

# Domestic internet purchasing and sources of cannabis for medicinal use within different countries: a systematic review

Corinne Bowman, Lorna West, Hannah Family, Maria Cordina.

**Background** Controversies about different cannabis legalisation in various countries and inadequate regulation are raising safety concerns. Misleading labels and harmful contaminants occur with cannabis products, yet, the scale and severity of the adverse effects when consuming such products obtained through the internet is unknown.

**Purpose** The aim of the systematic review was to identify and appraise critically published literature that: 1) report the extent and type of internet purchasing of cannabis products, 2) countries which mostly apply this practice, and 3) the advantages, disadvantages and risks consumers experience purchasing cannabis products online.

**Method** MeSH and keywords were used to conduct the search in MEDLINE, CINAHL, Cochrane Library, EMBASE and Web of Science. Papers were included if they fulfilled the following: 1) published in English after 1999, 2) primary research studies, systematic reviews or meta-analyses, 3) participants were  $\geq$  18 years who purchased cannabis online for medicinal use. After removing duplicates, titles followed by abstracts and full papers were screened against inclusion criteria. References of accepted papers were checked for other relevant studies. Included papers were appraised critically using validated appraisal tools. A narrative synthesis of findings was conducted to analyse and report findings.

**Findings** A protocol, which was registered in the international prospective register for systematic reviews PROSPERO (CRD42018114353), was developed to guide the systematic review. The search, which is still underway, generated a total of 8125 titles. Data extraction and appraisal will be conducted independently by two reviewers from the research team to ensure validity. Disagreements will be discussed and resolved with the rest of the research team. The following primary outcomes will be documented: 1) extent of domestic internet purchasing, 2) countries involved, 3) types of sites being used, 4) advantages and risks of online cannabis products experienced by consumers. Secondary outcomes that will be documented include: 1) reported adverse events, 2) hospital admissions, and 3) deaths due to online purchasing of cannabis.

**Conclusion** Findings of this systematic review are imperative to inform policy and to generate evidence which can form the basis for patient educational material. The systematic review will be concluded in the coming weeks and full findings will be presented at the upcoming conference.