

# Disaster Risk Reduction and Displacement: Disease Burden Among Refugees in Mainland Greece

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## Background

Despite the importance of baseline health information for evidence-informed decision-making during disasters and emergencies, data are rarely available for displaced populations. During the European refugee crisis, most seeking asylum in Europe were from regions with high prevalences of communicable and non-communicable diseases. To create an epidemiologic profile for refugees in mainland Grecian refugee camps, this study assessed the prevalence of 11 communicable and non-communicable diseases among refugees utilizing Médecins du Monde (Mdm) in-camp clinics.

## Study Population

Using data from Médecins du Monde clinics operating in mainland Grecian refugee camps from April 2016 to July 2017, shortly after the closure of the Balkan Route (Figure 1), this project characterizes the relationships between determinants of disaster impacts and negative health outcomes in a complex emergency setting.



Figure 1. Main Balkan Route transit pathways Connecting Greece to Western Europe.

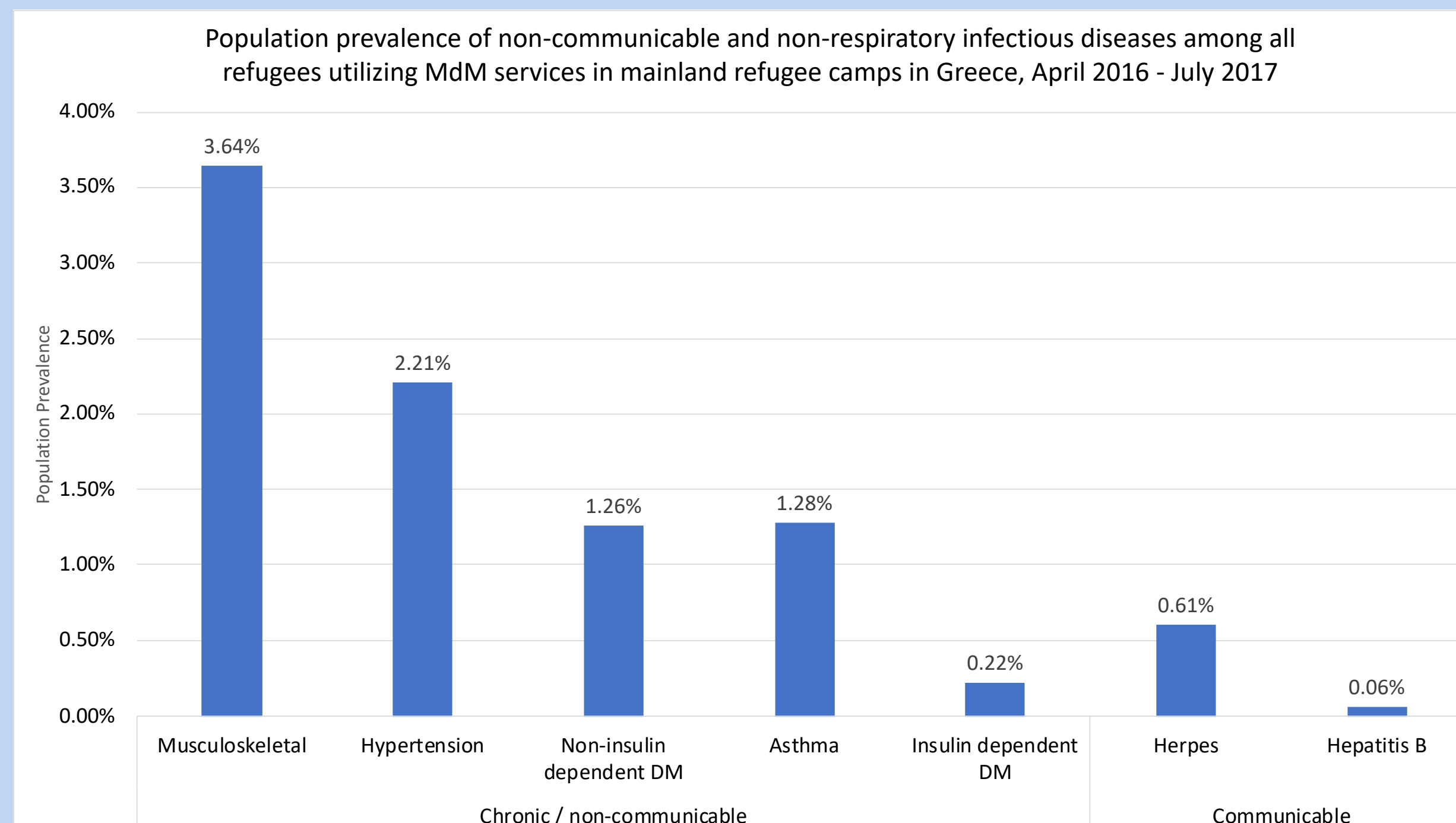
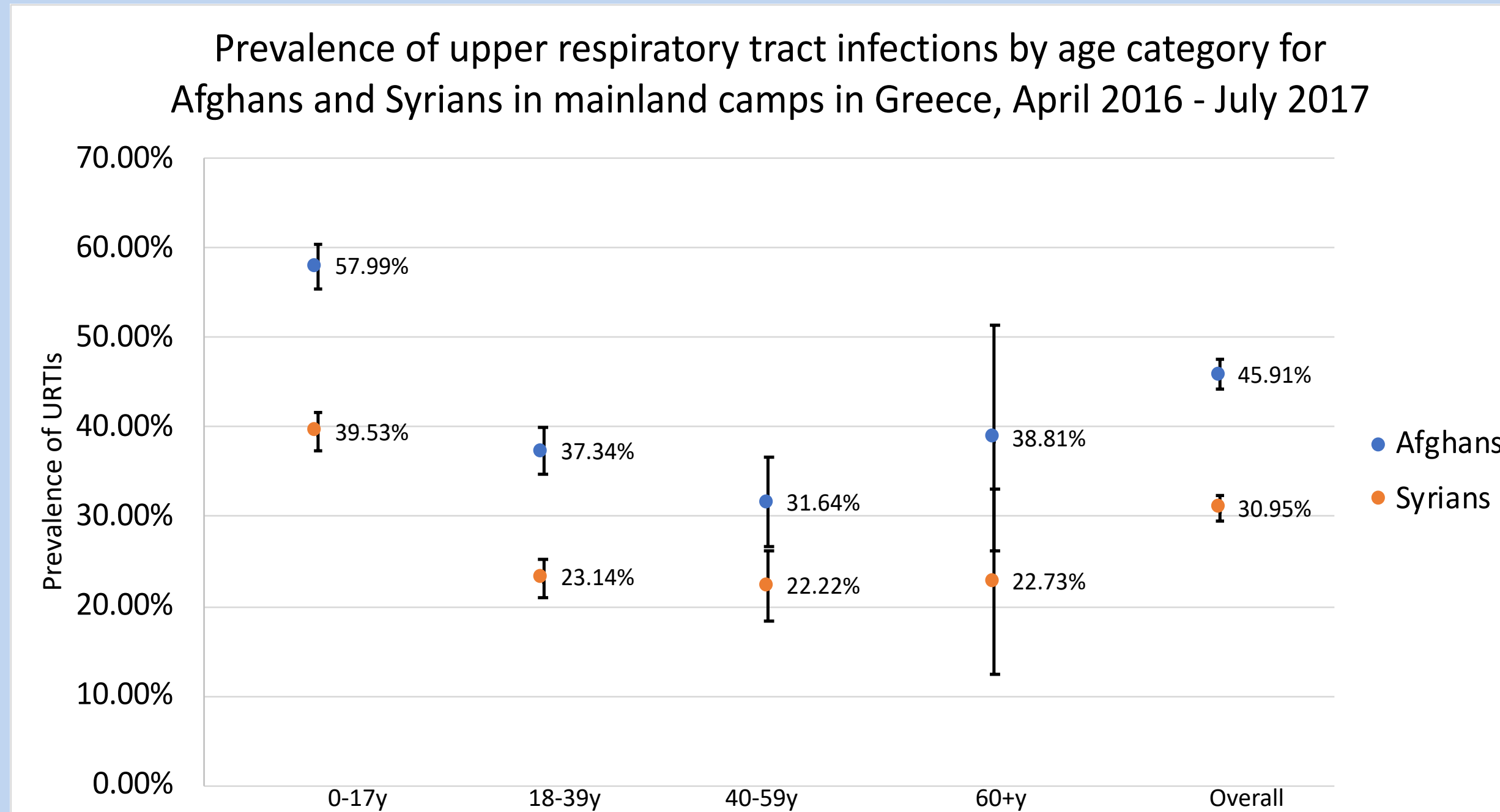
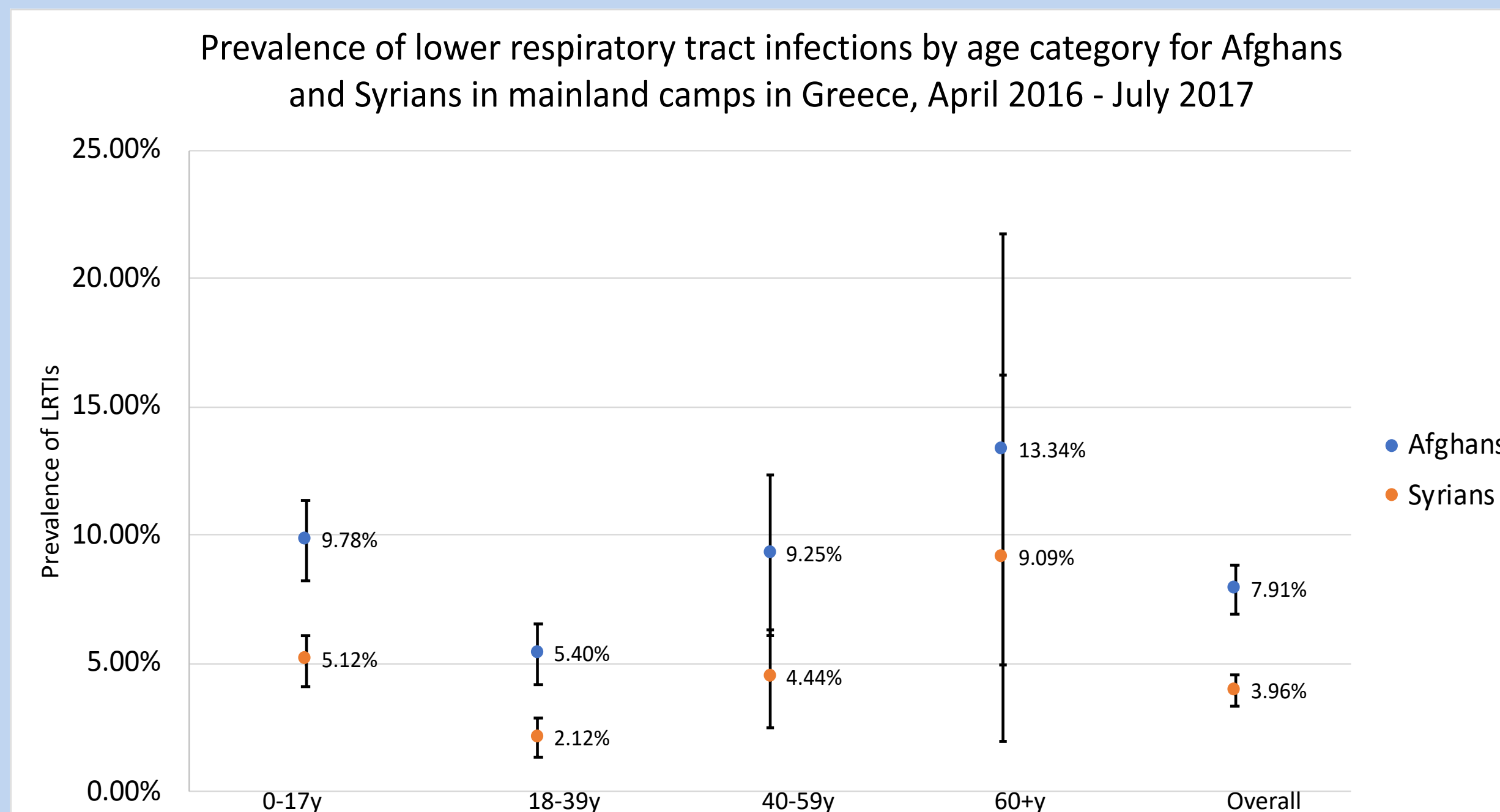


