

Mapping hypertension prevalence and absolute burden across the states and districts of India

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Abstract

Hypertension is India's leading risk factor for premature mortality, and national programmes now require district-level targeting. Existing evidence maps prevalence, which identifies where individuals are most likely to be hypertensive but not where the largest numbers of affected people live. This study examines the distribution of both prevalence and absolute burden across India's states and districts. Individual-level blood pressure data from the National Family Health Survey-5 (2019–21), covering 707 districts, were used to estimate weighted prevalence, with hypertension defined as mean systolic blood pressure ≥ 140 mmHg and/or diastolic ≥ 90 mmHg. District populations from WorldPop gridded estimates were multiplied by prevalence to obtain absolute burden. Districts were classified into four bivariate categories using national medians and ranked within states by cumulative burden contribution. National prevalence was 26%, ranging from 18% to 42% across states and 11% to 49% across districts. The estimated hypertensive population was 250 million in India. Absolute burden followed a different pattern; Uttar Pradesh alone accounted for 14% of the national total despite below-average prevalence, while eight high-prevalence small states contributed only 0.8%. Within nearly every state, a small subset of districts accounted for the majority of state burden. The divergence between prevalence and burden indicates that healthcare programmes ranked by prevalence would direct resources away from the districts where the greatest number of people require care. Hypertension control programmes in India should incorporate district-level burden estimates alongside prevalence when allocating screening, treatment and follow-up services.

Introduction

High systolic blood pressure is the single most important risk factor for early death worldwide, responsible for an estimated 10.8 million avoidable deaths and 235 million disability-adjusted life years annually (1). The number of adults aged 30–79 years living with hypertension doubled between 1990 and 2019, from approximately 650 million to 1.28 billion, even though age-standardised prevalence remained broadly stable at about one in three adults (2, 3). This paradox shows a stable prevalence rate alongside a doubling of cases is the product of the population growth and ageing, and this is the first indication that prevalence alone is an incomplete description for the hypertension problem. The geographical expansion has also been uneven; Prevalence has declined in high-income regions but risen substantially in low- and middle-income countries (LMICs). Of the 8.5 million annual deaths attributable to elevated systolic blood pressure worldwide, 88% now occur in LMICs (4). This divergence driven by ageing and rising exposure to unhealthy diets and physical inactivity, leaving LMIC health systems facing a rapidly increasing burden of hypertension and related cardiovascular disease (5). Globally, only 54% of adults with hypertension are diagnosed, 42% treated and 21% controlled, yet scaling treatment to the level of high-performing countries could prevent 76 million deaths between 2023 and 2050 (1). India illustrates this distinction at national scale. An estimated 188.3 million adults aged 30–79 years live with hypertension in India. The largest number in any single country even though national prevalence sits marginally below the global average of 33%.

Under Sustainable Development Goal (SDG) target 3.4, United Nations member states committed in 2015 to reducing premature mortality from noncommunicable diseases (NCDs) by one third by 2030 (6), given India's demographic weight (6), this goal depends heavily on what India achieves. Hypertension is the most important chronic disease risk factor and the primary cause of death and disability in India according to the Global Burden of Diseases study (7), and a major contributor to cardiovascular morbidity and mortality both globally and within India (8). It caused 1.63 million deaths in India in 2016, a 108% increase over the 0.78 million recorded in 1990 (9), and contributes to over half of all deaths from ischaemic heart disease, stroke and chronic kidney disease (10).

India's policy response to non-communicable diseases (NCDs) has developed at scale over the past fifteen years. The National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), launched in 2010, brought the integration of NCD services at district level under the National Health Mission, and was renamed the National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD) in 2023–24 following the inclusion of chronic kidney disease and non-alcoholic fatty liver disease (11). Population-Based Screening (PBS) under this programme provides universal screening for hypertension, diabetes and three common cancers to all individuals above 30 years of age. The National Multisectoral Action Plan for Prevention and Control of Common NCDs (2017–2022) further established a national monitoring framework committing to ten targets by 2025, including a 25% relative reduction in the prevalence of raised blood pressure. Hypertension-specific implementation is led by the India Hypertension Control Initiative (IHCI), launched in November 2017 by the Indian Council of Medical Research in collaboration with the World Health Organization and the Ministry of Health and Family Welfare. IHCI began in 25 districts across Punjab, Madhya Pradesh, Kerala, Telangana and Maharashtra and was subsequently expanded to 100 districts nationwide (12) (13). More recently, the "75/25" initiative aims to place 75 million people with hypertension and diabetes on standardised care (14). What these programmes now require is not further confirmation of a national emergency, but defensible evidence on which districts to enter first.

A substantial Indian literature has already mapped the distribution of hypertension across successively finer geographies. National and state-level analyses have established hypertension prevalence and its variation by rural–urban residence and sociodemographic characteristics (15, 16), while district-level disaggregation has shown the highest prevalence in coastal peninsular and northeastern India alongside marked intra-state heterogeneity (17). More recent work has moved from description to detection, applying logistic regression, spatial autocorrelation, bivariate mapping and hotspot analysis to identify high-risk and high-clustering districts for targeted resource allocation (18–20), converging on the conclusion that, given high within-state variation, interventions must be flexible to each state's development and care performance (21) and decentralised to the district level (22).

Almost without exception, however, the existing literature prioritises on the basis of a rate. Cluster analysis and choropleth ranking identify where prevalence is highest, which is epidemiologically correct but an incomplete input for decisions on where to allocate blood pressure monitors, drug consignments, trained providers and follow-up registers. Such decisions scale with the number of people to be enrolled

rather than with prevalence itself, and the two measures diverge most sharply where allocation matters most. For example, a district with 30% prevalence among 4 lakh adults contributes 1.2 lakh cases to its state's caseload, whereas one with 20% prevalence among 40 lakh adults contributes 8 lakhs nearly seven times more, yet only the former is visible on a prevalence map.

