

Online Supplementary Document

J Glob Health Reports 2018;2:e2018005

Anand et al. Association of Apolipoprotein L-1 polymorphisms with blood pressure in three multi-ethnic African studies

Variable	Nigeria	Kenya	Ghana
Blood pressure	Average of 3 recordings taken 5 minutes apart in a sitting position	The average of the first two measurements if both are available, either if only one of them is available or the third measurement if either is available	The average of the first two measurements if both are available, either if only one of them is available or the third measurement if either is available
Education	Four levels: None, Primary, Secondary, and Higher None: No formal education Primary: Primary level up to 6 years Secondary: Secondary level Higher: University or post-secondary degree or diploma	None: No formal education Primary: Incomplete or complete primary education Secondary: Secondary school incomplete, Secondary school completed, A-level completed Higher: College/University completed, Post-graduate degree	None: No formal education Primary: Incomplete or complete primary level Secondary: Incomplete or complete secondary level Higher: Higher than secondary level
Smoking	Two levels: Smoker and non-smoker Smoker: uses tobacco Non-smoker: does not use tobacco	Smoker: current smoker Non-smoker: former smoker or never smoked	Smoker: smokes cigarette or pipe Non-smoker: does not smoke cigarette or pipe
Medication for hypertension	N/A	Self-reported hypertension for which medication is in use	Self-reported hypertension for which medication is in use
Body Mass Index	Weight (kg)/Height(m) ²	Weight (kg)/Height(m) ²	Weight (kg)/Height(m) ²
g1/g2	Estimated assuming Hardy-Weinberg	Estimated assuming Hardy-Weinberg	Estimated assuming Hardy-Weinberg

homozygosity	Equilibrium (HWE)* by squaring the sum of g1 and g2 frequency in the ethnic group	equilibrium by squaring the sum of g1 and g2 frequency in the ethnic group	equilibrium by squaring the sum of g1 and g2 frequency in the ethnic group
--------------	---	--	--

Table S1: Definitions of key variables

* This assumption was based on the estimate by HWE matching observed genotyped g1/g2 homozygosity, e.g. Akans of Ghana: genotyped 29.1%, estimated by HWE 29.2%, Ga-Adangbe of Ghana: genotyped 23.9%, estimated by HWE 19.4% and Ibo of Nigeria: genotyped 43.5%, estimated by HWE 43.6%.

Table S2: Mapping ethnic groups from the G1/G2 frequency data source to the blood pressure data source

	Blood pressure data source	G1/G2 frequency data source
Nigeria	Yoruba	Yoruba
Kenya	Somali, Borana	Somali
	Masaai, Turkana	Masaai
	Embu, Kamba, Kikuyu, Meru	Kikuyu
	Luyha and Kisi	Luyha
	Luo	Luo
Ghana	Ga-Dangme	Ga- Adangbe
	Akan	Akan

Table S3: Association of mean diastolic blood pressure with harmonized correlates

	β Coefficient	95% Confidence Interval	
Intercept	50.08	47.38	52.78
Age (per 10 years)	2.51	2.31	2.72
Female sex	-1.12	-1.65	-0.60
BMI (per 1 kg/m²)	0.55	0.49	0.60
Country		3.04	5.29
Ghana	4.16	10.15	13.95
Kenya	12.05	47.38	52.78
Nigeria	ref		
Setting			
Rural	-0.94	-1.45	-0.43
Urban	ref		
Ever smoked			
Yes	1.54	0.14	2.94
No	ref		
Education			
None	-1.42	-2.40	1.66
Primary	-0.65	-1.54	1.53
Secondary	-1.99	-3.11	2.30
High school and beyond	ref		
G1/G2 homozygosity (per 1% change)	0.07	-0.02	0.16

bold values $p < 0.05$.