

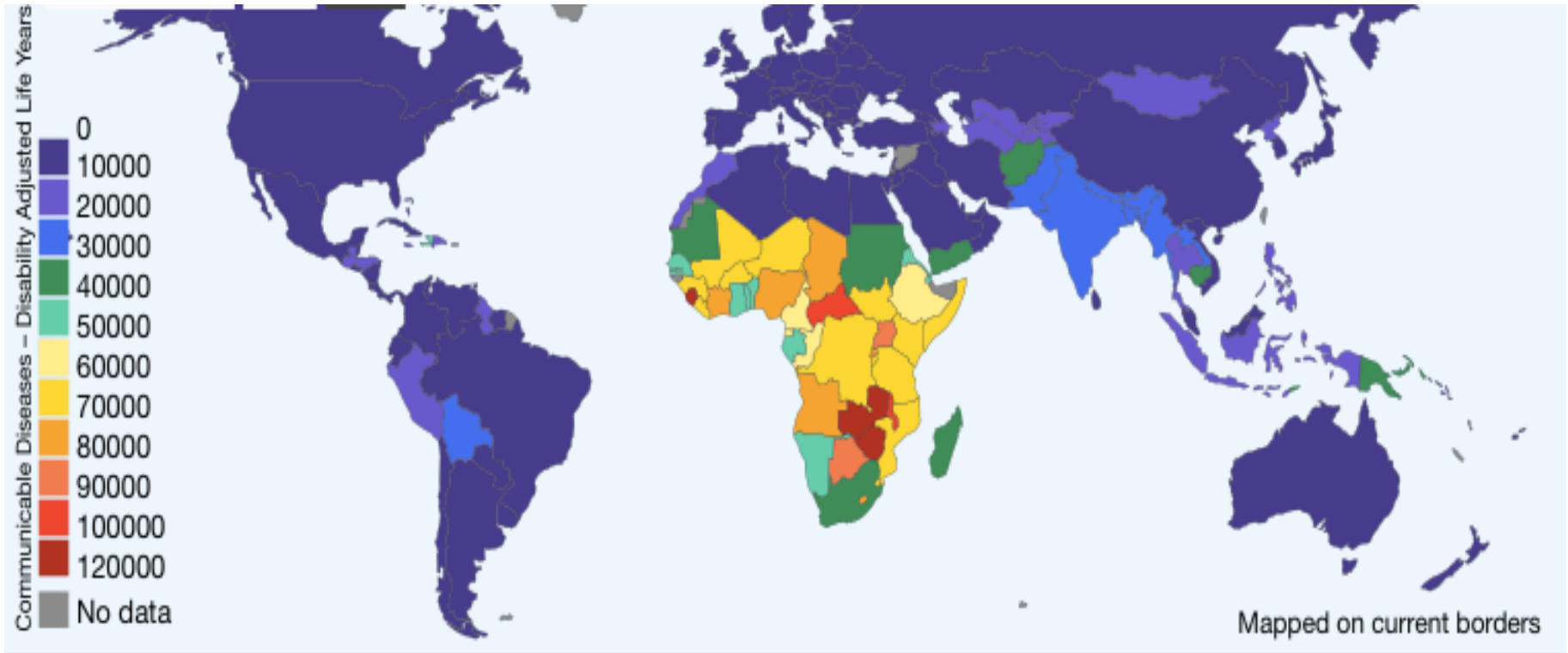
DOUBLE BURDEN OF MALNUTRITION AFRICA

SHANE NORRIS

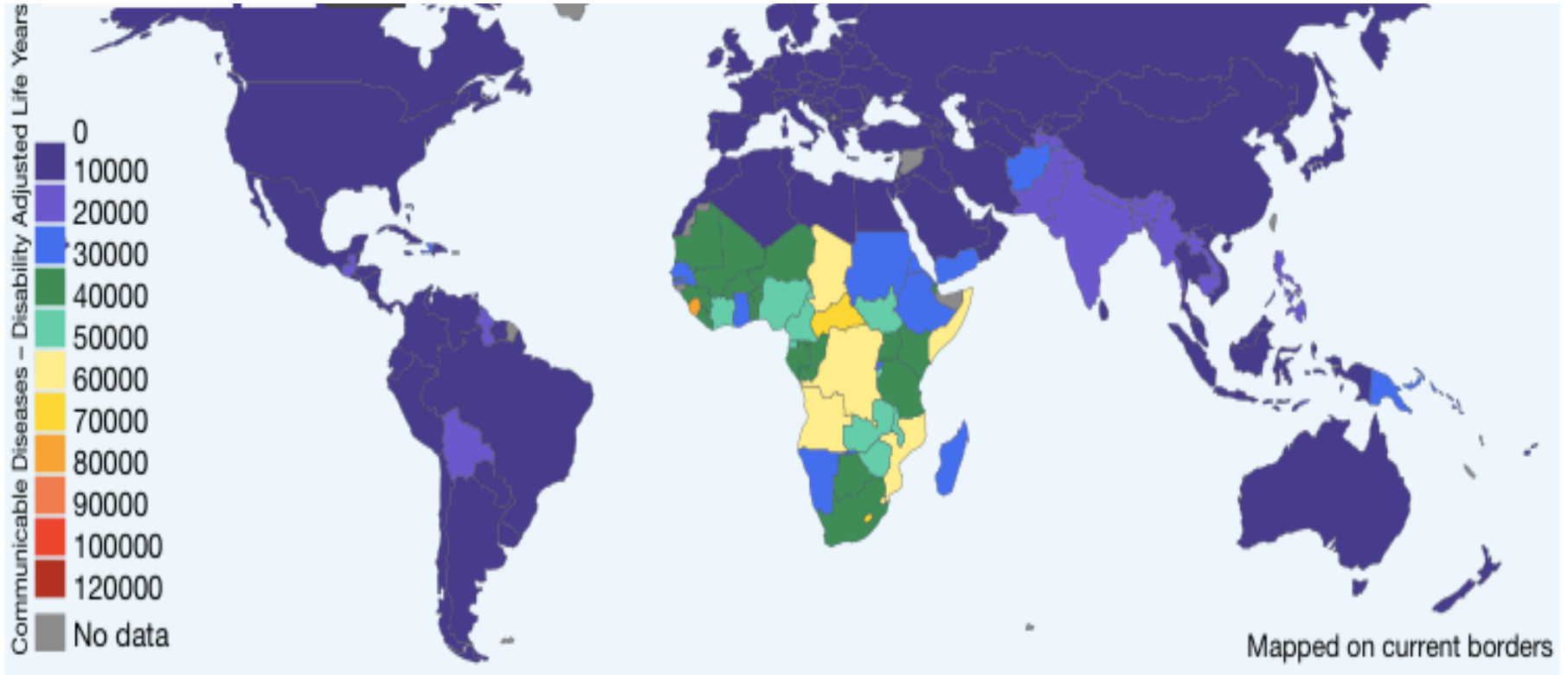
UNIVERSITY OF THE WITWATERSRAND

