

A Web of Harm Prevention: Mapping and Analyzing Policy Progress Towards the 10-10-10 Targets

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INTRODUCTION

Criminalization, stigma, and discrimination against people living with HIV, key populations, women and girls, and other marginalized populations create very real barriers to achieving global HIV/AIDS goals. Evidence shows that in order to end AIDS by 2030, it is crucial that countries remove punitive laws that criminalize key populations and expand rights-supportive laws and policies that fight stigma, discrimination, gender-based violence, and gender inequity (The Lancet HIV, 2021). The HIV Policy Lab tracks seven laws/policies that countries should adopt in order to create a legal/policy environment conducive to achieving the UNAIDS-proposed '10-10-10' societal enabler targets. *No country in the world has adopted all seven of these laws and policies.* But 181 countries have adopted at least one, and each of the seven has been adopted by at least one country.

This work presents an analysis of policy co-occurrence to understand the extent to which countries across WHO regions have adopted different policy combinations. Co-occurrence refers to how often a single country has adopted a pair of policies at the same time. This can show us not just the frequency of a policy's implementation but also the policies that complement one another. For example, in the maps below and opposite we can see that same-sex relationship decriminalization occurs frequently in all regions with national human rights institutions.

METHODS

To represent the total value of policy adoption for the 10-10-10 targets, the societal enablers indicators of the HIV Policy Lab were totaled for 2020.

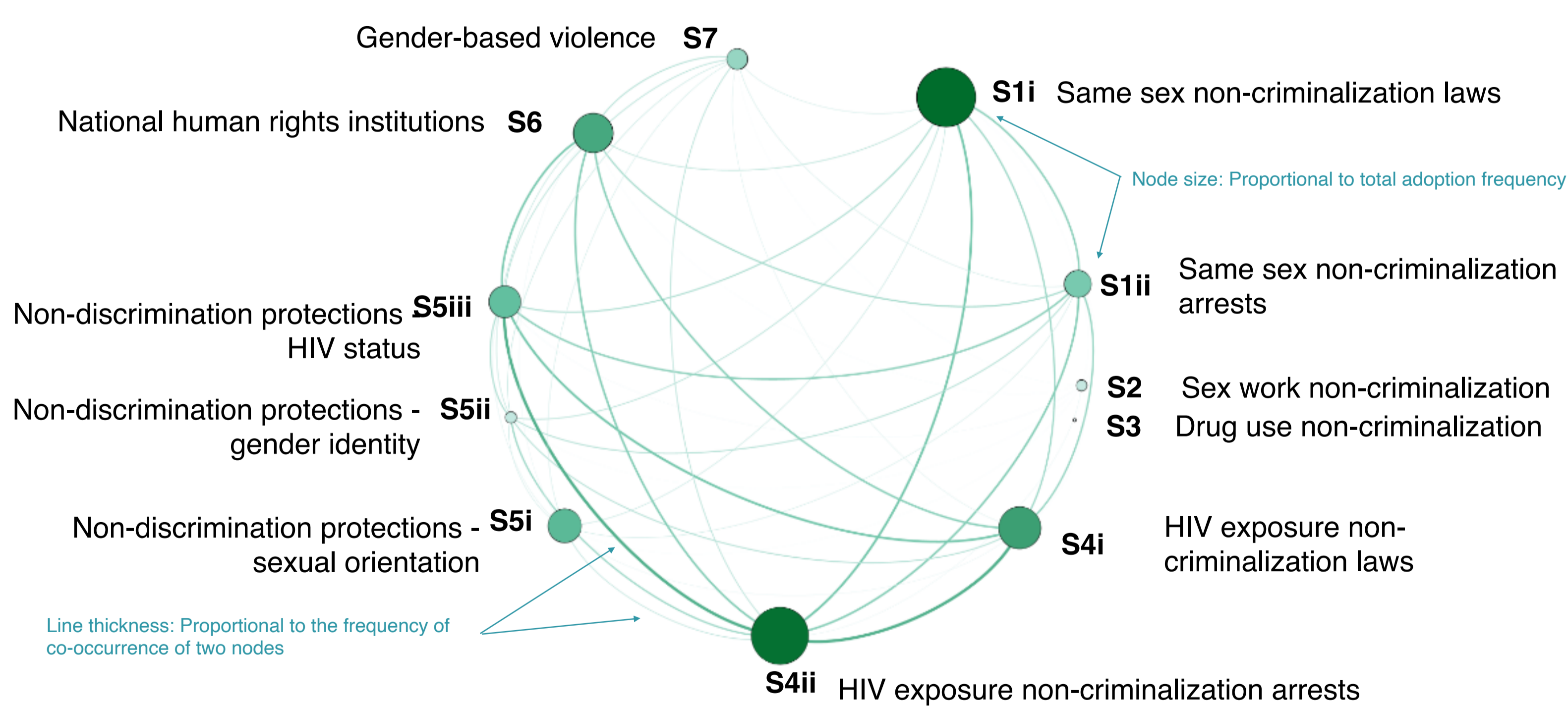
To better understand how policies occurred together, the policies were split from the main HIV Policy Lab dataset and used to create a co-occurrence matrix. In the equation below, each pair of policies (k, l) are summed together and averaged over n rows (194 countries) in the dataset. Doing so produces one cell in the matrix which is the co-occurrence value for that particular pair of policies. Expressed mathematically:

