EUROPEAN PUBLIC HEALTH CONFERENCE

Formulation of Policy Recommendations for Non-communicable Diseases (NCDs) among Urban Poor in Bangladesh

Process of Knowledge Synthesis

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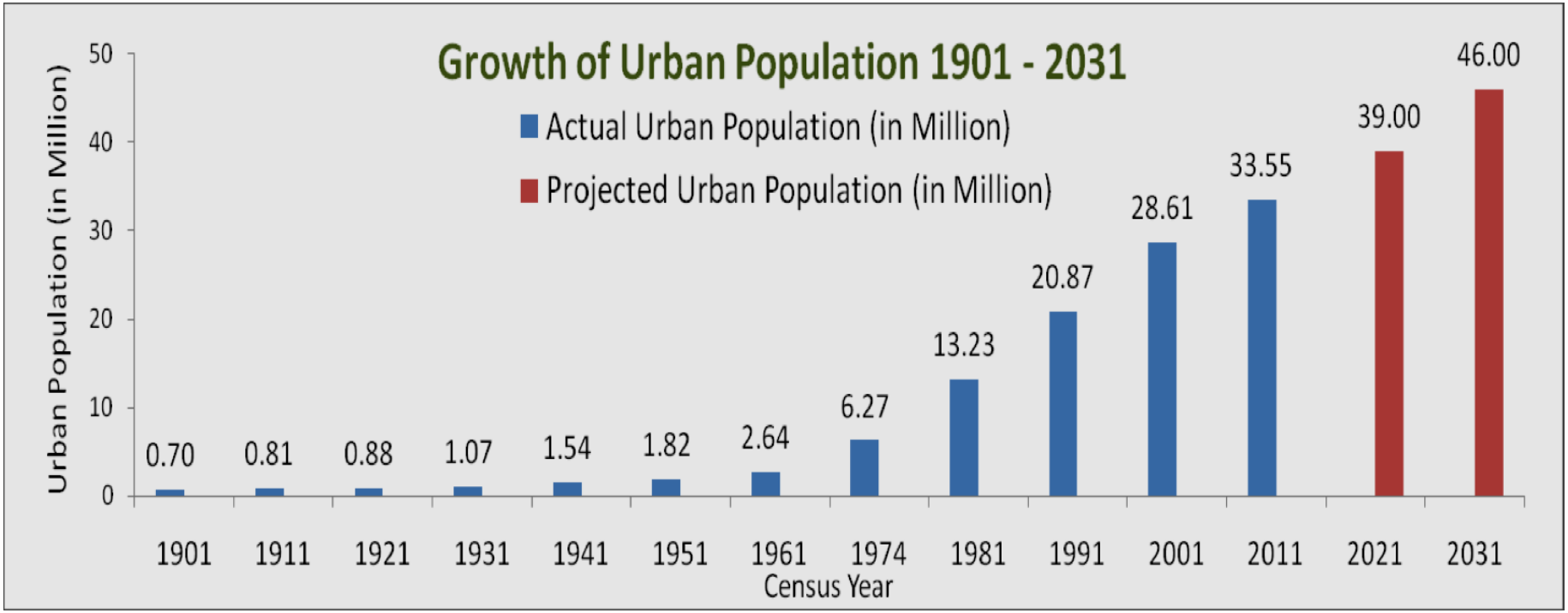
Outline

- ❑ Trends in Urbanization in Bangladesh
- ❑ Health impact of urbanization
- ❑ Non-communicable diseases (NCDs) among Urban poor
- ❑ Health service delivery for urban poor
- ❑ Challenges

Urbanization: Bangladesh scenario

Urban growth in Bangladesh



- **Bangladesh is urbanizing very rapidly**
- **Rate of urbanization: approximately 3% per year**

(Source: UNFPA 2011)

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Highest growth rate in slum settlements

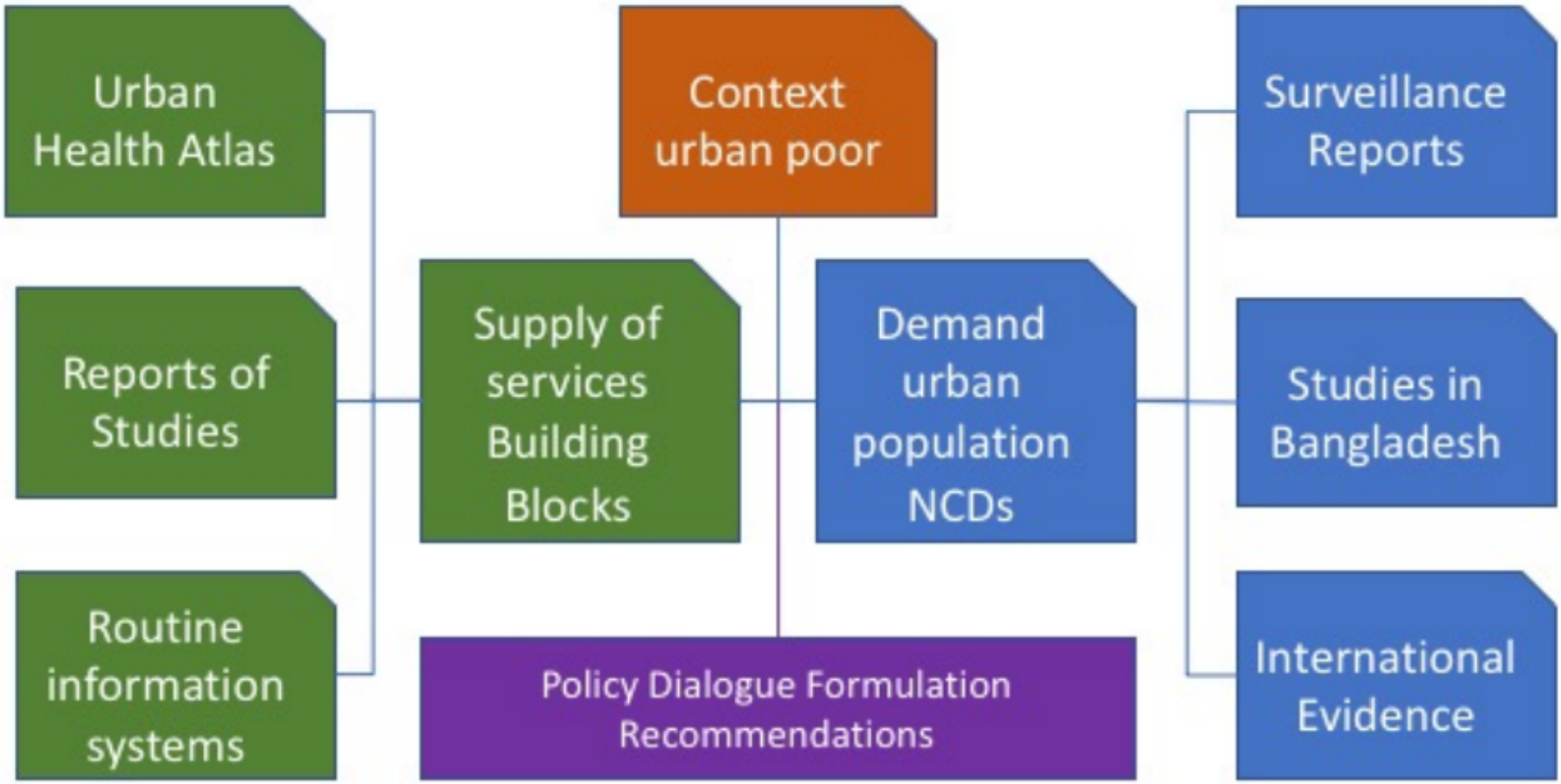
- By 2040, over **50% of** Bangladesh's population **will live in urban areas**
- Higher growth in **slum settlements** (7% per year)

