The Medicine Quality Monitoring Globe: online news to monitor substandard and falsified medical products (SFMP).

Kerlijn Van Assche
Medicine Quality Research Group,
University of Oxford

Quality of Medicines at the Heart of Health Systems,
Institute of tropical medicine, 8 October 2026

WHO definition of substandard and falsified medical products (SFMP)

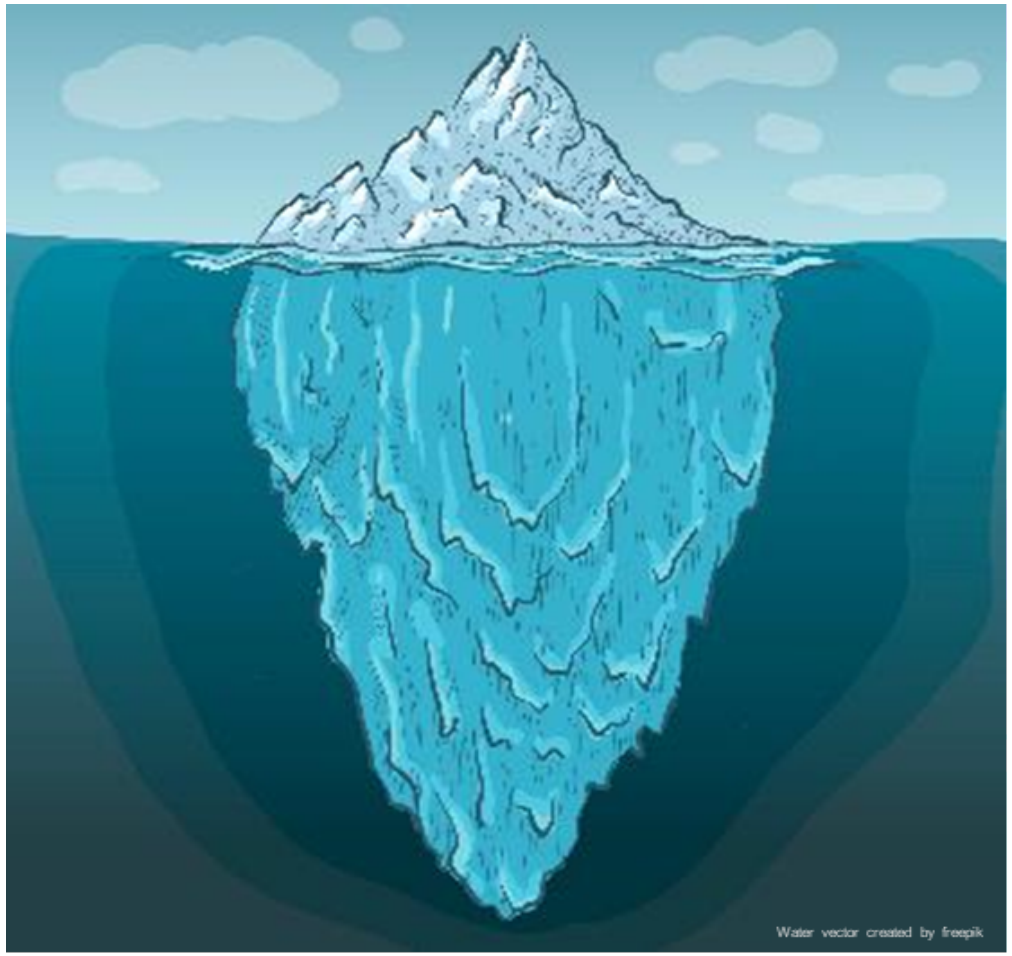
- **Focus on public health, not protection of intellectual property rights**
- **Three separate classification - origins and solutions differ considerably**

SUBSTANDARD	UNREGISTERED/ UNLICENSED	FALSIFIED
		
Also called "out of specification", these are authorized medical products that fail to meet either their quality standards or their specifications, or both. → Result from negligent factory error or degraded due to improper storage	Medical products that have not undergone evaluation and/or approval by the NRRA for the market in which they are marketed/distributed or used, subject to permitted conditions under national or regional regulation and legislation.	Medical products that deliberately/fraudulently misrepresent their identity, composition or source. → Criminal intention /Intentional fraudulent production

