The EPN Forum 2018 Report

PROMOTING PATIENT SAFETY - MEDICATION WITHOUT HARM

15TH - 18TH MAY 2018
KAMPALA, UGANDA
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Acronyms

ADEs – Adverse Drug Events
ADR – Adverse Drug Reactions
AEST – Association Evangélique pour la Santé au Tchad
AMR – Antimicrobial Resistance
AMS – Antimicrobial Stewardship
ART – Anti-retroviral therapy
BUFMAR – Bureau des Formations Médicales Agréées du Rwanda
CADIMEBU – Centrale D’approvisionnementet de Distribution des MédicamentsEssentiels de Bunia
CBACA – Communaute Baptiste Au Centre de L’ Afrique
CBCHB – Cameroon Baptist Convention Health Services
CCIH – Christian Connection for International Health
CHAZ – Churches Health Association of Zambia
CHI – Church Health Institutions
CHS – Churches Health Systems
CME – Evangelical Medical Centre
DAZ – Diabetes Association of Zambia
DCMP – Depot Central Medico-Pharmaceutique
DIFAEM – German Institute for Medical Mission
DSOs – Drug Supply Organization
DTC – Drug and Therapeutic Committee
EACPP – East African Pooled Procurement Program
EPN – Ecumenical Pharmaceutical Network
ESBL – Extended Spectrum Beta-Lactamase
GIVS – Global Immunization Vision and Strategy
GMP – Good Manufacturing Practice
GPHF – Global Pharma Health Fund
HAI – Hospital Acquired Infections
HAM – High Alert Medication
IPC – Infection Prevention Control
JMS – Joint Medical Store
LASA – Like Alike, Sound Alike
LMICs – Low and middle income countries
MEDS – Mission for Essential Drugs and Supplies
MEMS – Mission for Essential Medical Supplies
MRSA – Methicillin-resistant Staphylococcus aureus
MTCs – Medicines and Therapeutics Committees
NMRA – National Medical Regulatory Authorities
ODK – Open data kit software
PQM – Promoting Quality of Medicines
PSA – Pamela Steel Associates
PSA – Pharmaceutical Systems Africa
PV – Pharmacovigilance
ReAct – Action on Antibiotic Resistance
STGs – Standard Treatment Guidelines
TB – Tuberculosis
About the EPN Biennial Forum

The initial EPN Forum was held in 2006, as a biennial event that brought together EPN members, donors and partners. It is a platform for members to share experiences and best practices on emerging issues in pharmaceutical health services within faith-based health facilities across. The Forum is also an amazing opportunity for the EPN members to fellowship, be inspired and network. Each Forum unpacks a pharmaceutical delivery topic with the aim of equipping members with current and expert information. While the EPN Forum is the main event; it is usually flanked by one pre-event and the EPN Annual General Meeting.

The EPN Biennial Forum 2018 was held from 15th to 18th May 2018 in Kampala, Uganda hosted by Joint Medical Store (JMS), Uganda.

The EPN Forum Theme for 2018

The theme of the 2018 forum was; Promoting Patient Safety: Medication without Harm.

The World Health Organization (WHO) Third Grand Challenge on Patient Safety is Medication without Harm. It was launched in March 2017 with a goal to reduce the level of severe, avoidable harm related to medications by 50% over 5 years, globally. Every year, millions of patients die or are injured because of unsafe and poor quality health care. Patient harm is the fourteenth leading cause of morbidity and mortality in the world and about two-thirds of this harm occurs in low and middle-income countries. The goal of Patient Safety is to encourage health facilities across the globe to establish and adopt health systems that identifies and minimizes occurrences of patient harm.

The EPN Biennial Forum 2018 theme “Promoting Patient Safety: Medication without Harm” addressed the WHO Third Grand Challenge within a generally low-resourced sub-Saharan context. In attendance was over 100 stakeholders from over 24 countries, from academia, healthcare administrators and workers, drug distribution experts, technologists, medication packaging among others. Notably, majority of the attendees were from Church Health institutions (CHIs) across Africa.

Objectives of the EPN Forum 2018:

1. Understand the global goals on patient safety and the role of EPN members in achieving these goals.
2. Increase awareness of knowledge of EPN members on patient safety strategies including mitigation of medication errors.
3. Identify useful methods of collecting, analyzing and using data about medication safety.
4. Understand approached and strategies in addressing medication errors in health facilities.

This report, therefore, is designed to summarize the discussions and procedures undertaken at the EPN Forum 2018; how each of the topics addressed the forum theme; Patient Safety: Medication without Harm; the role CHIs can play in addressing the Forum objectives and key take-a-ways that will facilitate next steps that CHIs can use to better serve the communities in which they operate.
Words of Gratitude

The EPN Secretariat expresses heartfelt gratitude to all the participants, donors and partners who traveled far and near to be a part of the EPN Biennial Forum 2018. We are incredibly aware that without you, the event would not have been the success it was. To our co-hosts, Joint Medical Store, and specifically Dr. Bildard Baguma and the entire JMS Team, we are highly appreciative of your warm reception. To our donors and partners we thank you for the continued financial support and mentorship which is a testament to our shared vision of increasing access to quality-assured medicines and its rational use within Church Health Institutions (CHIs).

Pre-Conference: The Minilab Workshop

Background

The pre-event to the EPN Forum 2018 was facilitated by DIFAEM, Germany showcased the progress made by the Minilab Network which is a group of 15 organizations (13 from 9 African countries and 2 from India) who are using the Global Pharma Health Fund (GPHF) Minilab™.
The GPHF Minilab™ is a mobile mini-laboratory used for rapid drug quality verification and counterfeit medicines detection. It is a system that only requires the kit itself and no other complex laboratory equipment.

EPN members within the Mini Lab Program use the GPHF Minilab™ to increase efforts of detecting counterfeit medicines within CHIs and act as a “watch-dog” agency of these medicines within the communities they serve. Findings and data collected maps trends in counterfeit medicines which is typically reported to national governments’ health ministries and the WHO.

**Notable Achievements:**

- 84 essential medicines currently testable with the Minilab. In addition, in 2015 DIFAEM provided technical support to the organizations to collect and test at least 100 batches of testable medicines from the private and uncontrolled markets.
- Samples showing inconclusive results with the Minilab get retested by a second Minilab partner and in case of failure the samples are analyzed further at the WHO prequalified laboratory at Mission for Essential Drugs and Supplies (MEDS) in Kenya or in Germany for final confirmation.
- Approximately, a total of 2131 medicine samples have been tested through the DIFAEM - EPN Minilab Network Program.

