Interest of assessment of frailty in the prevention campaigns and screening

J.P. Baeyens

Ageing is not only characterized by a decline (loss) of some functional abilities, but also by an increase (gain) in other functional abilities. It is more and more common in recent literature to emphasize the importance to stop using the deficit model for the description of ageing.

What matters in older age is not the fact that a person no longer is capable of doing certain activities, but rather for a person to keep as many as possible functionalities which are required for the activities of daily living.

A functionality is the result of the equilibrium between what the person can do by himself and the possibilities of the environment (inclusive other people). Thus, a minor handicap in a rather hostile environment or loneliness could be a major threat for the functionality of a person. Therefore, assessment of frailty always needs to take the functionality of the person, as well as the environment into account

In Public health science all agree that the major breakthroughs can be found in the area of prevention. The best example is the high impact of vaccination, on the life of millions of people, who before the introduction of vaccination were dying of several infectious diseases such as diphtheria, tetanus, smallpox, poliomyelitis, influenza, etc. Another example is the decreased use of salt, as a result of which hypertension in younger adults has now almost disappeared. The screening for hypertension in older adults is now very common, and more in general blood pressure is now measured at any medical visit. It has thus become a standard test.

Frailty in older persons is a progressive evolution to less functionality. The reasons for this process are multiple: from active disease to inactivity and/or disuse . The process results in disability and a poor quality of life. Older people are more interested in the quality of their remaining life than in their life expectancy. In daily medicine most physicians tend to look for blood pressure, cholesterol, and sometimes the vaccination status. However, many forget to look for the first (reversible) signs of frailty.

Screening for the first signs of frailty should become state-of-the-art in every contact between an older person and a physician (or community nurse). However, there are two factors that impede such practice. Firstly, there are different definitions of frailty that co-exist. We urgently need to find a consensus at international level. Secondly, the tools to screen for frailty are too complex for daily use in a general medical practice. Although the current tools are excellent for research programs, they are not user-friendly for daily practice.

Amongst all published and validated screening tools, the simplest tool is the SOF-index. With this SOF-index, Ensrud[i,ii] was able to simplify the screening. She proposed the SOF-index (Study of Osteoporotic Fractures). This SOF-index defines *frailty* by identifying the presence of <u>two or more</u> of the following three components at the second examination:

Weight loss (irrespective of weight-loss intention) of 5% or more between the baseline and the second examination

Inability to rise from a chair without using the arms and this five times in a row

Poor energy as identified by an answer of "no" to the question "Do you feel full of energy?" on the Geriatric Depression Scale.

A person with none of the above components is considered *robust*, and those with one component were considered to be in an *intermediate stage of frailty.*

Screening can be enhanced by sending postal questionnaires for self-reporting to a population above 65 years. There are some good examples of research projects that used this approach: the Groningen Frailty Indicator, the Tilburg Frailty Indicator, the Sherbrooke Postal Questionnaire. The problem with postal questionnaires however is that it is likely that the fittest people respond more frequently, and the more frail people respond least. Therefore, the questionnaire will miss its target of finding the frail persons.

Looking to the practical day-to-day activity with patients tending to frailty, they generally received some home-nursing, or other help. When in these patients a short comprehensive geriatric assessment is done, i.e. with the InterRAI instrument[iii,iv] , it is very easy to see the first signs of frailty appearing, especially when this evaluation is repeated at regularly intervals (3, 6 or 12 months).

When a person's frailty has appeared, appropriate action is of course required. The causes of this beginning of frailty need to be identified. An action plan has to be drawn up, and must be accompanied with a close follow-up[v].

In summary, it can be concluded that a program, whereby a specific very short screening for frailty is systematically undertaken whenever there is a contact between a health professional and an older citizen, looks very promising and achievable at the same time to detect as early as possible the beginning of the frailty process…

References

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