**Progress brief, Literature review, Work package 1, FutureGen**

The aim

To explore the research question (RQ): To what extent are sex differences in old-age functional impairments attributable to socioeconomic conditions?

Method

Narrative or scoping literature review.

Search string

(sex[Title/Abstract] OR gender[Title/Abstract]) AND (socioeconomic[Title/Abstract] OR education[Title/Abstract] OR social class[Title/Abstract] OR income[Title/Abstract]) AND (disability[Title/Abstract] OR disabilities[Title/Abstract] OR functional impairment[Title/Abstract] OR physical function[Title/Abstract] OR functioning[Title/Abstract] OR mobility impairment[Title/Abstract] OR mobility limitation[Title/Abstract] OR ADL[Title/Abstract] OR IADL[Title/Abstract] OR health[Title/Abstract]) AND (old age[Title/Abstract] OR older adults[Title/Abstract] OR older people[Title/Abstract] OR aging[Title/Abstract] OR ageing[Title/Abstract] OR old[Title/Abstract] OR elderly [Title/Abstract])

Search results

The above search string returned 7529 items on MedLine (2019-08-05)

Suggested inclusion criteria

1. Peer-reviewed papers
2. Published after year 2000 (2010?)
3. From OECD countries
4. Participants aged 65+

Preliminary findings

After reviewing parts of the 7000+ hits generated by the search string, I’ve made some preliminary observations (that may, or may not, turn out to be erroneous after systematically assessing the literature):

1. There are few, if any, studies from high-income countries that are explicitly addressing our RQ. I found this quite surprising.
2. Yet, there are studies from which you could get information about the RQ. Typically, these are studies that show estimates of sex-differences in functional impairment before and after adjusting for indicators of socioeconomic position.
3. Most, but not all, of these studies tend to show that there are sex-differences in functional impairments – with higher prevalences among women than among men.
4. Yet, adjusting for socioeconomic indicators usually do not change the estimates substantially – suggesting that socioeconomic conditions do not play any major role in shaping the observed sex-differences. This also surprised me.

Limitations

1. These studies were usually designed for other purposes, meaning that there are no formal tests of differences between the estimates across the models.
2. The indicators of socioeconomic position typically reflect the current conditions – while it is likely that the outcomes in old age are shaped by life-long processes.
3. There is also issues of potential misclassification when using individual vs. household socioeconomic position.
4. Limitation 2 and 3 can (hopefully) partly be addressed by comparing the results from different studies, using different indicators of socioeconomic position.

Current concerns

1. Given the limitations mentioned above (and other), is it reasonable to go ahead and pursue the RQ using this method (literature review)?
2. Are the suggested inclusion criteria reasonable? Other suggestions?
3. As the studies are typically designed for other purposes, how do we decide what studies to include and what to exclude (and how can we make those criterias robust enough for replication/triangulation)?
4. How do we assess the evidence when formal tests are lacking?
5. Would a narrative review give us more leeway in terms of concerns 3 and 4?
6. Manpower. Is it enough with one reader during the screening process (with consultation of others in problematic/questionable cases)?

Suggested timeline

Given that I really have no experience in heading a literature review of this kind before, it is difficult for me to assess the time needed for each step. But here is a suggested timeline (in parallel with this, we will start working on the first empirical paper of WP1):

1. Finalize the searches (with the help of the search unit at Karolinska) and select the relevant papers (August-September).
2. Analyze the findings and write up a first manuscript of the study (October-November)
3. Circulate the manuscript among the co-authors for comments and suggestions (December)