



Presentation from
**2016 World Water
Week in Stockholm**

www.worldwaterweek.org

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ARE WATER CARRIERS WOMEN?

What current data tells us (and doesn't) about informal and unpaid water provision

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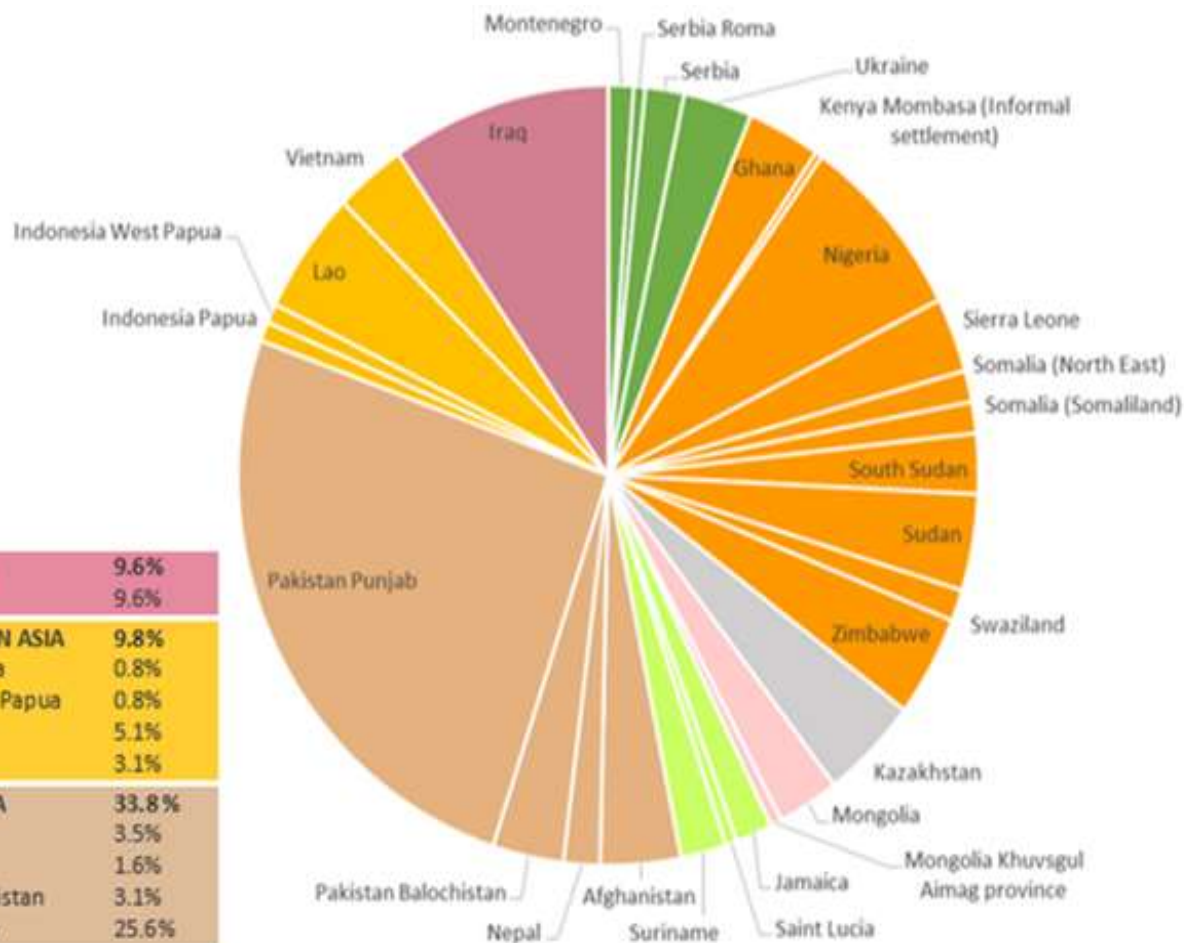