(Source: UNFPA 2014)

Health impacts of urbanization

- **Direct health hazards**
  - **Pollution, natural disasters, road traffic injuries, contaminated water supply, crowding and poor housing**
- **Indirect health hazards**
  - **Unhealthy diet- fast food, formalin in food, rising costs**
  - **Lifestyle & habit- no open space, no physical exercise, smoking tobacco, substance abuse**

Knowledge Synthesis



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Trends of under- and overweight among rural and urban poor women indicate the double burden of malnutrition in Bangladesh

Sohana Shafique,[1]* Nasima Akhter,[1] Gudrun Stallkamp,[1] Saskia de Pee,[2] Dora Panagides[3] and Martin W Bloem[4]

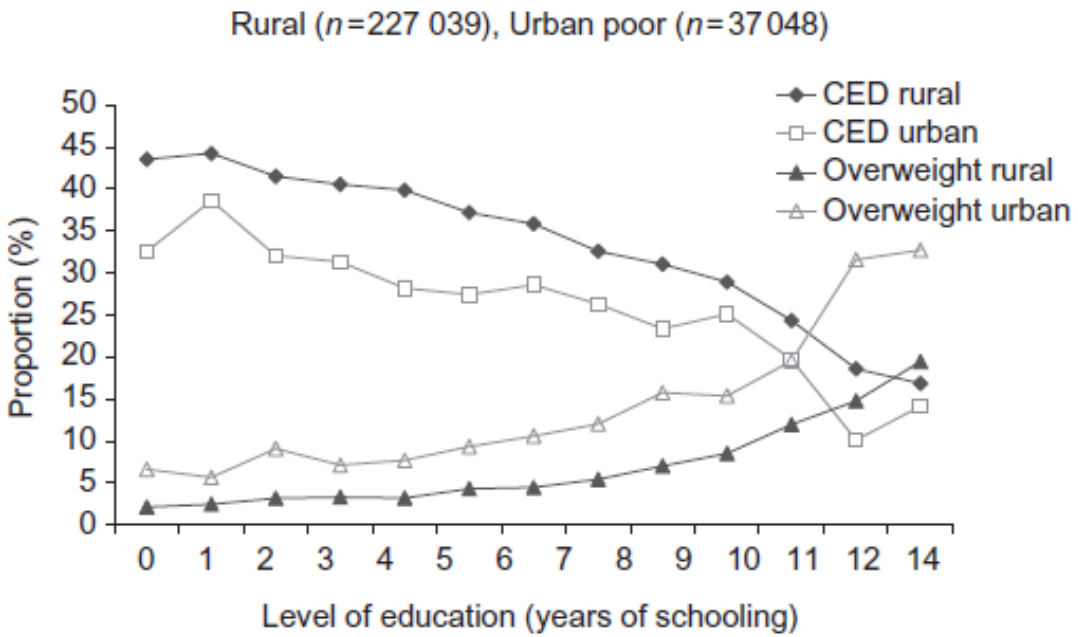
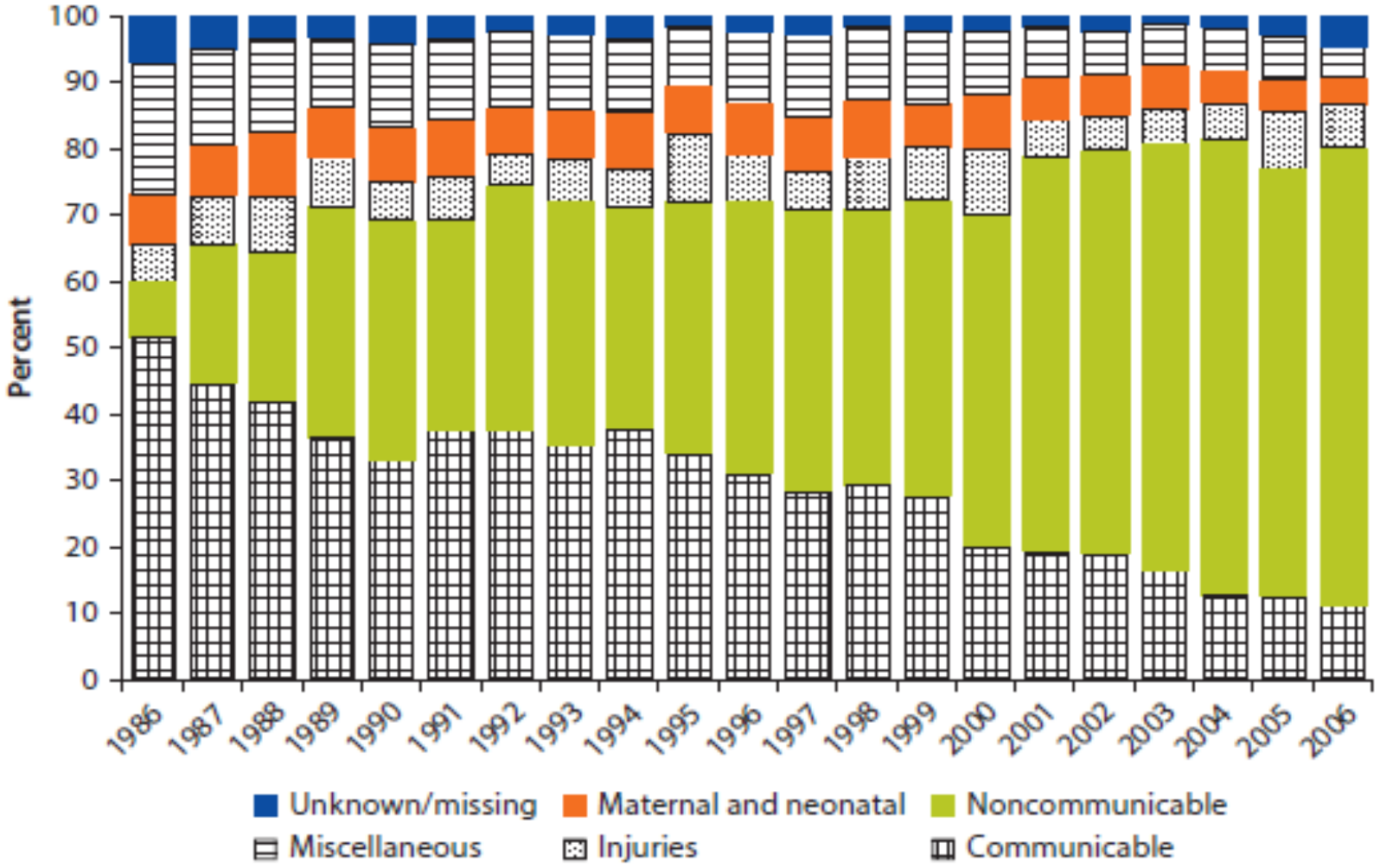


