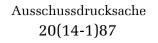
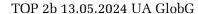


Ausschuss für Gesundheit





13.05.2024



EPN-DIFAEM MINILAB NETWORK



EPN Initiative in detecting and fighting SF medicines in Africa

Dem Ausschuss ist das vorliegende Dokument in nicht barrierefreier Form zugeleitet worden.

Introduction of the EPN Network



- We support churches and church health systems provide just and compassionate quality pharmaceutical services.
- A Network of 140 Members (CHA, DSO, CHI, HSS and Individuals)
- Expansion: 38 Countries, 27 in Africa

Coverage of church health services averages 40%.

More than 300 million people rely on health care provided by our Network



EPN African countries:

Benin, Burkina Faso, Burundi, Cameroon, CAR, Chad, DRC, Egypt, Ethiopia, Ghana, Guinea, Kenya, Lesotho, Liberia, Malawi, Namibia, Niger, Nigeria, Rwanda, Sierra Leone, SA, South Sudan, Tanzania, Togo, Uganda, Zambia & Zimbabwe

Ecumenical Pharmaceutical Network (EPN) is

- a Christian,
- not for profit,
- independent organization
- committed to the provision of quality pharmaceutical services
- as a means to achieving global goals and targets on health and access to medicines

Our Network consists of:

- 32 Christian Health Associations(CHAs)
- 25 Health Systems Strengthening (HSS)
- 20 Drug Supply Organisations (DSO)
- 17 Church Health Institutions (CHI)
- 46 Individual Members





Threat of Substandard and Falsified Product in Africa

ABOUT

BROWSE



According to the 2023 report 'Trafficking in Medical **Products in the Sahel**', various studies indicate that the share of medical products that are SF products are between 19-50%

PUBLISH

PLOS ONE

⑥ OPEN ACCESS
Ø PEER-REVIEWED

Substandard and falsified antimicrobials in selected east African countries: A systematic review

Addisu Afrassa Tegegne . Anbessa Bekele Feissa, Gemmechu Hasen Godena, Yesuneh Tefera . Hassen Kebede Hassen, Yildiz Ozalp, Sultan Suleman

Published: January 26, 2024 • https://doi.org/10.1371/journal.pone.0295956

This systematic review in PubMed of publications from 2017 to February 2023 reveals for 4 East Africa countries (Ethiopia, Kenya, Rwanda and Tanzania):

22.6% (151/669) of all samples of antimicrobials tested failed at least one quality test (Essay of the API, visual inspection of the package).

https://iournals.plos.org/plosone/article?id=10.1371/iournal.pone.0295956

Up To 500,000 Killed by Fake **Medicines in Sub-Saharan Africa**

Figures linked to falsified and substandard medicines in Sub-Saharan Africa

Deaths per year

267,000 linked to falsified/substandard antimalarial medicines

linked to falsified/substandard antibiotics (for severe pneumonia in children)

\$12.0 million- annual cost of caring for people who have used \$44.7 million falsified/substandard medical products (malaria only)

of falsified/substandard medical products 605 tons seized 2017-21 (West Africa only)

> estimated share of medical products that are falsified/substandard (Sahel medical market)

Major exporting countries:











Sahel zone neighboring states

Source: UNODC Trafficking in Medical Products in the Sahel

Sahel Countries: Burkina Faso, Chad, Mali, Mauritania and the Niger.







EPN promotes medicine's quality by adopting the GPHF MINILAB



- GPHF Minilab is a cost effective system
- We ensure that medicines entering the CHIs meet the quality standards they claimed to meet.
- We facilitate knowledge-sharing among members using the GPHF Minilab across the African continent and in India.
- Implemented since 2010 with DIFAEM (German Institute. for Medical Mission) a member institution of the EPN network
- Outcome: increased quality awareness within the faith-based health sectors, and collaboration with local authorities.

