ABSTRACT:
The Okinawa Islands located in the southern-most part of Japan were under U.S. administration from 1945 to 1972. During that time, fluoride was added to the drinking water supplies in most regions. The relationship between fluoride concentration in drinking water and uterine cancer mortality rate was studied in 20 municipalities of Okinawa and the data were analyzed using correlation and multivariate statistics. The main findings were as follows. (1) A significant positive correlation was found between fluoride concentration in drinking water and uterine cancer mortality in 20 municipalities ($r = 0.626, p < 0.005$). (2) Even after adjusting for the potential confounding variables, such as tap water diffusion rate, primary industry population ratio, income gap, stillbirth rate, divorce rate, this association was considerably significant. (3) Furthermore, the time trends in the uterine cancer mortality rate appear to be related to changes in water fluoridation practices.