for variables k, l in n rows to matrix M

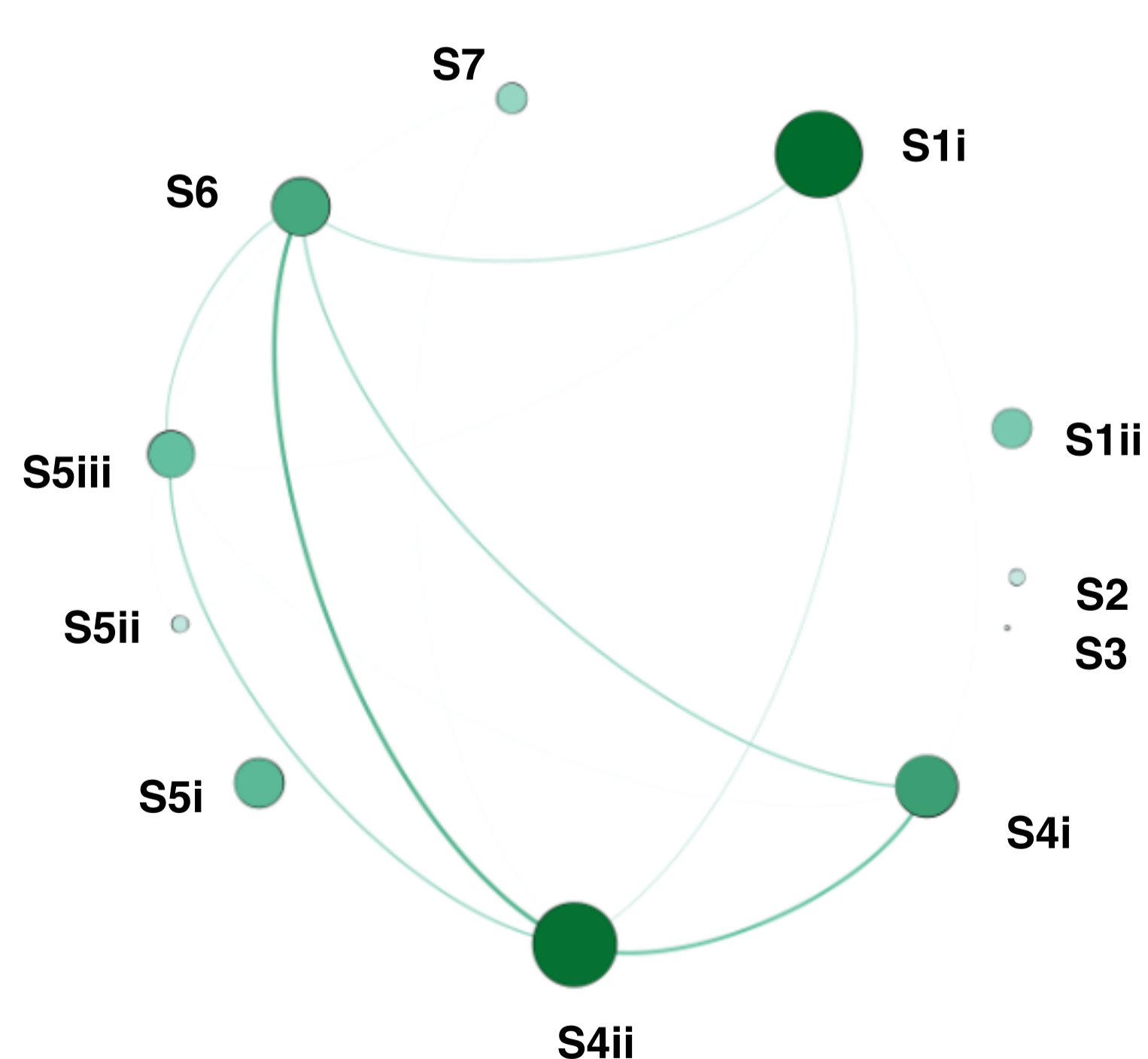
$$M_{k,l} = \frac{\sum_1^n kl}{n}$$

Once the matrix was produced, this could be arranged in a circular format and edges added. Each node's size is proportional to its total frequency in the full dataset and each edge is weighted proportional to the frequency of co-occurrence between the two nodes (i.e., the thicker and darker the edge, the more countries there are in which the two policies co-occur).

