

Review Article

The Method of Checking Medications Prior To Administration: An Evidence Review

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Abstract

Background: Checking medications before their administration by nurses is a basic preventive action for medication errors. Due to the fact that nurses perform medication checking in the everyday clinical practice, either on their own (single) or with another nurse (double) and are responsible for what they administer to the patients, checking is directly related to nursing. Mostly the last years, queries around multiple issues about checking have been raised.

Aim: The present review was undertaken in order to collect and appraise research evidence about the method of medication checking (single and double) prior their administration.

Methodology: A literature search was undertaken to PUBMED, SCIENCE-DIRECT, BRITISH NURSING INDEX and CINAHL databases using specific keywords for relevant articles (of qualitative, quantitative, mixed methodology) published in English from January 1990 to March 2015. For the introduction of an article to the review, specific inclusion criteria were set. Additional data obtained through relevant reports from institutions and the articles' references. The selection process of the articles was based on the flowchart which was recommended in the PRISMA statement.

Results: Twenty primary research studies and three reviews were included in the review and their data was clustered according to the analysis of studies' findings: definition inconsistency, single-checking, double-checking, cases of checking application, benefits and drawbacks of checking, medication errors and promoting and supporting ways for checking method.

Conclusions: The present review gathers current evidence about medication checking prior their administration, either single or double. Yet data is limited and ambiguous, implying the need for additional research in the field, so that the subject would be investigated in depth with safer and accurate conclusions.

Keywords: nursing, medication preparation, medication administration, single checking, double checking, medication error.