

# Malnutrition in the OIC Member Countries: A trap for Poverty

1



**Standing Committee  
for Economic and Commercial Cooperation  
of the Organization of Islamic Cooperation (COMCEC)**

9<sup>th</sup> Meeting of the COMCEC Poverty Alleviation Group,  
Ankara, 6 April 2017

Presentation: Part 1

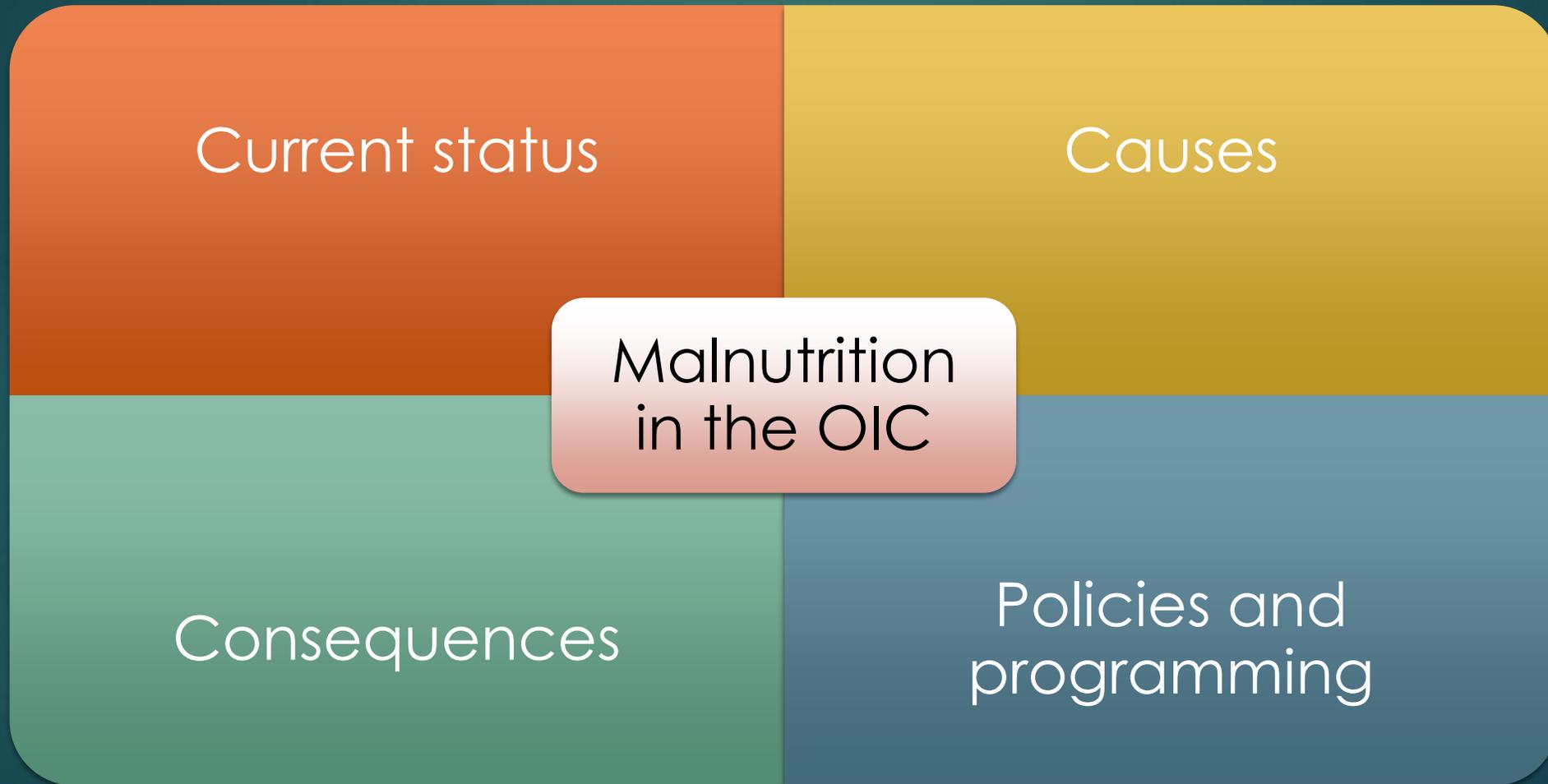


# Outline

- ▶ Objectives and Methodology
- ▶ Conceptual framework and indicators
- ▶ Malnutrition as a poverty trap
  - ▶ Costs of malnutrition
  - ▶ Intergenerational transmission of malnutrition
- ▶ Global policy framework against malnutrition
  - ▶ Historical overview
  - ▶ Best practices
  - ▶ Regional policies
- ▶ Malnutrition in OIC countries

# Methodology

# Scope



# Four strands of enquiry

Conceptual discussions around the relationships between malnutrition and poverty and between maternal and child malnutrition

Review of regional policies

Secondary data analysis of nutrition data and indicators of economic development

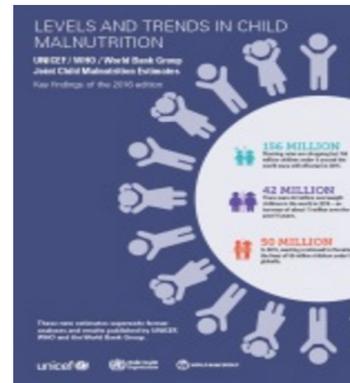
In-depth case studies: Senegal, Bangladesh, Indonesia, Tajikistan and Egypt

# Main data sources

- ▶ Joint Malnutrition Estimates from UNICEF, WHO and the World Bank (2016)
- ▶ World Development Indicators [World Bank]
- ▶ Household surveys (DHS, IFLS)

## Global Database on Child Growth and Malnutrition

### UNICEF-WHO-The World Bank: Joint child malnutrition estimates - Levels and trends



The UNICEF, WHO and the World Bank inter-agency team regularly updates joint global and regional estimates of child malnutrition. These estimates of prevalence and numbers for child stunting, overweight, wasting and severe wasting are derived by United Nations (UN), Millennium Development Goal (MDG), UNICEF, WHO and World Bank regions, as well as World Bank income group classifications.

All estimates are presented with 95% confidence intervals to show the level of uncertainty around them. These intervals are important to consider when interpreting estimates. The 95% confidence interval highlights the range within which one can be 95% certain that the true value lies. A wide interval reflects higher uncertainty compared to a narrow one.