ANALYSIS OF MULTIPLE INDICATOR CLUSTER (MICS) SURVEYS



Survey sample drawn from all surveys conducted and reported between 2010-2015

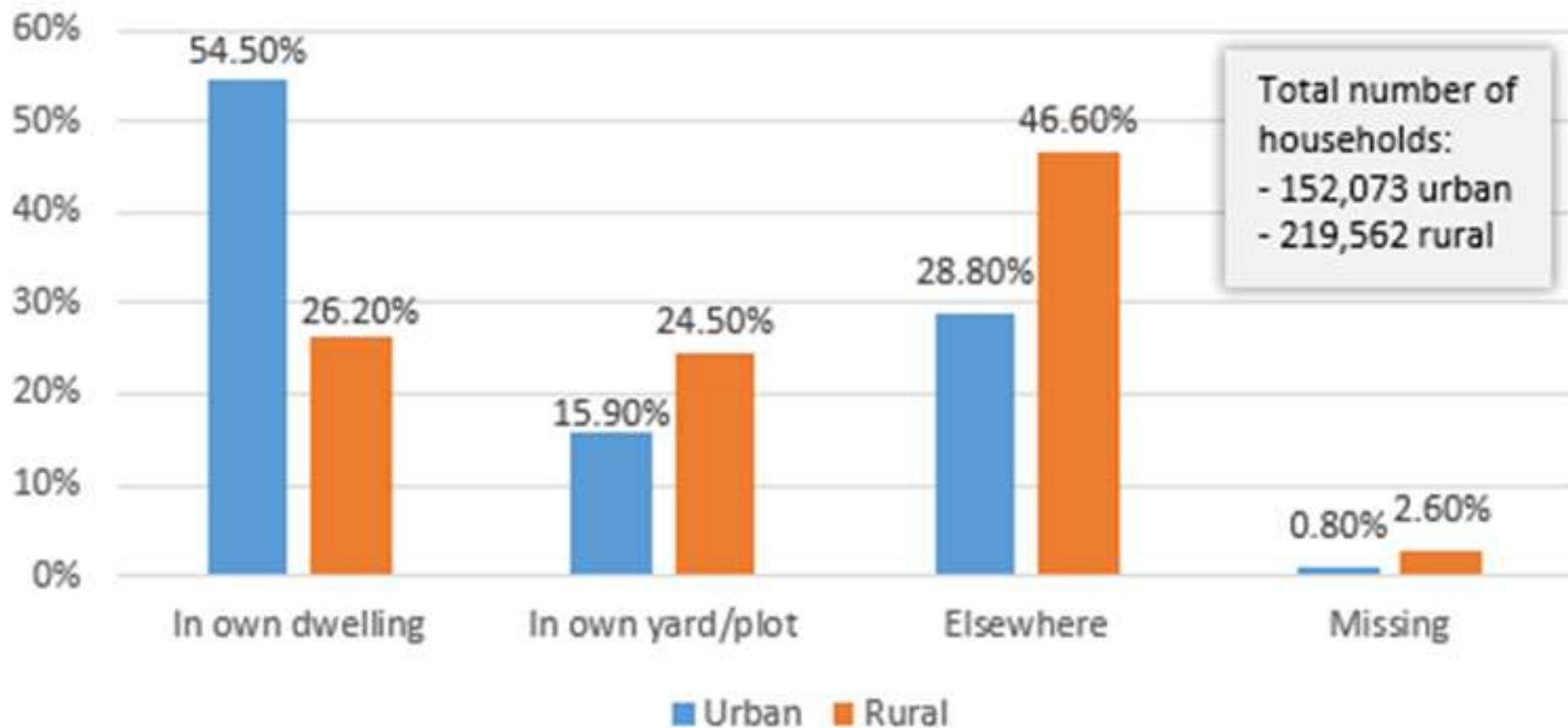
ANALYSIS OF MICS SURVEYS



DEVELOPED REGION	6.3%
Montenegro	1.1%
Serbia Roma	0.5%
Serbia	1.7%
Ukraine	3%
SOUTHERN AFRICA	29%
Ghana	3.2%
Kenya Mombasa (Inf. settlement)	0.3%
Nigeria	7.8%
Sierra Leone	3.1%
Somalia (North East)	1.3%
Somalia (Somaliland)	1.3%
South Sudan	2.5%
Sudan	4%
Swaziland	1.3%
Zimbabwe	4.2%
CAUCASUS AND CENTRAL ASIA	4.3%
Kazakhstan	4.3%
EASTERN ASIA	3.2%
Mongolia	2.7%
Mongolia Khuvsgul Aimag province	0.5%
LATIN AMERICA AND THE CARIBBEAN	4.1%
Jamaica	1.6%
Saint Lucia	0.5%
Suriname	2%

