Supplementary material

Supplementary Text 1: Age-standardisation method

Age-standardised prevalence was calculated by $\sum_{i=1}^{4} ASP_i * w_i$, where ASP$_i$ is the age-specific prevalence in age group i (4 groups including 18-30, 31-40, 41-50, and 51-60 years), and w$_i$ is the weight for each age group i calculated as the global population proportion in age group i divided by the global population proportion in the entire 18-60 years group, using the WHO global standard population.[S1] Note that the Chilean study was an exception, only surveying those over 40, so only age groups 41-50 and 51-60 were included in those calculations.

Supplementary Text 2: Findings from sensitivity analyses and post-analysis checks

Using age-adapted cut-offs led to marked increases in prevalence in some areas, particularly Sri Lanka, Nepal and England, whereas other areas did not change (Table S6).

In the studies where it was possible to do the relevant analyses, use of CKD-EPI 2021 did not substantially alter prevalence estimates compared to those obtained using CKD-EPI 2009. In contrast, the MDRD equation showed much higher prevalences in many areas (Table S7).

These sensitivity analyses didn't change any of our major conclusions.

When testing for associations between the main prevalence outcome and study design characteristics, the response rate and the study year were not associated, even when restricting to areas with moderate-high prevalence. There was borderline evidence that a higher proportion of males in the sample was associated with a slightly higher prevalence, but only in areas with moderate-high prevalence (Table S8).

Supplementary references

S1 Ahmad O, Boschi-Pinto C, Lopez A, *et al*. Age standardization of rates: a new WHO standard. GPE Discussion Paper Series, No.31. Geneva: World Health Organization; 2001, http://www.who.int/healthinfo/paper31.pdf. Accessed 01/08/2023

Supplementary Figures
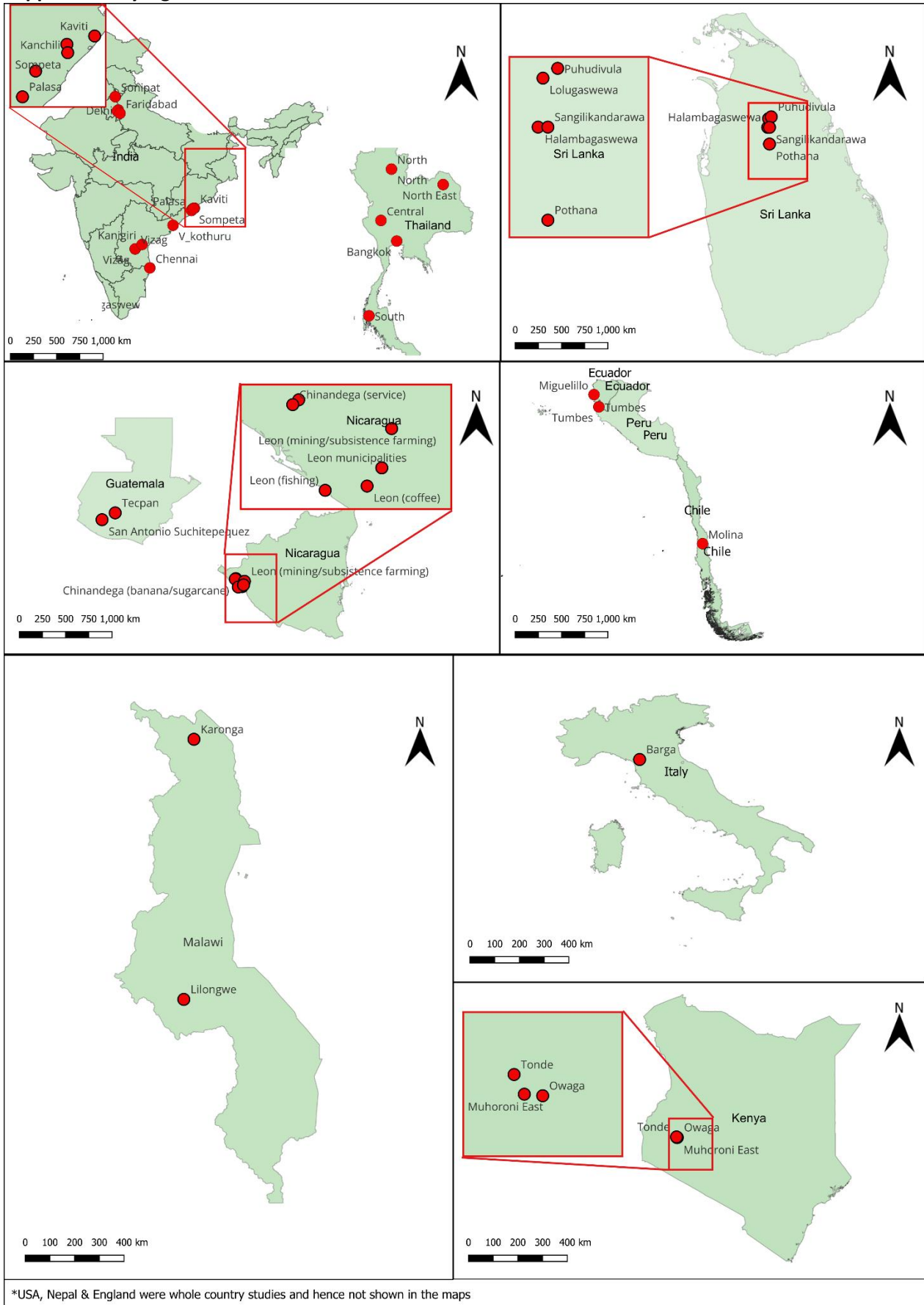
*USA, Nepal & England were whole country studies and hence not shown in the maps