# Challenges

- ▶ Limited coverage of the data
  - ▶ Some countries are not well covered by the JME dataset, especially in early years
    - ▶ Also true for poverty
  - ▶ Some forms of malnutrition are not well measured
    - ▶ E.g. micro nutrients deficiencies
  - ▶ Consistency of measurement across countries and time?
- ▶ To cover malnutrition in all its forms
- ▶ To cover the breadth of OIC experiences

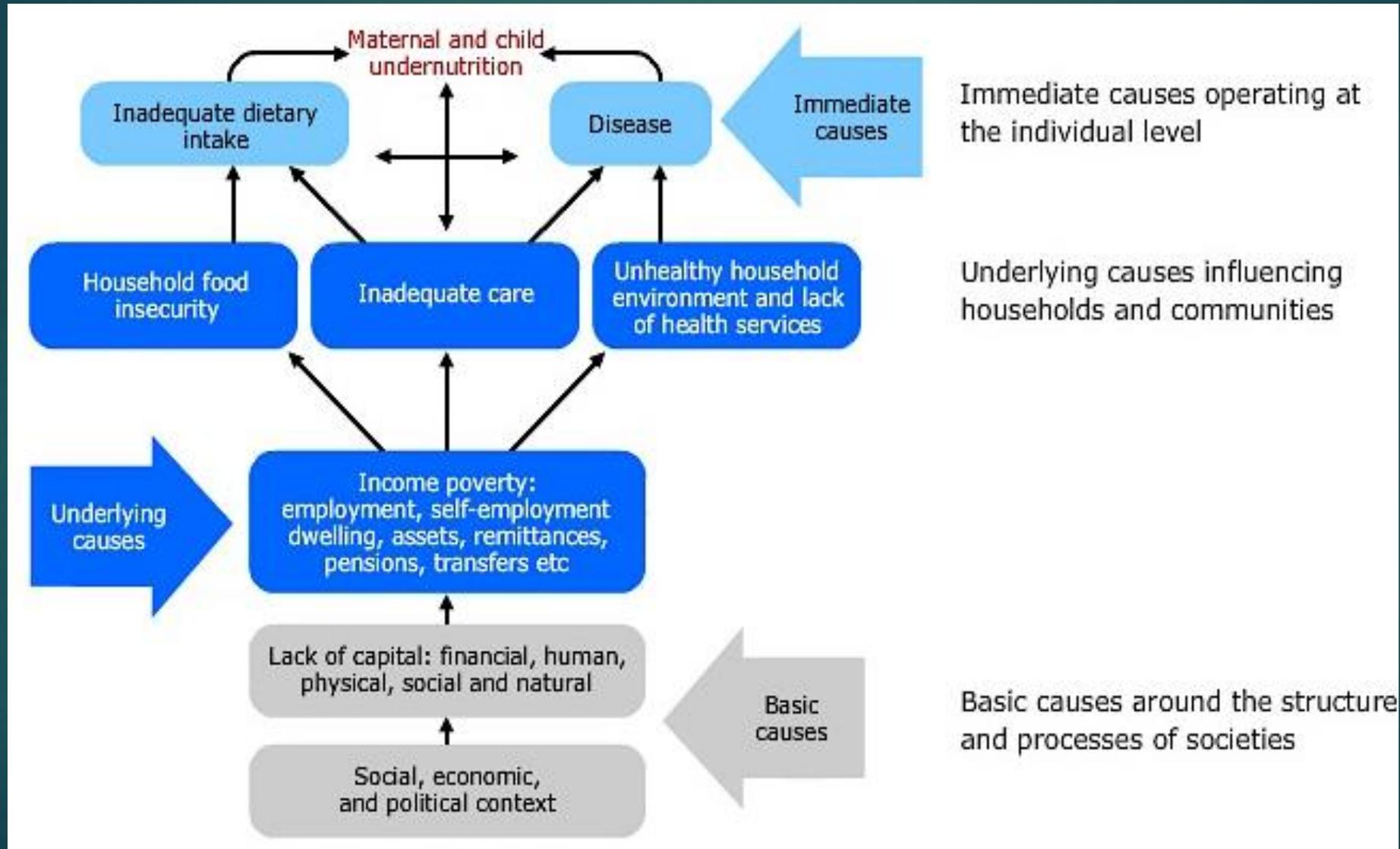
# Conceptual Framework and Indicators

# Malnutrition

- ▶ When the body lacks the nutrients, vitamins, minerals and other nutrients it needs to maintain healthy tissues and organ function
- ▶ Protein-energy malnutrition:
  - ▶ When the diet lacks energy and protein because of a deficit in all major macronutrients (e.g. carbohydrates, fat, proteins)
  - ▶ When severe, can lead to marasmus and kwashiorkor
- ▶ Micro-nutrient deficiencies:
  - ▶ Result of lack of vitamin and mineral nutrients
  - ▶ Can be hidden
  - ▶ Can lead to anaemia, scurvy, pellagra etc
- ▶ Under-nutrition: lack of nutrients intake
- ▶ Over-nutrition: excess of nutrients intake

# UNICEF Conceptual Framework

10



# Child Malnutrition Indicators: Undernutrition

- ▶ Wasting: “children too thin for their height”
  - ▶ Acute malnutrition
  - ▶ Factor of mortality
  - ▶ Subject of humanitarian attention
  
- ▶ Stunting: “children too short for their age”
  - ▶ Chronic malnutrition
  - ▶ Linked to cognitive and non-cognitive development

# Child Malnutrition Indicators: Undernutrition

12

- ▶ Micronutrient deficiencies: deficiencies in key nutrients
- ▶ “Hidden hunger”: deficiencies in nutrients that do not manifest itself in child anthropometry
- ▶ Chronic malnutrition
- ▶ Data not widely available
- ▶ Focus on iron deficiency (which can cause anaemia) and vitamin A deficiency (growth retardation and infection)

# Child Malnutrition Indicators: Overnutrition

- ▶ Obesity and overweight
  - ▶ In adults, based on body mass index
  - ▶ In children, based on weight for length
- ▶ Associated with Non Communicable Disease (NCDs)
- ▶ Leads to heightened mortality and morbidity
- ▶ Tends to be a problem in urban, richer environments
  
- ▶ Double burden of malnutrition: combination of over- and undernutrition
  - ▶ E.g. children who are overweight and stunted

# Malnutrition as a trap for poverty

# Costs of malnutrition

- ▶ Mortality
- ▶ Disease
  - ▶ Cost of treatment
  - ▶ Loss of work/school days
- ▶ Hampered cognitive and non-cognitive development
  - ▶ Lower school performance
  - ▶ Lower productivity
  - ▶ Lower income
- ▶ Costs are compounded by intergenerational transmission of malnutrition