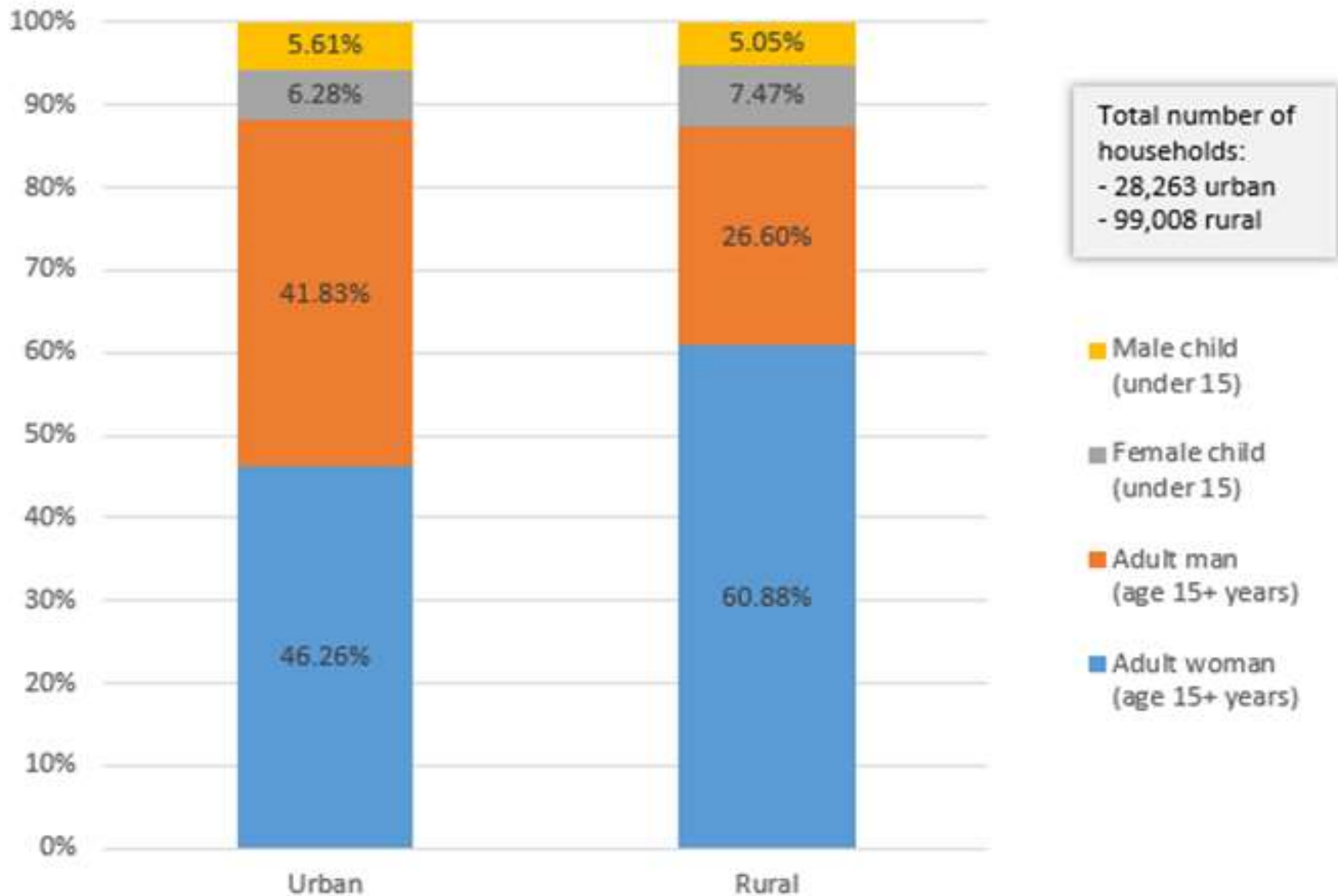
WESTERN ASIA	9.6%
Iraq	9.6%
SOUTH-EASTERN ASIA	9.8%
Indonesia Papua	0.8%
Indonesia West Papua	0.8%
Lao	5.1%
Vietnam	3.1%
SOUTHERN ASIA	33.8%
Afghanistan	3.5%
Nepal	1.6%
Pakistan Balochistan	3.1%
Pakistan Punjab	25.6%