**MiniLab Workshop Feedback:**

- Limited human resources trained in the MiniLab utilization remains a major problem across the countries.
- High cost of Mini-lab reagents have posed procurement and testing challenges. Further, reagents are not always readily available locally within countries.
- Cameroon and DRC have the highest prevalence of sub-standard medicines.
- A 2015 study conducted in Cameroon on prevalence of substandard medicines found some samples of Pen V that did not have any penicillin as well as falsified “Augmentin” - Medical product alert No. 2/2018 at the WHO.
- In DRC, massive corruption leads to escaped prosecutions of those found selling falsified medicines.
- The failure rate of medicines has reduced from 35% to about 5% from 1997 to 2017 at MEDS, Kenya
MiniLab Workshop Outcomes

The main outcomes of the workshop were:

- Formation of regional network groups and action plans.
- Strategies to implement tools that raise awareness on quality.
- Resolutions to allocate internal funds by the member institutions to support the Minilab system operations and urge their respective boards to seek additional external funding to supplement the Minilab activities.
- Resolution to increase vigilance and screening of antibiotics as a response to AMR.
- Resolution to improve collaboration, networking and information-sharing among member organizations as a way of harnessing the diverse expertise and resources within the network and to strengthen the capacity of other member organizations.
- Resolution to address the need for additional products for the Minilab system to the owner GPHF in Germany.
- Resolution to conduct pooled testing (regionally) where possible as a cost-effective measure.
We acknowledge and thank Dr. Bildard Baguma, Executive Director of JMS, and Mr. Marlon Banda, EPN Board Chair for their welcome addresses. We were also honored to have Mr. Morris Seru, Assistant Commissioner Pharmacy Department, Ministry of Health, Uganda, officially opening the EPN Biennial Forum.

A cross-section of the attendees of the Forum in one of the sessions
Gertrude Avortri began with a fundamental question: **what is patient safety in connection with medication harm?** To, Avortri, Patient Safety relies on health systems that identifies and minimizes occurrences of patient harm and such health systems need to be strong and resilient. However, the reality is that every year, millions of patients die or are injured because of unsafe and poor quality health care, pointed out Avortri. She noted that millions of patients die or are injured because of unsafe and poor quality health care and patient harm is the 14th leading cause of morbidity and mortality in the world and about two-thirds of this harm occurs in low and middle-income countries. Avortri also cautioned that there are fundamental blocks for reducing medication harm, which she identified as (1) System redesign - Safety standards development with clear measurements, including improved safety culture aligned with error/incident reporting systems (2) Professional education and training for healthcare workers (3) Integrated information systems in healthcare facilities and (4) Patient engagement and participation is vital.

In her current role, Avortri shared that the WHO is putting Safety on the world’s agenda and has done so in the past through the WHO Global Patient Safety Challenges & World Alliance for Patient Safety that initiated two Global Patient Safety Challenges in 2004 with the goal to mobilize worldwide
commitment and action to reduce health-care-associated infections and risks associated with surgery, namely:
- Clean Care is Safer Care and
- Safe Surgery Saves Lives

Engagement and coordination is crucial at national, global and WHO levels, according to Avortri:

<table>
<thead>
<tr>
<th>Key Action Areas</th>
<th>National</th>
<th>Global</th>
<th>WHO</th>
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<tbody>
<tr>
<td><strong>Early priority actions</strong></td>
<td>Provide guidance and develop strategies, plans and tools.</td>
<td>Provide leadership in all the domains of the challenge.</td>
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<tr>
<td>Strong commitments, prioritize and take early action, and effectively manage three key areas to protect patients from harm, namely:</td>
<td><strong>Strengthens:</strong></td>
<td>Facilitate the development and implementation of country programs, e.g. commission expert reports.</td>
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<tr>
<td>- high-risk situations</td>
<td>Human resource capacity through leadership development and skill-building.</td>
<td>Develop strategies, guidelines, plans and tools.</td>
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<td>- polypharmacy</td>
<td>The quality of monitoring and evaluation systems.</td>
<td>Promote communications and advocacy at the global and regional levels.</td>
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<td>- transitions of care</td>
<td>Promote and support patient safety research.</td>
<td>Promote patient and family involvement.</td>
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<td><strong>Innovation</strong></td>
<td>Engage with regulatory agencies and international actors to improve medication safety, including manufacturing practices.</td>
<td>Monitor and evaluate impact of the Challenge.</td>
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<td>Explore the beneficial effects of using technology in enhancing ways to improve processes that reduce medication harm.</td>
<td>Develop mechanisms for the engagement and empowerment of patients to safely manage their own medication.</td>
<td>Mobilize resources for global support</td>
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<td>Promote country-centered approaches to patient safety and medication errors that take into account the feasibility, acceptability and applicability in specific areas.</td>
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Quotes: “First do no harm. Then know that we cannot do it all at once but we need to prioritize key actions we can take and lastly, everyone has a role to play in Patient Safety.”

Mr. Rembrand Rodenburg, Pilot, Mission Aviation Fellowship (MAF - Uganda) gave an insightful analogous presentation of how the aviation industry has developed safety processes and protocol resulting in a significant decline of aircraft fatalities over the last two decades despite an increase in the number of flights globally. He credited this phenomenal to the globally utilized Four Pillars of Safety Management System (1) Policy (2) Management (3) Assurance and (4) Promotion. He interrogated whether, adopting a globally accepted set of operational systems in healthcare, specifically as a safety measure when dealing with medication. In his opinion, like the aviation industry, the health sector may benefit from; stricter worldwide regulated and the development of systems and structures for monitoring and evaluation. Currently, rebuttals Rodenburg, the true extent of connecting safety and harm across all health care settings and sectors is still a “black box”, often because of fears from health professionals that reporting will lead to punitive action. To Rodenburg, the key is to shift the healthcare workers’ mind set to take a more proactive stance with systematic changes in how healthcare is practiced.
<table>
<thead>
<tr>
<th>Policy</th>
<th>Risk Management</th>
<th>Operational</th>
<th>Promotion</th>
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<tr>
<td><strong>Safety begins after the safety policy is written.</strong></td>
<td>Zero risk doesn’t exist but an acceptable minimum risk does.</td>
<td>Monitor the Risk with measurable indicators.</td>
<td>Include everyone; one person cannot do it alone.</td>
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<td>A clear road map of the types of risk, recognition of risk, their</td>
<td>When mistakes are made, appointed risk healthcare personnel should be diligent</td>
<td>Store and organize data to maximize ease of monitoring and evaluation to</td>
<td>Periodic trainings, education and communication for all staff within their</td>
</tr>
<tr>
<td>effects, mechanism for data and continuous monitoring, activities,</td>
<td>in mitigating the mistake so that it does not result in a disaster.</td>
<td>facilitate such that changes are observed isolated and acted on quickly.</td>
<td>roles and across departments.</td>
</tr>
<tr>
<td>roles, reporting and steps to taking action, evaluation and resolve.</td>
<td>Healthcare should invest risk analysis tool, with a well-defined severity and</td>
<td>i.e. improvements to be made more efficient or inefficiencies addressed.</td>
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<td>probability matrix tailored to the specific context.</td>
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<td>Pause and do a (formal) risk assessment.</td>
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<td>In emergency situations, train staff to conduct some objective risk</td>
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<td>assessment.</td>
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<tr>
<td>Staff reporting is key</td>
<td>Make it simple, easy and safe. This highly depends on the organizational</td>
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<td></td>
<td>Can staff self-report? A clear reporting system is essential that assures</td>
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<td>confidentiality, anonymity and follow</td>
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<tr>
<td>Celebrate safety because success results in lives being saved.</td>
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up. This fosters openness, involvement, sharing and continuous improvement in safety.

Quote: “Healthcare gives hope to millions of people. People depend on healthcare workers, in every department, every day. People have to trust you.”

