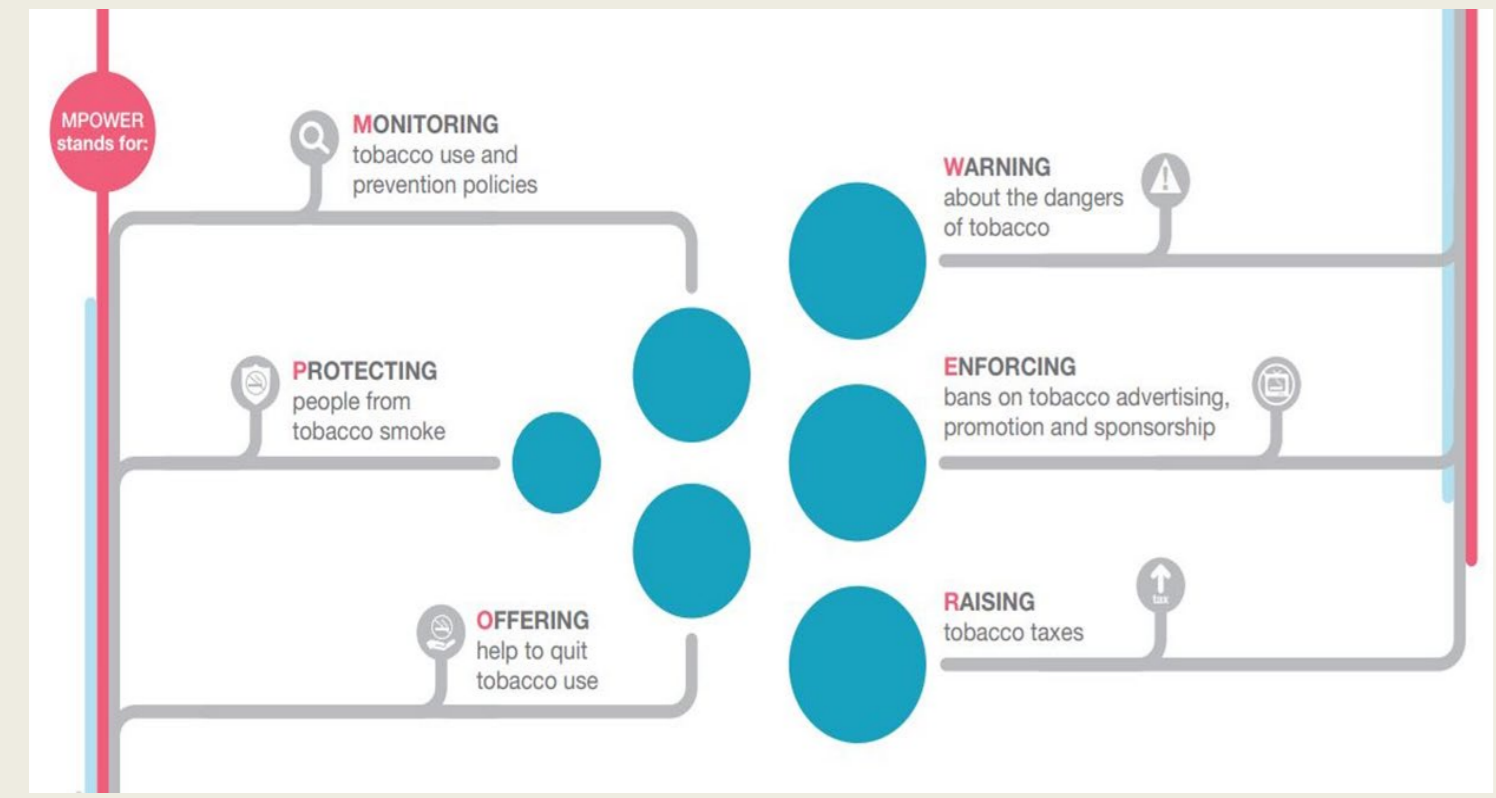


**Background**

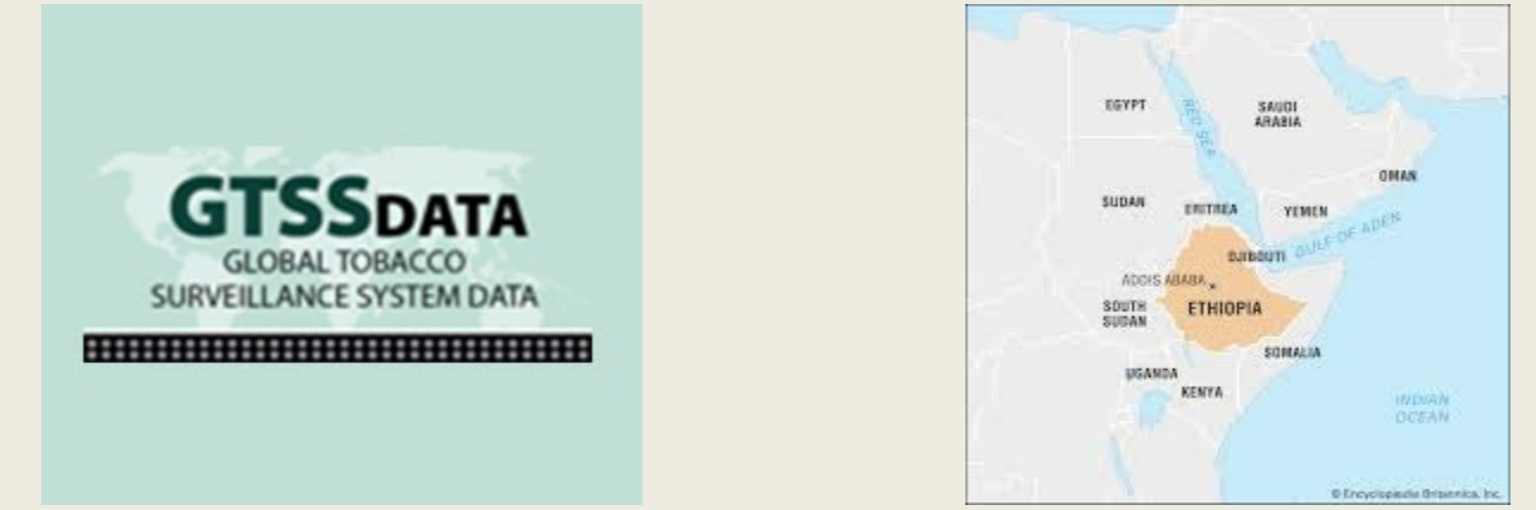
Following WHO's MPOWER, many low- and middle-income countries have seen a rise in the public's health risk perceptions of smoking over the past decade.

However, little is known whether disparities in risk perceptions exist across population subgroups, and whether and how public health communications have a role in addressing such disparities.



**Methods**

We analyzed the Global Adult Tobacco Survey data of Ethiopia (N = 10150).