LOCATION OF WATER SOURCE URBAN VERSUS RURAL



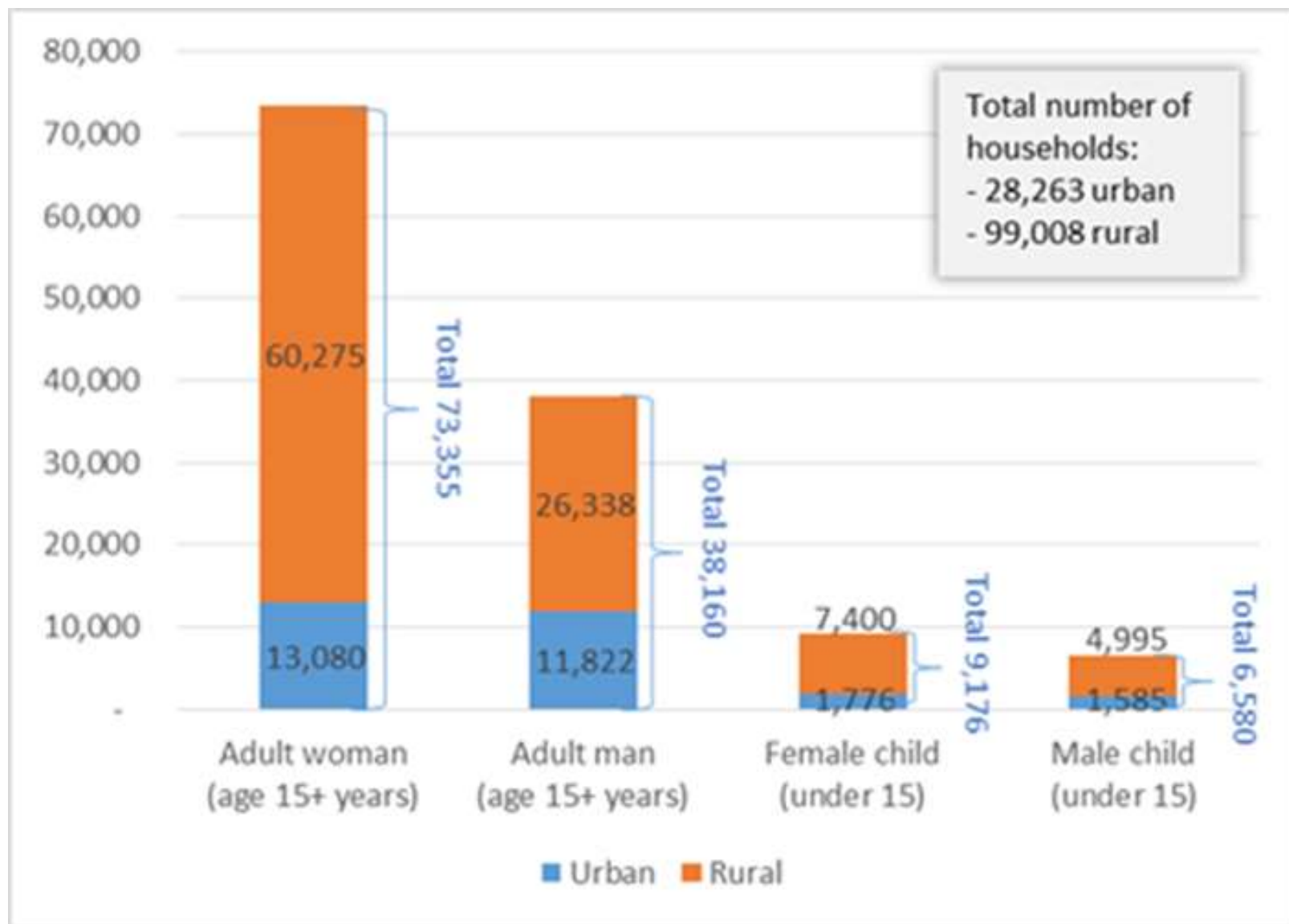
PERSON RESPONSIBLE FOR COLLECTING WATER (%)