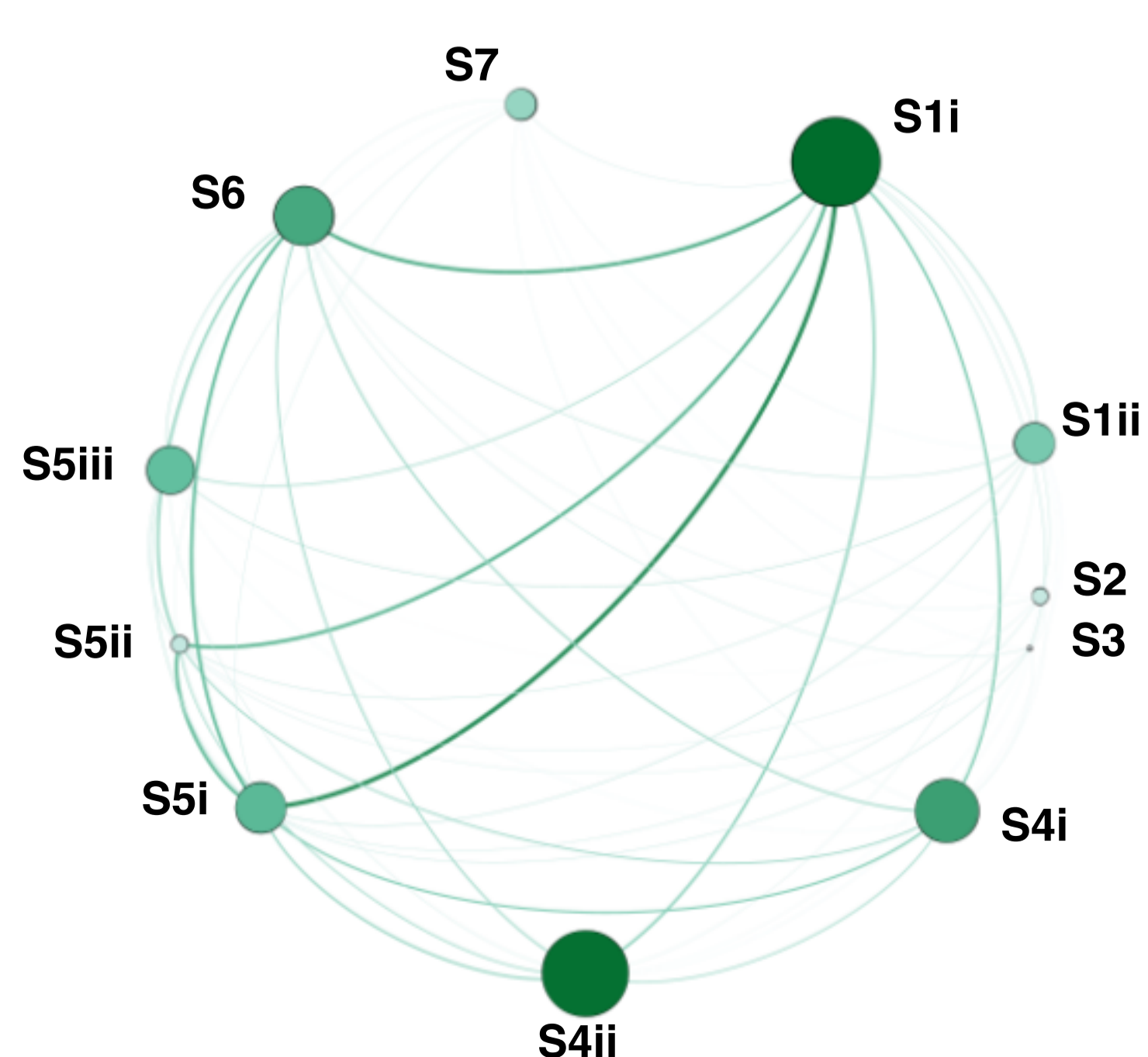
RESULTS



WHO Africa Region (AFRO)