Figure S1: DEGREE centre locations within countries*

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Supplementary tables

Table S1: Definitions of variables and any differences between studies

Centre	Hypertension definition	Diabetes definition	Heavy proteinuria definition	eGFR calculation in main analysis[a]	Sampling method	Other
Chile	Self-report of diagnosis or mean (of 2) SBP≥140mmHg or DBP≥90mmHg or use of antihypertensive drugs in past 2 weeks	Self-report or glycemia ≥126mg/dL or use of hypoglycemic drugs	urine ACR≥300mg/g	Creatinine: CKD-EPI 2021	Simple random sampling	Tables provided. Age <=40 excluded.
Ecuador	SBP≥140 or DBP≥90 mmHg in two different measurements	HbA1c ≥ 6.5%.	urine dipstick protein ≥+++	Creatinine: CKD-EPI 2009 (with race)	Convenience sampling. All adults aged 18 years and older living in the communities were invited to participate through community assemblies	Tables provided.
England	Self report of diagnosis, or mean (of 3) SBP≥140 mmHg or DBP≥90mmHg	Self report of diagnosis or HbA1c ≥6.5%	urine ACR>300mg/g	Creatinine: CKD-EPI 2009 (with race) Cystatin C: CKD-EPI 2012	Multi-stage stratified probability sampling	Nationally representative nationwide survey. Age groups are one year out i.e. 18-29, 30-39, 40-49, 50-59. Non-institutionalised individuals only.
Guatemala	Self report of diagnosis, or mean (of 3) SBP≥140mmHg or DBP≥90mmHg	Self report of diagnosis or HbA1c ≥6.5%	urine ACR>300mg/g	Creatinine: CKD-EPI 2009 (non race)	Simple random sampling	
India 1 (CARRS)	Self-report of diagnosis or mean SBP≥140mmHg or DBP≥90 mmHg	Self report of diagnosis or HbA1c ≥6.5% or fasting glucose ≥126mg/dl	urine ACR>300mg/g	Creatinine: CKD-EPI 2009 (non race)	Multi-stage cluster random sampling	Age <20 years excluded. Pregnant, bedridden and participants who were unable to comprehend the questionnaires due cognitive deficiencies were excluded.
India 2 (ICMR)	Self-report of diagnosis or mean SBP≥140mmHg or DBP≥90mmHg	Self report of diagnosis or HbA1c ≥6.5% or fasting glucose ≥126mg/dl	urine ACR>300mg/g	Creatinine: CKD-EPI 2009 (non race)	Multi-stage cluster random sampling for urban area, simple random sampling for rural area	Age <30 years excluded. Pregnant, bedridden and participants who were unable to comprehend the questionnaires due cognitive deficiencies were excluded.
India 3 (UDAY)	Self-report of diagnosis or mean SBP≥140mmHg or DBP≥90mmHg	Self report of diagnosis or HbA1c ≥6.5% or fasting glucose ≥126mg/dl	urine ACR>300mg/g	Creatinine: CKD-EPI 2009 (non race) Cystatin C: CKD-EPI 2012	Multi-stage cluster random sampling	Age <30 years excluded. Pregnant, bedridden and participants who were unable to comprehend the questionnaires due cognitive deficiencies were excluded.
India 4 (Uddanam)	Self-report of >5 year hypertension	HbA1c ≥6.5%	urine PCR>150mg/g	Creatinine: CKD-EPI 2012 (non race)	Cluster random sampling	Tables provided.
India 5 (Prakasam)	SBP≥140mmHg or DBP≥90mmHg	HbA1c ≥6.5%	urine ACR≥300mg/g	Creatinine: CKD-EPI 2021 (non-race)	Whole population (of selected villages)	Tables provided.
Italy	Self-report of diagnosis or SBP≥140mmHg or DBP≥90mmHg	Self-report of diagnosis	urine dipstick protein ≥++	Creatinine: CKD-EPI 2009 (non race)	Simple random sampling	Stratified by age and sex.

Kenya	Self-report of diagnosis or medication for hypertension, mean SBP≥140mmHg or mean DBP≥90mmHg	Self-report of diagnosis or diabetic medication	urine dipstick protein ≥++	Creatinine: CKD-EPI 2009 (non race) Cystatin C: CKD-EPI 2012	Household random sampling	One individual per house selected, with sex predetermined.
Malawi	Self-report of diagnosis, or hypertensive medication in last 2 weeks, or mean SBP≥140mmHg or DBP≥90mmHg	Glucose ≥7mmol/L, or self-report previous diagnosis or diabetic medication	urine ACR>300mg/g	Creatinine: CKD-EPI 2009 (non race) Cystatin C: CKD-EPI 2012	Simple random sampling	
Nepal	Diagnosis (verified through medical records provided by participant) or mean SBP≥140mmHg or DBP≥90mmHg	Taking diabetic medication, or fasting glucose ≥126mg/dL or post prandial blood glucose levels ≥200mg/dL	Urine protein>=300 mg/dL	Creatinine: CKD-MDRD	Multi-stage cluster random sampling	Nationally representative nationwide survey. Too frail participants and those who cannot provide written consent were excluded.
Nicaragua 1	Self-report of diagnosis, or SBP≥140mmHg or DBP≥90mmHg	Self-reported diagnosis or glucosuria ≥100mg/dL using a urine stick	urine dipstick protein ≥+++	Creatinine: CKD-MDRD	Simple random sampling	Tables provided.
Nicaragua 2	Self-report of diagnosis or mean SBP≥140mmHg or DBP≥90mmHg	Self-reported diagnosis or serum glucose ≥110mg/dL	urine dipstick protein ≥+++	Creatinine: CKD-EPI 2012 (with race) for eGFR$_{creat}$	Household random sampling	Tables provided. Stratified by urban/rural to match the population rate
Peru	Self-report of diagnosis, or mean SBP≥140mmHg or DBP≥90mmHg	Self reported diagnosis, or taking diabetes medication, or fasting glucose ≥126mg/dL	urine dipstick protein ≥++	Creatinine: CKD-EPI 2009 Cystatin C: CKD-EPI 2012	Simple random sampling	Stratified by urban/rural to 50% and sex. Female recruitment stopped after reaching 60% for each subgroup.
Sri Lanka	Self report of taking medication for hypertension, or mean SBP≥140mmHg or DBP≥90mmHg	Self-reported diagnosis, or current diabetic medication, or fasting glucose ≥126mg/dL	urine ACR>300 mg/g	Creatinine: CKD-EPI 2009	Simple random sampling	Stratified by urban/rural (almost 50% in each group) and by sex. Female recruitment stopped after reaching 60% for each subgroup.
Thailand	Self report of taking medication for hypertension, or mean SBP≥140mmHg or DBP≥90mmHg	Use of antihypoglycemic medications, or fasting plasma glucose ≥126mg/dL	urine dipstick protein ≥++	Creatinine: CKD-EPI 2009 (non race)	Multi-stage cluster random sampling	Tables provided. Stratified, nationally representative, nationwide survey.
USA	Self-report of diagnosis, or mean (of 3) SBP≥140mmHg or DBP≥90mmHg	Self report of diagnosis or HbA1c ≥6.5%	urine ACR>300mg/g	Creatinine: CKD-EPI 2009 (non race)$_t$	Multi-stage cluster random sampling	Nationally representative nationwide survey. Non-institutionalised individuals only. Urban/rural flag unavailable.

SBP=systolic blood pressue; DBP=diastolic blood pressure; ACR=albumin creatinine ratio; HbA1c=glycated haemoglobin; CKD-EPI=The Chronic Kidney Disease Epidemiology Collaboration; CKD-MDRD=Chronic Kidney Disease Modification of Diet in Renal Disease; [a] All creatinine assays were IDMS (isotopic dilution mass spectrometry) referenced. We do not have written confirmation for Nicaragua 1 but this was conducted in a ministry of health laboratory where IDMS references were being used at the time. Cystatin C measures from India, Malawi and Peru were standardised to a single reference laboratory.