Mr. Banda of CHAZ, tackled Patient Safety from the healthcare facility standpoint and brought the operationalization of the concept into focus. Humanizing Patient Safety, Mr. Banda, linked healthcare workers’ susceptibility to errors and behavioral drifts to the caliber of the health facility’s administrative structure, as a determinant of the number of adverse events. Mr. Banda argued that human errors more often than not, occur when there is a slip or lapse in judgment to an otherwise familiar task – a mistake, while in medication errors can be managed through clear procedures, training, design of operational work flow and comfortable work environment. Adverse events, he reiterated, are not the only caused by human errors but also because healthcare facilities may not have resilient coordinated and systematic administrative and operational approaches to the procedures of providing healthcare.

The systems approach is not about changing the human condition but rather the conditions under which humans work.” J.T. (Reason, 2001)

Mr. Banda recommended that, risk management analysis is conducted with an acceptable small threshold of harm because it is inevitable as well as constant monitoring and evaluating with a key component being self-reporting of any medication errors with clear guidelines of procedures and actions.
Dr. Chandy, Professor, Clinical Pharmacology, Christian Medical College, Vellore, India: Medication errors in health systems, can we prevent them?

Dr. Mirfin Mpundu, Executive Director of EPN, Kenya: Role of Pharmacovigilance in patient safety

Hailu Tadeg, Chief of Party, Promoting Quality of Medicines (PQM): Ensuring quality and safety of medicines in LMICS: PQM’s approach and successes.

Dr. Chandy picked up the baton from Mr. Banda as he dug deeper into specific and common errors in health institutions, specifically with regard to prescribers and dispensers. He began by generally noting that healthcare errors generally encompass: diagnostic, equipment malfunction errors, hygiene gaps and, of greatest interest, medication prescribed and dispensed. The majority of medication errors typically occur at four critical moments in a health facility setting at prescribing, dispensing and administering, then at patient level, at consumption. Dr. Chandy was particularly emphatic about errors at the prescription stage. He described in detail that the most common of prescription errors are: failure to adjust dosage in response to a change in hepatic/renal function; history of allergy to the same or related medication; wrong drug name, dosage form, or abbreviation on order; incorrect dosage calculation and atypical or unusual critical dosage consideration. He noted that these errors seemed like “common-sense” but in his experience,
there is always a need to restate them to all healthcare professionals - rookies and experienced physicians alike.

Could electric prescriptions be the answer? Dr. Chandy posed the question. On the surface perhaps, however, he expressed his concern that in low resource facilities, this requires substantial investment of both time and finances, which in rural LMICs, where infrastructure and human resource capacities were not at global standards, would be impossible. Diligence in foundation processes such as legible prescriptions are helpful. However, he cautioned that at dispensing stage, Like Alike, Sound Alike (LASA) medications still posed a problem. To manage LASA errors, Dr. Chandy suggested that the dispenser keep drugs apart and double checks before passing on to the patient.

"The effects of medical errors to your patients are not good experiences. They will never leave you, so work hard to prevent them."

What happens when medication harm is caused by unintended and/or unknown adverse effects of the drug itself outside of the documented and anticipated reactions declared during clinical trials? Dr. Mpundu, Executive Director of EPN, tackled the topic of pharmacovigilance (PV) as critical element of mitigating medication errors leading to harm. To Dr. Mpundu, the heart of Pharmacovigilance is in the assurance of medication and patient safety. According to the WHO, "Pharmacovigilance is the science and activities relating to the detection, assessment, understanding, and prevention of adverse effects or any other drug-related problems"

Dr. Mpundu defined and expanded on Adverse Drug Reactions (ADRs) and Adverse Drug Events (ADEs) as key components to patient safety and ultimate prevention of medication harm. The challenge was placed on healthcare professionals who are responsible for maintaining the quality and integrity of medicines from clinical trial stage manufacturing to packaging, transportation, storage and dispensing. Critical to effective PV, Dr. Mpundu advised, is that it is an extension of the rational and safe use of medicines, therefore, findings when substantiated, should typically lead to drug usage restrictions, changes in specific doses, introduce warnings, alter the legal status (over-the-counter to prescription only) and removal of the drug from the market. While noting that ADRs and ADEs are typically discovered after some form medication harm has occurred, Dr. Mpundu urged participants to report all suspected reactions: minor, serious, unexpected, unusual ADRs including monitoring of any frequency changes i.e. tracking for suspected drug-drug, drug-food and drug-food-supplement interactions, ADR associated with drug withdrawal, medication errors and lack of efficacy or suspected pharmaceutical defect.
Reporting on PV should be done to regulatory authority (e.g. Pharmacy and Poisons Boards), drug manufacturers, health professionals, patient organizations etc.

_Quote:_ “Pharmaco is Greek for ‘drug’ and vigilance is Latin for ‘to keep awake or alert’ which is all the instruction we need.”

Rational use of poor quality medicines is ineffective and counterproductive because a natural presumption to Pharmacovigilance is that quality is woven into every step of the development of medicines at manufacturing, testing, distribution and storage, this was the preamble to Mr. Tadeg’s presentation titled *Ensuring quality and safety of medicines in LMICS: PQM’s approach and successes* Chief of Party, PQM. Tadeg raised the alarm by noting that substandard quality or “fake” or counterfeit medicines are entering the health market and health systems across Africa.

A substandard or falsified medicine may contain no active ingredients, less than the required amount of active ingredients, too much of the active ingredients, or ingredients not described on the package label.3 Both types of products may have ingredients that are toxic (e.g., boric acid, leaded road paint, floor and shoe polish, talcum powder, chalk, brick dust, and nickel). Poor Quality Medicines are key contributors to various forms of adverse events endangering patient safety.

A 2015 review of 17,000 drug samples, including anti-malarial, anti-TB, and antibiotics, found 41% failed to meet quality standards and in East Asia and sub-Saharan Africa it is estimated that one third of malaria medicines used are fraudulent. Poor-quality antimalarials are estimated to have killed 122,350 children in 39 African countries in 2013 alone.

Mr. Tadeg blamed this proliferation of counterfeit medicines in Africa to weak regulatory systems, inadequate post-marketing surveillance programs and a lack of systems for generating and sharing information for decisions within and across borders. In his conclusion, Mr. Tadeg warned that the financial benefits of substandard medicines on the market will only create a vicious cycle of “competition” between regulators and pharmaceutical companies producing falsified medicines. As regulations of falsified medicines become more effective, so will the level of sophistication in technologies of falsification which will require even higher regulatory expertise? To safe guard the quality of medicines, there needs to be: increased access to reliable and current information (global database of pharmaceutical manufacturers, medicines quality and safety) and enhanced traceability/serialization of medical products.

The first day of the EPN Forum 2018 ended with a closing prayer and a short networking session among participants.
THE EPN Forum 2018: Day 2

The second day of the EPN Forum 2018 began with a devotional message delivered by Reverend Baraka Kabudi, CEO, Mission for Essential Medical Supplies (MEMS) located in Tanzania. The theme for Day 2 focused on Hospital Practice on Patient & Medication Safety.