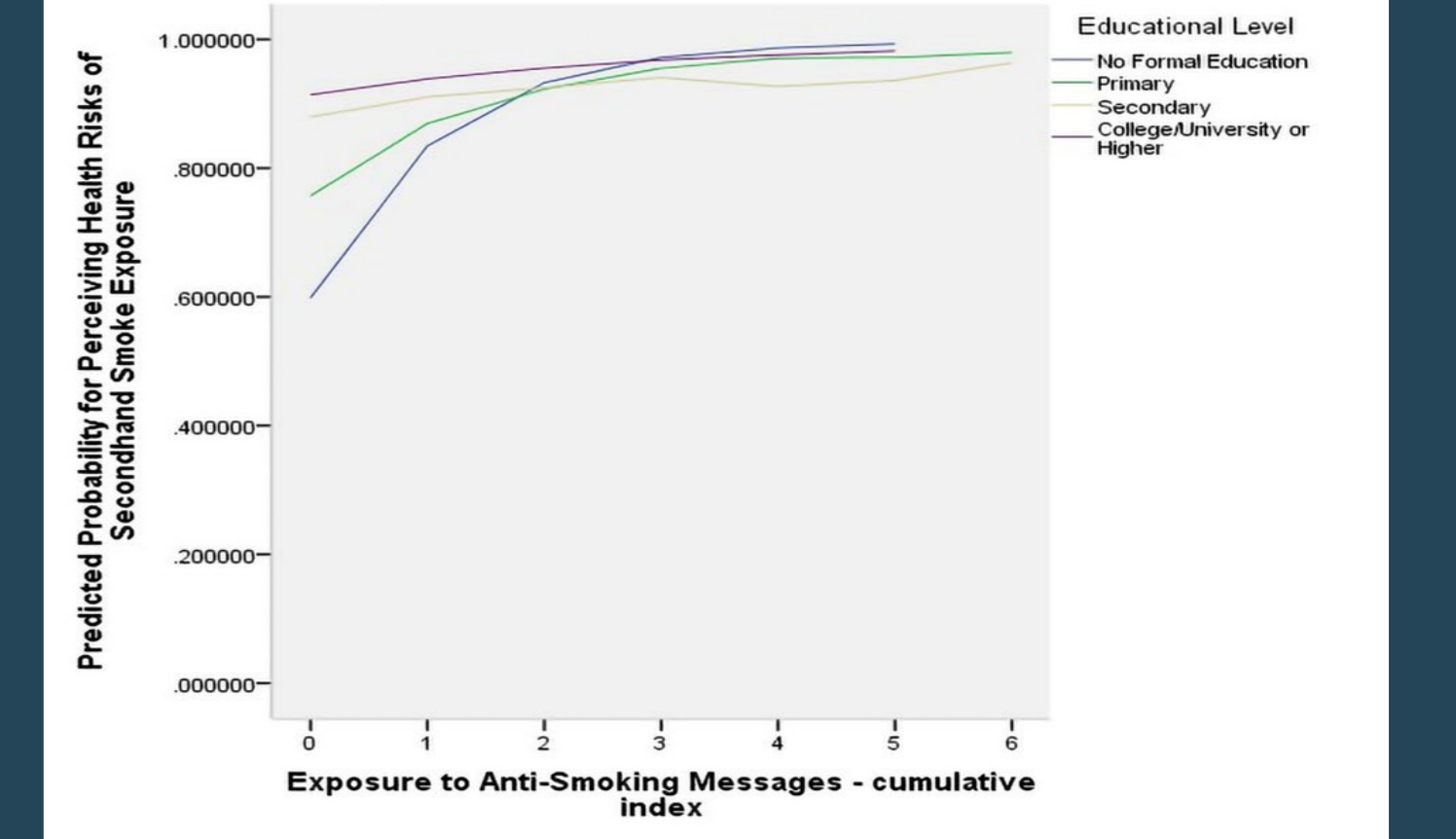