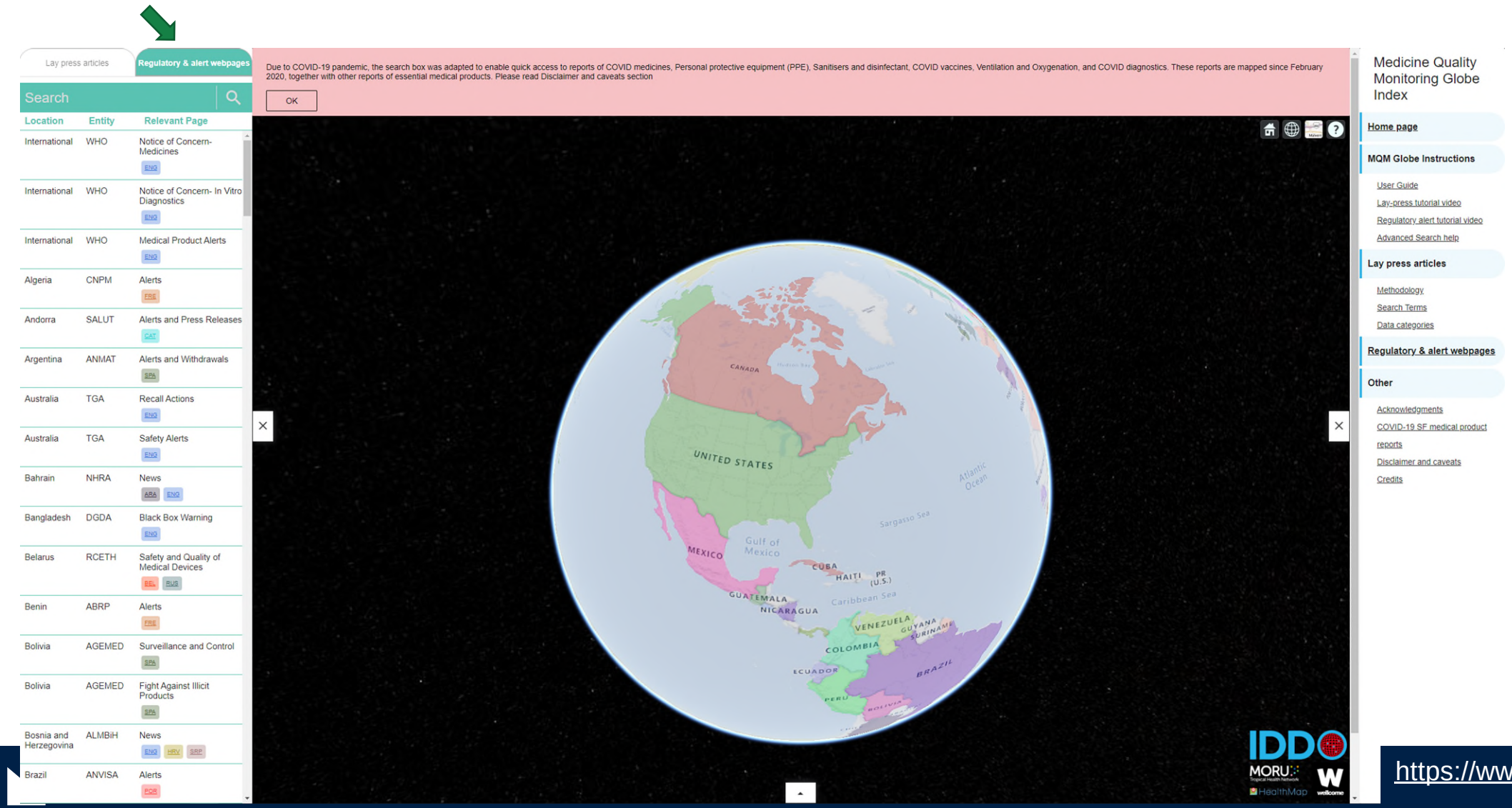
Adapted from a slide created by Cathrin Hauk. Source: WHO, 2017

