



# Improving knowledge and awareness of substandard and falsified medicines through health partnerships in eight African countries

## Background

Substandard and Falsified Medical Products (SFMs) are a growing threat to the public health of nations, with an estimated 1:10 medicines in low/middle-income countries (LMICs) to be substandard or a fake, accounting for >10% failure rate of all medicines (Fig 1). A great proportion of these are antimicrobials; in Sub-Saharan Africa alone, >267,000 deaths annually are linked to fake and substandard antimalarials and >160,00 deaths have been linked to fake and substandard antibiotics for the treatment of severe pneumonia in children. Various studies have also shown that SFMs are potential drivers and have a role in the development of antimicrobial resistance (AMR). Increased awareness at all healthcare levels is, therefore, crucial to optimise access to quality and effective medicines.

### AIM

Evaluate the SFMs workstream of the CwPAMS programme in 8 sub-Saharan countries (Fig 2), including investigating healthcare professionals' knowledge of SFMs to identify the gaps and build capacity and capability through educational interventions

## CwPAMS - The Commonwealth Partnerships for Antimicrobial Stewardship

CwPAMS aims to enhance the capabilities of health institutions and workforce in Commonwealth countries, especially LMICs, in addressing the challenges of antimicrobial resistance (AMR). Through the creation of health partnerships and leveraging on the expertise of UK health institutions and healthcare professionals to strengthen antimicrobial stewardship capacity and capability in LMICs, CwPAMS provides a unique opportunity for multidirectional learning by sharing knowledge, experiences, and best practices across the globe.

In 2023, a SFMs-focused workstream was incorporated as part of CwPAMS with the aim to foster knowledge acquisition and build confidence in SFMs' detection and reporting by improving CwPAMS healthcare professionals' knowledge and awareness in this area.

