

In sickness and in health: shared risk factors for musculoskeletal consultations in couples

Musculoskeletal (MSK) conditions are the second most common condition seen in primary care

Evidence exists of shared risk in couples for a range of common conditions such as:

- Diabetes
- Heart disease
- Depression
- Asthma

Three proposed explanations for this are:

- Shared emotion
- Shared health beliefs and behaviours
- Shared environment

We used recorded primary care consultations to assess shared risk for MSK conditions in couples over a 1 year period.

In this particular study over 27,000 patients (13,500 couples) were included with a mean age of 52 years. One member of each couple was designated the “index patient” for this analysis.

- Read codes were used to identify musculoskeletal consultations
- Shared emotion was defined as a consultation for mood or anxiety problems by both partners over the year period
- Health behaviour was defined as the number of consultations over the year period, with those in the top 20% of number of times consulted classified as frequent consulters
- English Index of Multiple Deprivation was used to give an indication of the shared environment

Figure 1: Possible explanations of shared risk in couples



Results

- 8292 patients had consulted for a MSK condition within the 1 year period
- Regression analysis showed a 22% increase in the odds of a person consulting for a MSK condition if their partner had also consulted for MSK

Key findings

Further analysis of potential explanations showed that partners who:

- have consulted about a MSK condition
- have consulted about a mood or anxiety condition
- are frequent consulters
- share a higher level of deprivation

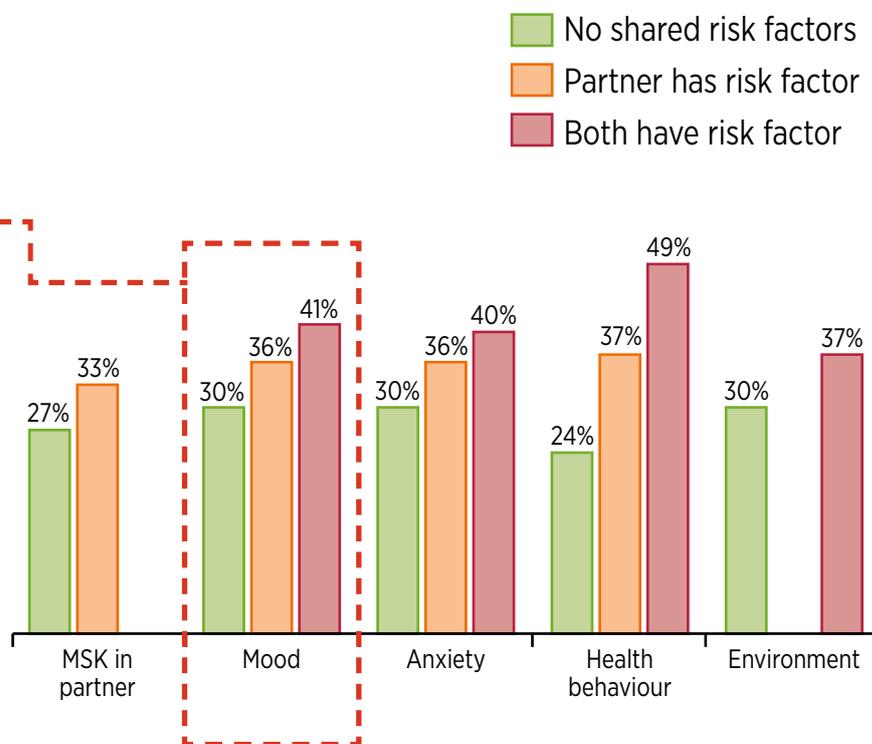
all independently increase the odds of a MSK consultation in the index patient.

❖ Taking mood as an example from the graph to the right, the figures mean that:

- **when neither partner has a mood problem the prevalence of MSK conditions in index patients is 30%**
- **when the partner, but not the patient, has a mood problem, MSK prevalence in index patients is 36%**
- **when both partners have a mood problem, MSK prevalence is 41% in the index patient**

These findings illustrate the wider influence of shared risk on consultations for MSK conditions in Primary Care.

Percentage of index patients who have musculoskeletal conditions, according to risk factor status of index patient and partner



Implications

These interesting results have potential direct relevance to primary care:

- 1) Partners of those with MSK pain have a higher chance of having pain themselves, and so MSK is a potential issue for “Family Health”
- 2) Partners’ general health and mood may be linked to patients’ MSK pain, with potential consequences for both partner (e.g. caring role) and patient (e.g. coping)
- 3) These findings highlight the potential to conduct further research on the benefits of managing MSK at the couple and/or family level

Reference

Campbell P, Shraim M, Jordan K, Dunn K (2015). **In sickness and in health: a cross-sectional analysis of concordance for musculoskeletal consultations in 13,507 couples.** (early view: *European Journal of Pain* doi:10.1002/ejp.744)

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