

Pharmalink

A Publication of Ecumenical Pharmaceutical Network

Vol 14 : Issue 1 - December 2014

Medicines



**A cornerstone of Maternal
and Child Health**

About Ecumenical Pharmaceutical Network (EPN)

Ecumenical Pharmaceutical Network (EPN) is an independent, not-for-profit, Christian organization whose mission is to support churches and church health systems provide and promote just and compassionate quality pharmaceutical services for all. In addition, the work of EPN is aimed at working towards services that allow no discrimination and guarantee equal access to all.

About the cover image

The image depicts a mother caring for her newborn child. Source: www.openclipart.org.

In this issue

1. Maternal and Child Health Care - Safe Pharmaceuticals 1
2. State of Maternal & Children's Medicines in Nigeria 3
3. Availability of Children's Medicines in Church Health Facilities in Africa 5
4. Improving Access to Essential Commodities for Maternal, Newborn and Child Health - Improved Access. Improved Services. Better Health Outcomes. 8
5. Universal Health Coverage to Improve Medicine Access 12
6. Family Planning for Christians: Vital for Maternal & Child Health in Africa 15

Editorial Committee

Dr Andreas Wiegand

Translation, layout and design

Transmundo Ltd

Letters to the editor

Inquiries or comments about this edition of Pharmalink should be directed to:

communications@epnetwork.org.

The editor also welcomes author's initiatives for future editions.

Disclaimer

Opinions expressed in this edition of Pharmalink are those of the authors and do not necessarily reflect the views of Ecumenical Pharmaceutical Network.

www.epnetwork.org

Editorial

The target of Millennium Development Goal 4 on child mortality will not be achieved in 2015. The Millennium Development Goals Report 2013 reports the child mortality rate has dropped by 47 per cent since 1900. 17,000 fewer children are dying each day comparing 2013 to 1990 (Levels & Trends in Child Mortality, UNICEF report 2014). But still 6.6 million children under age five died in 2012 - mostly from preventable diseases. In sub-Saharan Africa, one in ten children die before age five, more than 15 times the average for developed regions. The poor countries still show a high birth rate and the growing population cannot rely on a properly working health system providing good health services which would lead to low child mortality rates.

Medicines for prevention and treatment are a crucial element of good health services. Three WHO departments (Essential Medicines and Health Products, Reproductive Health and Research, and Maternal, Newborn, Child and Adolescent Health) published a list of Priority life-saving medicines for women and children in 2012. This list clearly defines the medicines which are essential if not vital for the major causes of mortality and morbidity, palliative care and child survival. EPN investigated the available children's medicines in several countries and discovered significant gaps putting lives in danger. Medicine supply chains of the public sector are still weak in many countries. But EPN observed that pharmacy staff without any formal training struggles to manage the medicines stocks and control the inventory. That is why recent interventions are aimed at increasing the capacity of this target group.

This Pharmalink enables readers to get insight in the status, factors, experience and approaches to address Maternal & Child Health keeping in mind the importance of the essential medicines as one key factor. Well known representatives from international and EPNetwork member organisations presented their experience in this year's EPN Forum at the end of April in Nairobi. For those who participated, this issue provides the opportunity to recall the data presented. Others who could not participate find more than just a summarising report.

EPN is very grateful that the speakers at the EPN Forum contributed twice. They presented at the Forum and made the effort to transform the spoken word into an article for this Pharmalink issue. Asanteni sana!

Job 5:18 *For he wounds, but he also binds up; he injures, but his hands also heal.* (NIV)

Andreas Wiegand

Maternal and Child Health Care Safe Pharmaceuticals

Christopher Ouma

Like in other countries, the child mortality rate decreased in Kenya, however it is not yet heading towards the defined MDG4. More has to be done to accelerate the reduction process. The same applies for maternal health in Kenya.

The economic impact of medicines is substantial; especially in developing countries. While spending on medicines represents less than one-fifth of total public and private health spending in most developed countries, it represents 15 to 30% of health spending in transitional economies and 25 to 66% in developing countries. In most low-income countries, medicines are the second largest public expenditure on health after personnel costs and the largest household health expenditure. And the expense of serious family illness, including medication, is a major cause of household impoverishment (http://www.who.int/medicines/services/essmedicines_def/en/).

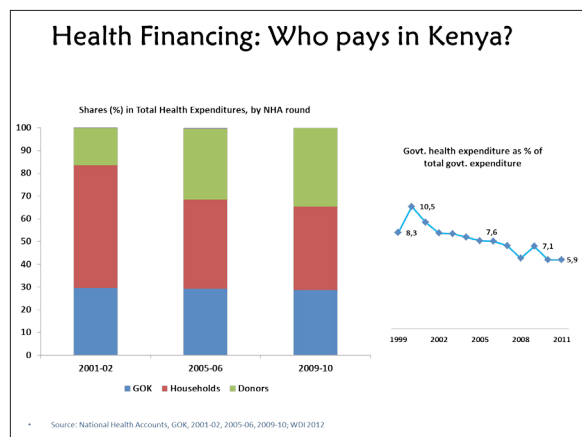
The child mortality rate has decreased in Kenya, however it is not yet heading towards the defined MDG4.

It is important to know who is currently paying for health services in Kenya. The graph below illustrates the share of different sectors.

Access to essential medicines plays a major role for affordable and good quality health services. This approach can't be fulfilled considering the current situation.

- The existence of parallel markets increases the opportunity of counterfeiters.
- Erratic supplies of medicines and high prices increase the motivation for counterfeiters.
- In developing countries, ineffective medicines regulation, smuggling of drugs, weak or absent sanctions and widespread corruption all contribute to make the presence of unsafe drugs a real problem.
- Apart from health-related complications, counterfeiting stifles investment and innovation, and retards economic growth

through no tax payments and deterred investments.