"*Facilitating access to evidence*"

on substandard and falsified medical products

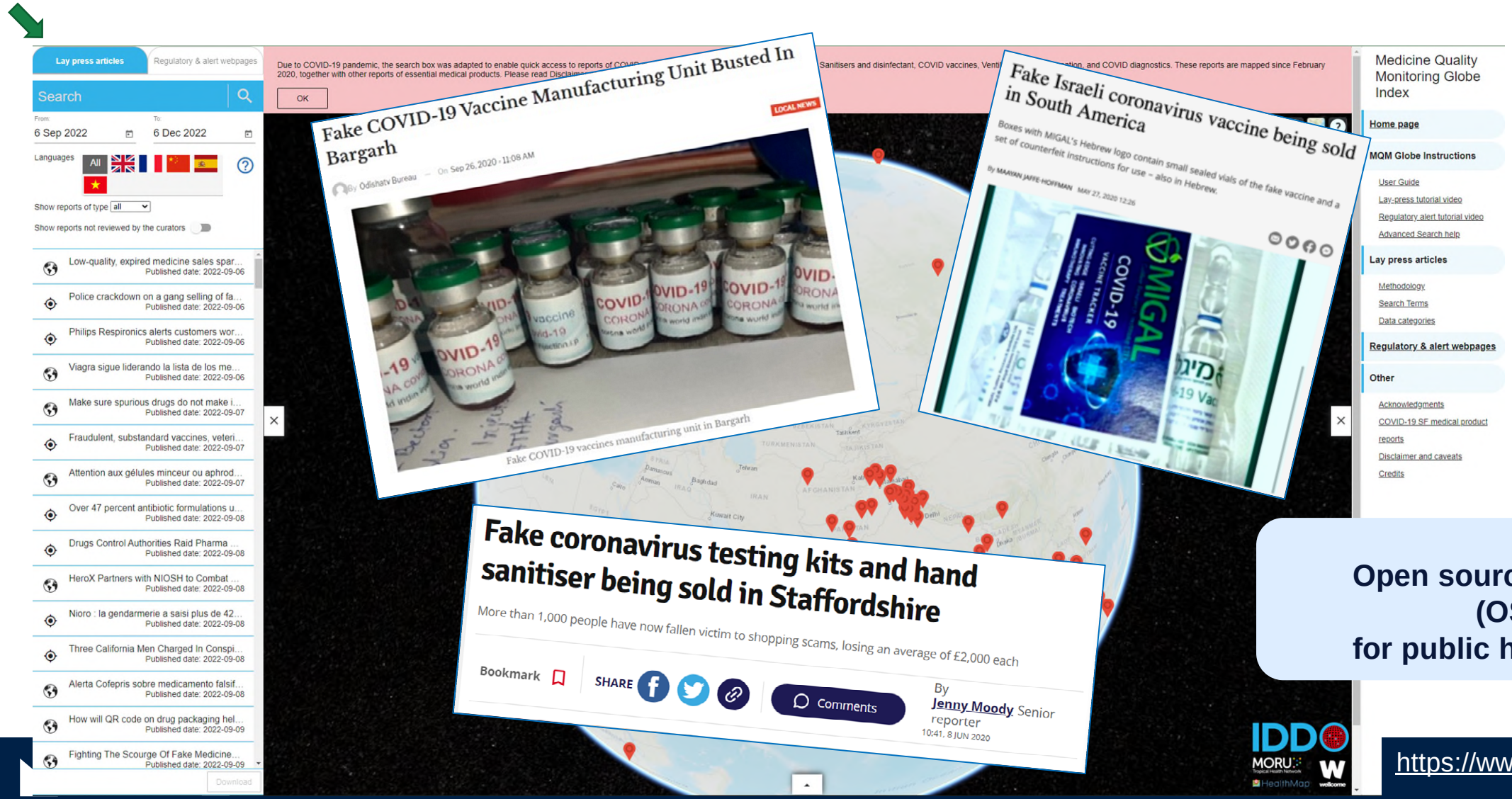


Medicine Quality Monitoring Globe (MQM Globe): Regulatory & alerts webpages



https://www.iddo.org/mqmglobe/

MQM Globe – Media monitoring of SFMP



Open source intelligence (OSINT) for public health security

https://www.iddo.org/mqmglobe/

PLOS Digital Health

About Browse Publish

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

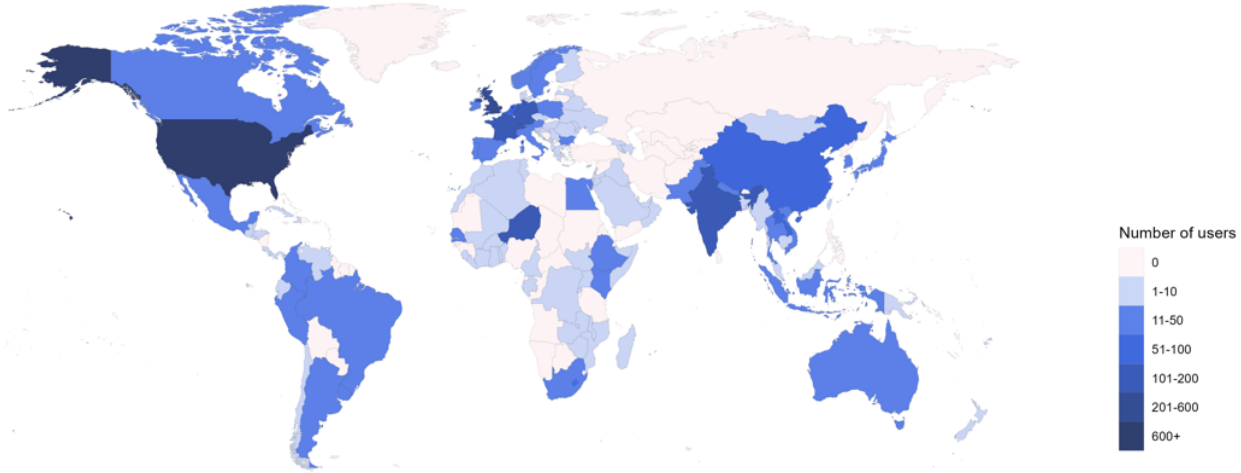
The Medicine Quality Monitoring Globe: A public health intelligence system for collecting and curating