Reliance on uniform proportional targets across a heterogeneous epidemic has been shown to misdirect resource allocation, leaving the largest absolute numbers of untreated patients concentrated precisely in the high-population settings that proportional metrics render invisible (23). Sub-national HIV and undernutrition planning elsewhere therefore directs resources to areas combining high prevalence and large absolute numbers of affected people (24, 25). This gap is not merely conceptual in India. Health is a state subject, district-level implementation of NP-NCD and IHCI is financed and sequenced within state budget envelopes, and the district is already institutionalised as the unit of prioritisation through the Aspirational Districts Programme, which frames district targeting as the localisation of the SDGs (26). A national prevalence ranking is therefore administratively unusable, since one state cannot act on another state's districts ranking higher.

The present study addresses these needs by examining the geographic distribution of both hypertension prevalence and hypertension burden across India, at the state and district levels. Accordingly, the study has three objectives. First, to estimate the prevalence and the absolute burden of hypertension across India's states and districts. Second, to examine spatial patterns and regional variation in hypertension prevalence and burden. Third, to identify priority districts for public health action by quantifying each district's relative contribution to its state's total hypertension burden and the cumulative share accounted for by its highest-burden districts.

Data and Methods

Data Sources

This study utilized and integrated two independent, nationally representative datasets to estimate state and district-level hypertension burden. The first dataset was NFHS-5 which provided information on hypertension prevalence at the individual level (27) while the second was WorldPop provided population estimates in the high-resolution gridded population (28).

The National Family Health Survey Round 5 (NFHS-5), implemented between 2019 and 2021, is India's largest and most comprehensive nationally representative household survey. Conducted by the International Institute for Population Sciences (IIPS), Mumbai, in partnership with ICF International, the NFHS-5 collected data from households across all 28 states and 8 Union Territories, covering 707 districts. The survey employed a stratified two-stage probabilistic sampling design. These analyses were conducted using the NFHS-5 Person Recode file (IAPR7EFL).

WorldPop is an open-access global dataset that distributes population counts from national censuses onto a regular geographic grid at approximately 100-metre spatial resolution. WorldPop uses a statistical

model (random forest) informed by detailed geospatial covariates including satellite imagery of built settlements, night-time lights, land cover, road networks and water bodies to estimate where within each district people actually live.

Estimation Approach for Hypertension Prevalence and Burden

In this study, an individual was classified as hypertensive based on measured blood pressure values, following standard clinical criteria used in national reports and previous studies (1, 29). For each respondent, systolic blood pressure (SBP) and diastolic blood pressure (DBP) were recorded across three sequential readings in the survey, and the mean SBP and mean DBP were computed to minimize measurement variability. Individuals with a mean SBP ≥ 140 mmHg and/or a mean DBP ≥ 90 mmHg were classified as hypertensive. Subsequently, a binary variable was created: 1 was assigned to individuals who met any of the above cutoff criteria, while 0 was assigned to those who did not meet the cutoff criteria for hypertensive status. Prevalence was estimated as the proportion of individuals classified as hypertensive within the total study population at both the state and district levels, using appropriate sampling weights to ensure representativeness of the population.

To estimate the absolute burden of hypertension at both the state and district levels, the respective geographic prevalence estimates were combined with corresponding population totals derived from gridded population data. The total hypertensive population for each specific state and district was calculated by multiplying the region-specific prevalence rate by its total population (30), yielding the estimated absolute burden for both state and district.

For the percentage share of each state's, total national hypertension burden was calculated by dividing the state's total burden by the sum of burden across all states, and multiplying by 100. States contributing less than 3% individually were grouped under an "Others" category for visual clarity.

District-level prevalence and burden were each classified as "High" or "Low" based on whether they were above or below their respective national median values, and the two binary classifications were combined to generate four bivariate categories (High Prevalence–High Burden, High Prevalence–Low Burden, Low Prevalence–High Burden, and Low Prevalence–Low Burden), which were then mapped to visualize the joint spatial distribution of prevalence and burden.

Districts were further ranked within their respective states based on their percentage contribution to total state-level burden, and inclusively classified into four priority groups (Priority 1 to Priority 4) based on cumulative contribution to state burden, highlighting those districts that jointly share $\geq 50\%$, $\geq 75\%$, $\geq 90\%$, and $\leq 10\%$ of the total hypertension burden within the states, respectively, in order to identify districts disproportionately contributing to the overall disease burden and requiring targeted public health policy. The detailed district-wise ranking and priority classification for all states is provided in **Supplementary Table S1**.

Results

Sub-national Variation in Hypertension Prevalence

Hypertension prevalence among adults showed pronounced sub-national heterogeneity across India (Fig. 1). Nationally, 26.4% of adults were classified as hypertensive approximately one in four, but state-level estimates ranged more than two-fold, from 17.8% in Bihar to 42.0% in Sikkim. Eighteen of the 36 states and union territories recorded prevalence above the national figure, and their distribution resolved into three broad clusters, the eastern Himalayan and north-eastern states (Sikkim 42.0%, Arunachal Pradesh 31.4%, Nagaland 29.4%, Manipur 28.0%); the north-western belt together with the metropolitan union territories (Punjab 36.9%, NCT of Delhi 30.0%, Chandigarh 29.4%); and the southern peninsular and island territories (Goa 35.3%, Andaman & Nicobar Islands 33.0%, Kerala 32.7%, Puducherry 29.7%, Karnataka 28.9%, Telangana 28.8%, Tamil Nadu 28.3%, Andhra Pradesh 28.0%, Lakshadweep 27.3%). The lowest prevalence was concentrated almost entirely within the central and eastern states Bihar (17.8%), Rajasthan (18.9%), Jharkhand (21.0%), Uttar Pradesh (21.6%) and Madhya Pradesh (23.3%).

