

# QUALITY MEDICINE USE FOR CHILDREN IN UGANDA

## SITUATIONAL ANALYSIS

### SUMMARY

**Jessica Jitta**

Child Health and Development Centre  
College of Health Sciences, Makerere University, Uganda

[jitta@chdc.mak.ac.ug](mailto:jitta@chdc.mak.ac.ug)

**Herbert Muyinda**

Child Health and Development Centre  
College of Health Sciences, Makerere University, Uganda

[hmuyinda@chdc.mak.ac.ug](mailto:hmuyinda@chdc.mak.ac.ug)

**Ebba Holme Hansen**

Department of Pharmacology and Pharmacotherapy  
Faculty of Pharmaceutical Sciences, University of Copenhagen, Denmark

[ehh@farma.ku.dk](mailto:ehh@farma.ku.dk)

**Kathrine Østergaard Nielsen**

Department of Pharmacology and Pharmacotherapy  
Faculty of Pharmaceutical Sciences, University of Copenhagen, Denmark

[tene\\_12@hotmail.com](mailto:tene_12@hotmail.com)

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## QUALITY MEDICINE USE FOR CHILDREN IN UGANDA: SITUATIONAL ANALYSIS

Makerere University and University of Copenhagen collaboratively implement a research capacity building project using scientific foundation to contribute to improvement of quality medicine use for children in Uganda. The project focuses on four medication scenarios where children may require medication for a long time namely, ARI (asthma and pneumonia), epilepsy, HIV/AIDS and intestinal schistosomiasis. The Situation Analysis study was undertaken in August and September 2010 to provide baseline information on demographic, morbidity and mortality levels and trends, health care system, pharmaceutical supply system and medicine related policies and interventions for subsequent specific studies. The study, with time trends analysis for decade 2000-2009, provided national profile data with special focus on Jinja District where it was anticipated most research will take place. The study considered children aged 0-14 years before reproductive age group.

Data was collected by reviewing documents both published and unpublished and also reviewed HMIS data at district level and in selected health units in Jinja district. Key informant interviews were conducted with district health managers, in-charges of health facilities, health service providers-clinicians, pharmacists, dispensers, nurses and drugs store managers in public health and PNFP facilities as well as private pharmacies and drug shops in Jinja district.

Uganda has a rapidly growing but young population, with growth rates estimated at 3.2% per annum. The total population is estimated over 30 million total population, 52% is under the age of 15 years and nearly 20% are children less than 5 years old. Jinja District with similar population characteristics has a population under 500,000 people with annual growth rate of 2.0% and nearly 80% of population live in rural areas.

The country has some of the highest childhood mortality, neonatal mortality rate of 29/1,000 live births, IMR of 76/1,000 live births and U5MR of 137/1,000 live births, with only marginal or low reduction in rates in the last decade (2000-2010). Available mortality and morbidity data was mostly facility-based. At the national level, malaria, acute respiratory infections and diarrhoea were responsible for over half of all infant deaths and 60% of children deaths were complicated by malnutrition. In Jinja district, malaria, pneumonia, diarrhoea, septicaemia, and anaemia were the main causes of childhood mortality, but mortality from HIV/AIDS, epilepsy and schistosomiasis remained low compared to the top causes of mortality.

Major causes of childhood morbidity at national level have not changed in the last decade with malaria, RTI and diarrhoea as leading causes in under-fives. Malaria has remained high and stagnant while diarrhoea morbidity has worsened. A similar picture was found in Jinja district with marked increase in RTI prevalence in under-fives. Asthma was common cause of morbidity in OPD followed by epilepsy in children less than five years old. Among children over 5 years, HIV/AIDS was more common cause of OPD attendance while schistosomiasis was the lowest among ChildMed conditions in all age groups. Mental health programs for children were impeded by underfunding that limited the outreach activities, led to stock-outs of mental health and epilepsy medicines; and the negative attitudes of some health managers, providers, and teachers in schools, which hindered integration of the affected children in various programs and their own communities.

Existing data show that although the Government owned the majority (76%) of the health facilities, most people utilized services in the private sector. Based on analysis of the 2006 national household survey, about 46% of Ugandans who needed and sought healthcare did so from a private clinic, followed by about 26% who sought care from a government health unit, 13% from a drug store or pharmacy and

4% from PNFP health unit (UBOS 2006). At a higher level 7% sought care from a government hospital, and only 2% went to an NGO hospital. In the public health sector, less than half of the patients got their medicines and 65% of patients had to pay for the medicines prescribed in the public health facilities. The Traditional and Complimentary Medicine Practitioners (TCMPs) were also considered to be part of this health system although they had no functional relationship with the public and the private health providers.

Access to health service indicators in Jinja was better than at the national level. While it was estimated that 72% of the population lived within 5 km radius of a health facility (public or PNFP) in the country, Jinja district records show that almost all people live within 5 Km of a health facility.

Although the provision of health services had been decentralized, distribution of medicines was centrally managed. The health facilities used the essential drug list from the government to order medicines and to replenish their stock however there was no specific list for essential drugs for children. District and health providers at all levels reported frequent essential medicine stock-outs, especially malaria medicines and antibiotics. Overall children medicines were available for 2 weeks per month. ART service centres had not experienced stock out for ARVs. However, some of them get medicines from other service centres in case of shortages.

Although there was an emerging pharmaceutical industry in the country, 85 - 90% of all medicines were still being imported into the country, mainly from India and China. 75% of all medicines in rural communities were provided through drug vendors, and 61% of the outlets were not registered and licensed.

Like in many developing countries, the human resource situation in Uganda posed great challenges in ensuring quality use of medicines. Most of the unfilled positions were for nurses with rates of 53% - HC II, 54% - HC III and 37% - HC IV. In most health centres, stock management was done by dispensers and dispensing was often done by the nurses or internship students.

Several published reports confirmed that medication errors were common in paediatrics, and that potentially harmful medication errors might be three times more common in the paediatric population than in adults. However the underreporting of ADRs was widely reported. It was estimated that less than 10% of all serious and 2-4% of all non-serious ADRs were reported. This was partly because written patient information on medicines provided was very scarce at the pharmacies and drug shops. Most of the medicine outlets had manufacturer's brochures, and hardly patient leaflets. Medicines were often acquired from acquaintances, relatives and unregistered vendors who had little or no health-care training and appropriate information to pass on. Even where appropriate prescriptions were made, the Ugandan baseline survey showed the discrepancy between medicines prescribed and dispensed.

The Ministry of Health and national level institutions were among other things responsible for policy analysis, formulation and implementation. A number of policies regarding provision and use of medicines had been put in place; however there were no specific policies for children's medicines. A few programmes existed in Jinja district for child health and medications. These included Integrated Management of Childhood Illnesses (IMCI), Child Days Plus Strategy (CDPS), treatment of Neglected Tropical Diseases (NTDs), and mass de-worming in schools. Most of these programmes integrated other programmes to improve children's access the medicines. At the community level government implemented the VHT strategy for sustainable mobilization of communities for improved health. Some programs such as Home Based Management of Fevers (HBMF) had been phased out due to failure to supply appropriate malaria drugs to distributors in communities.