

Socioeconomic disparities in health in the Maldives:

Results and Implications of an Analysis

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Social Determinants of Health

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Outline

- Country situation
- Response of the Maldives to the WHO Commission on Social Determinants of Health
- Study findings
 - Health system
 - Mortality
 - NCDs and NCD risk factors
- Implications for action

Country situation

The Maldives

- 1200 islands - 200 inhabited
- 300,000 inhabitants
- GDP per capita \$3,200 (2007) & rapid economic growth >7%
- Distance of atolls and islands major constraint to improving living standards and effective service delivery
- Significant government investment in health and education



Population below poverty line (Rf15/day)

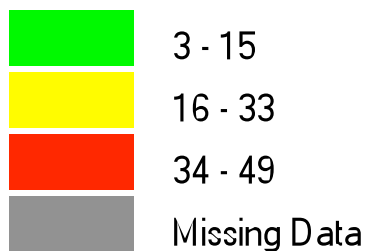


2000



2004

Percent

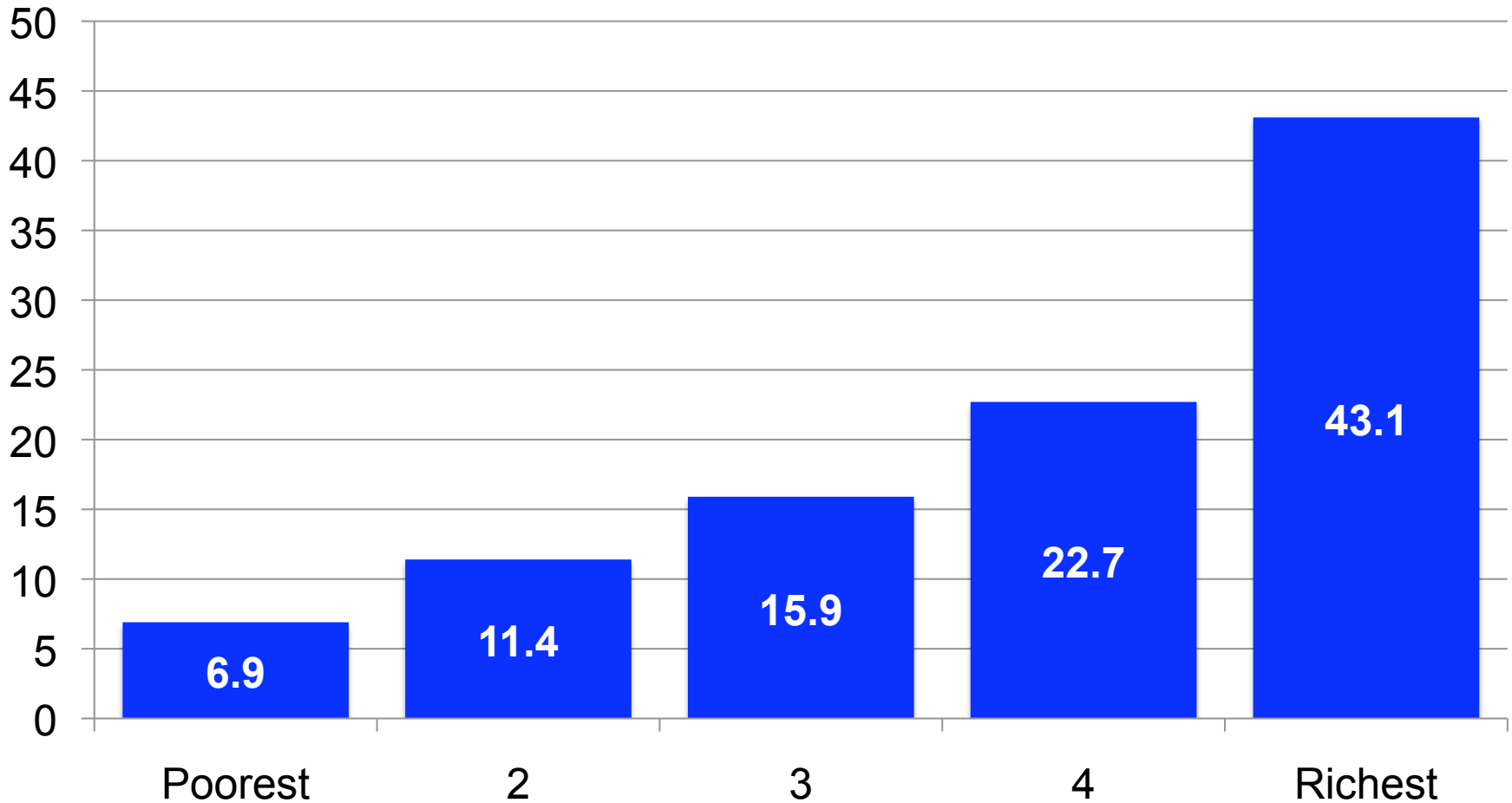


Gnaviyani Atoll

Seenu Atoll

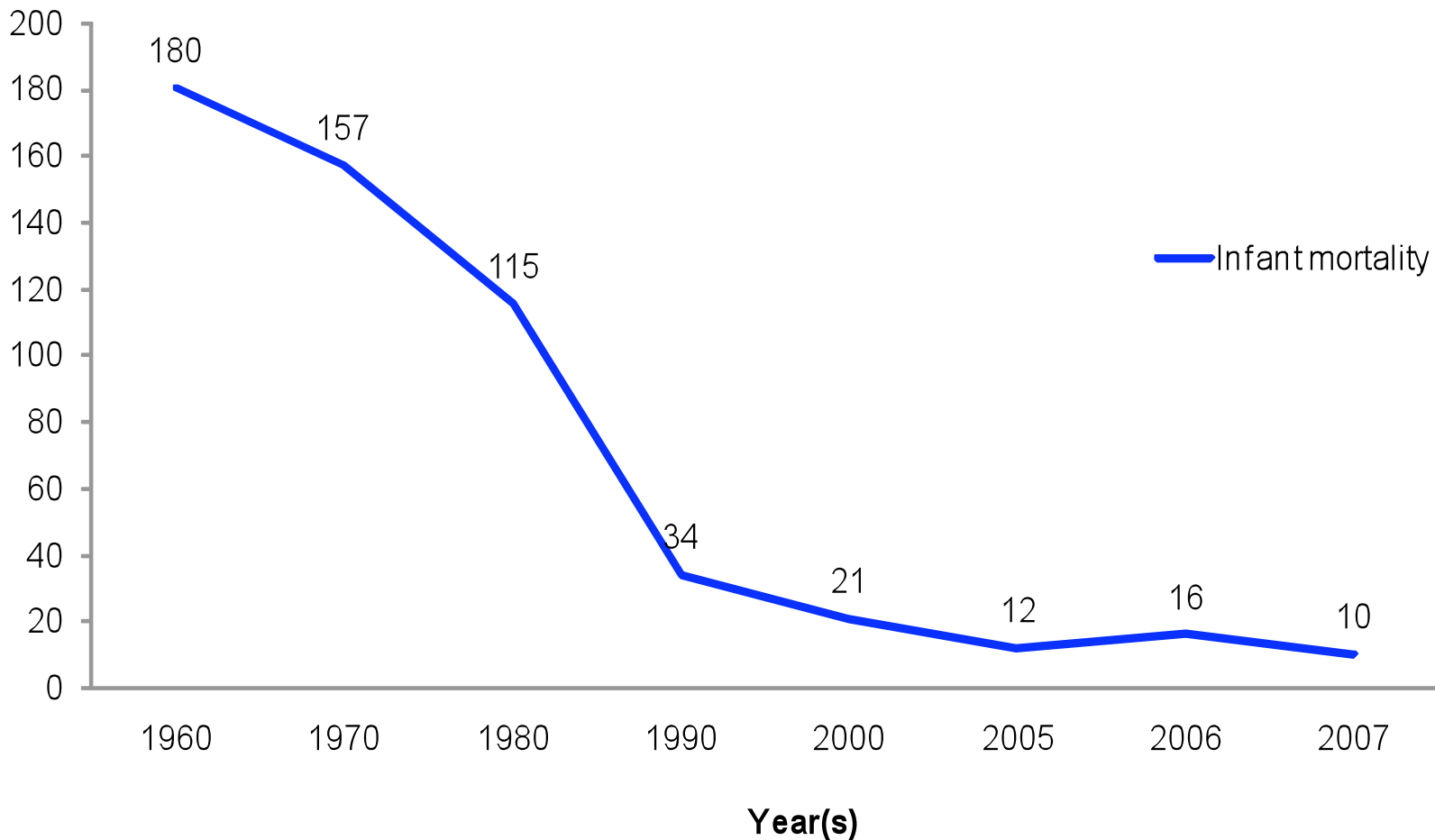
and high inequality in living standards

Percentage of total household consumption by household quintiles (%)



