Democracy and implementation of non-communicable disease policies

In their Article in The Lancet Global Health, Luke Allen and colleagues found weak evidence for a positive association between democracy and the implementation of policies recommended by WHO to reduce the burden of premature non-communicable disease mortality. As Allen and colleagues note, that finding is in contrast with our research on the positive association between democracy and population health outcomes on non-communicable diseases. Accordingly, here we build on the important analysis of Allen and colleagues by closely examining the association between democracy and implementation of non-communicable disease policy.

First, we expanded Allen and colleagues’ analysis of the association between the Economist Intelligence Unit measure of democracy and implementation of non-communicable disease policy to include data for both 2015 and 2017 and for 144 to 149 countries, depending on the democracy indicator. Allen and colleagues used 2017 data for 144 countries. Second, we considered three additional democracy indicators produced by the Varieties of Democracy project, Freedom House, and the World Bank.

We found that all four democracy indices are positively associated with implementation; although only three of the four are significant (figure). Third, we compared countries’ adoption of WHO’s best buy non-communicable disease policies in 2017, finding autocracies only outperform

Figure: Association between democracy and implementation of non-communicable disease policy

(A) Regression results for non-communicable disease policy implementation and four democracy indices for the years 2015 and 2017. We did separate random-effects regressions for each democracy index. The dependent variable is implementation of non-communicable disease policy, measured as an aggregate score ranging from 0 (no policies implemented) to 18 (all policies fully implemented). Squares are point estimates, with whiskers showing 95% CIs. The following time-varying independent variables were included in the regressions, but are not included in the figure (available on request from corresponding author): GDP per capita, female educational attainment at age 15 years, risk of premature mortality from non-communicable diseases, tax share in GDP. The following time-invariant independent variables were included in the regressions, but are not included in the figure (available on request from corresponding author): continent, legal origin, tropical climate, average distance to nearest ice-free coast, and oil endowment. (B) Proportion of countries not implementing each non-communicable disease policy by regime type for 2017. No implementation means neither partial nor full policy implementation. The implementation data is drawn from WHO Noncommunicable Disease Progress Monitor for 2017. We classified regimes using V-Dem’s regimes of the world index. EIU= Economist Intelligence Unit. FH=Freedom House. GDP=gross domestic product. V-Dem=Varieties of Democracy. WB=the World Bank

democracies for four of the 19 policy indicators (figure). Allen and colleagues hypothesised that autocracies are more likely to implement health policies that restrict personal freedoms or reduce commercial profits than democracies are. This hypothesis proves true for bans on alcohol and tobacco advertising, which some governments consider a form of speech. Democracies slightly outperform autocracies on smoke-free public places and are more likely to tax tobacco and alcohol, require graphic warnings on cigarette labels, restrict the marketing of unhealthy foods to children, and have pro-health policies on breastfeeding substitutes, promoting physical activity, and reformulating food to reduce trans fatty acids and sodium.4

Our results are in accordance with the literature showing autocratic leaders have less incentive than their democratic counterparts to invest in the policies needed to reduce non-communicable diseases.5 Democracy is often messy, but remains better than the alternatives at addressing the health challenges that are confronting most nations.

We declare no competing interests. SW, JLD, TT, and TJB coauthored the manuscript. SW did the quantitative analysis. SK provided editing support.

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