3 steps of analysis





Visual inspection of product, package and label



Simplified disintegration testing



TLC (thin-layer chromatographic) analysis

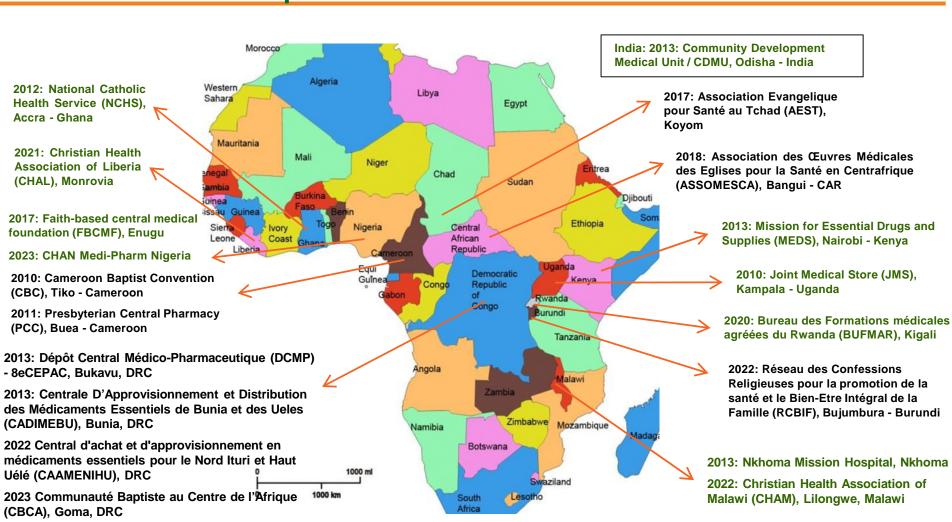




Members of the EPN Minilab Network

To date: 19 partners in 13 countries





Francophone Countries (5)

Cameroon, Burundi, DRC, CAR,

Chad

Anglophone Countries (

Ghana, Liberia, Nigeria, Uganda, Rwanda, Malawi

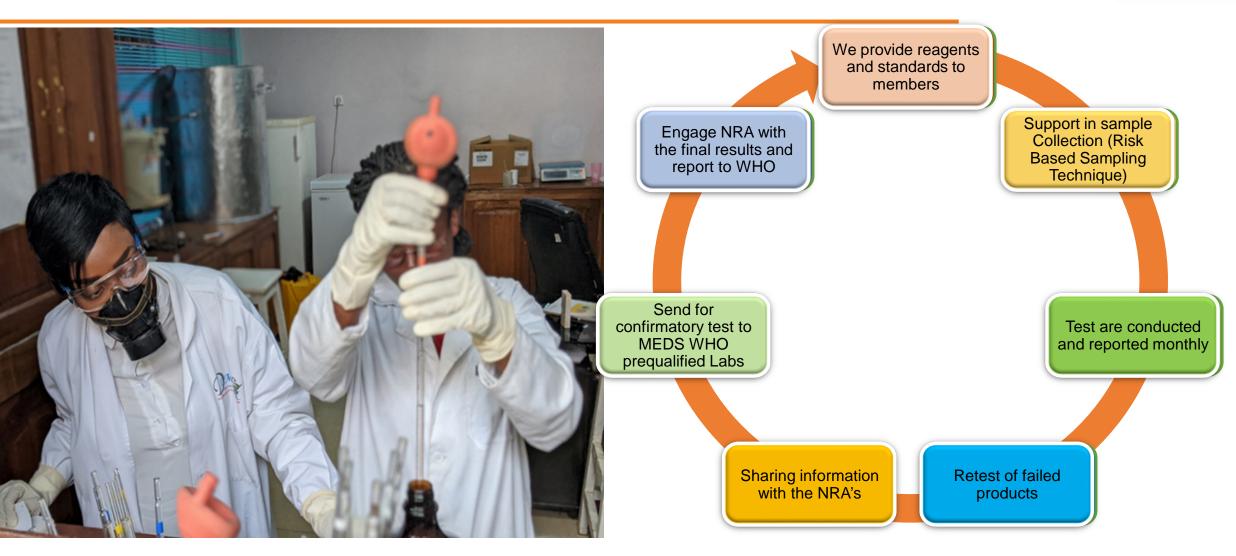






EPN-DIFAEM Minilab Approach





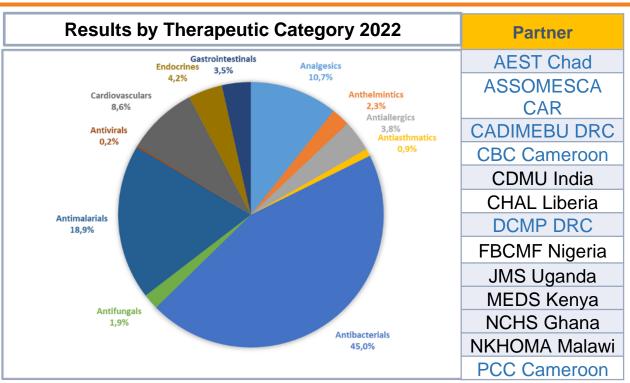




Network Testing Results 2022 - 2023



partner AEST



Endocrines Go Cardiovasculars 2.3%	astrointestinals. 2.3%	Anaigesics 6.9% Anthelmi	intics
5.9% Antivirals	2.370		Antiallergics
0.3%			3.4%
Antimalarials			Antiasthmatic
10.7%			0.5%
Antifungals			
2.8%			
Antiepileptics			
0.1%			
			Antibacterials
			62.4%

