

Increasing coverage and use of insecticide-treated nets in Zambia: Results from the Zambia Malaria Indicator Survey 2018

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BACKGROUND

Universal coverage of vector control, defined as persons living in households at risk having adequate coverage of insecticide-treated nets (ITNs) or indoor residual spraying (IRS), is a key piece of Zambia's National Malaria Strategic Plan for 2017–2021. As part of this goal, a mass distribution campaign of more than 10 million nets was conducted in all provinces in 2017–18, with the aim of distributing of one net per two people in each household.

The Zambia National Malaria Indicator Survey (MIS) 2018, conducted in April–May 2018 (see poster 1007), offers an opportunity to check both coverage and usage of ITNs after this mass distribution.

METHODS

The 2018 MIS was based on a nationally representative two-stage cluster sample of 4,475 households selected from 179 standard enumeration areas; 4,177 households were interviewed.

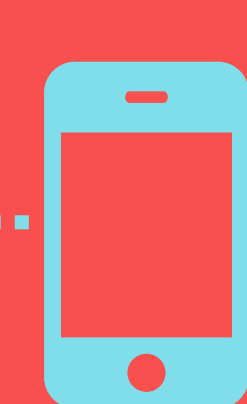
Consenting household members were asked questions about their dwellings and about malaria interventions. A net roster module listed each net that households owned, and which family members slept under it, allowing a detailed analysis of coverage.

RESULTS

- Overall household-level possession of at least one ITN has risen from 74% in 2015 to 80% in 2018. However, the percentage of households with at least one ITN per sleeping space decreased from 62% in 2015 to 47% in 2018 (Fig 1).
- The average number of ITNs per household is 1.7 (range 1.2–2.2 by province), with an average of 0.86 ITNs per every two individuals in a household (target is 1).
- ITN use increases with net availability (Fig 2).
- ITN use is higher among infants than older children and teenagers and increases again in adults ≥ 25 years old (Fig 4).
- Adolescent boys see a much larger decline in net use than adolescent girls (Fig 4).

Sufficient availability of ITNs within a household is essential for increased use among all household members.

Significant progress in the universal coverage of vector control has been achieved in Zambia; however, full coverage (one ITN for every two household members) has not yet been reached.



Take a picture to download the *Zambia National Malaria Indicator Survey 2018* report.

Figure 1: Cascade of net and ITN possession, full coverage, and use among children and all household members, by national, urban, and rural areas (Zambia 2018).

