ACTIVITY, FRAILTY AND WELL-BEING IN LATER LIFE: A TEN-YEAR LONGITUDINAL STUDY IN SWITZERLAND

J.-F. Bickel1, 2, M. Girardin1, Ch. Lalive d’Epinay1

1) Center for Interdisciplinary Gerontology, University of Geneva, Switzerland; 2) Department of Social Work and Social Policy, University of Fribourg, Switzerland

QUESTION

Is continuity in activity engagement related to well-being: 1) when frailty appears?; 2) when frailty is worsening (increasing deficiencies)?

SAMPLE

SWILSO-O (Swiss Interdisciplinary Longitudinal Study on the Oldest Old)

Participants1) 299 224 190 162 124 99 75 51 42

Mean Age Participants


Mean Age Participants


1) First cohort, those living at home and directly interviewed

INDICATORS

The two Dimensions of Well-Being

Affective dimension

Cognitive dimension

Affective Well-Being: Standardised mean index of 8 items measuring frequency of positive and negative affects

Perception of Health: Standardised mean index of 2 items: self-rating health and frequency of worries about one’s own health

Activities

Listen to radio; Watch television; Read the newspaper; Read books or magazines; Play games with others; Play solitary games; Do gardening; Do craftwork; Go to walk; Do physical exercise; Visit coffees, restaurants; Participate in trips or outings; Attend cultural events; Attend local fairs or celebrations; Pray; Attend religious services.

Sum index of regular activities (0-16)

Health Status

Robust (R)

no ADL incapacities and not more than one affected dimension of frailty (mobility, memory, energy, physical ailments, sensory capacities)

Frail (F)1)

no incapacities on the ADL, but two or more deficiencies on the dimensions of frailty

1) ADL-Dependents, having one or more ADL incapacities, have been excluded of analyses

RESULTS

A) Evolution in aggregate mean level of well-being between Tn and Tn+1 for three types of health and activity trajectories (test of Wilcoxon)

B) Well-being in Tn+1 by health and activity trajectories (multi-level models)

1) Entry into Frailty (R-F)

<table>
<thead>
<tr>
<th>Stasis in Robustness (R-R) (=ref. group)</th>
<th>Affective Well-Being</th>
<th>Perception of Health</th>
<th>Affective Well-Being</th>
<th>Perception of Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability in Robustness (R-R) (=ref. group)</td>
<td>Affective Well-Being</td>
<td>Perception of Health</td>
<td>Affective Well-Being</td>
<td>Perception of Health</td>
</tr>
<tr>
<td>Entry into Frailty (R-F) with Continuity in Activity</td>
<td>Affective Well-Being</td>
<td>Perception of Health</td>
<td>Affective Well-Being</td>
<td>Perception of Health</td>
</tr>
<tr>
<td>Entry into Frailty (R-F) with Decline in Activity</td>
<td>Affective Well-Being</td>
<td>Perception of Health</td>
<td>Affective Well-Being</td>
<td>Perception of Health</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stability in Robustness (R-R) (=ref. group)</th>
<th>Affective Well-Being</th>
<th>Perception of Health</th>
<th>Affective Well-Bein</th>
<th>Perception of Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability in Robustness (R-R) (=ref. group)</td>
<td>Affective Well-Bein</td>
<td>Perception of Health</td>
<td>Affective Well-Bein</td>
<td>Perception of Health</td>
</tr>
<tr>
<td>Worsening Frailty (F-F+) with Continuity in Activity</td>
<td>Affective Well-Bein</td>
<td>Perception of Health</td>
<td>Affective Well-Bein</td>
<td>Perception of Health</td>
</tr>
<tr>
<td>Worsening Frailty (F-F+) with Decline in Activity</td>
<td>Affective Well-Bein</td>
<td>Perception of Health</td>
<td>Affective Well-Bein</td>
<td>Perception of Health</td>
</tr>
</tbody>
</table>

1) Multi-levels models. *p<0.05; **p<0.01; ***p<0.001

Note. Controlled by gender, socio-economic status, region, age, living alone and well-being in Tn

2) Worsening Frailty (with increasing deficiencies) (F-F+)

When frailty appears or is worsening, a continuity in activity is:

A) related with no change in well-being, in contrast with a decline in activity which implies a decrease in well-being;

B) associated with no statistically significant difference in well-being when compared to a stable robustness or a stable frailty, whereas the difference is highly significant in case of a decline in activity.

CONCLUSION

The entering into frailty or the worsening in frailty has a deleterious effect on well-being when it is accompanied with a decline in practices; but such a consequence is softened (if not eliminated) when there is a continuity in activity level.

The preservation of the oldest old well-being affected by the frailty process depends on the resources and the capability they have to cope with its impact.

This research is supported by a grant from the Swiss National Science Foundation (NSF).

Principal Investigator: Prof. Christian J. Lalive d’Epinay

For more informations: jean-francois.bickel@unifr.ch