## Methods

The prevalences of selected diseases among individuals utilizing Mdm services were determined from data collected at mainland Grecian refugee camps clinics from April 2016 - July 2017. Overall and age-specific prevalences were reported. Differences in disease burden among refugees from the largest sending countries - Afghanistan and Syria - were compared using prevalence ratios and 95% confidence intervals. Patterns in results were compared with disease burden estimates in sending countries and with findings from comparable settings.

## Results

Respiratory tract infections (RTIs) were the most prevalent outcome. Among RTIs, upper RTIs were most common, with a prevalence of nearly 40%; throughout the study period, over 46% of children under 18 years had at least one upper RTI consultation. Musculoskeletal conditions (3.64%), were the most prevalent non-communicable outcome, followed by hypertension (2.21%) and asthma (1.28%). Afghans were 31.68% more likely than Syrians to have a consultation for at least one condition (PR: 1.32; 95% CI: 1.25, 1.39). The prevalence of RTIs was comparable to sending countries, but there was a comparatively lower burden of other conditions among refugees than literature estimates from sending countries.



## Conclusion

Refugees utilizing Mdm clinics in camps had higher burdens of communicable diseases - predominantly RTIs - relative to non-communicable diseases. Non-communicable disease burdens were comparatively lower than reported prevalences from in-country populations. These findings can be attributed to a range of considerations including differences in demographic profiles between sending countries and refugee populations (e.g., younger, more predominantly male) and missed opportunities for utilizing clinical care. Further investment is needed to capture the and address the health needs of displaced populations to support evidence-informed decision-making processes in humanitarian emergency responses.

