

A global repositioning of non-communicable diseases

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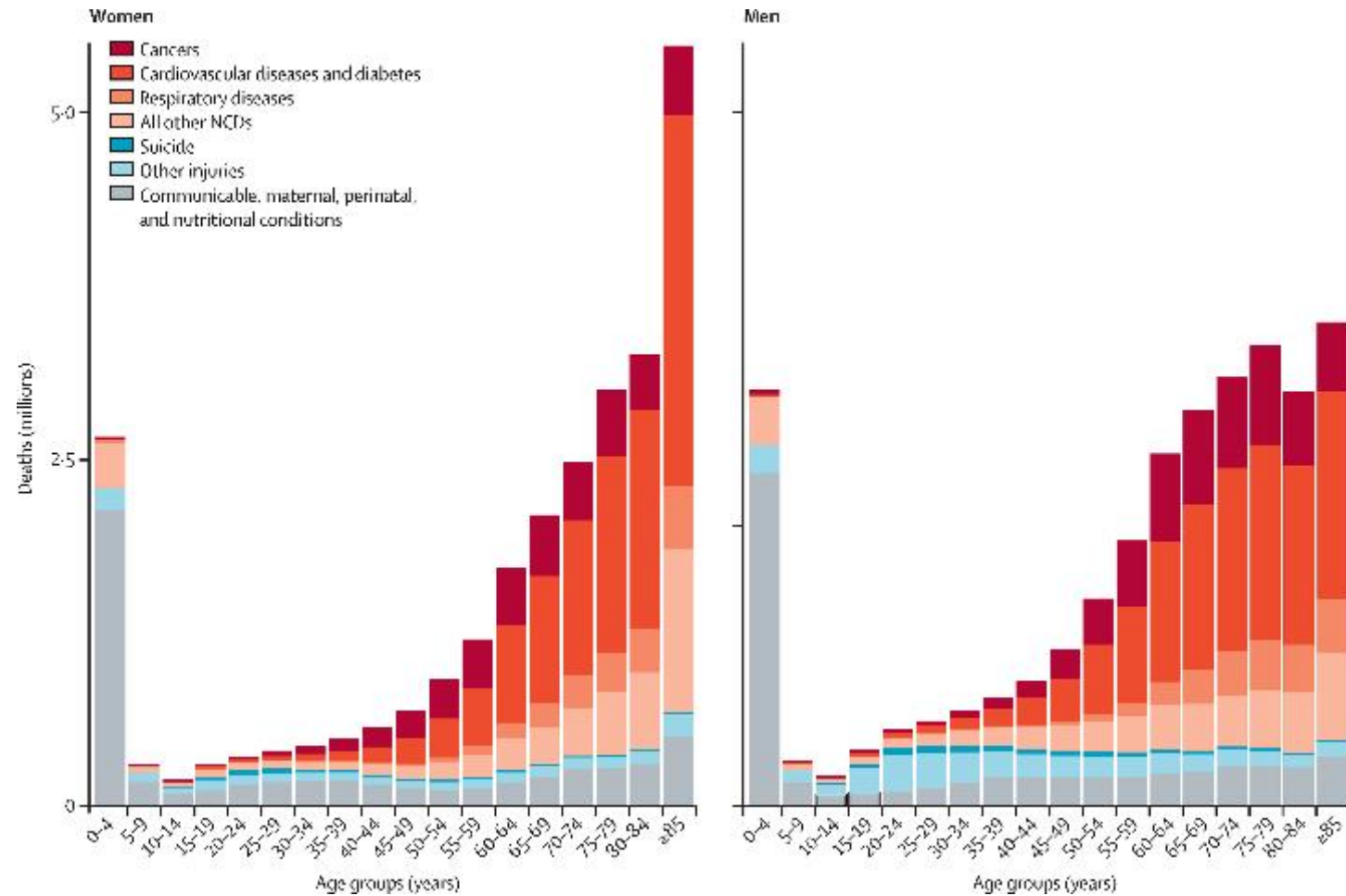