Table S2: Age-standardised prevalence of eGFR<60ml/min/1.73m^2 in total sample and complete data sample (including those with diabetes, hypertension and heavy proteinuria), by sex

Centre	Area	Rural / Urban	Total Sample men	Men with missing data	Total sample prevalence of eGFR<60[a] in men % (95% CI)	Complete case prevalence of eGFR<60[a] in men % (95% CI)	Total Sample women	Women with missing data	Total sample prevalence of eGFR<60[a] in women % (95% CI)	Complete case prevalence of eGFR<60[a] in women % (95% CI)
Chile	Molina	Rural	42	3	0.0 (N/A)	0.0 (N/A)	18	1	0.0 (N/A)	0.0 (N/A)
Chile	Molina	Urban	167	11	0.0 (N/A)	0.0 (N/A)	283	19	1.5 (0.1, 2.9)	1.6 (0.1, 3.1)
Ecuador	Miguelillo	Rural	312	0	2.2 (0.7, 3.8)	2.2 (0.7, 3.8)	442	0	6.4 (4.3, 8.5)	6.4 (4.3, 8.5)
England	all	Rural	167	6	0.4 (0, 1.0)	0.4 (0, 1.0)	233	10	2.1 (0.7, 3.5)	2.2 (0.8, 3.7)
England	all	Urban	789	45	0.6 (0.1, 1.0)	0.5 (0.1, 0.9)	1063	56	1.0 (0.6, 1.5)	1.0 (0.6, 1.5)
Guatemala	San Antonio Suchitepequez	Rural	119	4	3.0 (0, 6.0)	3.1 (0, 6.3)	224	3	0.9 (0, 2.2)	0.9 (0, 2.2)
Guatemala	Tecpan	Rural	116	7	0.8 (0, 2.4)	0.9 (0, 2.6)	236	27	0.0 (N/A)	0.0 (N/A)
India 1 (CARRS)	Chennai	Urban	2374	41	0.9 (0.5, 1.2)	0.9 (0.5, 1.3)	3108	75	0.6 (0.3, 0.9)	0.6 (0.3, 0.9)
India 1 (CARRS)	Delhi	Urban	1791	58	1.0 (0.6, 1.5)	1.0 (0.6, 1.5)	1890	59	1.2 (0.7, 1.6)	1.2 (0.8, 1.6)
India 2 (ICMR)	Delhi	Urban	864	27	1.2 (0.6, 1.8)	1.2 (0.6, 1.9)	1102	51	2.3 (1.5, 3.1)	2.3 (1.5, 3.1)
India 2 (ICMR)	Faridabad	Rural	670	41	1.6 (0.9, 2.4)	1.6 (0.8, 2.4)	845	61	1.6 (0.9, 2.4)	1.6 (0.9, 2.4)
India 3 (UDAY)	Sonipat	Rural	778	10	0.6 (0.2, 1.1)	0.6 (0.2, 1.1)	1184	48	0.6 (0.2, 1.0)	0.6 (0.2, 1.0)
India 3 (UDAY)	Sonipat	Urban	1046	8	0.9 (0.4, 1.3)	0.9 (0.4, 1.3)	1206	22	0.6 (0.2, 0.9)	0.6 (0.2, 0.9)
India 3 (UDAY)	Vizag	Rural	1019	85	6.1 (3.0, 9.1)	6.7 (2.9, 10.4)	1349	107	3.3 (2.2, 4.3)	3.1 (2.2, 4.1)
India 3 (UDAY)	Vizag	Urban	935	32	1.2 (0.6, 1.8)	1.2 (0.6, 1.8)	1193	63	0.7 (0.3, 1.1)	0.7 (0.3, 1.1)
India 4 (Uddanam)	Kanchili	Rural	148	0	4.8 (1.1, 8.6)	4.8 (1.1, 8.6)	169	0	7.2 (3.2, 11.3)	7.2 (3.2, 11.3)
India 4 (Uddanam)	Kaviti	Rural	102	0	12.2 (7.7, 16.7)	12.2 (7.7, 16.7)	110	0	8.0 (3.5, 12.4)	8.0 (3.5, 12.4)
India 4 (Uddanam)	Mandasa	Rural	95	0	18.4 (10.7, 26.1)	18.4 (10.7, 26.1)	105	0	10.6 (6.0, 15.1)	10.6 (6.0, 15.1)
India 4 (Uddanam)	Palasa	Rural	186	0	11.2 (5.9, 16.5)	11.2 (5.9, 16.5)	176	0	11.0 (6.1, 15.9)	11.0 (6.1, 15.9)
India 4 (Uddanam)	Sompeta	Rural	202	0	9.2 (4.9, 13.4)	9.2 (4.9, 13.4)	241	0	2.7 (0.9, 4.5)	2.7 (0.9, 4.5)
India 4 (Uddanam)	V_kothuru	Rural	250	0	5.3 (3.0, 7.5)	5.3 (3.0, 7.5)	281	0	4.9 (2.9, 7.0)	4.9 (2.9, 7.0)
India 5 (Prakasam)	Kanigiri	Rural	420	0	5.3 (3.4, 7.2)	5.3 (3.4, 7.2)	632	0	3.4 (2.0, 4.7)	3.4 (2.0, 4.7)
Italy	Barga	Rural	130	2	0.9 (0, 2.3)	0.9 (0, 2.3)	176	3	0.7 (0, 1.7)	0.7 (0, 1.7)
Kenya	Muhoroni East	Urban	138	0	0.0 (N/A)	0.0 (N/A)	122	0	0.9 (0, 2.7)	0.9 (0, 2.7)
Kenya	Owaga	Rural	138	25	0.0 (N/A)	0.0 (N/A)	151	22	2.1 (0, 4.5)	2.2 (0, 4.8)
Kenya	Tonde	Rural	114	0	0.0 (N/A)	0.0 (N/A)	119	0	0.0 (N/A)	0.0 (N/A)