Results by Therapeutic Category 2023

	, . _ .
Α	SSOMESCA
	BUFMAR
(CAAMENIHU
	CADIMEBU
	CBC
	CBCA
	CHAL
	CHAM
	CHAN
	DCMP
	FBCMF
	JMS
	MEDS
	NKHOMA
	PCC
	RCBIF
٠	non complian

2022	Tests conducted	ОК	Falsified	Substandard	Further analysis
total	1420	1385	15	18	2

Falsified Cases DRC: 1x Erythromycine, 1x Acetylsalicylic acid,

1xCefixime, 4x Quinine,

1xArthemether/Lumefantrine, 1x Cotrimoxazol

Falsified Cases Nigeria: 6x Cotimoxazol

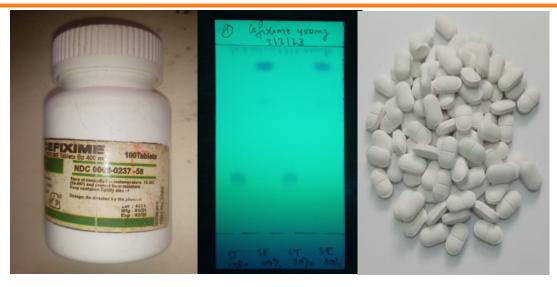
Test result	total	ok	percent	non compliant	in percent
faith based health facility	347	344	99,1%	3	0,9%
public health facility	108	107	99,1%	1	0,9%
own stock	387	383	99,0%	4	1,0%
licensed private vendor	626	600	95,8%	26	4,2%
unlicensed private vendor	287	264	92,0%	23	8,0%
other	5	5	100,0%	0	0%
total	1760	1703	96,8%	57	3,2%





Recent case from the EPN Minilab Network 2023







- Cefixime 400 mg
- Stated manufacturer: MERCK & CO.EMC
- Batch: not legible
- Mfg. Date: 01/2021
- Exp. Date: 02/2025
- Detected in DRC in February 2023
- HPLC analysis, (MEDS, Nairobi): no API
- Reported to WHO by Difaem

Cefixime 400 mg tablets Found by DCMP, DRC

- Cefixime 400 mg
- Stated manufacturer: Apotex Inc
- Batch: MGJ516
- Mfg. Date: 06/2021
- Exp. Date: 07/2024
- Detected in DRC in February 2023
- HPLC analysis, (MEDS, Nairobi): no API
- Reported to WHO by Difaem







WHO alert 2021

World Health



Result from the EPN Minilab Network 20, AVENUE APPIA - CH-1211 GENEVA 27 - SWITZERLAND - TEL CENTRAL +41 22 791 2111 - FAX CENTRAL +41

Vitamin A

The products contained 64,4% and 68,6% of Vitamin A respectively.



Ref. RPQ/REG/ISF/Alert N°1.2021

05 March 2021

Medical Product Alert N°1/2021

Falsified VITAMIN A (retinol) identified in WHO region of Africa

Alert Summary

This WHO Medical Product Alert refers to two falsified VITAMIN A (retinol) capsules identified in Chad and reported to WHO in November 2020. Laboratory analysis of recovered samples identified that both products are severely degraded and underdosed - containing less than the stated active ingredient. Both falsified products also carry now defunct logos - the outdated WHO Essential Drugs Programme logo and the outdated Micronutrient Initiative logo. Both falsified products were supplied at patient level and may still be in circulation in the region.

Table 1: Products subject of WHO Medical Product Alert N°1/2021

Product Name	VITAMIN A (RETINOL)	VITAMIN A (RETINOL)		
Stated manufacturer	Accucaps Industries Limited	Banner Pharmacaps (Canada) Ltd		
Stated active ingredient	Vitamin A (USP) 200,000 I.U. Vitamin E (USP) 40 I.U.	Vitamin A (USP) 200,000 I.U Vitamin E (USP) 40 I.U		
Batch number	UI4004	39090439		
Mfg. date	01/2019	01/2019		
Exp date	09/2022	09/2022		
Packaging language	English & French	English & French		
Identified in	Chad	Chad		





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WHO Alert 2023

Recent Case – with the help of our Member CBC Central Pharmacy





Wednesday, 19 July 2023

Medical Product Alert N°5/2023: Substandard (contaminated) syrup medicines

This WHO Medical Product Alert refers to a batch of substandard (contaminated) NATURCOLD Syrup identified in Cameroon and first reported to WHO on 13 March 2023. All reasonable precautions have been taken by WHO to verify the information contained in this alert and this may be updated as more information becomes available.

