DOUBLE BURDEN OF MALNUTRITION AFRICA

SHANE NORRIS
UNIVERSITY OF THE WITWATERSRAND

IAEA WORKSHOP OCT 2017
Communicable disease burden 2000

Our World in Data; Oxford
Communicable disease burden 2012

Our World in Data; Oxford
HIV infection 2012

Our World in Data; Oxford
Adolescent pregnancy

UNICEF, World Bank, WHO
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

OBESITY

Norris et al. 2014 Ann Nutr Metab
Bt20 Moms

BMI Categories of BT20 Caregivers

- Normal (BMI >25)
- Overweight (BMI 25 - 29.9)
- Obese (BMI 30 - 34.9)
- Morbidly obese (BMI > 35)

% Prevalence

2003
- Normal: 23
- Overweight: 30
- Obese: 24
- Morbidly obese: 23

2013
- Normal: 38
- Overweight: 29
- Obese: 21
- Morbidly obese: 12

Unpublished data, Micklesfield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 Unpublished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 = 30 items/week
Percentage achieving WHO guidelines (added sugars; 11.4% of total energy)
Type-2 Diabetes

IDF Atlas 2016
AFRICA

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