www.ncdrisc.org



www.ncdcountdown.org

Over 40 million NCD deaths – ~seven out of ten worldwide deaths



The SDG commitment

- Target 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

SUSTAINABLE DEVELOPMENT GOAL 3

Ensure healthy lives and promote well-being for all at all ages

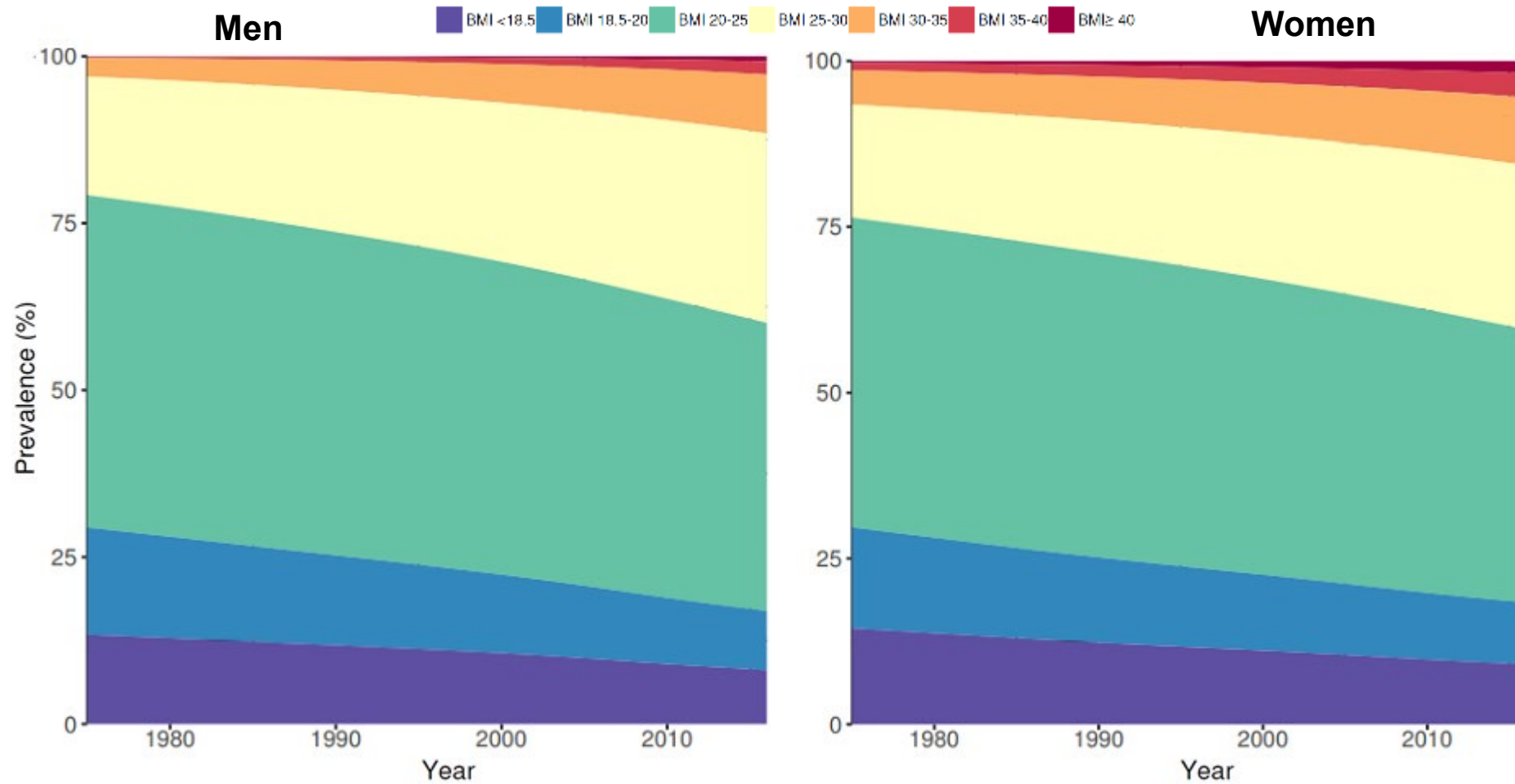


Non-Communicable Disease Risk Factor Collaboration (NCD-RisC)

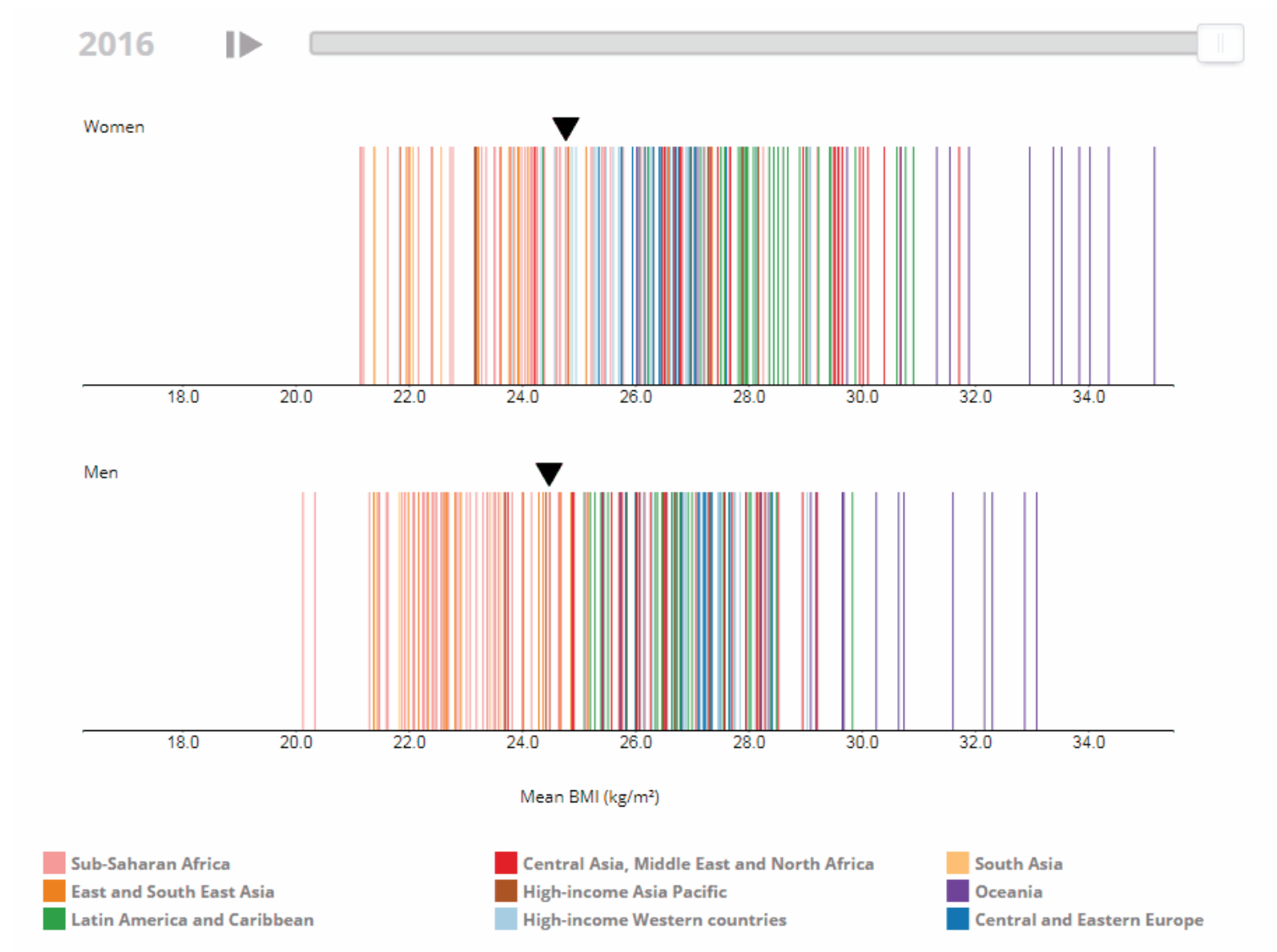
- Worldwide network of 1,200+ scientists from different countries
- Pool and analyse comprehensive, population-based measurement data on cardiometabolic risk factors
- Working closely with the World Health Organization (WHO)
- Country results and visualisations at www.ncdrisc.org



