

## Individual and community level interventions for obesity reduction in Africa; a systematic review.

Onyeonu B.A.<sup>1</sup>, Kalu F.C.<sup>2</sup>, Thompson U.V.<sup>2</sup>, Igbokwe K.C.<sup>1</sup>, Okezie, F.C.<sup>3</sup>, Taiwo A.F.<sup>1</sup>, IHEME, G.O.<sup>2,4</sup>

<sup>1</sup>Department of Human Nutrition and Dietetics, University of Ibadan, Ibadan Nigeria

<sup>2</sup>Department of Human Nutrition and Dietetics, Michael Okpara University of Agriculture Umudike Nigeria

<sup>3</sup>Department of Medicine and Surgery, Abia State University Teaching Hospital Aba Nigeria

<sup>4</sup>Department of Food Studies, Nutrition and Dietetics, Uppsala University Sweden

Correspondence: kalufavourchiamaka@gmail.com

### BACKGROUND

The surge in Obesity prevalence in Africa and associated health complications makes it critical to adopt effective interventions to address this public health issue (WHO, 2022). Therefore, this systematic review aims to generate pooled evidence on the impact of individual and community-level interventions for obesity reduction in Africa.

### METHOD

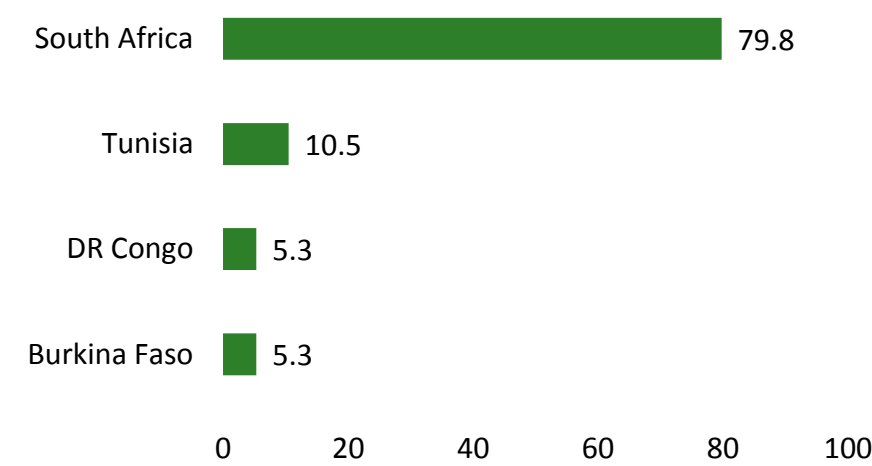
This systematic review was registered with PROSPERO (CRD42023450307) and reported according to PRISMA statement. A comprehensive literature search was conducted across four databases, PubMed, Google Scholar, EMBASE, and African Journals Online from January 2000 to December 2023. Three reviewers were involved in the search and article screening.

### RESULTS

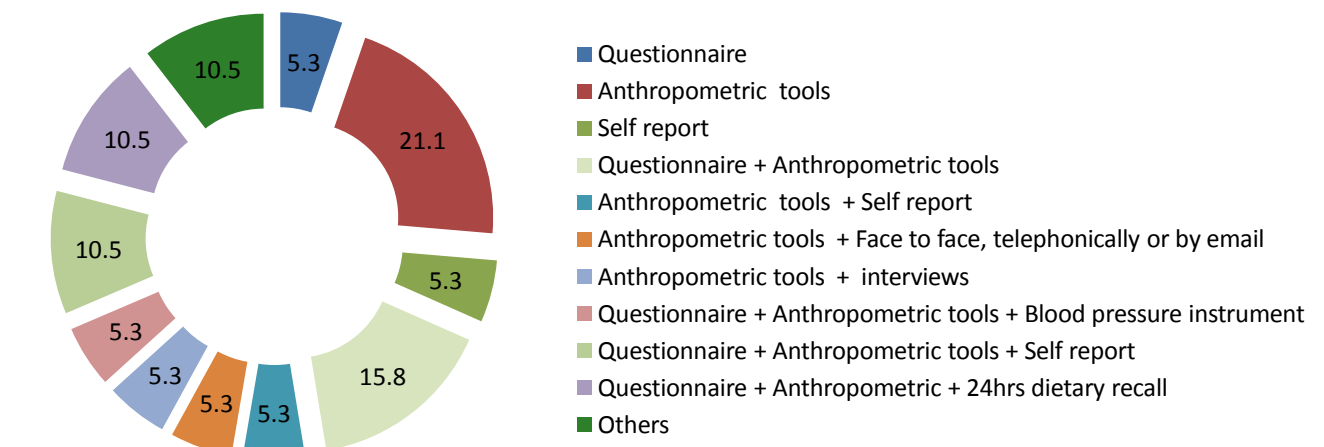
Our search identified a total of 19 eligible studies with low risk of bias. Although a few of the interventions were designed with the potential for community- and institution-wide impact, the approach taken in these studies was primarily individualized.