# Intergenerational transmission of malnutrition I

- ▶ Maternal deficiencies in micronutrients are passed on to the child
- ▶ Maternal body size and nutrition status are strongly associated with size and nutrition status of the child
  - ▶ Children born with low weight are 8 times more likely to die than children with normal weight
  - ▶ Mothers with short stature give birth to small children, who become short adults and will give birth to small children
  - ▶ Poor fetal growth or stunting in the first 2 years of life (1,000 days) leads to irreversible damage on cognitive and non-cognitive development
  - ▶ Links between early childhood development and school, health, and earning outcomes at adult age

# Intergenerational transmission of malnutrition II

- ▶ Babies who are born small are less likely to be lean adults
- ▶ Maternal overweight and obesity can cause significant birth complications, including risk of infant death, and pregnancy-related disorders
- ▶ Maternal overweight can increase risk of child overweight
- ▶ Poor nutrition in early childhood can be associated with overweight later in life

# Global Policy Framework

# MDGs and malnutrition : A useful but incomplete framework

- ▶ MDG 1C: Halve proportion of people who suffer from hunger by 2015
  - ▶ Prevalence of underweight children < 5
  - ▶ Proportion of population below minimum level of dietary energy consumption
- ▶ Since 1990, drop by almost half of undernourishment rate
- ▶ Mostly focused on hunger; not enough focus on nutrition
- ▶ No roadmap to achieve the targets
- ▶ Focus on undernourishment too narrow
- ▶ Synergies between nutrition and other sectors under-exploited

# SDGs and malnutrition: Some improvements...

- ▶ Goal 2: “End hunger, achieve food security and improved nutrition, and promote sustainable agriculture”
- ▶ Commitment to **end malnutrition in all its forms.**
- ▶ More indicators than in MDGs:
  - ▶ Wasting
  - ▶ Stunting
  - ▶ Focus on children below 5; adolescent girls, pregnant and lactating women; and older persons

# SDGs and malnutrition: ...But still some negatives

- ▶ Only one SDG related to hunger and nutrition
- ▶ No reference to malnutrition in other SDGs
  - ▶ Nutrition-sensitivity is absent from the SDG framework, so narrow focus on food security
  - ▶ Yet, health, sanitation, and water are very important determinants of malnutrition
- ▶ Important World Health Assembly targets have been forgotten:
  - ▶ Anaemia
  - ▶ Low-birth weight babies
  - ▶ Overweight
  - ▶ exclusive breastfeeding

# Multisectorality and the Fight Against Malnutrition

- ▶ Multisectoral planning
  - ▶ Collaboration of several sectors is required
  - ▶ Multiple stakeholders need to work together
  - ▶ Nutrition-sensitive policies are key
- ▶ Scale-Up Nutrition (SUN) Movement
  - ▶ Good model to encourage multisectorality
  - ▶ 26 OIC countries
  - ▶ Country-level engagement with Civil Society, Academia and Private Sector
  - ▶ Common Results Framework (CRF)

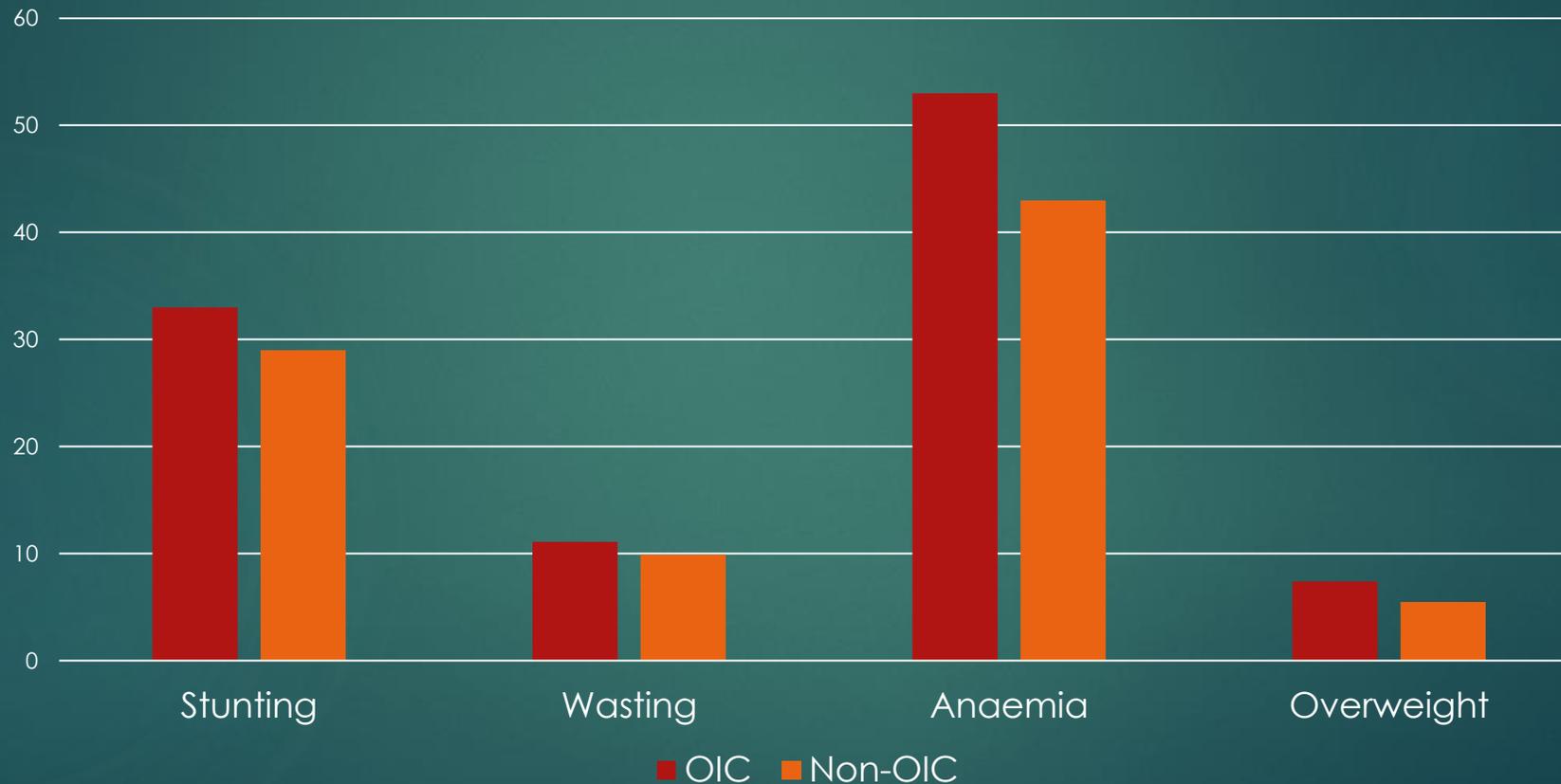
# Regional Frameworks

- ▶ The report lists and describes various regional policies and frameworks
- ▶ Policies tend to be comprehensive and relevant
- ▶ Cover a lot of OIC Member Countries
- ▶ Regional policies useful to deal with global causes of malnutrition and spur cooperation
- ▶ But Regional Accountability Frameworks are often weak and non-binding
- ▶ Policies and frameworks overlap (especially in West Africa)
- ▶ Funding is often not on par with targets