Rapid improvements in population health

Per '000 live births

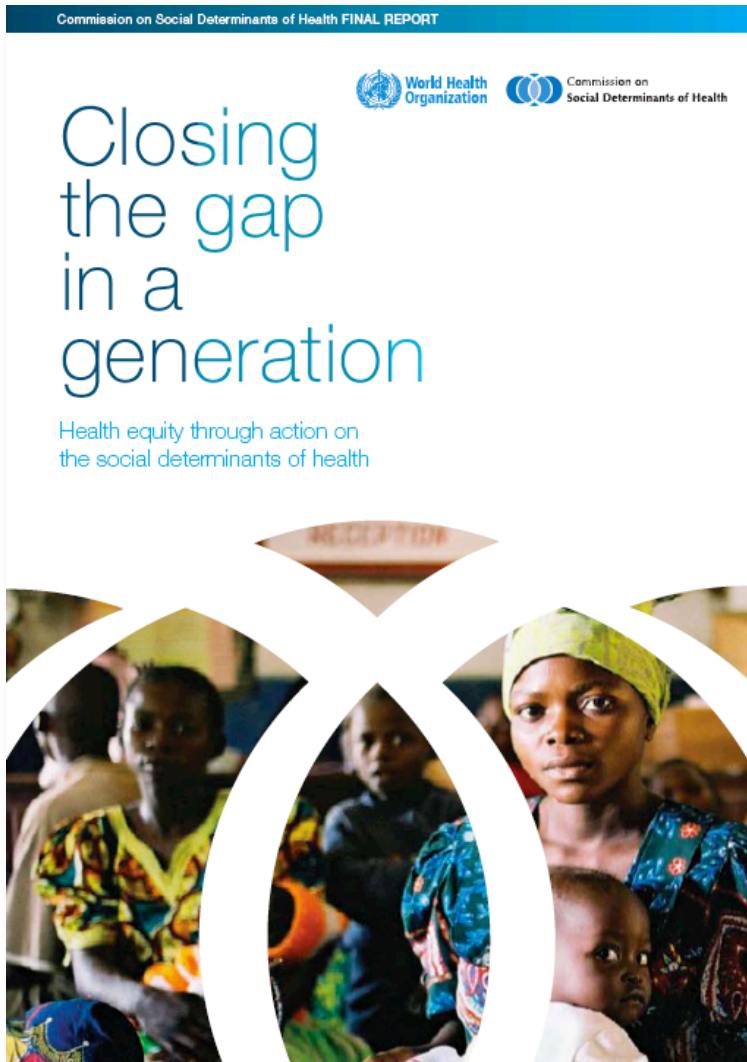


Maldives response to the WHO Commission on Social Determinants of Health



Commission on
Social Determinants of Health

WHO Commission on SDH Recommendations 2008



- 1. Improve Daily Living Conditions**
- 2. Tackle the Inequitable Distribution of Power, Money and Resources**
- 3. Measure and Understand the Problem and Assess the Impact of Action**

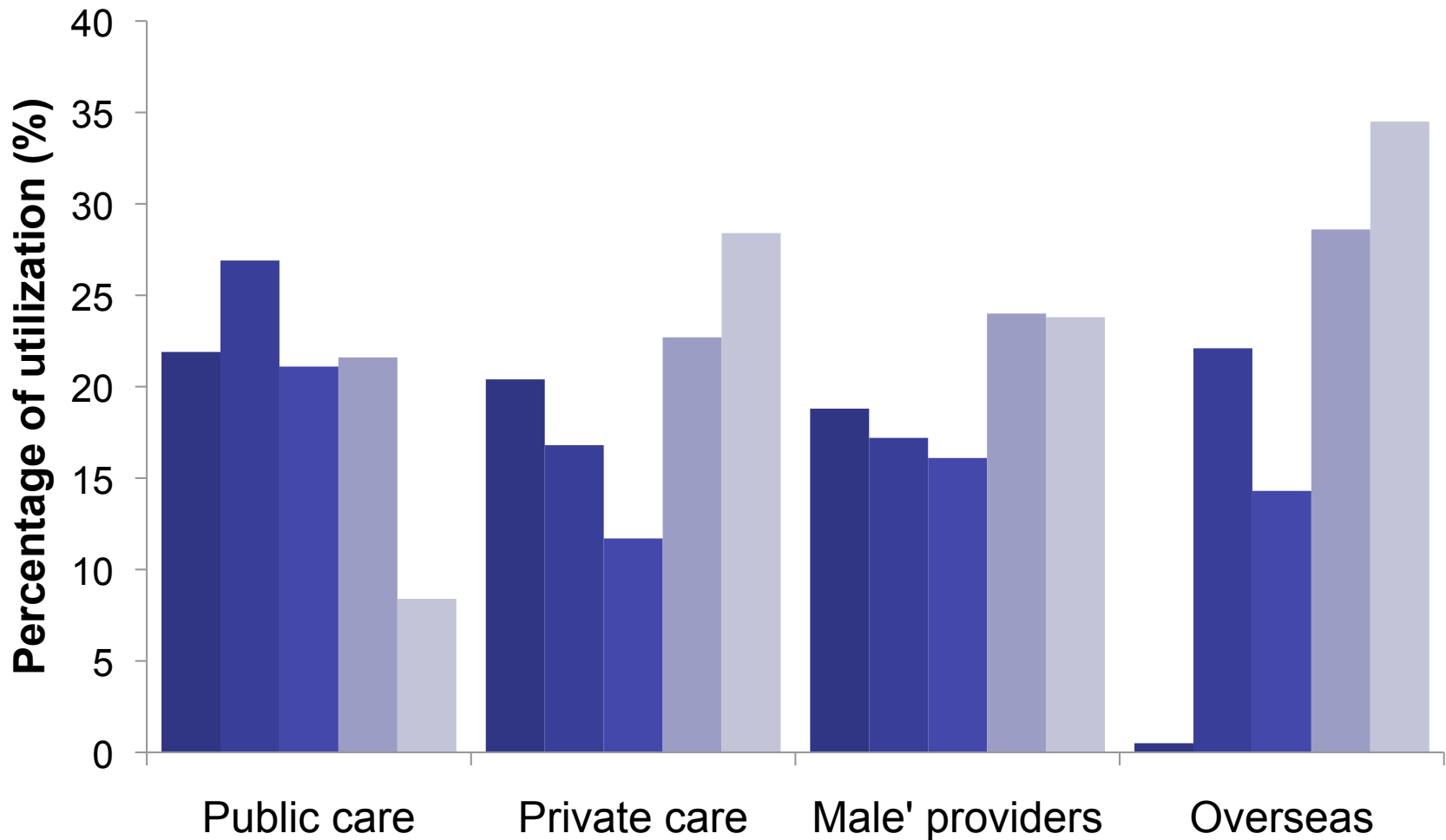
Study of socioeconomic disparities in health in the Maldives