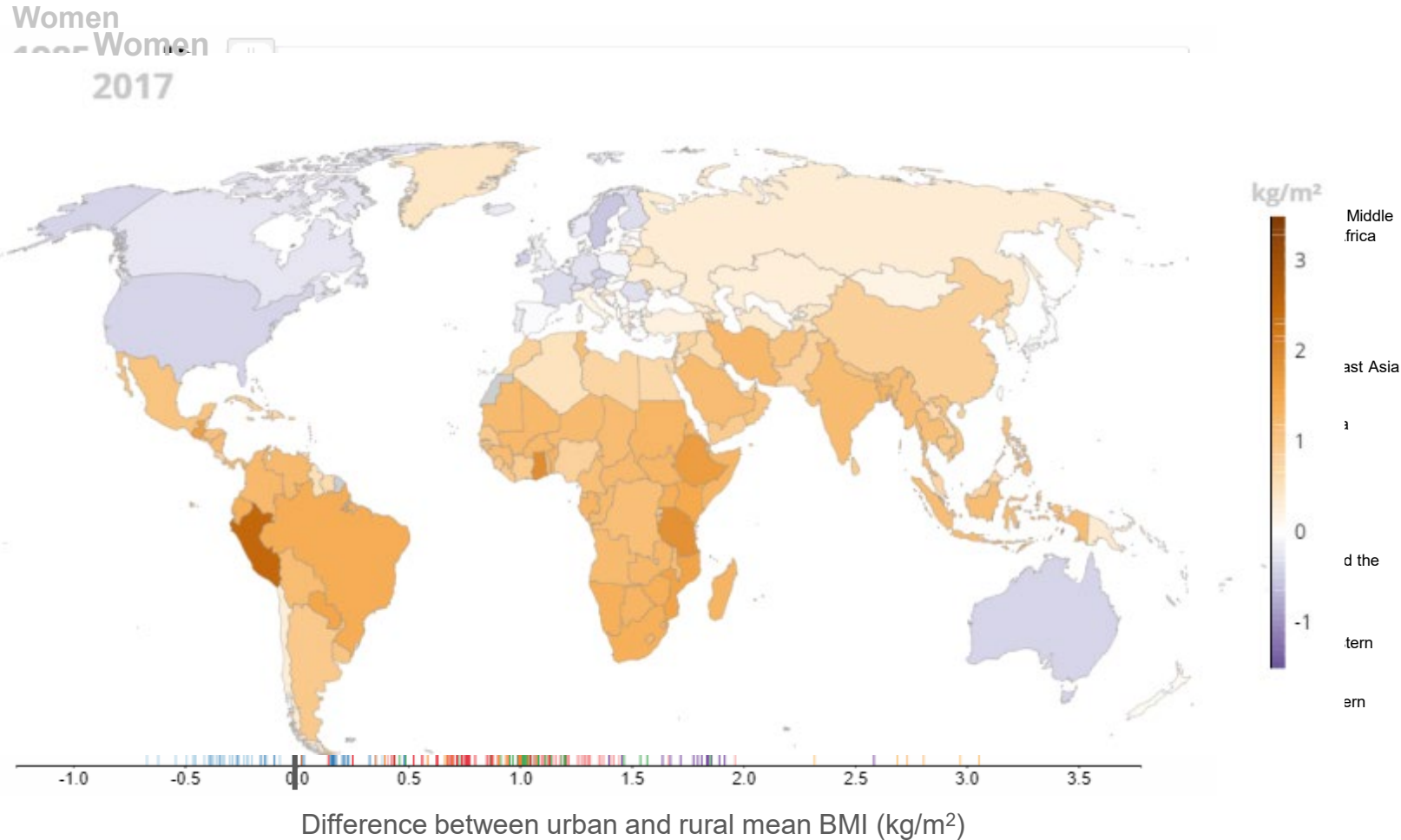
A global rise in body-mass index, overweight and obesity (adults)



Country trends in adult body-mass index are highly heterogenous



Rising rural BMI is driving global obesity epidemic



npr

Study Shatters Preconceived Notions About Urban Vs. Rural Obesity



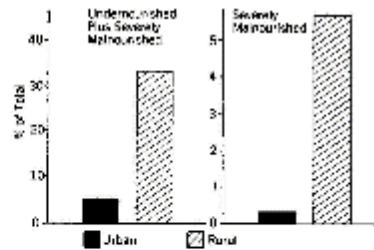
How do cities create better conditions for growth?

The Rural-to-Urban Malnutrition Gradient

A Key Factor in the Pathogenesis of Urban Slums

Carlas L. Krumdiek, MD, PhD

tion exists even in the United States, a paradoxical consequence of the mechanization of agriculture with the consolidation and consequent disappearance of family farms and redirection of emphasis towards cash crops and single species cultures. Although accurate information is not yet available and must await the publication of the results of the National Nutritional Survey, it is clear that rural malnutrition exists, that it has probably worsened during the past decade, and that it is not confined to the rural South or to a single ethnic group. It is reported¹² that in 1968, 21% of the families in the state of New Hampshire had diets rated as poor, a situation which represents a worsening from 1955 when only 15% rated in this category. "The decline of the family



Comparative incidence of undernutrition and severe malnutrition among rural and urban populations of children in Peru.

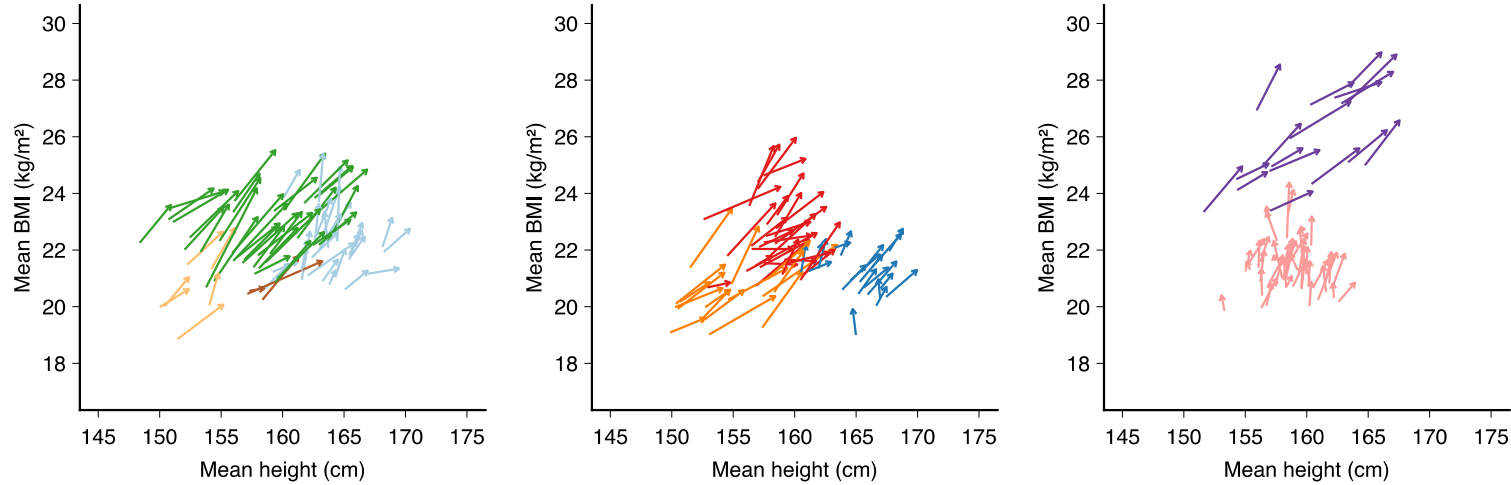
Table 1.—Comparison of the Daily Average Food Intake of Urban and Rural Populations in Iraq^{9,10}

	Urban		Rural
	Inter-mediate	Poor	Fellaheen
Iraq	2,897	2,613	1,813
Calories			
Animal protein, gm	27.4	24.9	21.9
Protein, gm			

