

Kidney Disease in the News, 2019-2026: Attention, Geography and Tone of Global Coverage, and How It Compares with Research and Invention

Fliar BI · Prism Research Layer · Working paper, October 2026 · Dataset and code: github.com/fliarbi/prism-news-api · Licence CC BY-NC 4.0

Abstract

We measure how kidney disease, kidney failure, dialysis and kidney transplantation were covered in a global news index from January 2019 to July 2026, using 115,696 de-duplicated items, and set that coverage beside 121,198 research papers (2015-2025) and 17,423 patent families (2015-2024). The index carries research abstracts as well as news reports, and we report where this shapes the results. Six results stand out:

1. **Attention.** Kidney disease took 7.42 of every 10,000 indexed articles in 2025, 21.4% fewer than the 9.44 of 2019. Raw counts rose, but the index grew faster.
2. **Geography.** The United States holds 51.8% of located items, close to its weight in the index (lift 1.07). India holds 17.36% (lift 1.31). Ghana is the most over-represented country (5.21), and Africa the most over-represented continent (1.63).
3. **States.** Within India, Telangana (2.15), Andhra Pradesh (1.64) and Madhya Pradesh (1.44) lead. Within the United States, Massachusetts (4.4) leads, and New Jersey (0.12) trails.
4. **Tone and urgency.** Only 21.8% of items are negative in tone (all news: 33.6%), yet 87.1% are rated critical priority (all news: 42.6%).
5. **Measurement.** In a hand check, 32 of 40 matched openings were research abstracts. Abstracts dated by year only push 20.59% of a typical year's items into January.
6. **Research and invention.** Kidney disease papers rose from 13.83 to 20.74 per 10,000 papers between 2015 and 2025. Patent families grew 1.99-fold from 2015 to 2024, and China's office holds 68.7% of family-office filings.

Findings stated for citation

- **F1.** Kidney disease took 7.42 per 10,000 indexed articles in 2025, 21.4% below the 9.44 of 2019.
- **F2.** 21.8% of items were negative in tone, 0.65 times the all-news share.
- **F3.** 87.1% of items were rated critical priority, 2.04 times the all-news share.
- **F4.** The United States held 51.8% of located items (lift 1.07) and India 17.36% (lift 1.31).
- **F5.** Ghana (5.21) was the most over-represented country, and Africa (1.63) the most over-represented continent.
- **F6.** Within India, Telangana (2.15), Andhra Pradesh (1.64) and Madhya Pradesh (1.44) had the most over-represented coverage.
- **F7.** Within the United States, Massachusetts (4.4) had the most over-represented coverage; New Jersey (0.12), Pennsylvania (0.45) and Florida (0.48) the least.

- **F8.** Coverage as a share of India's news rose from 3.57 to 4.7 per 10,000 between 2023 and 2025.
- **F9.** Kidney disease papers rose 1.5-fold as a share of all papers between 2015 and 2025.
- **F10.** Patent families published per year grew 1.99-fold between 2015 and 2024.
- **F11.** China's office held 68.7% of family-office filings (2015–2024).
- **F12.** Medical tourism appeared in 3.45% of themed items, 128.42 times its rate in all themed news.
- **F13.** Two developers of engineered pig organs were named in 204 and 121 articles (2023 – Jul 2026).

1. Introduction

Chronic kidney disease affects a large share of adults worldwide. Many people who reach kidney failure depend on dialysis or a transplant. News coverage shapes what the public and policy-makers treat as urgent. It also records new treatments, the cost of care and the gaps in access. Yet coverage is rarely measured as data in its own right. Disease registries record patients. Bibliometric studies record research. Few sources record attention: how much of the news kidney disease takes, where, and in what tone.

This paper and its dataset do that. They combine three records for one topic: a global news index, research papers and patents. Each comparison uses a denominator, so that growth in the index or in publishing is not mistaken for growth in interest. The companion dataset publishes an item-level sample (28,882 rows) and full coverage tables, so every figure here can be re-derived. The [Prism News API](#) serves the full history.

2. Data and methods

News. The Prism news index holds articles from outlets worldwide; non-English articles are indexed in English translation. It also carries research abstracts. Each item has its opening text (the first few sentences), a primary location, a graded tone label, an editorial priority rating (1–9), themes, keywords and named organisations. We count unique item identifiers; repeated rows for the same item are removed. When this release was built, 92.88% of the index was readable, so all counts are lower bounds.

Matching. An item is about kidney disease when its opening text contains one of 13 terms as whole words: *kidney disease(s)*, *chronic kidney disease*, *renal disease*, *kidney failure*, *renal failure*, *end-stage renal disease*, *dialysis*, *hemodialysis*, *haemodialysis*, or *kidney transplant(s)* and *kidney transplantation*. Market-research listings ("market size", "forecast", compound growth rates) are excluded. They removed 792 of 116,488 raw matches (0.68%). Broader terms such as *nephropathy* and the abbreviation *CKD* were tested and not used.

One reviewer read 40 randomly drawn matched openings. 38 referred to kidney disease or its treatment in the medical sense (precision 95%), and in 33 (82.5%) it was the main subject. The two false positives were an institute name in an article about diabetes and a veterinary virus study. 32 of the 40 openings were research abstracts. A rule that detects structured abstract headings flags 42,943 of 115,691 matched items (37.1%), a lower bound on the abstract share.