Spatial Divergence in Burden and Prevalence

The geography of absolute burden diverged sharply from the geography of prevalence (Fig. 1). The estimated hypertensive population totalled approximately 249.9 million. Uttar Pradesh alone accounted for 35.2 million cases (14.1% of the national total) (Fig. 2) despite a prevalence (21.6%) below the national average, and six states Uttar Pradesh, Maharashtra (24.9 million), Tamil Nadu (18.1 million), West Bengal (17.1 million), Karnataka (15.6 million) and Bihar (15.0 million) together carried 125.8 million cases, slightly more than half of India's entire burden. Whereas prevalence varied 2.4-fold across states, absolute burden spanned nearly four orders of magnitude (10^4), from 35.2 million in Uttar Pradesh to 7,305 in Lakshadweep. This divergence was most pronounced at the two extremes of the prevalence distribution: the below-average-prevalence states of Uttar Pradesh, Madhya Pradesh, Bihar, Rajasthan and Jharkhand collectively contributed 81.1 million cases (32.5% of the national burden), while the high-prevalence small states and UTs Sikkim, Goa, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Chandigarh, Puducherry and Lakshadweep together contributed only 2.1 million cases (0.8%).

The concentration of national burden among the ten highest-contributing states is summarised in Fig. 2, where Uttar Pradesh, Maharashtra, Tamil Nadu, West Bengal, Karnataka, Bihar, Madhya Pradesh, Gujarat, Andhra Pradesh and Rajasthan together accounted for the majority of India's hypertensive population.

Prevalence of Hypertension across the districts of India

Disaggregation to the district scale revealed substantially greater heterogeneity than the state-level estimates suggested (Fig. 3). Across the districts, prevalence ranged from 11.34% to 48.46%, a more than four-fold spread, compared with the 2.4-fold range observed between the states.

The district-level pattern was spatially structured rather than randomly distributed, with four discernible clusters (Fig. 3). The first extends across the north-western sub-Himalayan and Indo-Gangetic margin, encompassing districts of Punjab, Himachal Pradesh and adjoining Uttarakhand, and contains one of the darkest concentrations on the map (35.26–48.46%). The second occupies the north-eastern region, where an almost contiguous band of districts in Sikkim, Arunachal Pradesh, Nagaland, Manipur and parts of Assam falls in the two highest classes. The third and most extensive cluster covers the southern peninsula, running continuously from coastal Karnataka and Goa through interior Karnataka, Telangana, Andhra Pradesh, Tamil Nadu and Kerala, where the majority of districts lie above 28.92%. A fourth, discontinuous cluster comprises the island territories, with districts of the Andaman & Nicobar Islands and Lakshadweep appearing in the upper classes.

Low-prevalence districts formed an equally coherent spatial cluster. A broad, near-continuous belt of districts in the two lowest classes (11.34–23.94%) extends across the central and northern interior, covering western Rajasthan, much of Gujarat, Madhya Pradesh, Uttar Pradesh, Bihar and Jharkhand, and reaching eastward towards parts of West Bengal. Within this belt the lightest class (11.34–19.34%) is concentrated most densely in the arid districts of western Rajasthan and in the eastern Gangetic plain.

Absolute Hypertension Burden across the districts of India

Absolute number of hypertensive adults by district revealed a distribution far more skewed than that of prevalence (Fig. 4). District burden ranged from 0.03 lakh to 27.38 lakh cases, a spread of nearly three orders of magnitude (10^3), against the four-fold range recorded for prevalence. The burden distribution was heavily concentrated, with the majority of districts carrying fewer than 8 lakh cases, while a small number of districts concentrated substantially higher burdens. Districts bearing the heaviest burden (14.94–27.38 lakh cases) appeared as isolated, spatially discrete units within the major metropolitan and industrial agglomerations of western Maharashtra, the Bengaluru region of Karnataka, coastal and northern Tamil Nadu, the lower Ganga delta of West Bengal, central Kerala, the Punjab plains and pockets of the western Gangetic plain.

Districts in the lowest burden class (0.03–2.42 lakh cases) dominated the entire north-eastern region, the sub-Himalayan districts of Uttarakhand and Himachal Pradesh, the tribal interiors of Chhattisgarh, Jharkhand and eastern Madhya Pradesh, and the sparsely settled districts of western Rajasthan and the island territories.

Bivariate Classification of Districts by Prevalence and Burden

Four distinct dual-burden categories emerged across the districts of India, each with a clear spatial pattern (Fig. 5). Districts falling into the high prevalence–high burden category, representing the most acute dual concern, formed the largest and most spatially coherent cluster across the southern peninsula, occupying an almost continuous expanse through Kerala, Tamil Nadu, Karnataka, Telangana

and southern Andhra Pradesh, and extending northward into western and central Maharashtra. A second concentration of this category appeared across the Punjab plains and adjoining districts of Haryana and western Uttar Pradesh, with further clusters in eastern Gujarat, western Madhya Pradesh, coastal Odisha and the lower Ganga delta of West Bengal.

High prevalence–low burden districts were concentrated mainly in the north-eastern states (Arunachal Pradesh, Nagaland, Manipur, Mizoram, Meghalaya, Sikkim and parts of Assam), the sub-Himalayan districts of Uttarakhand and Himachal Pradesh, and the island territories, while low prevalence–high burden districts formed a broad belt across the northern and central interior, spanning Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, northern Gujarat, parts of West Bengal and northern Maharashtra.

Districts in the low prevalence–low burden category were comparatively few and spatially fragmented, appearing mainly in the arid western margin of Rajasthan, the tribal interiors of Chhattisgarh and Jharkhand, and scattered pockets within Uttar Pradesh, Bihar, Odisha and the north-eastern hills.