Figure 4 Proportion of women with overweight[a] and CED[b] in urban poor and rural areas by level of education[c] in Bangladesh, 2000–04. [a]Overweight was defined as BMI $25 \geq$ kg/m^2; [b]CED was defined as BMI < 18.5 kg/m^2; [c]None of the women had 11 or 13 years of schooling

NCD Mortality Increases in Rural Bangladesh (Matlab), 1986–2006



Source: Karar, Alam, and Streatfield 2009.

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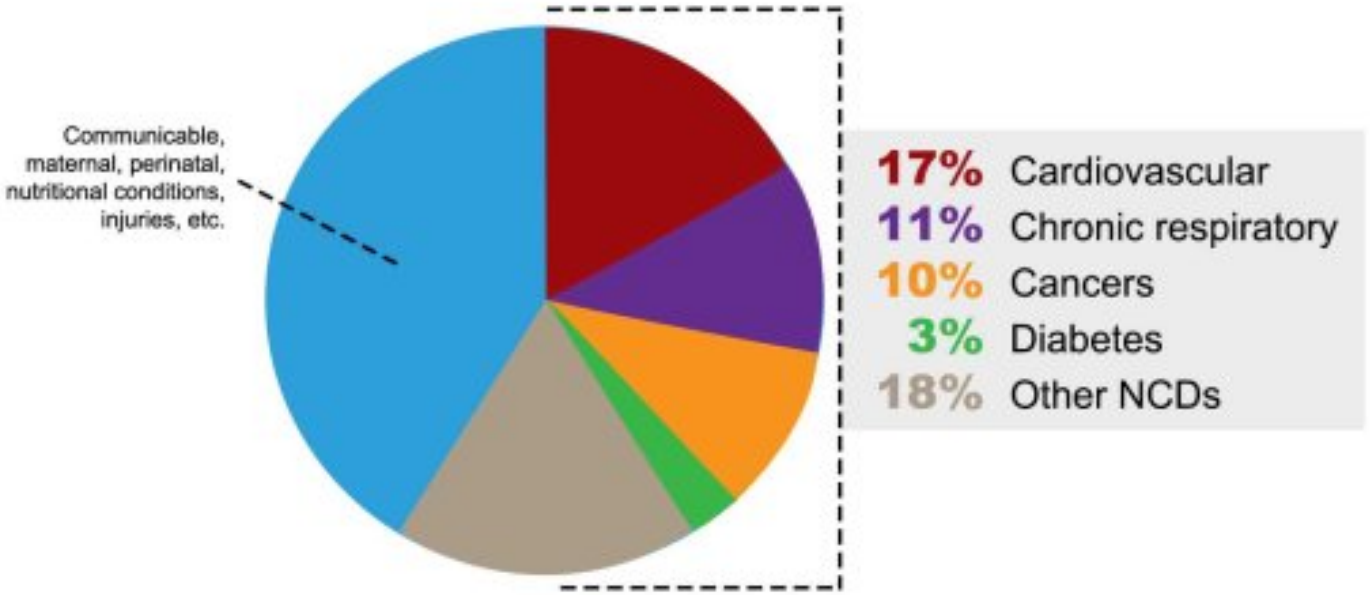
Source: Tackling Noncommunicable Diseases in Bangladesh • http://dx.doi.org/10.1596/978-0-8213-9920-0

