

Putting evidence into practice

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A training module is described in which experienced health care managers from developing countries explore the challenges to be faced when attempting to use the results of systematic reviews of scientific studies on health care interventions in policy and practice.

It is clearly desirable to have evidence that health care interventions are likely to be effective before they are undertaken. Measurements of cost-effectiveness can be used to prioritize interventions (1), and sounder methods of evaluation are now being advocated. Systematic reviews of the literature locate, assess and combine evidence from scientific studies and can provide reliable summaries of the effects of interventions (2).

A systematic review differs from a traditional review in that it is led by a well-defined research question, follows a pre-established protocol, relies on extensive searches for both published and unpublished literature, and provides a synthesis of research findings. If well conducted, systematic reviews provide an unbiased, comprehensive summary of all the reliable evidence that is available. Managers, clinicians and consumers are beginning to use them to inform their

decision-making. The present article explores how managers experienced in delivering health care in developing countries could use systematic reviews in matters of policy and practice.

Systematic reviews were chosen from the Cochrane Database (3). They represented a range of certainties: areas where there was good evidence of effectiveness but where the interventions were not a part of routine practice (amodiaquine treatment of malaria, and partner treatment in trichomoniasis (4,5)); interventions where there was good evidence of ineffectiveness (routine nutritional supplementation in pregnancy (6)); and interventions where the evidence was not compelling, but where a small beneficial effect could not be excluded (routine iron supplementation in pregnancy (7)).

The 21 participants had all been managers in developing countries with underprivileged populations. They worked in groups to assess the quality of systematic reviews and interpret the evidence with the help of established guidelines (8). They were then asked to decide what action should be taken. Outlines of the conclusions drawn, the health care systems to which the results were applied, and the actions planned are given below.

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Amodiaquine treatment of malaria

The review showed good evidence that amodiaquine was more effective in treatment than chloroquine, and there was no

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evidence of increased toxicity. Therefore amodiaquine was an option in uncomplicated falciparum malaria where chloroquine failed.

Applied to

Patients with uncomplicated malaria in outpatient clinics in Africa. Illustrative countries: Kenya and Uganda. Currently there is a high level of clinical treatment failures in cases of presumed malaria treated with chloroquine. Second-line treatment with sulfadoxine/pyrimethamine is expensive.

Proposal

Work with clinicians to design an algorithm that ensures three-day treatment with amodiaquine for patients with simple malaria and clinical recrudescence after chloroquine treatment.

Implementation

Engage key policy-makers responsible for essential drugs and clinicians about altering national and regional guidelines.

Trichomoniasis treatment in women

The review showed that single-dose treatment with nitroimidazole compounds was as effective as other, longer treatments. The treatment of partners appeared important in diminishing reinfection.

Applied to

Women with symptomatic infections suggestive of trichomoniasis in primary care outpatient clinics. Illustrative countries: Brazil and Nicaragua. Currently, treatments vary in length, and although treatment of partners is recommended it is frequently not implemented.

Proposals

1. Increase the delivery of care as recommended in current guidelines.
2. Carry out additional research to evaluate the effectiveness of a variety of partner treatment programmes.

Implementation

1. Guidelines to be disseminated in a number of ways throughout the countries, and local workshops to be convened to encourage implementation of guideline recommendations.
2. Randomized controlled trials to be designed to evaluate the effectiveness of different methods of implementing programmes for the treatment of partners.

Balanced protein/energy supplementation in pregnancy

There was little evidence that food supplementation had long-term substantive benefit on mothers or babies. The effectiveness of routine food supplementation programmes during pregnancy, except