Country	Region		N				N			
Malawi	Karonga	Rural	286	15	3.0 (0.6, 5.3)	3.0 (0.7, 5.4)	382	7	3.0 (1.0, 4.9)	3.0 (1.0, 5.1)
Malawi	Lilongwe	Urban	96	0	2.2 (0, 6.2)	2.2 (0, 6.2)	216	0	4.9 (1.4, 8.4)	4.9 (1.4, 8.4)
Nepal	all	Rural	1796	106	0.9 (0.5, 1.3)	0.9 (0.6, 1.3)	3151	361	2.1 (1.6, 2.6)	2.1 (1.6, 2.6)
Nepal	all	Urban	1683	81	0.8 (0.4, 1.1)	0.8 (0.4, 1.1)	3160	326	3.0 (2.4, 3.5)	3.0 (2.4, 3.6)
Nicaragua 1	Chinandega (banana/sugarcane)	Rural	155	0	19.0 (12.5, 25.5)	19.0 (12.5, 25.5)	176	0	3.5 (0.6, 6.4)	3.5 (0.6, 6.4)
Nicaragua 1	Chinandega (service)	Rural	50	0	0.0 (N/A)	0.0 (N/A)	90	0	0.0 (N/A)	0.0 (N/A)
Nicaragua 1	Leon (coffee)	Rural	40	0	6.3 (0, 14.4)	6.3 (0, 14.4)	37	0	0.0 (N/A)	0.0 (N/A)
Nicaragua 1	Leon (fishing)	Rural	76	0	10.2 (3.2, 17.3)	10.2 (3.2, 17.3)	90	0	2.1 (0, 5.9)	2.1 (0, 5.9)
Nicaragua 1	Leon (mining/ subsistence farming)	Rural	158	0	16.2 (10.4, 22.0)	16.2 (10.4, 22.0)	224	0	4.8 (1.7, 7.9)	4.8 (1.7, 7.9)
Nicaragua 2	Leon municipalities	Rural	247	0	15.3 (10.9, 19.7)	15.3 (10.9, 19.7)	329	0	3.1 (1.2, 5.0)	3.1 (1.2, 5.0)
Nicaragua 2	Leon municipalities	Urban	400	0	10.0 (7.2, 12.7)	10.0 (7.2, 12.7)	696	0	3.6 (2.3, 4.8)	3.6 (2.3, 4.8)
Peru	Tumbes	Rural	281	3	0.5 (0, 1.3)	0.5 (0, 1.3)	349	5	0.3 (0, 0.9)	0.3 (0, 0.9)
Peru	Tumbes	Urban	261	4	0.5 (0, 1.2)	0.5 (0, 1.2)	360	1	0.5 (0, 1.1)	0.5 (0, 1.1)
Sri Lanka	Halambagaswewa	Rural	246	4	8.2 (5.5, 10.9)	8.3 (5.5, 11.0)	504	7	3.8 (2.2, 5.3)	3.8 (2.2, 5.3)
Sri Lanka	Lolugaswewa	Rural	221	0	5.8 (3.5, 8.1)	5.8 (3.5, 8.1)	576	7	4.5 (3.1, 6.0)	4.5 (3.1, 5.9)
Sri Lanka	Pothana	Rural	201	7	4.9 (2.6, 7.2)	5.0 (2.6, 7.3)	504	7	1.6 (0.7, 2.6)	1.7 (0.7, 2.6)
Sri Lanka	Puhudivula	Rural	224	2	7.6 (5.2, 10.1)	7.7 (5.2, 10.2)	580	4	3.6 (2.3, 4.9)	3.6 (2.3, 5.0)
Sri Lanka	Sangilikandarawa	Rural	276	6	6.2 (3.9, 8.5)	6.1 (3.8, 8.4)	558	10	3.1 (1.8, 4.4)	2.9 (1.6, 4.3)
Thailand	Bangkok	Urban	381	0	1.1 (0.1, 2.2)	1.1 (0.1, 2.2)	1223	0	0.7 (0.0, 1.3)	0.7 (0.0, 1.3)
Thailand	Central	Rural	606	0	0.9 (0.3, 1.4)	0.9 (0.3, 1.4)	795	0	1.1 (0.4, 1.9)	1.1 (0.4, 1.9)
Thailand	Central	Urban	519	0	0.6 (0.1, 1.1)	0.6 (0.1, 1.1)	832	0	0.4 (0.1, 0.7)	0.4 (0.1, 0.7)
Thailand	North	Rural	668	0	1.1 (0.6, 1.7)	1.1 (0.6, 1.7)	730	0	1.0 (0.1, 1.8)	1.0 (0.1, 1.8)
Thailand	North	Urban	445	0	1.1 (0, 2.3)	1.1 (0, 2.3)	604	0	1.0 (0.4, 1.6)	1.0 (0.4, 1.6)
Thailand	North East	Rural	577	0	1.3 (0.5, 2.1)	1.3 (0.5, 2.1)	637	0	0.8 (0.3, 1.3)	0.8 (0.3, 1.3)
Thailand	North East	Urban	492	0	0.7 (0, 1.4)	0.7 (0, 1.4)	609	0	0.6 (0.2, 1.0)	0.6 (0.2, 1.0)
Thailand	South	Rural	549	0	0.5 (0.1, 1.0)	0.5 (0.1, 1.0)	678	0	0.2 (0, 0.5)	0.2 (0, 0.5)
Thailand	South	Urban	303	0	0.7 (0.0, 1.4)	0.7 (0.0, 1.4)	489	0	1.1 (0.3, 2.0)	1.1 (0.3, 2.0)
USA	all	All	1597	11	2.1 (1.4, 2.7)	2.1 (1.4, 2.8)	1796	9	1.3 (0.8, 1.7)	1.3 (0.8, 1.8)

eGFR=estimated glomerular filtration rate; CI=confidence interval using normal approximation [a] age-standardised prevalence using WHO global population age weights;

Table S3: Age-standardised prevalence of eGFR<90ml/min/1.73m^2 by sex (for age 18-60)

Centre	Area	Rural / Urban	Sample with complete data				Sample of people without hypertension, diabetes and heavy proteinuria			
			Men		Women		Men		Women	
			n	eGFR<90[a] % (95% CI)	n	eGFR<90[a] % (95% CI)	n	eGFR<90[a] % (95% CI)	n	eGFR<90[a] % (95% CI)
Chile	Molina	Rural	39	36.2 (17.3, 55.2)	17	59.1 (35.7, 82.4)	16	35.9 (9.0, 62.8)	6	100 (NA, NA)
Chile	Molina	Urban	156	42.1 (34.2, 50.0)	264	49.0 (42.8, 55.8)	66	47.5 (36.0, 59.0)	137	46.5 (37.7, 55.2)
Ecuador	Miguelillo	Rural	312	34.1 (29.2, 39.1)	442	46.3 (41.9, 50.6)	180	33.4 (26.6, 40.3)	235	45.2 (38.6, 51.9)
England	all	Rural	161	35.7 (27.7, 43.8)	223	36.1 (29.7, 42.5)	98	35.8 (26.8, 44.7)	169	37.3 (29.9, 44.8)
England	all	Urban	744	37.5 (33.9, 41.2)	1007	31.7 (28.9, 34.5)	515	38.1 (34.0, 42.2)	759	32.9 (29.8, 35.9)
Guatemala	San Antonio Suchitepequez	Rural	115	6.8 (2.0, 11.6)	221	4.7 (1.9, 7.5)	86	6.3 (0.5, 12.1)	171	3.4 (0.5, 6.3)
Guatemala	Tecpan	Rural	109	10.7 (4.9, 16.5)	209	5.7 (2.6, 8.7)	83	9.4 (2.3, 16.4)	152	8.8 (3.6, 13.9)
India 1 (CARRS)	Chennai	Urban	2333	8.2 (7.1, 9.2)	3033	5.8 (5.0, 6.7)	1161	6.0 (4.6, 7.5)	1915	5.4 (4.1, 6.7)
India 1 (CARRS)	Delhi	Urban	1733	11.4 (10.1, 12.7)	1831	11.9 (10.6, 13.1)	770	10.8 (8.6, 12.9)	935	11.1 (8.9, 13.2)
India 2 (ICMR)	Delhi	Urban	837	33.3 (27.8, 38.8)	1051	37.0 (33.9, 40.0)	399	33.2 (25.8, 40.7)	571	36.1 (32.2, 39.9)
India 2 (ICMR)	Faridabad	Rural	629	18.6 (16.4, 20.8)	784	18.1 (12.8, 23.4)	380	18.6 (15.6, 21.5)	520	17.2 (11.0, 23.5)
India 3 (UDAY)	Sonipat	Rural	768	15.3 (9.1, 21.4)	1136	12.3 (10.0, 14.5)	530	13.7 (7.7, 19.8)	847	12.5 (10.1, 15.0)
India 3 (UDAY)	Sonipat	Urban	1038	12.0 (10.5, 13.4)	1184	11.2 (9.2, 13.2)	586	10.9 (9.0, 12.8)	768	9.9 (7.8, 12.0)
India 3 (UDAY)	Vizag	Rural	934	30.6 (24.6, 36.6)	1242	20.1 (17.6, 22.6)	696	30.2 (23.4, 37.0)	933	19.1 (16.4, 21.8)
India 3 (UDAY)	Vizag	Urban	903	28.3 (23.1, 33.5)	1130	14.6 (12.8, 16.5)	469	27.8 (21.5, 34.0)	692	12.8 (10.2, 15.4)
India 4 (Uddanam)	Kanchili	Rural	148	11.3 (6.3, 16.2)	169	15.8 (10.2, 21.4)	71	13.0 (5.6, 20.5)	83	13.9 (6.7, 21.1)
India 4 (Uddanam)	Kaviti	Rural	102	19.7 (14.4, 24.9)	110	20.0 (13.1, 26.9)	52	12.5 (5.2, 19.7)	65	14.0 (7.5, 20.5)
India 4 (Uddanam)	Mandasa	Rural	95	24.2 (16.1, 32.3)	105	18.5 (13.1, 24.0)	57	18.3 (8.5, 28.0)	54	12.5 (6.7, 18.3)
India 4 (Uddanam)	Palasa	Rural	186	21.4 (15.5, 27.4)	176	21.9 (15.5, 28.3)	84	17.4 (9.2, 25.6)	81	15.5 (8.5, 22.5)
India 4 (Uddanam)	Sompeta	Rural	202	16.2 (11.1, 21.4)	241	12.7 (8.4, 17.0)	99	14.0 (6.9, 21.0)	127	17.1 (10.3, 23.9)
India 4 (Uddanam)	V_kothuru	Rural	250	14.7 (10.9, 18.5)	281	13.7 (10.6, 16.8)	101	11.4 (5.6, 17.3)	121	11.6 (6.5, 16.7)
India 5 (Prakasam)	Kanigiri	Rural	420	27.8 (23.7, 31.8)	632	14.4 (11.8, 17.0)	221	25.5 (20.0, 31.1)	432	11.7 (8.3, 15.1)
Italy	Barga	Rural	128	31.5 (23.9, 39.2)	173	38.0 (31.2, 44.8)	73	31.5 (21.8, 41.2)	149	36.1 (29.3, 43.0)
Kenya	Muhoroni East	Urban	138	8.1 (4.0, 12.3)	122	20.5 (12.1, 28.9)	113	8.6 (3.6, 13.6)	104	21.6 (17.5, 25.6)
Kenya	Owaga	Rural	113	10.3 (4.4, 16.1)	129	16.1 (10.5, 21.7)	88	8.5 (1.3, 15.8)	98	17.9 (11.6, 24.2)
Kenya	Tonde	Rural	114	3.6 (0.5, 6.7)	119	7.2 (2.6, 11.9)	94	3.5 (0.2, 6.7)	100	8.2 (2.5, 13.8)
Malawi	Karonga	Rural	271	17.6 (12.9, 22.3)	375	14.5 (10.3, 18.8)	214	15.0 (9.5, 20.4)	309	13.8 (9.1, 18.5)