NCDs in Bangladesh



NCDs account for 59% of total deaths in Bangladesh

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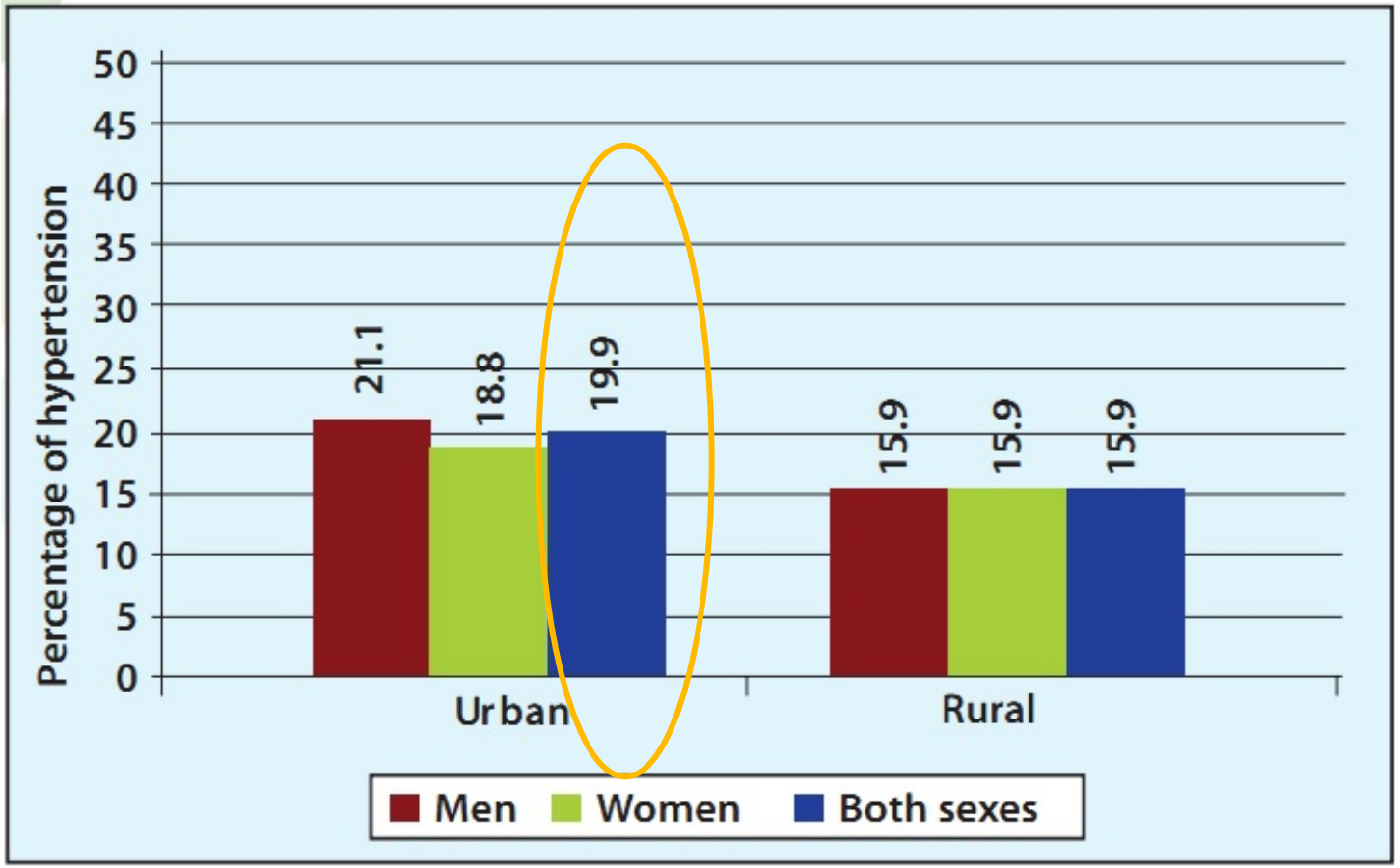
Hypertension

Prevalence of HTN (blood pressure ≥140/90 mmHg) or drug treatment in urban and rural areas