Cumulative Share of Hypertension across the districts and within States of India

Cumulative contributions of districts to state-level hypertension burden are presented in Fig. 6. Districts those jointly responsible for the top 50% of each state's burden were markedly fewer than the remaining districts yet were distributed across every major state rather than confined to any single region (Map 1). They appeared as dense clusters in the western and eastern Gangetic plain of Uttar Pradesh, the Punjab and Haryana plains, western and central Maharashtra, northern and southern Karnataka, coastal and interior Tamil Nadu, central Kerala, the lower Ganga delta of West Bengal, and pockets of Bihar, Madhya Pradesh, Gujarat, Rajasthan, Telangana, Andhra Pradesh and Odisha, together with scattered districts in the north-eastern states and Jammu & Kashmir. The pattern indicates that within nearly every state a comparatively small subset of districts accounts for half of the state-level burden.

Extending the threshold to the top 75% (Map 1 and 2 combined) added a second layer of districts that filled the gaps around the Map 1 clusters, thickening the coverage across the Gangetic plain, the Deccan interior, eastern Gujarat, Chhattisgarh, Jharkhand, Odisha and the north-eastern hill states (Map 2). At the top 90% threshold (Map 1, 2 and 3), the highlighted districts covered the overwhelming majority of the national territory, leaving only a residual and highly fragmented set of unshaded districts (Map 3). Districts those collectively accounting for the bottom 10% of state burden which numbered comparatively few and occurred as dispersed, non-contiguous pattern concentrated in the arid western districts of Rajasthan, the sparsely settled interiors of Chhattisgarh, Jharkhand and Odisha, the sub-Himalayan and north-eastern hill districts, parts of Gujarat and southern Karnataka, and the island territories (Map 4).

Discussion

This study shows that hypertension burden in India cannot be understood through prevalence alone. Prevalence followed a recognisable state- and district-level pattern, but the absolute number of affected individuals followed a largely different distribution. Hypertension prevalence varied substantially across India, ranging more than two-fold across states and four-fold across districts with high-prevalence clusters along the northern, north-eastern and southern states and low-prevalence areas concentrated in the central states. Absolute burden diverged sharply from this prevalence pattern, populous but lower-prevalence states like Uttar Pradesh and Bihar carried the largest hypertensive populations, while several high-prevalence small states contributed minimally to national burden. The mismatch between prevalence and burden was not evenly spread. A specific group of districts, mainly in the southern peninsula and north-west, had both high prevalence and high burden, while in most states a small subset of districts made up the largest share of the disease burden.

The national estimate of 26.4% obtained here is consistent with the range reported by earlier nationally representative studies (9, 15, 22). The elevated prevalence of hypertension observed across the southern and western states. In the south Indian states higher prevalence may be plausibly linked with the diet consumption. High dietary sodium intake and saturated fat particularly from coconut oil and butter, has been identified as an independent predictor of systolic blood pressure in South Indian populations (31, 32). In the north-west parts of India, our finding of high prevalence in Punjab is consistent with the alarmingly high state-level estimate (33). In these regions elevated pressure may be linked with the higher zinc content of the local food chain arising from groundwater-irrigated vegetables and other zinc-rich dietary items (34). In the north-eastern highlands districts of India, physiological responses to cold and lower oxygen availability, together with lifestyle particularly reliance on unclean water sources and certain sanitation practices, dietary shifts and smoking practices have been the major cause (35).

Hypertension prevalence was low across the states of the central and eastern interior, consistent with earlier studies. Adults living in central India have been shown a lower risk of hypertension than those in southern India population even after controlling for socioeconomic characteristics, where poverty may act protectively by limiting exposure to hypertension risk factors (36). A similar clustering of low prevalence across parts of northern India has been reported previously (37), although our studies identifies the Punjab and Haryana region among the high prevalence and higher-burden.

Our finding that lower-prevalence states carry the heaviest absolute burden supports the argument that resources should be directed to areas combining high prevalence with large absolute numbers of affected people (24). This is particularly consequential for the central and eastern interior states, which are not only among the poorest but also have markedly highest and younger age population (38). The same logic applies to the metropolitan districts, where below-average prevalence coexists with very large absolute case of numbers.

These findings of this study suggest two priority areas for resource allocation for the management of the hypertension in India. First, districts with concurrent high prevalence and high burden should receive intensive intervention including population-level screening and strengthened NCD clinics. Second,

districts with large absolute case numbers despite moderate prevalence require targeted intervention to prevent them from becoming future hypertension hotspots.

The strength of this study lies in its focus on the absolute number of hypertensive individuals rather than prevalence alone, this approach rarely applied in Indian epidemiological studies but directly relevant to policy and resource allocation for the India. Since burden was calculated as the product of prevalence and population, the accuracy of these estimates depends directly on the population figures used, in the absence of updated census enumeration, district population counts were derived from WorldPop gridded projections. While this introduces some uncertainty into the burden estimates, WorldPop currently offers the most reliable alternative for sub-national population estimation in India. Future studies should combine these burden estimates with information about local health facilities and clinics, and data on risk factors such as salt intake and smoking, to develop practical intervention plans for priority districts.

Conclusions

Hypertension prevalence and absolute burden follow distinctly different geographies across India. States and districts with below-average prevalence but large populations account for the greatest number of affected individuals, while several high-prevalence areas contribute only marginally to the national total. Resource allocation based on prevalence alone is therefore incomplete, as it overlooks where the greatest number of people actually require care. District-level burden mapping, combining survey-based prevalence with population data, provides a more realistic basis for planning. We therefore recommend that Population-Based Screening under NP-NCD be intensified and prioritised in the high-burden districts identified here, so that screening and treatment services reach the largest number of affected people most efficiently.

Declarations

Declaration statement

Data Availability

The datasets analyzed during the current study are publicly available. The NFHS-5 data can be accessed from the DHS Program repository (<https://dhsprogram.com/>) upon free registration, and the spatial population data can be downloaded directly from the WorldPop repository (<https://www.worldpop.org/>).

Consent of Participation

This study was based entirely on publicly available secondary datasets, so informed consent had already been obtained by the NFHS survey authorities from all participants during the original data collection process. The WorldPop database provides anonymized and publicly accessible population data. Therefore, no additional consent to participate was required from the authors' side for the present study.