Summary Plenary 3 – Hospital Practice on Patient & Medication Safety

Hospital Practice on Patient & Medication Safety plenary was moderated by Dr. Mirfin Mpundu, EPN Executive Director. Presenters and their respective topics included:

- **Mrs. Vuyelwa Sidile-Chitimbire**, Executive Director, Zimbabwe Association of Church Related Hospitals: **Hospital accreditation impact on patient safety**
- **Mr. Andreas Wiegand**, General Secretary, Apotheker Helfen e.V. /German Pharmacists’ Aid: **Role of technology in patient safety**
- **Dr. Philip Mathew** Consultant, ReAct Asia Pacific Assistant Professor of Community Medicine, PIMS, Thiruvalla, Kerala (India): **AMR as a patient safety issue**

Mrs. Sidile-Chitimbire kicked off the second day with a concept that many health institutions in rural Africa struggle with: Hospital accreditation. In her presentation titled: Hospital accreditation impact on patient safety, she noted that since hospital accreditation relied on self-assessment component of reporting, it would be beneficial in identifying, correcting and maintaining standards where inefficiencies are likely to occur within facilities. After going into some detail on the various local and regional organizations that certify accreditation in Africa and globally, Mrs. Chitimbire, further noted that hospital accreditation for rural health facilities may not be as easy as those in the urban settings. She emphasized, that the benefits of hospital accreditation, such as; low cross infections; orderly patient record keeping, maintenance of infrastructure and equipment, would largely benefit rural hospitals.

Hospital accreditation: ‘A self-assessment and external peer assessment process used by health care organizations to accurately assess their level of performance in relation to established standards and to implement ways to continuously improve.’

Mr. Andreas Wiegand’s presentation on the Role of technology in patient safety began with a valid reminder that mobile technology continues to bring major breakthrough to medicine and the provision of healthcare services in Africa. In under-resourced facilities in LMICs, however, the use of technology is typically limited by financial constraints, trained staff and infrastructure that support the functioning of high tech medical devices. However, he pointed out, LMICs do not necessarily have to shy away from technologies as simple and practical technologies exist that can make a big impact on patient safety in these remote areas. What is required, he suggested, is for CHIs to make smart investments on technologies that serve specific issues in their facilities for example packaged resources such as MedBox which has information on varied diseases and medications; mSupply a stock management mobile application which is a mobile medical supply application; Micromedex, a free online resource that gives clinical information, types of interactions and the severity of the interaction of a given drug etc. Mr. Wiegand concluded by making the argument that globally, LMICs have below average healthcare human resources available to them; technology can help alleviate that gap when properly used and available. Dr. Philip Mathew, with his presentation titled: AMR as a patient safety issue, AMR as a cross cutting issue across patient safety as well as how antibiotics many
bring about medication errors. Within a healthcare facility setting, specifically within in-care patients or hospitalized patients, AMR is propagated by Hospital Acquired Infections (HAIs). Dr. Mathew explained that within the context of patient safety, HAIs increase the number of invasive procedures and a high number of surgical interventions, along with the issue of antimicrobial resistance (AMR). He asserted that consistently, the antibiotic resistance levels have been worse in isolates from HAIs, as compared to community acquired ones e.g. MRSA, VRSA and ESBL all of which emerged from healthcare facilities. Nonetheless, he advised that to improve patient safety and avoid HAIs and the unnecessary exposure to antibiotics, healthcare facilities should be aware of the Infection Prevention Control (IPC) and consider other rigid prevention techniques of HAIs.

Dr. Mathew in his conclusion took a simple yet powerful approach that HAIs are a preventable patient issue and health facilities should be more vigilant with hygiene especially when there is an increase in the number of medical procedures and surgical interventions. Dr. Mathew expanded that a rise in HAIs leads to a rise of Antimicrobial Resistance (AMR) which in turn increases these deadly infections. A strategic administrative role of preventing HAIs is through antibiotic stewardship and proper infection control practices is the take-away message from Dr. Mathew. Further, the optimization of antimicrobial therapy (ensuring the availability and accessibility of quality antibiotics using and first line antibiotics first) and by ensuring proper use (indication, dose, route of administration, and duration) will minimize side effects i.e. AMR in patients.
Break Out Sessions Day 2
Breakout Session 1

Session 1: Managing vaccines, high risk medication and controlled substances in the health system

Vaccines, high risk medication and controlled substances play a vital role in patient safety with regard to medication harm in the prevention and treatment of diseases. Vaccines, high risk medication and controlled substances are sensitive and require special handling at various stages of distribution.

Moderator: Tracie Muraya

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<th>Topic</th>
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<tr>
<td>Vaccine safety &amp; Cold chain management</td>
<td>Valentin Pondo</td>
</tr>
<tr>
<td>Handling 'high risk medications' in promoting patient safety</td>
<td>Susan Mutua</td>
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<tr>
<td>Controlled substances and systems promoting medication safety</td>
<td>Joanita Lwanyaga</td>
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Medicines and health commodities require specific handling procedures and vaccines are an especially delicate one which Mr. Valentin Pondo, from CADIMEBU in DRC, discussed specifically with regard to vaccines. Vaccines are a vital around the world, however, especially so in Africa where the greatest burden of disease lies and, as propagated by Mr. Pondo, should always be handled appropriately in accordance with the WHO and UNICEF Global Immunization Vision and Strategy (GIVS). Mr. Pondo insisted that consistent “good practice” when handling vaccines and specifically refers to the importance of “cold chain” distribution measures. Vaccines should always be handled in-line with the manufacturer’s recommendation from transportation, storage and point of administration. Mr. Pondo cautioned participants that, “Patient or parents/care-givers should not be asked to store vaccines” and, “Food, drink and clinical specimens must never be stored in the refrigerator for vaccines.”

Picking up from the topic of proper handling of sensitive medicines Dr. Susan Mutua, Chief Pharmacist at Gertrude’s Hospital in Kenya, gave a rundown of High Alert Medication (HAM) as the medicines that carry a heightened risk of causing significant harm when used in error within pharmacies. In her presentation titled: Handling ‘high risk medications’ in promoting patient safety, she urged pharmacists to be very concerned with reducing or eliminating possibilities of errors. Examples of medication classified as HAMS, while according to Dr. Mutua, maybe well-known, provided the list below as examples:

**Classes/Categories of High-alert Medications**

Adrenergic agonists, IV (e.g., epinephrine, phenylephrine, norepinephrine)

Adrenergic antagonists, IV (e.g., propranolol, metoprolol, labetalol)
Antiarrhythmics, IV (e.g., lidocaine, amiodarone)
Antithrombotic agents
Chemotherapeutic agents: Parenteral and Oral
Dextrose, hypertonic, 20% or greater
Dialysis solutions, peritoneal
Hypoglycemics, oral
Inotropic medications, IV (e.g., digoxin, milrinone)
Insulin, subcutaneous and IV
Moderate sedation agents, IV (e.g., midazolam); oral (e.g., chloral hydrate)
Narcotics/opioids: IV, Transdermal, Oral

Specific High-alert Medications
Epinephrine, subcutaneous
Insulin U-500 (special emphasis)*
Magnesium sulfate injection
Methotrexate, oral, non-oncologic use
Nitroprusside sodium for injection
Oxytocin, IV
Potassium chloride for injection concentrate
Potassium phosphates injection
Promethazine, IV
Vasopressin, IV or intraosseous

The solution, according to Dr. Mutua, is to take steps that minimize misuse through limiting access to HAMS, using auxiliary and automated alerts and standardizing the handling of HAMS and prevent errors by ensuring proper identification, designated storage and consistent procurement (i.e. same brand, and special prescribing formats i.e. no abbreviations etc.). As a sustainability measure, Dr. Mutua advised a multidisciplinary joint “high alert” task force to include doctors, pharmacists and nurses as paramount to improve patient’s safety, when dealing with HAMS.