UNICEF has a Drug Safety Program. UNICEF has in place a central pharmaceutical procurement centre in Copenhagen. This is regulated by the Quality Inspection Unit - Pharmaceutical and nutrition products. This unit performs Good Manufacturing Practices (GMP; guidelines to be followed producing medicines) evaluations of new and current suppliers of the above products using WHO GMP guidelines 2007. GMP inspections are planned yearly, with a supplier inspected every 2 - 5 years depending on the regula-



tory environment of the country of origin. The UNICEF warehouse is GDP (Good Distribution Practice) licensed in accordance with European Community GDP regulations and is licensed by the Danish Ministry of Health. Random analytical testing of products is conducted. Centralized procurement ensures economy of scale, good access to efficient sea and air cargo services ensures goods are dispatched as quickly and efficiently as possible. This drug safety program is available only for UNICEF related procurement. National standards and enforcement measures are in the WHO/UNODC domain. 🇰🇪

About the Author

Christopher Ouma is project officer at UNICEF, Kenya.

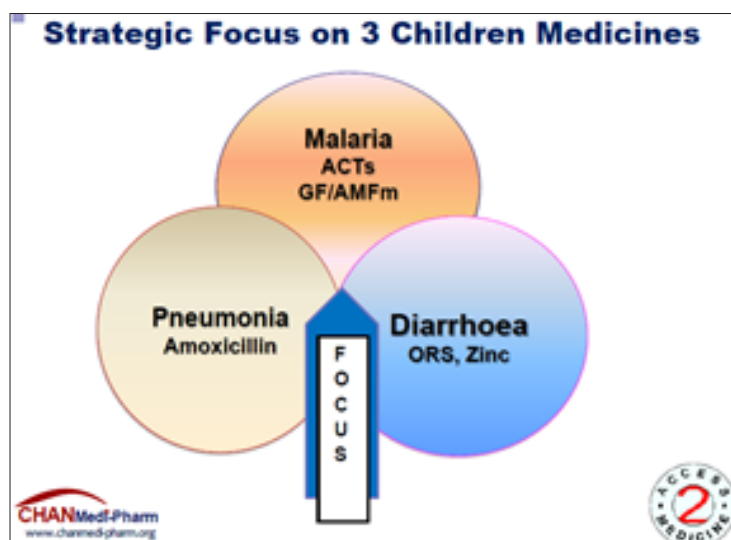
Contact details: nairobi@unicef.org

Website: www.unicef.org/Kenya

State of Maternal & Children's Medicines in Nigeria

Matthew O. Azoji

Maternal and Child mortality rates of any country serve as indicators of the health status of the country's citizens. Nigeria constitutes approximately 2% of the world population, but accounts for over 10% of the world's maternal and under-five deaths. It still ranks second in the world, after India, in the scale of maternal mortality with 40,000 deaths per annum compared to India's 56,000 per annum (WHO, 2013). However, maternal mortality has improved from 950 deaths per 100,000 live births (WHO, 2000) to 560/100,000 (WHO, 2013). The MDG 5 target for Nigeria is 250 deaths/100,000 live births by 2015. The causes for maternal mortality are eclampsia, postpartum haemorrhage, infection, unsafe abortion and other causes.



Children under-5 mortality

Under-5 mortality for Nigeria was estimated at over 1 million deaths per annum at the rate of 194 deaths per 1,000 live births by 2000. About 55% of these deaths were due to three diseases: pneumonia, malaria and diarrhoea. By the time of the 2010 UN Inter-agency report, the Under-five Mortality Rate for Nigeria dropped to 143 deaths/1,000 live births. The MDG 4 target for Nigeria is 71 deaths/1,000 live births. The key issues are poverty, health financing (e.g. Out of Pocket Payment for health), very low health insurance coverage, poor health care seeking behaviour and a lack of Access to Priority Essential Medicines.

Nigeria has a scheme for addressing M&C Mortality with the following elements:

- Integrated Maternal, Newborn and Child Health Strategy (IMNCH)
- SURE-P MCH (Maternal and Child Health project of the Subsidy Reinvestment and Empowerment Programme)
 - Child Health Week
 - National Midwives Service Scheme (NMSS)
 - Free medical treatment for pregnant women and Children under five
- Essential Childhood Medicines Scale-Up Plan 2012 -2015

Nigeria has a scheme for addressing M&C Mortality.

CHAN Medi-Pharm as a stakeholder in Nigeria's healthcare delivery services through the contributions of the CHAN member institutions is working to make the M&C Priority medicines accessible to all who need them. Looking at availability of the medicines on the list, we are



Matthew Azoji speaking at the EPN Forum in Nairobi

happy to say that we have over 95% of the items on the list in stock.

The key actions to achieve the current status are collaboration with key partners, contract manufacturing & registration of priority medicines, training & capacity building on public health supply logistics for pharmacists, and capacity building for CHAN Medi-pharm's quality assurance.

Who is CHAN Medi-Pharm?

It is an ecumenical organization owned by Catholic Bishops Conference of Nigeria, Christian Council of Nigeria, and Northern Christian Medical Advisory Council established in 1979 as CHAN Pharm. A department of CHAN became autonomous in November

2004, and was registered as a company Limited by Guarantee in July 2006. It initiated contract manufacturing in 2007. CHAN Medi-Pharm serves mission hospitals in Nigeria. In Nigeria, there are approximately 400 mission hospitals and 4,000 primary healthcare centres affiliated to them, serving about 40% of the Nigerian population. CHAN member institutions are reaching the unreached. 🇳🇮

About the Author

Matthew O. Azoji is Managing Director and CEO at CHAN Medi-Pharm Ltd/Gte, Jos, Nigeria, a member institution of EPN.