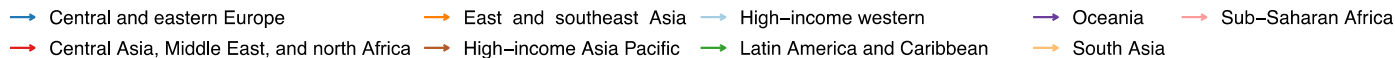
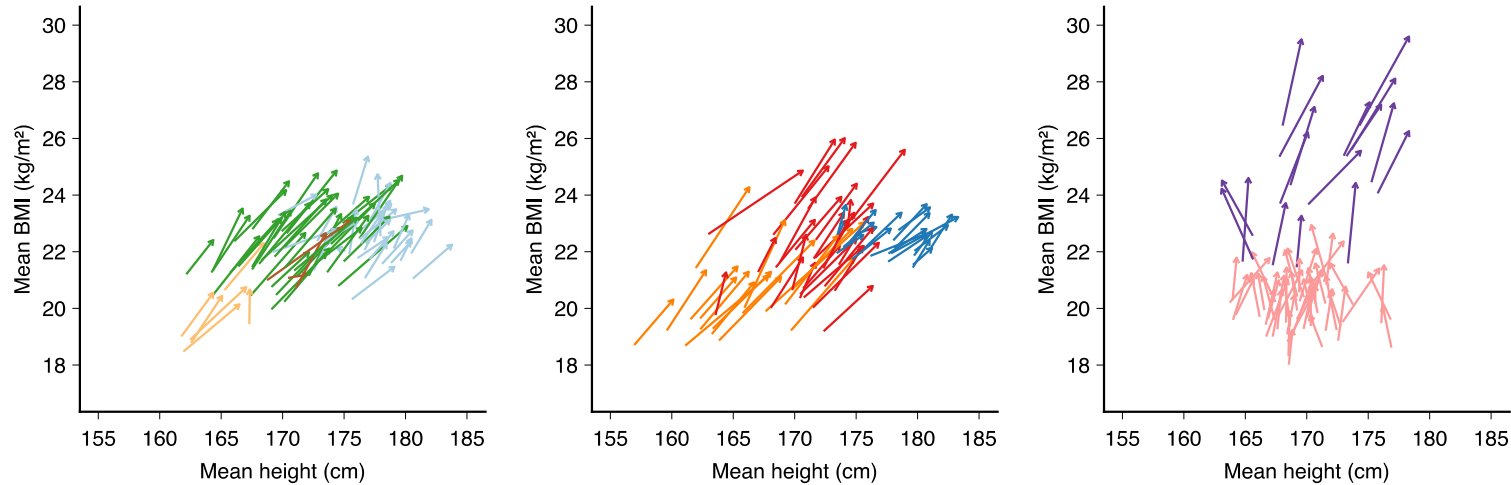
Food Items	Supermarket (n=11)	Grocery store (n=8)	Convenience store (n=56)	Total food stores (n=75)
	← % →			
Fruit and vegetables				
Apple ^{ab}	100	100	4	28
Cucumber ^{ab}	100	100	0	25
Orange ^{ab}	100	100	2	27
Tomato ^{ab}	100	100	2	27
Any produce ^{ab}	100	100	4	28
Protein				
Chicken drumsticks ^{abc}	100	88	0	24
Chicken breast, skinless, boneless ^{abc}	100	75	0	23
Eggs ^{ab}	100	100	29	47
Fresh seafood ^{ab}	82	63	0	19
Frozen seafood ^{abc}	100	63	0	22
Dairy				
Whole milk ^{ab}	100	100	68	76
Reduced-fat milk ^{ab}	100	100	30	48
Low-fat/non-fat milk ^{ab}	100	88	2	25