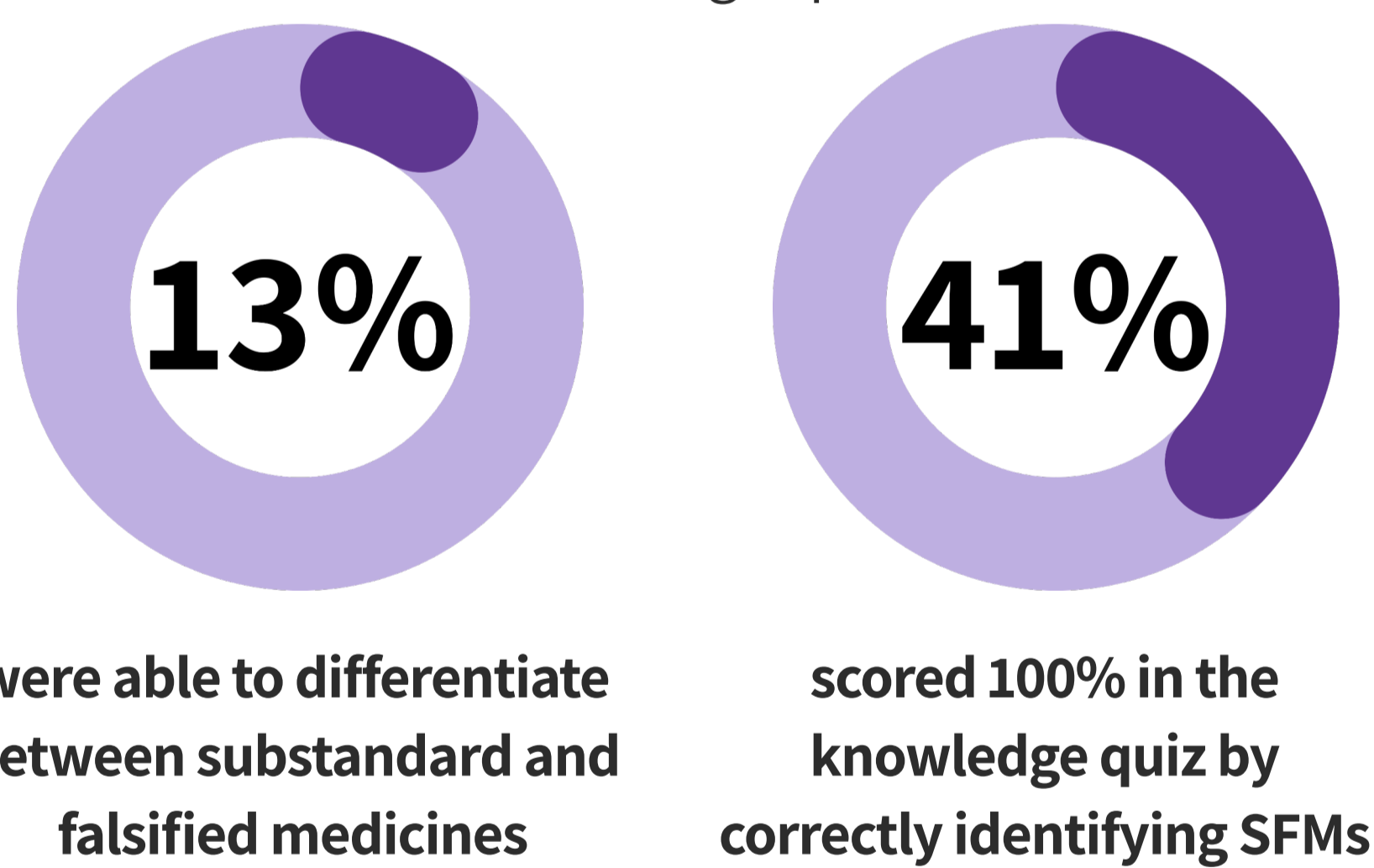
## Results

Total 113 responses received from a mix of professional backgrounds, mostly from the public sector (87%), including pharmacy (43%), medicine (36%), nursing (9%), laboratory (6%), and midwifery (4%). Baseline data suggests limited knowledge of SFMs (Fig 3).

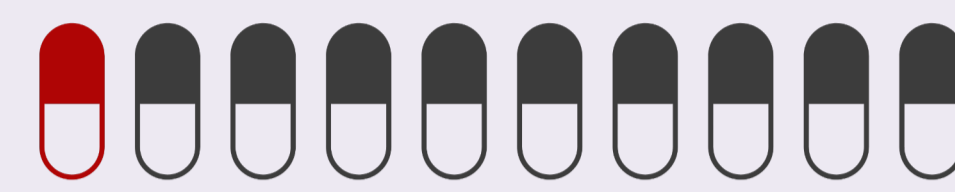
### Educational intervention

When asked about educational support, healthcare professionals highlighted the need to be able to detect (99%) and report (76%) SFMs, as well as to manage patients who have taken SFMs (73%), preferring face-to-face educational delivery (86%), webinars (66%), online self-directed learning (63%), case-studies (56%), articles (53%), and video graphics (52%).

Fig. 3 Healthcare professionals' scores in SFMs knowledge quiz.



In line with these results, an educational intervention has been designed and is currently being delivered: online self-directed learning course; webinar series, educational resources and support.



1 in 10 medicines in low and middle income countries are substandard or falsified

250,000+ DEATHS linked to SFMs every single year



42% of SFMs reported to WHO are from the WHO African Region, but every region of the world is impacted

2 billion people worldwide lack access to necessary

Global annual economic cost of up to \$200,000,000,000 including \$30 billion USD in low and middle income countries



Fig. 1 The global burden of substandard and falsified medicines.



Fig. 2 Flags and borders of Ghana, Kenya, Tanzania, Uganda, Malawi, Sierra Leone, Nigeria & Zambia.