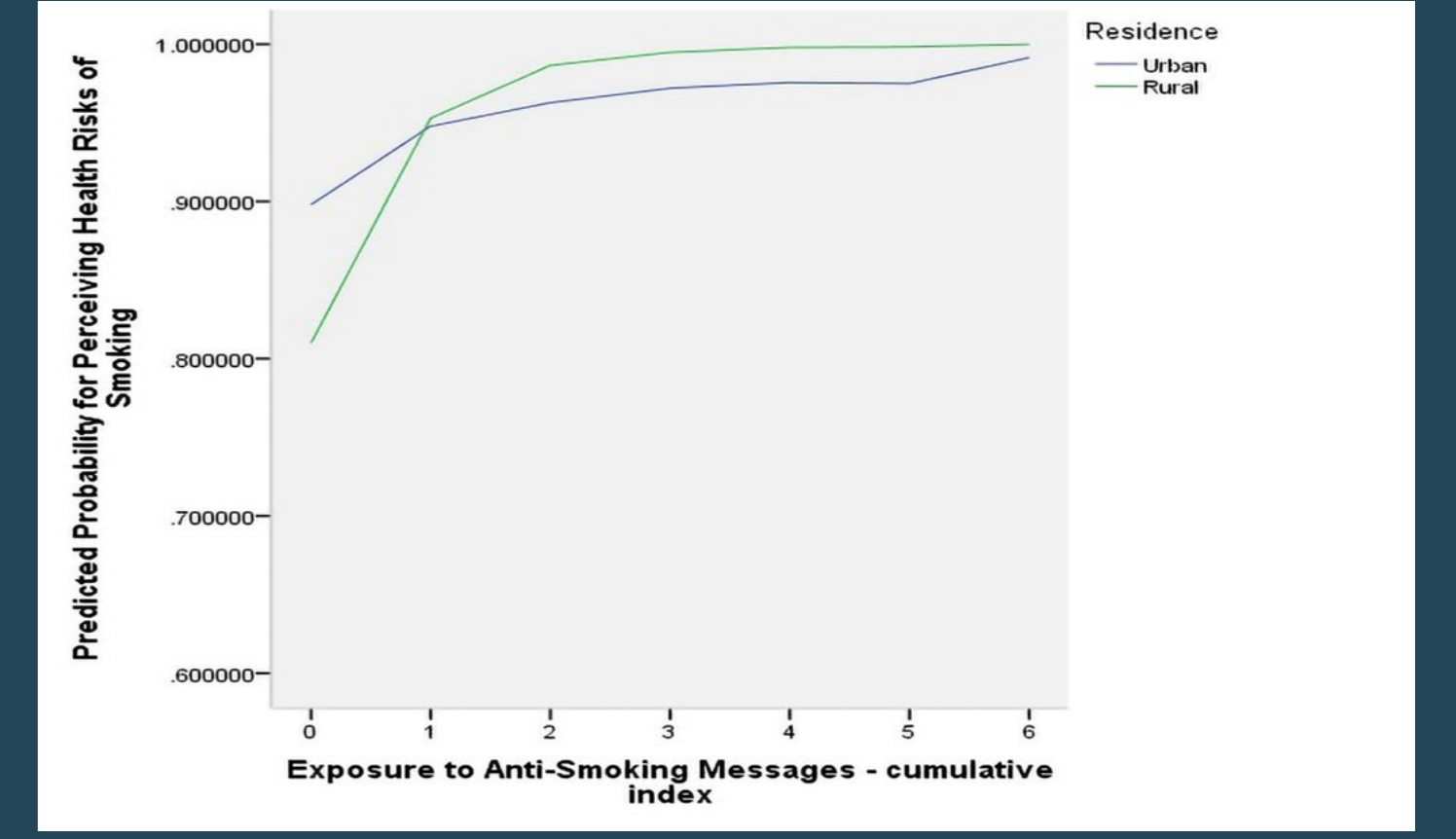