IAEA WORKSHOP OCT 2017

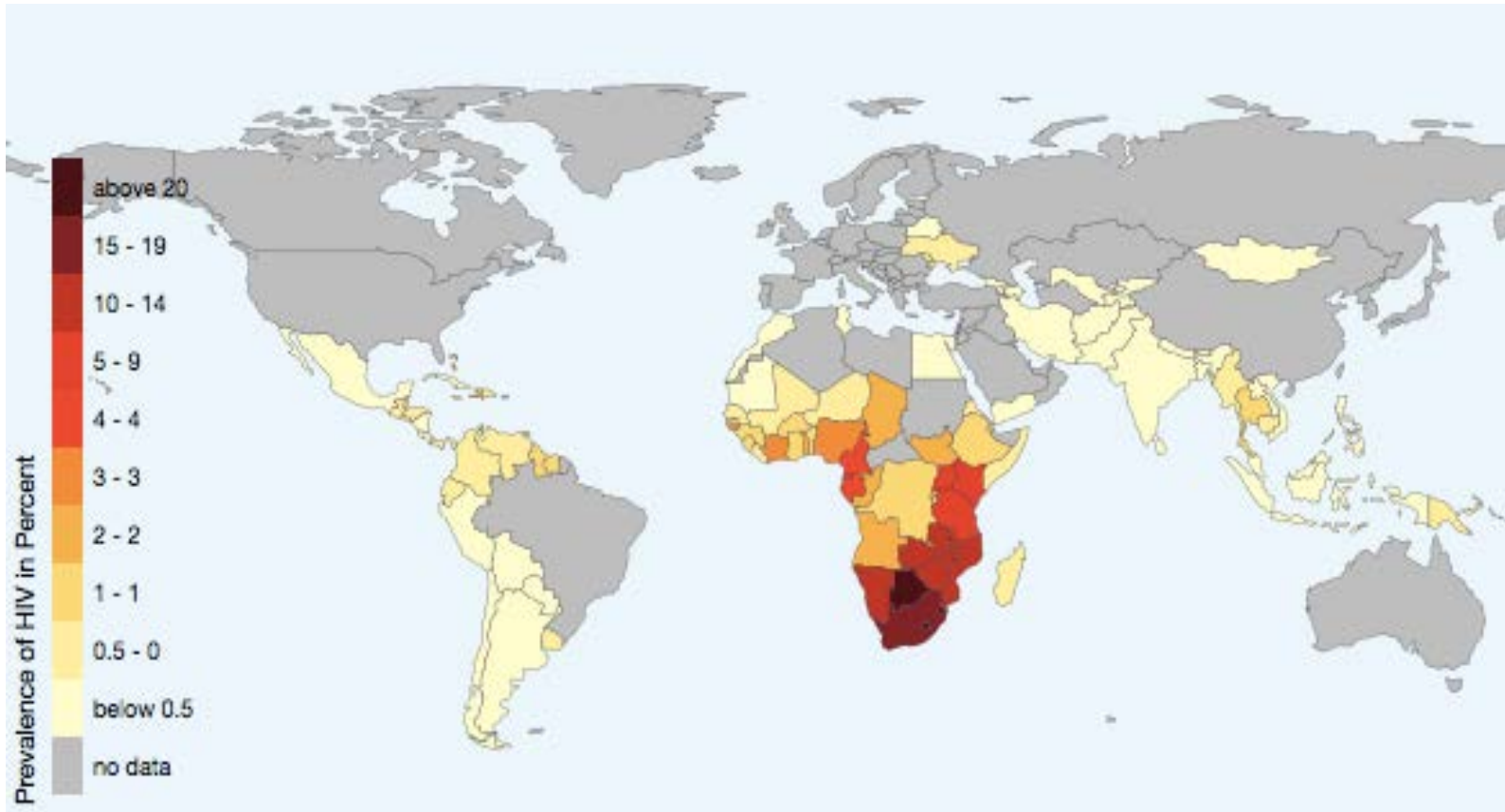
Communicable disease burden 2000



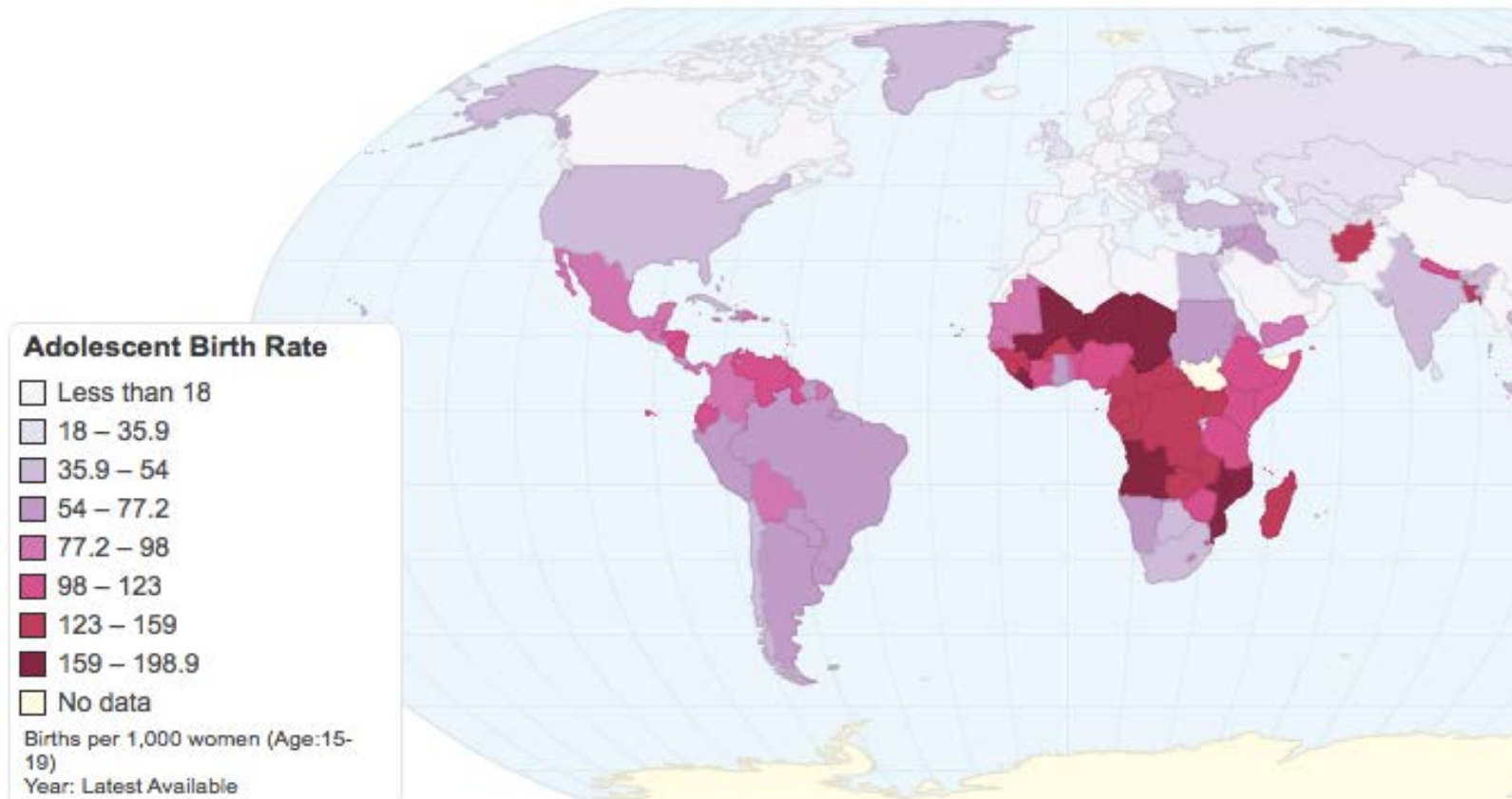
