Individual Health Transitions between Frailty and Dependence in Late Life

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Abstract

Based on a multidimensional measure of health status, we analyzed the individual health transitions in very old age using Markov chains methodology. We combined the ADL with a frailty indicator—based on the presence of deficiencies in mobility, memory, energy, physical or sensory capacities—and constructed three statuses: independent (I), one or more ADL incapacities, and dependent (D). Based on this distinction, we found that frailty is very often a precursor of dependence: 85% were frail one wave before becoming dependent. Reversibility out of frailty is rare (probability 0.17 for F-I), and most often of short duration. Frailty is a lasting situation: stability in frailty is one of the two most frequent trajectories (with independence) on 3, 4, and 5 successive waves. Frailty does not necessarily lead to a rapid decline towards dependence: one year after, 59% of frail people remain frail, only 16% become dependent. Long-term dependence does not necessarily precede death: only 29% were long-term dependent at baseline in two contrasting regions of Switzerland (urban and rural). They were interviewed 5 times (between 1994 and 1999). The information was gathered by means of face-to-face interviews (total N=1225).

Conclusions and perspectives

Frailty is a leading and lasting situation in late life, from which ameliorations are rare and of short duration. Frail people are at increased risk of dependence. A majority of the oldest old die without having to suffer from long-term dependence. These results, combined with the fact frailty influences the oldest old well-being (see Girardin M., Poster Session BSS 11/20/04) and leads to arrangement of their daily life (e.g. social relationships, activities), could demonstrate that frailty – not long-term dependence – is the last stage in late life.