Measures. Coverage over time is expressed per 10,000 articles in the index that year, because the index grew from 11,807,177 articles in 2019 to 26,990,006 in 2025. Geography,

tone, priority and themes use January 2023 – July 2026. Geography is expressed as lift: a country's share of located items divided by its share of all located articles. For states, the baseline is all located news from the same country. Only 19.2% of items in that window carry a primary country, because abstracts rarely do, so geography rests mostly on news reports. Place tags derived from ordinary words (such as "Congress", "Earth" or "Winter") were treated as unlocated in every location field, which removed 15.3% of city-tagged articles.

Research and patents. Research papers are de-duplicated articles and reviews (2000–2025) with a kidney disease, kidney failure or dialysis term in the title. Repository deposits and laboratory senses of dialysis (equilibrium dialysis, dialysis tubing, drug-release studies) are excluded. Patent families (2005–2024) use a similar title rule that adds *dialyser*. They are counted once per filing office and exclude electrodialysis, desalination and protein purification.

3. Results

3.1 How much and when

The index holds 115,696 kidney disease items from January 2019 to July 2026. Raw counts rose from 11,146 in 2019 to 20,018 in 2025, but the share of all news fell: 9.44 per 10,000 in 2019, 8.01 in 2020, 7.24 in 2024 and 7.42 in 2025 (Table 1, Figure 1). The 2025 level is 21.4% below 2019. The 2020 share was 15.1% below 2019.

Year	Items	All articles in index	Per 10,000
2019	11,146	11,807,177	9.44
2020	12,997	16,230,014	8.01
2021	14,609	17,281,220	8.45
2022	15,865	19,115,515	8.3
2023	15,411	20,484,506	7.52
2024	16,888	23,311,896	7.24
2025	20,018	26,990,006	7.42

Table 1. Kidney disease items per year and as a share of the index. 2026 (January–July) is partial and omitted.

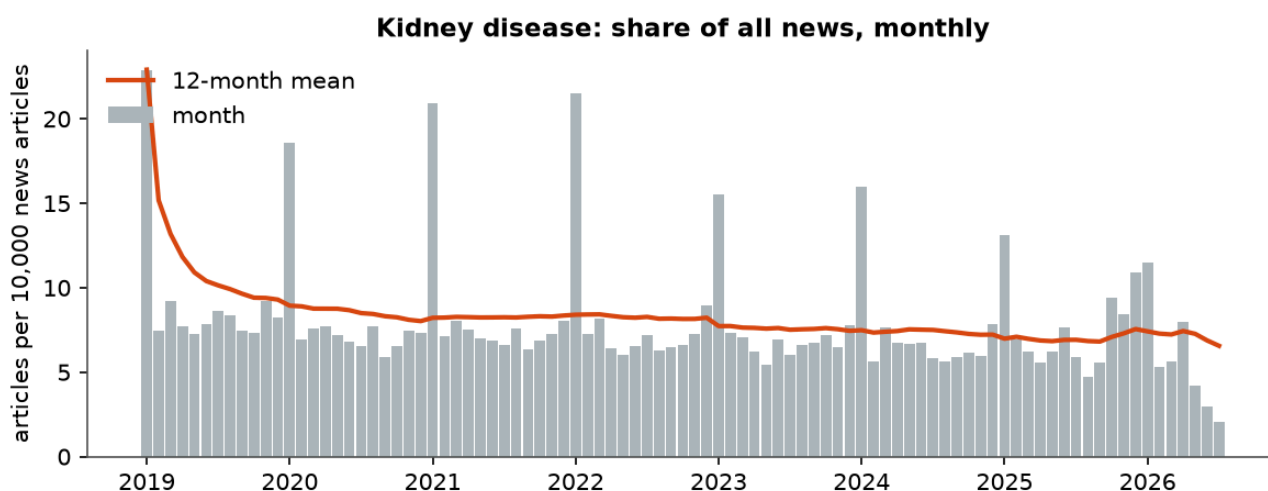


Figure 1. Kidney disease coverage as items per 10,000 articles in the index, monthly, January 2019 – July 2026.

The monthly series has one sharp feature, and it is an artefact. January holds 20.59% of a typical year's items, 12.26 percentage points above an even month (Figure 2). The other eleven months each hold between 6.79% and 8.37%. Research abstracts that carry only a

publication year are dated 1 January, so the January bars measure abstract ingestion, not news. The highest monthly shares (January 2019, 22.91 per 10,000) are the same effect. Outside January, coverage shows no seasonal pattern.