Communicable disease burden 2012



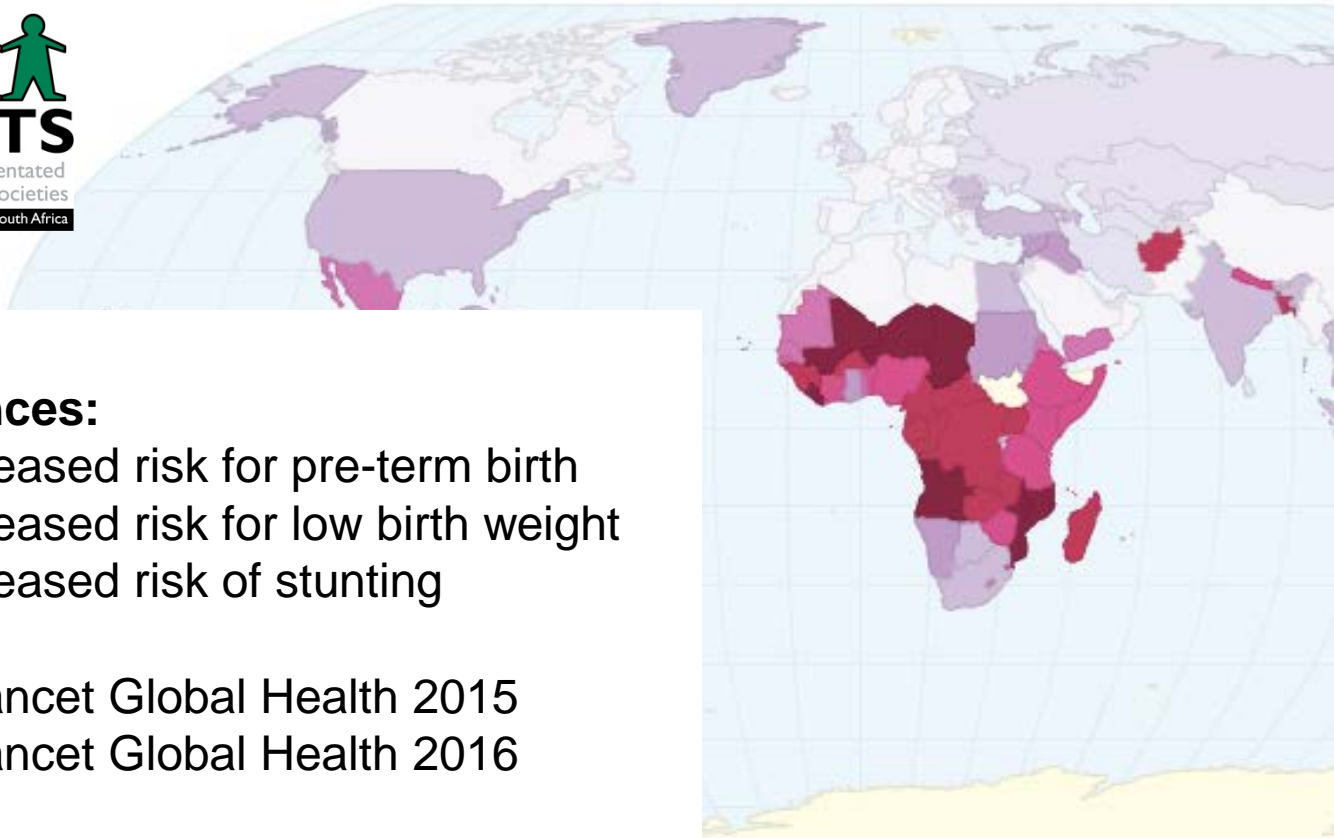
HIV infection 2012



Adolescent pregnancy



Adolescent pregnancy