- Objectives:
 - To assess using available data what disparities in health exist in the Maldives
 - To explore implications for policy and follow-up activity
- Approach
 - Analysis of existing data sources in country
 - National Population Census
 - MOHF Vital Registration System (VRS)
 - National household socioeconomic surveys (VPA)
 - STEPS Survey
 - Using established quantitative methods to measure disparities by Socioeconomic Status (SES), including concentration index (CI)

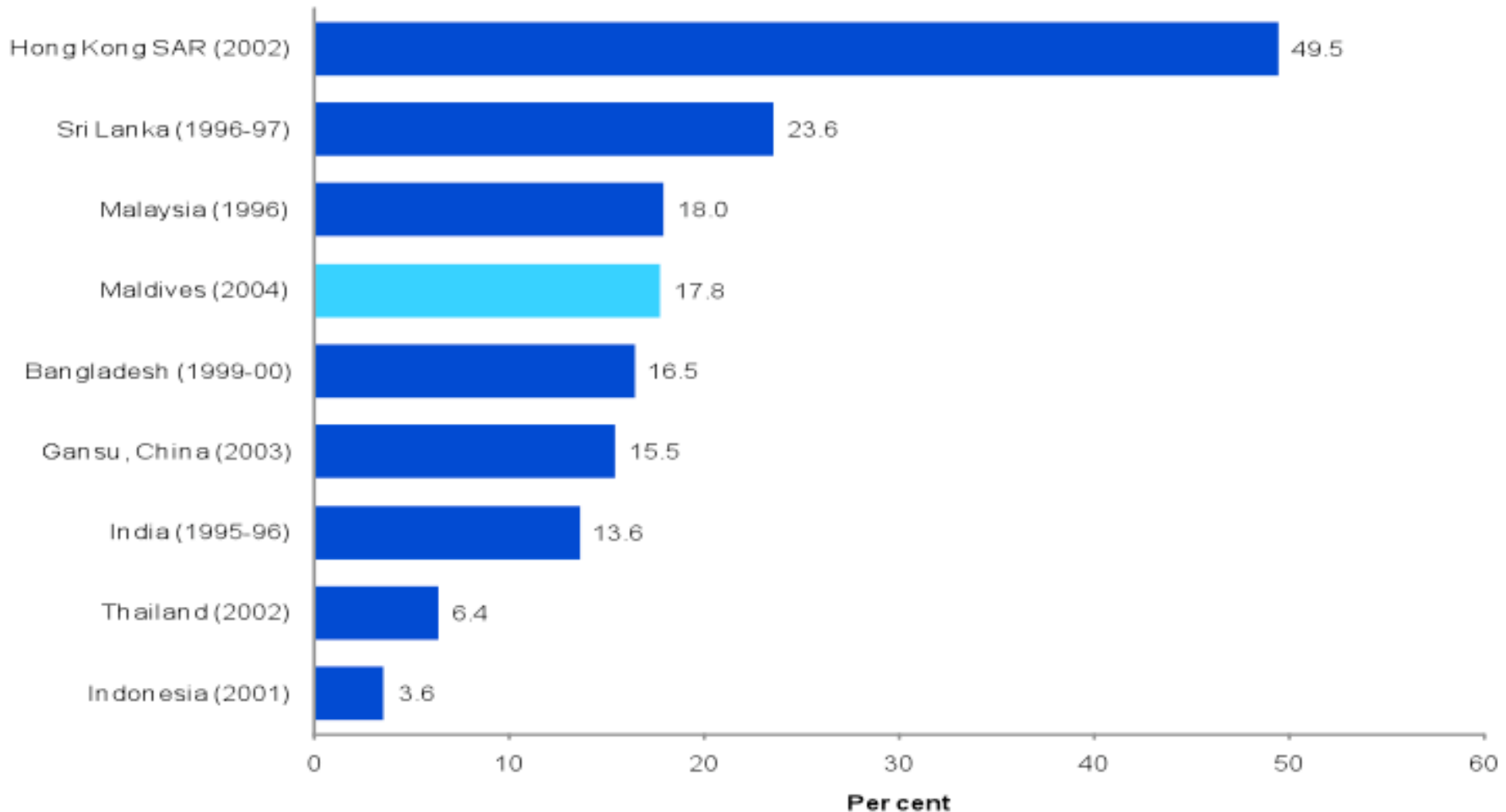
Findings: Health system inequalities, Maldives

Healthcare use:

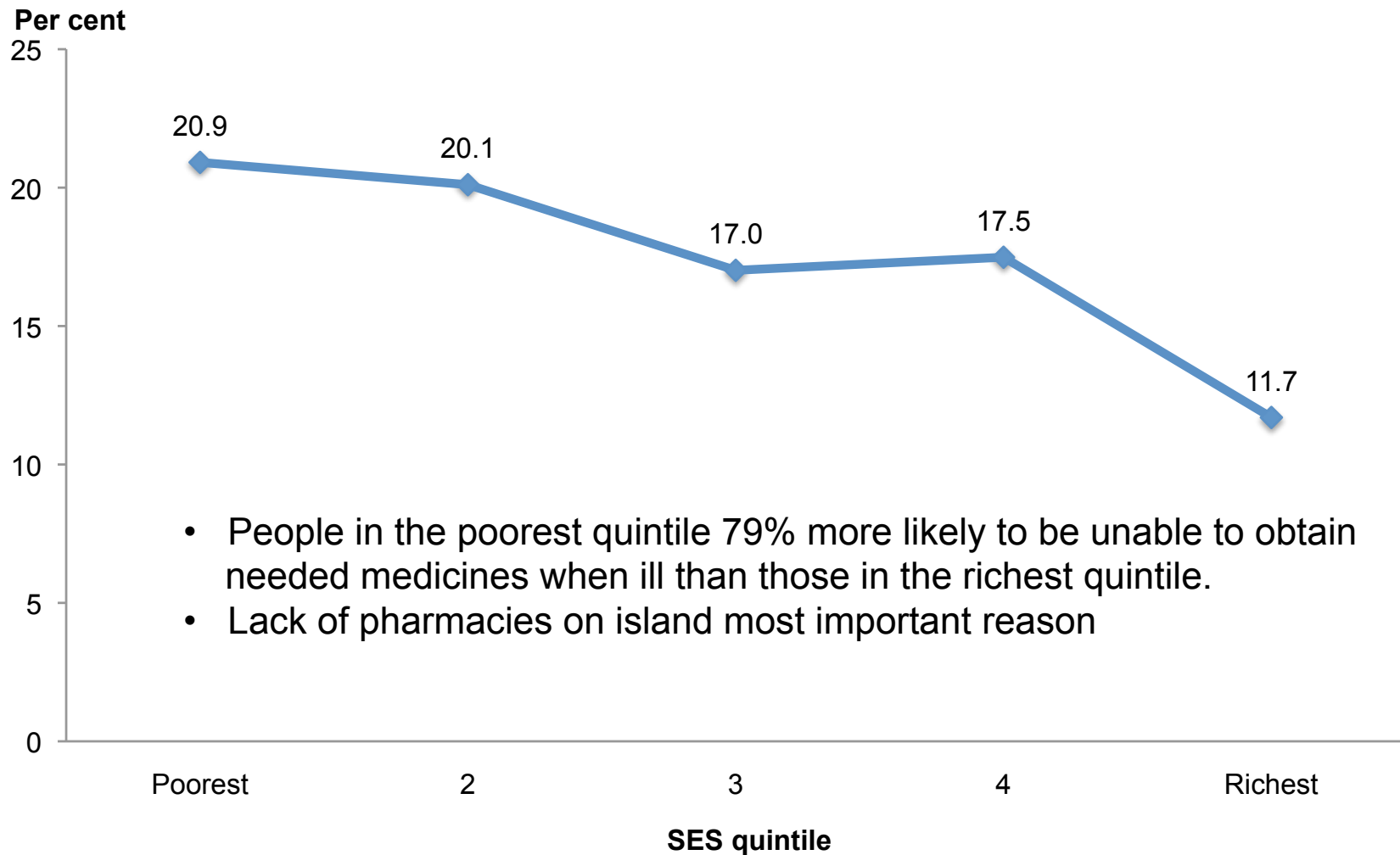
Public services pro-poor outside Male', but private care pro-rich