We conducted bivariate analyses to determine if health risk perceptions of smoking and secondhand smoke exposure varied across socioeconomic and urban vs. rural population subgroups.

We then fit generalized linear models, adjusting for the complex sampling design, to examine whether and how anti-smoking message exposure is associated with disparities in risk perceptions across these population subgroups.

**Results**

- Health risk perceptions of smoking and secondhand smoke exposure were significantly lower among less educated, rural, and less affluent population subgroups
- Exposure to anti-smoking messages moderated the associations of place of residence and education with risk perceptions of smoking and secondhand smoke exposure, respectively.
- The change in the probability of risk perception of smoking associated with anti-smoking message exposure was more pronounced among the rural populace compared to urbanites.
- The change in the probability of risk perception of secondhand smoke exposure associated with anti-smoking message exposure was most pronounced among individuals without formal education compared to those with some education



**Conclusions**

- Exposure to anti-smoking messages increases tobacco risk perception.
- Although tobacco risk perceptions are generally high among the overall adult population, disparities exist among population sub-groups.
- There are socioeconomic- and residence-based disparities in tobacco risk perceptions
- Socioeconomic- and residence-based disparities in tobacco risk perceptions could be mitigated by targeted public health communications

**Objectives**

To examine whether disparities in risk perceptions exist across population subgroups, and whether and how public health communications have a role in addressing such disparities.