# Malnutrition in OIC countries

# Malnutrition rates are high in OIC

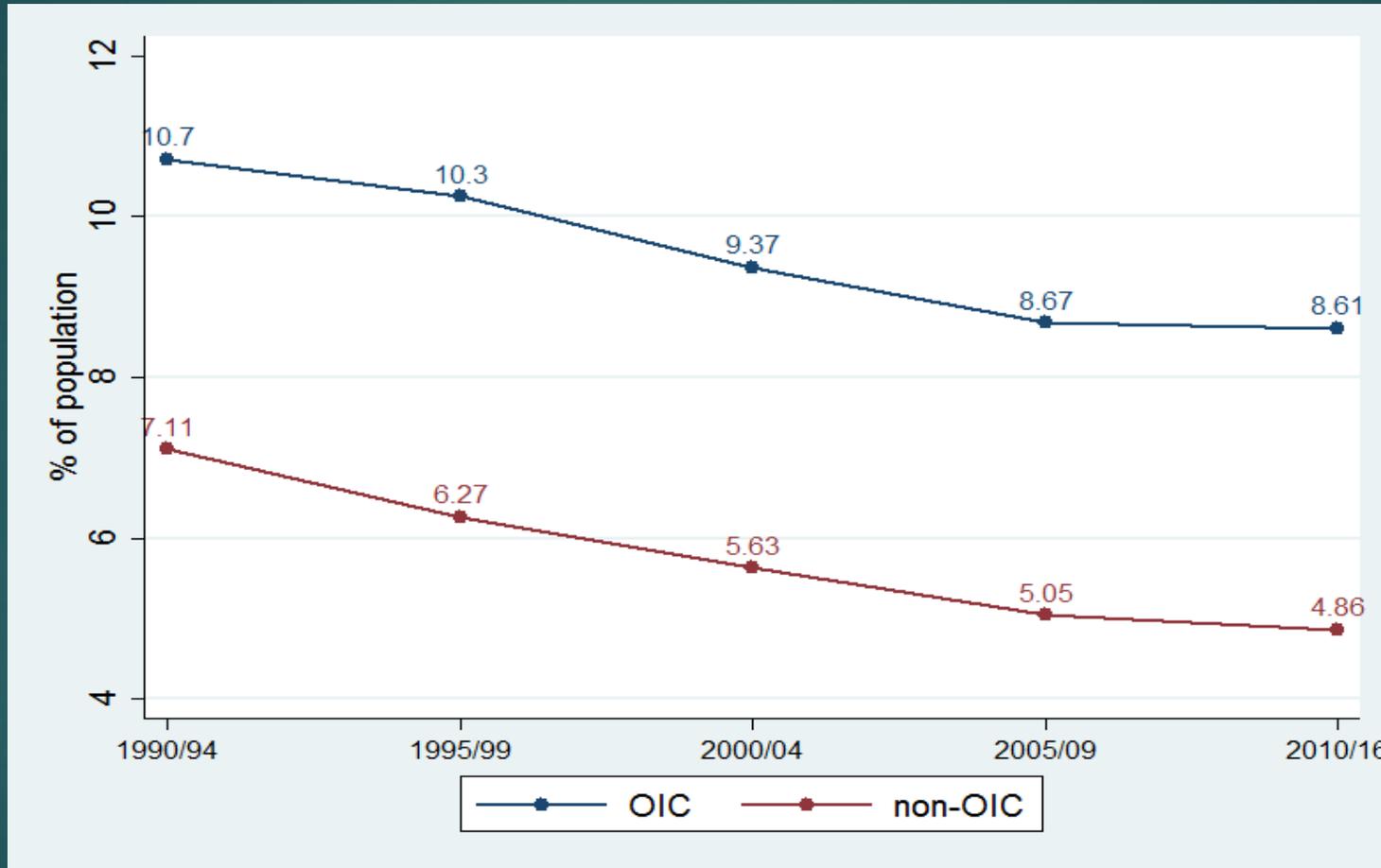
Malnutrition prevalence among children under five  
(SESRIC, 2009-2013)



