

Prevalence and predictors of anxiety and worry in women after colposcopy: a longitudinal study

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Background

Well organised cervical screening is effective in reducing cervical cancer incidence and mortality. However, if cervical screening is to be successful, women with low-grade abnormalities require follow-up. One common follow-up option is referral for a hospital-based colposcopy examination. Other options include a biopsy of the abnormal cervical cells or removal of the cells by treatment.

It is widely known that colposcopy can be a distressing experience for women. Studies have reported raised anxiety levels & distress both prior to and during the examination. Less is known about the psychological after-effects, and the issues that concern women.

Aims

- In women undergoing colposcopy and related procedures, to
- estimate the prevalence of anxiety and specific worries at 4, 8 and 12 months post-colposcopy (and related procedures); and
 - identify women most at risk of suffering psychological after-effects.

Methods

This study involved assessments at 3 time-points – 4, 8 and 12 months after the initial colposcopy. Figure 1 shows the study design and what was assessed at each time point.

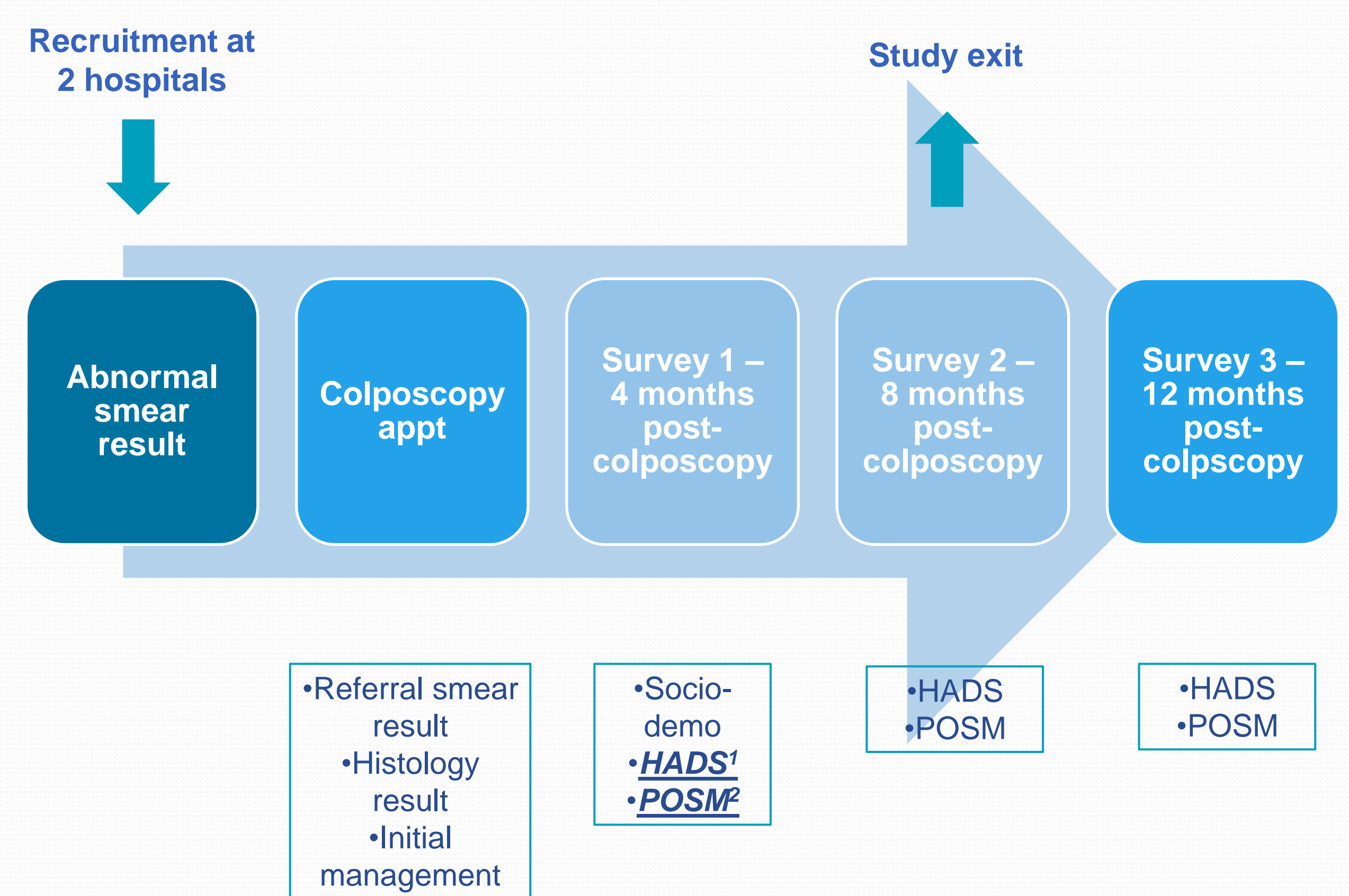
Subjects and Survey instruments

Women were recruited at two colposcopy clinics following referral for an abnormal smear result. A postal survey was mailed to women 4, 8 and 12 months following their initial colposcopy clinic appointment. Anxiety was assessed by the HADS. Specific worries about cervical cancer and future fertility were assessed by the POSM. Women's clinical data was obtained through their hospital records retrospectively.

Analysis

Outcomes assessed were anxiety, cervical cancer and future fertility worries. Prevalence of each outcome was assessed at each time point and at any time point (Figure 2). Multiple logistic regression analysis was used to identify significant predictors of the outcomes at any time point (4 or 8 or 12 months) (see Figures 3, 4 and 5).

Figure 1. Study design



¹HADS (Hospital Anxiety and Depression Scale) Snaith & Zigmond, 1983
²POSM (Process Outcome Specific Measure) Gray, 2005