Source: NCD Risk Factor Survey 2010

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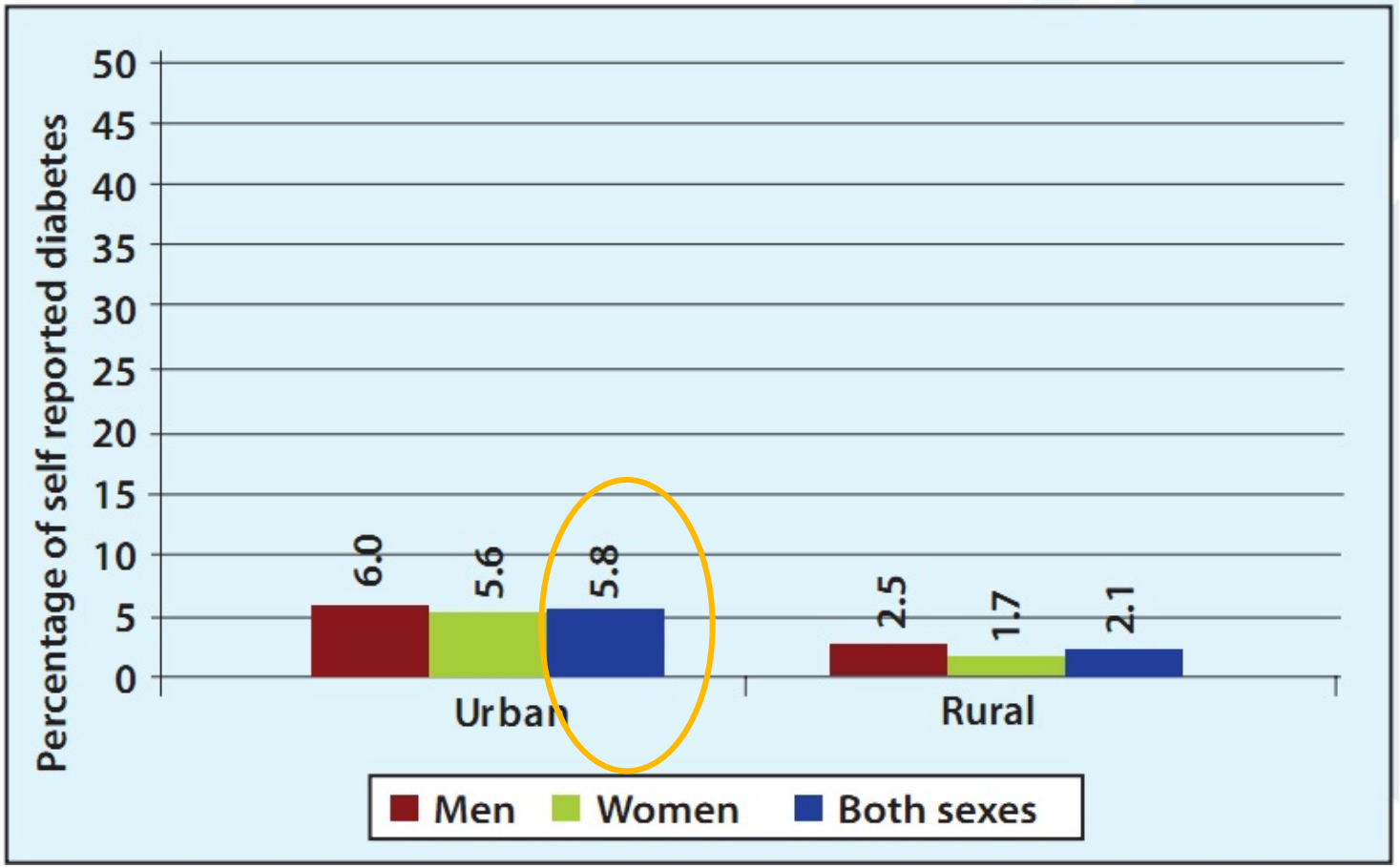
Diabetes mellitus

Prevalence of self-reported (documented) diabetes in urban and rural areas



Source: NCD Risk Factor Survey 2010

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Prevalence of NCD risk factors

Prevalence (%) of selected risk factors among the adult population aged ≥ 25 years

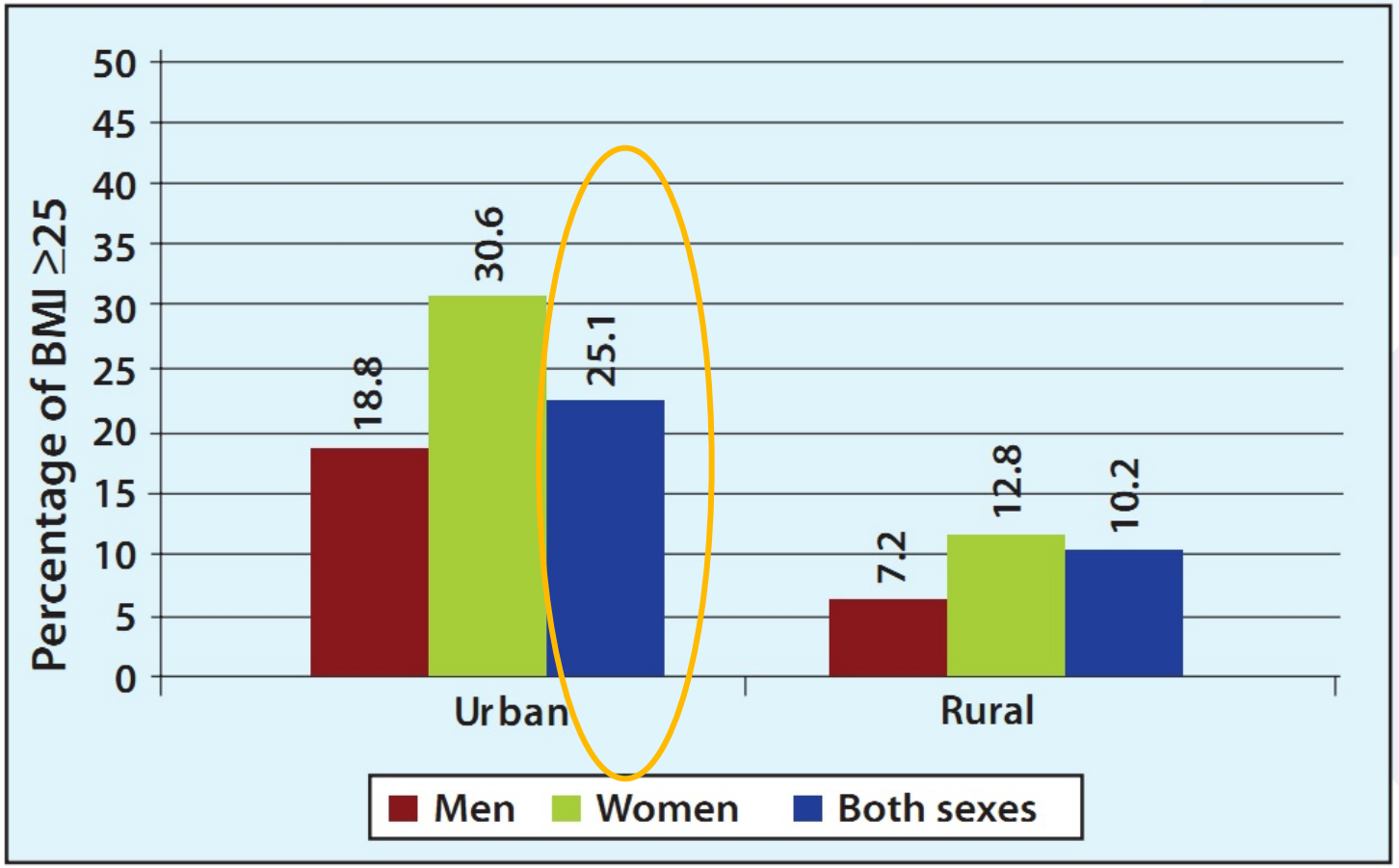
Risk factors	Men	Women	Both sexes
Current smoking	54.8	1.3	26.2
Smokeless tobacco use	29.4	33.6	31.7
Tobacco use (any form)	70.0	34.3	51.0
Low vegetable/fuit intake[a]	97.6	94.1	95.7
Low physical activity[b]	10.5	41.3	27.0
Overweight (BMI > 25 kg/m^2)	13.0	21.6	17.6
Large waist circumference[c]	8.0	33.7	21.7
Hypertension[d]	18.5	17.3	17.9
Self reported diabetes mellitus (documented)	4.3	3.6	3.9

