

The 'Physician-Legislator': a Comparative Analysis of Physician Membership in National Parliamentary Bodies



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INTRODUCTION

Worldwide, health care costs account for roughly 10% of global gross domestic product (GDP)¹. Despite this substantial expense, physician membership in the parliamentary bodies that appropriate funds for healthcare is seldom discussed. We therefore sought to quantify physician membership in national parliamentary bodies across the globe.

METHODS

We obtained a list of national parliamentary bodies from the Inter-Parliamentary Union (IPU)². Of the 272 parliamentary bodies, we received official responses regarding physician membership from 43, and online public information was available from an additional 80. We defined physicians by the following: 1) degrees indicative of physician-level training, 2) descriptions of medical education and/or work as a physician, and/or 3) inclusion of physician-specific prefixes. All data was obtained between December 2020 and March 2021. In addition, using data obtained from The World Bank, we evaluated the relationship between physician membership in parliaments and variables related to both healthcare expenditures and physician prevalence³.

RESULTS

The 123 parliamentary bodies included in the present study encompass 96 nations, including 38 in Europe (38 of 43 total, 88%), 24 in Asia (24/47, 50%), 11 in North America (11/23, 48%), 10 in Africa (10/54, 19%), 8 in Oceania (8/14, 57%), and 5 in South America (5/12, 38%) (Fig. 1).

Of these 123 bodies, 18 (15%) reported no physician members. These included the unicameral chambers of Andorra, Denmark, the Federated States of Micronesia, Kiribati, Liechtenstein, Luxembourg, Monaco, San Marino, the Seychelles, Tonga, and Vanuatu, as well as the Senates of Australia, Belgium, Grenada, and the Philippines, the National Councils of Bhutan and Slovenia, and the Chamber of Deputies of Rwanda. The Senate of the Dominican Republic was the legislative body with the highest proportion of seats occupied by physicians (5 of 32, 15.6%), while the Grand National Assembly of Turkey was home to the greatest total number of physicians (44 of 600, 7.3%) (Fig. 2).

Physician representation differed across regions ($p = 0.01$ by Kruskal-Wallis H-test), driven primarily by lower representation in Africa (mean: 2.8%, IQR: 1.8% to 3.9%) and Oceania (1.6%, 0.0–2.7%), relative to North America (5.7%, 3.2–7.3%), South America (5.0%, 3.3–6.6%), Asia (4.5%, 2.7–6.4%), and Europe (4.3%, 1.2–5.8%). There was no relationship between the number of physicians in parliament and either the number of physicians per 1000 population ($p=0.57$) or healthcare expenditures as a percentage of GDP ($p=0.89$), and only a weak, negative association between physician membership and government healthcare spending per capita (Pearson's $r=-0.23$, $p=0.02$).

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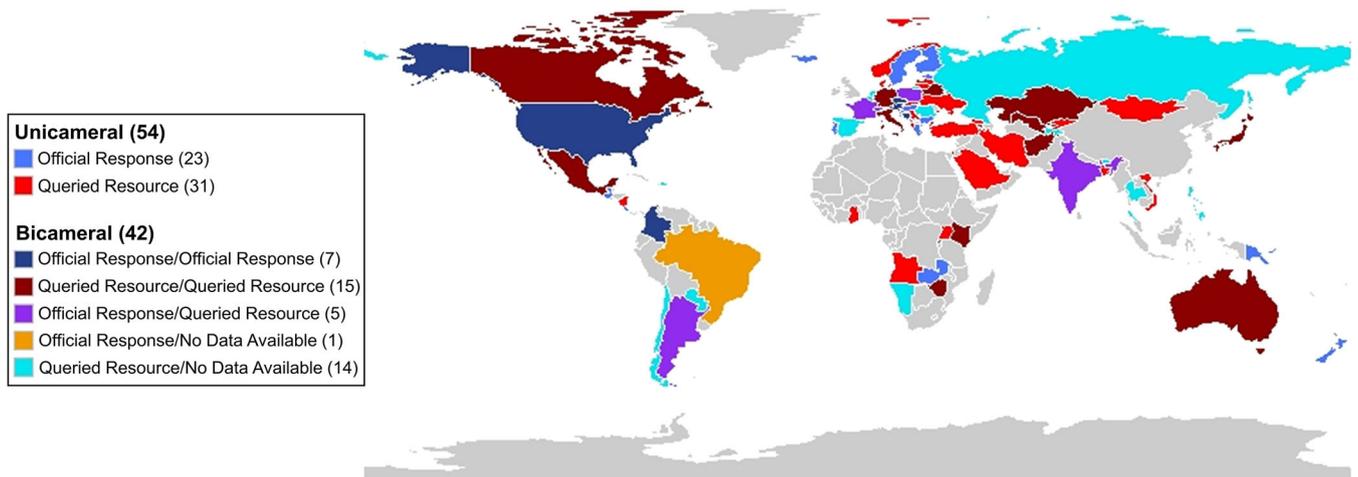