## Recommendations and Implications

- Inclusion of refugees and internally displaced persons is vital for reaching the targets set forth in the Sendai Framework (Figure 2)
- Displaced persons should actively be included in disaster risk reduction planning, policy, and implementation
- Baseline health data are needed to meaningfully report health-related losses and damages following disaster events
- The timeline has been accelerated for the implementation and coverage of multi-hazard early warning systems (MH-EWS); to protect the most vulnerable, MH-EWS must be available and accessible to these communities.

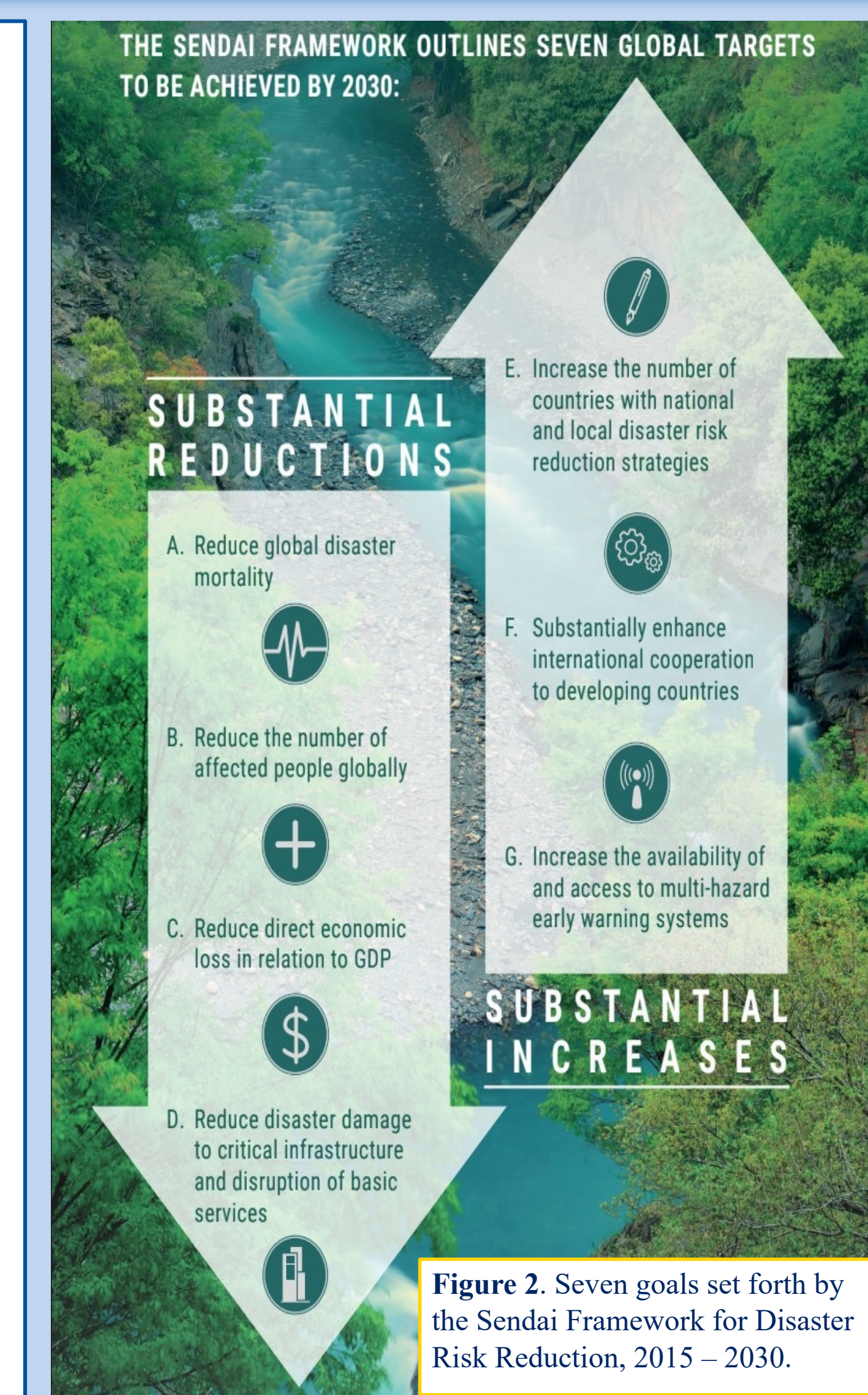


Figure 2. Seven goals set forth by the Sendai Framework for Disaster Risk Reduction, 2015 - 2030.

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