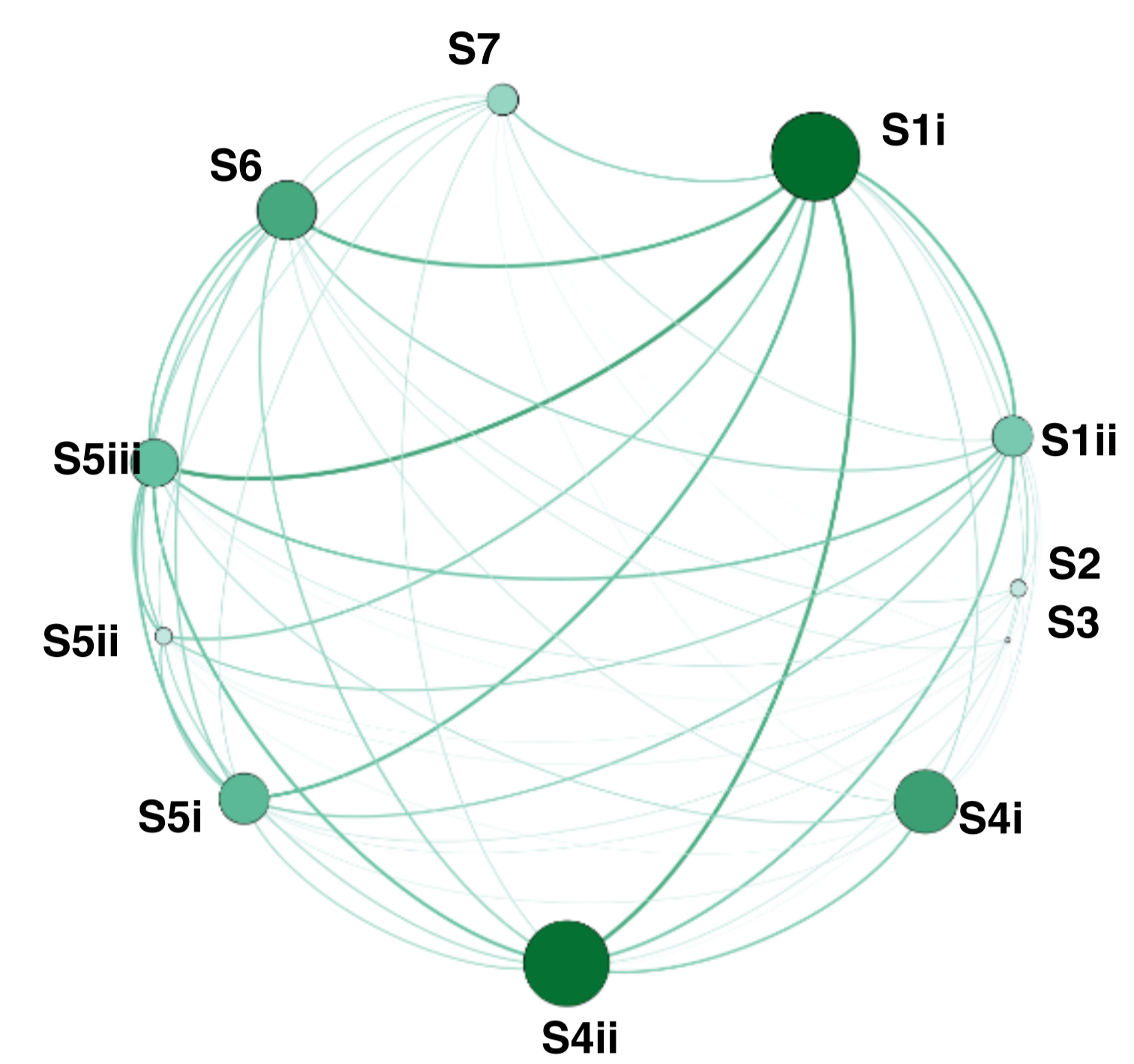


WHO Eastern Mediterranean Region (EMRO)