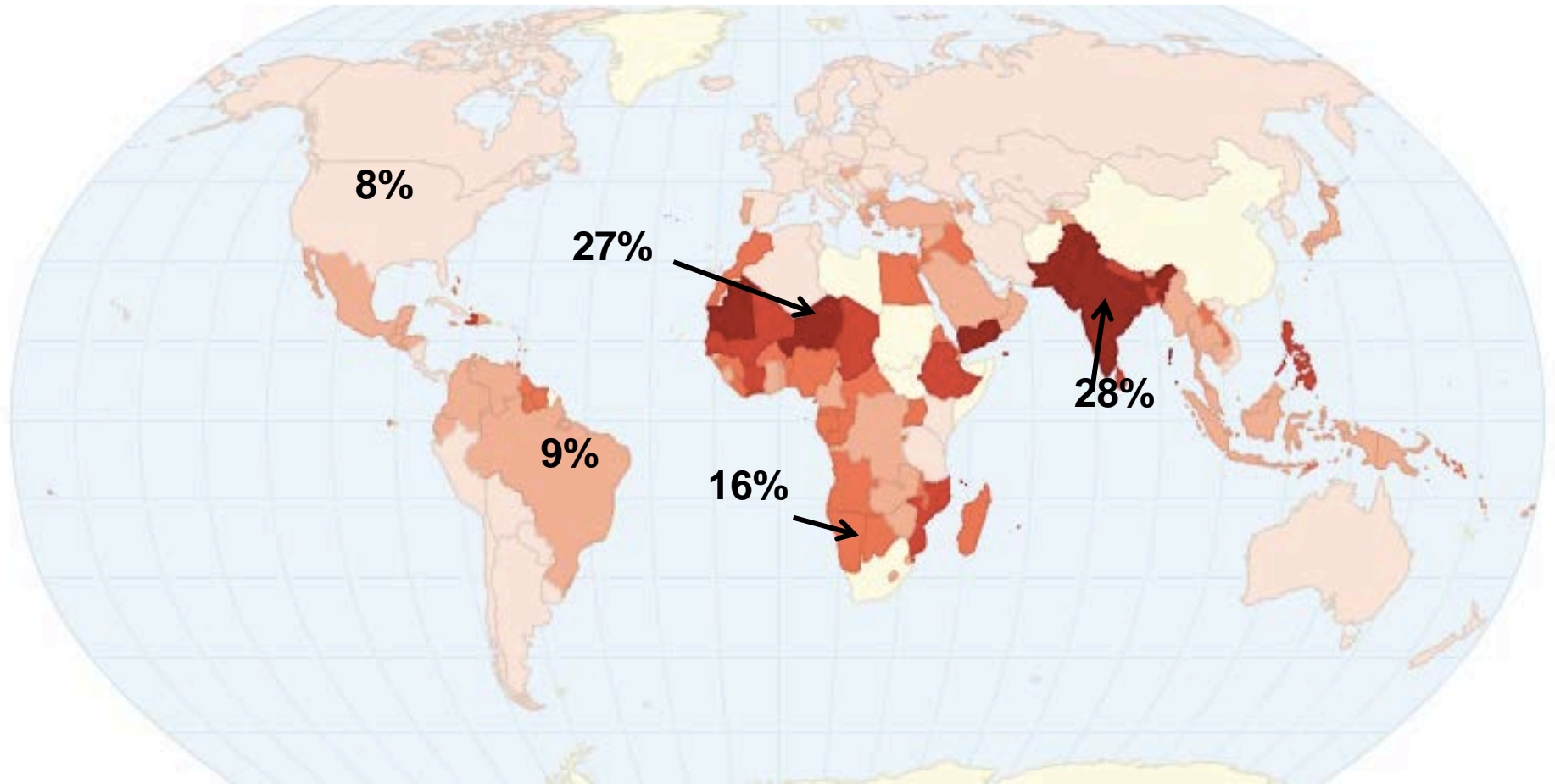
Consequences:

- 26% increased risk for pre-term birth
- 18% increased risk for low birth weight
- 46% increased risk of stunting

