

# Insights into epidemiology training in Africa: what competencies to cope with the challenges?

The desirable scope of epidemiology training in Africa is broad and remains characterized by traditional competency areas. Emerging fields of competency such as artificial intelligence are not yet ranked among the priorities.

Tieba **Millogo**<sup>1</sup>, Seni **Kouanda**<sup>1,2</sup> for the PREP-EPID project consortium

<sup>1</sup>Institut Africain de Santé Publique, <sup>2</sup>Insittut de Recherche en Sciences de la Santé

#### BACKGROUND

Because of its centrality to all public health functions, epidemiology and epidemiology training can virtually encompass a wide range of skills and competencies that are unlikely to fit in a single training curriculum.

Epidemiology training curricula at master's level in Africa tend to adhere to two broad and distinct approaches : either diving into more complexities through acquisition of advanced analytical skills or targeting more practical and field-based skills and rather competencies (surveillance, investigation and response for instance). How these approaches match needs on the ground and the possibility /relevance of reconciling them into a unique curriculum is unknown.

## **METHODS**

• Online experts' surveys targeting departments that train or employ epidemiologists in universities, research centers, ministries of health and global health organizations across Africa.

### **RESULTS CONTINUED**

Area of qualification	n(%)
Epidemiology	10 (52.6)
Public Health	05 (26.3)
Clinical medecine	02 (10.5)
Health economics	01 (5.3)
Virology	01 (5.3)



P1-J8



- A review of the curricula for epidemiology training at master level of selected universities and a literature review used to inform the development questionnaire
- The questionnaire comprised a list of twenty competency domains
- Each expert ranked the domains using a Likert scale  $(1 \rightarrow 5)$ .
- Descriptive statistics were used to derive the level of priority given to each domain, high priority being a score of 4 or 5 on the scale.

## RESULTS

The power of sharing science

- 19 experts in epidemiology and public health responded
- 09 countries across west, central and eastern Africa
- Each representing one organization or department
- 52,6% of respondents were PhD holders



- More than 50% ranked the 20 competency areas as high priority
- 12 out of 20 competency areas ranked high priority by 3 out of 4 respondents and high priority areas cut across both applied and advanced skills in epidemiology

## CONCLUSIONS

- Training curriculum in epidemiology in Africa must pursue the development of both applied and advanced analytical skills
- Traditional areas of competency remain on top of priorities in Africa despite the fast-evolving nature of epidemiology training
- Given the broad scope of desirable skills, distinct subtracks of training with consistent contents are needed.

## **ADDITIONAL KEY INFORMATION**

Author Contact Information : Millogo Tieba, millogorod@gmail.com WhatsApp:+22676437445

**Funding Source** : Project PREP-EPID funded by EDCTP and CDC Africa

## **Conflicts of Interest :** None to declare

Acknowledgements : Consortium PREP-EPID

