

**Cochrane** Database of Systematic Reviews

# Interventions for reducing anxiety in women undergoing colposcopy (Review)



Galaal K, Bryant A, Deane KHO, Al-Khaduri M, Lopes AD. Interventions for reducing anxiety in women undergoing colposcopy. *Cochrane Database of Systematic Reviews* 2011, Issue 12. Art. No.: CD006013. DOI: 10.1002/14651858.CD006013.pub3.

www.cochranelibrary.com



#### [Intervention Review]

# Interventions for reducing anxiety in women undergoing colposcopy

Khadra Galaal<sup>1</sup>, Andrew Bryant<sup>2</sup>, Katherine HO Deane<sup>3</sup>, Maha Al-Khaduri<sup>4</sup>, Alberto D Lopes<sup>5</sup>

<sup>1</sup>Gynaecological Oncology, Princess Alexandra Wing, Royal Cornwall Hospital, Truro, UK. <sup>2</sup>Institute of Health & Society, Newcastle University, Newcastle upon Tyne, UK. <sup>3</sup>School of Health Sciences, University of East Anglia, Norwich, UK. <sup>4</sup>Reproductive Endocrinology and Infertility, Sultan Qaboos University Hospital, Muscat, Oman. <sup>5</sup>University of Exeter Medical School, Exeter, UK

Contact: Khadra Galaal, k.galaal@nhs.net.

**Editorial group:** Cochrane Gynaecological, Neuro-oncology and Orphan Cancer Group. **Publication status and date:** Edited (no change to conclusions), published in Issue 1, 2022.

**Citation:** Galaal K, Bryant A, Deane KHO, Al-Khaduri M, Lopes AD. Interventions for reducing anxiety in women undergoing colposcopy. *Cochrane Database of Systematic Reviews* 2011, Issue 12. Art. No.: CD006013. DOI: 10.1002/14651858.CD006013.pub3.

Copyright © 2011 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

#### **ABSTRACT**

# **Background**

Prior to the development of cervical cancer abnormal cervical cells can be detected on a cervical smear. The usual practice following an abnormal cervical smear is to perform colposcopy. Colposcopy is the visualisation of the cervix using a binocular microscope. Women experience high levels of anxiety and negative emotional responses at all stages of cervical screening. High levels of anxiety before and during colposcopy can have adverse consequences, including pain and discomfort during the procedure and high loss to follow-up rates. This review evaluates interventions designed to reduce anxiety levels during colposcopic examination.

# **Objectives**

To compare the efficacy of various interventions aimed at reducing anxiety during colposcopic examination in women.

# Search methods

We searched the Cochrane Gynaecological Cancer Group Trials Register, Cochrane Central Register of Controlled Trials (CENTRAL), Issue 3, 2010, MEDLINE and EMBASE up to July 2010. We also searched registers of clinical trials, abstracts of scientific meetings, reference lists of included studies and contacted experts in the field.

#### **Selection criteria**

Randomised controlled trials (RCTs) of interventions to reduce anxiety during colposcopic examination.

## **Data collection and analysis**

Two review authors independently abstracted data and assessed risk of bias. Mean differences for anxiety levels, knowledge scores, pain, patient satisfaction and psychosexual dysfunction in women who underwent colposcopy were pooled in a random effects meta-analyses.

#### **Main results**

We found six trials that met our inclusion criteria. These trials assessed the effectiveness of different interventions for reducing anxiety in women undergoing colposcopy for the first time.

All comparisons were restricted to single trial analyses or meta analysis of just two trials. There was evidence from a reasonably large trial (n = 220) that was at low risk of bias to suggest that music during colposcopy significantly reduced anxiety levels (MD = -4.80, 95% CI: -7.86 to -1.74) and pain experienced during the procedure (MD = -1.71, 95% CI: -2.37 to -1.05) compared to not listening to music. There was no statistically significant difference between anxiety levels prior to colposcopy in women receiving information leaflets versus no leaflets and information leaflets, video and counselling versus information leaflets and video with no counselling. However, knowledge scores were significantly higher and psychosexual dysfunction scores were significantly lower in women who received leaflets compared to those



who did not so there was some sort of benefit to giving patients information leaflets. There is evidence for video colposcopy from a quasi randomised trial which assessed 81 women showing significant anxiety reduction.

#### **Authors' conclusions**

Anxiety appears to be reduced by playing music during colposcopy. Although information leaflets did not reduce anxiety levels, they did increase knowledge levels and are therefore useful in obtaining clinical consent to the colposcopic procedure. Leaflets also contributed to improved patient quality of life by reducing psychosexual dysfunction.

## PLAIN LANGUAGE SUMMARY

#### Women can experience high levels of anxiety at all stages of screening for cervical cancer including colposcopy

Women can experience high levels of anxiety at all stages of screening for cervical cancer including colposcopy (visualisation of the cervix by using a binocular microscope). Colposcopy has been shown to be associated with high levels of anxiety, even higher than anxiety levels in women before surgery and similar to the anxiety levels in women following an abnormal screening test for fetal abnormalities. High levels of anxiety before and during colposcopy can have psychological consequences including pain, discomfort and failure to return for follow-up. This review examined interventions aimed at reducing such anxiety. Anxiety associated with colposcopic examination appears to be reduced by a variety of interventions including playing music during colposcopy, and viewing the procedure on a TV monitor (video colposcopy).