[a] < 5 serving/day [b] < 600 MET [c] men ≥ 94 cm women ≥ 80cm [d] (≥ 140 /90 mmHg or on anti-hypertensive medication)

Source: Strategic Plan for Surveillance and Prevention of Non-Communicable Diseases in Bangladesh 2011-2015

Body mass index (BMI)

% of people having BMI 25 (kg/m2) or above in rural and urban areas



Source: NCD Risk Factor Survey 2010

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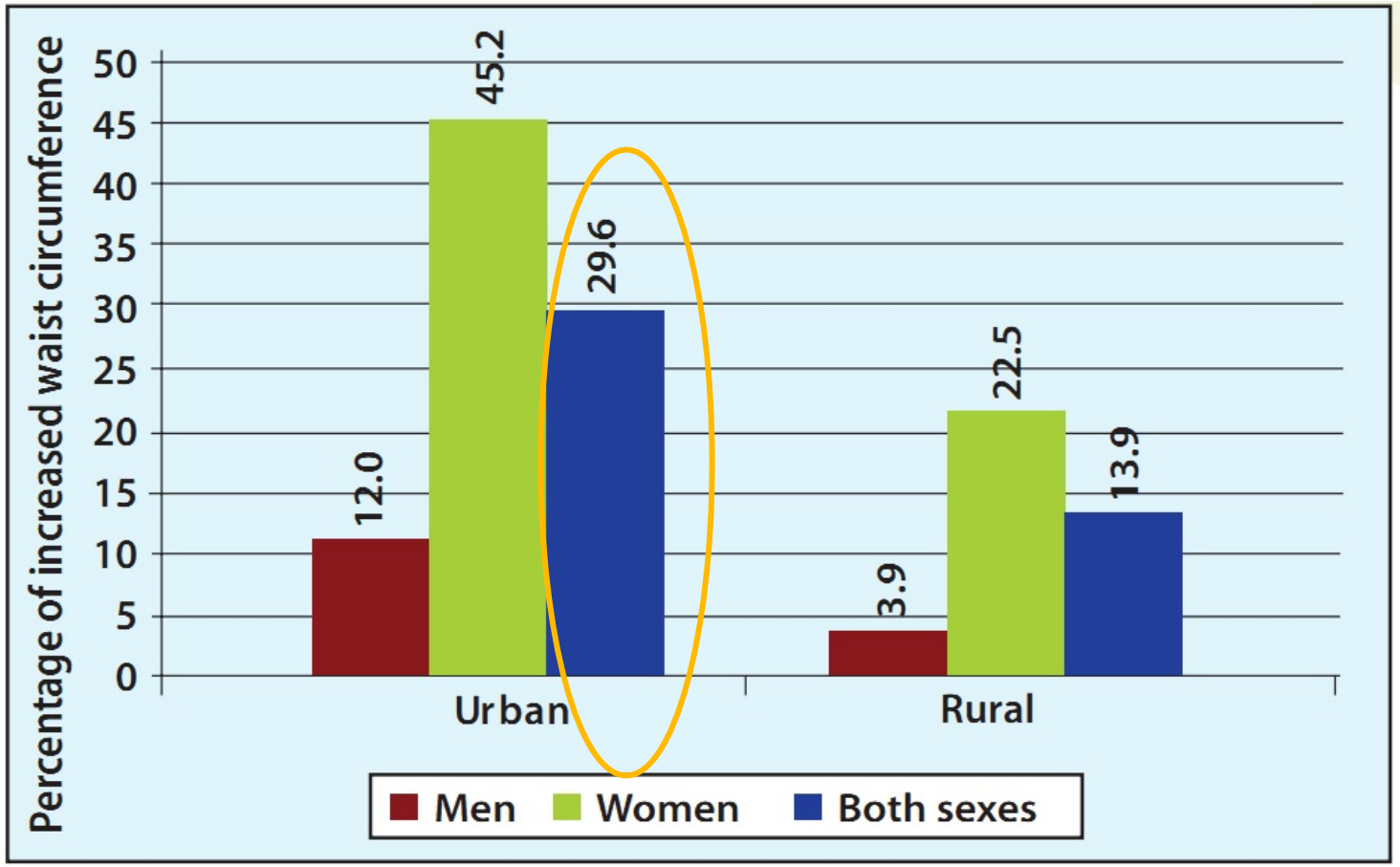
Waist circumference

% of people with increased waist circumference (men ≥ 94 cm, women ≥ 80 cm) in urban and rural areas