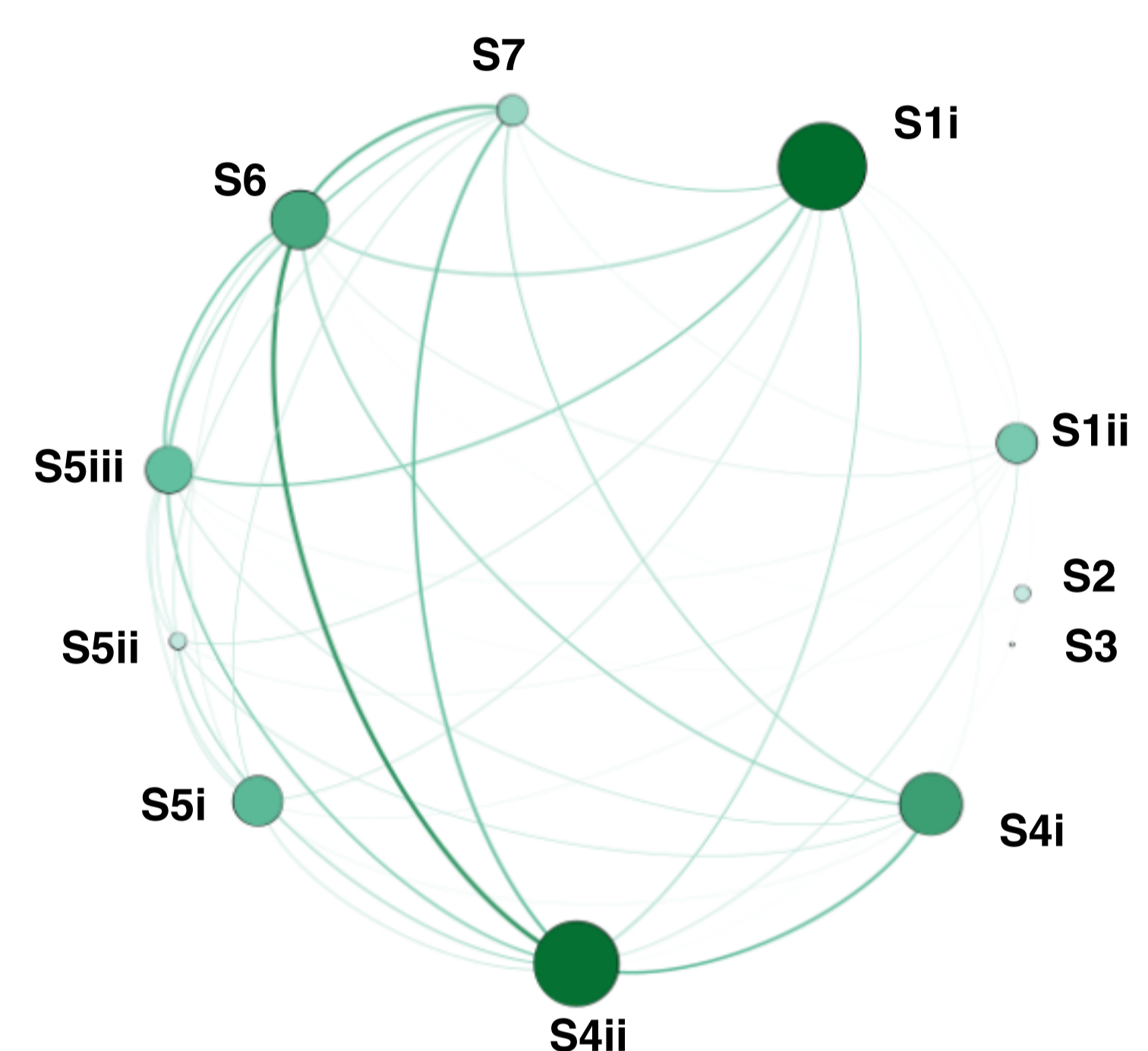


WHO European Region (EURO)