reports of substandard and falsified medical products from publicly available Internet news media

Clark C. Freifeld, Kerlijn Van Assche, Alberto Olliaro, Martial Battain, Inthapavanh Kitignavong, Vayouly Vidhamaly, Phonepasith Boupha, Kem Boutsamay, Ngan Thi Do, Konnie Bellingham, Viengsavanh Pimxayvong, Thitthiphone Olinh, Ana Rosado Olmo, [...], Céline Caillet [view all]

Published: September 15, 2026 • https://doi.org/10.1371/journal.pdig.0001648

Distribution of unique users of the MQM Globe

2020-2025





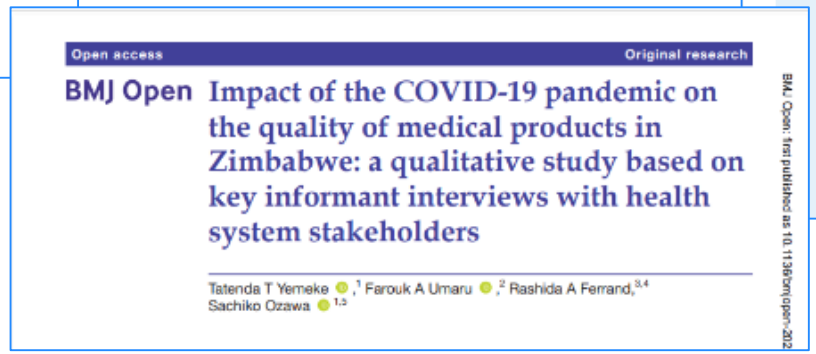
UNODC
United Nations Office on Drugs and Crime