Tackling the distribution of sensitive medicines, Ms. Joanita Lwanyaga from JMS in Uganda presented on Controlled substances and systems promoting medication safety. She put forth that controlled medicines should always be (a) used rationally and for the intended purposes (b) prescribed in accordance to dosage regimen and (c) dispensed as per prescription. However, her concern was that with controlled substances it becomes very important that the (a) quality of the medicines is pristine and maintained throughout manufacturing, transportation and storage (b) security measures be in place to limit access at every stage of distribution until dispensing. Technology that tracks these controlled medicines becomes a key element to achieving the aforementioned.
Breakout Session 2

Sessions 2: Processes, partnerships and suppliers
The second break out session focused on the pharmacy processes, partnerships and supplier interactions with relevant to efficient workflow practices when filling prescriptions to issuing the medication to the patient.

Moderator: Stefanie Puegge

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>Addressing pharmacy workflow in addressing medication safety</td>
<td>Collins Jaguga</td>
</tr>
<tr>
<td>Manufacturers audits what to look for, for patient safety</td>
<td>Samuel Ong’ale</td>
</tr>
<tr>
<td>Working with country and regional regulators on medication safety</td>
<td>Christoph Bonsmann</td>
</tr>
</tbody>
</table>

Dr. Collins Jaguga, Project Manager at EPN in Kenya, began the session by bringing into focus that medication errors can be drastically reduced by a well-organized pharmacy workflow; in his presentation on using pharmacy workflow to enhance Medication safety. The basics of what Dr. Jaguga advocated in an effective pharmacy workflow should display professionalism, build into the pharmacy system a heightened level of accuracy of dispensing practices of medication with shorter lead time and thus, help in the prevention of medication errors.

The pharmacy workflow:

Dr. Jaguga noted that misunderstanding and misinterpreting prescriptions i.e. indications, dose calculations, abbreviations and drug interactions is the most common error encountered in pharmacies. Patient follow-ups are not always performed and in his opinion, constituted the most important part of the process within and outside health facilities. However, he conceded that out-patient data on medicines adherence, reports on allergic reactions, device malfunction (e.g. insulin pens, inhalers) is difficult to collect yet vital to improving sustained patient health outcomes.

Moving the discussion to incorporate manufacturers and distributors, Mr. Samuel Ong’ale, Warehouse Operations Manager at MEDS in Kenya, presented on Manufacturers audits, what to look for patient safety and specifically the importance of a professional working relationship between
manufacturers and Drug Distribution Organizations (DSOs). According to Mr. Ong’ale, manufacturers and distributors contribute to promote Patient Safety when medication audits and inspections are performed consistently accurate in busy operational settings. Mr. Ong’ale further cited the various quality assurance certifications that a manufacturer of medicines requires for national compliance and then moved on to the importance of a high level of sanitation and hygiene by the manufacturer and the DSO.

Manufacturer Inspection/Audit is the process of ascertaining that a pharmaceutical manufacturer conforms to the WHO current good manufacturing practices (cGMP).

“Pristine hygiene reduces the potential for contamination...equally a system to recall from the market, promptly and effectively, products known or suspected to be defective is paramount,” as he emphasized that a “good relationship” between parties is the key ingredient to limiting medication harm. In his conclusion, Mr. Ong’ale ended by encouraging drug distribution companies and healthcare administrators, where possible, to establish relationships with medicines manufacturers with the patient’s positive health outcome in mind-always.

Shining a light on the functions of a Medical Regulatory Systems by regulatory agencies and organizations in ensuring the safety, quality and efficacy of medicines and medical devices, harmonization of legal procedures related to drug development, monitoring and ensuring compliance with statutory obligations, Christoph Bonsmann gave an insightful presentation which concluded the session.

**Functions of a Medicines Regulatory System**

![Diagram of Functions of a Medicines Regulatory System](Source: WHO Assessment of medicines regulatory systems in sub-Saharan African countries 2010)
Pharmacovigilance in Africa is hindering the functionality and efficiency of regulatory systems to mitigate counterfeit medicines, according to Mr. Bonsmann.

- Group 1: minimal or no capacity
- Group 2: basic structure
- Group 3: capacity to collect and evaluate
- Group 4: systems that detect, evaluate and prevent

The challenges that African countries face in performing effective and efficient pharmacovigilance activities, include: few trained staff and QC labs; existence of grey or black markets; poverty attracts the purchase of counterfeit medicine; unreliable databases of registered products etc. Mr. Bonsmann, advised that African countries should: conduct and use results of assessments of National Medical Regulatory Authorities (NMRAs), harmonize with international regulatory requirements, attachments to with other regulators for experience and expectation recognition in order to begin pharmacovigilance efforts that will make regulation effective.

The second day of the Forum included a tour of the JMS facilities in Kampala followed by a cultural excursion to an outdoor theatre.
The EPN Forum 2018: Day 3

The last day of the EPN Forum 2018 began with devotion and a short recap of Day 2 followed by the plenary sessions.

Summary Plenary 4: Supply chain and self-assessment

The Supply chain and self-assessment plenary was moderated by Ms. Mona Bormet, Program Director at CCIH, USA. She interrogated the vital role that Supply Chain Management of medication plays in mitigating Medication Harm in relation to Patient Safety. Presenters and their respective topics included:

- Pierre-Henrie Bruchon, Executive Vice President and Head of Constantia Flexibles Pharma Division (Austria): Anti-Counterfeit Pharmaceutical and Anti-Counterfeit Packaging.
  
  Note: Mr. Bruchon’s participation in the EPN Forum was purely to provide breakthrough information and advice on the innovations in packaging of medicines as a measure to detect counterfeits.

- Dr. Baguma, Executive Director of JMS (Uganda): Role of Resilient Supply Chains in Addressing Medication Safety.


Mr. Bruchon began by stating that medicines packaging is a vital component of protecting the integrity of medicines, a responsibility that pharmaceutical companies hold in protecting people against counterfeit medicines. Mr. Bruchon noted that very often, especially in LMICs, the outer package is disposed off immediately as many pharmaceuticals are sold blister by blister, hence compromising the primary goal of protecting packaging that is “fake-free” and in essence, counterfeit medicines from entering the health market. Counterfeit medicines, he continued, have multiple ramifications as they can damage the reputation of the company, the credibility/trust of doctors and patients to use the drugs, economic loss and indeed, cause harm to patients. Mr. Bruchon further elaborated on the breakthrough technologies for protecting the primary package which are interactive and digitally printed allowing for easily tracking (with computer software) and detection (through inspection and reporting) of any tempering. Technology, he concluded, is available and accessible for stakeholders across various points of the distribution of medicines right to the patient, who is the end user. To continue fighting counterfeits medicines, all stakeholders should consider securing packaging, increasing awareness to the industry stakeholders and the public, investing in improving more ways of detection and advocating for changes in policies around counterfeits, all in all, making pharmacovigilance efforts more efficient with reliable data.