URBAN AND RURAL AREAS



PERSON RESPONSIBLE FOR COLLECTING WATER

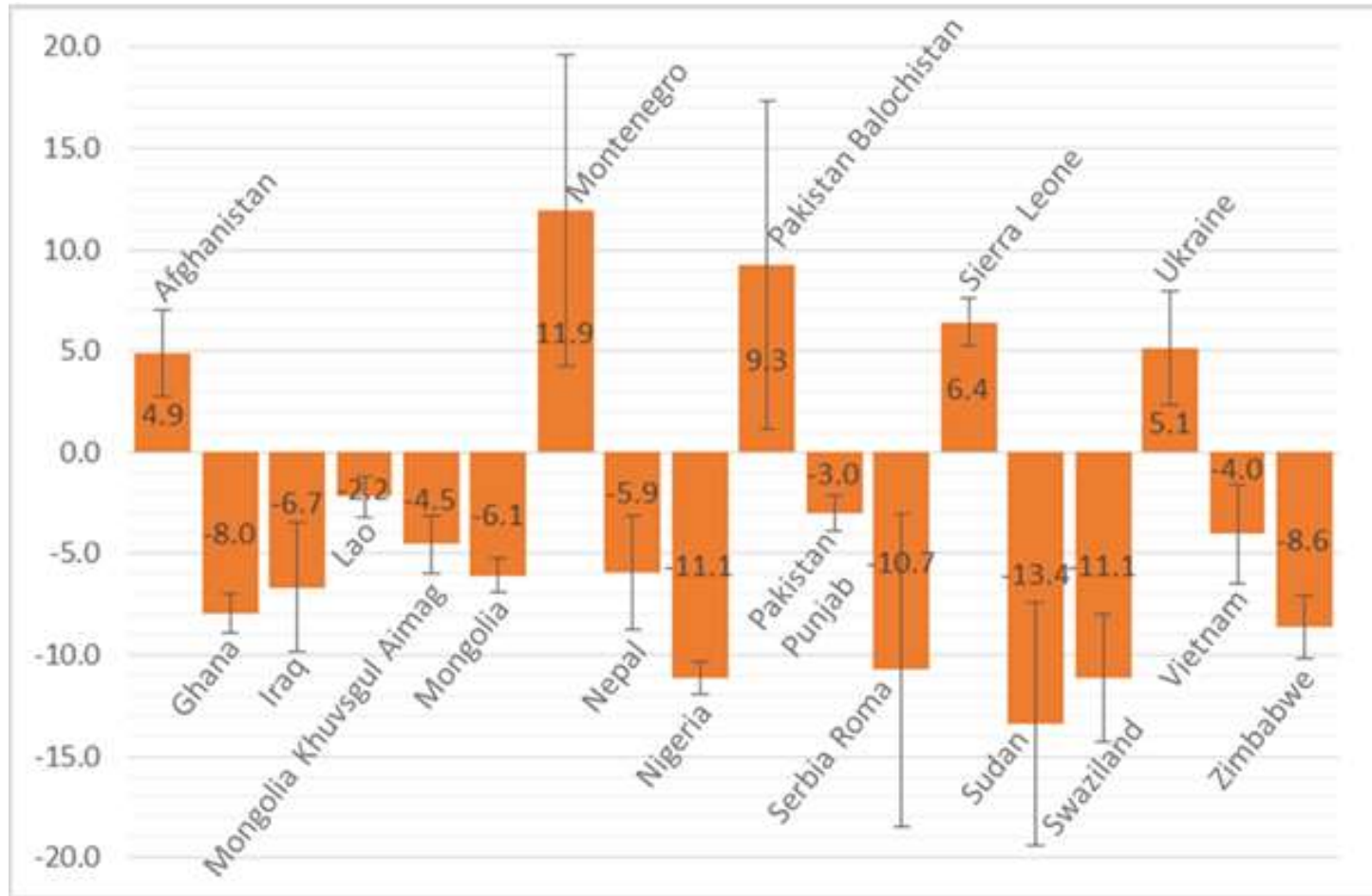
NUMBER OF HOUSEHOLDS, URBAN AND RURAL AREAS



PERSON RESPONSIBLE FOR COLLECTING WATER



MEAN DIFFERENCE IN MINUTES BETWEEN RURAL AND URBAN AREAS TO GET WATER AND COME BACK



a Only surveys with statistically significant difference.

b Negative value indicates more time taken in rural compared to urban area

CHILDREN AND WATER COLLECTION



Mean hours spent collecting water or firewood in previous week ranged from 1 (St Lucia) to 11.3 hours (Somalia NE).

Significant differences in mean hours spent fetching water or firewood in the previous week between children from urban and rural households in all surveys except Jamaica, Montenegro, Saint Lucia, Serbia, Suriname, Ukraine and Vietnam.

Significant mean differences ranged from 0.4 hours or 20 minutes in Sierra Leone (greater in rural areas) to 4.2 hours in Serbia Roma (greater in urban areas) hours.

WHAT'S MISSING FROM THE AVAILABLE DATA?

