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Editorial

New perspectives in Gerontology and Geriatrics

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Introduction

In the development of Gerontology and Geriatrics in the next twenty years important questions have to be resolved, as following questions are suggesting:

- Is the cooperation between Gerontology and Geriatrics today optimal?
- How to detect and reverse pre-frailty?
- The increasing number of hip fractures: what is primary: osteoporosis or sarcopenia?
- All the Geriatric patients admitted in a general hospital have to be admitted in geriatric wards?
- Is the always earlier retirement age one of the important cause of the increase in incidence and prevalence of Alzheimer Dementia?
- How to stop the polypharmacy and inappropriate prescription for geriatric patients?
- How to start with clinical trials in very old frail patients?

What are the possible answers to these questions?

- Is the cooperation between Gerontology and Geriatrics today optimal?

It looks more and more difficult to take together Gerontology and Geriatrics. Geriatrics is really focusing on keeping the steady increasing number of people of very old age as autonomous as possible. As in the seventies Geriatric departments presented a mean age of 78 years, it is now in Western Europe 86 years or even higher.

The Gerontology is generally doing research on people in the sixties. It is indeed very important to prevent more and more incapacity in later age, and that begins earlier than the care of the very old people. Both should do efforts to keep more in touch. It was already one of the goals of the creation of the International Association of Gerontology in Liège (Belgium) in 1950.

- How to detect and reverse pre-frailty?

Both the Gerontology and the Geriatrics have to learn a lot from each other. The prevention of the frailty syndrome is an excellent example for cooperation between both disciplines. Prevention of frailty and reversing of pre-frailty in non-frailty is really a major challenge for mankind today (1-4). The General Practitioners have here a major role to play (1). They have to detect the Pre-Frailty situations in their patients. The Geriatric Day Hospitals can help them to change the situation when detected. This will be the only way to stop the massive inflow of geriatric patients in the emergency departments as it is today. Public health recommendations to eat an optimal diet with the right amount of energy and proteins should be moved to the public domain (2).

- The increasing number of hip fractures: what is primary: osteoporosis or sarcopenia?

The ortho-geriatric wards are starting in many hospitals. The number of hip fractures is increasing. Many geriatric patient have an extreme low vitamin D concentration, what could be easily corrected. Vitamin D shortage has a negative effect as well on the calcium resorption as on the incorporation of calcium in the muscle stem cells (3). The very expensive treatment of osteoporosis has till today no significant effect on the occurrence of hip fractures on population level. We see

indeed in the geriatric patients very frequently extreme situations of cachexia and sarcopenia. Undernutrition is a major problem in this population group. Not only their fat is burned, but also their muscles.

In many cases they have also inactivity: a typical aspect of geriatric patients; This also diminish the muscle strength and endurance. Treatment of these problems will also diminish the degree of osteoporosis.

The key question is "Osteoporosis and sarcopenia: two diseases or one?" (4).

- All the Geriatric patients admitted in a general hospital have to be admitted in geriatric wards?

In the General Hospitals we find today patients with geriatric profile in nearby all the departments. This was the situation 50 years ago with paediatrics. We found in the sixties children in all departments, between older and very old patients. Now this is no longer the case worldwide. Children are concentrated in the Paediatric departments, cared for by specialised paediatric nurses and paediatricians. Concentration of people with geriatric profile is necessary, because it is now proven by many studies that the results of this approach is much more rewarding than the conventional approach mixing all patients profile (not the age as such). The care by specialised geriatricians and the geriatric multidisciplinary team appears to be very efficient (5).

- Is the always earlier retirement age one of the important cause of the important increase in incidence and prevalence of Alzheimer Dementia?

The increase in prevalence and incidence of Dementia is a major problem in geriatric medicine today. as always in Medicine, prevention is more rewarding than cure (the major example is the high degree of efficiency of vaccination). Major questions are raising up: why this increase? What was modified in our society recently?

All papers are now proving that prevention of Alzheimer disease includes regular physical and mental activity.