Fall et al, Lancet Global Health 2015

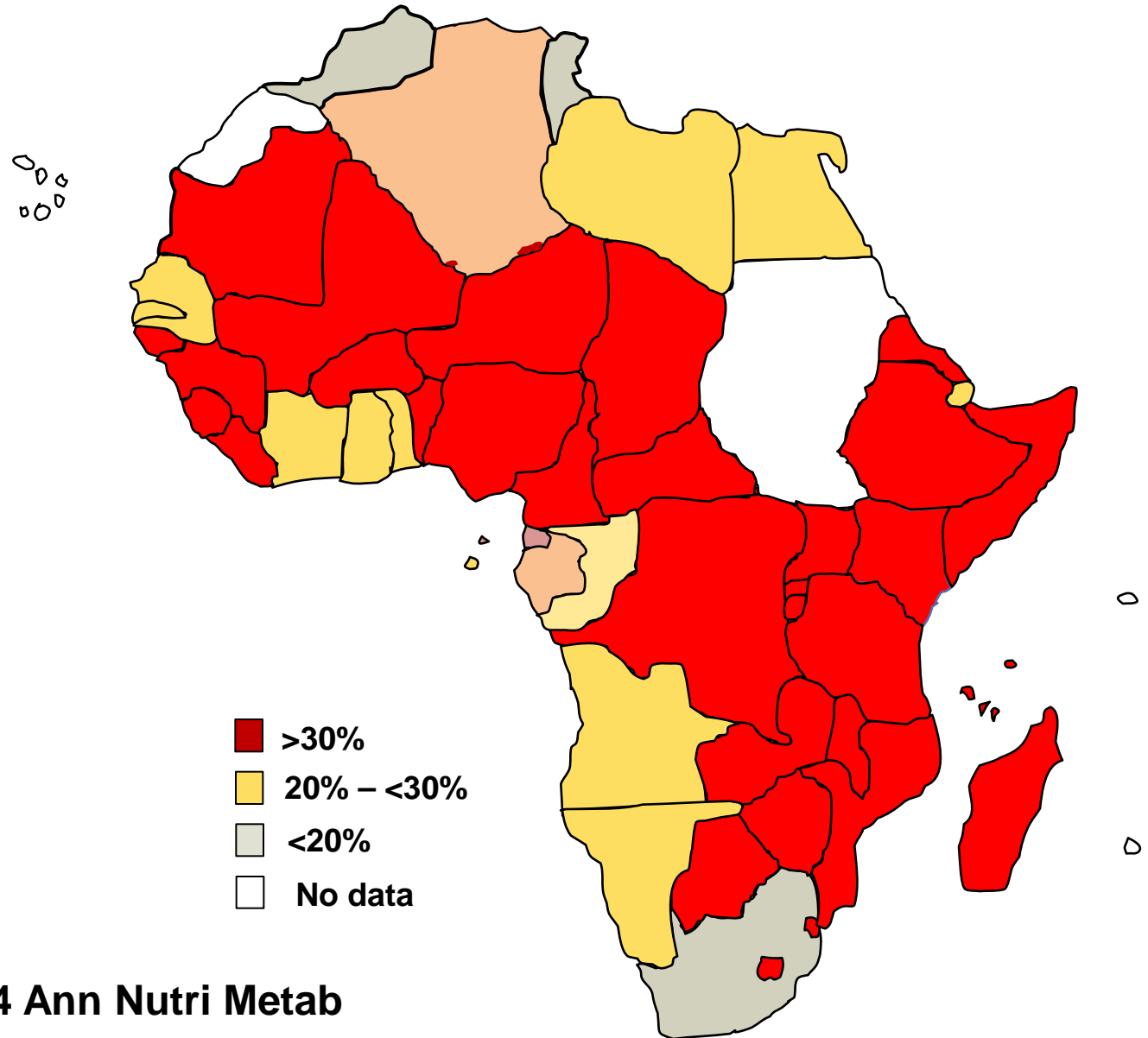
Fall et al, Lancet Global Health 2016

Low birthweight



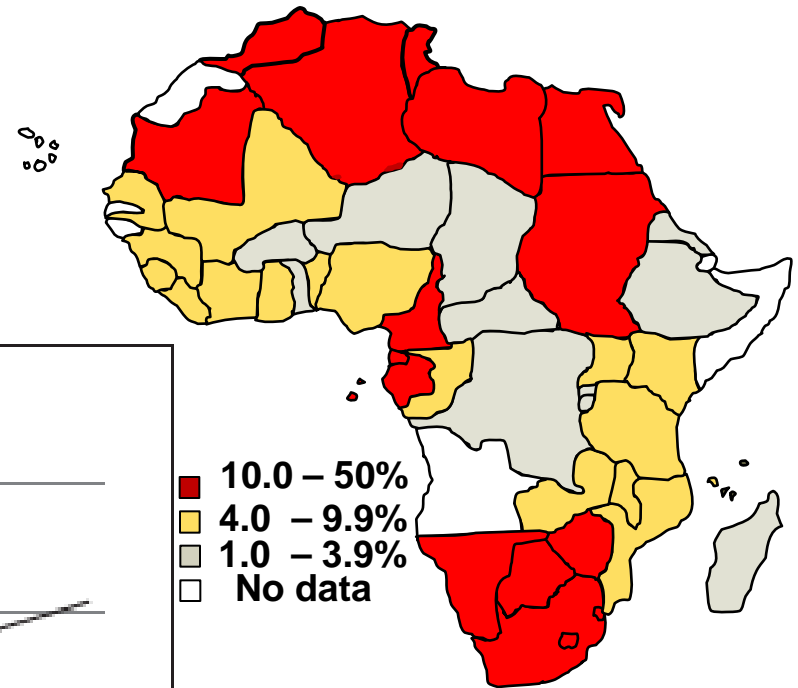
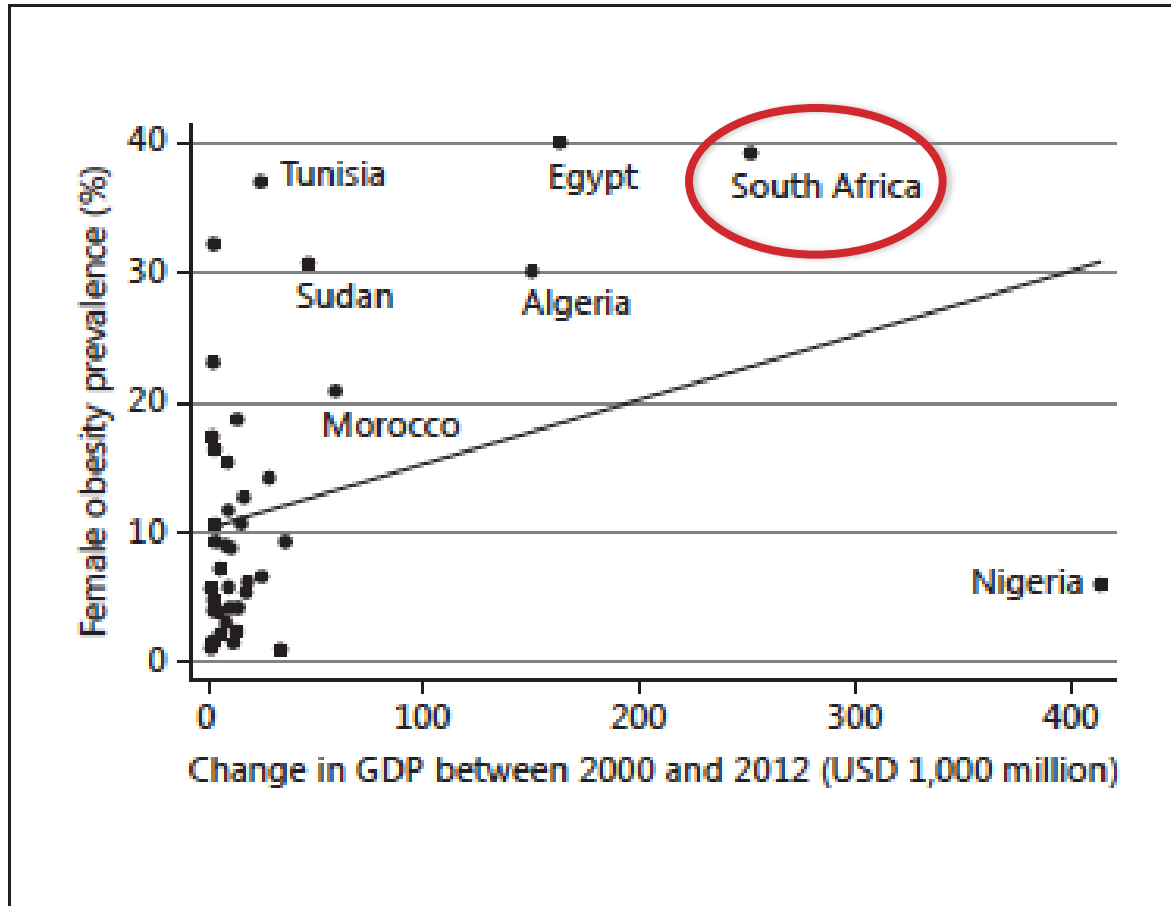
UNICEF, World Bank, 2012-2015