The stated active ingredients of NATURCOLD syrup are listed as paracetamol, phenylephrine hydrochloride & chlorpheniramine maleate. The combination of these three ingredients are used to relieve symptoms associated with the common cold, flu, and allergic rhinitis.

Samples of the NATURCOLD syrup from Cameroon were made available to WHO on 27 June 2023 and analysed in a WHO contracted and prequalified laboratory. The analysis found that the product contained unacceptable amounts of diethylene glycol as contaminants. Diethylene glycol was detected in samples of NATURCOLD as much as 28.6%. The acceptable limit for Diethylene Glycol is no more than 0.10%.



NATURCOLD SYRUP (Paracetamol, Phenylephrine, Chlorpheniramin)

Stated manufacturer: FRAKEN INTERNATIONAL LONDON, ENGLAND

Batch: E22053

• Mfg. Date: 03/2022

Exp. Date: 02/2025



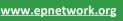
7 out 34 WHO
Medical
Product Alerts
since 2019 –
2022 are
based on
reports from
our Minilab
Network

Total Number of Network testing results 2015 – 2023:

10,580







The main drivers behind the production and distribution of falsified medicines



- Relying on imports of medical products
- Local pharmaceutical industries in the earlier stages of development.
- Limited access : priority on price over quality
- Poor traceability of medical products – and postmarketing surveillance limits
- Weak legislation



From EPN experience:

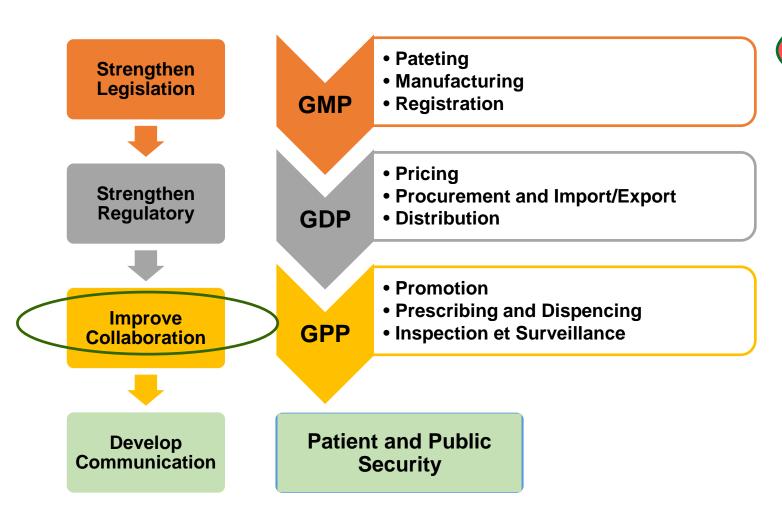
- It takes a long time to have a confirmatory test (From WHO Prequalified Lab) before WHO Alert
- It takes a long time for the National Regulatory Authority (NRA) to react and prosecute.
- Distribution of the EPN GPHF Minilab network in Africa more countries, great visibility





There is need to increase collaborations in Fighting SF Medicine





Until we successfully collaborate with actors accross sectors

- WHO, Africa CDC, ...
- National Medicine Regulatory Authorities, (National)
- Medicine Control Laboratories
- Manufacturers through federations and associations
- Distributors, Central Medical Stores
- Civil Society, including Faith-Based Drug Supply Organizations
- Academia/Universities and related associations/initiatives
- Health care providers
- Media





Who is involved - further actors

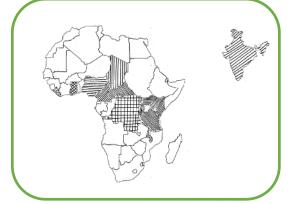














Supporting structures









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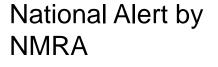
Fruitful partnerships in the Minilab Network settings - the Cameroon example (2)



Discovery of suspicious product by PCC

Minilab analysis by PCC

Confirmatory analysis at Tuebingen University (Germany)

















Apr 2019

- ⇒ Quick and efficient process due to previously established collaborations.
- ⇒ The product contained Glibenclamide, an antidiabetic!



What the German Government can do?



- Support initiatives that strengthen regulation, this remains the ultimate way to increase patients safety
- Support local production in Africa, it is vital that patents, knowhow and technology have to be shared
- Support a holistic approach including health system strengthening is important – from the last mile.





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Thank you!



