

Abstract

Background Dementia will pose a huge burden and challenge for the health care system and economy as population ageing is a universal phenomenon of the world. Previously, we had a knowledge gap in the area of modifiable risk factors for dementia. In the recent few years, as more evidence has been accumulated, we have attained more understanding of the modifiable risk factors and protective factors.

Among the possible protective factors, the role of an active lifestyle is always the subject of debate.

Aims In this review article, the role of an active lifestyle in dementia is examined by evaluating the aggregated evidence. A person with an active lifestyle is defined as having regular leisure activities. For convenient analysis, the leisure activities are divided into non-physical (social and mental) leisure activities and physical leisure activities. The objective is to see whether there is an association between leisure activities and risk of dementia.

Methods

- Using MEDLINE, PsycINFO EMBASE and the Cochrane Database of Systematic Reviews (1980-2008) to search the relevant articles.
- Applying practical screen to select the appropriate articles systematically by studying the content, year, language and setting.
- Applying the methodology of quality screening by studying

the designs, sample size, data analysis and results of the studies.

- Manual searching through reference lists of the papers.
- Contacting the experts through e-mail communication and letters.
- The underlying biological mechanisms are explored.

Results and Conclusion Eight papers on non-physical leisure activities and 15 papers on physical leisure activities were identified.

There is evidence that social and mental leisure activities are associated with reduce risk of dementia. Findings also indicate that physical leisure activities are associated with reduced risk of dementia but the effect of the physical component itself is still the subject of debate.

Implications Promoting education for active life style is highly recommended. Cognitive behavioural programmes with a wide spectrum of activities involving mental, social and physical components are warranted.

With further confirmation and elucidation by more well designed studies on the topic and on the underlying biological mechanism, our health planner can motivate the public to adopt an active lifestyle through education and media propagation.

Keywords Leisure activities, dementia risk, biological mechanisms, clinical implication, adopt active life style.