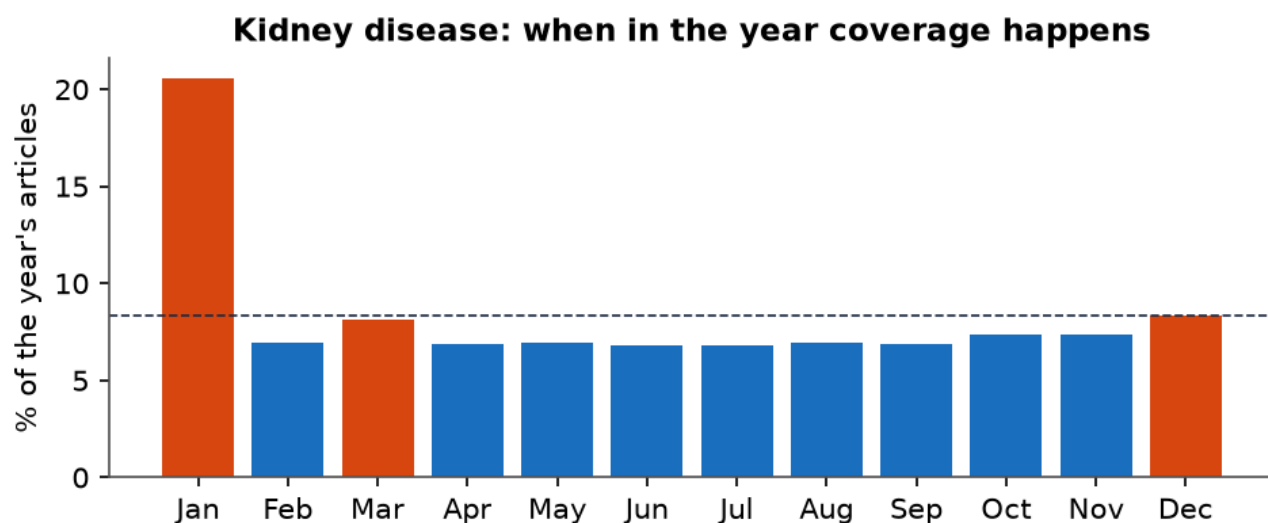


Figure 2. Share of each year's kidney disease items published in each month, averaged over 2019–2025. Dashed line = an even spread (8.3% per month). The January bar is inflated by abstracts dated by year only.

3.2 Where

Between January 2023 and July 2026, 11,718 items carried a primary country. The United States holds 51.8% of them, close to its weight in the index (lift 1.07). India's share (17.36%) comes with a lift of 1.31. The United Kingdom (0.65), China (0.72), Australia (0.76) and Canada (0.85) are under-represented. Ghana is the most over-represented country, at 5.21 times its share of all news (Table 2, Figure 3).

Country	Located items	Share %	Lift vs all news
United States	6,070	51.8	1.07
India	2,034	17.36	1.31
United Kingdom	447	3.81	0.65
Ghana	294	2.51	5.21
China	222	1.89	0.72
Nigeria	218	1.86	1.36
Canada	214	1.83	0.85
Australia	192	1.64	0.76
Japan	140	1.19	1.12
Singapore	125	1.07	1.2

Table 2. Countries with at least 100 located kidney disease items, January 2023 – July 2026, with lift against all located news.

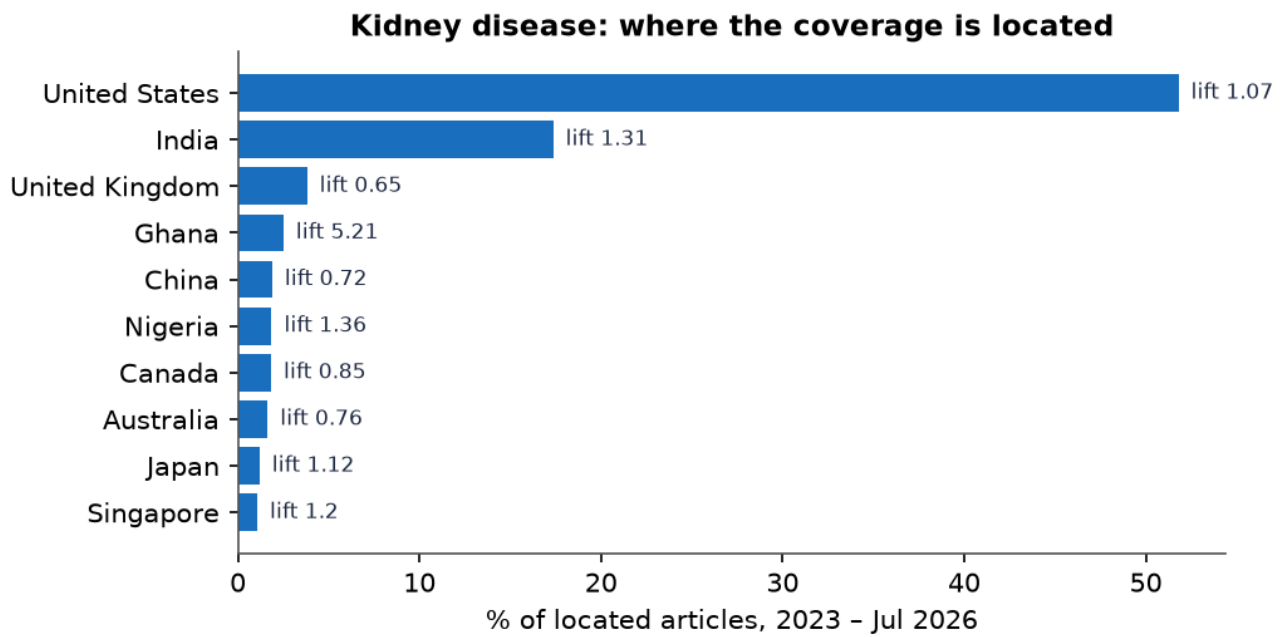


Figure 3. Leading countries by share of located kidney disease items, 2023 – Jul 2026, labelled with lift against all located news.

