A Construction of Future Life Table in Japan Using a Relational Model.

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The cohort-component method for population projection requires assumptions for future fertility rates and sex ratio at birth, future survival rates, and international migration. Future survival rates are assumed from estimated future life tables. In this paper, future life tables are constructed applying one type of relational model known as Lee-Cater model to the Japanese data. While the position considering life expectancy will keep going up appears more prominent in the last years, a recent survey among population experts in Japan showed that popular was the view that life expectancy for Japanese would increase only up to the assumptions adopted in the previous projections. Thus, both standpoints were averaged for this exercise. As a result, life expectancy at birth will reach from 77.64 years for male and 84.62 for female in 2000 to 80.95 for male and 89.22 for female in 2050. This model produced relatively stable estimates between 1990 and 1995 as the starting year. Also, this model produced estimates that are not deviant in 2050 among the industrial countries. As the technology, the society, and the epidemiology of diseases change, improvements and updates of the model in response to the changing situation are vital.