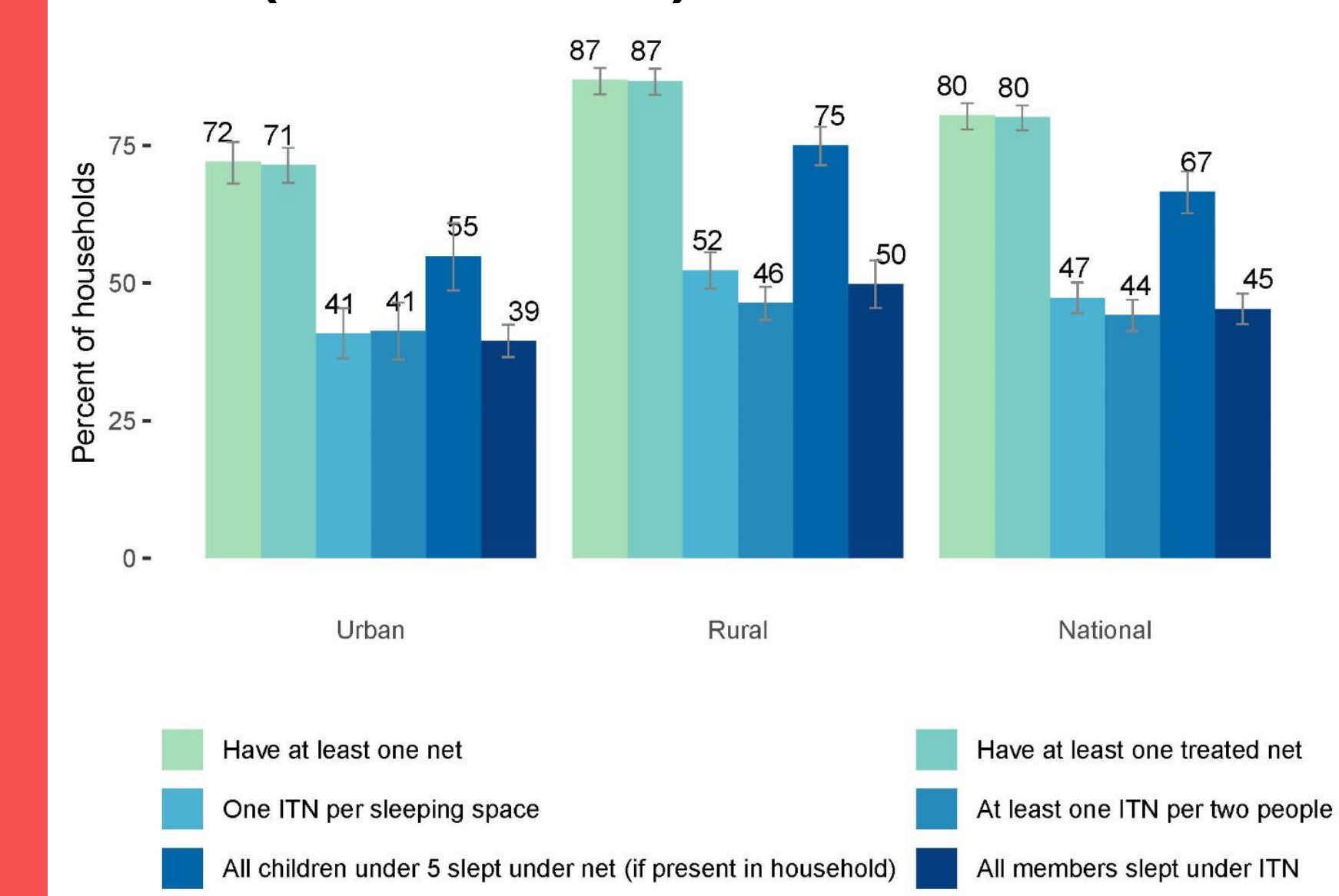


Figure 2: Percentage of household members using an ITN the night before the survey, by level of household ownership of ITNs (Zambia 2018).