## Commonwealth Partnerships for Antimicrobial Stewardship

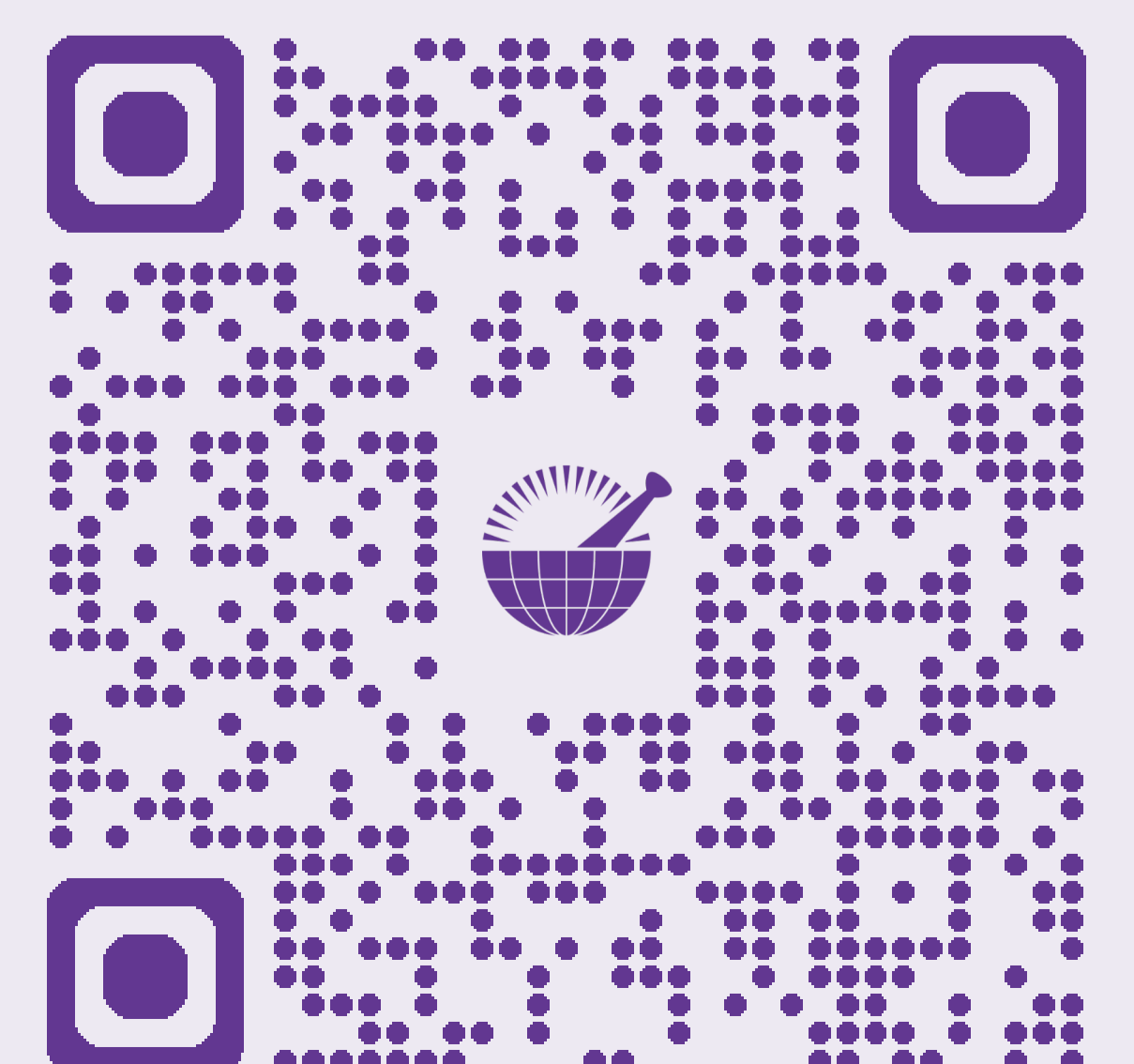
Since its inception, in March 2019, CwPAMS has supported >30 UK-LMIC health partnerships, reaching >80 healthcare institutions and offering >8,000 training slots to healthcare staff (including >800 pharmacists) across 8 partner countries.

We aim to continue building on the success of the programme to continue providing opportunities for learning and development enhancing patient care.

## Method

**Baseline data:** Cross-sectional survey developed, piloted and disseminated to healthcare professionals from 24 CwPAMS health partnerships in 8 African countries (Fig 2). Survey structure: socio-demographics; SFMs knowledge and awareness; educational needs to upskill in SFMs. Data entered to Excel and analysed using descriptive statistics; comments thematically analysed.

**Endline data:** Survey to be repeated at the end of CwPAMS to understand the impact of the educational intervention. Metrics from educational platforms (e.g. e-learning) also being monitored.



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