3.3 Geo intelligence: continents, states and shifting attention

The world map (Figure 4) colours only the 10 countries with at least 100 located items, because most items carry no location. Among them, Ghana stands out, followed by Nigeria, India, Singapore and Japan. The United Kingdom, China, Australia and Canada are under-represented. By continent, Africa (1.63) is over-represented, Asia (1.09) and North America (1.08) are close to their weight, and Oceania (0.83), South America (0.63) and Europe (0.6) are under-represented (Figure 7, left).

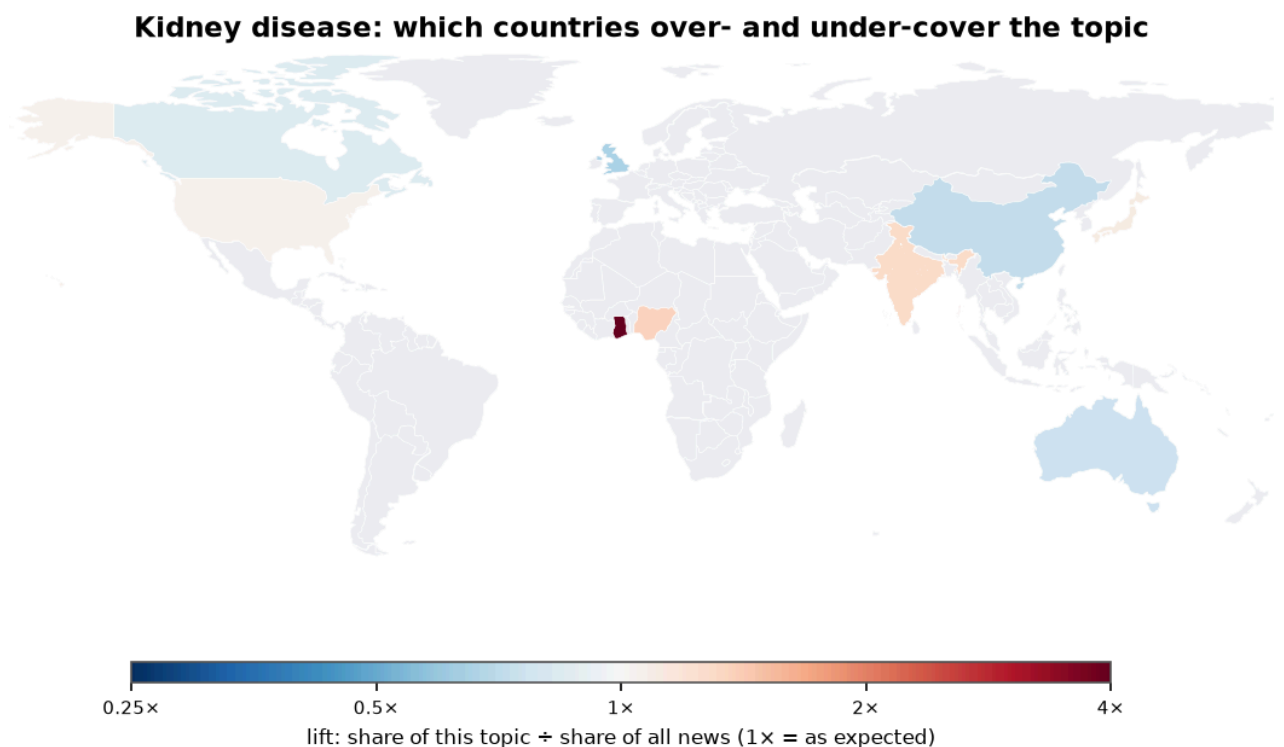


Figure 4. Lift of each country's share of located kidney disease items, January 2023 – July 2026 (red = over-represented, blue = under-represented, grey = fewer than 100 articles). India is drawn with its official outline.

Within countries, the picture is sharper (Table 3). In India, coverage concentrates in the south and centre. Measured against each state's share of Indian news, Telangana (2.15), Andhra Pradesh (1.64), Madhya Pradesh (1.44) and Tamil Nadu (1.26) are the most over-represented among the 1,742 located Indian articles, counting states with at least 50 articles (Figure 5). Madhya Pradesh's lift owes much to coverage of child deaths from kidney failure in Chhindwara district in October 2025. None of these states is strongly under-represented: Uttar Pradesh (0.94), Delhi (0.97) and Maharashtra (1.01) sit close to their weight.

In the United States (4,984 located articles), Massachusetts (4.4) leads by lift; its items cluster in Cambridge and Boston, home to transplant centres and biotechnology firms. New Jersey (0.12), Pennsylvania (0.45) and Florida (0.48) are far below their weight in American news (Figure 6). The next-highest lifts are mostly not reliable. Maryland (1.7), spread across Rockville, Columbia, Baltimore and Bethesda, shows no tagging artefact. New York's (2.56) is inflated by a cluster of near-identical dialysis items dated to one day in April 2026. Alabama's (2.32) rests largely on the surname of a transplant surgeon read as the city of Montgomery. Connecticut (1.94) and North Carolina (1.6) gain from town names that match company names or towns in other states. These rows are marked in Table 3.

