Better medicines for children in Ghana

Ministry of Health

GHANA

Supply chain assessment of child-specific medicines in Ghana

An in-depth assessment conducted in selected sites in Ghana

Executive summary

December 2010
Background

A precondition for the achievement of Millennium Development Goals 4 and 6\(^1\) is the availability of essential medicines for children. Infant and under-five mortality rates are estimated at 50 and 80 respectively per 1000 births\(^2\). Most of these deaths are caused by diseases that could be prevented, treated, or managed by access to safe, essential child-specific medicines. Child-specific medicines are those manufactured to suit the age, physical condition, and body weight of the child taking them. Efficient medicines supply systems are crucial in ensuring access to child-specific medicines in developing countries.

The Better Medicines for Children (BMC) project takes into consideration an in-depth assessment of the public supply system for the supply of child-specific medicines. The main goals of the assessment are to:

- identify the extent of availability of child-specific medicines in the public supply system;
- analyze the national supply system within the context of supply management functions; and
- identify the strengths and weaknesses of the system with respect to child-specific medicines.

Methods

The assessment of the public supply chain for child-specific medicines was done through structured interviews using WHO standard tools adapted to fit the child-specific medicines context for Ghana.

The country was divided into three areas. One assessment site was identified in each of the three areas. Structured, in-depth interviews were done at each survey site. Qualitative analysis was done on data collected under 10 thematic areas, namely: selection of products; quantification of needs; procurement; ordering; storage/stock management; distribution; quality assurance; financing; information management; and monitoring and evaluation.

Key results

Selection of products

Selection of child-specific medicines was based on a national selection process; however, the national essential medicines list (EML) does not clearly identify key child-specific medicines by formulation. This is the top-rated reason for procuring child-specific medicines outside of the national EML.

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1 United Nations Development Programme, Millennium Development Goals.
2 Ghana Demographic and Health Survey Report, 2008.
**Quantification and forecasting**
There is capacity for efficient quantification based on adjusted dispensed-to-user data from the Logistics Management and Information System (LMIS). However, in some instances, these data are not well managed within LMIS. Quantification was mainly done using spreadsheet applications to generate six-month forecasts.

**Procurement**
Child-specific medicines are procured, along with all other essential medicines, through procurement methods with lead times ranging between 4–120 days. Suppliers are issued a contract on the basis of a purchase order with contract awards based on product quality vis-à-vis supplier quotations (compared to the national health insurance agenda [NHIA] prices).

**Ordering**
Order periods are more demand-driven than periodic, though the two systems are run equally. Products are delivered by the supplier, but with orders from the central medical stores (CMS), regional medical stores (RMS) arrange their own means of transport. Distances from CMS range between 30–740 km.

**Storage/inventory control**
Inventory control for child-specific medicines, along with other commodities, is carried out on a quarterly basis. The most common causes of stock outages were “delays in delivery” and “quantities delivered not in conformity with quantities ordered”. Prescribing patterns that fail to conform with standard treatment guidelines (STGs) are the main cause of expiration in medicine inventories.

**Distribution**
At the time of the assessment, transport challenges were found to be RMS-specific; the most common challenge was a lack of vehicles. Child-specific medicines do not have a defined distribution system.

**Quality assurance system**
The most common criteria used to ensure quality are: products are registered in-country with the Food and Drugs Board (FDB) and products are chosen from pre-selected suppliers. Product samples are not taken on a batch-by-batch basis for quality analysis.

**Financing**
There were no special financial arrangements for child-specific medicines. (Internally generated funds support all essential medicines).
Information management
There are no special Management Information Systems (MIS)/Logistics Management and Information Systems (LMIS) in place for child-specific medicines. All medicines are managed on the same platform. There are reports which cover logistical information systems. These are not submitted to the central medical stores (CMS), but to the regional health administration (RHA). Products financed by partners have their own MIS.

Monitoring and evaluation
Supervision by the CMS is weak. Through the Ministry of Health's (MOH) Ghana National Drugs Programme (GNDP), Ghana Health Service (GHS) provided supervision, but did not include training. There are no separate monitoring systems, either internally or externally, for child-specific medicines.

Conclusions and recommendations
- There are no special/separate structures within the public supply system to explicitly ensure access to child-specific medicines. Child-specific medicines are grouped with other essential medicines; the lack of emphasis on these medicines is reflected by low availability patterns, as observed during this assessment. A specific policy needs to be created to ensure the supply chain is child-sensitive.
- Education and training programmes are needed. Tools for raising awareness regarding the availability of child-specific medicines and their use need to be created.
- From the supply perspective, child-specific formulations need to be included in the national EML for subsequent procurement into the public supply chain.
- From the demand perspective, guidelines for prescribing need to be strengthened in accordance with the national EML and STGs.