Variable change in height and weight in children and adolescents

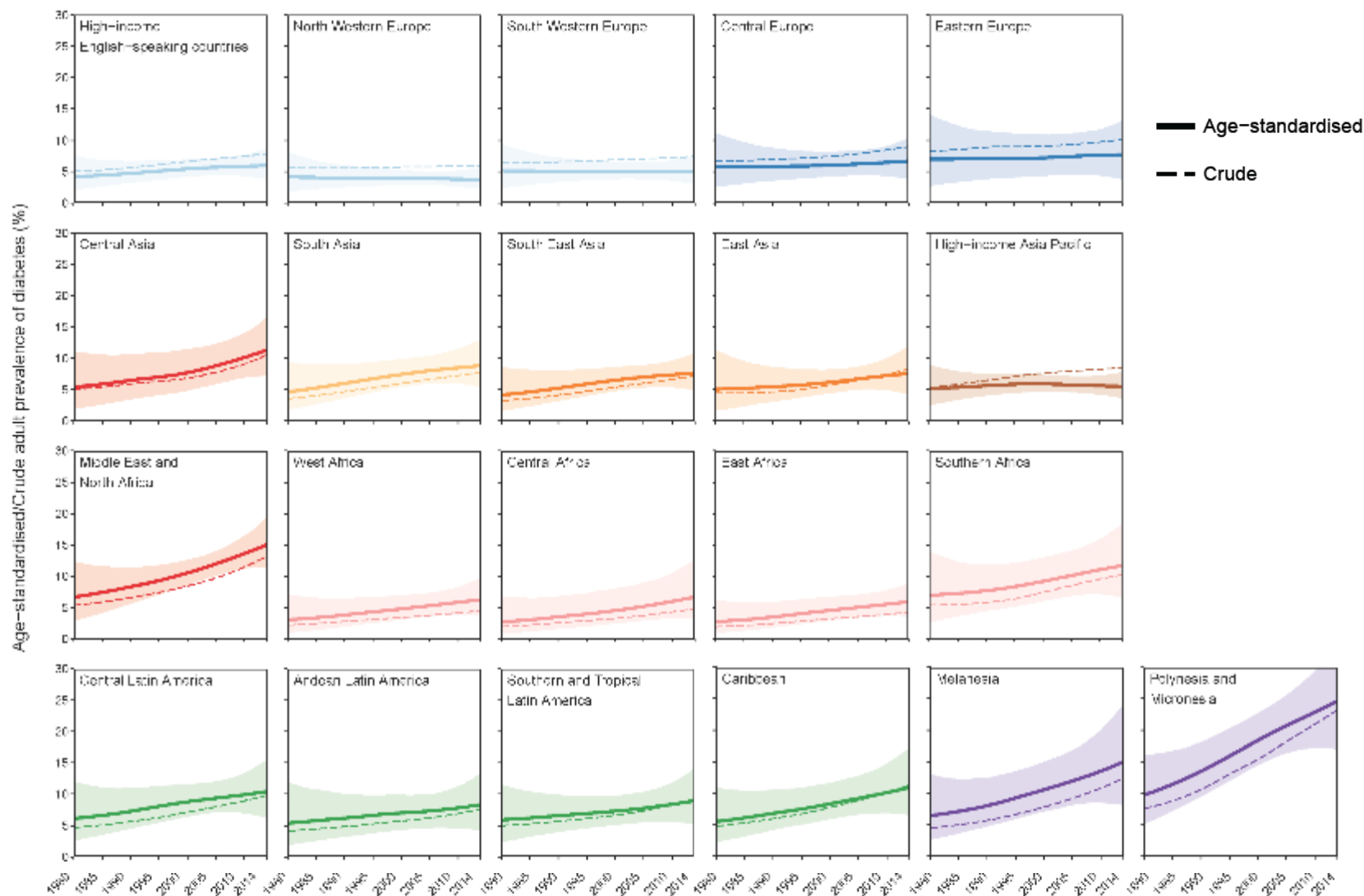
Girls



Boys



Diabetes also rising in most regions but not necessarily tracking BMI



No increase in the prevalence of known diabetes between 1986 and 1999 in subjects 25–64 years of age in northern Sweden

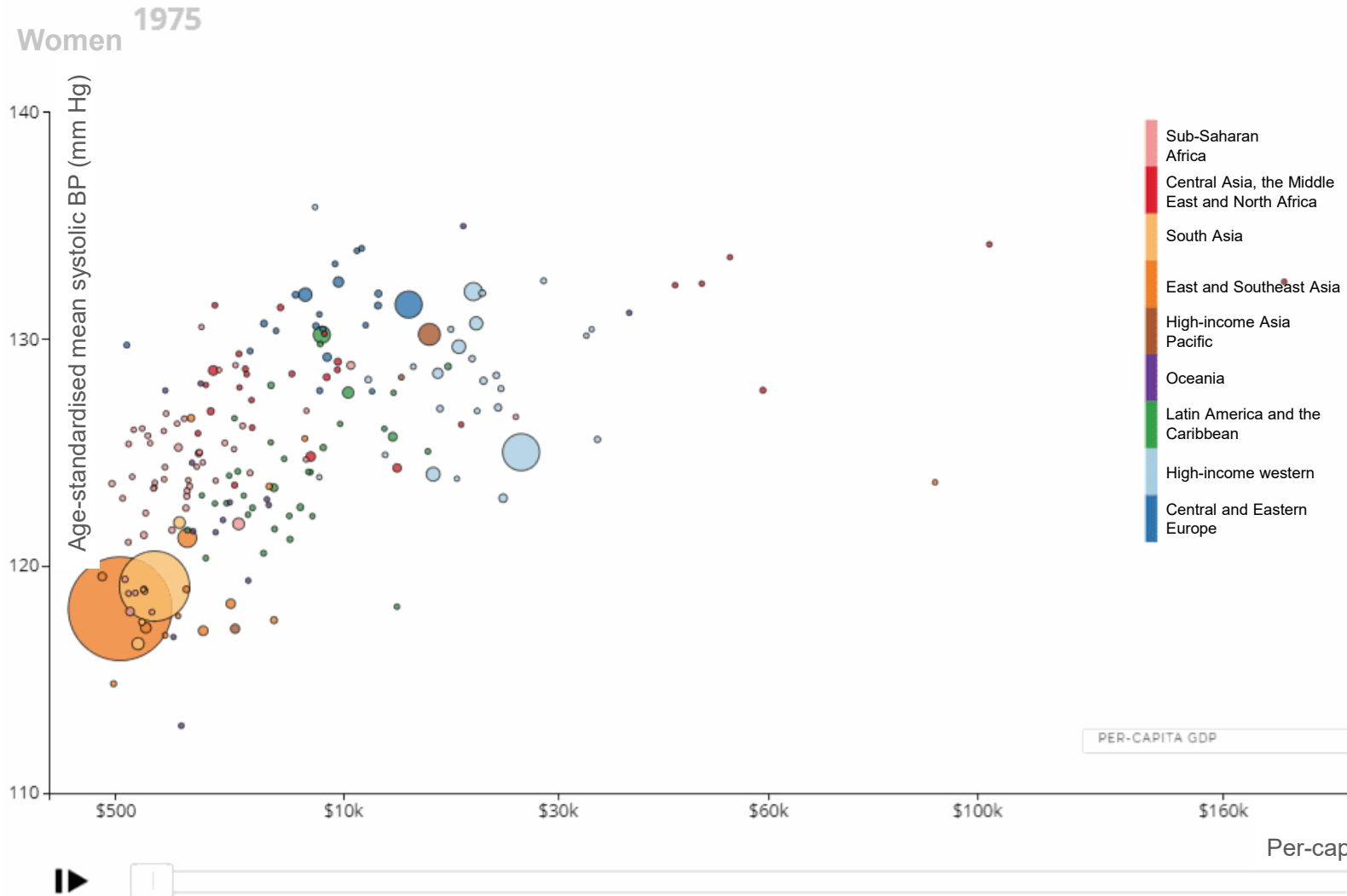
Results Over the time period 1986–1999 there was no increase in the prevalence of known diabetes. No trends were noted in the finding of previously undiagnosed diabetes or impaired glucose tolerance over the period 1986–1994, although the confidence intervals are wide. Fasting, but not post-load, glucose

Diabetes prevalence and association with social status—Widening of a social gradient? German national health surveys 1990–1992 and 1998

