How concentrated are academic publications of countries’ progression towards universal health coverage?

All UN member states aim to achieve universal health coverage (UHC) by 2030 as part of the Sustainable Development Goals. Countries’ progression towards UHC can be monitored using the WHO and World Bank standardised framework, whereas the World Bank Universal Health Coverage Study Series (UNICO) documents in depth the progress towards UHC of more than 40 countries. As more knowledge of countries’ pathways towards UHC accumulates and given the call that “all nations need to be producers as well as consumers of research”, one might wonder whether the available knowledge base on the UHC journey relies on a wide range of country experiences or only on a handful of distinctive and potentially unrepresentative ones.

We searched six electronic databases (Scopus, MEDLINE, Embase, Global Health, Econlit, and Web of Science) on March 5, 2019, for “universal health coverage” as keyword, title, or abstract—with no other restrictions—to quantify the extent to which individual countries are referenced in direct association with UHC. Of 7889 total records, 5204 duplicates were removed and the remaining 2685 unique records were imported into R statistical software. Their titles and abstracts were searched for the occurrence of root country names (eg, “Leban” for “Lebanon” or “Lebanese”) based on the list of 183 countries with a reported service coverage index in the WHO and World Bank monitoring report; the distinct records mentioning each country were counted. Multiple root words per country were used when appropriate (eg, “United Kingdom”, “Britain”, and “British” for the UK; “Turkey” and “Turkish” for Turkey vs “Turkm” for Turkmenistan); exclusions were made when appropriate (eg, occurrences of “United States dollars” were not counted towards the US). Further technical details are described in the appendix.

1641 (61%) of 2685 records mention at least one country root word. Firstly, it appears that several countries are invoked more often than others (figure, appendix). India, Thailand, China, South Africa, and Indonesia lead the chart with at least 75 distinct records each. At the other end of the spectrum, 24 countries are never explicitly mentioned and another 27 have only one mention each. 101 countries appear in less than five records each. Secondly, the countries cited the most tend to be low-income and middle-income countries (LMIC), whereas those with few or no mentions tend to be high-income (HIC). Nonetheless, there are cases of well documented HICs (eg, Japan, France, USA, Canada, and UK) and many more undocumented LMICs. Thirdly, the distribution of UNICO country case-studies mirrors reasonably closely the distribution of the literature, with most case-studies concentrated among the well studied countries. However, the UNICO series also includes several case-studies of countries that are underrepresented in the literature: Jamaica (1 record), Gabon (1 record), Armenia (1 record), Kyrgyzstan (1 record),

Figure: Number of distinct records mentioning country names and Universal Health Coverage
Data from 183 countries were included. Data are presented by income level (A) and Universal Health Coverage Study Series (UNICO) case study (B). Countries are presented by the number of distinct records (descending order).
Croatia (2 records), Azerbaijan (2 records), and the Dominican Republic (3 records).

This analysis has limitations: it focuses on a single (albeit, arguably, the most relevant) search term, it assumes all country mentions are comparable (eg, not all countries mentioned in a given abstract might be the focus of the document), and it is restricted to titles and abstracts. As a result, Kyrgyzstan, for example, whose health financing reforms have been relatively well documented over time, appears only once.

The emerging picture is nevertheless one of a UHC research focus to date on a small number of countries (particularly Brazil, Russia, India, China, and South Africa), potentially leaving the experiences of many others largely unknown. Cross-country variations in the national governments’ political commitment towards the UHC agenda, domestic capacity to conduct health systems research, and (research) funding priorities of development partners, among others, might well explain some of this disparity. For example, the signature reforms of nationwide health insurance roll out in Ghana since 2004 (the first comprehensive insurance scheme in sub-Saharan Africa) and health technology assessment (HTA) in Thailand (the first large-scale HTA programme in Asia) have attracted researchers’ attention for more than a decade. The governments of China and India have also long engaged in various reforms towards UHC. South Africa’s domestic political drive for UHC was reinforced with the publication of the White Paper on National Health Insurance in June, 2018, and is supported by strong domestic capacity for health systems research. Exploratory correlation and regression analyses broadly do not suggest an association between how frequently a country is mentioned in the literature and measures of service coverage (service coverage index calculated as the geometric mean of 16 tracer indicators across four areas: reproductive, maternal, new-born, and child health; infectious diseases; noncommunicable diseases; and service capacity and access; financial protection (percentage of households spending more than 10% of income on health care), and external health expenditure per capita (purchasing power parity international dollars), in 2015; however, more detailed analyses are needed to establish whether some form of publication bias is apparent.

Validating and, if confirmed, understanding and addressing the sources of this cross-country variability in research attention might be useful for advancing the UHC agenda. Countries seeking to achieve UHC as rapidly and cost-effectively as possible could learn from the successes of many others, particularly how they handled the various hurdles, at least some of which are unlikely to be unique. The over-representation of few countries in research for UHC is bound to introduce biases in the lessons to be had from countries’ practical experience, whether positive or negative. This bias could potentially undermine the fundamental UHC promise that every country must find its own way by limiting the options to what has been tried (and documented) already in a limited number of countries. The time seems ripe for a concerted effort to widen the base of countries and experiences.

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