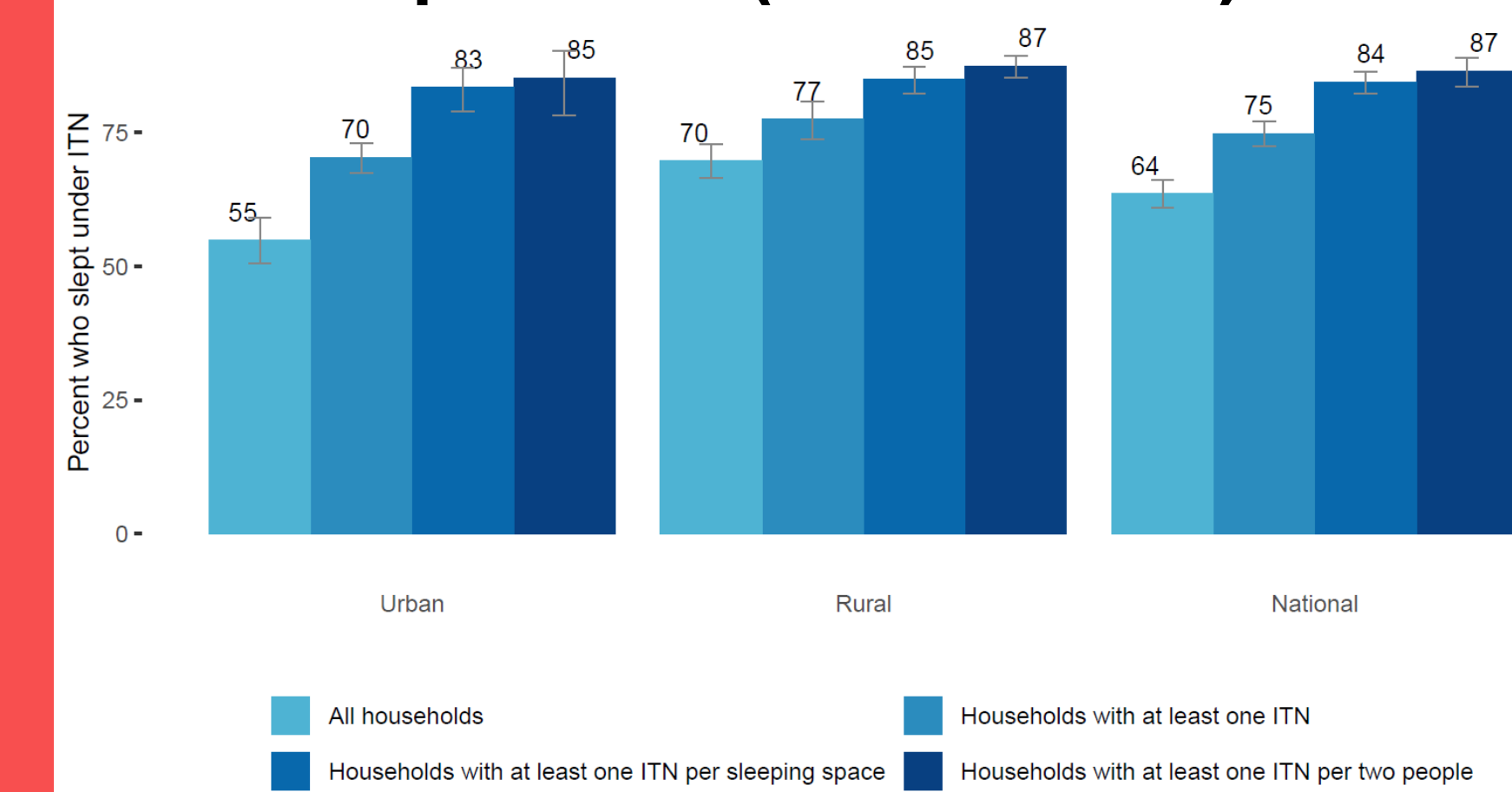


Figure 3: Percentage of households with an ITN-to-sleeping space ratio of ≥ 1 , by province (Zambia 2008–2018).