Source: NCD Risk Factor Survey 2010

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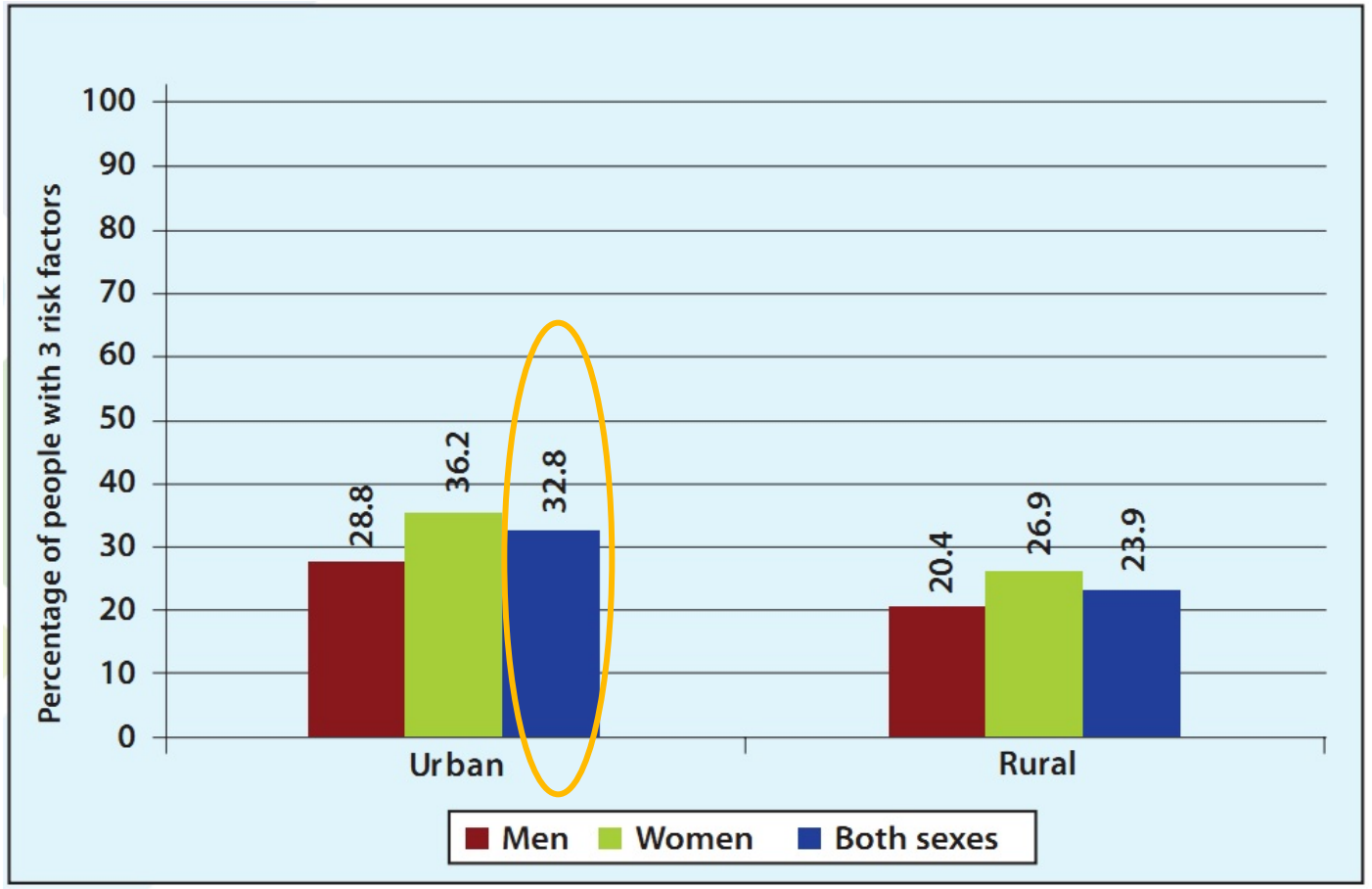
Risk factors

Distribution of people with three or more risk factors in urban and rural areas



Source: NCD Risk Factor Survey 2010

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NCDs among urban poor

- In Bangladesh, poorest income quintile spent less amount of their income on food and consumed less protein, fruits each day than the higher income quintiles (BUHS, 2013)
- Bangladesh Urban Health Survey (2006) found higher prevalence of hypertension (25% for women and 18% for men) among the slum dwellers in the six largest city corporations
- One recent study found 40% of urban poor overweight and obese (BSMMU, 2016)
- 22% women and 15% men had diabetes (BSMMU 2016)
- 90% of the poor did not consume fruits and vegetables (BSMMU 2016)

Health service delivery system in Bangladesh: Rural vs. Urban

Rural

Community Clinic

↓

Union Health & Family Welfare Centre

↓

Upazilla Health Complex

↓

District Hospitals

Urban

MoH - National tertiary hospitals/medical colleges

MoH - urban dispensaries, school health clinics

LGD - small & medium-sized hospitals

LGD + donors – UPHCSD, UHSSP, NHSDP (NGOs)