Figure 1 World map depicting the 123 parliamentary bodies included in the present study. Data was obtained via either official response from the parliamentary body ('official response') or a manual query of the body's official online resource ('queried resource'). For bicameral parliaments, the upper house is presented first and the lower house second. Countries in grey contributed no data to the present study.

DISCUSSION

The present study reports on physician membership in 123 parliamentary bodies across 96 nations, with physicians accounting for between 0.0 and 15.6% of total members. There was significant variability between regions with respect to physician representation. Notably, a weak but significant negative correlation was observed between physician membership and government healthcare spending per capita.

The potential contribution of the 'physician-legislator' is reflected in the breadth of healthcare-related issues that are debated at the highest levels of government, including public investment in healthcare infrastructure, accessibility of healthcare services to vulnerable populations, and appropriation of funding for biomedical research. Barriers to physician entry in the legislative arena are multifactorial and likely variable across countries, although several have been proposed, including the extensive demands of clinical practice,

professional risk in excess of perceived benefit, and a paucity of mentors within the field⁴. Although the factors that contribute to physician participation in the lawmaking process are complex and beyond this scope of this study, one possible interpretation of our findings, although speculative, is that decreased public healthcare expenditures serve as an impetus for physician involvement in the legislative process.

This study has two key limitations that deserve mention. First, the methods employed are biased towards the inclusion of parliamentary bodies with the resources to respond to queries and/or maintain official resources. Second, this study does not consider criteria for obtaining membership in a parliamentary body (e.g. appointment versus election), a factor that has the potential to influence the proportion of legislators holding advanced degrees.