India: state	Articles	Lift	United States: state	Articles	Lift
Telangana	130	2.15	Massachusetts	520	4.4
Andhra Pradesh	65	1.64	New York†	1,485	2.56
Madhya Pradesh	74	1.44	Alabama†	132	2.32
Tamil Nadu	110	1.26	Connecticut†	68	1.94
Karnataka	101	1.05	Maryland	86	1.7
Bihar	87	1.04	North Carolina†	127	1.6
<i>Lowest: Maharashtra</i>	279	1.01	<i>Lowest: Florida</i>	128	0.48
Delhi	219	0.97	Pennsylvania	136	0.45
Uttar Pradesh	207	0.94	New Jersey	115	0.12

Table 3. States with the highest and lowest lift for kidney disease coverage, January 2023 – July 2026, among states with at least 50 articles. Lift = the state's share of the country's located items ÷ its share of all located news from that country. † = lift inflated by a tagging artefact (see text).

Kidney disease: states of India by lift

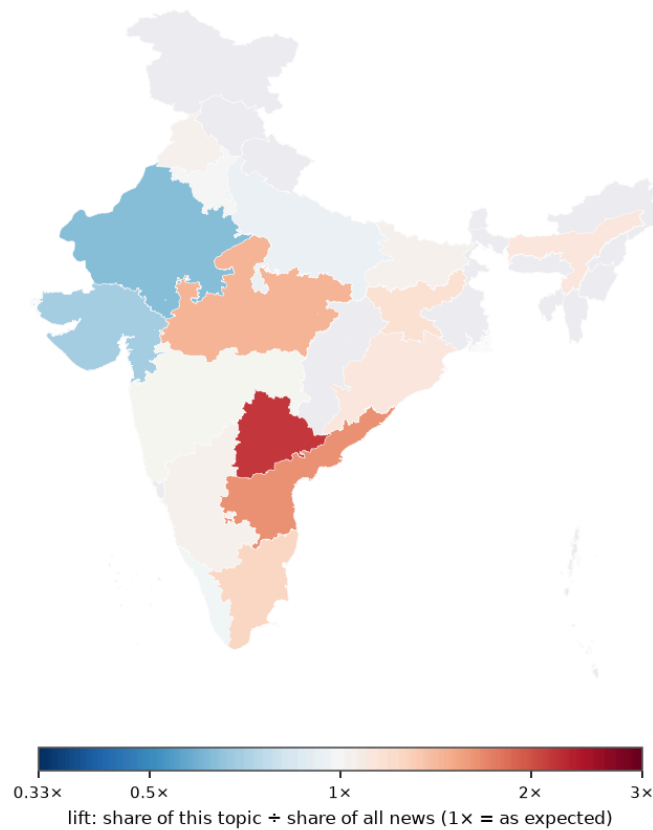


Figure 5. Lift of each Indian state's share of located kidney disease items against its share of all located Indian news, January 2023 – July 2026. Official outline; Ladakh is drawn within Jammu and Kashmir in the boundary file used.

Kidney disease: states of United States by lift

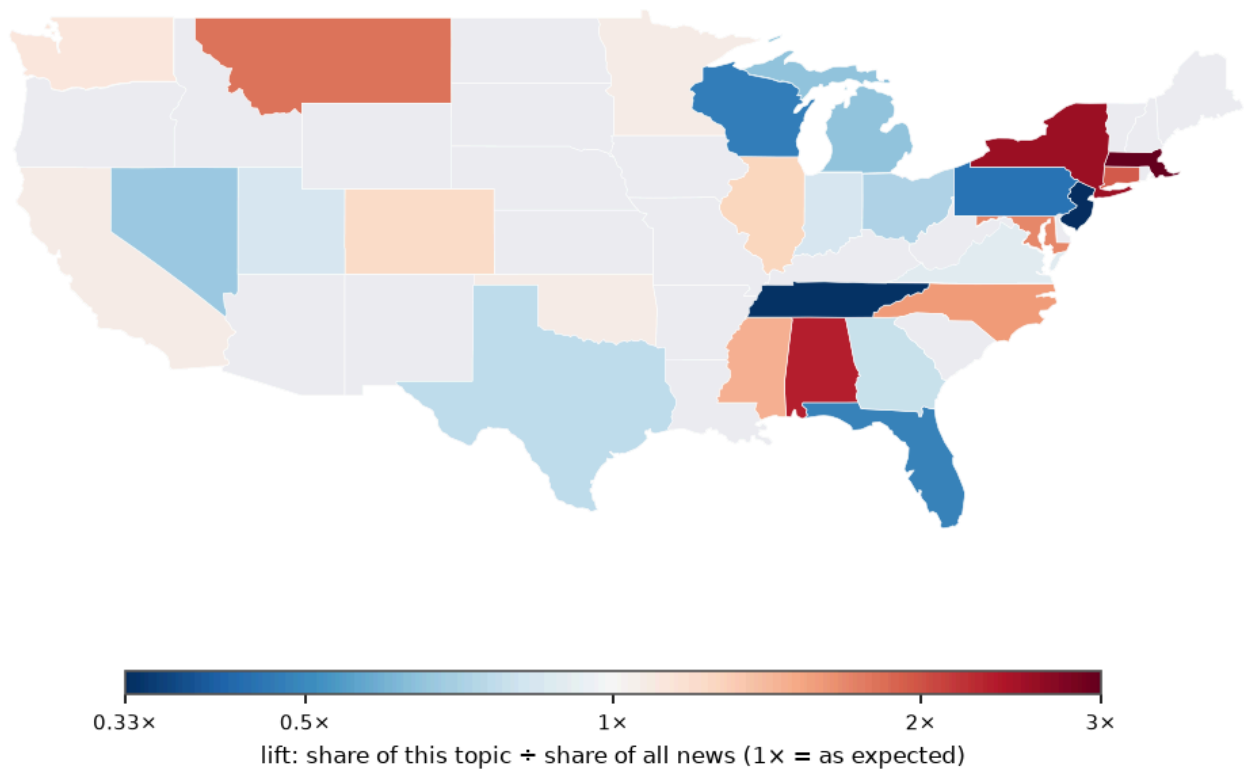


Figure 6. Lift of each US state's share of located kidney disease items against its share of all located US news, January 2023 – July 2026.

