardiovascular mortality and hospital morbidity trends in Busselton.

METHOD: Population census, hospital admission and death data were used to calculate and compare cardiovascular mortality rates from 1965 to 1998 and hospital morbidity rates from 1971 to 1998 in Busselton residents aged 40 to 84 years with the remainder of the south-west region of Western Australia.

RESULTS: Among men aged 40-69 years, the calendar year trends in standardised cardiovascular mortality and morbidity ratios were relatively flat and non-significant. Among women aged 40-69 years, the mortality ratio declined significantly up to 1989 (p = 0.03) but not over the whole period (p = 0.12), and the downward trend in the morbidity ratio did not reach statistical significance (p = 0.21). Among men aged 70-84 years, both the mortality and morbidity ratios rose significantly over time, whereas among women aged 70-84 years the mortality ratios showed a flat trend and the morbidity ratios a rising trend. These increasing trends were opposite to what was expected if the surveys had a beneficial impact.

CONCLUSION: This analysis of trends, while failing to demonstrate a clear benefit of repeated mass health screenings on cardiovascular event rates, also highlights the difficulties in evaluating the longer-term impact on event rates of such programs and suggests that negative conclusions should be made with caution.