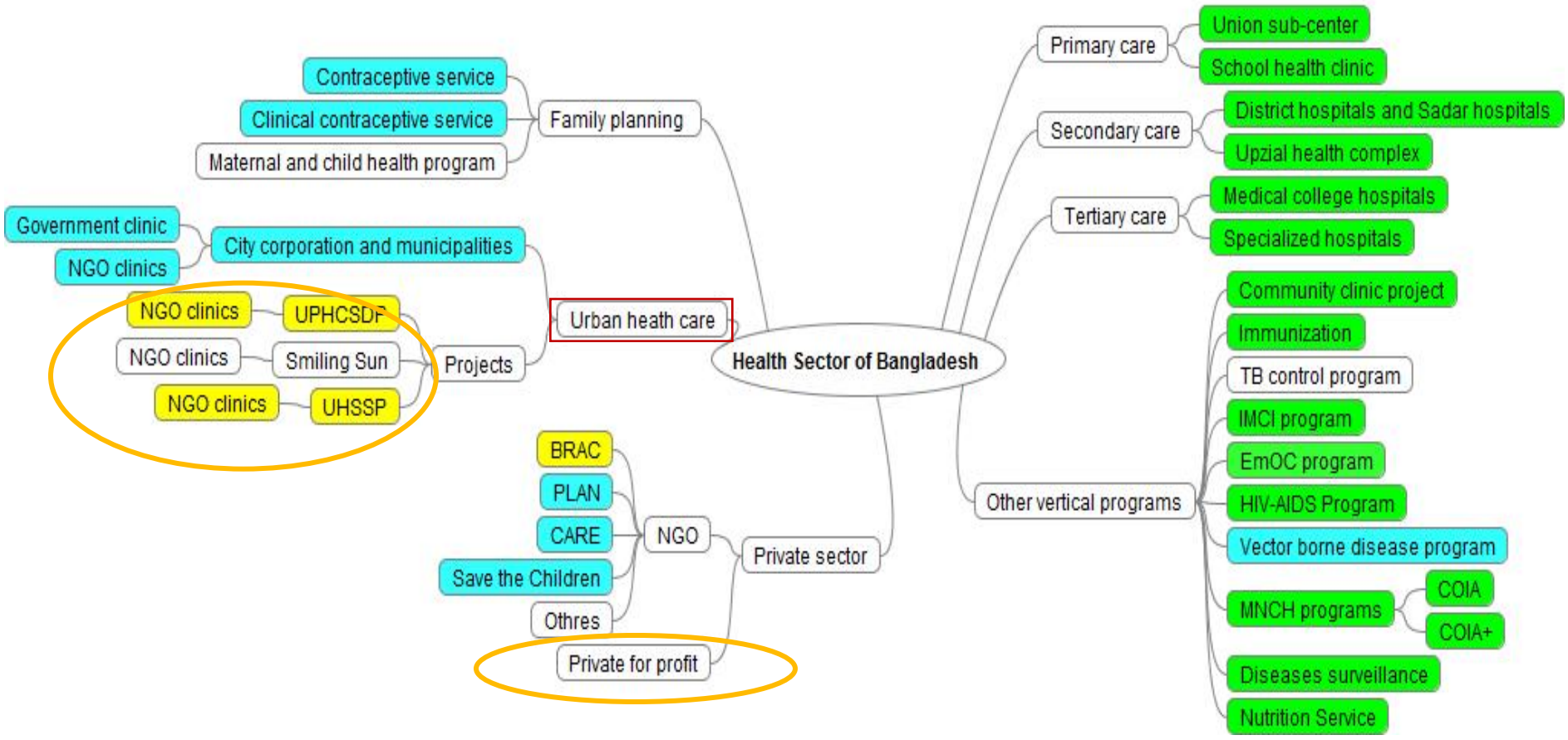
Others - Private sector, NGOs

(Source: Health Bulletin 2012, DGHS)

ICT for Health: Use of DHIS2 (Rural vs. Urban)

No data coming from urban areas

Fully Using DHIS2		Planned to use DHIS2	
Partially Using DHIS2		Not yet start DHIS2	



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NCD Services by MOH&FW

- **Country health care system addressing two of major NCDs: diabetes and cardiovascular disease (CVD)**

	Services	Guidelines for diagnosis and management	Trained staff
Diabetes			
Urban	57.4	30.3	11.2
Rural	14.1	24.6	23.1
Cardiovascular disease (CVD)			
Urban	54.5	23.3	12.1
Rural	12.6	23.0	10.4
Total number of health facilities: **Urban-130 and Rural-1418**			

Source: BHFS, 2014

Published by Oxford University Press in association with The London School of Hygiene and Tropical Medicine *Health Policy and Planning* 2015;**30**:i32–i45

doi:10.1093/heapol/czu094

Who serves the urban poor? A geospatial and descriptive analysis of health services in slum settlements in Dhaka, Bangladesh

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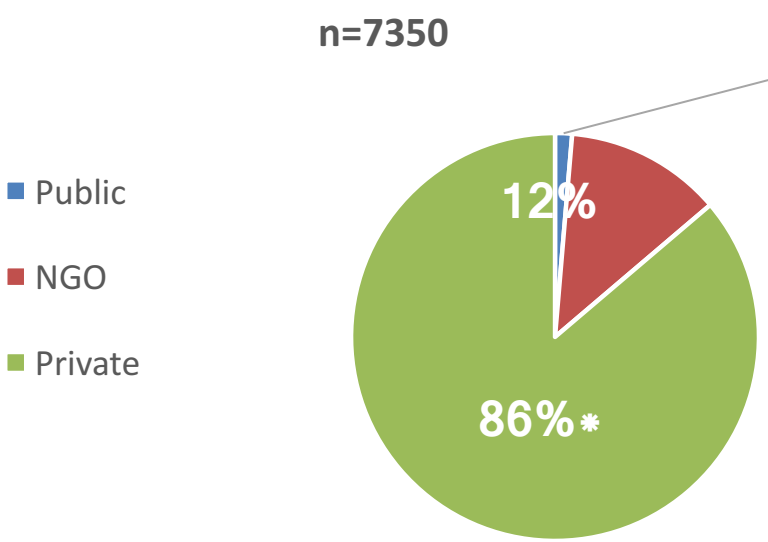
Who is providing healthcare?

- **No public provision of urban primary care services**: limited to tertiary facilities, EPI outreach, MNCH services contracted out by local government
- **Private sector dominates urban healthcare landscape**: private hospitals represent 80% of >3500 hospitals in Bangladesh

Formal healthcare facilities in Dhaka



*Excluding pharmacies & optical shops

Source: Adams, 2014

Major Challenges

- No free or subsidized treatment for NCDs through the public health system in Bangladesh
- Lack of structured primary health care services in urban settings
- Slum dwellers mostly depends on self-treatment and local informal providers
- Financing for NCD treatment is heavily dependent on 'Out of Pocket (OOP)' payments→ catastrophic health expenditure
- No coordination between LGD and MoH.

Policy recommendations

- Policymakers must make systematic decisions based on evidence in formulation of a realistic urban health strategy
- Clear roles, responsibilities and achievable targets of mutual interest of MOHFW and LGD
- Effective NCD prevention require leadership and collaboration across sectors / between the sate and non-state actors
- Build capacity of health workforce at PHC level for NCD surveillance, screening, routinely information and prevention
- NCD challenge needs to be prioritized in the national political and financial agenda
- Health Literary for public

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Thank you!

Questions/comments:
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