## Trends in disability in France over the two past decades in the light of the international context and the theoretical explanations for the disability pattern

Emmanuelle Cambois (Ined/Drees), Jean-Marie Robine (Inserm), Pierre Mormiche (Insee)

In France, severe disability happened to decrease, including at older ages, over the 1980's (Robine et al., 1994). While this situation is true for various countries where chronological series exist for this period, the French case remains atypical due to the fact that moderate disability also decreased (Robine et al., 1997): in most cases over this period, gains in life expectancy were accompanied by fewer years of severe problems while expected number of years with moderate disability tended to increase. However, in the United States, decrease in disability corresponds to the less severe levels of disability only (Spillman, 2004).

Theoretical explanations were proposed to understand this pattern (Myers et al., 2003; Robine et al., 2003). Moderate problems appear to be frequent with the ageing process and non-fatal chronic disorders which are themselves more common with the continuing decreasing trends in mortality. Therefore ageing populations are confronted to an objective burden of moderate disability and more specifically, of functional limitations (difficulty to walk, see, hear...). Nonetheless, this trends may be associated with a positive pattern in which individuals and society are more incline to prevent these functional problems to interfere in the daily life through restrictions in personal care activities, daily chores...

This study aims to show recent trends in disability in France, prolonging previous series in order to confirm or invalidate the favourable situation observed over the last decade. It also aims to further describe the population reporting general disability according to different dimensions of functional health. Both trends and description are expected to better document the French situation, to improve our understanding of the observed cross-national differences in disability trends and to give a new insight into the theoretical understanding of the disability pattern.

National health surveys are conducted every ten year in France. The survey is conducted face to face in the individual household population, excluding the population living in collective households and institutions. A general question on disability was introduced in 1980 and kept unchanged since then in order to provide information on disability comparable with the two previous points. This question on "everyday life difficulties or handicap" is asked to the person replying for the household. Two levels of disability are distinguished: severe for those

being bedridden or confined to home, and moderate otherwise. Trends are estimated regarding previous estimations for 1980-81 and 1991-92. As individual household population only is considered in the sample, the analysis takes into account trends in institutionalisation rates over the period, with actual data and scenarios on the functional status of people in institutions. Some changes in the general study design of the health survey occurred in 2002-2003. Their impact on the reported disability level is carefully examined. Especially, in the 2002-2003 survey, individuals with disability reply for themselves to an additional questionnaire including a module on sensory and physical functional limitations (seeing, hearing, climbing stairs...) as well as questions on activity restrictions (personal care and chore activities).

This additional information on functional limitations and activity restrictions allows to further document the nature of the health problems that people reporting disability are facing and/or taking into consideration when reporting. Although this analysis could not be performed with previous surveys, it contributes to the understanding of the observed trends. These results contribute to the international debate on the population health changes which accompany population ageing and the sustained increase in life expectancy (Robine and Michel, 2004). A handful of countries have long chronological series on health and disability, namely Australia, the Netherlands, Sweden, the United States of American and the United Kingdom. French trends and their possible explanation are discussed in this context.

- Myers GC, Lamb VL, Agree EM. Patterns of disability change associated with the epidemiologic transition. Robine JM, Jagger C, Mathers C, Crimmins E, Suzman R. Determining health expectancies. Chichester: John Wiley & Sons, Ltd, 2003b:59-74
- Robine JM, Michel JP. "Looking forward to a general theory on population aging." *Journal of Gerontology: medical sciences* 2004;**59A**(6): 590-597.
- Robine JM, Mormiche P. Estimation de la valeur de l'espérance de vie sans incapacité en France en 1991. *Solidarité santé* 1994:17-36
- Robine JM, Romieu I, Cambois E. Health expectancy indicators. *Bulletin of the World Health Organization* 1999;77(2):181-185
- Robine JM, Romieu I, Michel JP. Trends in health expectancies. Robine JM, Jagger C, Mathers C, Crimmins E, Suzman R. Determining health expectancies. Chichester: John Wiley & Sons, Ltd, 2003b:75-101
- Spillman, BC. Changes in elderly disability rates and the implications for health care utilisation cost. *The Milbank Quarterly* 2004;**82**(1): 157-194.