

Supplementary Table 1. Table showing cluster locations of diabetes in the selected population

	Cluster Location	Radius (km)	Total participants	Cases Observed	Relative risk
Urban	<i>High clusters</i>				
	1.Changanassery, Kottayam	7.43	279	167	3.14
	2.Adoor, Pathanamthitta.	3.29	167	70	2.03
	3.Trivandrum, city	3.99	22	17	3.66
	4.Mattanoor, Kannur	5.48	120	50	2.00
	5.Thodupuzha, Idukki	1.11	79	37	2.24
	<i>Low clusters</i>				
	1.Kasaragod city	14.7	273	18	0.31
	2.Calicut city	13.9	330	35	0.48
	3.Chittur, Palakkad	3.95	133	7	0.24
	4.Alappuzha city	5.56	72	3	0.19
Rural	<i>High clusters</i>				
	1.Aruvikkara, Trivandrum	9.91	174	85	2.68
	2. Kizhakkoth, Calicut	3.26	100	43	2.29
	3.Kokkayar, Idukki	1.09	17	13	4.03
	4.Alakode, Kannur	6.61	128	47	1.96
	5.Ezhamkulam, Pathanamthitta	1.11	33	18	2.28
	<i>Low clusters</i>				
	1.Vazhakulam, Ernakulam	14.8	247	17	0.35
	2. Mulavukad, Ernakulam	5.66	135	5	0.19
	3.Cherthala, Alappuzha	5.50	186	11	0.30
	4.Kumbadaje, Kasaragod	3.51	64	0	0.00

Supplementary Table 2. Table showing cluster locations of physical inactivity in the selected population

	Cluster Location	Radius (km)	Total (n)	Cases Observed	Relative risk
Urban	<i>High clusters</i>				
	1. Changanassery, Kottayam	3.12	268	203	3.21
	2. Adoor, Pathanamthitta	2.19	138	90	2.59
	3. Tirur, Malappuram	1.55	102	71	2.75
	4. Ernakulam city	4.95	193	106	2.19
	5. Kasaragod city.1	1.08	41	30	2.84
	6. Kasaragod city.2	1.11	52	32	2.38
	7. Kalpetta, Wayanad	3.33	115	56	1.89
	8. Nileswaram, Kasaragod	4.34	179	77	1.68
	9. Calicut city	7.01	181	78	1.69
	10. Nilambur, Malappuram	1.09	48	26	2.09
	<i>Low clusters</i>				
	1. Chittur, Palakkad	10.98	240	3	0.04
	2. Koyilandi, Calicut	4.89	175	4	0.08
	3. Thrissur city	6.92	261	16	0.23
	4. Ottapalam, Palakkad	4.67	193	11	0.21
	5. Kollam city	14.16	289	33	0.42
	6. Alappuzha city	4.57	203	18	0.33
	7. Thodupuzha, Idukki	3.33	123	6	0.18
	8. Karunagapally, Kollam	2.45	64	0	0.00
	9. Trivandrum city	11.32	137	9	0.25
	10. Kasaragod city	2.43	92	3	0.12
	11. Mattanur, Kannur	3.94	67	1	0.05
	12. Kannur city	3.26	104	5	0.18
	13. Pathanamthitta city	2.45	112	10	0.33
Rural	<i>High clusters</i>				
	1. Punnapra, Alappuzha	1.56	133	97	3.63
	2. Ezhamkulam, Pathanamthitta	7.44	172	104	3.21
	3. Thamarassery, Calicut	3.11	115	55	2.45
	4. Cherthala, Alappuzha	4.44	272	95	1.80
	5. Kaduthuruthy, Kottayam	3.33	69	35	2.57
	6. Vazhakulam, Ernakulam	5.52	194	69	1.82
	7. Anicadu, Pathanamthitta	3.47	113	44	1.97
	<i>Low clusters</i>				
	1. Kinanoor, Kasaragod	13.21	153	1	0.03
	2. Panmana, Kollam	14.27	219	8	0.18
	3. Kolayad, Kannur	8.77	89	0	0.00
	4. Kizhakkoth, Calicut	3.95	120	3	0.12
	5. Sulthan Bathery, Wayanad	14.81	220	15	0.33
	6. Alagappanagar, Thrissur	3.51	155	8	0.25
	7. Kanjiramkulam, Trivandrum	7.77	150	10	0.33
	8. Udumbanoor, Idukki	7.93	73	2	0.13
	9. Kokkayar, Idukki	10.00	83	3	0.18
	10. Mylom, Kollam	9.16	167	14	0.41