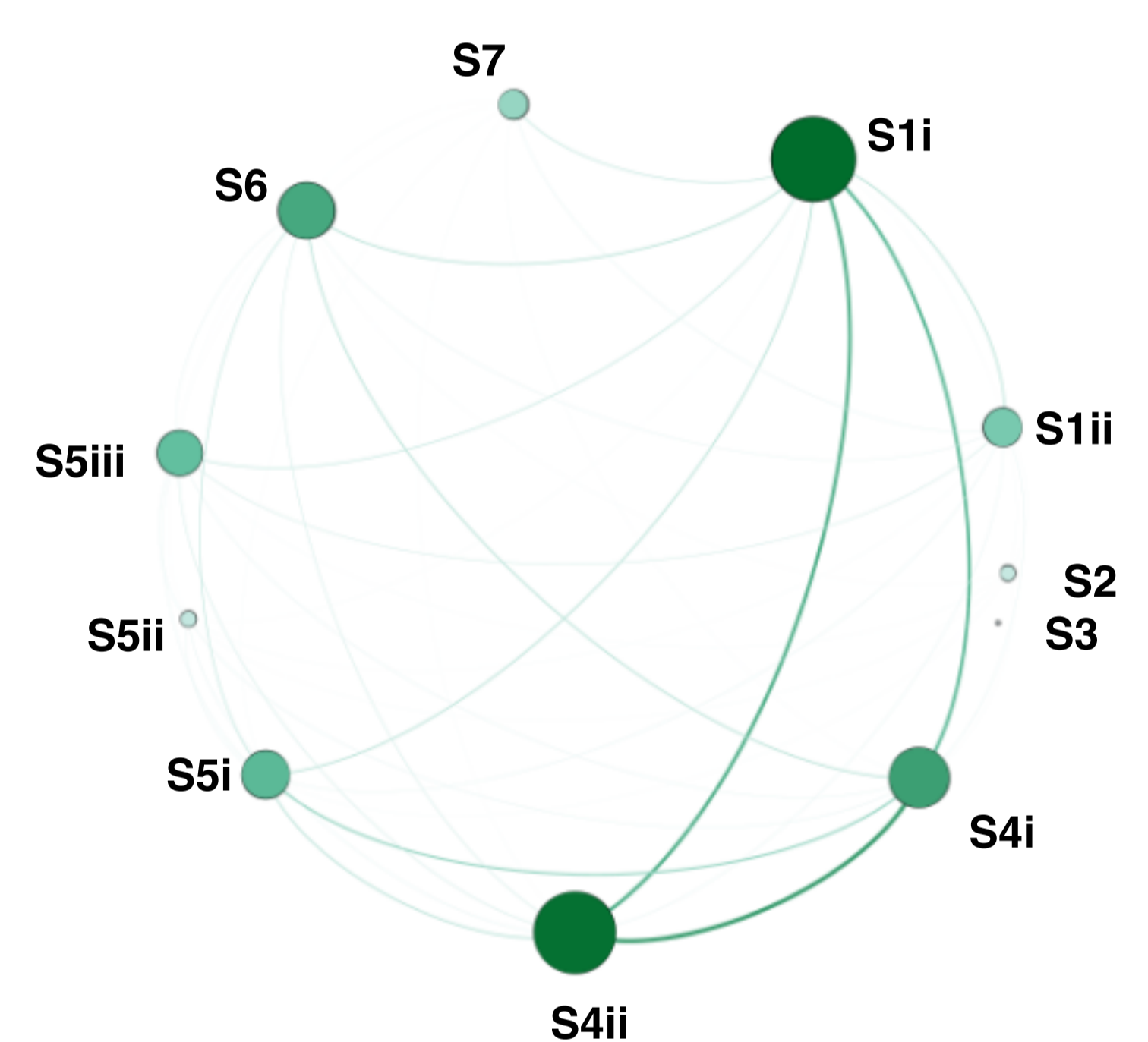
RESULTS



WHO Region of the Americas (PAHO)