UNODC Research

RESEARCH BRIEF

COVID-19-related Trafficking of Medical Products as a Threat to Public Health





Understanding the use of **Online News Media reports**

Collection of data
(in times of crisis)

→

Insights
from data

→

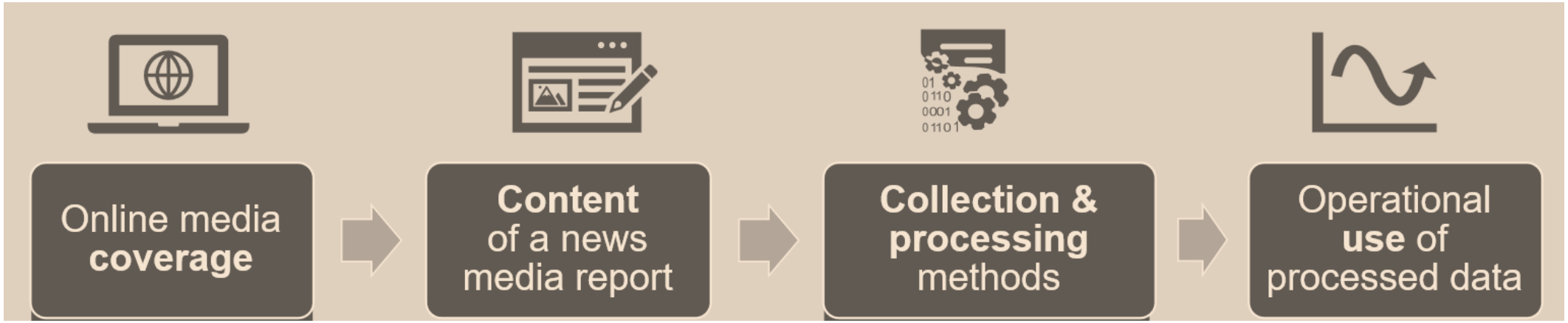
Data for
public health
intelligence

→

Public health
intelligence
in **action**



Challenges of media reports for surveillance and public health research



Newsworthiness | **Lack of validation** | **Languages collected**

Source: Van Assche, K. et al. 2025

Understanding the use of
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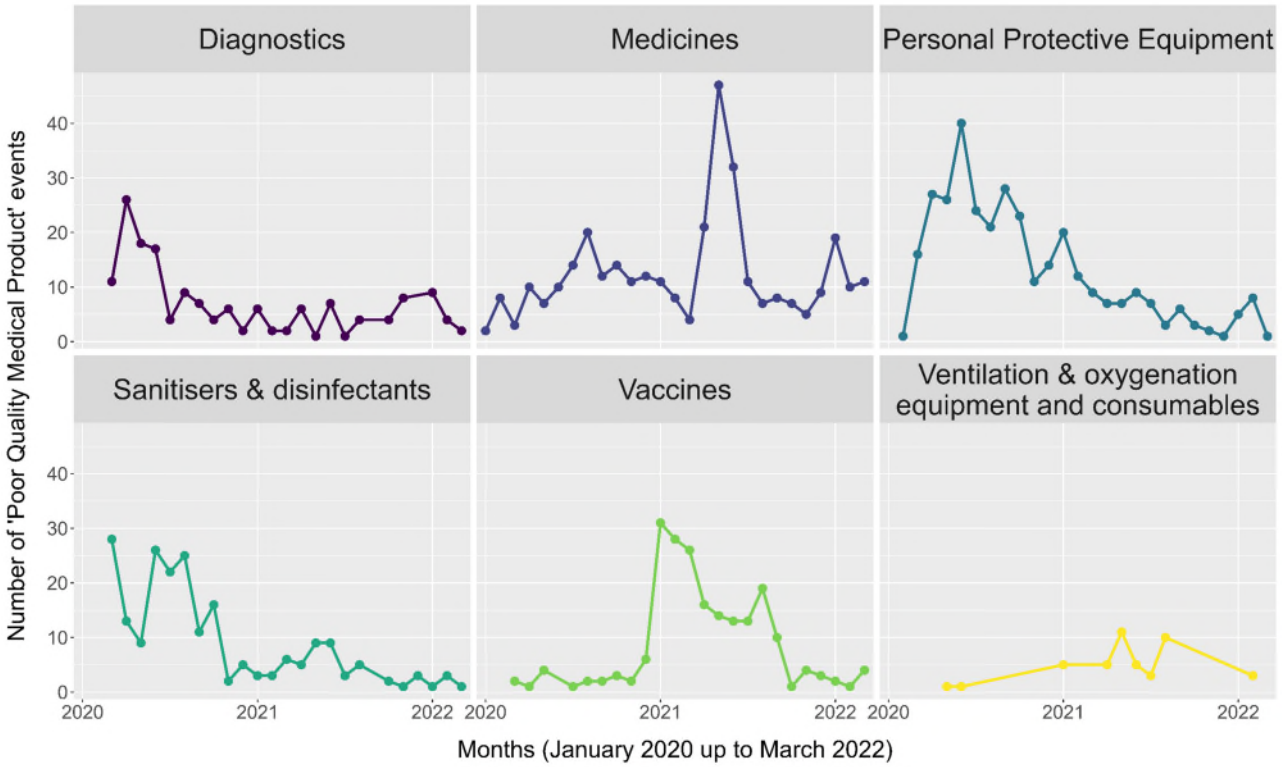
Public health
intelligence
in **action**



