Abstract

The Busselton Health Survey was established in 1966 with the aim of identifying factors that influenced the health of the inhabitants of this coastal town in Western Australia. Further surveys were conducted at 3 yearly intervals from 1966 to 1981, however, in these earlier studies little attention was paid to the topic of ageing. Given the increasing global interest in this subject, it was decided that all persons enrolled in the 1994-1995 resurvey should be examined for age-related changes in their haematology. Samples were obtained from 3830 male and female volunteers aged from 16 to 92 years. The data showed a number of significant, age-dependent shifts in the haematological profiles of those tested. In several instances the observed patterns were expected, for example, a gradual decline in the mean red cell count of males over 60 years of age. Other changes, including a significant increase in red cell distribution width which commenced in females aged 40+ years, have not previously been reported. Findings of this nature indicate the presence of an underlying, age-dependent decline in the haematopoietic system. They also reveal a requirement for age-specific normal ranges, to meet the needs of the many human populations with ever-increasing life expectancies.