Session 906: Various national and international data

The Kannisto-Thatcher Database on Old Age Mortality at the Max Planck Institute for Demographic Research: Analysis of Mortality Data at Old Ages

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We are presenting a unique data source on old age mortality: the Kannisto-Thatcher database (KTD). It was established for estimating the death rates at the highest ages (above age 80). In addition to the data itself, the KTD has a toolkit for dynamic data processing including calculation of various indicators of mortality and population and graphic inspection of trends online. These can be performed in addition to possibility of downloading country data sets. Additionally, we present results of data quality analysis and main trends in old age mortality calculated using capacity of the online analytical toolkit.

The KTD includes data on death counts and population estimates classified by sex, age, year of birth, and calendar year for more than 30 countries. The KTD provides the most precise estimates of population size at ages over 80 in developed countries. The main advantage of the KTD is that we use uniform methods to calculate mortality estimates across all countries within the database. One of the important problems for cross-national data analysis is the data comparability. The set of advanced methods used for the KTD are based on formal and mathematical demography approaches and have been applied to evaluate data quality and to harmonize data series. As a result, the data are comparable across time as well as between countries.

For different countries, continuous series for different periods are available. The longest is for Sweden (since 1861), the shortest is for Chile (since 1977). These data are freely available at http://www.demogr.mpg.de/databases/ktdb. We applied a set of old-age data accuracy measures for identification potential data problems for different countries and periods. Following Kannisto, we introduced several criterions to distinguish unexpected patterns in death and population data which suggest about age overstatement and age heaping. Additionally to several measures proposed by Kannisto et al. (1994), we also employed age accuracy indexes and model life tables to identify possible age heaping and age overstatement. We also compared our estimates to the available official statistics. As result, data in the KTD were divided into the three broad groups: good quality data, conditionally acceptable data, and relatively poor data.

To conclude, the KTD provides a better quality recalculated data and special analytical toolkit for data processing. It is a great opportunity for analysis of old age mortality.