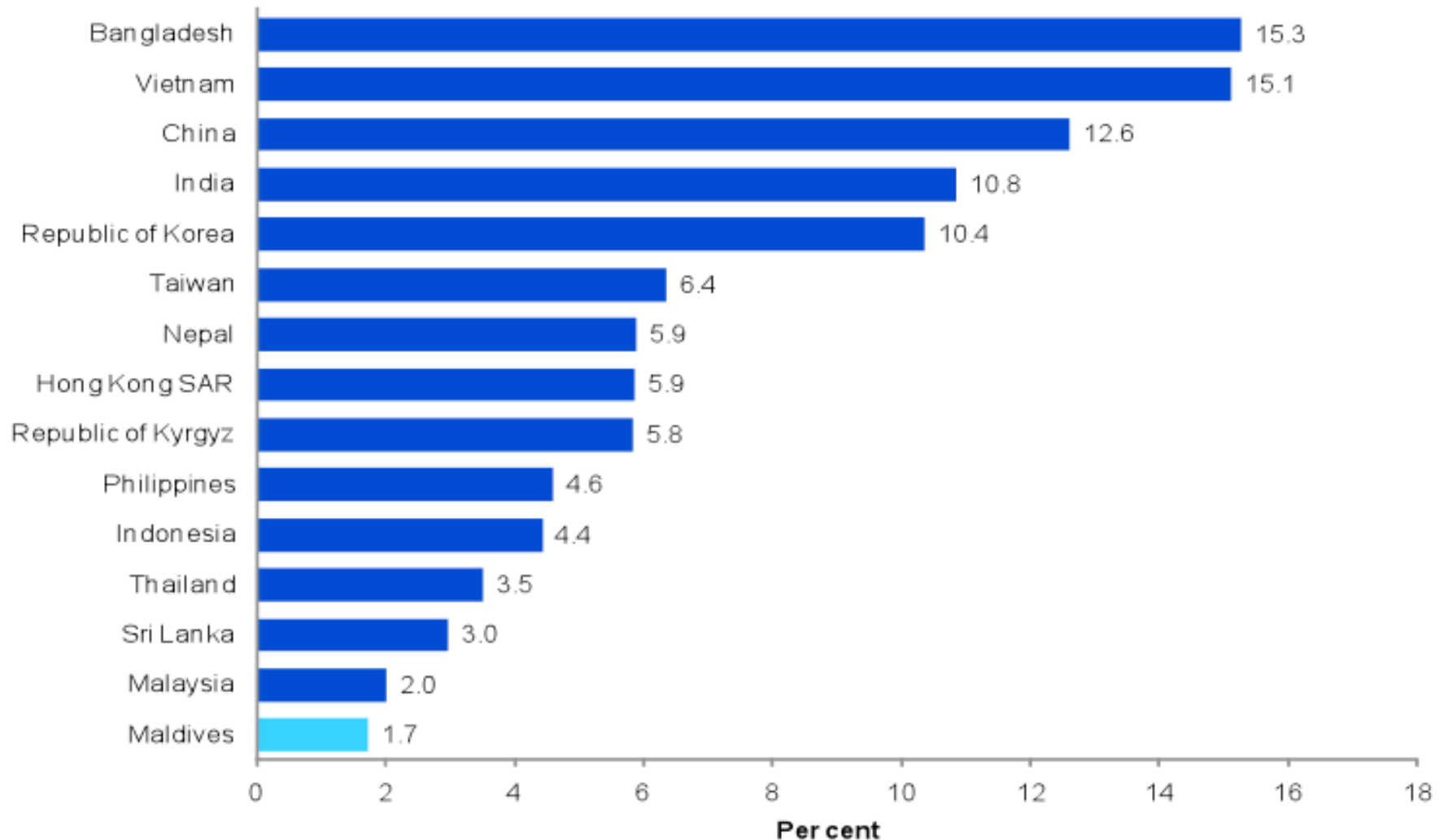
Percentage of healthcare use by poorest quintile (%)



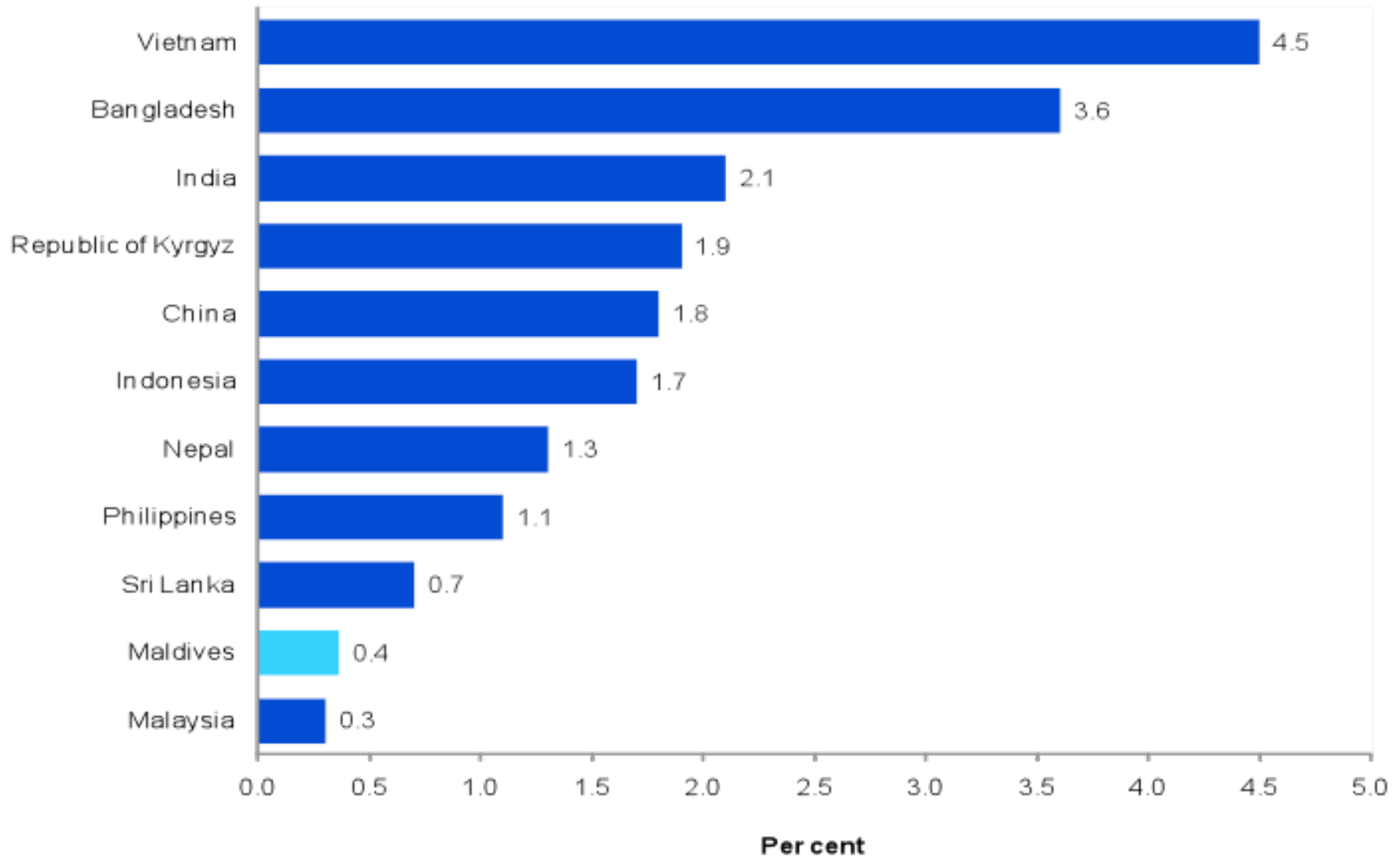
Percentage of people who did not obtain medicines when ill, by SES



