

The Hep-CORE Policy Score: A European hepatitis C national policy implementation ranking

Authors: Adam Palayew BSc¹, Samya Rose Stumo MSc², Prof Graham S Cooke FRCP³, Prof Sharon J Hutchinson PhD⁴, Prof Marie Jauffret-Roustide PhD⁵, Prof Mojca Matic MD PhD^{6,7}, Prof Magdalena Harris PHD⁸, Prof Ammal M Metwally MD^{9,10}, Homie Razavi PhD¹¹, Prof Jeffrey V Lazarus PhD², on behalf of the Hep-CORE Study Group

1. McGill University Department of Epidemiology, Biostatistics, and Occupational Health 2. Barcelona Institute for Global Health (ISGlobal), Hospital Clínic, University of Barcelona 3. Division of Infectious Diseases, Imperial College 4. School of Health and Life Sciences, Glasgow Caledonian University Cowcaddens Rd Glasgow, UK 5. Cermes3 (Inserm U988/CNRS UMR 8211/Ecole des Hautes Etudes en Sciences Sociales/Paris Descartes University) 6. University medical Centre Ljubljana, Japljeva 2, 1525 Ljubljana, Slovenia 7. Faculty of Medicine, University of Ljubljana, 8. Department of Public Health, Environments and Society; London School of Hygiene & Tropical Medicine, 9. Community Medicine Research Dept, Medicine Research Division, National Research Centre 10. Association of Liver Patient Care, Dakhlyia, Egypt, 11. Center for Disease Analysis Foundation, 1120 W South Boulder Rd, 80026, Lafayette, CO, USA

INTRODUCTION

New hepatitis C virus (HCV) treatments spurred the World Health Organization (WHO) in 2016 to adopt a strategy to eliminate HCV as a public health threat by 2030.¹ To achieve this, key policies must be implemented.

AIM

In the absence of monitoring mechanisms, this study aims to assess the extent of HCV policy implementation from the perspective of liver patient groups.

METHOD

Thirty liver patient organizations were surveyed in October 2018. They were queried on how policies were implemented in practice. Respondents received two sets of questions: 1. addressing WHO recommendations; and 2. from validated data sources verifying an existing policy in their country. Experts selected key variables from each set for inclusion into index scores. The index scores were calculated with a multiple correspondence analysis (MCA).² Proxy reference countries StagNation (no policies) and ElimiNation (all policies implemented) were included to contextualize answers. In the second index, ProcrastiNation (all policies in place, but none implemented) was also included. We extracted scores for each country and standardized them from 0 to 10 (best).

