# Do educational interventions by pharmacists help patients with cancer pain? – A systematic review and meta-analysis

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## Background

Every year in England and Wales 105,000 patients suffer from uncontrolled pain cancer pain. Educational interventions by healthcare professionals have been found to reduce patient pain levels and increase medicines knowledge but this has not been measured with pharmacist delivery. We hypothesize that educational interventions by pharmacists may improve pain for patients with cancer compared with standard care.

#### Methods

Searches were conducted in EMBASE, MEDLINE, CINAHL, PsychINFO, ASSIA, Web of Science and CENTRAL from inception until January 2018. RCTs reported in the English language where pharmacists had carried an educational intervention for patients with pain from cancer were included. Meta-analysis was carried out where possible using Rev-Man. Bias was assessed using the Cochrane tool.

### **Results**

989 studies were identified and 4 were included (3 from China and 1 from the UK) involving 944 patients. The number of consultations within these studies ranged from 5-12 with a follow up of between 8 days and 6 months. Bias was detected in all studies in differing amounts. Outcome measures were varied but all included some sort of pain assessment. Meta-analysis found a reduction in pain intensity following the intervention of 0.76 (on a 0-10 pain scale) in the intervention group compared with the control with a 95% confidence interval.

# **Implications**

Pharmacist educational interventions can help to reduce pain from cancer although studies were few and of varying quality. More studies of better quality and homogenous outcome measures are needed to prove the viability of this as a form of intervention.

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