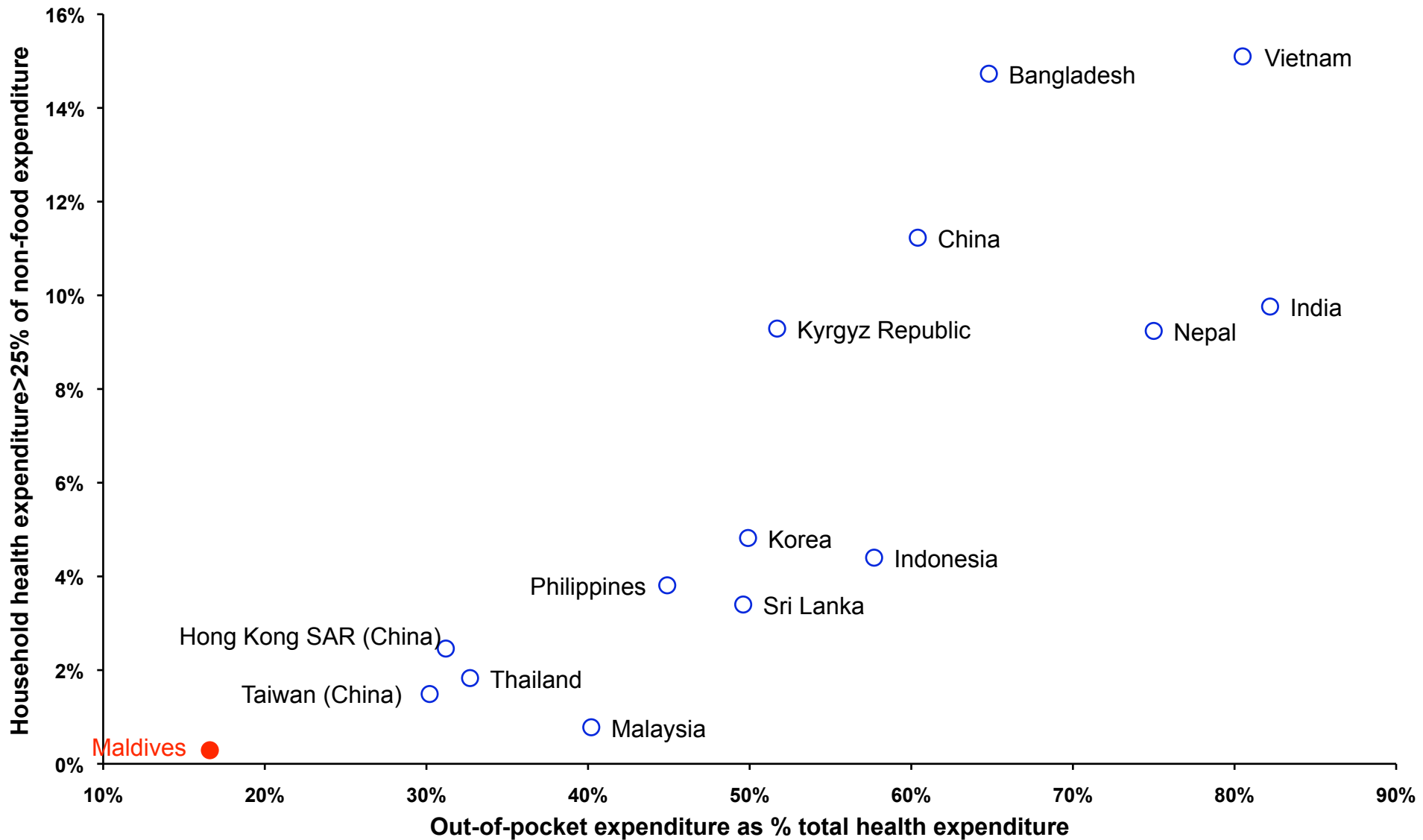
Catastrophic impact of spending on health: Households (%) spending more than 10% more than total consumption



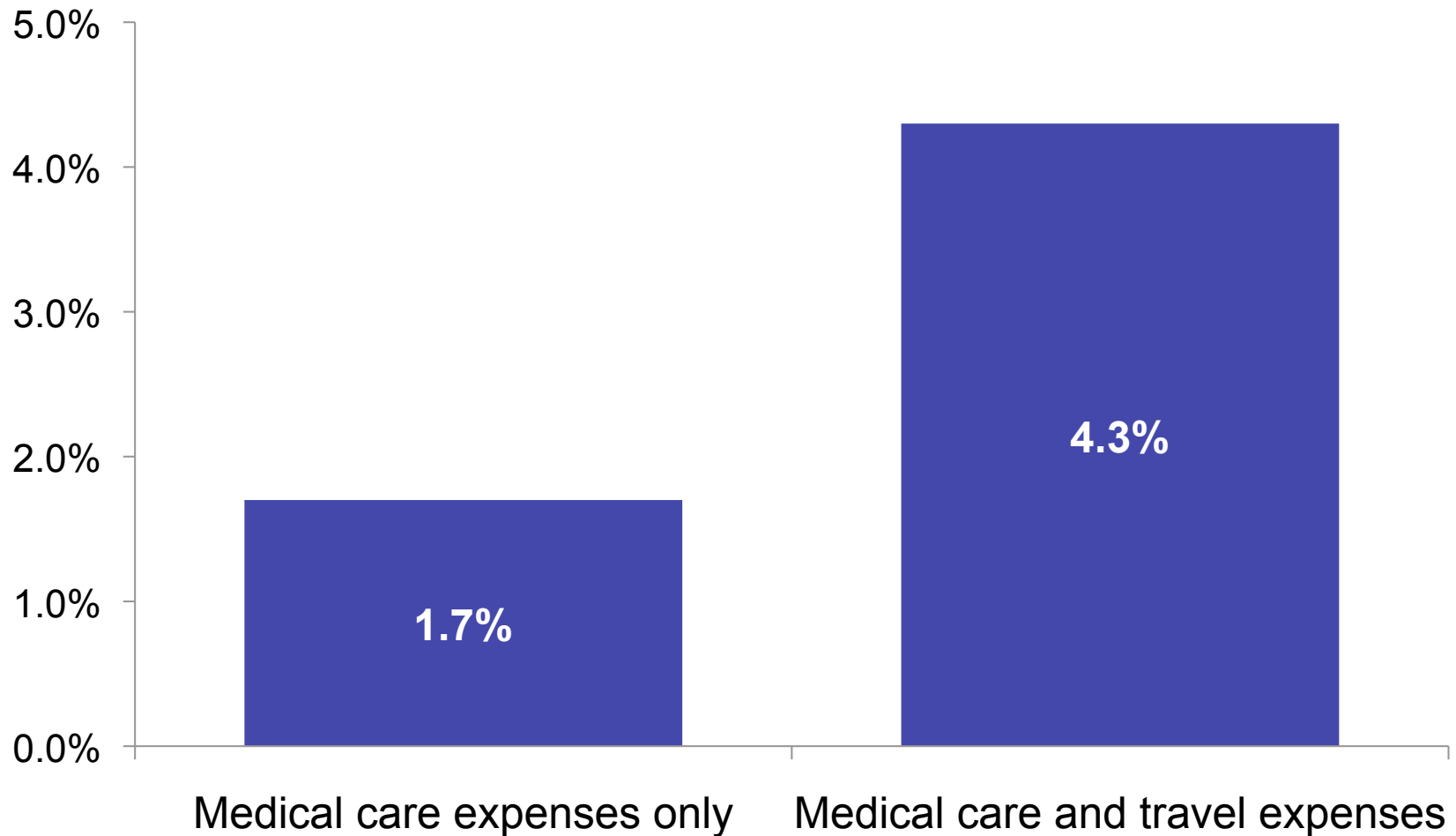
Impoverishing impact of spending on health: Households (%) impoverished at international \$2.15 poverty line



