



HIFA Literature Review on Information for Prescribers and Users of Medicines SUMMARY

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The HIFA Working Group on Information for Prescribers and Users of Medicines has undertaken a limited review of the literature based on the following headings:

- (1) The information sources used for prescribing in Low and Middle Income Countries (LMICs);
- (2) Information sources for consumers in LMICs;
- (3) How medicines information is accessed in LMICs;
- (4) The consequences of prescribing with either no information or biased/inaccurate information;
- (5) The benefits / usefulness of different sources of information on medicines;
- (6) Practical aspects of compiling a drug formulary.

The main findings are as follows;

(1) The information sources used for prescribing in Low and Middle Income Countries (LMICs)

- Training courses and internship education are information sources cited by doctors, the latter is a significant influence on prescribing practices.
- Prescribing practices are susceptible to the influences of pharmaceutical company representatives, as they are often one of the main sources of information on medicines. Promotional material available to prescribers is frequently inadequate due to inaccuracies or the absence of important information, and WHO Ethical Criteria for Medicinal Drug Promotion are not met.
- The availability of Essential Medicines Lists, and the extent to which they are used as information sources, varies widely from context to context.
- National medicines reference lists are not always consistent with national clinical practice guidelines.
- In countries without national medicines compendia the British National Formulary and Dictionnaire Vidal are often used.
- Medicine package inserts are of variable quality.

(2) Information sources for consumers in LMICs

- Community pharmacies are used by consumers as a medicines information source but may have inadequate access to that information themselves.
- Dispensing times can be short so little information can be imparted.
- Dispensing labels can omit important information.
- When issuing or dispensing repeat prescriptions prescribers and dispensers can miss opportunities to educate patients about medication.
- Health professionals are a commonly used information source, but television, magazines and internet sources are also used.
- Drug Package Inserts / Patient Information Leaflets accompanying medicines are of variable scientific accuracy and usefulness.

(3) How medicines information is accessed in LMICs

- The access that pharmaceutical representatives have to medical practitioners is not always regulated or controlled.
- Appropriate medicines information is not always available to the professionals who require it; pharmacists may rely on limited resources provided by the pharmacy owner, doctors and medicine management committees may not have access to current issues of formularies / books, in-patient care areas may not have medicines information for staff to refer to.
- Distribution of hard copies of a national essential medicines list can be an effective means of providing information to clinicians.

(4) The consequences of prescribing with either no information or biased/inaccurate information, in particular is there any evidence of patient harm as a result of poor/absent information?

- Increased healthcare costs, wasted resources and sub-optimal care have been reported.
- Inadequate knowledge about medicines can be a factor in errors of prescription, dispensing and administration.

(5) The benefits / usefulness of different sources of information on medicines (e.g. formularies, prescribing guidelines, websites, patient information leaflets)

- Pictograms can be a useful adjunct to written or verbal information to patients.
- UK based medicines information service can be a useful, quick and inexpensive source if information to LMICs.

- Drug package inserts can be an accessible information source for consumers, with positive impacts on adherence and satisfaction. However, problems have been identified with them being out dated, inconsistent with other sources of information, inaccurate, omitting important information, or not being available in the consumers' language.
- Standard treatment guidelines, essential drug lists, drug and therapeutics committees, problem based pharmacotherapy training and targeted continuing education have been shown to improve rational prescribing in appropriate circumstances.
- Simplistic strategies to disseminate prescribing information or clinical guidelines in written form only are likely to be inadequate.
- Doctors and pharmacists do not always take advantage of opportunities to educate patients about the medicines they are using, or to correct misunderstandings.

(6) Practical aspects of compiling a drug formulary.

- There can be a tendency to add more new medicines to a formulary than is rational whilst neglecting to remove redundant ones.
- A 4 step process for formulary production in LMICs has been suggested; identification & weighting of formulary listing criteria, prioritising of treatments, rank criteria and treatments according to reimbursement, use multi-criterion decision analysis to guide priority medicine ranking.
- A public health approach to site specific formulary development based on WHO Essential Medicines List, local prescribing patterns and medicine availability can improve the efficiency of the supply chain, avoid wastage and reduce stock-outs.
- It has been suggested that prescribing practices can be improved by the active promotion of a formulary system organised by licensed indication and evidence based clinical usage information.
- It has been suggested that a WHO led international medicines compendium would provide information more applicable to the needs of LMICs than a 'model formulary'.

Notes on methodology

The original searches were performed in early 2015 with no date limits.

We then did a more robust search involving a great many databases (mid 2015) going back to 2005 but we also included any other citations of note prior to that date that anyone (mostly from the WG) forwarded to the compiler (Sarah Cavanagh) or key refs cited in any of the papers found. This was augmented with a structured google search of the last 5 years only.

Our original list was vast >1,300. This was reduced (based on review of abstracts) to 53.

These 53 were all read and reviewed to produce a first short list limited to 31 then ultimately to 27.

This has since been augmented by citations provided by the PUM WG and the HIFA community.