Ethical Approval

This study is based on secondary datasets obtained from the National Family Health Survey (NFHS) and WorldPop databases. The datasets are publicly available and contain anonymized information; therefore, this study did not require any additional ethical approval or informed consent.

Conflict of Interest

The authors declare that they have no competing interests

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Author Contribution

AK: Conceptualisation, methodology, formal analysis, data curation, visualisation, writing – original draft. MJR: Methodology, validation, writing – review and editing. RN: Supervision, writing – review and editing. All authors read and approved the final manuscript

Data Availability

This study used publicly available secondary datasets. The National Family Health Survey-5 (2019–21) data are available from the DHS Program repository (<https://dhsprogram.com/data/>) upon registration and approval of a data request. The WorldPop gridded population datasets are openly available at <https://www.worldpop.org/>.

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Figures

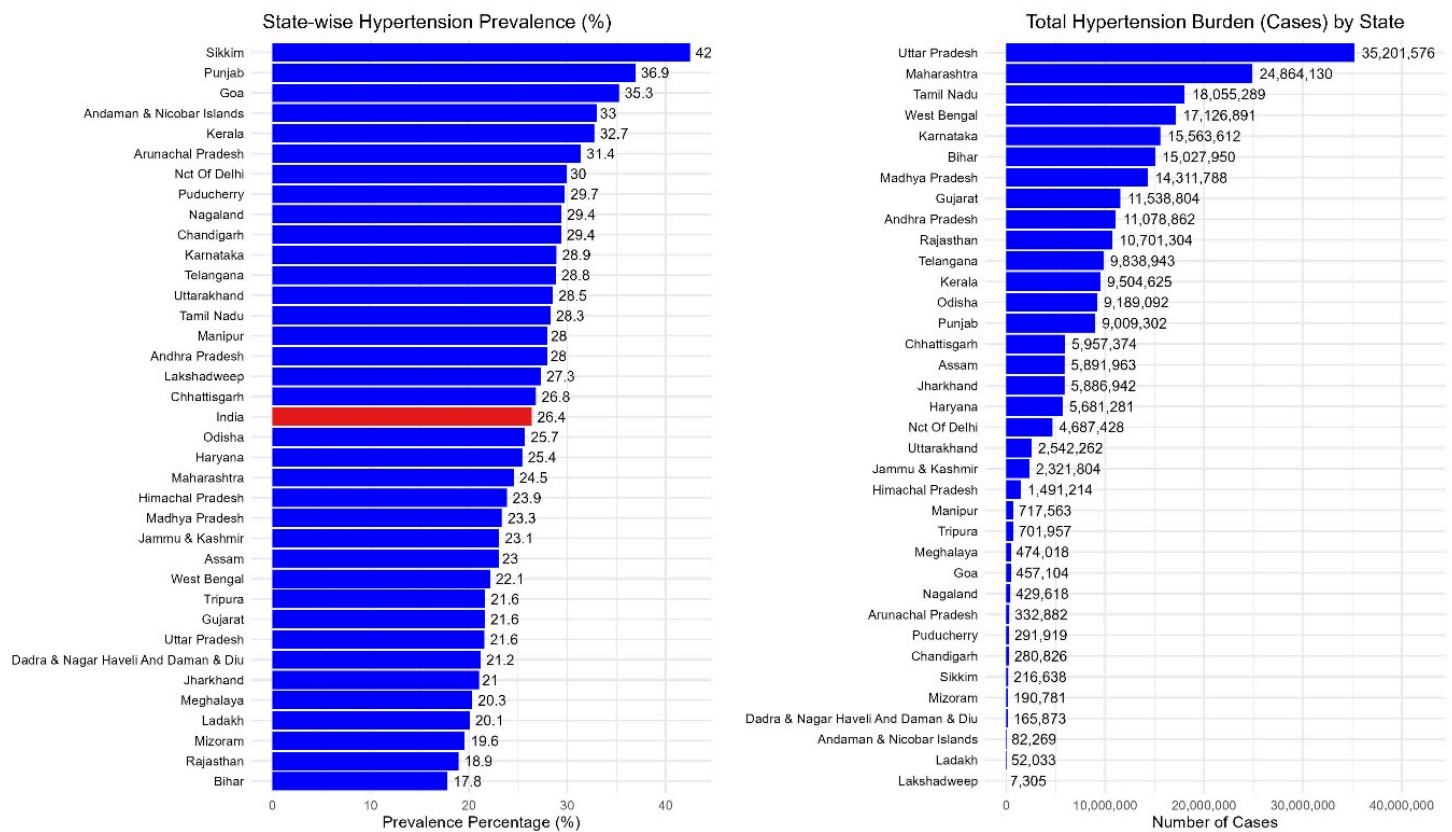


Figure 1

State-wise hypertension prevalence and estimated absolute burden in India, NFHS-5 (2019–21). (right) Hypertension prevalence (%) among adults. (left) Estimated absolute number of hypertensive adults.

