

Low socio-economic status linked to significant reduction in physical mobility

March 27th, 2018: Researchers with The Irish Longitudinal Study on Ageing (TILDA) have discovered that low socio-economic class is linked as strongly with reduced physical function in adults as obesity, diabetes and lack of exercise. The TILDA team's data, which was combined with that from cohorts in 24 other countries, shows for the first time the important effects of socio-economic class (a person's occupational group, education, income, wealth and residence) on physical function in adulthood on a global scale.

By age 60, seven years of good physical function are lost due to low socio-economic class in this EU-funded study (LIFEPATH) of around 110,000 people aged 45 years and older from Europe, USA, South America, China, the Far East and Africa. The results have recently been published in leading peer-reviewed medical journal, **thebmj** ([see here](#)).

The world's population is rapidly ageing. The World Health Organization (WHO) considers healthy ageing a public health priority, and there are targets for WHO member states to reduce death from chronic diseases by 25% by the year 2025. However, given the pressures on health and social services that global ageing is imposing, minimising the time that people spend living with disability and loss of independence (e.g. loss of physical function) is also a major health and social challenge.

This new study researched the factors that are associated with loss of physical function, including socioeconomic status (SES), diabetes, obesity, high alcohol intake, smoking and hypertension. The key components of physical function are a combination of energy, joint problems, weak muscles, heart problems, brain function, lung function and nerve function, which is why data were collected on walking speed -- a measure that captures these key components.

Key findings

- Walking speed declined year on year with advancing age, but the decline was exaggerated by SES.
- Other factors that influenced walking speed were obesity, lack of exercise, diabetes and, to a lesser degree - smoking, hypertension and high alcohol intake
- Men aged 60 and of low SES had the same walking speed as men aged 66.6 of high SES. In other words men in the lower SES lost almost 7 years of good physical function when compared to those in the higher SES
- For women, the loss in functioning years was almost five years. This is similar to the five years of good physical function lost for recognised factors such as lack of exercise, diabetes and obesity
- The association between lower SES and walking speed continues up to age 85 years. The impact of SES on function was more marked in high-income countries compared to low-income countries. For example, eight years loss of good physical function in

low SES categories in high-income countries compared with two years loss in low SES in low- and middle-income countries

- Current global health policies are targeted towards traditional risk factors such as smoking cessation, exercise, reduction in weight and good management of blood pressure and diabetes. The impact of these interventions addresses traditional end points such as death and disease, but the researchers behind the new findings now propose that physical function and disability are important end points that policy initiatives should address.

Professor of Medical Gerontology at Trinity College Dublin, and Principal Investigator with TILDA, Rose Anne Kenny, said: “This new study shows for the first time that SES is as important in determining physical function and disability as obesity, diabetes and lack of exercise. Furthermore, years of function lost at older ages exceeded the years of life lost, which suggests that the exclusive focus on diseases and death rates might lead to underestimation of the potential benefits of dealing with poor socioeconomic circumstances.”

“The social environment can be modified by policies at local, national and international levels. Examples include promotion of early childhood development, tackling poverty and living circumstances, and ensuring that all children have access to high quality education. Policies to deal with poor socioeconomic circumstances, in addition to recognised risk health factors are critical strategies for promotion of healthy ageing in Ireland.”

Along with Professor Kenny, TILDA researchers Dr Cathal McCrory and Professor Richard Layte are also listed as authors on the journal article.

To read more about the research, click [here](#).

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