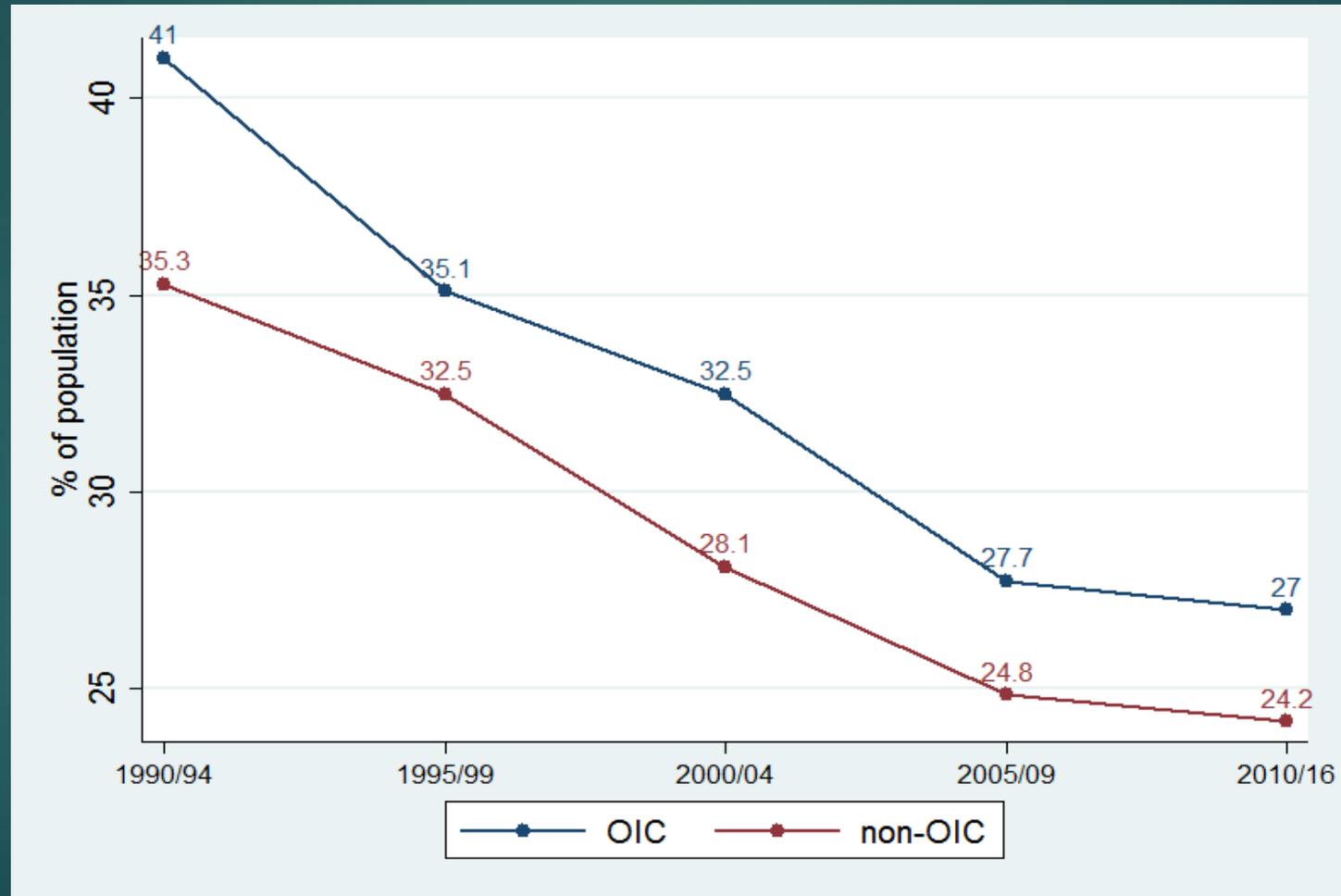
# Risk Factors of Malnutrition in OIC and non-OIC countries

- ▶ Overall, risk factors are more prevalent in OIC countries than elsewhere in the world
- ▶ Significant gaps in terms of food security, health, sanitation, water and nutritional best practices
- ▶ Consistent with previous analysis by SESRIC on health in OIC countries
- ▶ OIC countries especially exposed to climate change