Percent share of Hypertension Burden across the states of India

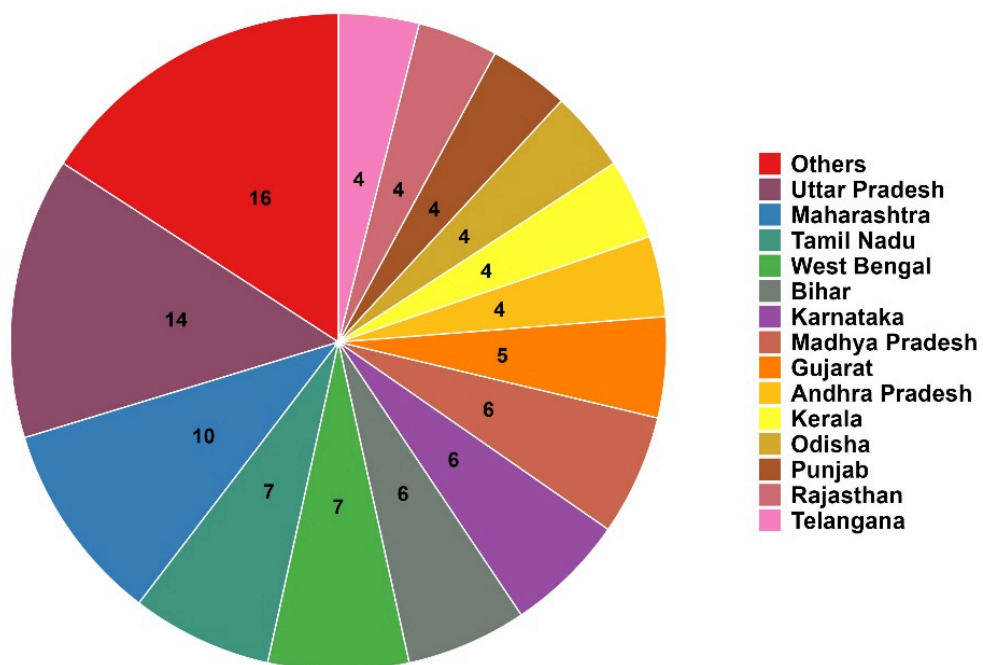


Figure 2

Percentage share of the national hypertension burden

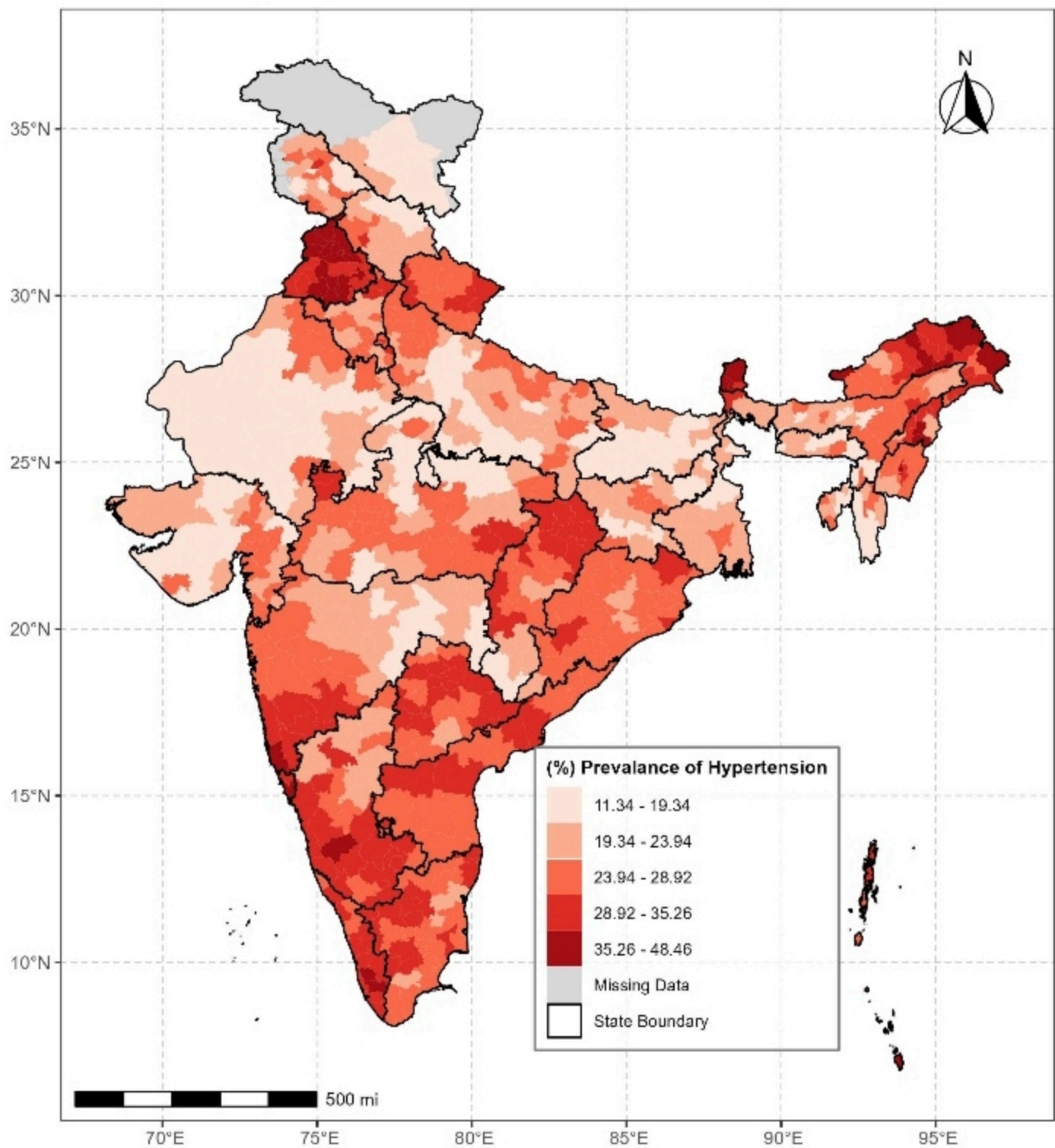


Figure 3

Prevalence of hypertension across the districts of India, NFHS-5 (2019–21).