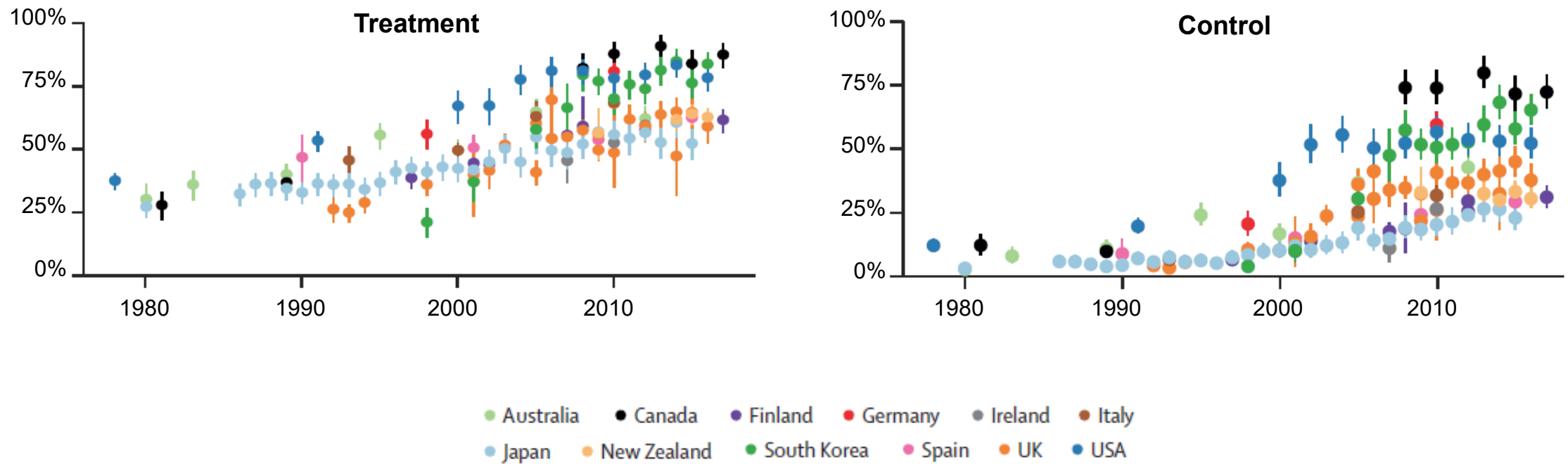
Results: Diabetes prevalences in 1990–1992 and 1998 were 5.1% (95% CI 4.1–6.0) and 4.3% (3.5–5.1) in men, and 4.7% (4.0–5.4) and 3.8% (3.0–4.6) in women. It was significantly higher in older subjects and in obese subjects, and tended to be higher in lower educated subjects. Overall, prevalence tended to be lower in 1998 compared to 1990–1992, however, not statistically significant after adjustment for education and BMI (odds ratio, 95% CI: men 0.73; 0.39–1.37; women 0.41; 0.17–1.03). On a descriptive level,

A diverging world for blood pressure

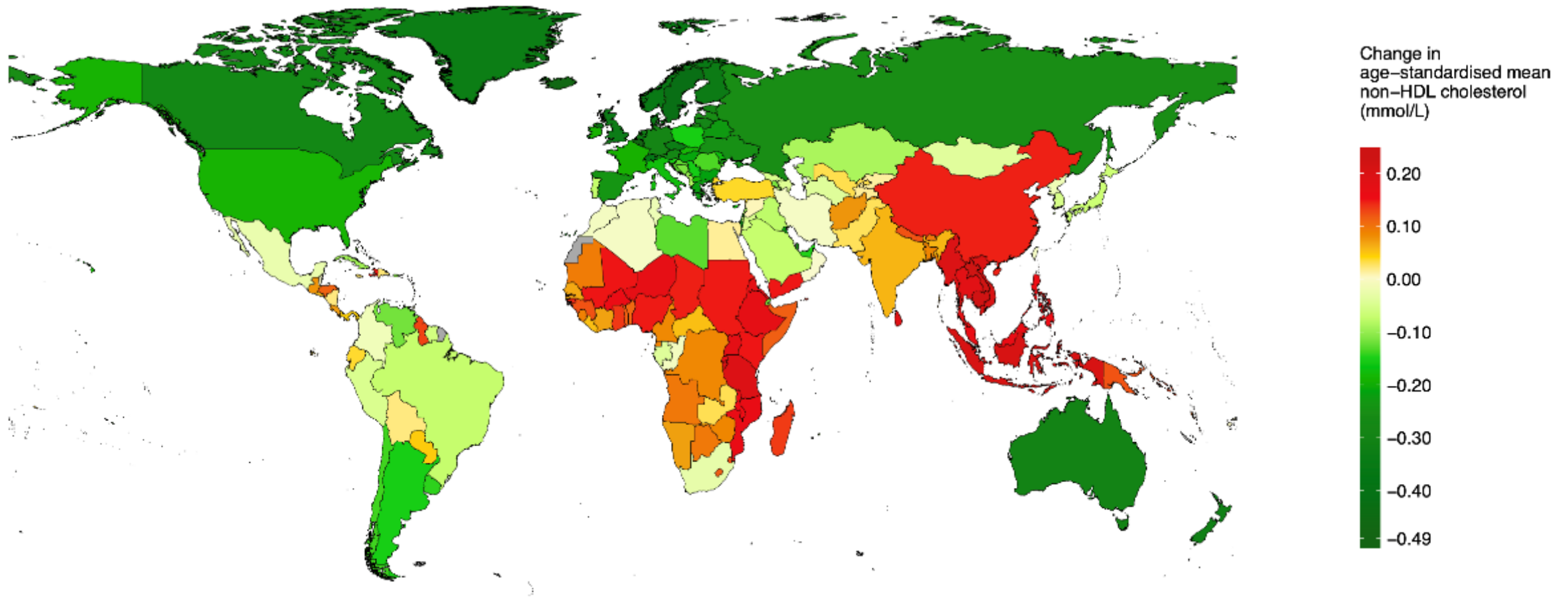
Blood pressure is now higher in low- and middle-income countries than in high-income countries



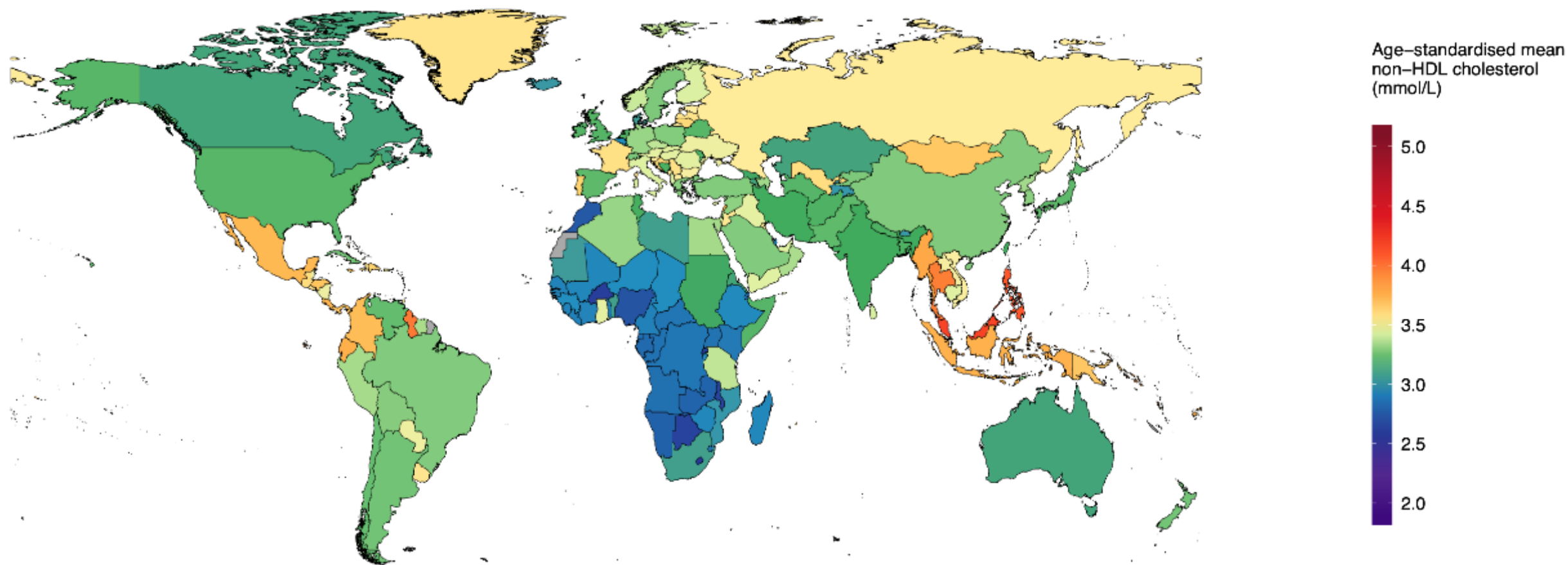
Hypertension treatment and control in 12 high-income countries (results shown for 60-69 year-old women)