Attention also moves between countries from year to year (Figure 7, right). Measured as items per 10,000 of each country's located news, India rose from 3.57 in 2023 to 4.7 in 2025 (1.32 times). The United States fell slightly, from 2.67 to 2.54, and the United Kingdom from 2.23 to 1.96. Among smaller countries, Japan rose from 2.93 to 4.46, while Ghana fell from 19.3 to 9.94 and Singapore from 6.48 to 2.71; their small baselines make these figures less stable.

Tone differs by country when each country is compared with its own news (Table 4). In India, 46.1% of kidney disease items are negative, against 41.2% of Indian news overall. In the United States the figures are 38.6% and 33.1%. In Canada (18.2% against 27.1%), Nigeria (36.6% against 44.4%), the United Kingdom (30.9% against 36.9%) and China (24.9% against 27.2%), kidney disease coverage is less negative than the country's news overall.

Country	Labelled items	Negative % (kidney disease)	Negative % (all news of that country)
United States	6,046	38.6	33.1
India	2,020	46.1	41.2
United Kingdom	444	30.9	36.9
Ghana	290	44.1	43.3
China	221	24.9	27.2
Nigeria	213	36.6	44.4
Canada	209	18.2	27.1

Table 4. Negative share of located kidney disease items by country against that country's news overall, January 2023 – July 2026.

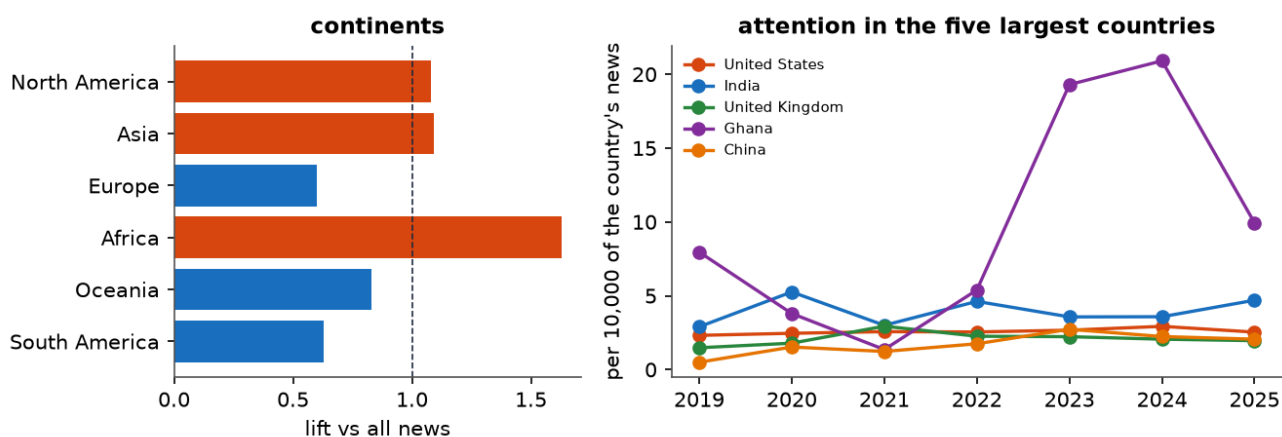


Figure 7. Left: lift by continent, January 2023 – July 2026. Right: kidney disease items per 10,000 of each country's located news, 2019–2025, for the five countries with the most items.

3.4 Tone, urgency and themes

Kidney disease coverage is less negative than news in general but rated as more urgent (Figure 8). Among items with a tone label, 21.8% are negative, against 33.6% across the index (0.65 times), and 71.1% are positive, against 56.8% (1.25 times). Reports of new treatments, transplants and research results tend to read as positive. The machine-assigned priority rating puts 87.1% of items at critical level (7 or higher), against 42.6% of all news (2.04 times).