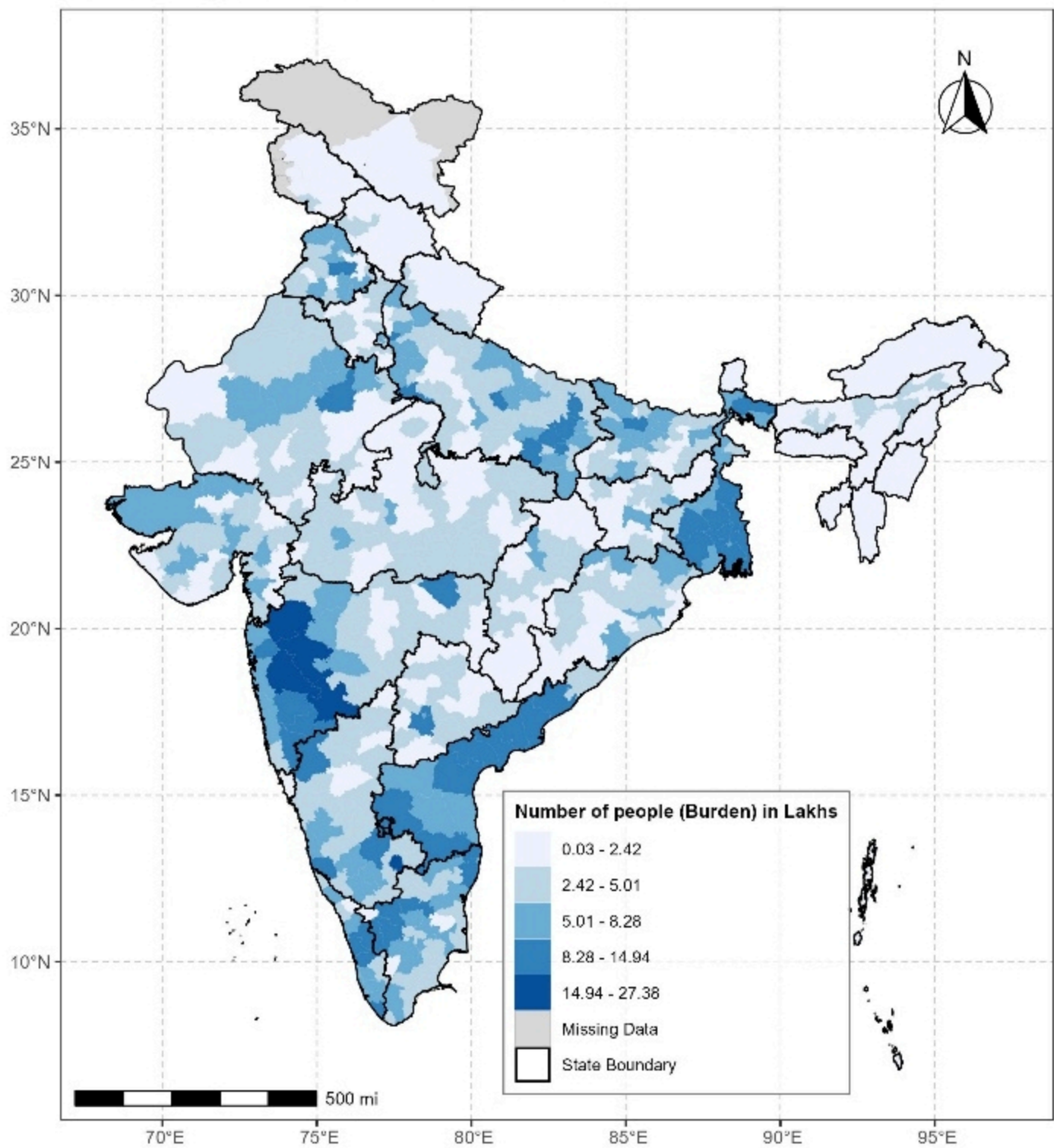


Figure 4

Absolute burden of hypertension across the districts of India, NFHS-5 (2019–21).