Contact details: info@chanmedi-pharm.org

Website: www.chanmedi-pharm.org

Availability of Children's Medicines in Church Health Facilities in Africa

Mirfin M. Mpundu

The 2009 World Health Organization (WHO) study "What Essential Medicines for Children are on the shelf", investigated the public and private sector in capital cities in 14 countries in Central Africa. It showed poor availability of key essential medicines for children. According to statistics from the WHO, the Under-Five mortality in the African region is 90 per 1000 live births; and in the European region 12 per 1000 live births (WHO, 2013). The major killers for children under five are (Levels & Trends in Child Mortality, Report 2014 Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation):

- Neonatal causes (33%)
- Pneumonia (15%)
- Diarrhoea (9%)
- Malaria (7%)

In reaction to these facts, EPN decided to investigate the state of medicines for children in the church health institutions (CHIs). EPN developed tools and a methodology for investigating the availability, pricing and factors impacting availability of medicines for children modelled along the one used by the WHO.

The main study objectives were to determine:

- Availability of children's medicines in CHIs
- Pricing of medicines for children in CHIs

- Facility level factors that impact on children's medicines availability

So far, children's medicines surveys have been conducted in Kenya (2010: 79 facilities), Chad (2010: 31 facilities), Uganda (2010: 61 facilities), Ghana (2011: 45 facilities), Tanzania (2013: 50 facilities) and Cameroon (2013: 50 facilities).

Table 1 below gives an overview of the facility levels investigated.

Results from Tanzania

In 15 hospitals, we found only eight pharmacists, fourteen pharmacy assistants and twenty pharmaceutical technicians. The health centres and dispensaries did not have any pharmaceutical staff. 80% of facilities had no guidelines specifically for children and no standard operating procedures (SOPs). Only three hospitals had the WHO Model Formulary for Children or a BNF for Children. Only 2 out of 50 facilities have access to internet.

Some questions asked included finding out who made decisions on children's medicines purchases for the institutions. Eleven out of fifteen hospitals had a Medical Therapeutic Committee

Overall, several essential medicines for children are not sufficiently available.

Table 1: types of facilities surveyed.

| | Kenya | Chad | Uganda | Ghana | Tanzania | Cameroon |
|-----------------------|-------|------|--------|-------|----------|----------|
| Hospitals | 30 | 7 | 19 | 43 | 15 | 16 |
| Health centres | 23 | 24 | 16 | 1 | 5 | 34 |
| Dispensaries | 26 | 0 | 26 | 1 | 30 | 0 |
| Total | 79 | 31 | 61 | 45 | 50 | 50 |

(MTC). Only two hospitals had an SOP on the selection of medicines. In dispensaries, the head of facility decided what was listed or stocked (13 out of 30). The following were the most remarkable results on the availability of specific children's medicines:

- Ceftriaxone 500 mg powder for injection vial: 10%
- Ceftriaxone 250 mg powder for injection vial: 16%
- Ceftriaxone 1g powder for injection adult dose: 50%
- Zinc dispersible tablets: 46%
- Zinc normal release tablets: 8%
- Oral Rehydration Salts: 94%

The prices the patients had to pay varied a lot among different health facilities. Some patients had to pay 50 to 140% more than the average most commonly asked price for medicine. The mark-up added on children's medicines was as high as 200% of the wholesale price.

The survey results were discussed by staff from the institutions and different stakeholders, and follow-up measures defined. The workshop participants recommended the following:

- To pressurize the government to get access to the funds already allocated to the health facilities.
- MEMS in Tanzania needed to develop into a competitive alternative supplier due to stock-outs of children's medicines with most suppliers in Tanzania.
- Raise awareness and educate to increase the ordering of children's medicines. Issue guidelines on children's medicines.

- Train existing staff with short courses in health centres and dispensaries on medicine supply management.
- Provision of counting trays.
- Strengthening Private-Public-Partnerships.
- Setting standards for health facilities including all stakeholders, e.g. government, donors, representatives of health facilities. Set up branches for medicine supply at strategic places throughout the country.
- Brand and market MEMS, e.g. incentives for the customers. Increase advertising for MEMS.

Results from Cameroon

In sixteen hospitals, the surveyors recorded only two pharmacists, twenty-two pharmaceutical technicians, fourteen pharmacy assistants and sixty-four pharmacy auxiliaries. In thirty-five health centres, the pharmaceutical qualified staff were ten pharmaceutical technicians, fifteen pharmacy assistants and fifty-five pharmacy auxiliaries. About 50% of the health facilities had reference books or guidelines on how to use medicines in children. The most prominent results concerning the availability of particular medicines were:

- Ceftriaxone 500 mg powder for injection vial: 6%
- Ceftriaxone 250 mg powder for injection vial: 2%
- Ceftriaxone 1g powder for injection adult dose: 30%
- Antiallergic medicines: 0%
- Zinc tablets: 2%

Table 2: availability of key medicines

| | Kenya | Chad | Uganda | Ghana | Tanzania | Cameroon |
|------------------------------|-------|------|--------|-------|----------|----------|
| Vitamin A capsules 100,000IU | 81 | 6 | 62 | 27 | 28 | 34 |
| Zinc tablet | 56 | 32 | 31 | 2 | 46 | 2 |
| ORS | 92 | 90 | 98 | 91 | 94 | 76 |
| Ceftriaxone 250mg inj | 37 | 6 | 15 | N/A | 16 | 2 |
| Amoxicillin | 91 | 45 | 61 | 95 | 88 | 60 |
| Cotrimoxazole | 95 | 39 | 57 | 95 | 80 | N/A |
| Tetracycline eye ointment | 94 | 68 | 92 | 71 | 62 | 66 |
| Paracetamol tablet | 95 | 36 | 95 | N/A | 100 | 92 |
| Paracetamol syrup | 92 | 57 | 46 | 98 | 94 | 96 |