Dr. Baguma’s presentation was centered on the complexities of logistical structures in the supply chain of medicines and how it requires high levels of planning and managing. This, Dr. Baguma expressed is especially crucial as medicines suppliers have the responsibility of ensuring that the intended integrity of medicines is maintained from source to pharmacy shelf. “Disruptions to medicine supply chains, if there is no resilience, have life threatening consequences; therefore, planning for eventualities such as natural disasters, accidents or human errors is paramount,” he cautioned. Dr. Baguma encouraged Drug Supply Organizations (DSOs) to put measures in place that screen for counterfeit medicines during each shipment by: conducting Risk assessment mechanisms along the supply chain -prior planning and contingencies; adopting a model quality assurance system.
that standardizes and/or justifies procedures – total sourcing model vis-à-vis cost-based models; complying with regulatory controls- safety systems in place and conduct stimulations to document readiness; controlling the product environment to match manufacturer’s specifications at all stages of the e.g. refrigerated trucks or a consignment of a controlled medicine; and the transfer of product integrity standards to partners through building partnerships and collaborations. However, Dr. Baguma cautioned DSOs on managing stockpiling strategies that place the product integrity at risk and reduce accessibility to patients due to inflated prices. Finally, Dr. Baguma submitted that the absence of historical data, thus far, limits the use of predictive statistical tools and this needs urgent attention.

Quote: Prepare, prepare, prepare. If you need assistance with building capacity of staff to handle, store and manage medicines appropriately, please reach out. As a Network, we are here to help each other.”

To conclude the plenary session, Ms. Jane Muyundo from Pamela Steele Associates, discussed the importance of continued training and the specific areas of concentration for healthcare workers with regard to medicines and health commodities supply chain.

Day 3 Breakout - Session 1
The participants were divided into two groups which were split into separate rooms for the Breakout Sessions.

Break Out Sessions Day 3

<table>
<thead>
<tr>
<th>Session 1: Examples of good practice in low resource settings</th>
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<tbody>
<tr>
<td>The case studies presented in these sessions gave on-the-ground accounts of how health facilities are making positive strides in following good health and pharmaceutical practices and filling capacity gaps in their health facilities within the confines of limited available resources.</td>
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Moderator: Freddy Kitutu

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>Pharmacovigilance activities case study in Maluti Adventist Hospital, Lesotho</td>
<td>Lineo Nyenye and Lebo Mothae</td>
</tr>
<tr>
<td>Role of minilab in medication safety</td>
<td>Christina Hafelle-Abah &amp; Richard Neci</td>
</tr>
<tr>
<td>Improving pharmaceutical care for Type 2 diabetic patients in Zambia</td>
<td>Julian Nyamupachitu &amp; Macford Chandalala</td>
</tr>
</tbody>
</table>
Pharmacovigilance activities case study in Maluti Adventist Hospital, Lesotho

Ms. Lineo Nyenye and Ms. Lebo Mothae gave a presentation of how Maluti Adventist Hospital, a small healthcare facility in Lesotho, enhanced pharmacovigilance efforts that has led to reducing numbers of ADRs among patients. The duo, pharmacists at the facility, reported that assessment of medication quality heavily relies on visual inspections and patients’ complaints because there is no laboratory for drug testing onsite. The visual inspections methods utilizes criteria such as medicines with; suspensions-caking i.e. unevenly distributed solutions despite shaking or obvious sedimentation and crystallization; and tablets with non-uniform coloring and broken or tightly sticking together. Internal Standard Reporting Procedures when such medicines are detected include an official notification to the medicines supplier requesting refunds and insisting on procurement of quality products e.g. brand specific nifedipine with modified release.

Other pharmacovigilance practices include logging of previously unrecognized ADR e.g. Aneamia in people using TDF; identification of subgroups of patients at particular risk of adverse reactions e.g. Liver toxicity, delaying ART in TB patients; conscious treatment options i.e. drug selection with limited drug to drug interaction; drug disease interaction e.g. Gabapentin, lorsatan, clopidogrel; and conducting trainings that Influence prescribing behaviors e.g. captopril/enalapril vs lorsatan. In conclusion, they shared plans to improve the quality of data reporting as the current system has some gaps, largely missing information, and firmly believe that acquisition of a Minilab® will greatly aid the detection of counterfeit/sub-standard medicines.

Role of minilab in medication safety

There are 15 EPN Members currently within the EPN-Difaem Minilab Network which was started in 2010 to offer technical support by effectively using the Minilab®. The Minilab® is a simple, low tech and relatively inexpensive method for first quality screening of 100 medicines and thus far 800 sets have been distributed to 97 countries since 1998. The Minilab allows for health facilities without full scale laboratories to conduct the quality tests or detection of falsification in of the drug i.e. the absence or presence of specified active ingredients in the correct quantities. Since 2010, 4678 samples have been tested and 40 cases of falsified medicines detected e.g. Quinine recently bought in Cameroon. Detection of falsified medicines (substandard products) to an arguable extent is the protection of patients from these products. It is approximated that at least 3,000 patients saved.

Ms. Christine Hafelle-Abah (DIFAEM, Germany) and Mr. Richard Neci (DCMP, DRC) reported on how the Minilab can help low-resource facilities and shared their positive experience at DCMP located in the province of South-Kivu, DRC. Notably, they shared that in 2017, activities in DCMP Minilab included the quality control of 76 samples (45 from wholesalers: 59.21%, 19 from illegal market: 25% and 12 from health facilities: 15.79%. From the health facility samples 3/12 samples did not confirm
to standards i.e. 2 samples of Cefixime tab and 1 of Quinine tablets. As a counter-confirmation measure of suspicious medicines, the samples we sent to the laboratory in Kenya for further testing. The same results were found and an alert was sent to the WHO on these medicines.

### Samples tested in 2017

<table>
<thead>
<tr>
<th>Country</th>
<th>Partner</th>
<th>Samples tested total 2017</th>
<th>Substandard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>Life Net</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>CBC</td>
<td>165</td>
<td>1</td>
</tr>
<tr>
<td>Cameroon</td>
<td>PCC</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>Cameroon</td>
<td>DCMU</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Chad</td>
<td>ARST</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>DRC</td>
<td>DCMU</td>
<td>76</td>
<td>3</td>
</tr>
<tr>
<td>DRC</td>
<td>CADDERU</td>
<td>62</td>
<td>2</td>
</tr>
<tr>
<td>Ghana</td>
<td>NCHS</td>
<td>285</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>CDMU</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>Sepro Hospital</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>MEDES</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>Nkomena Hospital</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>DCHV Medi-Pharm</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Nigeria</td>
<td>ENSO/FBMS</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>Tanzania</td>
<td>Kilmatino Hospital</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Uganda</td>
<td>AMS</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1080</td>
<td>7</td>
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</table>

In order for the Minilab to be of greater importance, the duo recommended that health facilities: develop a permanent and strong collaboration with the government far beyond non-conforming results; closely collaborate with the Church leaders to raise awareness among health professionals at the health facilities on the quality of medicines; and work with the mandate of both the government and the Church for the purpose of sampling medicines to test (90% of non-complying samples tested at DCMP were from health facilities).

**Improving pharmaceutical care for Type 2 diabetic patients in Zambia**

Ms. Julian Nyamupachitu (EPN, Kenya) and Ms. Macford Chandalala (CHAZ Zambia) presented on an on-going Diabetes Training of Trainers Project in Zambia funded by World Diabetes Foundation.
(WDF), with implementing partners Church Health Association of Zambia (CHAZ) and Diabetes Association of Zambia (DAZ) with the goal of improving pharmaceutical care of Type 2 Diabetes by: increasing the capacity and skills of non-trained pharmaceutical staff in inventory management and increasing the capacity and skills of non-trained pharmaceutical staff in quality dispensing of Type 2 Diabetes medicines. The duo described their approach as Training-of-Trainers of pharmacy personnel from CHAZ with 38 participants from 37 facilities in 3-day-training sessions across seven of the ten provinces of Zambia. Utilizing a patient-centered approach with the premise that pharmaceutical staff are highly accessible to the patients and therefore, this role is underutilized, pharmacists become a valuable resource to assure safe, appropriate, cost-effective medication use and patient counseling. One highlighted major challenge was the inconsistent availability of diabetes medicines, however, the duo showed optimism in the role that pharmacy staff play in curbing diabetes prevalence.