Relationship of incidence of catastrophic health impacts to reliance on out-of-pocket financing in health system



High catastrophic impacts from travel expenses



Summary points

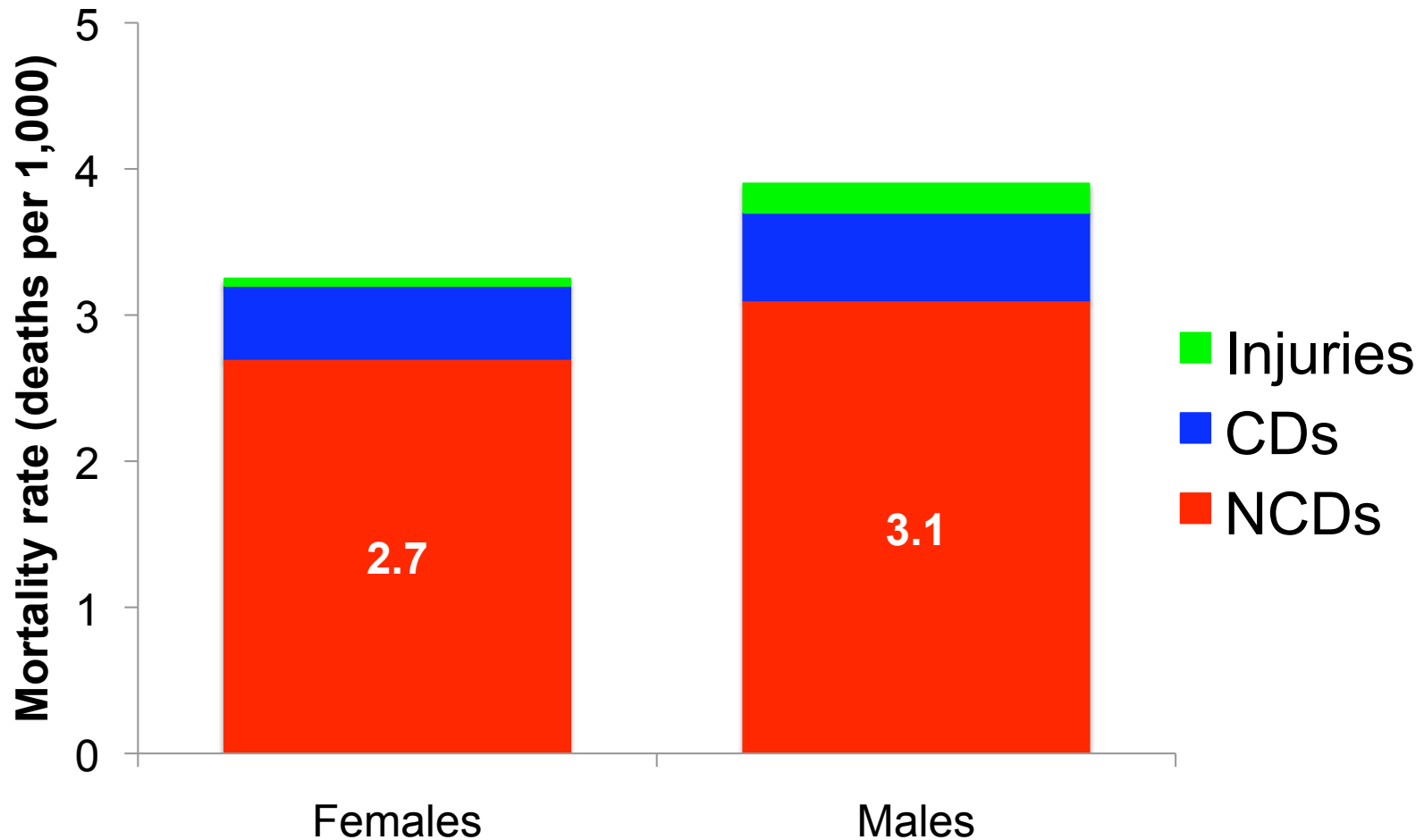
- Maldives does well by regional standards in reducing inequalities in access to medical care, and in ensuring risk protection
- Performance likely due to two reasons:
 - Commitment to public financing of healthcare and high levels of public expenditures
 - Investment in extensive public sector provision
- Problems that remain
 - Inequalities in access to specialist care
 - Gaps in risk protection owing to need to purchase medicines and travel

Findings: Disparities in mortality, Maldives

Approach to examining disparities in mortality

- Basis of approach
 - Similar to methods used in Australia, Japan, Sri Lanka
- Data source:
 - Vital Registration System (VRS)
 - Census 2006
- Method:
 - Using the Census 2006, each island ranked according to mean socioeconomic status of households
 - Standard mortality rates computed for each group of islands for 2005 & 2007-2008 (~3,000 deaths)

Higher total and NCD mortality in men than women



Mortality by SES

Findings

- Trends in mortality by SES small and not statistically significant
 - NCD mortality increase with SES
- Primary limitation in analysis was small number of deaths available for analysis ~3,219 in 3 years