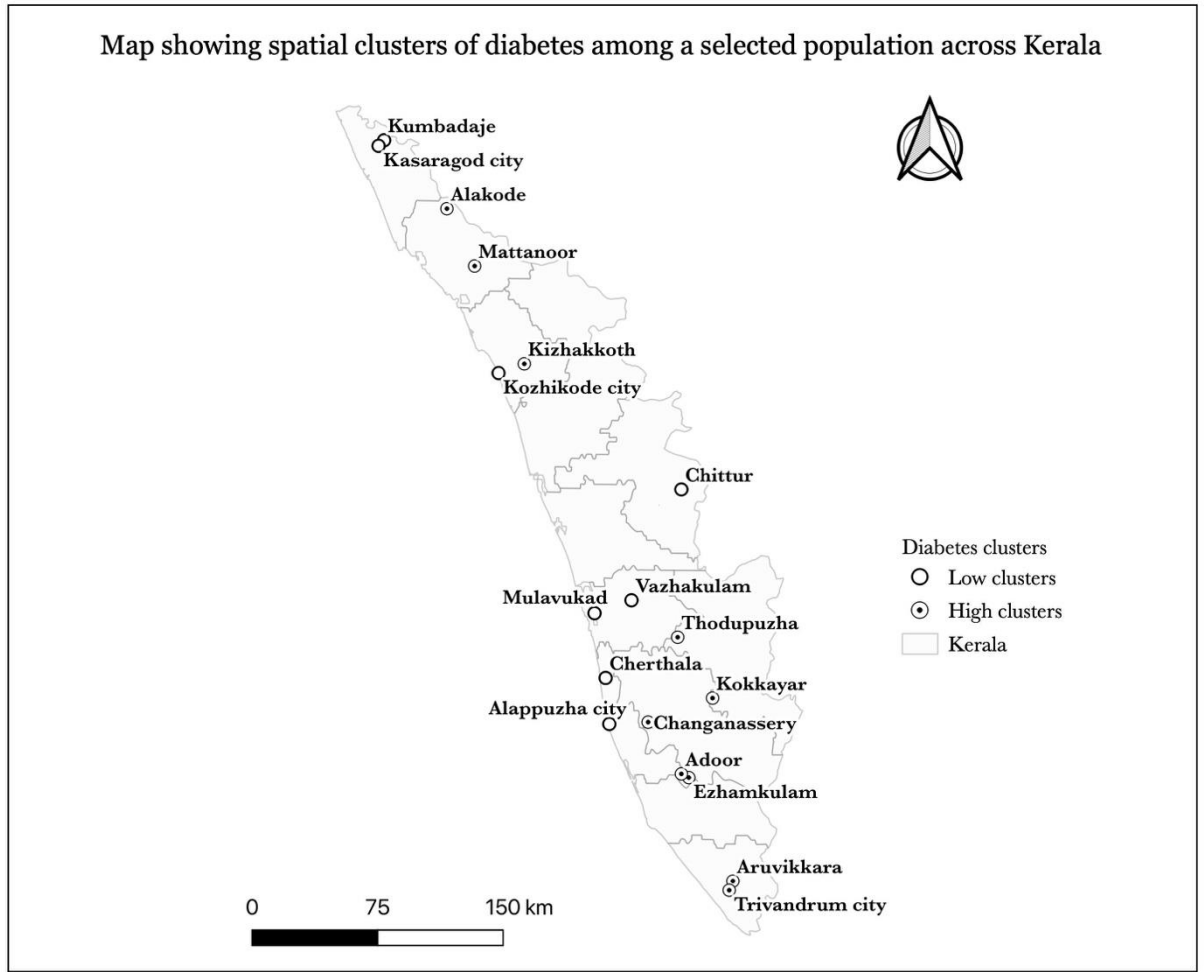
Supplementary Table 3. Sociodemographic characteristics of participants in spatial clusters of diabetes and physical inactivity

Outcome Location	Diabetes				Physical Inactivity			
	Urban		Rural		Urban		Rural	
Type of cluster	High	Low	High	Low	High	Low	High	Low
Demographic factors								
<i>Age of participants (in years)</i>								
18 – 34	25.3	34.9	27.2	36.6	29.6	30.3	32.0	31.6
35 – 55	45.1	43.9	49.8	45.1	45.7	45.7	43.1	44.3
>55	29.5	21.2	23.0	18.4	24.7	24.0	24.9	24.1
<i>Gender</i>								
Female	66.3	63.1	57.1	61.9	58.7	67.9*	63.7	62.4
Male	33.7	36.9	42.9	38.1	41.3	32.1	36.3	37.6
<i>Marital status</i>								
Single	12.4	17.2	15.0	23.6	15.7	15.2	18.1	16.2
Married	87.6	82.8	85.0	76.4	84.3	84.8	81.9	83.8
<i>Educational status</i>								
Primary school/Less	22.9	29.0	26.5	22.0	22.7	27.5*	20.0	31.8*
Higher secondary school	56.2	54.2	58.4	61.6	58.2	50.9	62.4	53.2
Graduation and above	20.8	16.8	15.0	16.5	19.1	21.6	17.6	15.0
<i>Occupational status</i>								
Unemployed	67.8	65.6	64.2	62.8	61.0	67.1*	65.4	62.0*
Manual laborer	4.3	11.5	13.3	10.0	5.2	8.7	11.0	16.8
Executives/ Businesses	27.9	22.9	22.6	27.2	33.8	24.2	23.6	21.2
Total (n)	667	808	452	632	1317	2119	1068	1429

Footnote 1. All cell values are in proportions, bold font denotes significant relationship (p-value <0.05),

* denotes p-value <0.01

Supplementary Figure 1. Map showing spatial clusters of diabetes among a selected population across Kerala (black and white)



Supplementary Figure 2. Map showing spatial clusters of physical inactivity among a selected population across Kerala (black and white)