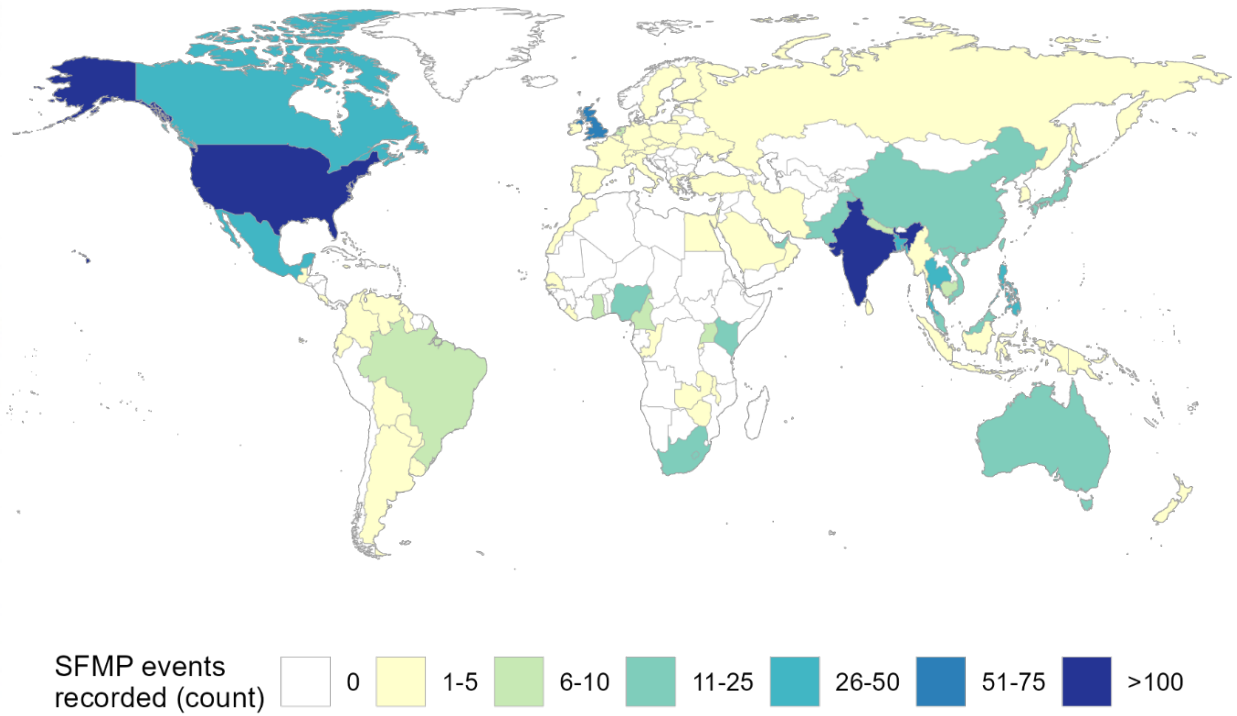
Insights into the **epidemiology**
of
substandard and falsified
medical products