Figure 2. Prevalence of anxiety and specific worries at each time point

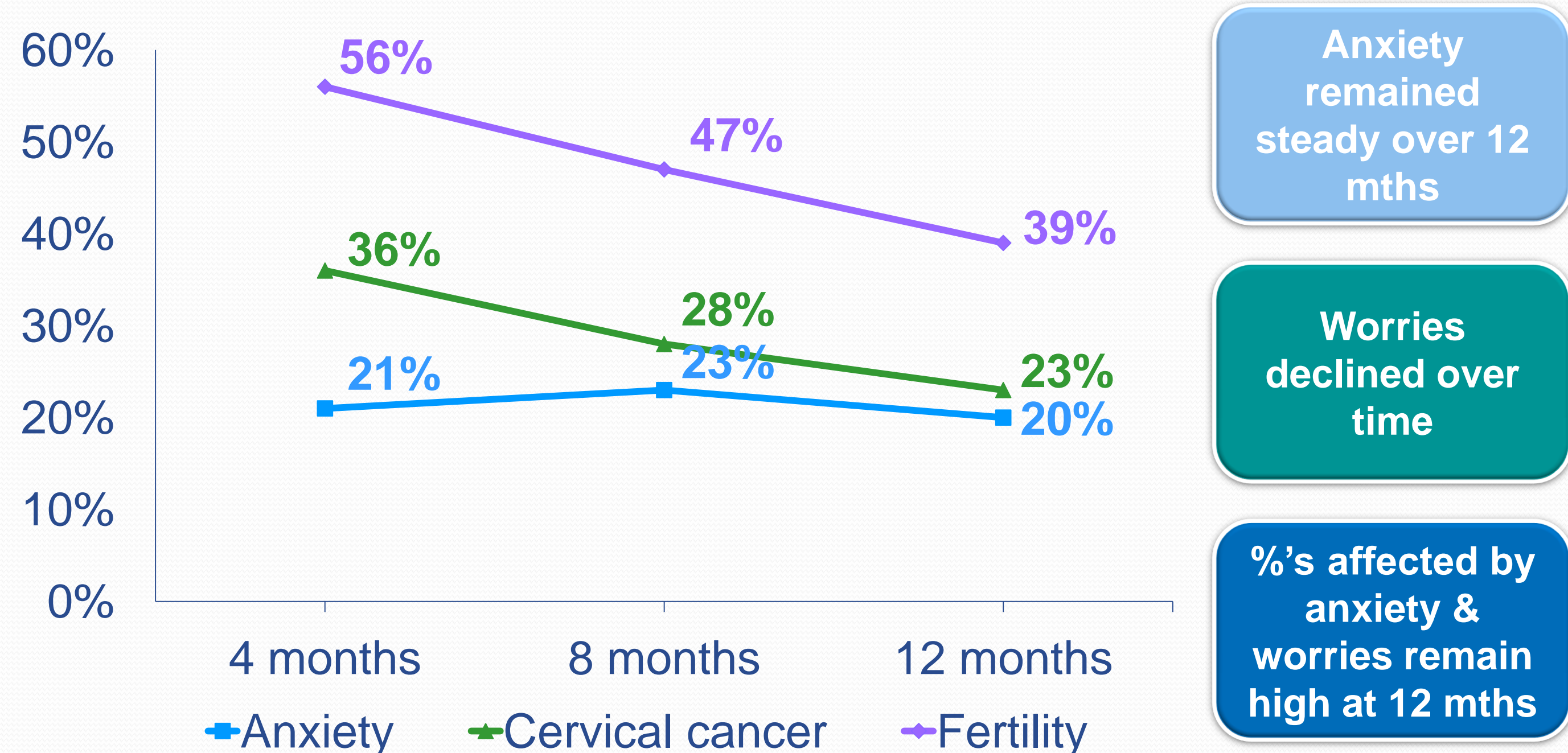


Figure 3. Significant predictors of increased risk of anxiety at any time point