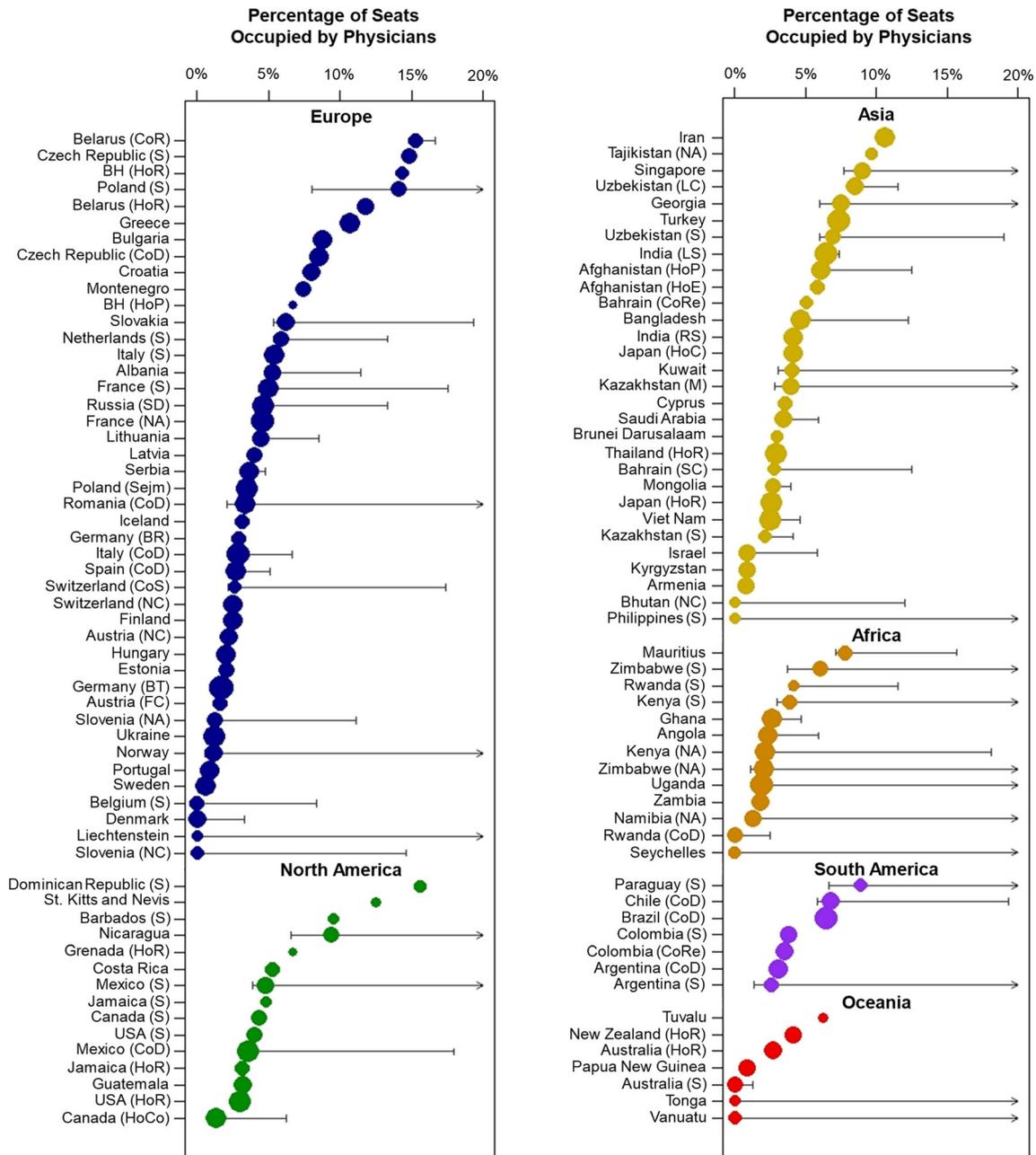


Figure 2 Proportion of parliamentary seats occupied by physicians. Parliamentary bodies are grouped by continent and ranked from highest to lowest. Circle size is proportional to the number of seats in the body. Colours correspond to geographic region—Africa: orange; Asia: gold; Europe: blue; Oceania: red; North America: green; South America: purple. Error bars represent the range of possible values for countries with incomplete biographical information. Arrows indicate that the upper bound of the error bar exceeds the boundaries of the plot. Abbreviations—BH, Bosnia and Herzegovina; BR, Bundesrat; BT, Bundestag; CoD, Chamber of Deputies; CoRe, Council of Representatives; CoR, Council of the Republic; FC, Federal Council; HoC, House of Councillors; HoCo, House of Commons; HoE, House of Elders; HoP, House of Peoples; HoR, House of Representatives; LC, Legislative Council; LS, Lok Sabha; M, Mazhilis; NA, National Assembly; RS, Rajya Sabha; S, Senate; SD, State Duma. Data for Andorra, the Federated States of Micronesia, Grenada, Kiribati, Luxembourg, Monaco, and San Marino, which have no physicians and are without error bars, are omitted for clarity.

In conclusion, the present study is the first to quantify and compare physician representation across national parliamentary bodies. Further work in this area would ideally include data from those bodies that did not contribute data to the present study, as well as temporal changes in physician membership over time.

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Declarations:

Conflict of Interest: The authors report that no conflicts of interest exist.

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