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Country	Location	Setting	N		N		N		N	
Malawi	Lilongwe	Urban	96	24.4 (13.9, 34.9)	216	24.7 (18.1, 31.3)	74	27.4 (16.2, 38.6)	159	31.3 (18.0, 44.6)
Nepal	all	Rural	1690	31.4 (29.2, 33.7)	2790	44.1 (42.4, 45.9)	1002	29.3 (26.6, 32.0)	1981	43.2 (41.2, 45.2)
Nepal	all	Urban	1602	40.0 (37.5, 42.6)	2834	54.9 (53.0, 56.8)	822	38.5 (35.3, 41.7)	1777	53.8 (51.6, 56.1)
Nicaragua 1	Chinandega (banana/sugarcane)	Rural	155	32.9 (25.5, 40.3)	176	6.5 (2.8, 10.3)	104	25.1 (16.4, 33.8)	111	2.2 (0, 4.6)
Nicaragua 1	Chinandega (service)	Rural	50	9.3 (1.3, 17.2)	90	2.4 (0, 5.5)	34	9.2 (0, 20.2)	58	2.4 (0, 6.8)
Nicaragua 1	Leon (coffee)	Rural	40	8.6 (0, 17.8)	37	5.6 (0, 14.4)	30	11.2 (0, 22.8)	26	0.0 (N/A)
Nicaragua 1	Leon (fishing)	Rural	76	31.2 (21.4, 40.9)	90	11.6 (4.5, 18.8)	55	24.5 (12.0, 36.9)	73	6.4 (1.2, 11.7)
Nicaragua 1	Leon (mining/subsistence farming)	Rural	158	41.2 (34.2, 48.2)	224	13.5 (8.8, 18.2)	106	35.9 (26.1, 45.6)	144	7.3 (1.7, 12.8)
Nicaragua 2	Leon municipalities	Rural	247	28.3 (23.0, 33.6)	329	11.5 (8.0, 14.9)	145	23.5 (16.8, 30.2)	211	9.3 (4.3, 14.3)
Nicaragua 2	Leon municipalities	Urban	400	21.9 (18.4, 25.4)	696	13.0 (10.8, 15.2)	256	15.9 (11.2, 20.6)	436	9.1 (6.5, 11.8)
Peru	Tumbes	Rural	278	7.5 (5.0, 10.0)	344	4.0 (2.0, 6.0)	210	4.5 (2.1, 7.0)	285	4.9 (2.0, 7.7)
Peru	Tumbes	Urban	257	15.5 (11.7, 19.3)	359	5.2 (3.2, 7.3)	186	14.4 (9.8, 19.0)	305	4.6 (2.3, 6.8)
Sri Lanka	Halambagaswewa	Rural	242	33.6 (28.6, 38.6)	497	29.1 (25.9, 32.4)	136	31.7 (25.1, 38.2)	336	26.5 (22.6, 30.4)
Sri Lanka	Lolugaswewa	Rural	221	39.5 (33.2, 45.8)	569	34.5 (31.4, 37.6)	138	38.1 (31.3, 44.9)	372	34.0 (30.3, 37.6)
Sri Lanka	Pothana	Rural	194	26.5 (22.0, 31.0)	497	30.3 (27.1, 33.6)	115	26.3 (20.1, 32.5)	330	29.6 (25.6, 33.6)
Sri Lanka	Puhudivula	Rural	222	46.3 (40.6, 51.9)	576	46.0 (42.5, 49.5)	112	49.0 (42.7, 55.4)	378	44.3 (39.9, 48.6)
Sri Lanka	Sangilikandarawa	Rural	270	30.4 (25.5, 35.3)	548	29.5 (26.2, 32.7)	157	27.7 (21.6, 33.8)	346	27.9 (23.8, 31.9)
Thailand	Bangkok	Urban	381	18.8 (15.0, 22.6)	1223	6.6 (5.4, 7.9)	233	20.3 (15.4, 25.2)	943	6.4 (5.0, 7.8)
Thailand	Central	Rural	606	11.6 (9.4, 13.9)	795	10.6 (8.6, 12.6)	424	11.4 (8.7, 14.2)	576	10.0 (7.7, 12.3)
Thailand	Central	Urban	519	15.9 (12.9, 18.8)	832	8.2 (6.6, 9.7)	336	15.0 (11.5, 18.5)	587	7.7 (6.0, 9.5)
Thailand	North	Rural	668	11.0 (8.8, 13.2)	730	7.4 (5.7, 9.2)	407	10.1 (7.4, 12.7)	498	7.2 (5.2, 9.2)
Thailand	North	Urban	445	16.3 (12.5, 20.1)	604	9.1 (7.0, 11.1)	267	15.2 (10.8, 19.7)	409	8.6 (6.2, 11.0)
Thailand	North East	Rural	577	12.5 (10.5, 14.6)	637	33.2 (29.0, 37.5)	428	11.9 (9.6, 14.2)	479	33.1 (28.5, 37.7)
Thailand	North East	Urban	492	16.4 (14.0, 18.8)	609	42.1 (37.2, 46.9)	351	14.7 (12.0, 17.5)	450	38.8 (33.7, 43.9)
Thailand	South	Rural	549	9.9 (7.7, 12.0)	678	4.3 (2.9, 5.6)	366	10.0 (7.2, 12.7)	493	4.0 (2.5, 5.6)
Thailand	South	Urban	303	14.5 (11.1, 17.9)	489	7.7 (5.6, 9.8)	193	13.7 (9.5, 17.9)	356	7.3 (4.8, 9.7)
USA	all	All	1586	27.0 (24.9, 29.0)	1787	17.9 (16.2, 19.5)	925	28.2 (25.4, 30.9)	1143	16.9 (14.8, 19.0)