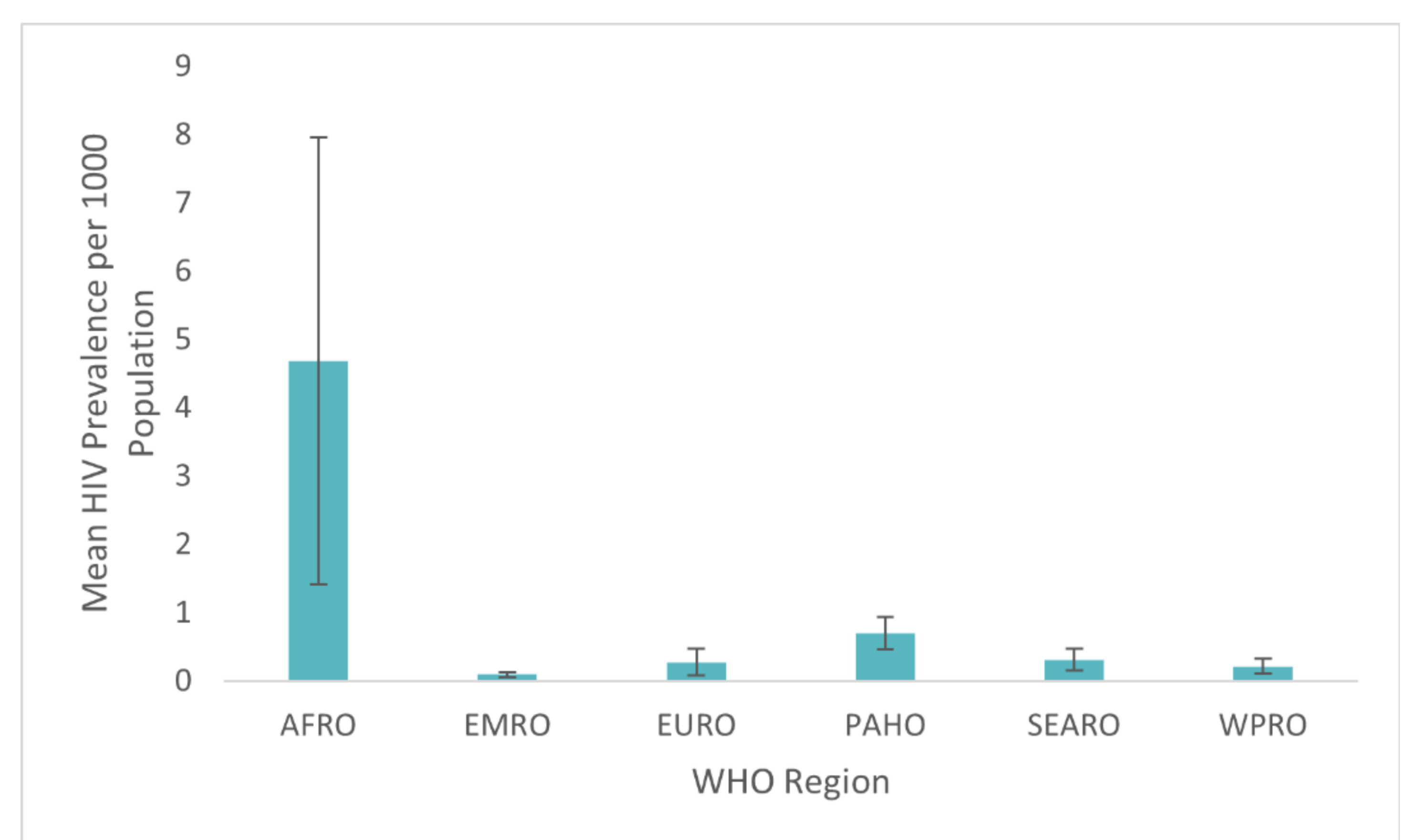


WHO South East Asia Region (SEARO)



WHO Western Pacific Region (WPRO)

HIV INCIDENCE



CONCLUSION

Co-occurrence analysis across different regions show the completeness of policy adoption. EMR and WPR both show significantly less adoption than other regions. This analysis also shows the core areas of focus for these countries.

Using tools like policy maps to visualize and understand how policies interact with each other is vital because, in the real world, no policy exists in isolation—the implementation and impact of each is always affected by other policies.

ACKNOWLEDGEMENTS

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