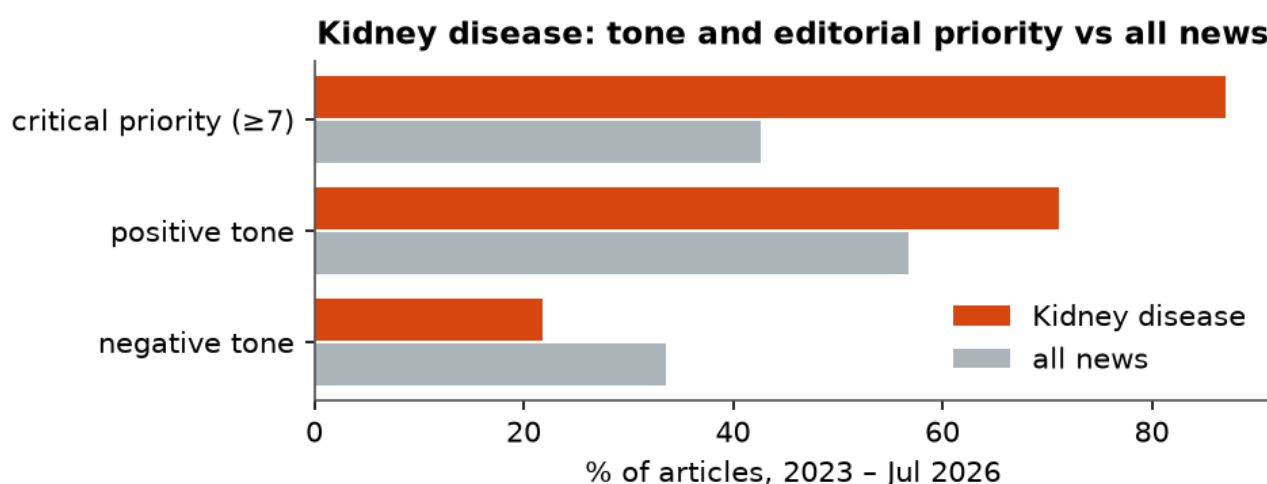


Figure 8. Tone and the share rated critical priority, kidney disease items vs all news, 2023 – Jul 2026.

Themes show what the items are about (Table 5). The broadest themes are epidemiology and disease control (12.93% of themed items) and health disparities (11.05%). The most specific are dialysis centres, diabetes and kidney disease, and diabetic nephropathy. Medical tourism appears in 3.45% of themed items, 128.42 times its rate in all news.

Theme	Items	Share %	Lift
diabetes and chronic kidney disease (ckd)	298	0.91	591.76
dialysis centers & kidney treatment units	1,211	3.69	555.87
dialysis treatment centers	410	1.25	504.97
diabetic nephropathy risk and management	277	0.84	499.35
home healthcare medical services	416	1.27	216.95
experimental medical interventions	967	2.95	214.31
patient advocacy and care coordination	962	2.93	135.88
medical tourism and cross-border treatments	1,132	3.45	128.42

Table 5. Selected themes with high lift in kidney disease coverage (lift against all themed news), January 2023 – July 2026.

The organisations list is noisy. It is led by a publisher of research abstracts and a press-release wire, and some abbreviations are resolved to the wrong organisation. Among the clearly identified names are dialysis providers (DaVita, 160 articles; Fresenius Medical Care, 149), health agencies (the National Institutes of Health, 182; the Centers for Disease Control and Prevention, 153), the Mayo Clinic (192) and two developers of genetically engineered pig organs, eGenesis (204) and United Therapeutics (121).

3.5 Research attention and invention

Research on kidney disease grew faster than the scientific literature. Papers with the terms in the title rose from 13.83 per 10,000 papers in 2015 to 20.74 in 2025, a 1.5-fold increase in share, while the total literature in the corpus grew by a factor of 1.0 over the same years. Between 2015 and 2025, 121,198 such papers were published, most often in *Nephrology Dialysis Transplantation* (7,445). The most-cited include the 2024 clinical practice guideline on chronic kidney disease, a global burden analysis, a trial of dapagliflozin and global prevalence estimates [1–5].

News attention does not track research attention (Figure 9). Research share rose in most years, while the news share fell from 2019 to 2024.

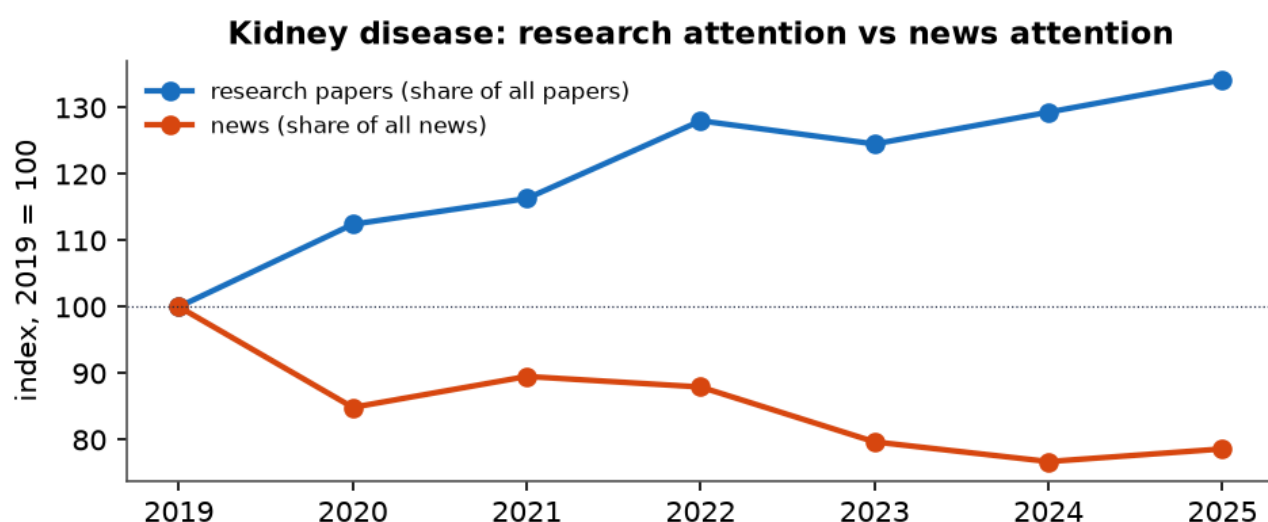


Figure 9. Research papers with kidney disease terms in the title (share of all papers) and kidney disease items (share of all news), each indexed to 2019 = 100.