Training Curriculum

Diabetes Medicine Availability – End line Assessment
Day 3 Breakout - Session 2

<table>
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<th>Break Out Sessions Day 3</th>
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<tr>
<td><strong>Session 2: Medication safety by involving the patient</strong></td>
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<tr>
<td>The presentations in this session were intended to bring Church Health Institutions’ role in safeguarding Medication Harm to ensure Patient Safety.</td>
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<tr>
<th>Moderator: Jasmine Makuta</th>
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<tbody>
<tr>
<td><strong>Topic</strong></td>
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<tr>
<td>Involving patients and families in clinical care to promote medication safety</td>
</tr>
<tr>
<td>Implementing Antimicrobial Stewardship Programs in Church Health Institutions</td>
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<tr>
<td>World Council of Churches global health agenda</td>
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Dr. Ndilta Djékadoum Osée, from AEST, Chad, brought in the patient family as a stakeholder in promoting medication safety. He argued that while prescribing, preparing and dispensing is a priority for healthcare facilities, correct administration (specifically in out-patients) and medication adherence largely depends on the good cooperation between patients, families and prescribers’ counsel. He made a point that, “Patient family cooperation is greatly influenced by counsel of prescribers as family caregivers extend pharmacovigilance efforts through the treatment period by reporting any ADRs and proper medicines storage,” in a greater statement on the how family members are a great source of surveillance data outside of the hospital setting.

“Antimicrobial resistance (AMR) is a growing concern as it threatens the effectiveness of medicines and thus positive health outcomes for patients. Health facilities, even those in low resource settings, should establish structures and systems aimed at containing antimicrobial resistance (AMR), prudent use of antimicrobials and IPC committees to help reduce hospital acquired infection,” began Dr. Mpundu, presenting on Implementing Antimicrobial Stewardship Programs in Church Health Institutions. Dr. Mpundu insisted that in order to manage the effects of AMR, health facilities should include Antimicrobial Surveillance (AMS) programs in addition to Infection Prevention Committees and adherence to STGs. Dr. Mpundu expanded on the fundamental components of the AMS programs which include Assessment (baseline parameters and outcomes), Interventions (capacity building of committee members) and Supportive Supervision (follow through activities). In conclusion, Dr. Mpundu cautioned that in order for AMR to be managed the AMS programs success depends on proper data management, clear targets for improvement, specific interventions and well defined guidelines.

The last presenter in this session was Dr. Mwai Makoka and brought a theological approach to providing compassionate healthcare, specifically to Patient Safety. Dr. Makoka summarized the role the World Council of Churches as a solid resource for Church Health Facilities to tap into for support in human capacity and procurement medicines and medical resources.
Session 3: EPN Project Presentations and lessons learned

Break Out Sessions Day 3

Session 3: EPN Project Presentations and lessons learned

This session unpacked three EPN projects focused on access to quality assured medicines and its rational use plus establishment of DTCs and IPCs in low resource facilities to prevent irrational use of medicines. The session was designed as a congruent topic to medication safety with the underlying rationale that in the long run; infection prevention and access to quality medicines work to reduce the amount prescribed medicines and thus circumvent medication harm to patients. The presentations gave summaries of the projects implemented and gave a few lessons learned in the process.

Moderator: Tony Tumwesigye

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>Implementing DTCs and IPCs in low resource setting facilities in Ghana</td>
<td>James Duah</td>
</tr>
<tr>
<td>Improving access to children’s medicines in Uganda</td>
<td>Tracie Muraya and Samuel Kiruyi</td>
</tr>
<tr>
<td>Promoting human resource capacity in church health institutions</td>
<td>Yvon de Jong</td>
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</table>

Dr. James Duah began this session with a presentation titled: Implementing DTCs and IPCs in low resource setting facilities in Ghana. Dr. Duah summarized EPN/CHAG intervention with the aim to better place CHIs in addressing non-communicable diseases (NCDs) and introduce structures and systems to reduce antimicrobial resistance (AMR). The activities in this intervention included: Hand hygiene training & periodic assessment; Setting up Infection Prevention and Anti-Microbial Stewardship Committees; Ensuring availability and compliance with STGs: Tracking Hospital Acquired infections and Address knowledge, attitudes & practices on AMR. Dr. Duah reported that mid-line data showed that that all facilities had functioning DTCs, IPCs were reactivated with identified point persons, hand hygiene training was conducted in 75% of the facilities, IPC existed but were struggling to be effective and Adherence to STG tracking was at 25%. “Implementing the program has been daunting as the systems of IPCs and DTCs including the concept of AMR in low resource facilities in a new concept in many of the facilities. Further, the paucity of complex laboratory presents inherent challenge in tracking one of the key outcomes for IPC and staff multi-task in poorly resourced settings and can lead to reduced commitment towards AMR,” he concluded as he noted that these factors may hinder sustainability of the projects if facilities are unsupported.

Dr. Tracy Muraya and Dr. Samuel Kiruyi jointly gave a summary on Improving access to children’s medicines in Uganda among FBOs, an intervention in partnership with Joint Medical Store. This intervention’s objectives focused on advocacy efforts to raise awareness on availability of pediatric formulations amongst the medical bureaus, DSOs and facilities, improve availability of children’s medicines and improve counseling for parents on children’s medicines in Uganda. In their summary, the duo acknowledged that one big lesson learned was that the creation of specific stakeholder activities that targeted specific areas of children’s medicines could be linked to the positive outcomes i.e. Advocacy meeting for local medicines producers, Training of Trainers (TOTs) on stock managements and counselling approaches, technical training for dispensing staff and Action Plans for Implementation for all health facility staff. Post intervention, she concluded, showed increased availability of medicines, establishment of support systems among stakeholders and discussions on
relevant policy issues to be addressed that cause barriers to the availability of children’s medicines in Uganda. “Children and not small adults,” said Muraya, “and in order to keep them safe, we need to dispense medicines in formularies that are meant for them.”

To conclude this session, Ms. Yvon de Jong presented on Promoting Human Resource Capacity in Church Health Institutions, based on two EPN flagship capacity building programs; the Ecumenical Scholarship Program (ESP) and Essentials of Pharmaceutical Practice Training (EPP). Using data analysis results from a 2010 EPN HR study of church health facilities in 8 countries that showed that a lack of qualified pharmacists, Ms. de Jong went on to show the positive impact on the improvements the two interventions have had. Noting that “existing staff in rural church health facilities are assets and need to be empowered through sustainable capacity building programs,” she proudly informed the group that due to the ESP and EPP interventions, the impact is two-fold: facilities have showed improved stock-keeping and dispensing practices and pharmacy staff are better equipped and knowledgeable in pharmaceutical practices. While the majority was positive news, Ms. de Jong conceded that one lesson learned is “that geo-political discourse” derailed the full positive impact in some countries and EPN should consider a “political stability” index in assessing future interventions.