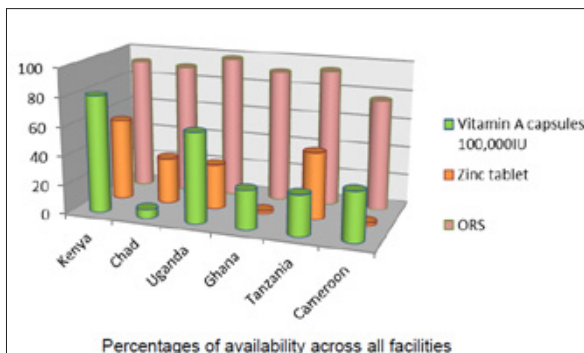


Mirfin Mpundu speaking at the EPN Forum in Nairobi

Like in Tanzania, a stakeholders meeting defined follow-up measures. The most urgent measures needed were promoting the ORS & Zinc combination, ensuring that essential medicines were listed for ordering and stock management, ensuring that staff was aware on what needed to be added to the stock, informing staff about children’s medicines and having up-dated treatment guidelines.

appropriate supply chain management and face logistic challenges. Qualified pharmaceutical staff is under-represented and skills in stock management are lacking at facility level.

EPN tries to improve such situations by doing follow-up projects that address problems observed; as has been done in Cameroon and Tanzania. EPN focuses on strengthening medicine supply chains in CHI’s while working with EPN partner organizations. 🇳🇬



About the Author

Mirfin M. Mpundu is Executive Director at EPN.
 Contact details: mmpundu@epnetwork.org
 Website: www.epnetwork.org

Overall, several essential medicines for children are not sufficiently available. This most likely has a tremendous negative effect on the prevention or treatment of even life-threatening diseases. The concept of essential medicines and primary health care goes back 35 years. Till today a lot of health systems are insufficiently financed, lack

Improving Access to Essential Commodities for Maternal, Newborn and Child Health - Improved Access. Improved Services. Better Health Outcomes.

Dr David Mafirizi

Dr David Mafirizi, Principal Technical Advisor HIV&AIDS (SIAPS), gives a brief description of the USAID-funded Systems for Improved Access to Pharmaceuticals and Services (SIAPS), a 5 year program that runs from September 2011 to September 2016.

SIAPS Goal and Objective

Goal

To assure the availability of quality pharmaceutical products and effective pharmaceutical services to achieve desired health outcomes.

Objective

To promote and use a systems-strengthening approach consistent with the Global Health Initiative that will result in positive and sustainable health impact.

Intermediate results

SIAPS focuses on 5 intermediate results that are related to areas of health systems strengthening.

1. Strengthen pharmaceutical sector governance.
Under SIAPS, our approach to improving governance and accountability focuses on establishing transparent management systems grounded in policies based on best practices, legislation supported by the rule of law, and regulation supported by appropriate technology and capacity.
2. Build individual, organizational, and institutional capacity for pharmaceutical supply management and services.

To increase efficiency, SIAPS works with stakeholders to assess a country's capacity to manage pharmaceuticals at all levels. Then, using a stakeholder consensus approach, we will identify areas for improvement and develop interventions to strengthen the system for the long term, such as building capacity among facility-level staff to track medicine consumption.

3. Address the information for decision-making challenges in the pharmaceutical sector.
Our approach to improving information systems is to integrate pharmaceutical data collection, processing, and presentation of information to help staff at all levels make evidence-based decisions to manage health and laboratory commodities and pharmaceutical services, as well as harmonize our tools with non-MSH tools.
4. Strengthen financing strategies and mechanisms to improve access to medicines.
Through SIAPS, we help countries conduct analyses to inform policy decisions regarding cost containment, greater efficiency, and options for mobilizing financing. Our health management expertise combined with SIAPS partners' knowledge and experience in innovative financing strategies will allow countries to maximize their pharmaceutical resources.
5. Improve pharmaceutical services to achieve desired health outcomes.
Our strategy for improving pharmaceutical services is not limited to only assuring prod-

uct availability; our holistic approach strives to ensure that patients receive medications optimized to their clinical needs, in doses that meet their individual requirements, for an adequate time, and at the lowest cost to them and their community.

To ensure services that will result in optimal treatment outcomes, we will build systems to train health professionals and providers, provide medicine information and counselling, conduct medicine utilization reviews, formulate policies and regulations for improved pharmaceutical care, and disseminate information and educational materials to promote public health.

Current global trends in increasing access to Maternal, Newborn and Child Health (MNCH) commodities

One of the strategic priorities of USAID is to end preventable maternal and child deaths. A second key strategic priority is to ensure an AIDS-free generation. The current achievements on Maternal Mortality and Child Mortality are:

Most countries have a long way to go to end preventable maternal and child deaths.

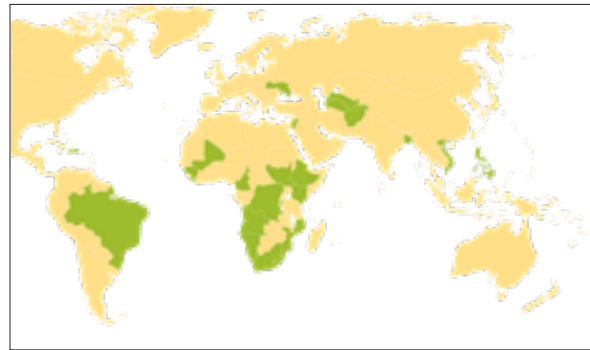
Maternal Mortality

Maternal deaths have dropped from 543,000 a year in 1990 to 287,000 in 2010; concentrated in Sub-Saharan African and South Asian countries (Trends in maternal mortality: 1990 to 2010, WHO 2012).