Example: COVID-19 case study

SFMP events published per month



SFMP events per country



SFMP: Substandard and falsified medical product

Source: Van Assche, K. et al. 2025

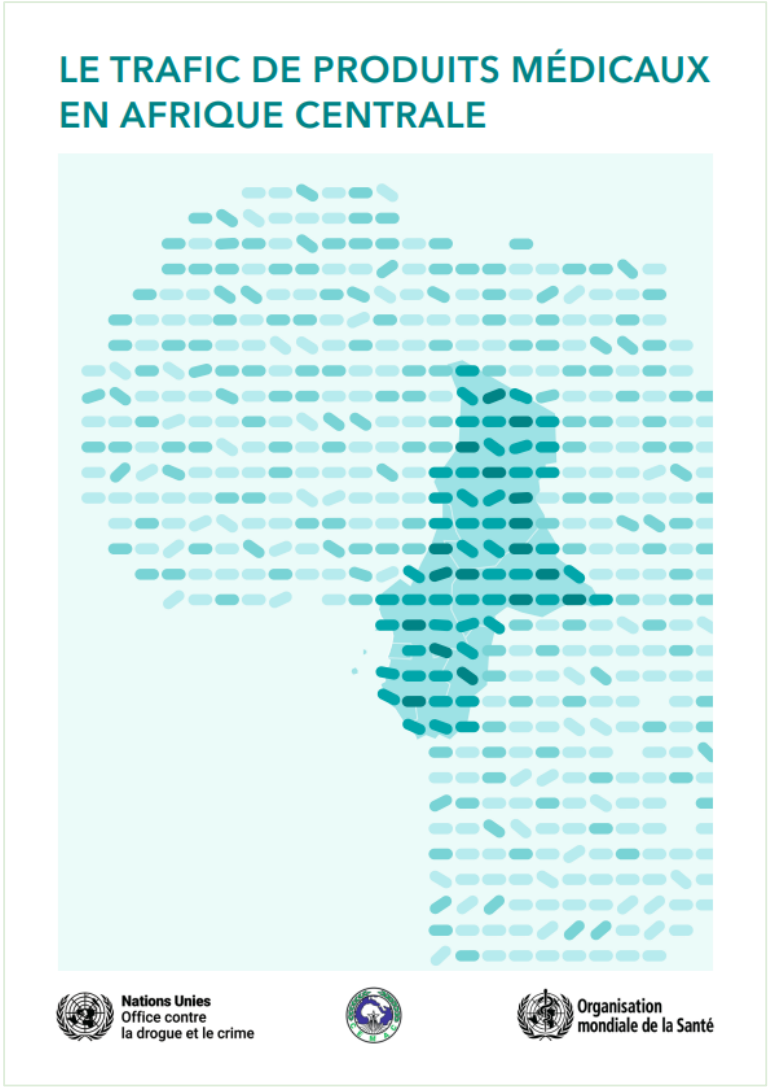


Value of MQM Globe & SFMP during COVID-19

Complement existing systems and data as

- Early Warning System
- Research tool





Sources: WHO 2024 & UNODC 2026

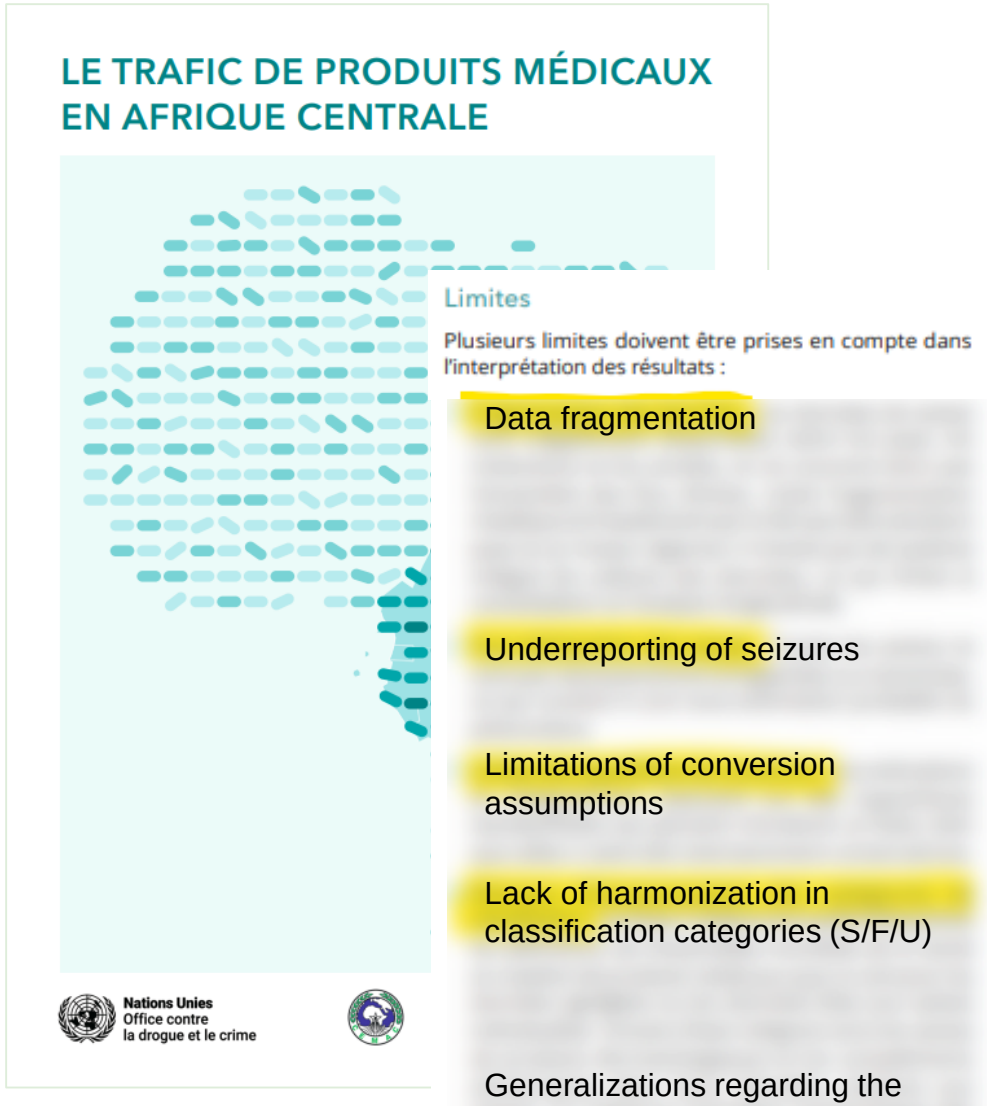


- **Limitations:** The GSMS primarily relies on reports submitted by trained focal points as well as following up on information reported by the public. This means the data collected may not always have the same level of validity and would not reflect the absolute prevalence of SF medical products in circulation. It however provides crucial insights into potential issues and is facilitates targeted interventions.

1.2 The scale

WHO provides information on incidents of SF medical products for each WHO region; individual Member States are not identified, as recording is uneven and may be inconsistent during a defined period. Furthermore, the WHO regions do not comprise equal numbers of Member State, and the population size and regulatory capacity of each Member State varies widely. Despite these limitations, the GSMS holds perhaps the most comprehensive global record of incidents of SF medical

Source: WHO 2024



Data fragmentation

Underreporting of seizures

Limitations of conversion assumptions

Lack of harmonization in classification categories (S/F/U)

Generalizations regarding the nature of seized products (therapeutic class)

Source: UNODC 2026

Sources: WHO 2024 & UNODC 2026

Collection of data
in times of crisis



Public health
intelligence
in **action**

Source pictures: WHO 2021

Paul N. Newton

Céline Caillet

Benn Sartorious

THANK YOU

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the **curators of the MQM Globe**
& to the wider **FORESFA collaboration** for their advice and support for this work.

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