Session 4: EPN member case studies

<table>
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<th>Topic</th>
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<tr>
<td>Lessons from the East African DSO Pooled Procurement Initiative</td>
<td>Baraka Kabudi and Ernest</td>
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<tr>
<td>in promoting access</td>
<td>Rwagasana</td>
</tr>
<tr>
<td>Lessons from NCDs approach in 9 countries</td>
<td>Mike Upio and Samuel Mwenda</td>
</tr>
<tr>
<td>Collaboration of EPN and Zimbabwe on AMR</td>
<td>Chidzewere Nzou</td>
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</table>

The East African Pooled Procurement Program (EACPP) with its members organizations; BUFMAR (Rwanda), JMS (Uganda), MEMS (Tanzania) and MEDS (Kenya) has allowed structured procurement of quality essential medicines and medical supplies in the East African Region (EAR) according to Rev. Baraka Kabudi, Executive Director of MEMS. In the update on the EACPP, Rev. Kabudi showed enthusiasm in the initial benefits, especially to the relatively smaller DSOs, especially MEMS, of negotiating and procuring essential medicines at lower costs. While he admitted that full benefits may not be wide spread across members, the EACPP is relatively still in its embryonic stages and the procurement model requires time to gain traction.
What remains key to the sustained success of EACPP, according to Rev. Kabudi, is the continued improvement of the procurement processes by maintaining a robust continuous quality improvement (CQI) system keen on reporting and monitoring and evaluation.

Dr. Samuel Mwenda, the Director General of the Christian Health Association of Kenya (CHAK) took to stage talking about approaches and lessons from the CHAK’s Non-Communicable Diseases (NCDs) program. Introducing CHAK’s strategy and partnership model in the implementation of NCD program, he underscored the role of partnership, including engaging Churches, religious leaders and Community Health Volunteers and creating linkages with healthcare workers as well as collaborating with local governments. Dr. Mwenda notes that partnerships are strategic and serve to integrate all stakeholders, build more advocacy hence more attention on NCDs. Drawing from the achievements and lessons from CHAK, Dr. Mwenda further points to the need for capacity building to facilitate task sharing and the overall health systems strengthening to cope with the double burden of both Non-Communicable and Communicable Diseases. He also highlighted on the importance of building data for policy advocacy & resource mobilization advocacy.

Dr. Chidzeweere Nzou closed the session with an often overlooked topic which relates to the media and how journalists are valuable and efficient communicators to the masses on the importance of following prescribed methods of medication use, vigilance in purchasing medication from authorized pharmacies, avoiding self-medication and other emerging issues of medication alerts. To Dr. Chidzeweere, medical journalism has a role to play in curbing Medication Harm when accurate and consistent information is transmitted to change learned erroneous medication consumption behaviors and social norms which will ensure patient safety.
Summary Plenary 5: Role of CHIs and CHAs in medication safety

The final plenary of the EPN Forum titled; Role of CHIs and CHAs in Medication safety and was moderated by Dr. Mirfin Mpundu. Presenters and their respective topics included:

- Isaac Muyonga, Health Department Director, Communauté Baptiste au Centre de l’Afrique (CBCA) - (Democratic Republic of the Congo): Developing sustainable models of promoting patient safety in low resourced CHIs.
- Ken Muma, Executive Director, JMS (Uganda): Role of Resilient Supply Chains in Addressing Medication Safety.

There is an argument to be made that the health facilities in low resource setting deal with challenges and a far greater intensity than more resourced health facilities. Dr. Isaac Muyonga brought forward the argument by show casing how health facilities in rural DRC are coping and upholding safety standards within their resource allocations. Dr. Muyonga informed participants that in North Kivu province of the Democratic Republic of Congo, the provincial drug store covers only 20% of the needs. This opens the gate to pharmaceutical products of low quality to cover 80% of the need. “How does a facility implement Patient Safety through medication without harm, when every hospital is expected to procure 80% of the medicines it needs, in a country looking to rebuild in a post-civil-war era?” With what Dr. Muyonga referred to as “diagnostic blindness” while explaining the functional in capabilities of healthcare facilities, he explained that what seems to be working in DRC, is a community-based approach to medication procurement in conjunction with diligent infection prevention measures, at facility level. To prevent Hospital Acquired Infections (HAIs) at CBCA (and thus avoid the use of more medication that aren’t readily available) diligence in good practice of Water, Sanitation and Hygiene within available infrastructure provisions and lastly, they have defined systems and procedures that monitor for Adverse Events i.e. a strict medication administering procedure within the wards for in-patients.

Infection prevention: (Left) The use of 3 water containers system: the first container used to decontaminate materials. (Right) The use of pressurized casserole with charcoal as source of heat instead of autoclave for sterilization
With these materials the infection control has been successful in the low income facilities back in the rural area and surgical site infection rate is as low as 1%.

Picking up from Muyonga, Dr. Ken Muma, presented on Sustainable Financing models church health facilities. Dr. Muma began by expressing that healthcare financing needs to have tenets of business acumen with a defined health practicing environment and identified group of recipients of care and sound administrative governance.

Noting that while CHIs resource mobilization efforts are hindered by; inadequately trained health finance human resources, healthcare worker crises and inadequate government budget allocation. There are global funds which are attainable through with strategic planning at administrative level within healthcare facilities. Furthermore, according to Dr. Muma, CHIs can also expand funds from existing community members by providing compassionate care, expanding services to the middle class, strategic partnerships with local organization and offering none-core healthcare services e.g. consulting and data collecting. Dr. Muma however cautioned on the importance for CHIs to focus on resource mobilization which is complex and requires good financial forecasting. It should remain plugged into global healthcare trends i.e. donor fatigue and changing health priorities.
Poster Presentations

We would like to express our utmost gratitude to all the posters that were presented at the EPN Forum 2018. It was an amazing effort to showcase all the various projects that are implemented by CHIs within the EPN Network.
The EPN Forum 2018 came to a close with a heartfelt closing speech by Dr. Mirfin Mpundu in which he thanked the EPN members for their work within the faith-based health sector, which reaches millions of vulnerable people across Sub-Saharan Africa. Dr. Mpundu encouraged all members, especially those from Francophone countries, to reach out to the EPN Secretariat for technical and program support as well as sharing their experiences within the Network. The EPN Forum 2018 closed with all attendees showing joint solidarity by singing the adopted EPN anthem - the hymn titled “Bind Us Together Lord”. The next EPN Forum will take place in the year 2020.
Photo Gallery

A section of participants during the Forum Presentations

Top: From (left), Gasper Makatta of Ruaha Catholic University, Mona Bormet (right) of Christian Connections for
International Health (CCIH), Bottom: Richard Van Slobbe (left) of Global Initiative of Medication Safety (GIMS) and Samuel Kiruyi (right) of Joint Medial Store (JMS) take participants through posters showcasing various organizational/institutional efforts on various areas on patient safety.

Dr. Bildard Baguma (left) briefs Forum participants ahead of a tour to the JMS drug store and medical laboratories. (right), the tour at the drug store.

Mr. Michael Mwangi (left), Treasurer to EPN Board and other participants at a Joint Medical Store medical laboratory.

Pre-Conference Minilab workshop participants visit to the JMS laboratory. (Right) the members of the Anglophone West African Minilab Network (Photo on the left).
(Left) A section of members of the Francophone regional Minilab network and (right) members of the East and Southern Africa Minilab Network