

Satisfying mid-life relationships linked to lower multiple chronic disease risk in older age

Findings only partially explained by income, education, and health behaviours

Satisfying relationships in mid-life with partners, friends, or work colleagues are linked to a lower risk of accumulating multiple long term conditions in older age—at least among women—suggests research published in the open access journal **General Psychiatry**.

The less satisfying these relationships were, the greater was the risk, with the findings only partially explained by influential factors, such as income, education, and health behaviours, the study shows.

Mounting evidence indicates a link between strong social networks and good health/wellbeing in older age, but it's not known if these connections might lower the risk of multiple long term conditions (multimorbidity), which many older women, in particular, face.

In a bid to assess to what extent a women's level of satisfaction with their relationships—partner, family, friends, work colleagues, and other social connections—singly and collectively might influence this risk, the researchers drew on 13,714 participants of the Australian Longitudinal Study on Women's Health (ALSWH).

The ALSWH is an ongoing population-based study looking at factors associated with the health and wellbeing of women who were aged 18–23, 45–50, and 70–75 in 1996.

All the women in the current study were aged 45-50 in 1996. Their health and wellbeing was tracked roughly every three years via questionnaire up to 2016.

They were asked to rank their levels of satisfaction with each of their 5 categories of relationships on a 4-point scale, with each response scored up to a maximum of 3 points.

And they were asked to indicate if they developed any of the following: diabetes; high blood pressure; heart disease; stroke; chronic obstructive pulmonary disease (COPD); asthma; osteoporosis; arthritis; cancer; depression; and anxiety.

Accumulating 2 or more of these from a starting point of none, or additional conditions from just 1, or from 2 or more, was defined as having multiple conditions (multimorbidity).

Information was collected on potentially influential demographic, lifestyle and hormonal factors: country of birth, marital status, area of residence, educational

attainment and the ability to manage income; weight (BMI), physical activity, alcohol intake and smoking; and menopausal status.

The final analysis included 7694 women, 58% (4484) of whom accumulated multiple long term conditions over 20 years of monitoring.

Those who did so, were more likely to have lower educational attainment, find it difficult to live off their income, be overweight/obese, physically inactive, smokers and to have had a surgically induced menopause.

Overall, relationship satisfaction was associated with the accumulation of multiple long term conditions: the greater the levels of satisfaction, the lower were the risks.

Compared with women reporting the highest level of satisfaction (score of 15), those who reported the lowest (score of 5 or less) were more than twice as likely to accumulate multiple long term conditions after fully adjusting for potentially influential factors.

The strength of the association was comparable with that of well established risk factors, such as overweight/obesity, physical inactivity, smoking and alcohol intake, say the researchers.

When all 5 types of relationship were included in the analysis, the association weakened, but still remained significant for all except friendships. Similar results were observed when individual conditions were analysed separately.

Well established risk factors, such as socioeconomic position, health behaviours, and menopausal status, together explained less than one-fifth of the observed association.

This is an observational study, and as such, can't establish cause. It also relied on personal recall, and didn't capture information on social relationships in early adulthood. And as it included only Australian women, the findings might not be applicable to men or other cultures, say the researchers.

Further research is needed to explore other specific effects of relationships on the accumulation of multiple long term conditions, such as intimacy, quantity, and emotional and practical support, they emphasise.

Nevertheless, they conclude: "Our findings have significant implications for chronic disease management and intervention. First, at the individual level, these implications may help counsel women regarding the benefits of starting or maintaining high quality and diverse social relationships throughout middle to early old age.

"Second, at the community level, interventions focusing on social relationship satisfaction or quality may be particularly efficient in preventing the progression of chronic conditions.

“Third, at the country and global levels, social connections (eg, social relationship satisfaction) should be considered a public health priority in chronic disease prevention and intervention.”