[a] age-standardised prevalence using WHO global population age weights; [b] only 41-60 years included; eGFR=creatinine-based estimated glomerular filtration rate; CI=confidence interval using normal approximation; N/A=no CI available due to zero estimate

Table S4: Lin's concordance correlation coefficient between eGFR measurements using creatinine and cystatin C, based on total sample

Concordance between creatinine-based eGFR and:	England	India 3 (UDAY)	Kenya	Malawi	Peru
Cystatin C-based eGFR (CKD-EPI 2012) CCC (95% CI)	0.53 (0.50-0.56)	0.24 (0.21-0.26)	0.44 (0.36-0.53)	0.24 (0.18-0.29)	0.49 (0.46-0.53)
Creatinine-cystatin-based eGFR (CKD-EPI 2012) CCC (95% CI)	N/A[a]	0.55 (0.53-0.58)	0.75 (0.69-0.81)	0.82 (0.80-0.84)	0.75 (0.73-0.77)

eGFR=estimated glomerular filtration rate; CCC= Lin's concordance correlation coefficient; CI=confidence interval; [a] underlying cystatin C measurement not available

Table S5: Age-standardised[a] prevalence of creatinine- and cystatin C-based eGFR<60ml/min/1.73m^2 in complete sample (including those with diabetes, hypertension and heavy proteinuria), by sex, for ages 18-60 years with both creatinine and cystatin C measurements available

Centre	Area	Rural / Urban	Men				Women			
			n	Creatinine % (95% CI)	Cystatin C % (95% CI)	Creatinine-cystatin % (95% CI)	n	Creatinine % (95% CI)	Cystatin C % (95% CI)	Creatinine-cystatin % (95% CI)
England	all	Rural	161	0.4 (0, 1.0)	0.6 (0, 1.4)	-[b]	223	2.2 (0.8, 3.7)	0.4 (0, 0.9)	-[b]
England	all	Urban	744	0.5 (0.1, 0.9)	1.6 (0.7, 2.5)	-[b]	1007	1.0 (0.6, 1.5)	1.0 (0.5, 1.4)	-[b]
India 3 (UDAY)[c]	Sonipat	Rural	-	-	-	-	253	0.0 (N/A)	12.9 (7.3, 18.4)	0.6 (0, 1.3)
India 3 (UDAY)[c]	Sonipat	Urban	-	-	-	-	273	0.0 (N/A)	14.1 (10.6, 17.6)	2.8 (0.8, 4.8)
India 3 (UDAY)[c]	Vizag	Rural	-	-	-	-	325	2.8 (1.2, 4.5)	12.1 (8.7, 15.5)	4.8 (2.7, 7.0)
India 3 (UDAY)[c]	Vizag	Urban	-	-	-	-	244	0.0 (N/A)	12.8 (8.1, 17.5)	2.1 (0.1, 4.1)
Kenya	Muhoroni East	Urban	4	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)	10	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)
Kenya	Owaga	Rural	44	0.0 (N/A)	3.6 (0, 10.0)	0.0 (N/A)	50	0.0 (N/A)	8.3 (3.2, 13.5)	0.0 (N/A)
Kenya	Tonde	Rural	26	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)	39	0.0 (N/A)	10.6 (2.7, 18.5)	0.0 (N/A)
Malawi	Karonga	Rural	271	3.0 (0.7, 5.4)	0.8 (0, 1.8)	2.3 (0.3, 4.4)	375	3.0 (1.0, 5.1)	1.5 (0, 3.2)	2.2 (0.3, 4.0)
Malawi	Lilongwe	Urban	96	2.2 (0, 6.2)	0.6 (0, 1.8)	0.0 (N/A)	216	4.9 (1.4, 8.4)	0.0 (N/A)	0.5 (0, 1.3)
Peru	Tumbes	Rural	278	0.5 (0, 1.3)	2.1 (0.7, 3.6)	0.8 (0, 1.7)	343	0.3 (0, 0.9)	1.5 (0.2, 2.7)	0.3 (0, 0.9)
Peru	Tumbes	Urban	257	0.5 (0, 1.2)	1.5 (0.2, 2.8)	0.3 (0, 0.8)	358	0.5 (0, 1.1)	2.4 (1.0, 3.8)	1.0 (0.0, 1.9)

eGFR=estimated glomerular filtration rate; CI=Confidence interval using normal approximation; [a] age-standardised prevalence using WHO global population age weights; [b] not available as eGFR values supplied and exact age not available; [c] complete data not available as only participants without hypertension, diabetes and heavy proteinuria had cystatin C measured; N/A=no CI available due to zero estimate

Table S6: Sensitivity analysis for using age-adapted cut-offs for age-standardised[a] prevalence of eGFR<60ml/min/1.73m^2, compared to standard, in people without hypertension, diabetes or heavy proteinuria