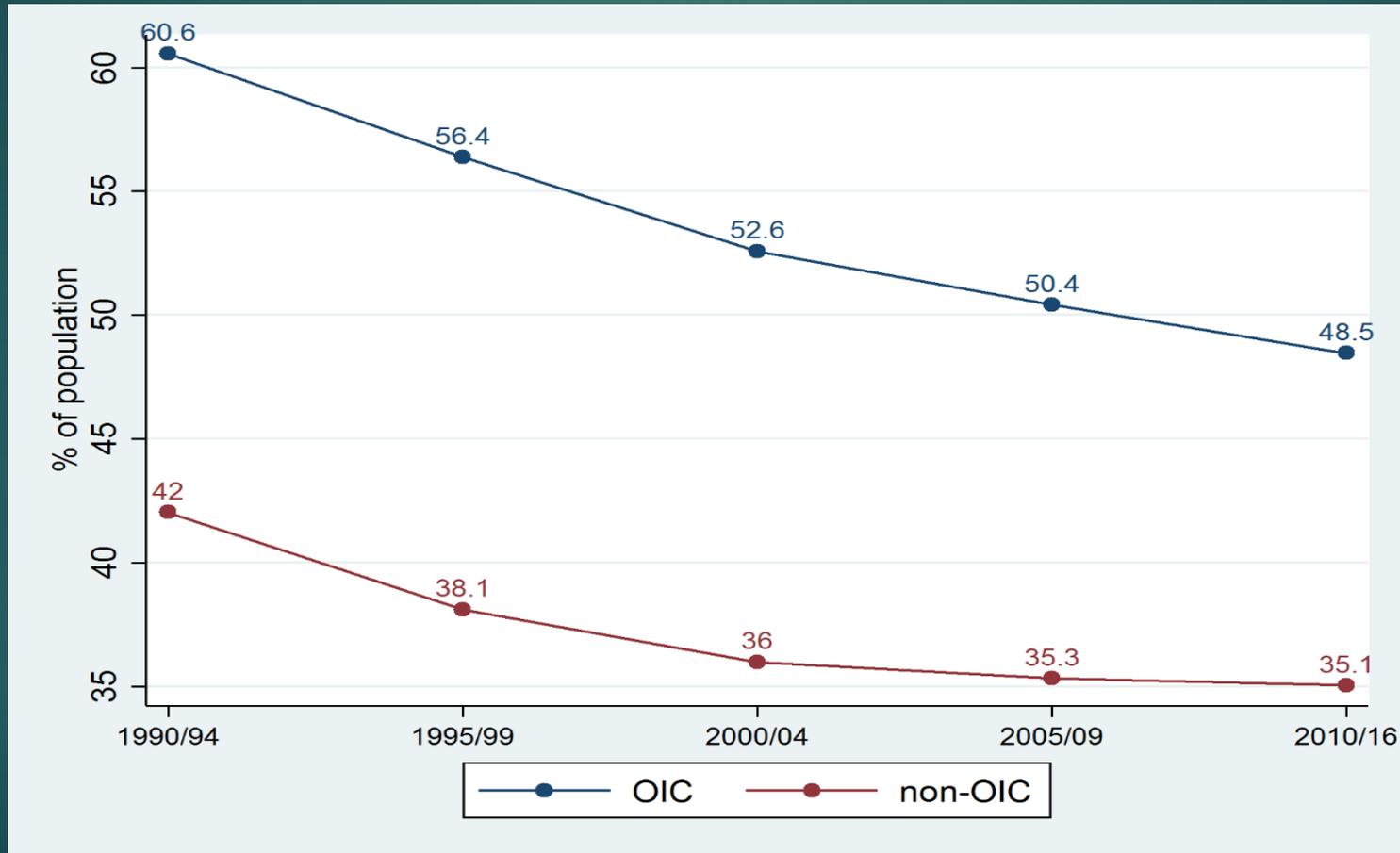
# Trends in Wasting



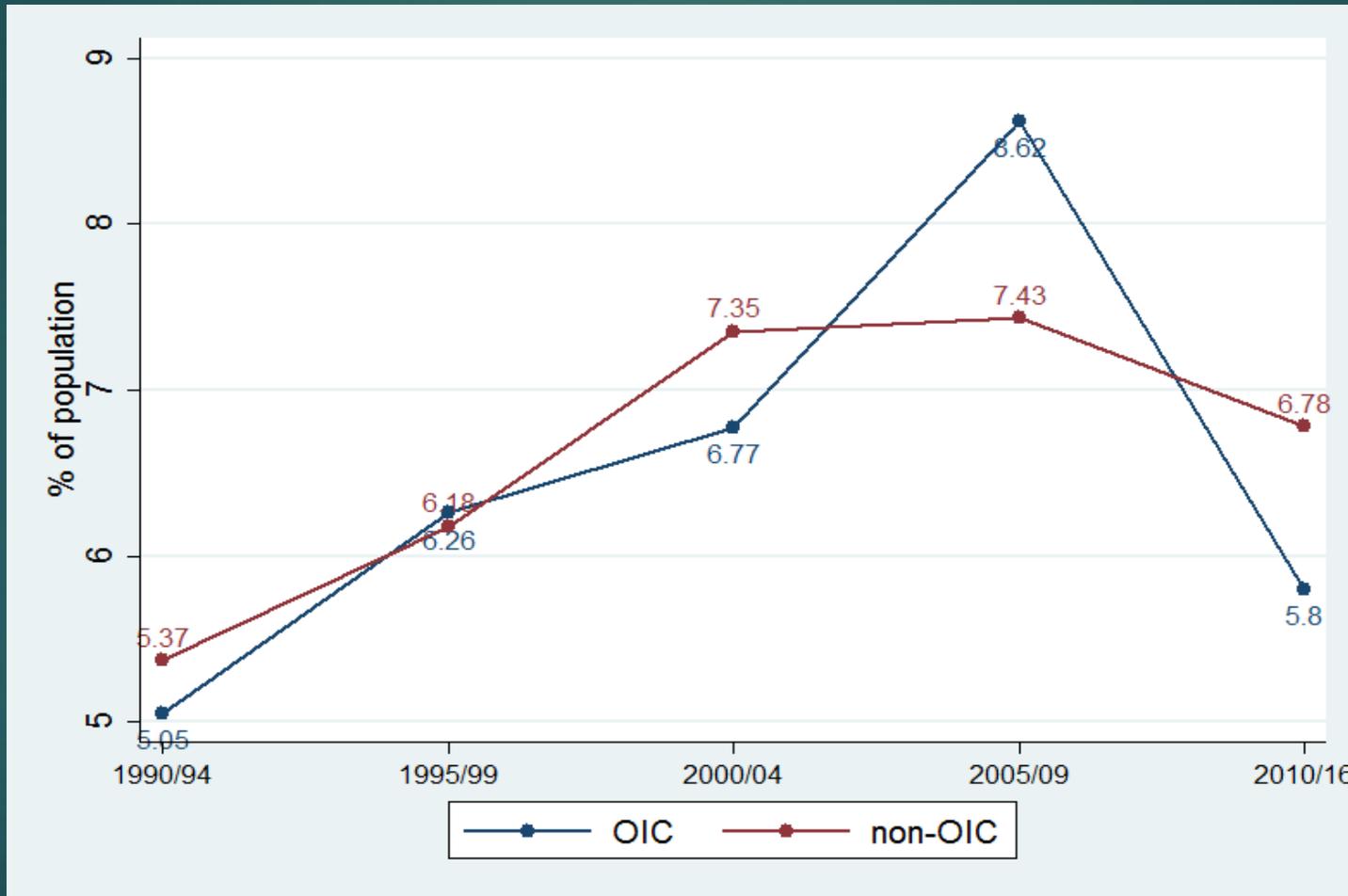
# Trends in Stunting



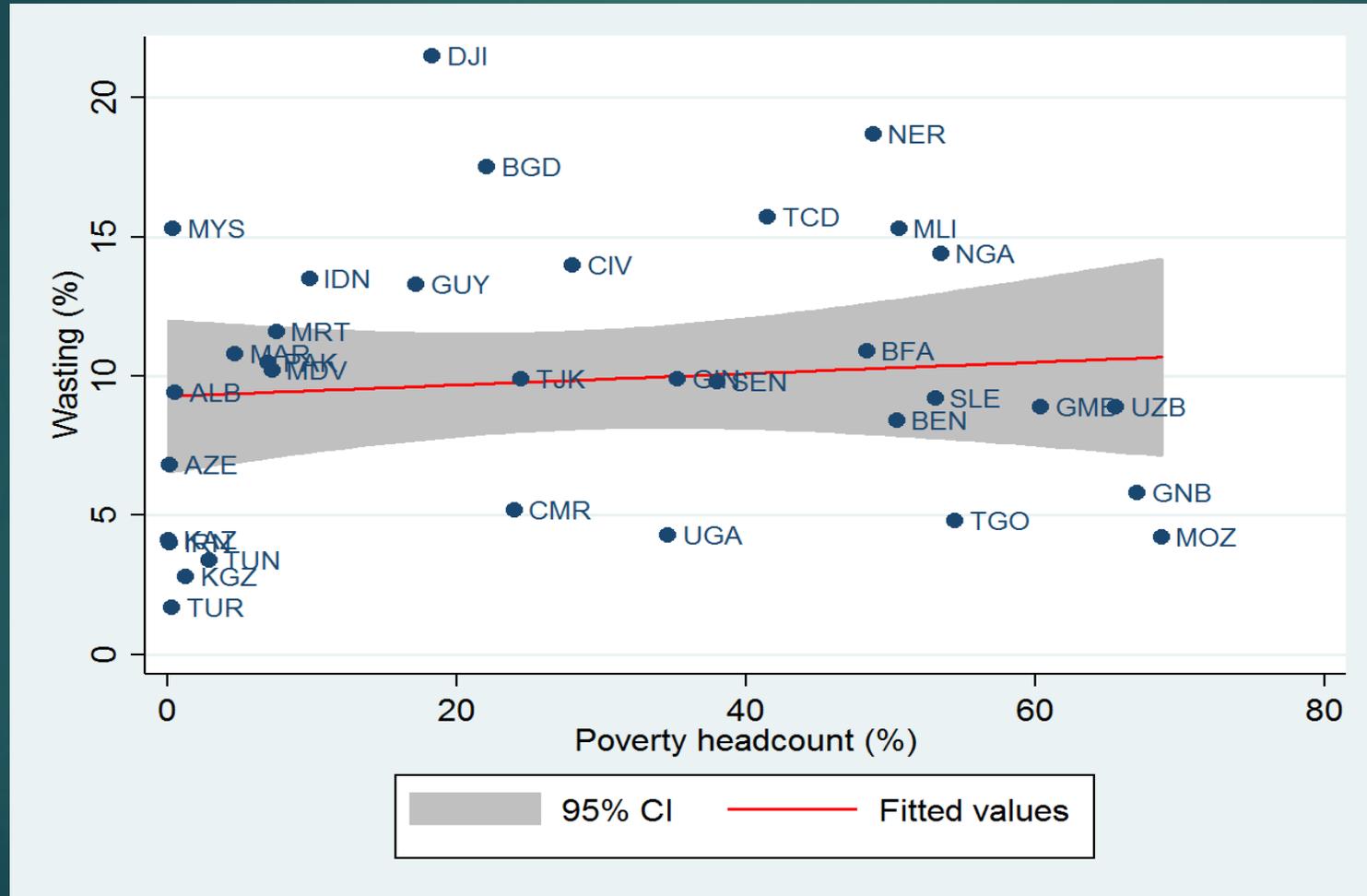
# Trends in Anaemia



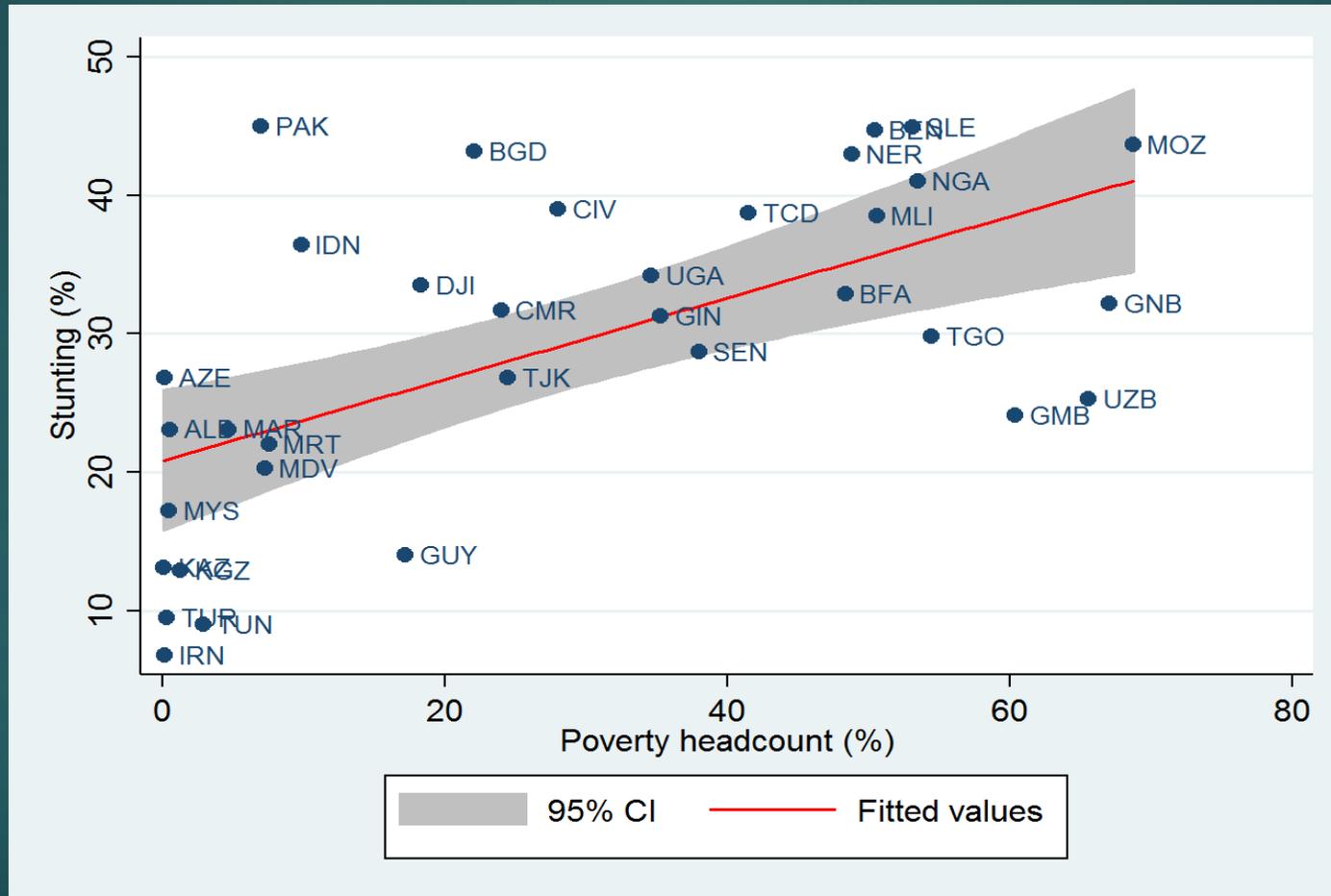
# Trends in Overweight



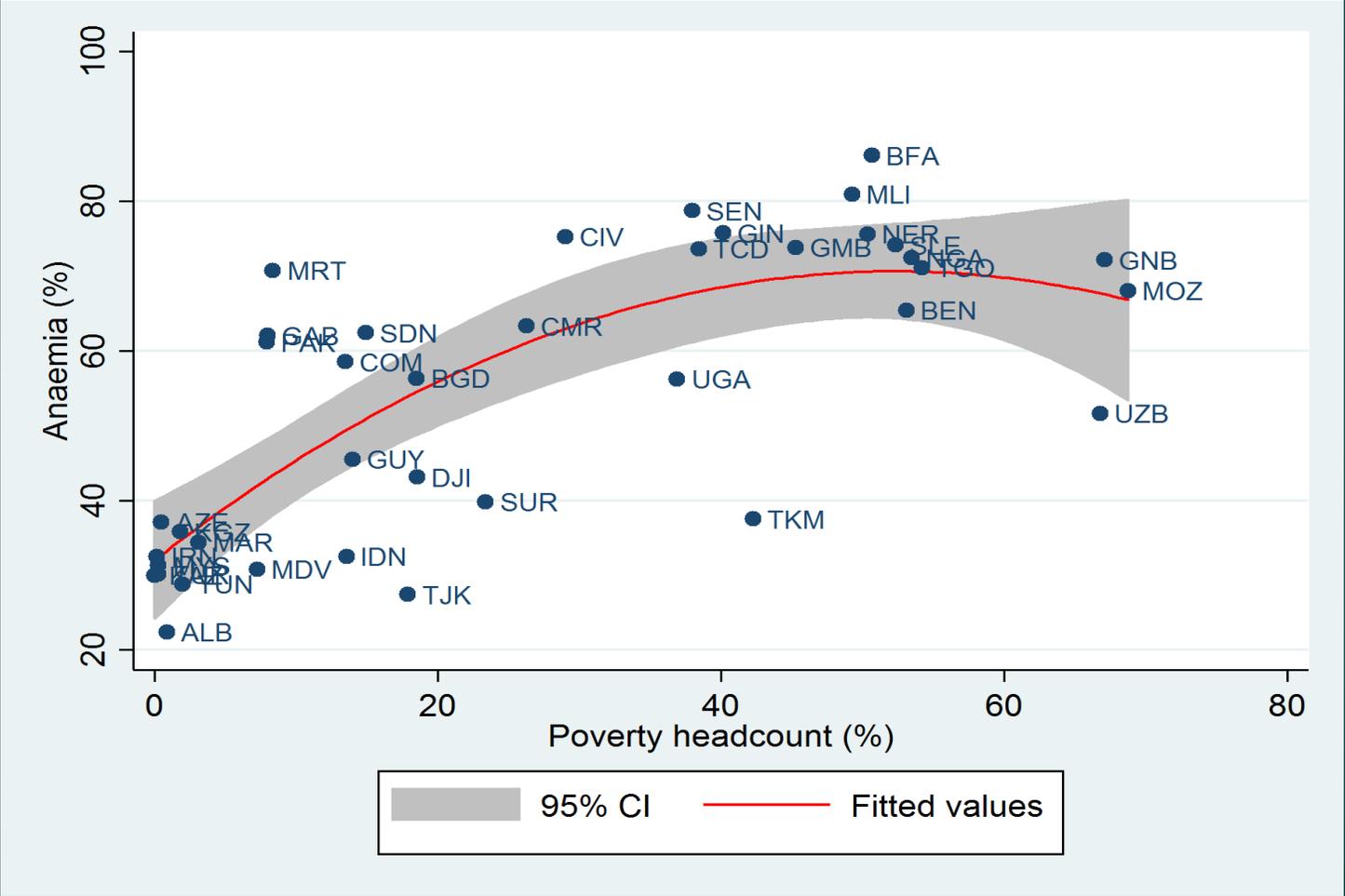