In contrast we see more and more people retiring earlier, without any residual activity. The question is raising why we should not abolish the fixed mandatory retirement age and change it in a flexible age, with progressive adapted decrease in activity over the time. Recently some publications are making the possible link between later retirement and delaying of the onset of Alzheimer Dementia (6-8). Longer professional activity is in any case a major guarantee for physical and mental activity.

It has to be mentioned that some people appealed to the European Court of Justice in Luxemburg, with the result that the court concluded that the mandatory age related retirement is a real discrimination by age, but was not able to change this.

- How to stop the polypharmacy and inappropriate prescription for geriatric patients?

Polypharmacy is still an increasing major problem in the healthcare of geriatric patients. This was already mentioned in papers in the sixties, but the problem is increasing and is not solved. More and more "organ specialists" are treating geriatric patients and all of them likes to prescribe a lot of medicines. Each "organ specialist" is considering his speciality as the most important.

Good choices have to be made by the General Practitioner of the patient, and if too complex, the geriatrician's advice can be very useful. Some geriatric departments have started special out-patient clinics for this problem with success.

In many cases these prescriptions are not appropriate for the geriatric patient. The former Beers list (USA) and the recently published adapted to the European region STOPP-and START (9, 10) is now good disseminate but has to be introduced in the prescription software programmes to facilitate the generalisation.

-How to start with clinical trials in very old frail patients?

All geriatricians are now convinced that the principle of "start low, go slow" in geriatric patients is a good one, but that is not enough to avoid complications due to the medication side effects and medication interactions in these geriatric patients (11).

The situation is improving: we see more clinical trials with "fit older people". Clinical trials however with the "real frail geriatric patients" are still lacking. This is unacceptable and in contradiction with what has been decided in the European Parliament. The Eu-

ropean Parliament adopted a regulation that clinical trials have to be performed in "real patients".

Again what was started for the Paediatrics has also to be started up for the geriatrics: to start in the EMA (European Medicine Agency) with a Geriatric Committee as there is a Paediatric Committee (12).

References

1. Martin-Kleisch A, et al. Feasibility of assessing frailty in general medicine patients aged over 65. Rev. Epidemiol Sante Publique 2019 Mar 7, pii S0398-7620(19) 30171-3.
2. Cruz-Jentoft AJ, et al. Nutritional interventions to prevent frailty. Curr opin Clin Nutr Metab Care 2019 May; 22(3): 191-5. Doi 10.1097/MCO.0000000000000556.
3. Scimeca M, et al. Vitamine D receptor in muscle atrophy of elderly patients: a key element of osteoporosis-sarcopenia connection. Aging and Disease 2018 dec 9; (6): 952-064.
4. Reginster JY, et al. Open Clin Nutr Metab Care 2018; 19: 31-36.
5. Rubenstein L. The cklinical effectiveness of multidimensional geriatric assessment. J Am Ger Soc 1983 dec 31; (12): 578-62.
6. Lupton MK, et al. Int J Geriatric Psychiatry 2010 Jan; 25 (1): 30-6. doi.10.1002/gps.2294.
7. Grotz C, et al. Plos One DOI:10.1371/journal pone.0115056 february 25, 2015
8. Dufouil C, Pereira E, Chêne G, Glymour MM, Alpérovitch A, Saubusse E, Risse-Fleury M, Heuls B, Salord JC, Brieu MA, Forette F. Older age at retirement is associated with decreased risk of dementia. Eur J Epidemiol 2014 May; 29 (5): 353-61. doi: 10.1007/s10654-014-9906-3. Epub 2014 May 4.
9. Conejos M. et al. Potentially inappropriate drug prescription in older subjects across health care settings. European Geriatric Medicine 2010; 1: 9-14.
10. O'Mahony D, et al. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age and Ageing 2015; 44: 213-218.
11. Topinkova E, et al. Evidence-based strategies for the optimization of pharmacotherapy in older people. Drugs Aging 2012 Jun 1; 29 (6): 477-94.
12. Baeyens JP. The European Medicine Agency discovers the Geriatric Patient. Drugs Aging 2011; 28 (11): 849-851.