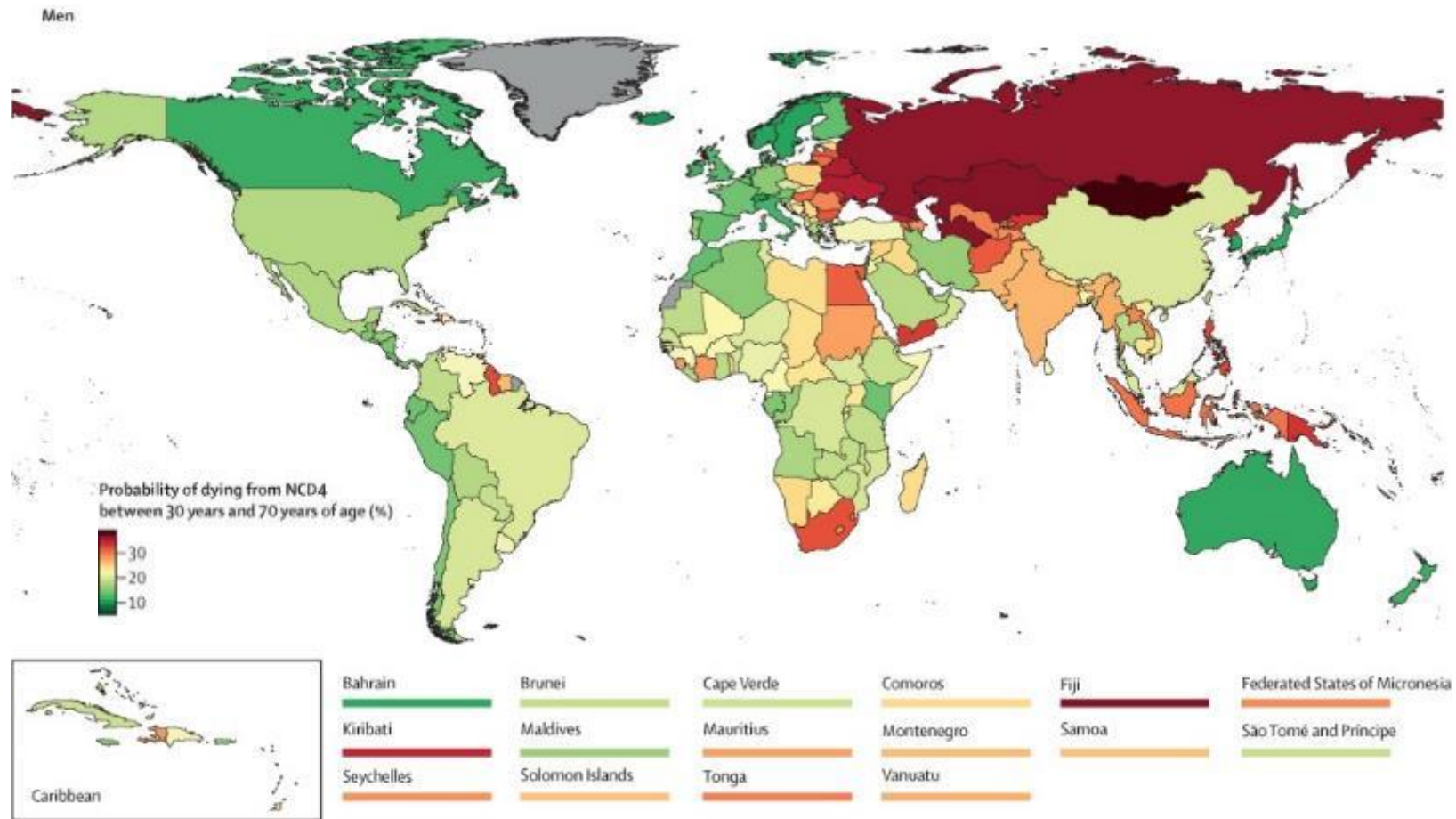
Change per decade in mean non-HDL cholesterol by country (women)