Child Mortality

- Declined from 12 million a year in 1990 to 7.6 million in 2010
- Pneumonia and diarrhoea still cause more than two million deaths annually
- Malaria causes at least 700,000 deaths per year
- 21,000 children die every day around the world (Levels & Trends in Child Mortality report 2011, UNICEF)

Despite this progress, most countries have a long way to go to end preventable maternal and child deaths. Ensuring access to appropriate services, including appropriate medicines and supplies, is key.



Where SIAPS works

Some of the service delivery strategies currently recommended are the promotion of facility births with skilled birth attendants, the community distribution of misoprostol and post-natal care (home visits). For mothers, the integration of birth spacing and maternal health services leads to an improved health outcome. In neonates, infection prevention reduces mortality rates. Good results can be achieved with the community distribution of chlorhexidine. For resuscitation and integrated management of childhood illnesses (IMCI), an integrated community case management (ICCM) is needed.

“The continuum of care for maternal, neonatal, and child health requires access to care provided by families and communities, by outpatient and outreach services, and by clinical services throughout the lifecycle, including adolescence, pregnancy, childbirth, the postnatal period, and childhood. Saving lives depends on high coverage and quality of integrated service-delivery packages throughout the continuum, with functional linkages between levels of care in the health system and between service-delivery packages, so that the care provided at each time and place contributes to the effectiveness of all the linked packages.” - The Lancet, 2007

In order to ensure access to life-saving commodities for women and children, good pharmaceutical management practices must be followed. The special concerns related to MNCH products for each component of the pharmaceutical cycle are selection, procurement, distribution and storage, inventory management, use and management

support. The following questions are part of the situation assessment which tackles the different elements of the pharmaceutical management cycle:

Selection

Maternal health commodities:

- Are storage conditions considered in the selection of uterotonics?
- Is misoprostol included in the essential medicine list (EML) for obs/gyn indications?
- Who is allowed to prescribe misoprostol?
- Do current guidelines align with meds on EML?

Neonatal and Child health commodities:

- Is zinc available without a prescription status?
- What formulations of zinc are available?
- What antibiotic for treatment of pneumonia is currently listed on the standard treatment guideline (STG)?
- Is amoxicillin in 250 mg dispersible tablets available for community case management?
- Do standard treatment guidelines align with the essential medicine list?

Procurement

Maternal health commodities

- Do tender documents provide sufficient specificity on characteristics that may affect quality (e.g. packaging for misoprostol)?
- Will re-packaging be necessary?
- What data are used for quantification?
- Is data on morbidity available?
- Have needs of lower levels of the health system been considered?
- Have multiple uses of medicines (e.g. oxytocin) been considered?

Neonatal and child health commodities

- Has amoxicillin in dispersible tablets and blister packs been considered for community case management? Are those included in procurement?
- What data are used for quantification?
- Are suppliers available (e.g. zinc, chlorhexidine)?
- Have needs of lower levels of the health system been considered?
- Have multiple uses of medicines (e.g. amoxicillin) been considered?

Distribution and storage

Maternal health commodities

- Are appropriate conditions maintained (e.g. temperature and humidity)?
- How are medicines distributed to lower levels of system (e.g. community-based distribution of misoprostol)?

Neonatal and child health commodities

- What systems are in place to ensure that medicines reach lower levels of system (e.g. community case management)?
- What are appropriate storage options at community level?

Inventory Management

Maternal health commodities

- Is consumption recorded?
- Are records reconciled (e.g. pharmacy vs. delivery room)?

Neonatal and child health commodities

- What systems are in place to collect data from lower levels of system (e.g. community case management)?
- Is data from community-level separate?

Use

Maternal health commodities

- Are there provider biases (e.g. misoprostol, mag sulfate)?
- Is home use monitored when community-based distribution is implemented?
- Are referral systems in place?

Neonatal and child health commodities

- Care-seeking practices
- Diagnosis
- Appropriate use of antibiotics
- Adherence to zinc

Management Support

- Are SOPs available for lower levels of system?
- Who is paying for MNCH supplies?
- Are community health workers trained in re-supply process?
- Are health workers receiving the support they need to ensure appropriate use?

In order to address the key issues for pharmaceutical management of MNCH medicines and supplies, MSH SIAPS MNCH works on its portfolio.

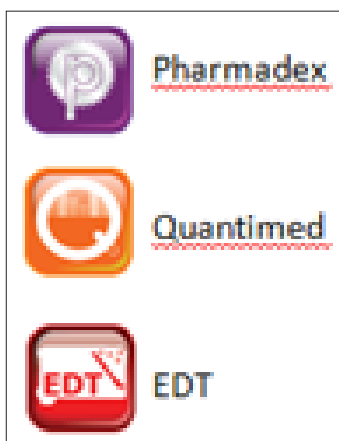
The objectives of SIAPS MNCH Work are to

- Support implementation of MNCH strategies in countries
- Provide global technical leadership for maternal and child health
- Develop innovative strategies and tools to improve access to MNCH commodities

Examples of support for country MNCH activities are the introduction of misoprostol at the community level in South Sudan, the cooperation with MoH in Mali, Burundi and Guinea to support implementation of CCM, the revision of EML, standard treatment guidelines and introduction of chlorhexidine in DRC.

Examples of SIAPS tools

SIAPS MNCH has developed innovative strategies and tools to assist countries in improving access to essential MNCH medicines. One example is the approach for estimation of unmet need for maternal health commodities, a strategic tool designed to help national stakeholders think through assumptions for forecasting need for maternal health medicines, and the assessment of local procurement of MH commodities, which assists stakeholders in determining the extent to which local procurement of commodities contributes to access.



Core tools from MSH are shortly described.

Pharmadex

National governments must effectively register and track pharmaceutical products to ensure that they are readily available and safe. When countries have weak medicine registration systems - backlogs of medicine registration applications, inefficient drug testing systems, and incomplete data on suppliers and products - they can waste millions of dollars and put millions of people at risk of using unsafe and low-quality medicines.

