

Defining the purpose of the medication history

Background: The medication history is an accepted part of anamnesis ('history taking') and an important skill in clinical practice. The World Health Organisation (WHO) defines 'The Best Possible Medication History' (BPMH) as "a medication history obtained by a clinician which includes a thorough history of all regular medication use (prescribed and non-prescribed), using a number of different sources of information"^[2]. In practice, the medication history often falls short of this. As many as two-thirds of medication histories of patients admitted to hospital contain errors, of which a third have the potential to cause harm^[1]. This may be because its purpose is not explicit.

Aim: To define the purpose of the medication history and refine the definition by a systematic literature search.

Summary of work: We drafted a list of the reasons for taking a medication history, and then refined it using a literature search of PubMed, Google Scholar, and Google, with search terms relating to ['drug' OR '(best possible)'medication' OR 'prescription'] AND ['history' OR 'reconciliation' OR 'errors']. We also searched the reference lists of identified documents and prior reference collections.

We compiled a table for the purpose of scoring each article according to its identification of the aims of the medication history, with three domains: 'drug and adherence,' 'diagnosis,' and 'future treatment', further divided into fifteen subdomains. Each paper was scored 1 for every subdomain it implicitly or explicitly included in its definition of the purpose of the medication history. We calculated a total score for each paper. A proportion of articles were assessed by two adjudicators. Where scores between two markers were discrepant, we took the higher score. In addition, we listed subdomains included in the paper but not in our original list.

Outcomes: We identified 32 papers, presentations, and web-based articles describing the purpose and methods of taking a medication history. The median number of predefined subdomains mentioned was 6 [range 1–12]. Most articles (n=24 and 25 respectively) mentioned prescription and non-prescription drugs. Few mentioned needing to avoid withdrawal effects (n=3) or altering investigation results (n=2). We identified 3 further subdomains absent from the original list: drug interactions; discrepant information; and areas where a patient could be helped (aids, education, overcoming difficulties).

Discussion and conclusion: The importance of the medication history is only clear when its purpose is defined. There is wide agreement on the need to establish the names of the drugs, and the dose, frequency and method of administration. Other reasons are much less appreciated. Teaching students the 18 subdomains we have identified underlines the importance of the medication history. In practice, remembering the three domains: *drug and adherence*, *diagnosis*, and *future treatment* can guide the questions to be asked, and has the potential to reduce medication errors.

References:

1. National Institute for Health and Care Excellence (2011). Technical patient solutions for medicines reconciliation on admission of adults to hospital. Accessed online [21 Sept 2015] at <http://www.nice.org.uk/guidance/index.jsp?action=byID&o=11897>
2. World Health Organisation. The High 5s Project Standard Operating Protocol: Assuring Medication Accuracy at Transitions in Care: Medication Reconciliation. Accessed online [21 Sept 2015] at <http://www.who.int/patientsafety/implementation/solutions/high5s/en/>