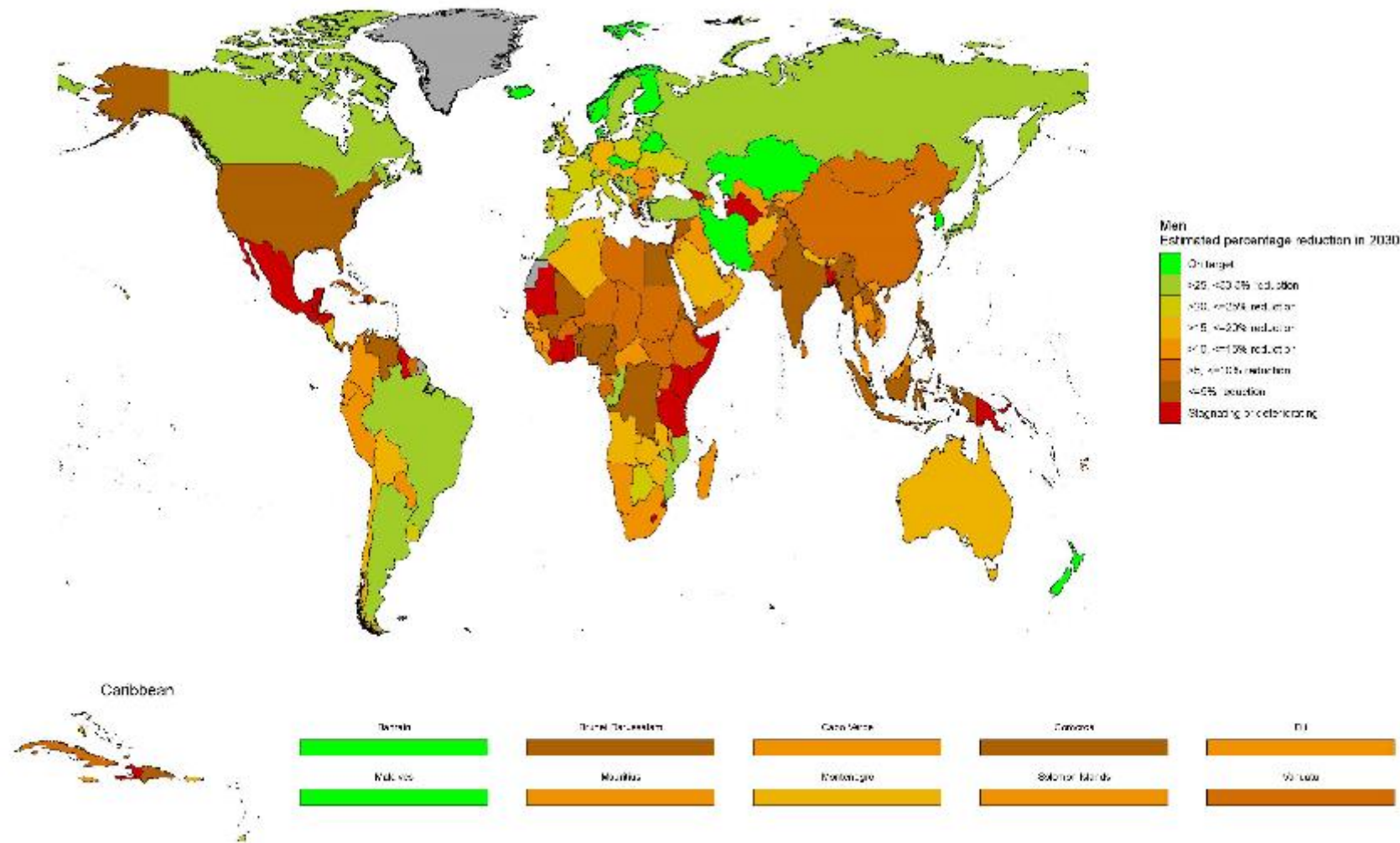
Mean non-HDL cholesterol by country in 2018 (women)



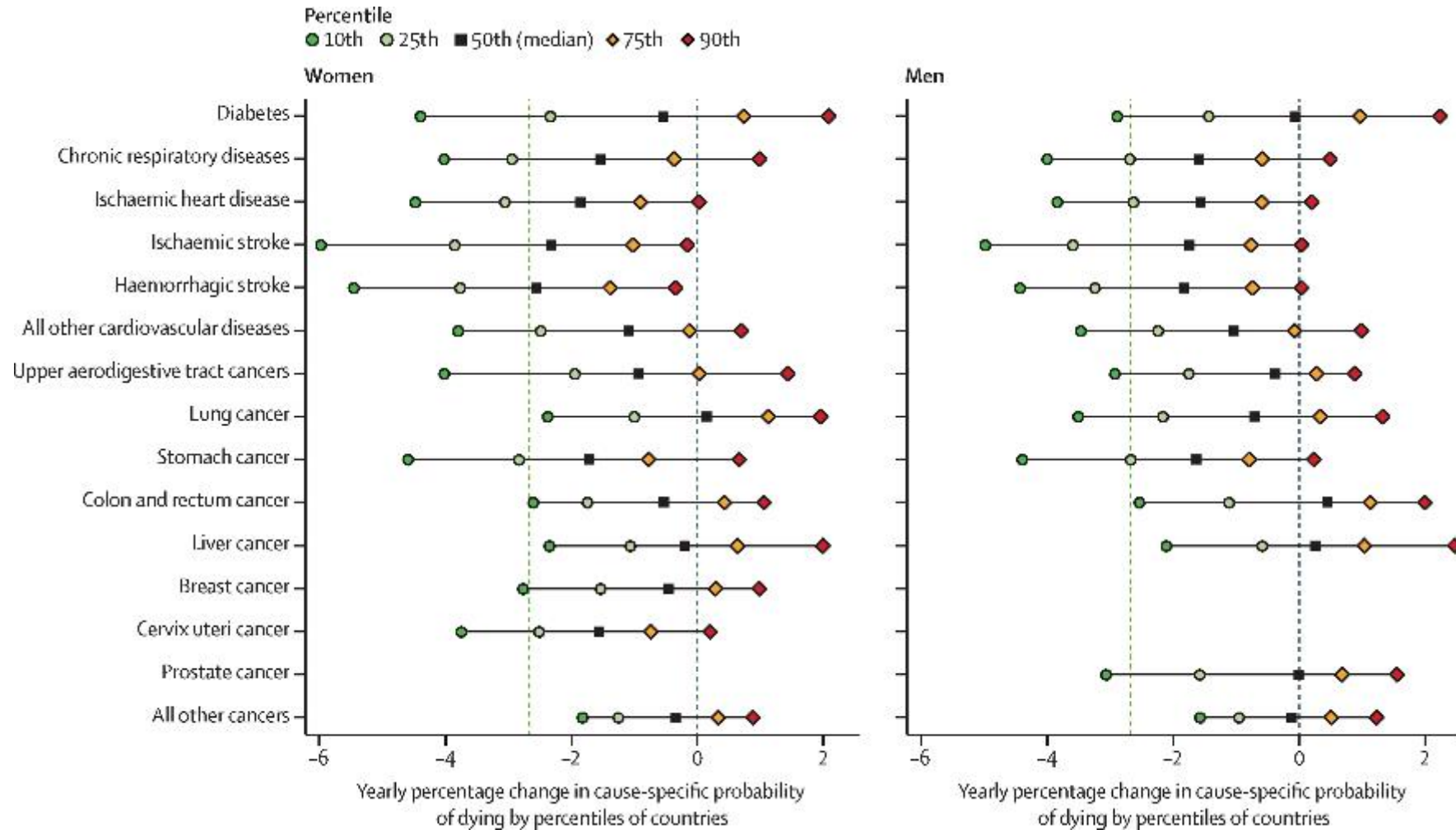
Low-and middle-income countries experience the highest risk of premature NCD mortality



Most countries are projected to miss the SDG target 3.4



Worldwide decline in cancers, diabetes, and vascular and respiratory diseases



Replicating success and accelerating progress

THE LANCET

Imperial College
London



NCD
Countdown
2030



NCD Alliance



World Health
Organization



NCD Countdown 2030: pathways to achieving Sustainable
Development Goal target 3.4

*NCD Countdown 2030 collaborators**

**NCD Countdown 2030: Efficient Pathways for Accelerated
Progress: Costs, and Resource Needs in Low- and Middle-
Income Countries**

NCD Countdown 2030 collaborators