The interventions were multi-dimensional with physical activity being the most (75.0%) adopted plan alone or in combination with other lifestyle modifications. We found that these programs/interventions had significant impact on weight reduction and adherence to these lifestyle changes.

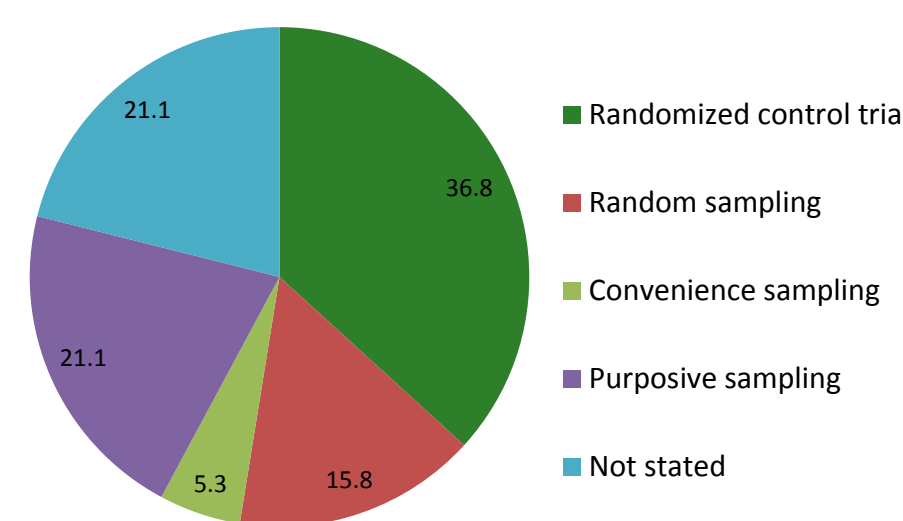
Study distribution by country



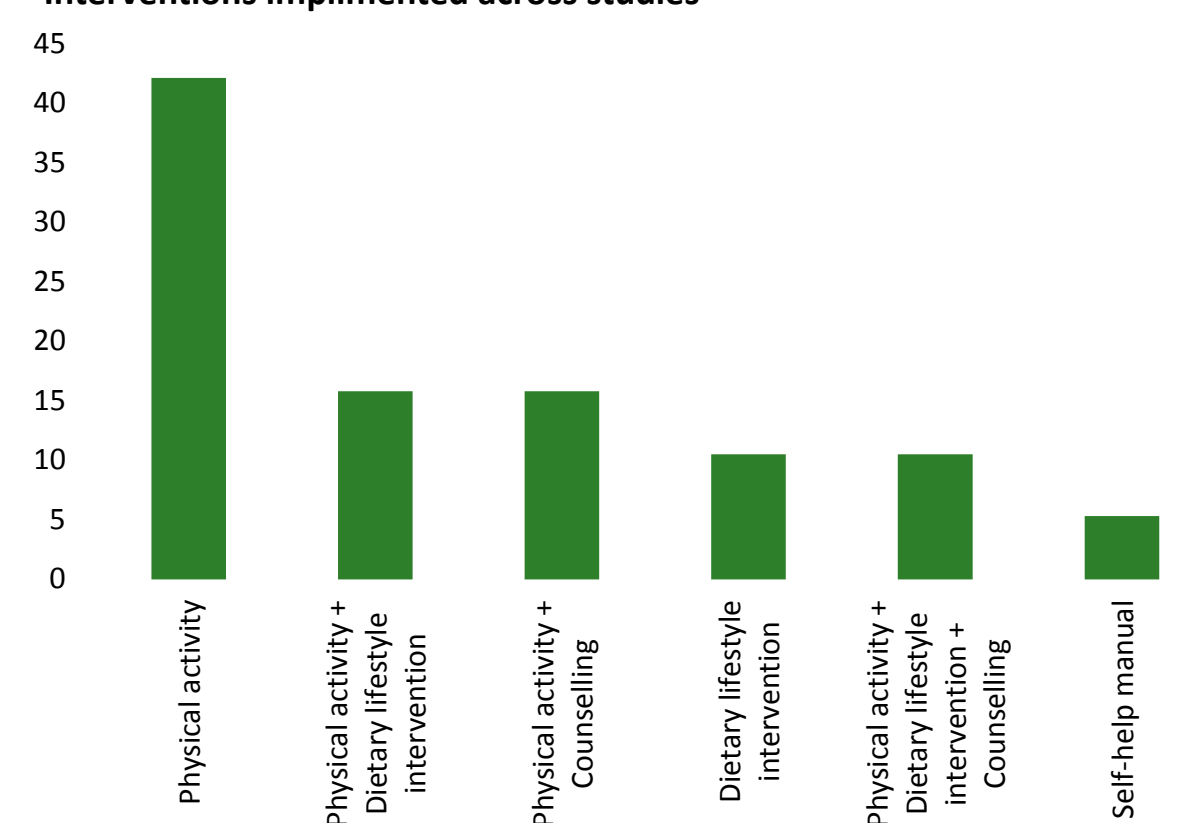
Study Instrument used across studies



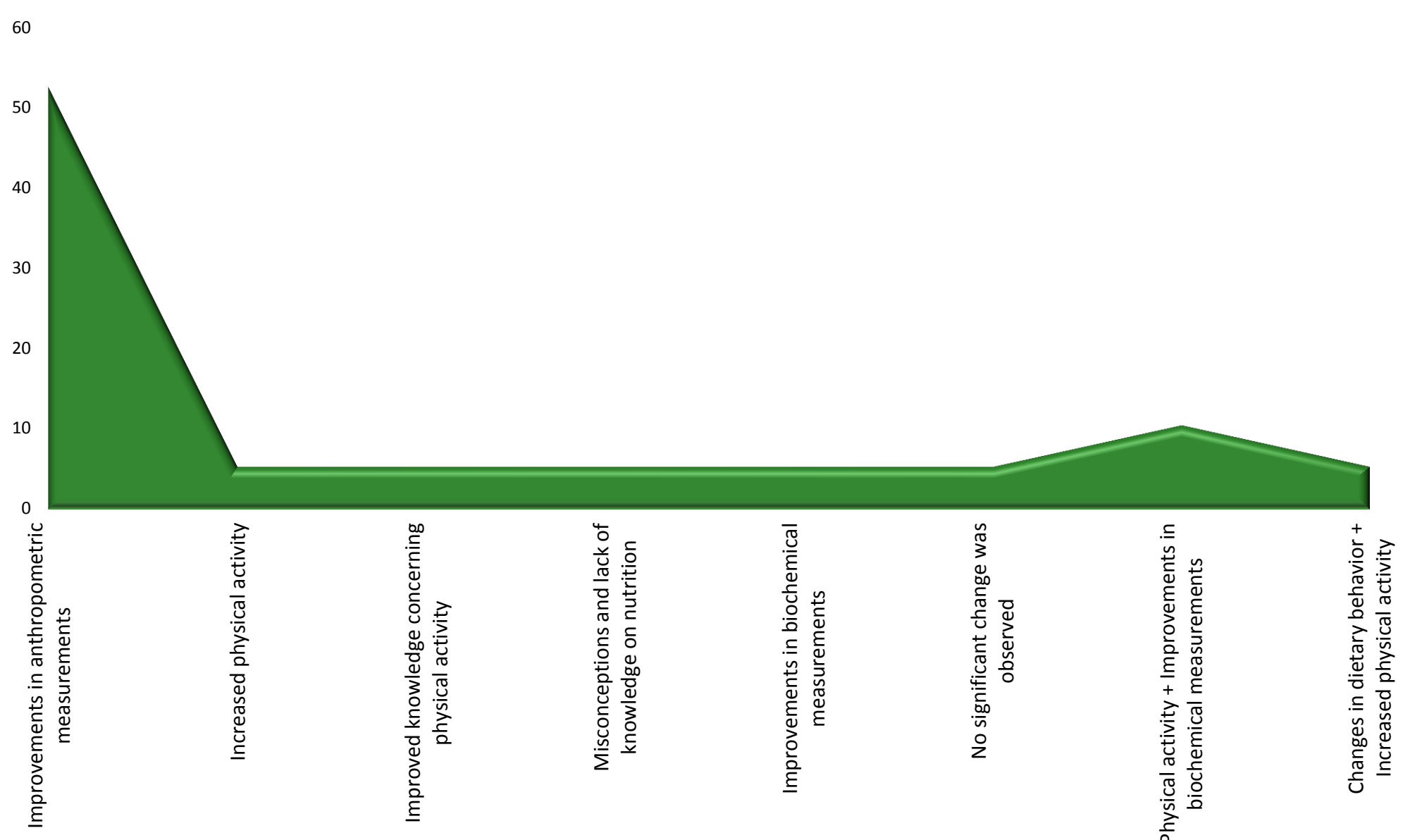
Proportions of Sampling Technique



Interventions implemented across studies



Key Findings from studies



### CONCLUSION

The multi-dimensional individualized obesity interventions accounted for reduction in weight and lifestyle changes. There is need to explore the long-term sustainability of these interventions as well consider setting-based approach to managing obesity.

### REFERENCE

WHO (2022). Obesity rising in Africa, WHO analysis finds. WHO Regional Office for Africa.

### ACKNOWLEDGEMENT

This work is a collaborative effort of the Young African Nutrition Scholars Fellowship and Obesity/NCDs work group of NDDI Africa.