Stunting



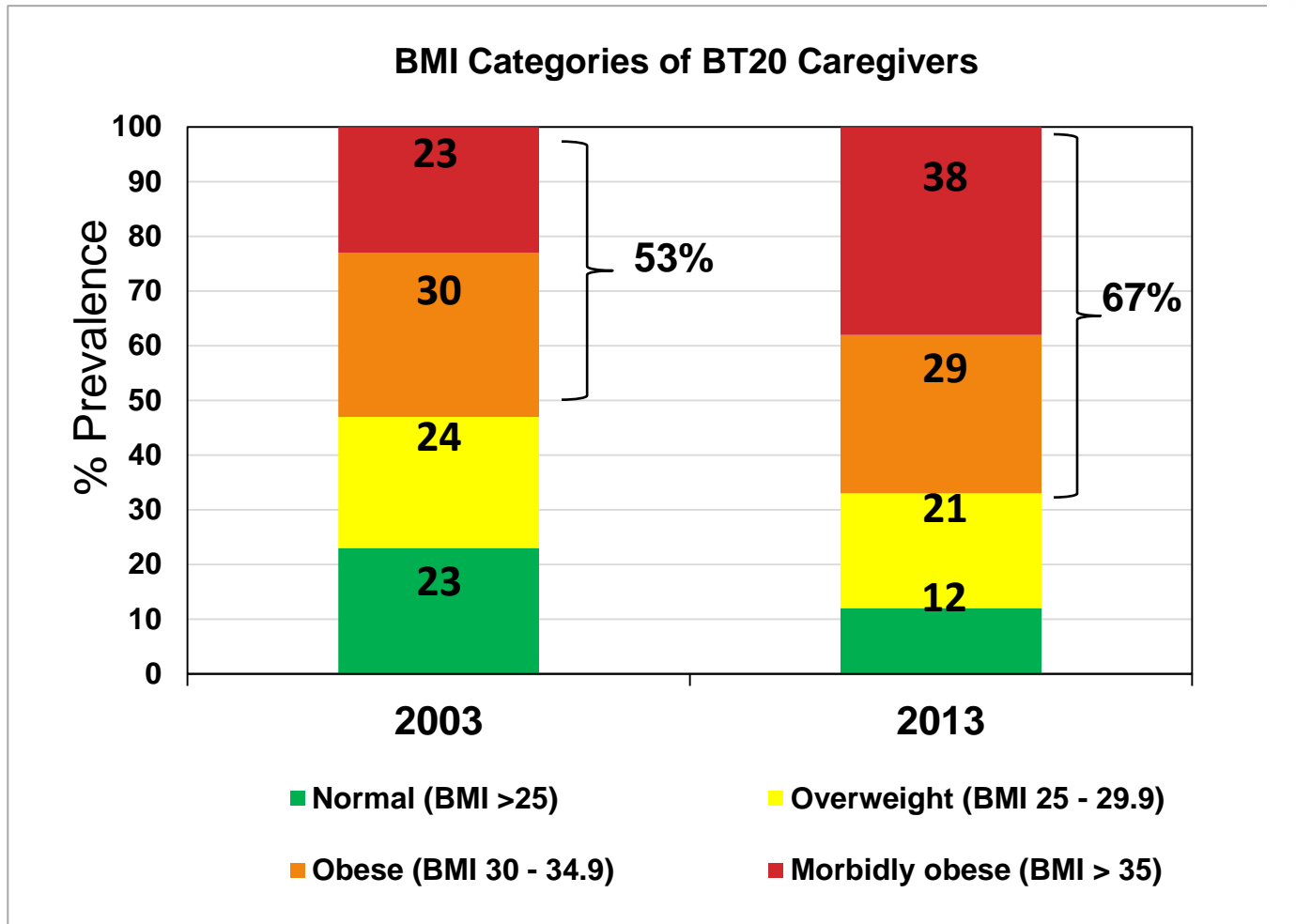
Norris et al. 2014 Ann Nutri Metab

OBESITY



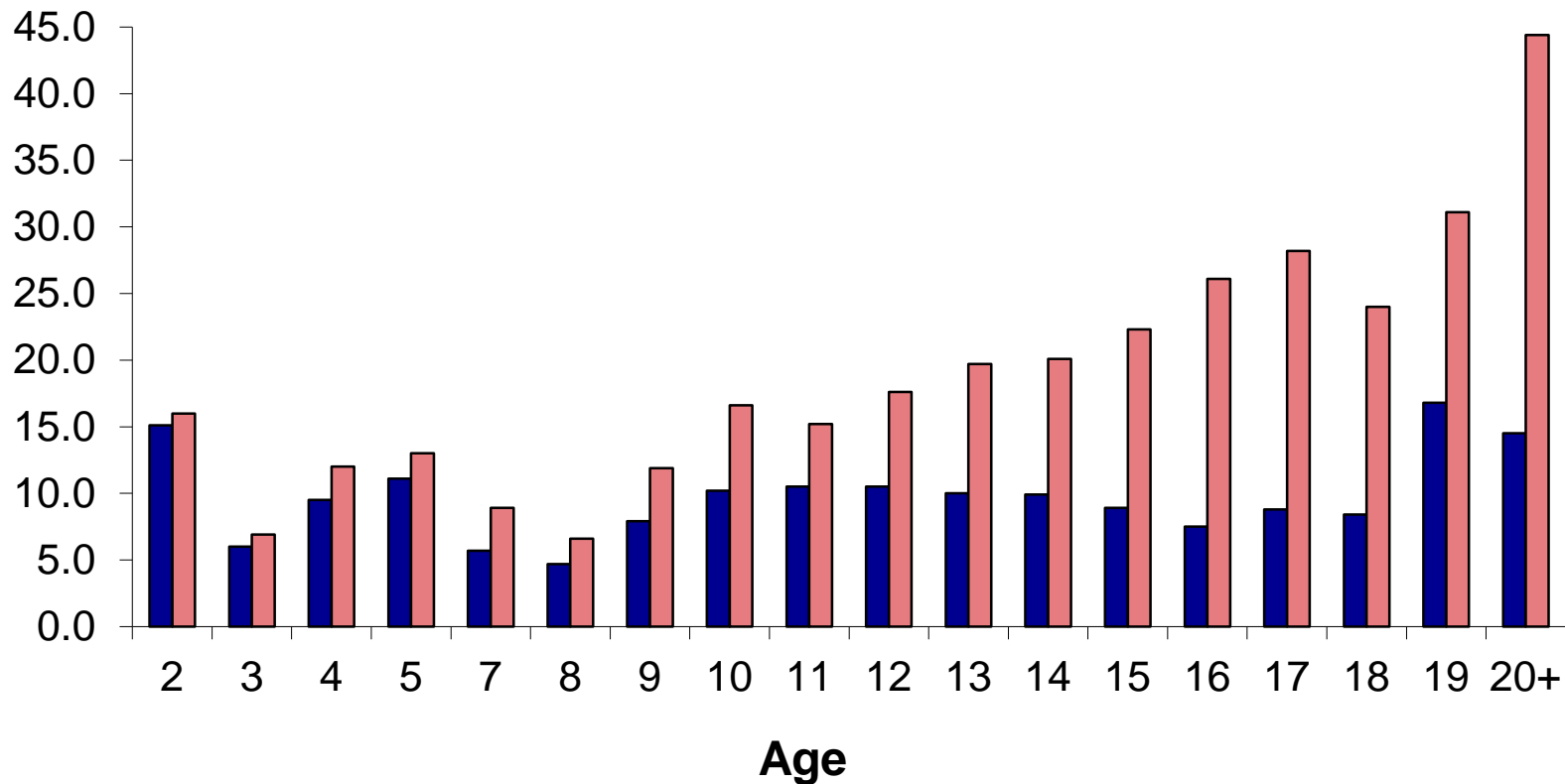
ADULT FEMALE OBESITY

Bt20 Moms



Unpublished data, Micklesfield

OVERWEIGHT & OBESITY PREVALENCE