Centre	Area	Urbanicity	Men			Women		
			n	Standard[b]	Age-adapted[c]	n	Standard[b]	Age-adapted[c]
England	all	Rural	98	0.0 (N/A)	2.8 (0, 6.5)	169	1.8 (0.4, 3.2)	5.0 (1.0, 9.1)
England	all	Urban	515	0.1 (0, 0.4)	2.9 (1.3, 4.4)	759	0.8 (0.3, 1.4)	2.1 (1.0, 3.2)
Guatemala	San Antonio Suchitepequez	Rural	86	3.0 (0, 7.0)	3.0 (0, 7.0)	171	0.0 (N/A)	0.4 (0, 1.2)
Guatemala	Tecpan	Rural	83	0.0 (N/A)	0.0 (N/A)	152	0.0 (N/A)	0.4 (0, 1.3)
India 1 (CARRS)	Chennai	Urban	1161	0.5 (0.0, 0.9)	0.5 (0.0, 0.9)	1915	0.2 (0, 0.5)	0.3 (0.0, 0.6)
India 1 (CARRS)	Delhi	Urban	770	0.6 (0.1, 1.1)	1.0 (0.3, 1.6)	935	0.6 (0.0, 1.1)	0.9 (0.2, 1.5)
India 2 (ICMR)	Delhi	Urban	399	0.6 (0, 1.3)	1.1 (0.2, 2.0)	571	1.8 (0.6, 3.0)	3.4 (1.8, 5.0)
India 2 (ICMR)	Faridabad	Rural	380	1.9 (0.8, 3.1)	3.0 (1.6, 4.3)	520	1.5 (0.5, 2.5)	5.5 (0, 11.3)
India 3 (UDAY)	Sonipat	Rural	530	0.4 (0.0, 0.8)	0.6 (0.1, 1.1)	847	0.5 (0.1, 0.9)	0.6 (0.2, 1.0)
India 3 (UDAY)	Sonipat	Urban	586	0.6 (0.1, 1.1)	1.1 (0.4, 1.8)	768	0.3 (0, 0.6)	0.3 (0, 0.7)
India 3 (UDAY)	Vizag	Rural	696	6.5 (1.9, 11.0)	6.9 (2.4, 11.4)	933	2.6 (1.5, 3.7)	4.0 (2.7, 5.3)
India 3 (UDAY)	Vizag	Urban	469	0.4 (0, 1.1)	1.6 (0.7, 2.6)	692	0.5 (0, 1.1)	0.6 (0, 1.3)
Italy	Barga	Rural	73	1.2 (0, 3.5)	1.2 (0, 3.5)	149	0.0 (N/A)	0.9 (0, 2.7)
Kenya	Muhoroni East	Urban	113	0.0 (N/A)	0.0 (N/A)	104	0.0 (N/A)	1.4 (0, 3.3)
Kenya	Owaga	Rural	88	0.0 (N/A)	0.8 (0, 2.4)	98	2.4 (0, 5.8)	2.4 (0, 5.8)
Kenya	Tonde	Rural	94	0.0 (N/A)	0.0 (N/A)	100	0.0 (N/A)	0.0 (N/A)
Malawi	Karonga	Rural	214	1.4 (0, 3.5)	2.9 (0.4, 5.5)	309	2.8 (0.3, 5.3)	3.1 (0.5, 5.6)
Malawi	Lilongwe	Urban	74	3.1 (0, 8.6)	4.5 (0, 10.4)	159	4.0 (0.7, 7.2)	6.8 (2.8, 10.8)
Nepal	all	Rural	1002	0.5 (0.1, 1.0)	2.4 (1.4, 3.5)	1981	1.7 (1.1, 2.3)	5.7 (4.7, 6.6)
Nepal	all	Urban	822	0.3 (0.0, 0.7)	2.0 (1.0, 3.0)	1777	2.6 (1.9, 3.4)	8.0 (6.7, 9.3)
Peru	Tumbes	Rural	210	0.0 (N/A)	0.0 (N/A)	285	0.6 (0, 1.7)	0.6 (0, 1.7)
Peru	Tumbes	Urban	186	0.0 (N/A)	0.0 (N/A)	305	0.0 (N/A)	0.0 (N/A)
Sri Lanka	Halambagaswewa	Rural	136	3.9 (1.1, 6.8)	12.6 (7.6, 17.6)	336	1.3 (0.1, 2.6)	9.6 (6.8, 12.4)
Sri Lanka	Lolugaswewa	Rural	138	7.7 (3.9, 11.5)	15.6 (10.8, 20.4)	372	2.6 (1.0, 4.2)	12.4 (9.4, 15.4)
Sri Lanka	Pothana	Rural	115	0.7 (0, 1.9)	5.6 (2.0, 9.2)	330	0.7 (0, 1.6)	8.1 (5.3, 10.9)
Sri Lanka	Puhudivula	Rural	112	7.6 (3.8, 11.3)	19.1 (13.6, 24.6)	378	1.4 (0.2, 2.6)	14.8 (11.3, 18.3)
Sri Lanka	Sangilikandarawa	Rural	157	3.1 (0.6, 5.6)	6.9 (3.4, 10.4)	346	2.4 (0.8, 3.9)	10.3 (7.3, 13.3)
USA	all	All	925	0.6 (0.1, 1.0)	2.5 (1.4, 3.5)	1143	0.7 (0.2, 1.2)	1.0 (0.4, 1.6)

eGFR=estimated glomerular filtration rate; CI=Confidence interval using normal approximation; [a] age-standardised prevalence using WHO global population age weights; [b] standard cut-off of eGFR<60ml/min/1.73m^2; [c] age-adjusted cut-off of eGFR<60ml/min/1.73m^2 for age 40-60 and eGFR<75ml/min/1.73m^2 for age <4

Table S7: Sensitivity analysis for different eGFR equations. Age-standardised[a] prevalence of eGFR<60ml/min/1.73m^2 in people without hypertension, diabetes or heavy proteinuria, in population aged 18-60 years

Centre	Area	Urbanicity	Men				Women			
			n	CKD-EPI 2009[b]	CKD-EPI 2021	CKD-MDRD[b]	n	CKD-EPI 2009[b]	CKD-EPI 2021	CKD-MDRD[b]
Chile	Molina	Rural	16	-	0.0 (N/A)	-	16	-	0.0 (N/A)	-
Chile	Molina	Urban	66	-	0.0 (N/A)	-	66	-	0.5 (0, 1.6)	-
Ecuador	Miguelillo	Rural	180	1.2 (0, 2.8)	-	-	235	6.0 (2.2, 9.7)	-	-
England	all	Rural	98	0.0 (N/A)	-	-	169	1.8 (0.4, 3.2)	-	-
England	all	Urban	515	0.1 (0, 0.4)	-	-	759	0.8 (0.3, 1.4)	-	-
Guatemala	San Antonio Suchitepequez	Rural	86	3.0 (0, 7.0)	1.5 (0, 4.3)	3.0 (0, 7.0)	171	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)
Guatemala	Tecpan	Rural	83	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)	152	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)
India 1 (CARRS)	Chennai	Urban	1161	0.5 (0.0, 0.9)	0.3 (0, 0.7)	0.5 (0.0, 1.0)	1915	0.2 (0, 0.5)	0.1 (0, 0.2)	0.5 (0.1, 0.9)
India 1 (CARRS)	Delhi	Urban	770	0.6 (0.1, 1.1)	0.4 (0, 0.8)	1.3 (0.5, 2.1)	935	0.6 (0.0, 1.1)	0.4 (0.0, 0.7)	1.1 (0.3, 1.9)
India 2 (ICMR)	Delhi	Urban	399	0.6 (0, 1.3)	0.1 (0, 0.4)	2.2 (0.8, 3.6)	571	1.8 (0.6, 3.0)	1.1 (0.2, 2.0)	3.6 (1.9, 5.2)
India 2 (ICMR)	Faridabad	Rural	380	1.9 (0.8, 3.1)	1.6 (0.6, 2.7)	2.9 (1.6, 4.3)	520	1.5 (0.5, 2.5)	0.9 (0.2, 1.7)	6.3 (0.4, 12.2)
India 3 (UDAY)	Sonipat	Rural	530	0.4 (0.0, 0.8)	0.2 (0, 0.6)	0.6 (0.1, 1.1)	847	0.5 (0.1, 0.9)	0.5 (0.1, 0.9)	1.1 (0.5, 1.7)
India 3 (UDAY)	Sonipat	Urban	586	0.6 (0.1, 1.1)	0.5 (0.0, 0.9)	0.9 (0.3, 1.6)	768	0.3 (0, 0.6)	0.1 (0, 0.4)	1.0 (0.4, 1.7)
India 3 (UDAY)	Vizag	Rural	696	6.5 (1.9, 11.0)	5.9 (1.4, 10.4)	7.7 (3.2, 12.3)	933	2.6 (1.5, 3.7)	2.3 (1.3, 3.3)	4.7 (3.4, 6.0)
India 3 (UDAY)	Vizag	Urban	469	0.4 (0, 1.1)	0.4 (0, 1.1)	0.9 (0.1, 1.8)	692	0.5 (0, 1.1)	0.5 (0, 1.1)	1.5 (0.5, 2.6)
India 4 (Uddanam)	Kanchili	Rural	71	6.9 (1.0, 12.9)	-	-	83	1.1 (0, 3.2)	-	-
India 4 (Uddanam)	Kaviti	Rural	52	6.7 (1.3, 12.2)	-	-	65	8.0 (2.0, 14.1)	-	-
India 4 (Uddanam)	Mandasa	Rural	57	13.7 (4.8, 22.6)	-	-	54	5.6 (0.4, 10.7)	-	-
India 4 (Uddanam)	Palasa	Rural	84	6.8 (0.1, 13.4)	-	-	81	4.6 (0.5, 8.7)	-	-
India 4 (Uddanam)	Sompeta	Rural	99	8.2 (2.2, 14.3)	-	-	127	5.8 (1.1, 10.6)	-	-
India 4 (Uddanam)	V_kothuru	Rural	101	2.1 (0, 4.8)	-	-	121	7.5 (3.2, 11.9)	-	-
India 5 (Prakasam)	Kanigiri	Rural	221	-	2.5 (0.3, 4.6)	-	221	-	1.9 (0.7, 3.1)	-
Italy	Barga	Rural	73	1.2 (0, 3.5)	1.2 (0, 3.5)	3.1 (0, 6.5)	149	0.0 (N/A)	0.0 (N/A)	1.7 (0.1, 3.3)
Kenya	Muhoroni East	Urban	113	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)	113	0.0 (N/A)	0.0 (N/A)	17.4 (15.9, 18.9)
Kenya	Owaga	Rural	88	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)	98	2.4 (0, 5.8)	2.4 (0, 5.8)	2.4 (0, 5.8)
Kenya	Tonde	Rural	94	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)	100	0.0 (N/A)	0.0 (N/A)	0.0 (N/A)
Malawi	Karonga	Rural	214	1.4 (0, 3.5)	1.4 (0, 3.5)	2.5 (0, 5.3)	309	2.8 (0.3, 5.3)	2.8 (0.3, 5.3)	3.7 (1.0, 6.5)
Malawi	Lilongwe	Urban	74	3.1 (0, 8.6)	3.1 (0, 8.6)	4.5 (0, 10.4)	159	4.0 (0.7, 7.2)	4.0 (0.7, 7.2)	5.7 (1.9, 9.5)
Nepal	all	Rural	1002	-	-	0.5 (0.1, 1.0)	1981	-	-	1.7 (1.1, 2.3)
Nepal	all	Urban	822	-	-	0.3 (0.0, 0.7)	1777	-	-	2.6 (1.9, 3.4)
Nicaragua 1	Chinandega (banana/sugarcane)	Rural	104	-	-	13.6 (6.3, 20.9)	111	-	-	0.0 (N/A)

