Suppl. 3. Heatmap of correlation of country-level statistics (all indicators).

	Publications per country	Publications per million population per country	Citations per country	Citations per million population per country	Publications in 1st quartile journals per country	Publications in 1st quartile journals per million population per country	CiteScore total per country	CiteScore total per million population per country
Publications per country	1.000	0.632	0.956	0.695	0.947	0.671	0.977	0.635
Publications per million population per country	0.632	1.000	0.639	0.918	0.645	0.857	0.643	0.973
Citations per country	0.956	0.639	1.000	0.778	0.965	0.723	0.979	0.679
Citations per million population per country	0.695	0.918	0.778	1.000	0.746	0.904	0.743	0.954
Publications in 1st quartile journals per country	0.947	0.645	0.965	0.746	1.000	0.777	0.981	0.693
Publications in 1st quartile journals per million population per country	0.671	0.857	0.723	0.904	0.777	1.000	0.736	0.913
CiteScore total per country	0.977	0.643	0.979	0.743	0.981	0.736	1.000	0.685
CiteScore total per million population per country	0.635	0.973	0.679	0.954	0.693	0.913	0.685	1.000
Surface area (sq. km), 2021	0.297	-0.307	0.264	-0.195	0.233	-0.196	0.267	-0.293
Land area (sq. km), 2021	0.295	-0.311	0.259	-0.200	0.229	-0.201	0.264	-0.297
Population, total, 2023	0.540	-0.225	0.496	-0.085	0.480	-0.080	0.502	-0.209
Population ages 65 and above, total, 2023	0.737	-0.079	0.707	0.202	0.696	0.202	0.712	-0.094
Population ages 65 and above (% of total population), 2023	0.407	0.704	0.441	0.648	0.453	0.633	0.432	0.696
Population density (people per sq. km of land area), 2021	0.184	0.218	0.201	0.217	0.216	0.226	0.188	0.211
Rural population, 2023	0.323	-0.422	0.272	-0.293	0.265	-0.270	0.286	-0.405
Rural population (% of total population), 2023	-0.369	-0.572	-0.401	-0.572	-0.367	-0.482	-0.377	-0.564
Urban population, 2023	0.623	-0.104	0.590	-0.036	0.564	-0.029	0.590	-0.089
Urban population (% of total population), 2023	0.369	0.572	0.401	0.572	0.367	0.482	0.377	0.564
Birth rate, crude (per 1,000 people), 2022	-0.396	-0.741	-0.438	-0.664	-0.453	-0.640	-0.429	-0.732
Death rate, crude (per 1,000 people), 2022	-0.104	0.195	-0.101	0.151	-0.125	0.184	-0.116	0.202
Mortality rate, adult, female (per 1,000 female adults), 2022	-0.366	-0.679	-0.410	-0.611	-0.413	-0.554	-0.387	-0.661
Mortality rate, adult, male (per 1,000 male adults), 2022	-0.376	-0.682	-0.416	-0.625	-0.416	-0.561	-0.396	-0.670
Cause of death, communicable diseases (% of total),* 2019	-0.415	-0.665	-0.412	-0.588	-0.439	-0.611	-0.428	-0.645
Cause of death, injury (% of total), 2019	-0.337	-0.509	-0.347	-0.469	-0.369	-0.486	-0.347	-0.494
Cause of death, non-communicable diseases (% of total), 2019	0.429	0.681	0.430	0.610	0.461	0.634	0.444	0.664
Mortality, road traffic injury (per 100,000 people), 2019	-0.479	-0.704	-0.475	-0.652	-0.504	-0.664	-0.495	-0.697
Mortality, CVD, cancer, diabetes or CRD, ages 30-70 (%), 2019	-0.494	-0.594	-0.551	-0.638	-0.561	-0.635	-0.538	-0.625
Mortality, unintentional poisoning (per 100,000 people), 2019	-0.359	-0.558	-0.392	-0.563	-0.425	-0.583	-0.395	-0.575
Life expectancy at birth, total (years), 2022	0.482	0.765	0.538	0.734	0.535	0.693	0.514	0.760
GDP (current US$), 2023	0.851	0.453	0.850	0.528	0.820	0.470	0.840	0.447
GDP per capita (current US$), 2023	0.484	0.825	0.531	0.797	0.539	0.787	0.526	0.831
Adjusted net national income (current US$), 2021	0.849	0.470	0.843	0.568	0.810	0.476	0.834	0.462
Adjusted net national income per capita (current US$), 2021	0.520	0.826	0.548	0.755	0.559	0.754	0.551	0.818
Current health expenditure (% of GDP), 2021	0.243	0.423	0.290	0.426	0.318	0.424	0.280	0.445
Current health expenditure per capita (current US$), 2021	0.502	0.832	0.530	0.800	0.547	0.786	0.533	0.836
Scientific and technical journal articles, 2020	0.916	0.536	0.912	0.599	0.898	0.548	0.912	0.535
Compulsory education, duration (years), 2023	0.159	0.215	0.169	0.203	0.173	0.208	-0.151	0.200
Unemployment, total (% of total labor force), 2023	-0.066	-0.053	-0.052	-0.013	-0.052	-0.002	-0.067	-0.032
Individuals using the Internet (% of population), 2022	0.478	0.792	0.499	0.745	0.509	0.748	0.500	0.780
Mobile cellular subscriptions, 2023	0.571	-0.119	0.532	-0.044	0.521	-0.077	0.532	-0.128
Mobile cellular subscriptions (per 100 people), 2022	-0.108	0.353	-0.110	0.291	-0.112	0.277	-0.111	0.342

Notes. All data are presented as Spearman's rank correlation coefficients. Shades of green indicate a positive correlation, and shades of red – a negative correlation. Crossed-out coefficients in grey correspond to the absence of significant association (p>0.050).

* The full name of the indicator is "Cause of death, by communicable diseases and maternal, prenatal and nutrition conditions (% of total)".

Abbreviations: CRD, chronic respiratory disease; CVD, cardiovascular disease; GDP, gross domestic product; US$, United States dollar.