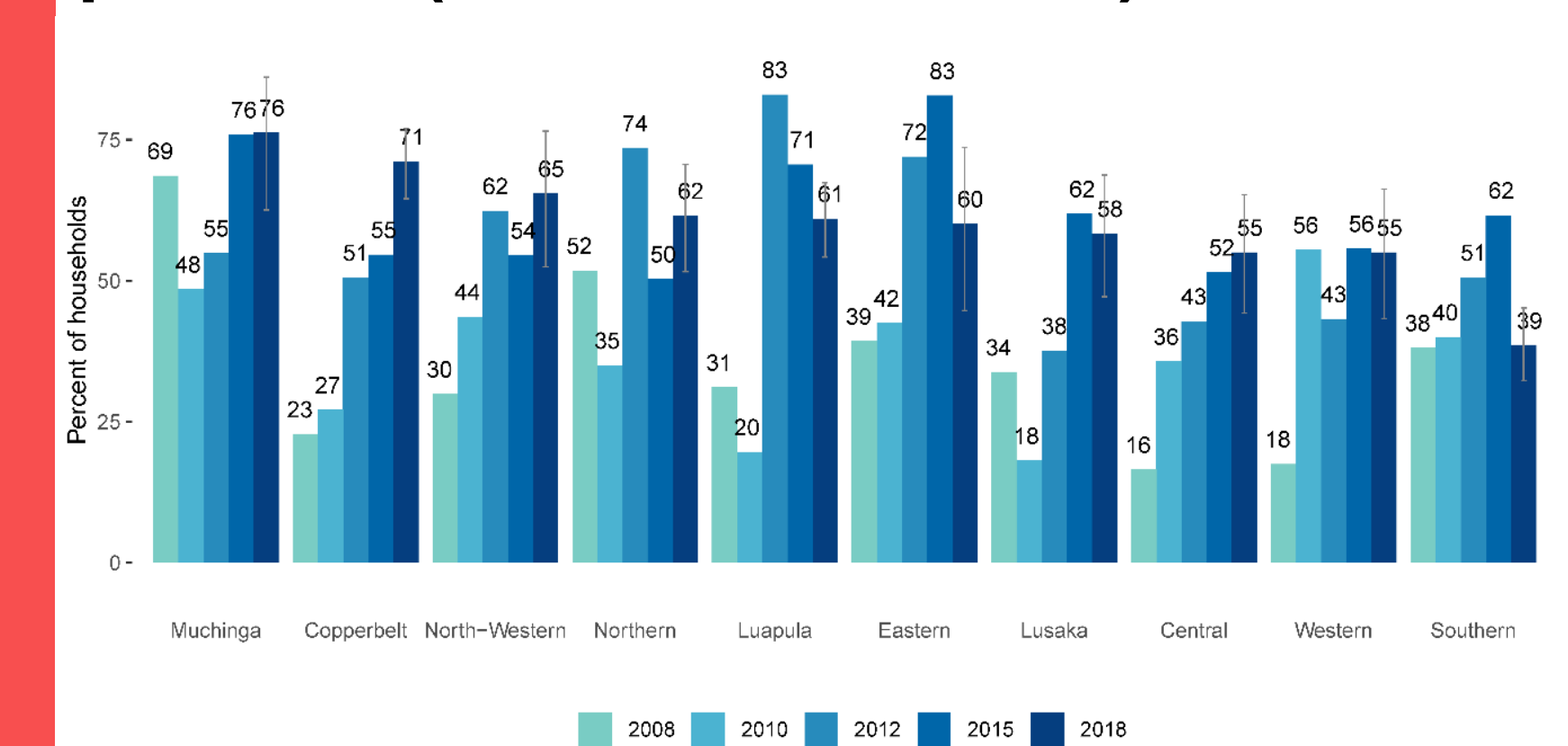
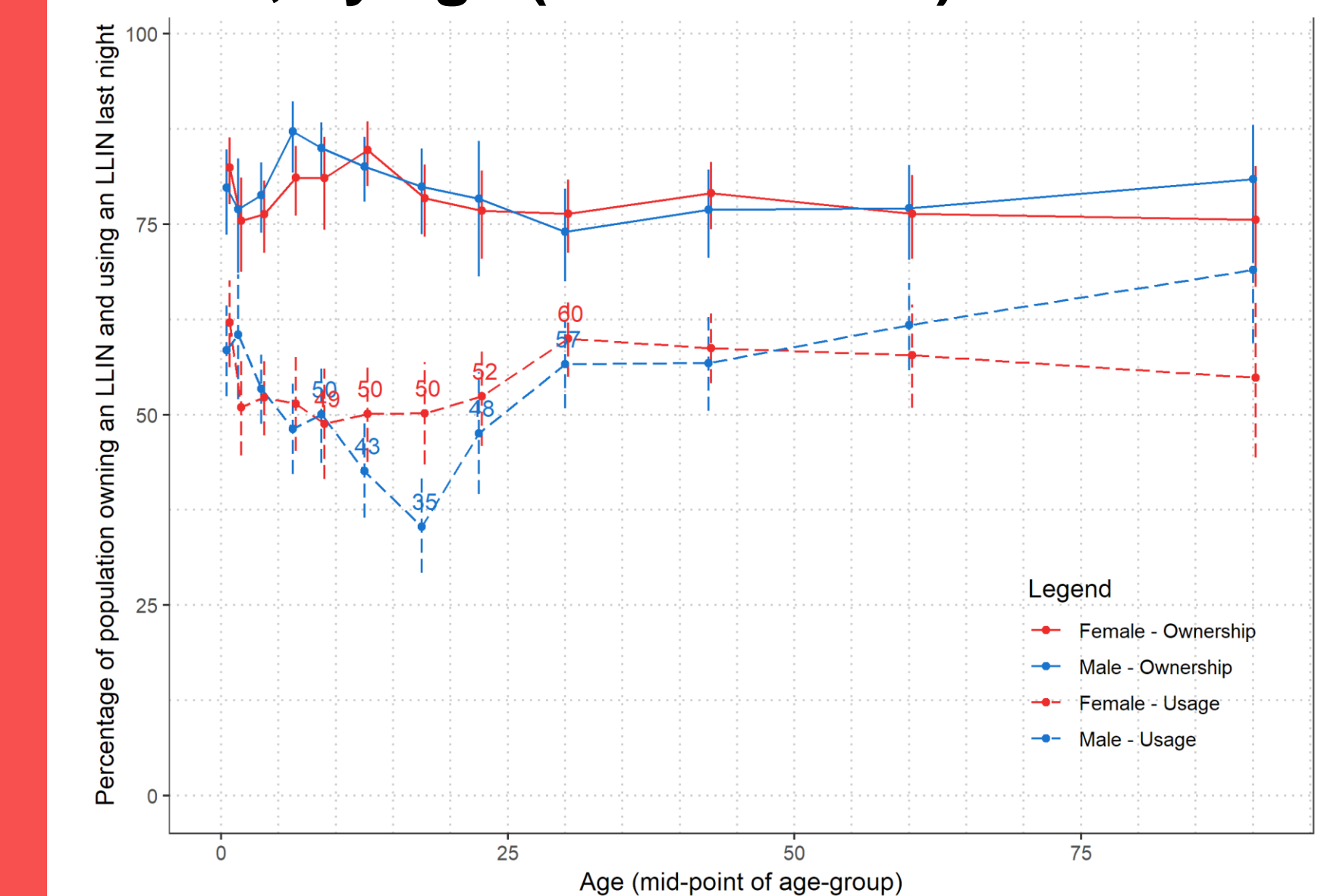


Figure 4: Percent of respondents whose households own at least one ITN and percent of respondents who slept under an ITN, by age (Zambia 2018).



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