Patenting rose too: 1,061 patent families were published in 2015 and 2,114 in 2024 (1.99 times), after a peak of 3,061 in 2021. Counting each family once per filing office, China's office holds 68.7% of filings from 2015 to 2024, followed by the United States (8.0%) and the European Patent Office (6.4%) (Figure 10). The leading technology classes are devices for introducing or removing body fluids (A61M, 2,341 families), medical preparations (A61K, 799) and analysis of biological samples (G01N, 341).

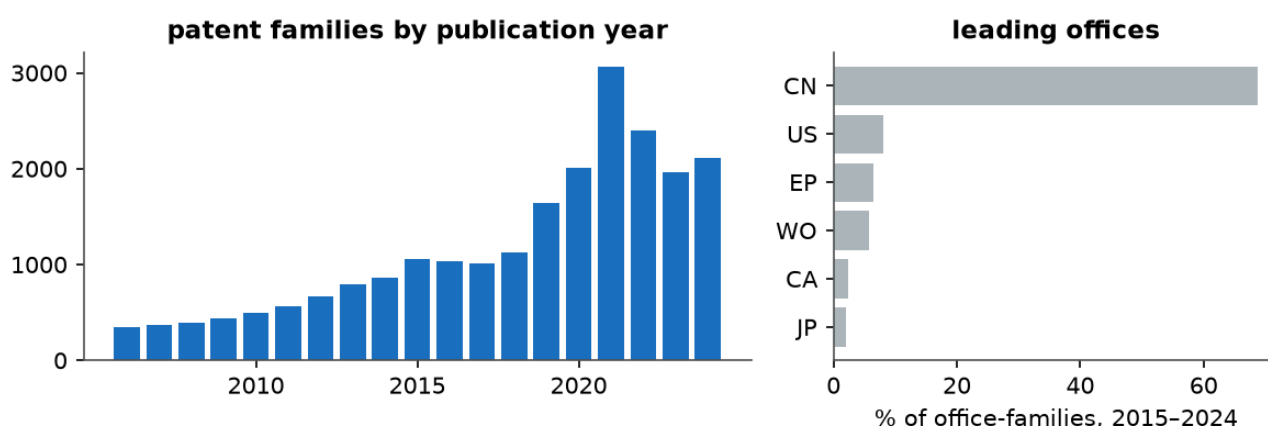


Figure 10. Patent families on dialysis and kidney disease by publication year (left) and the leading filing offices, 2015-2024 (right).

4. Discussion

Three points matter for anyone who uses this index as a record of kidney disease attention. First, coverage measures attention, not burden. Kidney disease took a smaller share of the index in 2025 than in 2019, even as raw counts rose. Second, a keyword search returns more than journalism. Research abstracts make up much of the matched set, and their dating creates a January peak that has nothing to do with news. Analyses of timing should use news reports only, or drop January. Third, geography rests on news reports and shows where kidney disease is a local story. The high lifts in Telangana, Andhra Pradesh and Ghana, and in Massachusetts, may reflect places where dialysis access, hospitals or new treatments draw local coverage, but the data do not test why. State lifts also need a look at the rows behind them: several high US lifts come from surnames, company names and one-day bursts, not places.

Research, invention and news run on different clocks. Research share grows steadily. Patent filings peaked in 2021 and remain concentrated in one office. News share drifts down. The dataset lets researchers link the three, for example to test whether coverage of a new therapy is followed by research or patent activity.

5. Limitations

- **Index availability.** 92.88% of the index was readable at build time, so counts are lower bounds. Shares and lifts are less affected, because the missing part is spread across topics.
- **Research abstracts.** Much of the matched set is research abstracts. They raise the counts, shape tone, and inflate January. They seldom carry a location.
- **Coverage after May 2026.** The index thins after May 2026, so 2026 is partial and is excluded from year comparisons.
- **Matching.** Matching uses the opening text. Items that mention kidney disease only later are missed, and 5% of matches are not about kidney disease. Acute kidney injury is captured only when described as kidney or renal failure.
- **Machine labels.** Location, tone, priority, themes and organisations are machine-labelled. The city field is noisy and is not analysed.
- **Place tags from ordinary words.** Place tags derived from ordinary words were treated as unlocated (15.3% of city-tagged articles), which lowers located counts. Surnames and company names read as places remain and still lift some US states.
- **Outlet mix.** The index over-represents English-language outlets. This shapes geography.
- **Research and patent counts.** These match titles only. One record in the top-cited list has an implausible citation count and is not cited here. Office shares reflect filing practice; utility models are numerous in China.

Data availability

The dataset (item sample, monthly and country tables, research and patent tables, all metrics) is released under CC BY-NC 4.0 with this paper. The sample holds 28,882 of 115,691 matched items to 31 July 2026. Full article text, headlines, publishers, later articles and other topics are served by the Prism News API: <https://github.com/fliarbi/prism-news-api> (base URL <https://radar-api.fliarbi.com/news>). A worked query: `prism-news trends "kidney disease" --since 2019-01-01 --until 2026-07-31 --granularity monthly`.

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