Norris et al. Unpublished

KOTA



Inexpensive: \$1-2

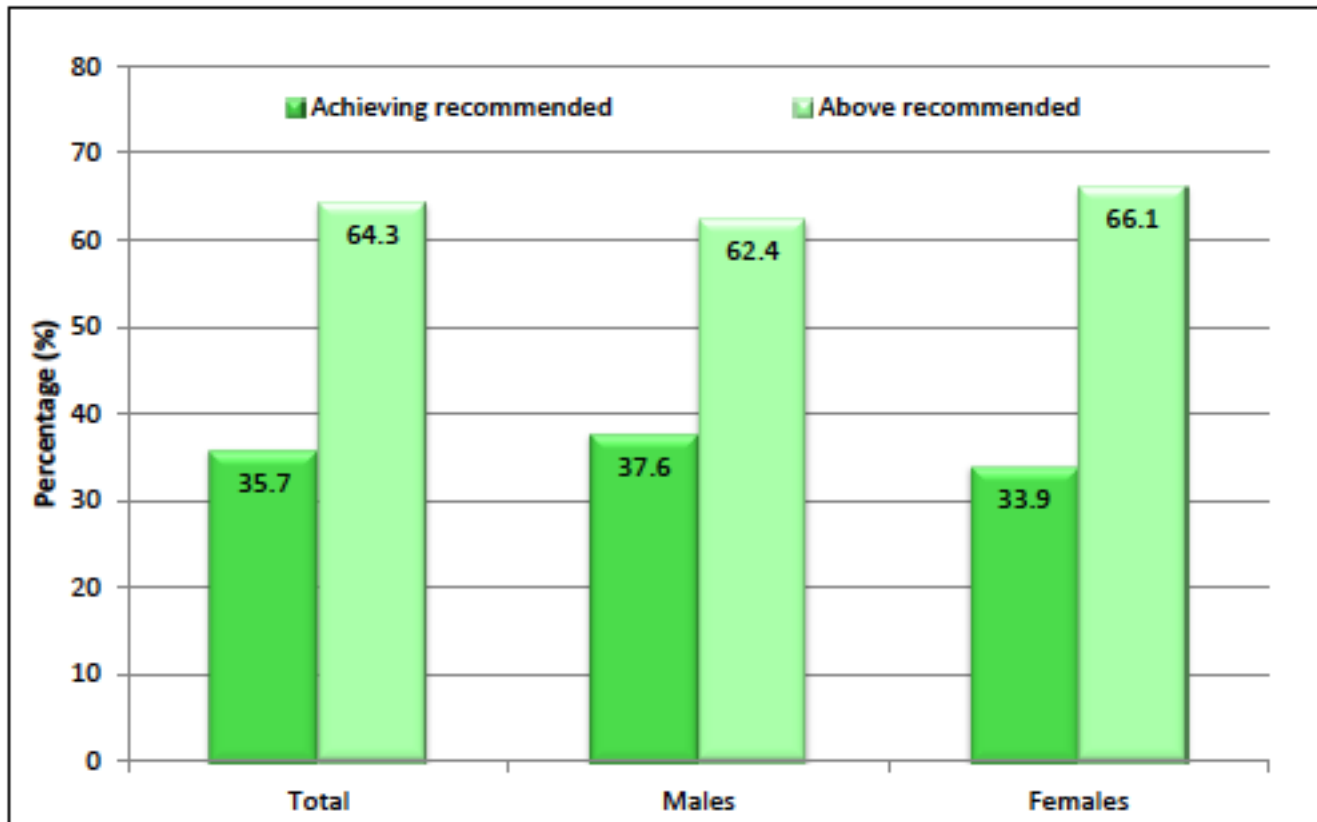
Informal vendors

Energy dense: 1283 kca

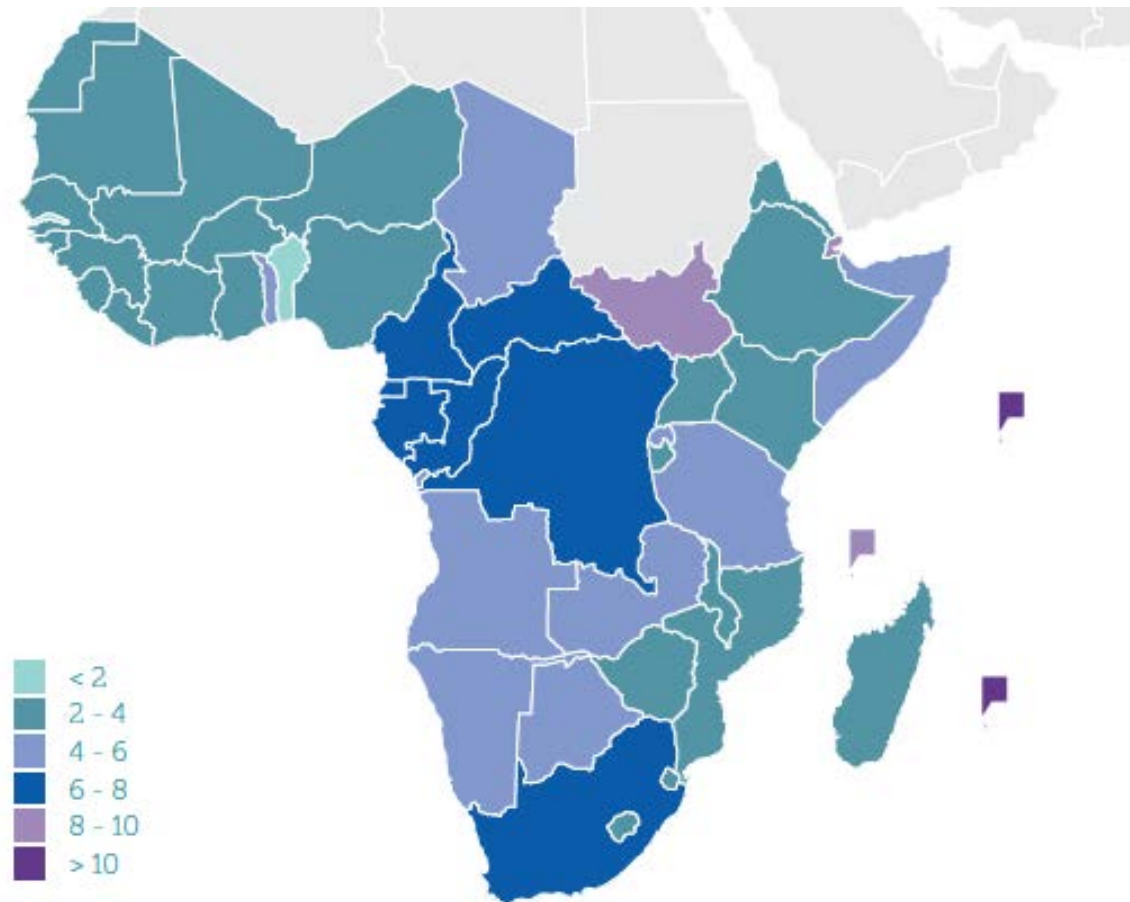
Ave consumption of fast food in Soweto = 30items/week

DIETARY INTAKE

Percentage achieving WHO guidelines (added sugars; 11.4% of total energy)



Type-2 Diabetes



AFRICA

- Rapid demographic and nutrition transitions
- Complex & heterogeneous
- Multiple burdens of health (malnutrition, obesity communicable & non-communicable)

THANK YOU!