Pharmadex is a web-based tool that helps to streamline and track medicines registration for a national drug regulatory authority by:

- Recording and organizing information on suppliers and products
- Tracking product applications in the registration process
- Analysing and comparing suppliers and products
- Tracking critical information for decision-making, such as costs, usage, and safety

Quantimed

This tool is designed to improve the accuracy of order planning and budgeting by providing a systematic approach to organizing and analysing data. It facilitates the calculation of commodity needs using either a single method or a combination of any of the three primary quantification methods: past consumption, morbidity patterns, and proxy consumption. The advantages are that it removes the often tedious and mistake-prone calculations associated with quantification, relegating it to the computer. It also allows the user to manipulate variables (i.e. time, population, scaling-up rates) to adjust quantification figures without having to recalculate.

Electronic Dispensing Tool

Helps pharmaceutical providers accurately dispense medicines by collecting, managing, and generating the necessary data, including:

- Patient profiles and medicine history
- Medicines inventory
- Patient statistics needed for management decisions

Pharmaceutical service providers often lack the data they need to dispense the correct medicines in correct amounts as well as monitor the use and side effects of those medicines. Providers must be able to easily collect patient data and access patients' medical history in order to optimize patient care, support management decisions, and appropriately manage stock. 🌍

About the Author

Dr David Mabirizi is Principal Technical Advisor HIV&AIDS at SIAPS, MSH.

Website: www.siapsprogram.org

Universal Health Coverage to Improve Medicine Access

Dr Jonathan Quick

Dr Jonathan Quick, President and CEO of Management Sciences for Health (MSH), presented on the linkages of Universal Health Coverage (UHC) and access to essential medicines at the EPN Forum 2014 in Nairobi. Too often, access to medicines is characterized by low domestic health financing and high out-of-pocket (OOP) payments. OOP spending is a huge burden for many households. In 33 mostly lower-income countries OOP eats up over 50% of health spending (2007).

UHC means that all people have access to the services they need, without financial hardship.

Each year, 150 million people suffer severe financial hardship. Due to inability to pay combined with other barriers to access, one third of poor people with acute illness receive none of the prescribed medicines.


lower-middle-income countries, are working toward UHC.

The principles of UHC are Equity - a focus on vulnerable populations - and Quality services for patients. To achieve UHC, it is necessary to increase government spending on health and to reduce OOP expenditures. UHC relies on risk pooling. This is done differently in different countries, but often through a universal or social health insurance scheme. Under

UHC, an essential package of services must be provided. This will usually start with basic primary care and increase progressively over time based on the needs of the population and economic growth. Key elements for effective service delivery are infrastructure, health workforce and essential medicines.

UHC has proven a powerful driver for women's health in low- and middle-income countries. To improve maternal and child health, we need to find a gender-sensitive approach to providing essential health services, eliminating financial burden, and reducing social barriers.

To effectively expand quality health services to all people and specifically to women, health systems must become stronger in leadership, management, financing, human resources, community involvement, and other critical elements. This target can only be reached if the different stakeholders of a state and society are actively en-

Universal Health Coverage – the vision 

"universal health coverage [UHC] implies that all people have access, without discrimination, to nationally determined sets of needed promotive, preventive, curative and rehabilitative basic health services and to essential, safe, affordable, effective and quality medicines, while ensuring that the use of these services does not expose the user to financial hardship, with special emphasis on the poor, vulnerable, and marginalized segments of the population."

- All people
- Essential package
Prevention & treatment
- Essential medicines
- Affordable
- Emphasis on poor, vulnerable, marginalized

WHA Resolution 58.33 Geneva:WHO; 2005. United Nations General Assembly. Resolution A/67/L.36 (6 December 2012). Available: http://www.un.org/ga/search/view_doc.asp?symbol=A/67/L.36

Management Sciences for Health — 40 years of Strengthening Health Systems for Greater Health Impact

UHC means that all people have access to the services they need, without financial hardship. Today, over 50 countries, including at least 20

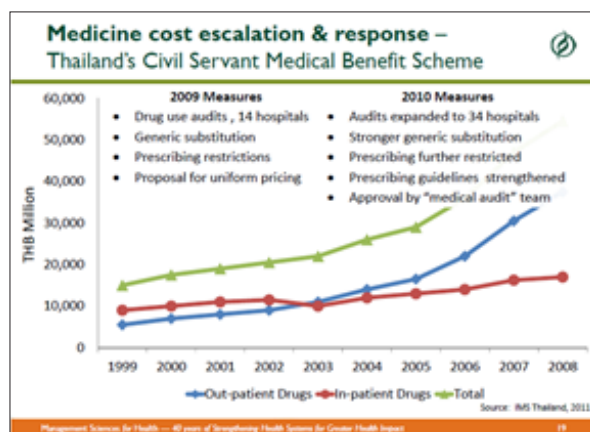
gaged, e.g. political and health leadership, civil society, multilateral agencies, global health funders and others involved with women's health and equity.

Access to medicines through UHC

The ideal of UHC is increased access to medicines with improved health outcomes, and greater financing equity with reduced medical impoverishment. However, a risk exists that instead we might see adverse impacts of cost controls that actually reduce health impact, create excess demand, more fraud and abuse and rising costs that threaten UHC program viability. To ensure UHC is achieving better health outcomes, it must be designed and implemented right.

Thailand

Thailand provides an example of an increase in coverage over more than four decades. Thailand has been striving toward UHC since the 1970s. By 2000, a number of public health insurance schemes, in combination with a small number of private plans, were able to cover 75% of the Thai population. By the 2000 national election, UHC had gained enough momentum to become a staple of many political campaigns and in 2001, the new government made a commitment to provide health coverage for all (<http://www.jointlearningnetwork.org/content/thailand>).