1. Usual number of water fetching trips per day or week
2. Measured distance to water source or water fetching time
3. Method of water carriage
4. Health and disability status of individuals in the household and of those who perform water carriage
5. Safety of individuals engaged in water fetching



DFID AT-HOUSE WATER SUPPLIES

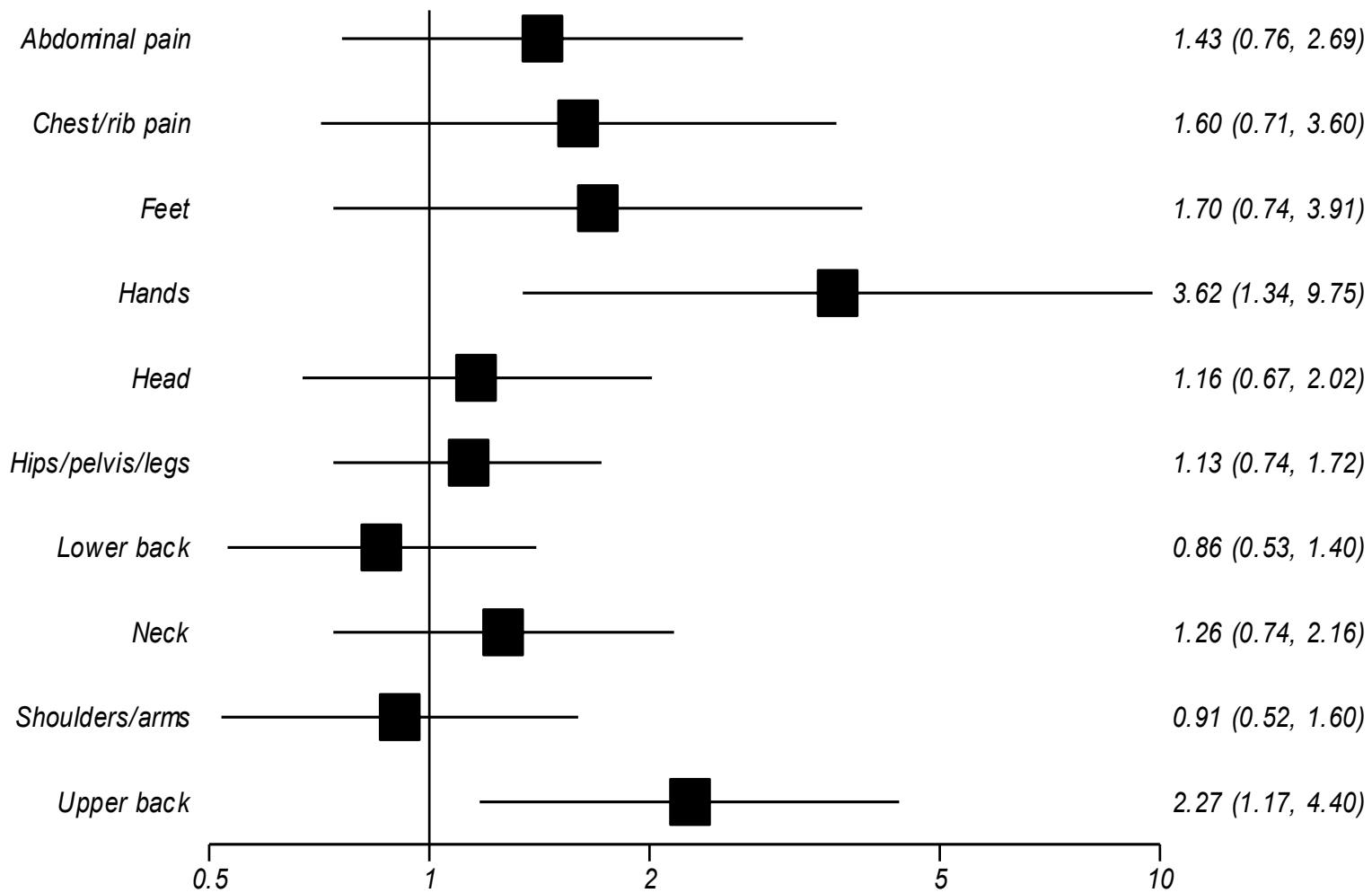
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Household questionnaire:

- Households with private (~50%) vs. public water supply (~50%)
- Fieldwork in 3 countries Ghana, South Africa and Vietnam (n=255+206+198)