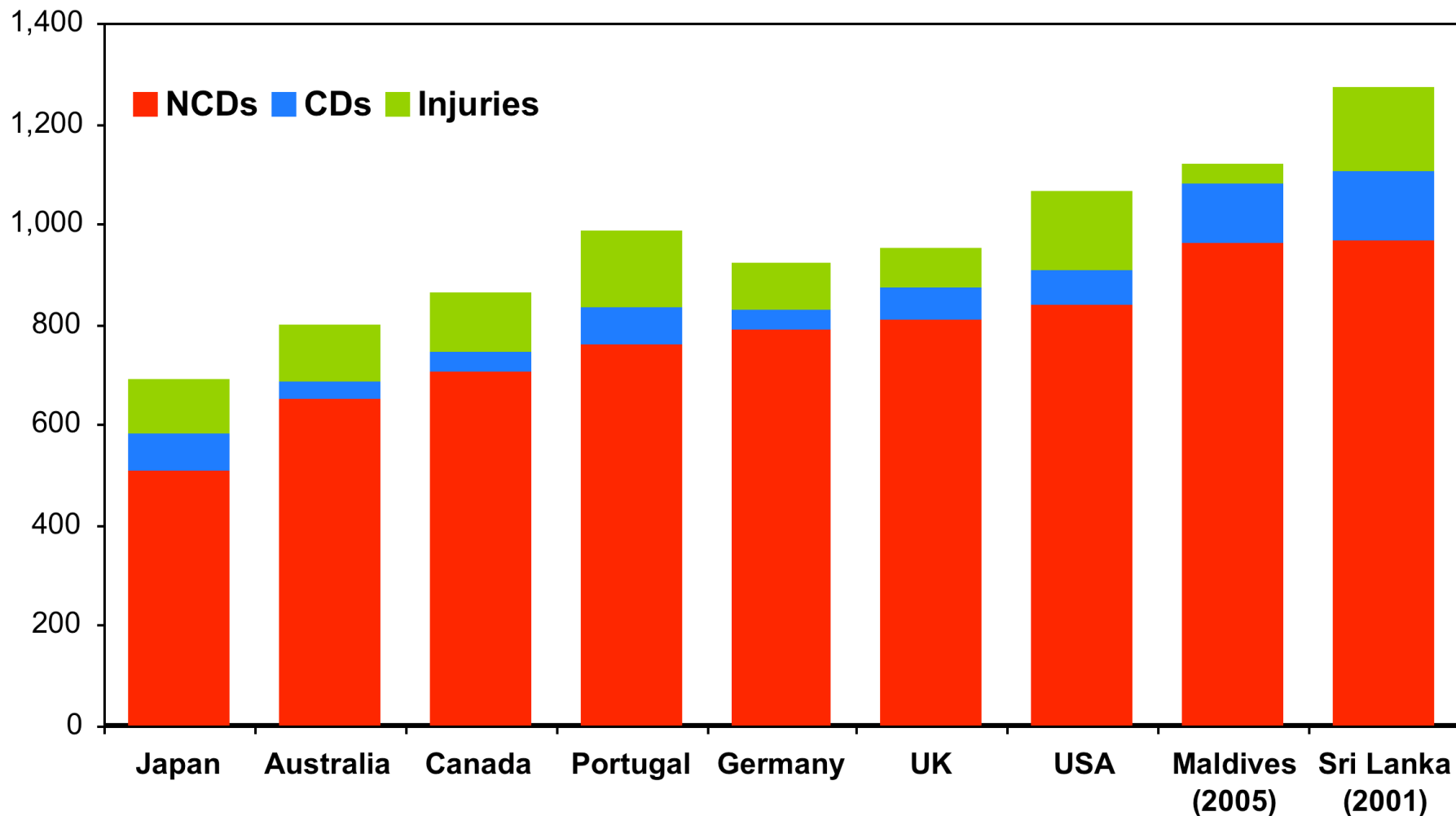
Recommendations

- Expand analysis to more years
- Improve death certification procedures

Findings: NCDs and NCD risks in Male', 2004

Mortality rates for NCDs in Maldives higher than in developed countries –

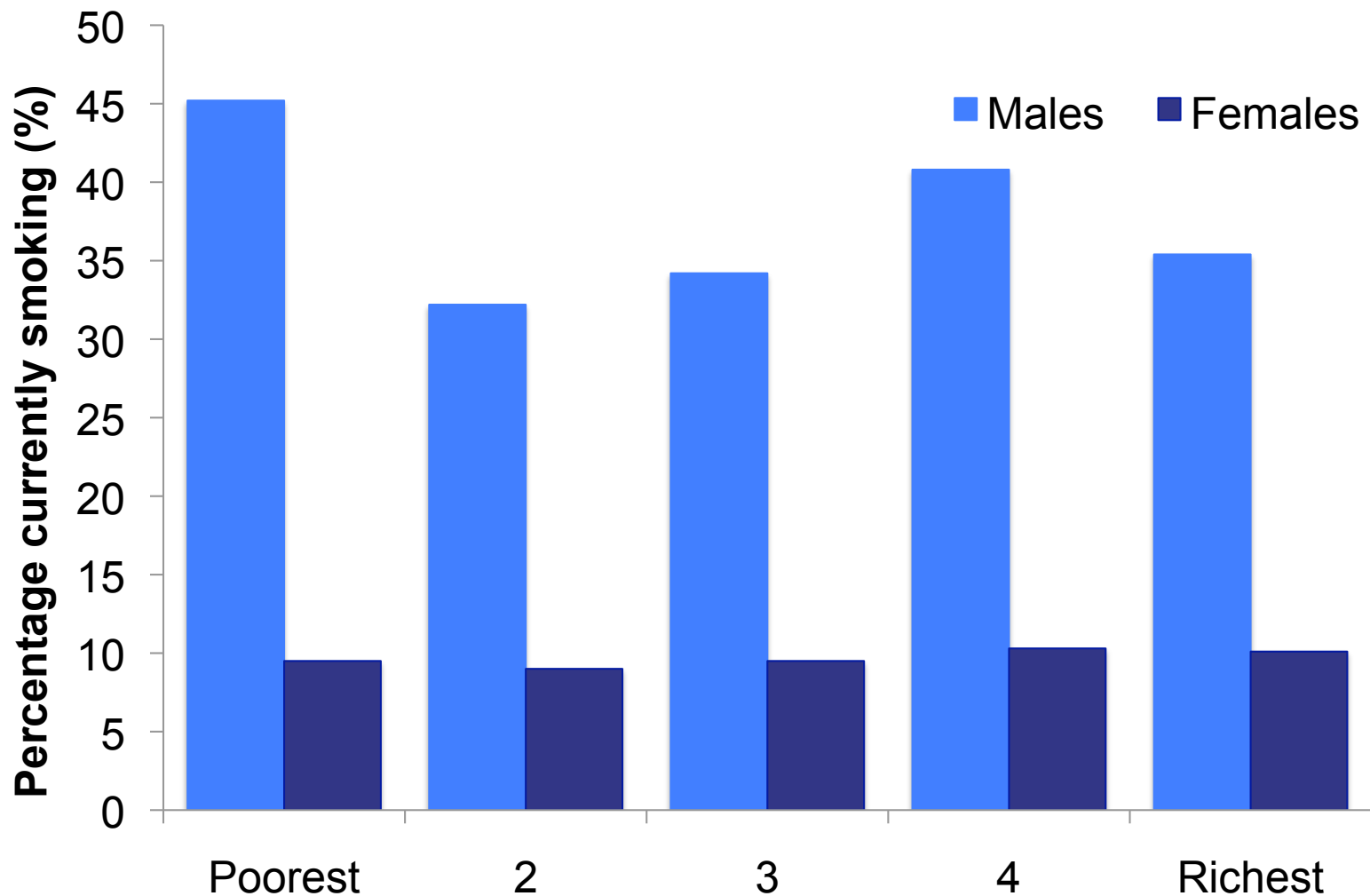
NCD deaths >80% of all deaths



What we know about social disparities in NCDs

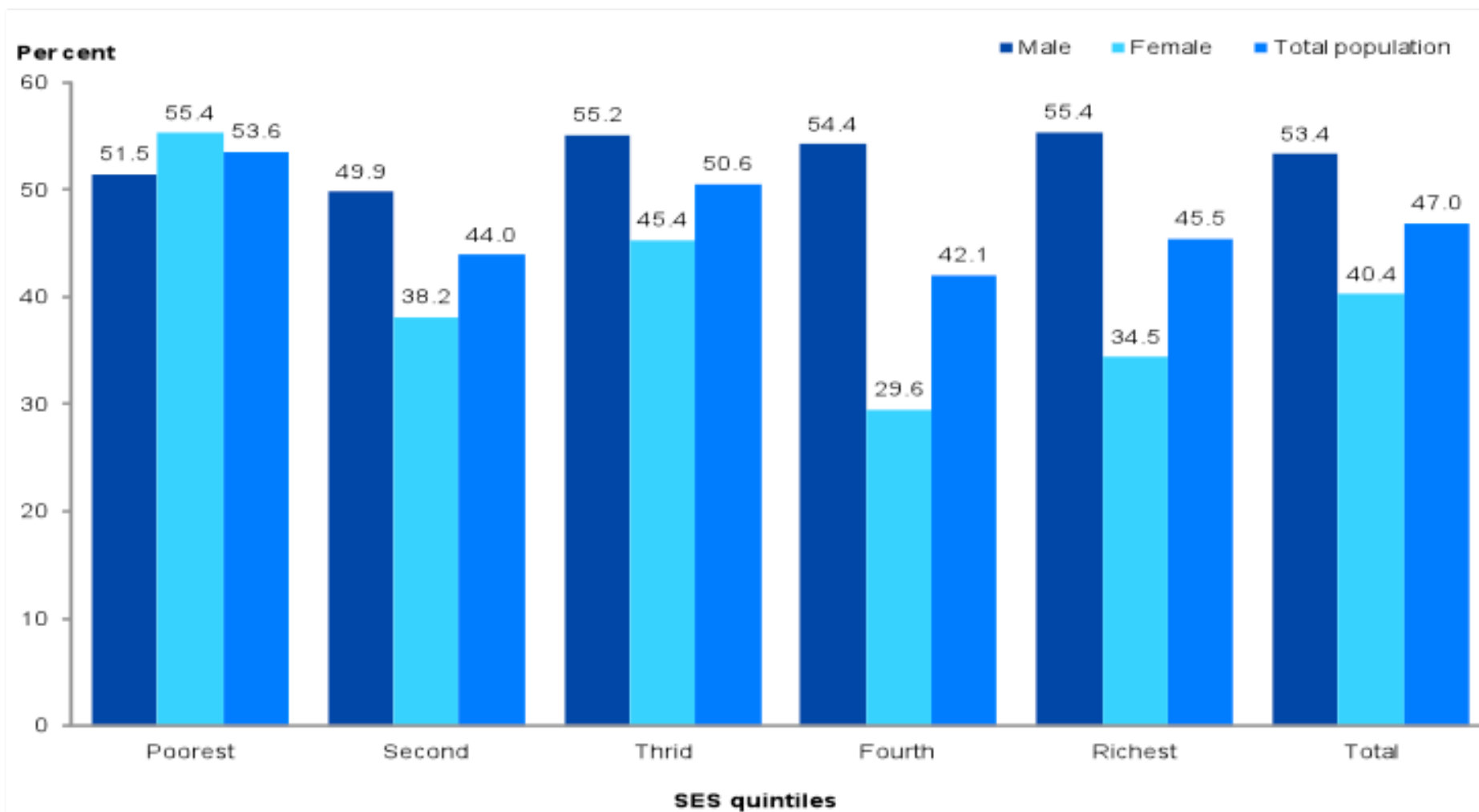
- Global transitions in burdens of NCDs
 - Initial burden highest in richest countries, and higher amongst better-off
 - NCD mortality rates increasingly higher in developing countries
 - NCD burdens in developed countries now concentrated amongst poor and disadvantaged
- Developing countries
 - Evidence limited, but Indian data indicate NCDs increase with income and urbanization

Smoking: Higher in men, and in poorer adults



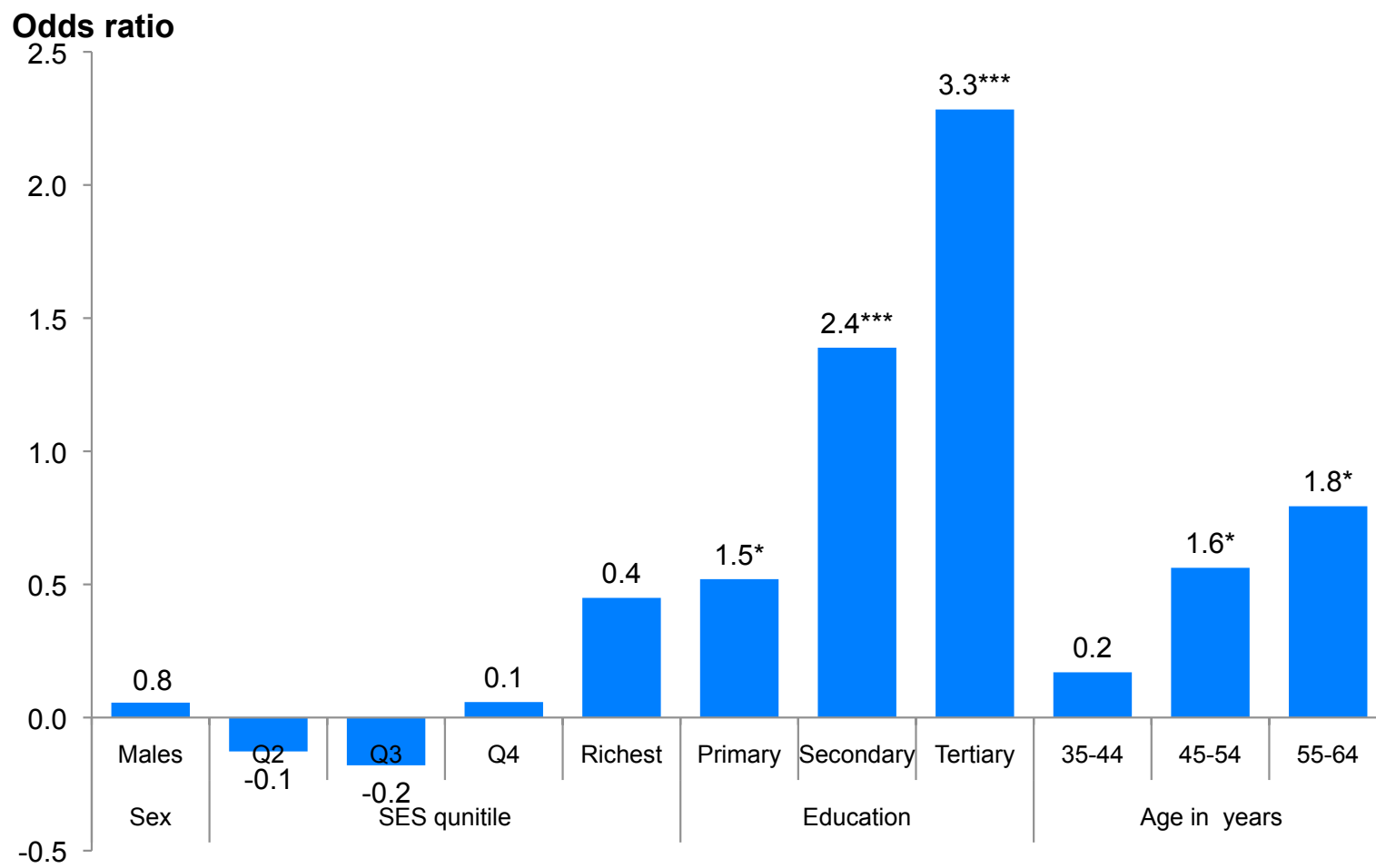
Lipids: Triglycerides/HDL-C > 5

Higher in men, and in poorer men



Adequate intake of fruit & vegetables

Higher in men, and strongly related to education



Other risk factors

- Physical inactivity
 - Increases with education, not SES
- Obesity/overweight
 - Increases with education and higher in men
- Diabetes, hypertension
 - No evident gradient and no evidence of higher rates in better off adults
- Future risk of heart disease and stroke
 - Future risk of disease higher in poorer adults

Summary points

- Pattern of NCDs appears to be changing from being higher in richer groups to higher highest in poor and least educated
 - Developing country pattern > Developed country pattern
- Education often a key mediator
- Reducing disparities will require:
 - Health promotion – but will reach poor less
 - Expanded treatment and care
 - Investment in healthier environment

Implications

Key messages

- Health system
 - Public financing of healthcare has worked well, but gaps remain
 - Further improvements will require extension of public financing to cover medicines and travel, and expansion of infrastructure in atolls
- NCDs
 - Pattern shifting towards a developed country pattern, where NCDs concentrated in poor and disadvantaged
 - Response must combine both prevention and treatment