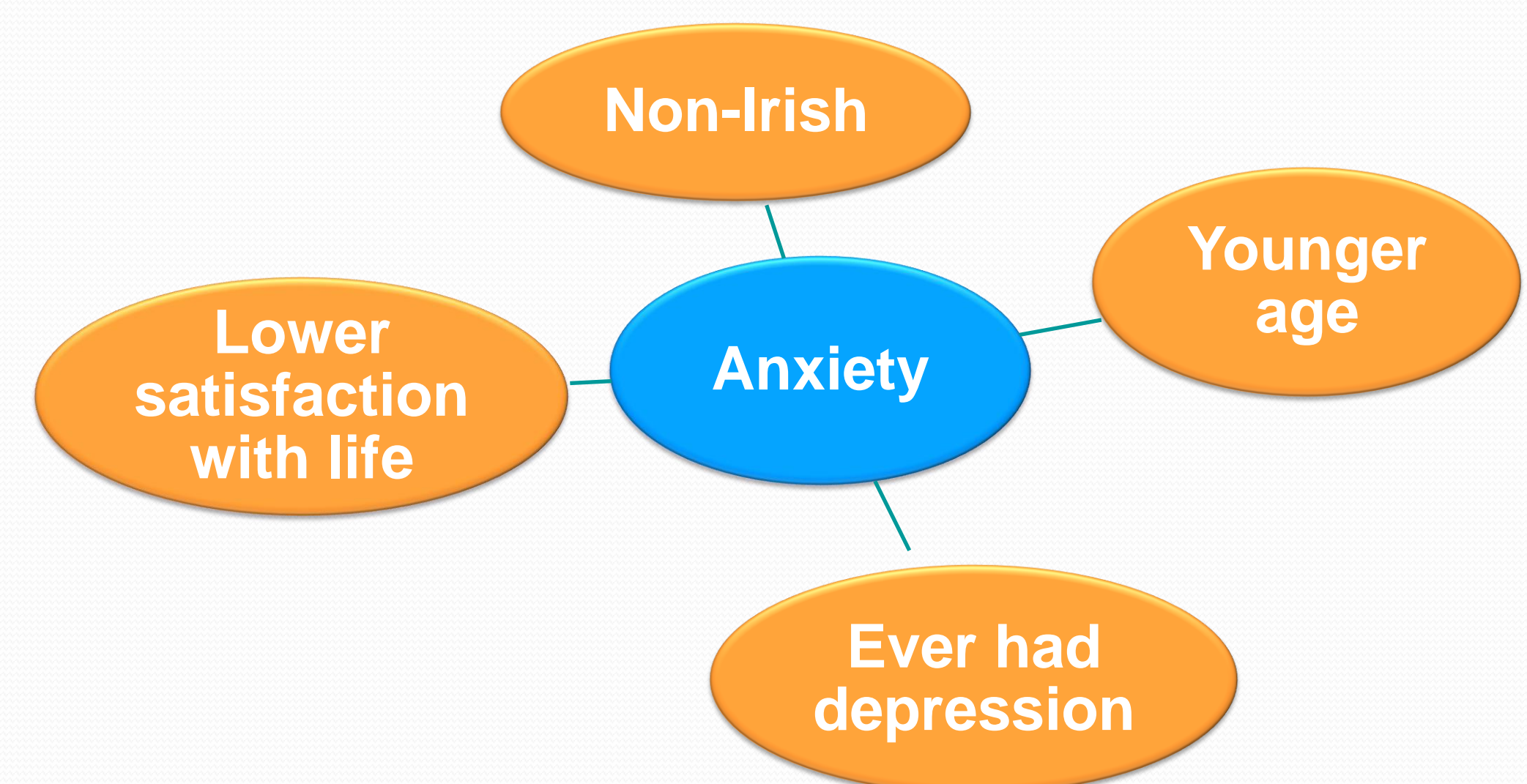


Figure 4. Significant predictors of increased risk of worries about future fertility at any time point