In 2002, the new Thai government passed the National Health Security Act with a great deal of popular support. It has since become one of the most important social tools for health systems reform in Thailand. The new Universal Coverage Scheme (UCS), or "30 Baht Scheme" (after the currency), combined the already existing Medical Welfare Scheme and the Voluntary Health Card Scheme to expand coverage to an additional 18

million people. Through the Universal Coverage Scheme and other existing schemes, Thailand has expanded coverage to 65 million people, or roughly 98% of the population.

The graph on this page illustrates increasing spending on medicines in Thailand over time, and the various reforms put in place under USC to control cost escalation.

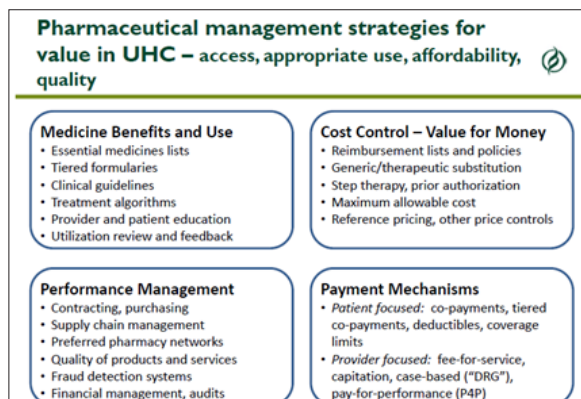
Ghana

A community-based health insurance scheme (CBHI) in Ghana began in the 1990s as a community response to the high user fees charged by public and private providers. Coverage rates ranged from 2 to 25%. By 2003, such community schemes covered only 1% of the country's population, while civil servants and formal sector employees were covered by social security. In 2003, Ghana passed the National Health Insurance (NHI) Act into law, which created the mandatory National Health Insurance Scheme (NHIS) that provides a broad minimum package of care (Witter and Garshong 2009). The NHIS built upon existing CBHI schemes at the community level and consolidated them into District Mutual Health Insurance Schemes (DMHIS) that were required to follow national rules on premiums and benefits as well as financing (World Health Organization 2011). The NHI Act established a regulatory body, the National Health Insurance Council (NHIC) to register, license, and regulate public and private health insurance schemes, including the DMHIS. The key responsibility of DMHIS is to enrol members, collect premium payments, and issue identity cards. Despite the development of national guidelines, districts differed in terms of premium payments, registration fees, and waiting periods as of 2008 (IFPRI Discussion Paper 01309, December 2013, The National Health Insurance Scheme in Ghana: Implementation Challenges and Proposed Solutions, Gissele Gajate-Garrido, Rebecca Owusua).

The NHIS covers all 138 districts in Ghana with a predefined benefits package that covers 95 percent of the disease burden in the nation (World Health Organization 2011). NHIS membership grew from 6.6 percent of the population in 2005 to 45 percent in 2008, but there is great variation across the different regions (Witter and Garshong 2009). Registration among peo-

ple in the informal sector and children has also increased (Universal health coverage in Africa: focus on community based health insurance, USAID, www.HealthSystems2020.org).

The focus on medicines as one cornerstone of health services and medical intervention requires a strategy covering four areas which are illustrated and explained in the slide. The indicators for the achievement in UHC can be measured in terms of the extent of access, appropriate use, affordability and quality of medicines.



UHC requires a multi-factual approach. Dr Quick proposed the following seven best practices as guidance:

1. Stakeholder engagement and communication – the public, patients, providers, healthcare managers, policy makers, politicians
2. “Smart” therapeutics – priority health problems, outpatient coverage, essential medicines, clinical guidelines

3. Value-based policy design – incentivize most appropriate use
4. Increased efficiency – generic/therapeutic substitution, efficient procurement and distribution systems
5. Reliable partners – accredited health providers and dispensing outlets, competitive sourcing from quality assured suppliers
6. Performance management – robust management systems for inventory management, drug use review, fraud detection
7. Culture of adaption – learning from others, benchmarking, routine monitoring, evaluating, based on what’s working and what isn’t

In conclusion, OOP spending is too often the largest source of national health financing for medicines and therefore a major source of impoverishment. Universal health coverage emphasizes reorganizing domestic financing, which has proven feasible through a variety of national UHC programs. UHC offers great promise to expand access to medicines. The success in expanding medicine access depends on strong policies and governance, informed pharmaceutical management strategies, and a focus on health impact and program viability. 🍏

About the Author

Dr Jonathan Quick is President and CEO at Management Sciences for Health.

Contact: www.msh.org/contact-information

Website: www.msh.org

Family Planning for Christians: Vital for Maternal & Child Health in Africa

Douglas Huber

Every day, nearly 1,000 women die due to pregnancy-related causes. 99 percent of all maternal deaths occur in the developing world. Sub-Saharan Africa with 10% of the global population contributes 51% of global maternal deaths (2005; UNICEF Global database).

How should Christians respond?

A CCIH 2008 survey of member organizations shows that members support family planning where it is understood to mean voluntary prevention of pregnancy, not including abortion. CCIH members see Family Planning as part of comprehensive services for family health.

An important impact on maternal health derives from birth spacing. When a pregnancy occurs 6 months or less following a birth, the risk of miscarriage increases by 230% and the risk of maternal death within 42 days increases by 150% (US Agency for International Development ESD Project). Thus the goal is to increase birth spac-

Every day, nearly 1,000 women die due to pregnancy-related causes.

ing. To achieve a 36 month birth interval, both breastfeeding plus contraception must be used for 18-22 months postpartum before trying to become pregnant again. If the birth intervals decrease to less than 2 years, the infant mortality doubles. There is still a huge need for contraceptives in Africa.

Unintended Pregnancies and Abortion

One-fifth of all pregnancies worldwide end in abortion, which means 42 million abortions each year. Many abortions are illegal and unsafe. Out of 4.7 million abortions in Africa each year, 4.5 million are unsafe (performed by people lacking necessary skills and in settings without minimal medical standards). 67,000 women die each year worldwide from unsafe abortions (Population Reference Bureau). Abortion is reduced when modern contraceptive use increases.

