



Cognitive and social activities and long-term dementia risk

I read Sarah Floud and colleagues' Article on activities and dementia risk with concern.¹ Considerable evidence supports the concept that cognitive and physical activities have a beneficial effect on the brain and that they protect against dementia development.

Floud and colleagues reported that participation in activities in the 10 years before dementia onset was protective because of reverse causality. Why could this relationship not be due to direct causation? There is considerable biological evidence to support this interaction.

While Floud and colleagues' study had a large sample size of 851 307 women and mean follow-up of 16 years, my view is supported by studies with rigorous disease assessment, as well as a longer study period.² In a case-control study including people with Alzheimer's disease and controls, aged approximately 72 years, participants were asked about their engagement with 26 activities from ages 20 to 60 years. It was found that the odds ratio for Alzheimer's in those performing less than the mean value of activities was 3.85 (95% CI 2.65–5.5; $p < 0.001$).³ Furthermore, the Nun Study of Aging and Alzheimer's Disease found that linguistic ability, derived from autobiographies written at a mean age of 22 years, was protective.^{4,5} Also, Floud and colleagues' study did not assess intensity of participation in the activities assessed, unlike the case-control and Nun studies.

Floud and colleagues recommend that guidelines concerning recommendations for activities to prevent dementia, "...should be reconsidered". This is unwise, considering the available evidence for direct causation, as well as the many studies showing that such activities are nonetheless valuable in the prevention of heart disease and hypertension.

I declare no competing interests.

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