Reviewer's report

Title: Deficient supplies of drugs for life threatening diseases in an African community

Version: 1 Date: 27 February 2007

Reviewer: Reginald P. Sequeira

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General
The effectiveness of drug supply system in achieving a reliable supply of essential drugs must be continually and objectively assessed. Drug management cycle involves four basic functions: selection, procurement, distribution and use. At the centre of the cycle is a core of management support system, and the entire cycle rests on policy and legal framework that establishes and supports the public commitment to the essential drug supply.

In this paper the authors have investigated the extent to which supplies of drugs for life threatening diseases, such as pneumonia and malaria, in 8 randomly selected health centres in the Lilongwe District, Malawi. It was found that the 8 index drugs level of supply was unacceptable, and insufficient deliveries from the Regional Medical Store was the reason for the problem.

It is well known that aside from the problems of financing, public sector drug supply in many countries continues to be played by ineffective management systems, lack of staff incentives, inability to control fraud and abuse, political pressures that channel supplies to better-off areas, and inefficient drug selection and use. There are examples of successful central supply systems, but there are numerous examples in which conventional central medical stores approach to drug procurement and distribution continues to result in chronic drug shortages – even after considerable investment in training, management systems and physical infrastructure.

Selection, procurement and distribution can each be carried out in centralized, partially Decentralized, or fully decentralized systems. Decentralization aims to improve the responsiveness, quality and efficacy of health services.

It is also believed that managing drug supply, it may be useful to think in terms of task-specific approach to decentralization. Examples of task that may be performed centrally include development of essential drug lists, preparation of standard treatment guidelines, management of competitive tenders, selection and monitoring of supplies, quality assurance, and development of training programs in rational drug use. On the contrary, examples of tasks that can be centralized include developing drug lists or standard treatments to local needs, quantifying drug requirements, coordinating local distribution, conducting training in rational drug use, and monitoring drug use at health centres.

Some of the above issues need to be incorporated in order to enrich the introduction and discussion sections of this paper.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Specific Remarks:

1. Selection of health centres: The generalizability of the findings need to be stated in discussion section. The study sample involved 8 health centres in the capital city and surroundings. To what extent the study findings are relevant to the entire country, in Malawi?

2. Selection of index: Has Malawi adopted essential drugs program? What is the total number of drugs in this list?

3. Data collection: The stock cards, drug reports and patient records – are these computerized? Were they manually retrieved?

4. The drug ordering and display system: Is there a seasonal variation in drug demand (which can affect the supply status)? I presume both pneumonia and malaria have an element of seasonality. How many regional medical stores are involved in supplying drugs to the health centres studied? What are the criteria justifying emergency supply requests? How effective is the recording of the quantity of each drug dispensed and the dose dispensed to each patient?
5. Insufficient deliveries from the regional medical store: What is the supply chain? Are drugs supposed to be available at health centres imported or locally manufactured?

6. Uneven distribution of drugs among health centres: Is it appropriate to conclude that the observed problem has resulted from management failure, primarily at the regional drug store? What is the contribution of the local health centres towards this problem? Could the variation in drug (chloramphenicol, quinine) availability at health centres be due to demographic pattern or epidemiological factors?

Corrections:

Methods:
- The study was approved by the National Health ……………… (please delete scientifically and ethically)

Suggestion: Consider citing the following paper:

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Methods:
- Research Randomizer (instead of Researcher Randomizer?)
- The study was approved by the National Health ………………  

(please delete scientifically and ethically)

Discretionary Revisions (which the author can choose to ignore)

Consider citing the following paper:

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.