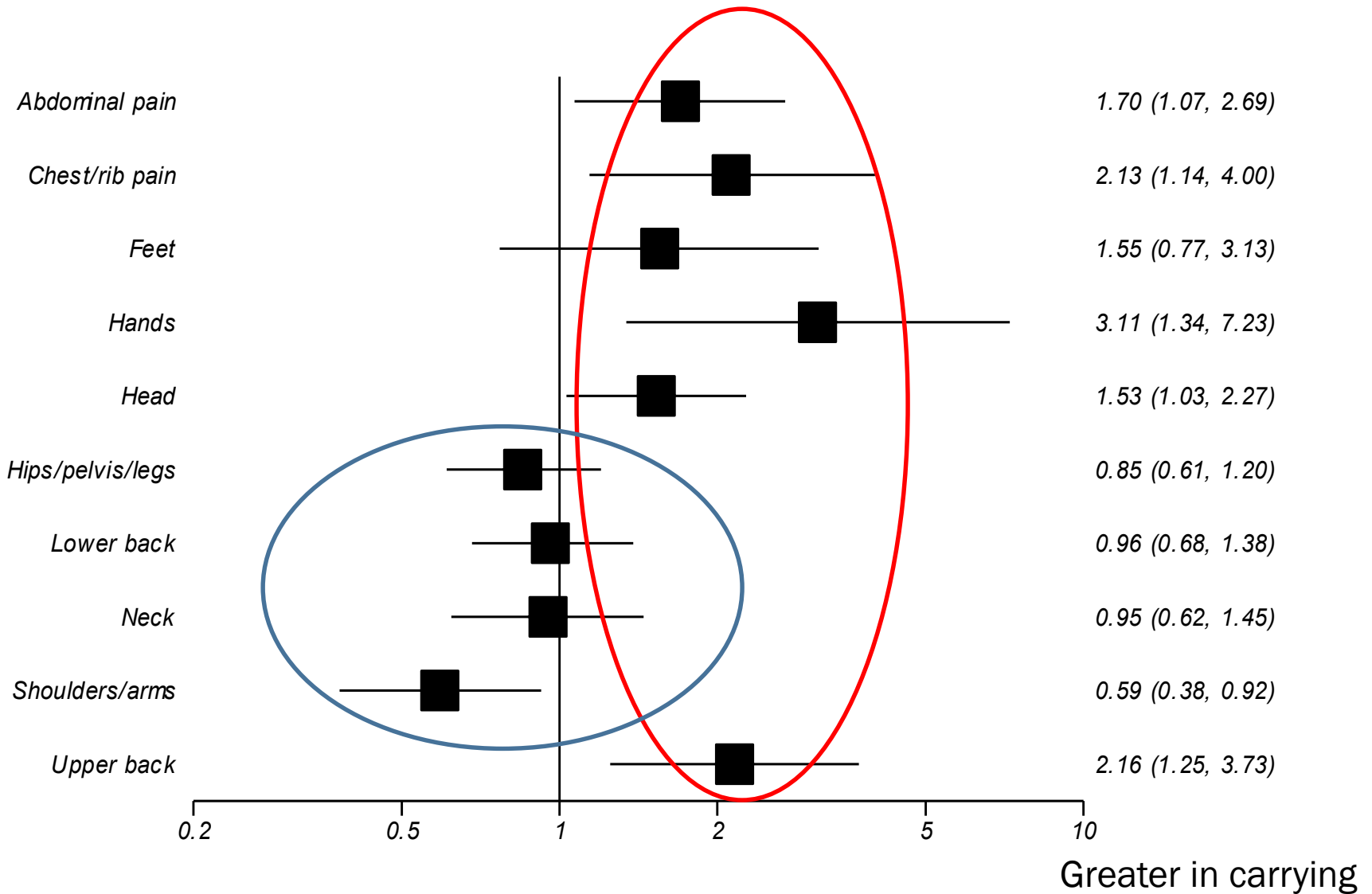


SITES OF REPORTED PAIN BY PAST VS NEVER WATER CARRYING



Greater in carrying

SITES OF REPORTED PAIN BY CURRENT VS NEVER WATER CARRYING



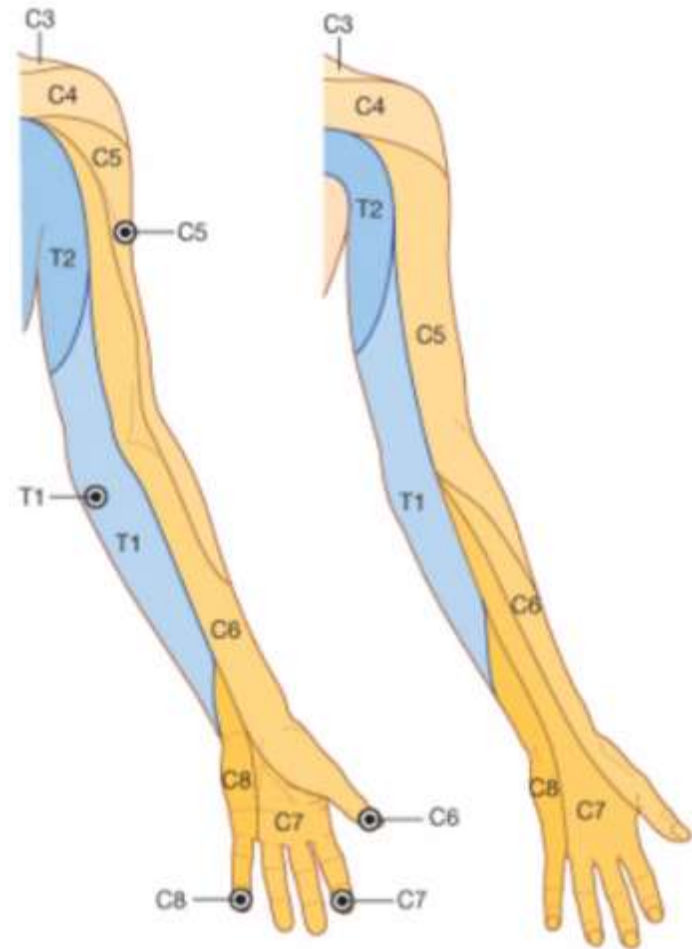
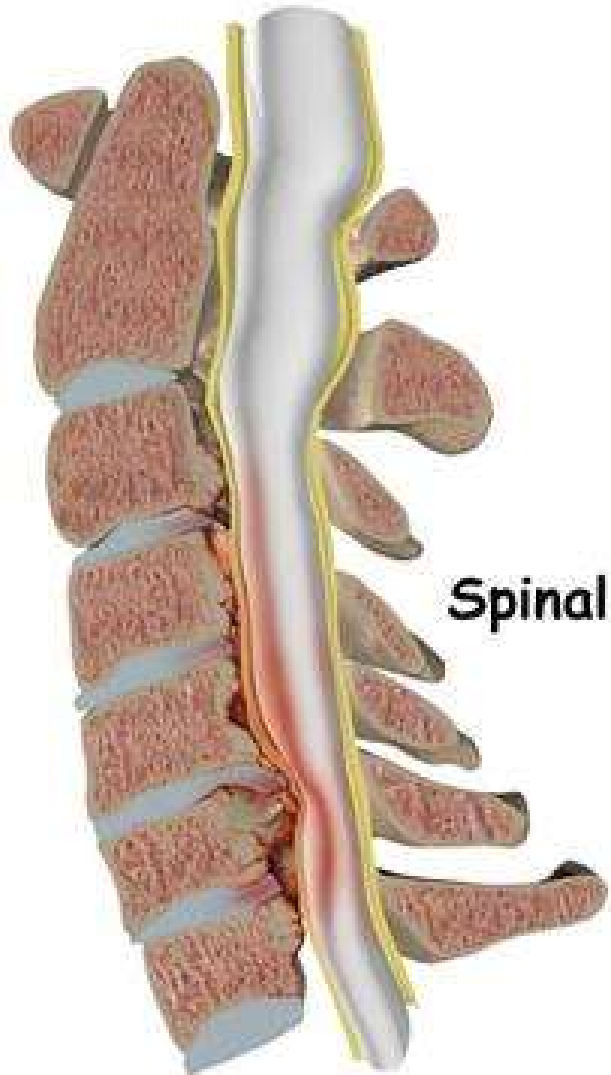
RELATIONSHIP BETWEEN AREA OF REPORTED PAIN & WATER CARRYING

Correlated areas of reported pain:

Pattern 1 = head and upper back, hands, chest/ribs, abdomen/stomach, feet

Water carrying	N	β	L95 %CI	U95% CI	P
No history	364	0			4.5E-5
Past history	159	0.21	0.01	0.042	
Current	474	0.30	0.17	0.43	
Currently carries water (no head loading)	214	0			
Currently carries water (head loading)	260	0.36	0.03	0.70	0.03

HOW TO EXPLAIN THE ASSOCIATION OF WATER CARRIAGE WITH PAIN PATTERN 1?



CONCLUSIONS

- Even with the MDG target on access to safe drinking water met, large populations globally still have to physically bring water to their homes
- In most countries this responsibility is predominantly carried by women, particularly in rural areas, yet in urban areas men also take on a substantial share of the burden
- The detrimental health and security implications that arise from this informal water provision work highlight an often overlooked dimension related to the definition of ‘access to safe drinking water.’