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Country	Location	Rural/Urban	N				N			
Nicaragua 1	Chinandega (service)	Rural	34	-	-	0.0 (N/A)	58	-	-	0.0 (N/A)
Nicaragua 1	Leon (coffee)	Rural	30	-	-	8.6 (0, 19.1)	26	-	-	0.0 (N/A)
Nicaragua 1	Leon (fishing)	Rural	55	-	-	6.4 (0, 13.0)	73	-	-	0.0 (N/A)
Nicaragua 1	Leon (mining/ subsistence farming)	Rural	106	-	-	12.1 (4.5, 19.6)	144	-	-	2.6 (0, 6.6)
Nicaragua 2	Leon municipalities	Rural	145	9.4 (4.4, 14.3)	-	-	211	2.5 (0, 5.4)	-	-
Nicaragua 2	Leon municipalities	Urban	256	6.6 (3.0, 10.1)	-	-	436	2.4 (1.0, 3.9)	-	-
Peru	Tumbes	Rural	210	0.0 (N/A)	0.0 (N/A)	0.4 (0, 1.2)	285	0.6 (0, 1.7)	0.0 (N/A)	1.2 (0, 2.8)
Peru	Tumbes	Urban	186	0.0 (N/A)	0.0 (N/A)	0.4 (0, 1.2)	305	0.0 (N/A)	0.0 (N/A)	0.6 (0, 1.5)
Sri Lanka	Halambagaswewa	Rural	136	3.9 (1.1, 6.8)	-	-	336	1.3 (0.1, 2.6)	-	-
Sri Lanka	Lolugaswewa	Rural	138	7.7 (3.9, 11.5)	-	-	372	2.6 (1.0, 4.2)	-	-
Sri Lanka	Pothana	Rural	115	0.7 (0, 1.9)	-	-	330	0.7 (0, 1.6)	-	-
Sri Lanka	Puhudivula	Rural	112	7.6 (3.8, 11.3)	-	-	378	1.4 (0.2, 2.6)	-	-
Sri Lanka	Sangilikandarawa	Rural	157	3.1 (0.6, 5.6)	-	-	346	2.4 (0.8, 3.9)	-	-
Thailand	Bangkok	Urban	233	1.2 (0, 2.7)	-	-	943	0.5 (0, 1.1)	-	-
Thailand	Central Rural	Rural	424	0.2 (0, 0.4)	-	-	576	1.0 (0.1, 1.8)	-	-
Thailand	Central Urban	Urban	336	0.0 (N/A)	-	-	587	0.2 (0, 0.5)	-	-
Thailand	North Rural	Rural	407	0.4 (0, 0.9)	-	-	498	0.5 (0, 1.3)	-	-
Thailand	North Urban	Urban	267	0.7 (0, 1.9)	-	-	409	0.3 (0, 0.7)	-	-
Thailand	Northeast Rural	Rural	428	0.6 (0.1, 1.2)	-	-	479	0.3 (0, 0.7)	-	-
Thailand	Northeast Urban	Urban	351	0.2 (0, 0.5)	-	-	450	0.1 (0, 0.4)	-	-
Thailand	South Rural	Rural	366	0.2 (0, 0.6)	-	-	493	0.2 (0, 0.5)	-	-
Thailand	South Urban	Urban	193	1.1 (0, 2.4)	-	-	356	0.7 (0, 1.4)	-	-
USA	all	All	925	0.6 (0.1, 1.0)	0.3 (0.0, 0.7)	1.7 (0.9, 2.6)	1143	0.7 (0.2, 1.2)	0.6 (0.1, 1.0)	1.8 (1.0, 2.5)

eGFR=estimated glomerular filtration rate; CI=Confidence interval using normal approximation; [a] age-standardised prevalence using WHO global population age weights; [b] without race adjustment

Table S8: Linear regression associations between prevalence of eGFR<60ml/min/1.73m^2 in people without hypertension, diabetes or heavy proteinuria, and sampling characteristics

Characteristic	Median (range) of values	Associations[a]		
		All centres (n=108[d]) estimate (*P*-value)	Affected centres[b] (n=36) estimate (*P*-value)	Unaffected centres[c] (n=72[d]) estimate (*P*-value)
Response rate (per 1% absolute increase)	85% (37% - 98%)	0.01% (0.67)	0.01% (0.72)	-0.003% (0.59)
Study year (per year increase)	2017 (2007 - 2023)	-0.06% (0.39)	-0.18% (0.11)	0.002% (0.91)
Proportion of males (per 1% absolute increase)	43% (24% - 53%)	0.04% (0.41)	0.15% (0.04)	-0.02 (0.12)

eGFR=estimated glomerular filtration rate; [a] effect on absolute percentage of prevalence after adjusting for sex and urban/rural; [b] affected centres have moderate-high prevalence of >=2%; [c] unaffected centres have low prevalence of <2%; [d] there are four fewer in the response rate sample due to missing response rates