# Wasting and Poverty



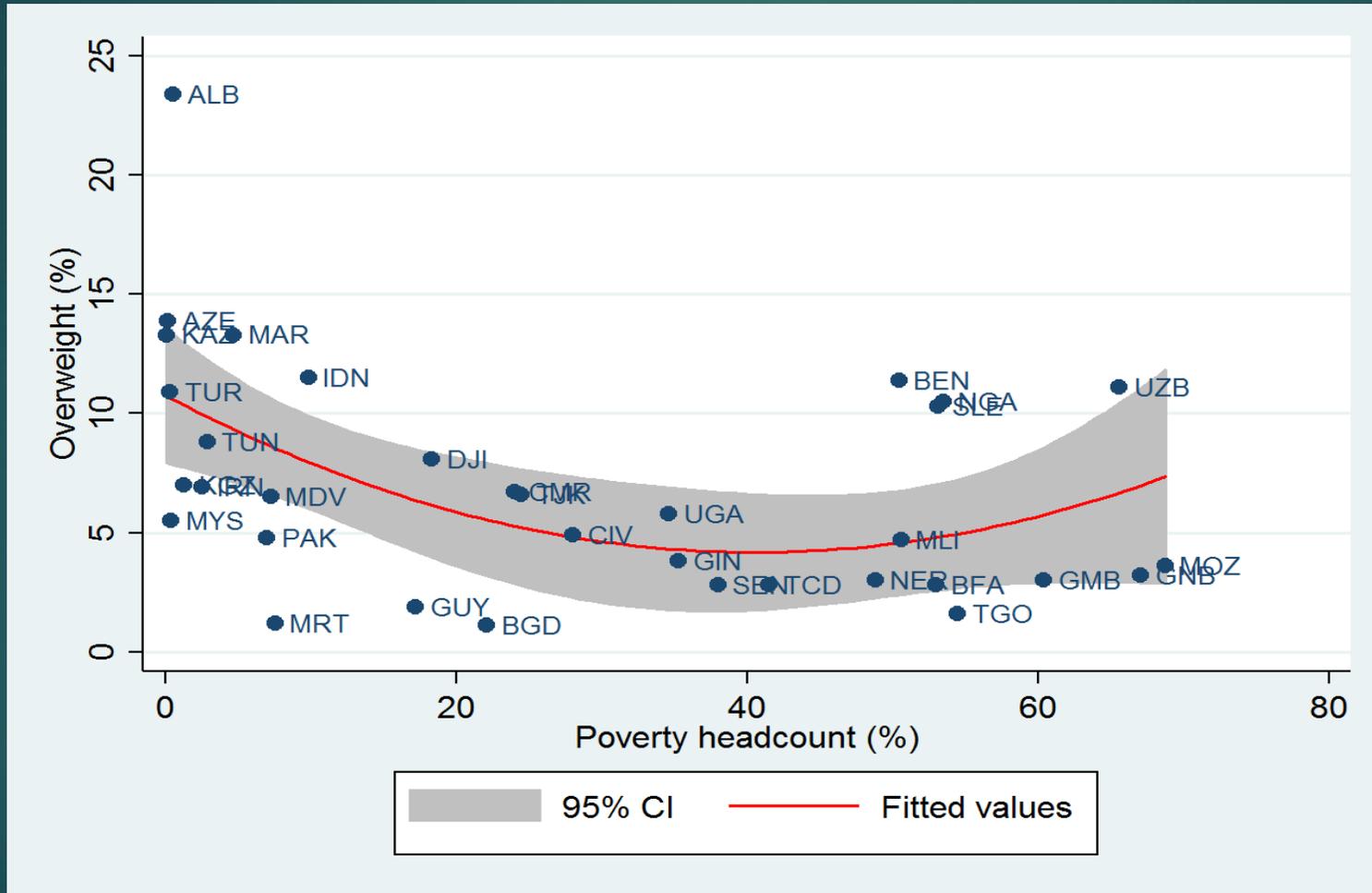
# Stunting and Poverty



# Anaemia and Poverty



# Overweight and Poverty



# Malnutrition and Poverty: Implications

- ▶ Economic growth is not enough for eradicating malnutrition
- ▶ Our results suggest that stunting rate would still be 21% in an average OIC country without poverty
- ▶ Weak relationship between wasting and poverty suggests the presence of structural obstacles to improved nutrition, especially IYCF
- ▶ Overweight is both a feature of underdevelopment and prosperity in OIC countries