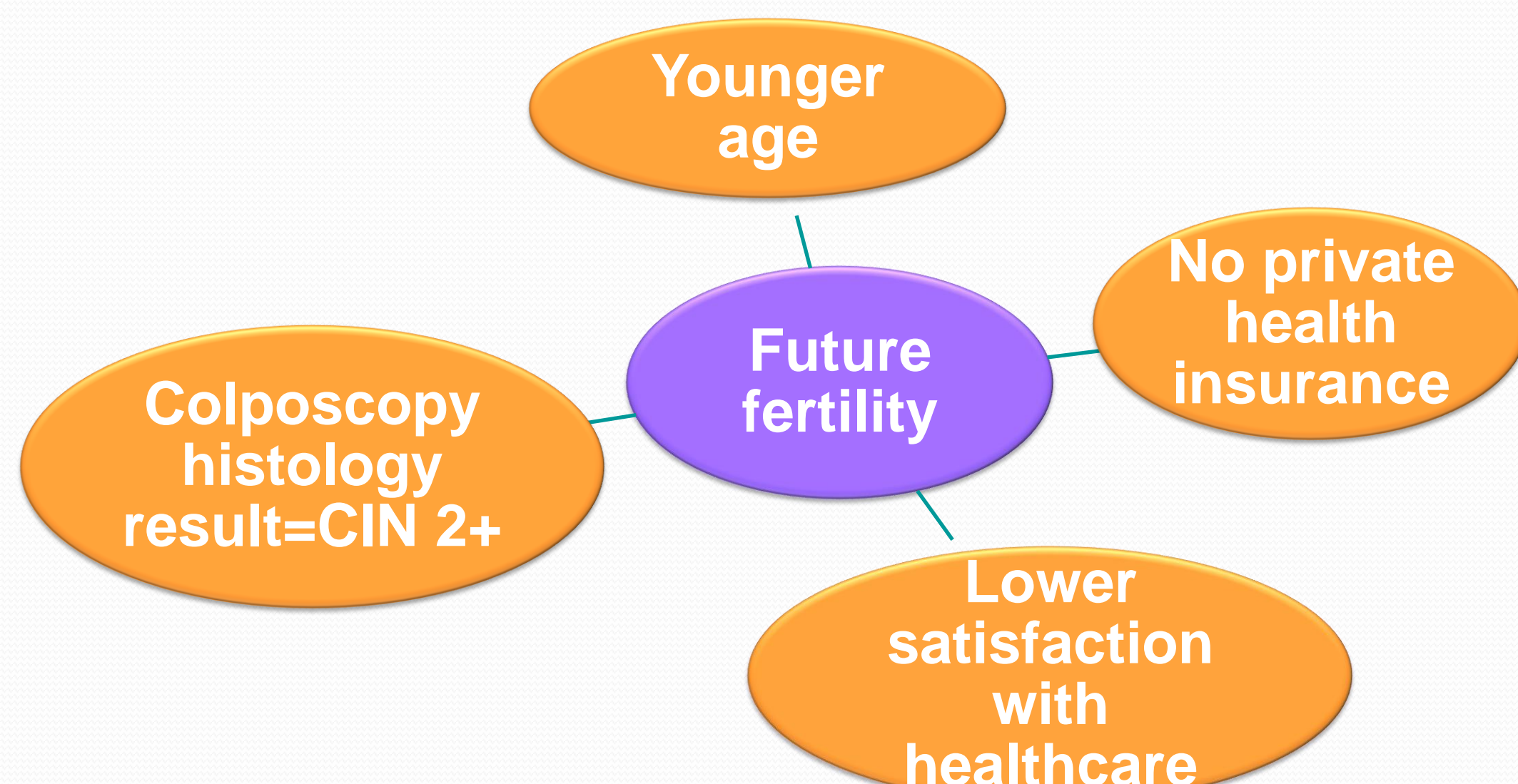
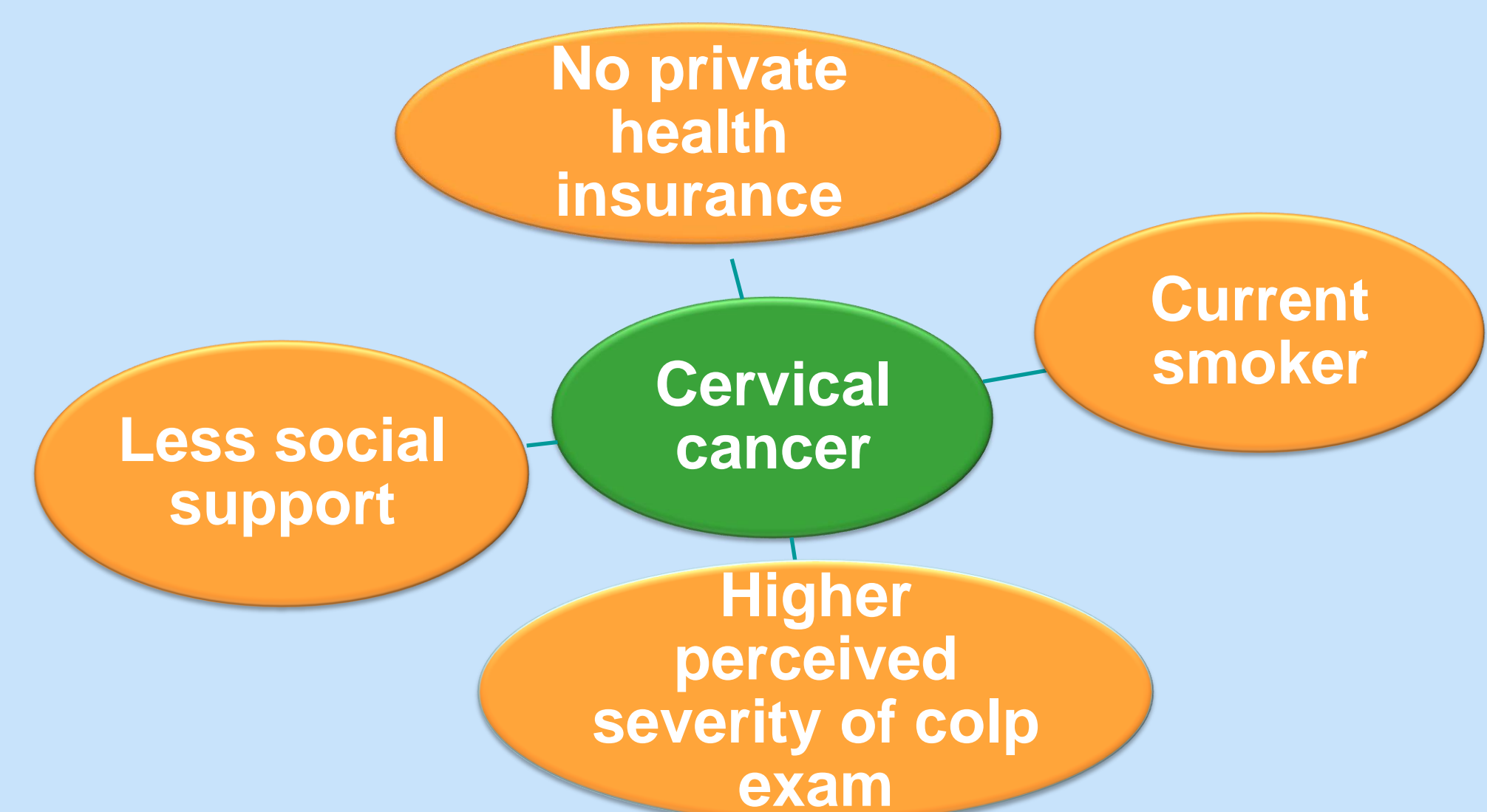


Figure 5. Significant predictors of increased risk of worries about cervical cancer at any time point



Results & Conclusions

High proportions of women suffer anxiety & specific worries following colposcopy and related procedures. Over time, anxiety remained steady while worries about cervical cancer and future fertility declined. However, proportions affected by anxiety and specific worries remain high at 12 months. Being younger in age, having ever had depression, having a lower satisfaction with life/healthcare, having no private health insurance, being a current smoker and having less social support than others are significant predictors of increased risk of anxiety and worries post colposcopy. There is a need to develop interventions to alleviate the psychological after-effects of colposcopy and related procedures that target vulnerable women, particularly those with a lower socio-economic status.