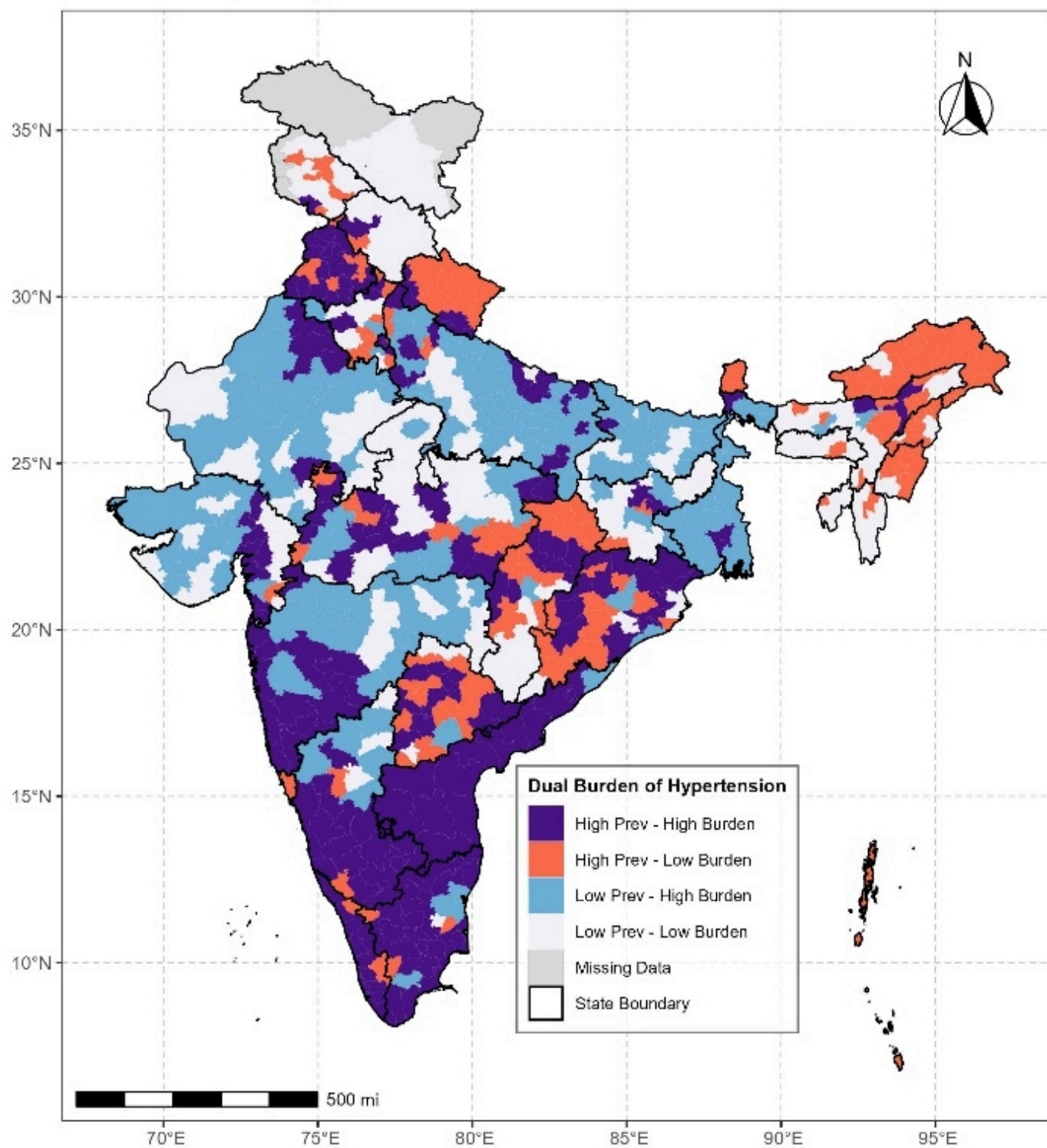


Figure 5

Bivariate classification of Indian districts by hypertension prevalence and absolute burden, NFHS-5 (2019–21)

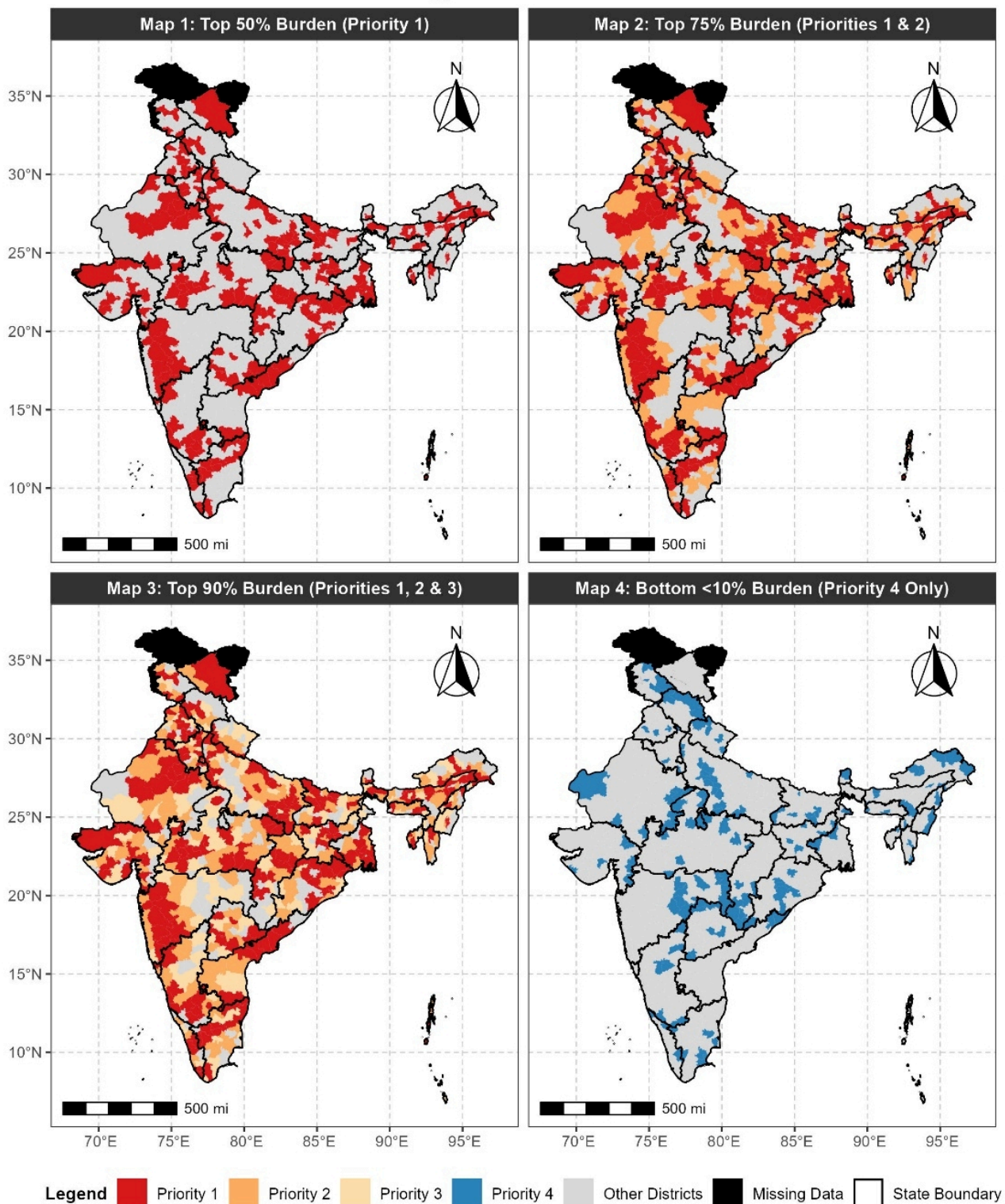


Figure 6

Cumulative district prioritization for hypertension intervention across India, NFHS-5 (2019–21). Map 1 (red) comprises the districts jointly responsible for the top 50% of state burden; Map 2 (dark orange and red) the 50–75% cumulative band; Map 3 (light orange, dark orange and red) the 75–90% band; and Map 4 (blue) the residual districts accounting for the bottom 10%.

Supplementary Files

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