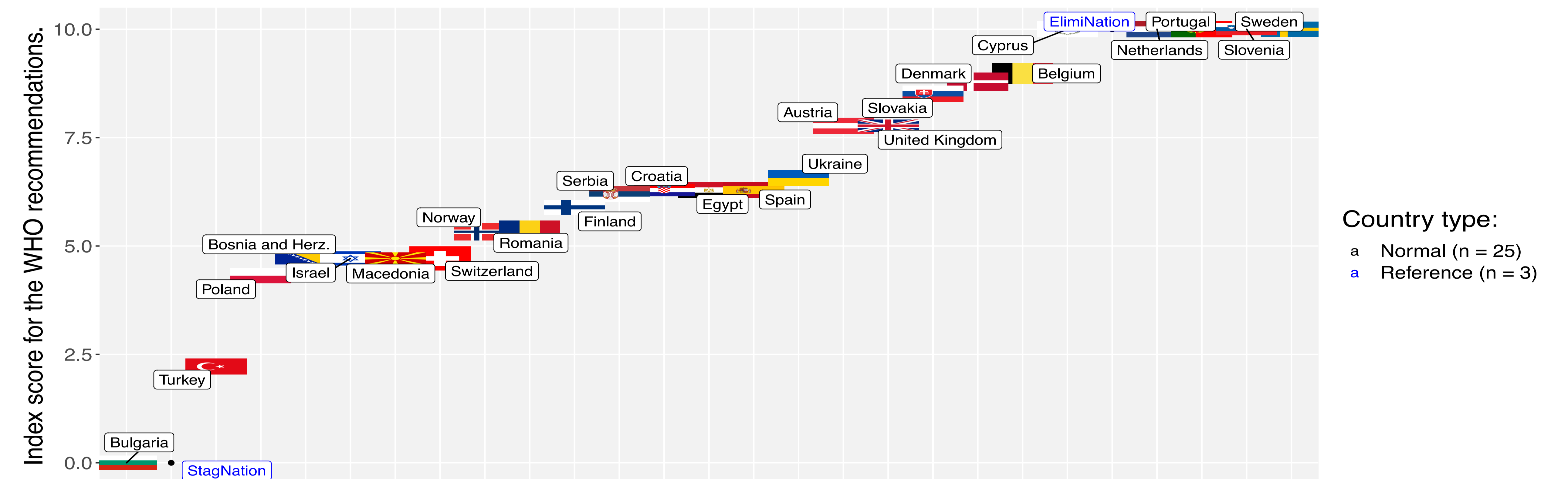
RESULTS

In total, 25 countries responded. In the WHO recommendations index, we included: microelimination in migrants, people who inject drugs, prisoners, sex workers as well as service integration of blood safety, harm reduction, and migrant services. The WHO MCA yielded a 1-Dimension (1D) solution explaining 75.5% of the variation. Bulgaria had the lowest score with all negative responses while five countries had perfect scores (Figure 1A). In the verified policy index, we included the variables: fibrosis restrictions, drug alcohol restrictions, needle-syringe program (NSP) community, NSP prison, opioid substitution therapy (OST) community, OST prison, HCV testing in prisons, and HCV treatment in prisons. The verified policy MCA yielded a 2D solution with D1 (if policies were in place) accounting for 44.3% of the variation and D2 (the proportion of policies in place that were implemented) accounting for 34.6%. Spain had the highest scores for D1 and D2, while Bosnia Herzegovina and Finland had the lowest scores for D1 and D2, respectively (figure 1B).

CONCLUSIONS

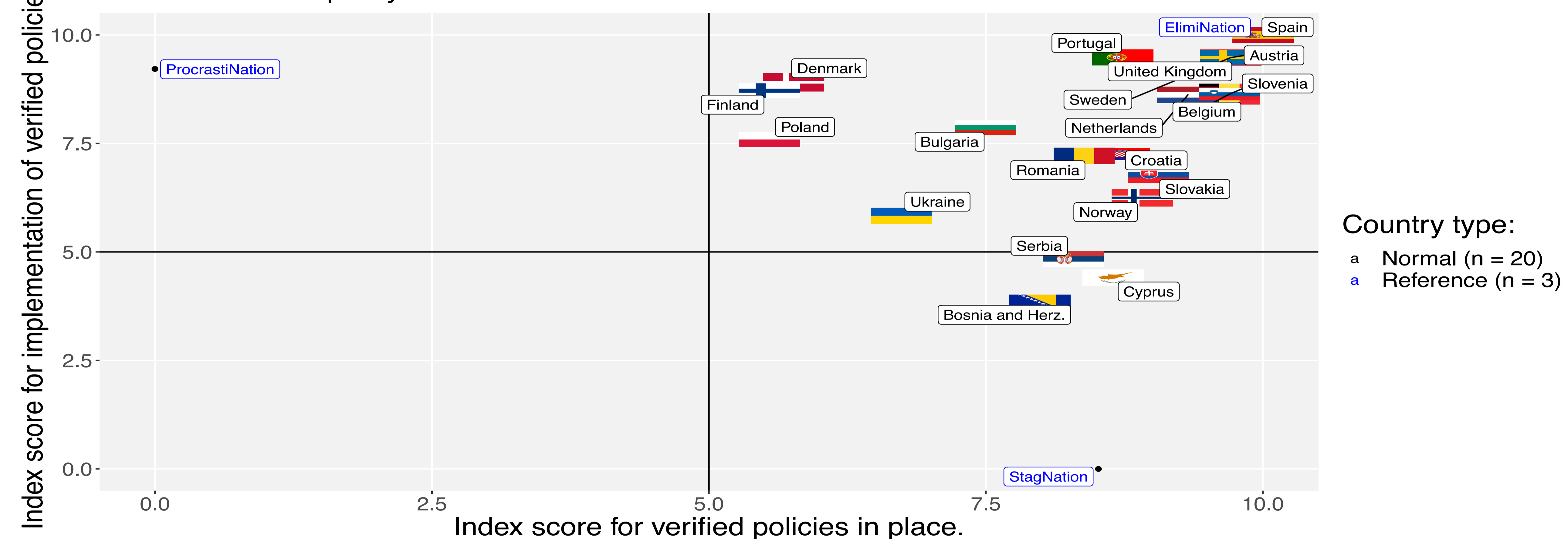
Patient groups reported low implementation of WHO recommendations and of HCV policies in Europe. Although, there were major differences among countries. If countries are to meet the WHO's HCV elimination goal, they need to further expand elimination efforts, especially to vulnerable populations.

Panel A: WHO recommendation index scores.



Country type:
a Normal (n = 25)
a Reference (n = 3)

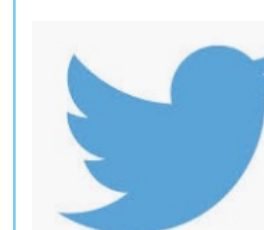
Panel B: Verified policy index scores.



Country type:
a Normal (n = 20)
a Reference (n = 3)

REFERENCES

- World Health Organization. Global health sector strategy on viral hepatitis 2016-2021 towards ending viral hepatitis. Geneva: World Health Organization; 2016.
- Greenacre M. Correspondence analysis in practice. 3 ed. Boca Raton Florida: CRC Press; 2017.



@AadmPalayew

@JVLazarus

ACKNOWLEDGEMENTS

GC is supported in part by the BRC of Imperial College NHS Trust and an NIHR Professorship. JVL is supported by a Spanish Ministry of Science, Innovation and Universities Miguel Servet grant (Instituto de Salud Carlos III/ESF, European Union (CP18/00074)).

CONTACT INFORMATION

Jeffrey V Lazarus, Barcelona Institute for Global Health (ISGlobal), Calle del Rossellón 132, 4th, ES-08036 Barcelona, Spain. Jeffrey.Lazarus@isglobal.org
ORCID: 0000-0001-9618-2299