“The evidence is overwhelming that contraception prevents abortion. And this is what we all want most of all”, says W. Henry Mosley, MD, MPH Professor Emeritus, Department of Population, Family & Reproductive Health, Johns Hopkins Bloomberg School of Public Health.

It is estimated that up to 100,000 pregnancy-related deaths occurring among women who had unintended pregnancies could be avoided each year with proper family planning (US Agency for International Development). The example of Kenya illustrates that by far injectables are the most commonly used method.

Contraceptive use in USA among women at risk of unintended pregnancy* by religious affiliation (Natl Surv Fam Grwth 2006-08; n=7,356 women)

Christian Connections for International Health, at Center for Bioethics & Human Dignity, 13 July 2012

| Contraceptive | All women | Catholic | Protestant Mainline | Evangelical | None |
|-----------------------|-----------|----------|------------------------|-------------|------|
| Highly Effective | 69% | 68% | 73% | 74% | 62% |
| Sterilization | 33 | 32 | 34 | 41 | 26 |
| Pill & other hormonal | 31 | 31 | 35 | 28 | 30 |
| Intrauterine device | 5 | 5 | 4 | 4 | 6 |
| Condom | 14 | 15 | 13 | 10 | 17 |
| Natural FP | 1 | 2 | 1 | 1 | 1 |
| Other | 5 | 4 | 4 | 6 | 7 |
| None | 11 | 11 | 10 | 9 | 14 |

* % of women sexually active but not pregnant, post-partum or trying to become pregnant.

Other methods are e.g. cycle beads. They help to know what days during the month the woman can get pregnant (days 9 to 19 after the first day of menstrual bleeding). To prevent pregnancy, the couple has either to avoid sex or use condoms on those days. This method is best used by women with regular monthly bleeding.

Concerns of Christians Working to Save Mothers and Children

An estimated 220 million couples want to delay or stop childbearing but are not using any form of family planning. Many faith-based clinics face severe shortages and frequent stock-outs of supplies. They need our help to reduce abortions, help families grow at a rate they can afford, and protect the health of women, children, families, and entire communities (World Health Organization and CCIH).

| | |
|----------------------------------|------------|
| • Injectables | 22% |
| • Pill | 7 |
| • Female sterilization | 5 |
| • Rhythm (natural FP) | 5 |
| • IUD | 2 |
| • Male condom | 2 |
| • Implants | 2 |
| • LAM (breastfeeding & criteria) | 0.3 |
| • <u>Female condom</u> | <u>0.0</u> |
| • ALL METHODS | 46% |

Although contraceptives might be available, there are a lot of misconceptions. Here is an example from Kenya (adapted from MLE, Tupange, 3 June 2011). According to the survey, 53% of the responders believe that the use of injectables can make a woman permanently infertile. Another 76% believe people who use contraception end up with health problems. 64% believe that contraceptives can give you deformed babies, and 58% believe that contraceptives can cause cancer. All are incorrect.

There is proof that interventions with education have an impact on increasing the use of family planning methods with an impact on maternal health. It is for us to overcome misconceptions: give good contraceptive method information to all - using written and verbal - e.g. WHO FP guide for specific methods accepted or currently being used (1/2 or 1/4 page from flip chart). That is also cost-effective. We should be able to give women their method of choice (injectables are popular in Africa). 🇰🇪

Useful resources:

- <http://www.ccih.org/>
- <https://www.fphandbook.org/factsforfamilyplanning>
- <https://www.fphandbook.org/>
- <http://www.globalhealthlearning.org/>
- http://www.who.int/reproductivehealth/publications/family_planning/9789241503754/en/#

About the Author

Douglas Huber MD, MSc. Christian Connections for International Health (CCIH). CCIH is a network of 160+ Christian organizations, Protestant, Catholic, evangelical, and mainline denominations, who are all dedicated to health and well-being from a Christian perspective
 Contact details: ccih@ccih.org
 Website: www.ccih.org

The “Nairobi Declaration”, June 2011: In this Declaration, we commit to leveraging our networks to support family health by providing education and services that enable families to plan the timing and spacing of their pregnancies consistent with their faith. We call on others to support this initiative to influence government and donor policies and funding. Endorsed by over 200 organizations, Muslim, Christian, Hindu and Buddhist.

Resources

Improving maternal and newborn health

Working with individuals, families and communities to improve maternal and newborn health; authors: World Health Organization; Number of pages: 52, Publication date: 2010, Languages: Arabic, English, French, Russian, Spanish; WHO reference number: WHO/MPS/09.04

http://www.who.int/maternal_child_adolescent/documents/who_fch_rhr_0311/en/

Medicines for women and children

Priority life-saving medicines for women and children

<http://www.who.int/childmedicines/prioritymedicines/en/>

Child mortality

Levels & Trends in Child Mortality Report 2014, Estimates Developed by the UN Interagency Group for Child Mortality Estimation

http://www.childmortality.org/files_v17/download/UNICEF%202014%20IGME%20child%20mortality%20Report_Final.pdf

MDGs

Information on Millennium Development Goals and beyond

<http://www.un.org/millenniumgoals/>

UHC

What is universal health coverage? WHO

http://www.who.int/universal_health_coverage/en/

Ecumenical Pharmaceutical Network

P. O. Box 749 - 00606

Nairobi, Kenya

Tel: +254 724 301755 | 572 522702

info@epnetwork.org

<http://www.facebook.com/EPN.epnetwork>

Visit us: www.epnetwork.org

EPN

Ecumenical Pharmaceutical Network
Réseau Pharmaceutique Œcuménique



Just and compassionate quality pharmaceutical services for all