S1 Table.
Definition of exposure variables based on the study year.

Exposure variables	Studies	Study questionnaire	Assessment	Missing value N (%)	Observations
Demographic and socioeconomic variables					
Age	PREFREC 2010	*How old are you now?* Fill the blank.	Continuous and categorical variable ("<50 years" or "≥50 years")	-	-
	ENSPA 2019	*Age?* Fill the blank.		-	
Sex	PREFREC 2010	*Sex?* Options: "men" or "women".	Dichotomic variable "men" or "women"	-	Based on the phenotypic characteristic.
	ENSPA 2019	*Sex of interviewee.* Options: "men" or "women".		-	
Ethnicity	PREFREC 2010	*To which socio-cultural milieu do you belong?* Options: "Afro-Panamanian", "Mestizo", "Asian", "Indigenous", "Caucasian", or "others"	Categorical variable "Afro-Panamanian", "Caucasian", "Mestizo", "Indigenous", or "others" (including Asians).	-	Asians were grouped with "others" due to small numbers.
	ENSPA 2019			-	
Region	PREFREC 2010	Based on INEC definitions [1] using the last Panamanian Census 2010. Options: "urban", "rural", or "indigenous".	Dichotomic variable "urban" "non-urban"	-	Indigenous and rural regions were grouped into "non-urban" due to small numbers.
	ENSPA 2019			-	
Education	PREFREC 2010	*How many years of education?* Options: "never attended", "primary education (one to six years)", "secondary education (seven to twelve years)", "technical (thirteen years)", "university (fourteen to eighteen years)", or "post-graduate (nineteen years)".	Categorical variable "no/primary education" "secondary education" "higher education"	men: 3611 (1.4) women: 5064 (1.0)	Special education (ENSPA) was grouped with "no/primary education" and technical education was grouped with "secondary education".
	ENSPA 2019	*What is the highest level of education you've achieved?* Options: "no formal education", "special education", "incomplete primary education", "complete primary education", "incomplete secondary education", "complete secondary education", "technical", "non-university higher education", "completed university", "incomplete university", "post-graduate", or "other".		men: 7975 (1.2) women: 6001 (0.9) ("others" was set to missing)	University and post-graduate were grouped into "higher education".
Monthly Family Income	PREFREC 2010	*What is the monthly family income?* Options: "<250 PAB", "250–300 PAB", "301–600 PAB", "601–999 PAB", "1000–1200 PAB", ">1200 PAB", or "Don't know".	Categorical variable "less than 250 PAB" "250–999 PAB" "≥ 1000 PAB".	men: 4291 (1.7) women: 32268 (6.1) ("don't know" was set to missing)	Although the PAB is the official currency of Panama, the United States dollar (USD) is also a *de facto* currency. The exchange rate between PAB and USD is set at parity, according to Panamanian law 84/1904. [2]
	ENSPA 2019	*Could you give me an estimate of the monthly family income?* Options: "Doesn't have", "1–74 PAB", "75–99 PAB", "100–124 PAB", "125–149 PAB", "150–174 PAB", "175–199 PAB", "200–249 PAB", "250–299 PAB", "300–399 PAB", "400–499 PAB", "500–599 PAB", "600–699 PAB", "700–799 PAB", "800–899 PAB", "900–999 PAB", "1000–1499 PAB", "1500–1999 PAB", ">2000 PAB", or "Don't know".		men: 30969 (4.6) women: 34992 (5.2) ("don't know" was set to missing)	
Established risk factors for hypertension					
	PREFREC 2010	*Have you ever smoked a tobacco product in your life?* Options: "yes", or "no".	Categorical variable	men: 921 (0.4)	We did not consider assessing both the consumption of electronic nicotine

Variable	Survey	Question/Indicator	Classification	N (%)	Notes
Tobacco consumption	ENSPA 2019	*Have you used cigarettes or other smoked tobacco products in the previous 30 days?* Options: "yes" or "no". *At any time in your life, how often do you use smoked tobacco?* Options: "daily", "not daily", or "never". *How often did you use smoked tobacco in the previous 30 days?* Options: "daily", "not daily", or "never".	"current smoker" (Smoked 30 days before answering the survey) "ex-smoker" (Smoked more than 30 days prior to replying to the survey) "non-smokers"	women: 480 (0.1) men: 1 (0.0) women: 156 (0.0)	delivery systems and non-smoke tobacco products because they were not asked in the PREFREC survey. Furthermore, results from the Global Adult Tobacco Survey in 2013 showed that the prevalence of non-smoked tobacco products consumption in Panama was 0.8%. [3]
Physical inactivity	PREFREC 2010 ENSPA 2019	Indicator: used the amount of time in minutes per week participants reported doing certain physical activities. Indicator: used the Global Physical Activity Questionnaire [4] to classify individuals based on their METs.	Dichotomic variable "physical inactivity" (less than 150 minutes of certain physical activity per week or less than 600 MET-minutes per week)	- men: 135212 (20.3) women: 124222 (18.3)	Physical inactivity was defined as not meeting current WHO recommendations on physical activity for health. [4]
Body Mass Index	PREFREC 2010 ENSPA 2010	Weight: Two measurements were taken using a calibrated instrument. If the 1st and 2nd measurement had a difference of >0.5 kg, a third measurement was performed. Height: Two measurements were taken. If the 1st and 2nd measurement had a difference of >0.5 cm, a third measurement was performed. The average of the measurements was considered the participant's weight and height.	Categorical variable "underweight" (<18.5 kg/m^2) "normal weight" (18.5 to 24.9 kg/m^2) "overweight" (25 to 29.9 kg/m^2) "obesity" (≥ 30 kg/m^2)	Men: 1940 (0.8) Women: 10251 (1.9) Men: 87786 (13.2) Women: 76261 (11.3)	Calculated by dividing the participant's weight in kilograms by the square of their height in meters squared. Classification was based on WHO criteria. [5]
Family history of hypertension	PREFREC 2010 ENSPA 2019	*Have any of your family members (parents, grandparents, aunts, uncles, siblings) been diagnosed with hypertension?* Options: "yes", "no", or "don't know ". *Have any of your family members (parents, grandparents, aunts, uncles, siblings) been diagnosed with hypertension?* Options: "yes" or "no".	Dichotomic variable "yes" or "no"	Men: 16480 (6.5) Women: 16919 (3.2) ("Don't know" was set to missing) -	-
Self-reported medical history of diabetes	PREFREC 2010 ENSPA 2019	*Have you been told by a physician that you have diabetes?* Options: "yes" or "no". *Has a physician diagnosed you with type 1 diabetes?* or *has a physician diagnosed you with type 2 diabetes?* Options: "yes" or "no".	Dichotomic variable "yes" or "no"	- -	-
BP assessment in the year before study enrollment	PREFREC 2010 ENSPA 2019	*When was the last time a health professional checked your blood pressure?* Options: "in the previous year", "1–5 years", "more than 5 years", or "never". *Have you had your blood pressure checked in the previous year?* Options: "yes" or "no". Additional question: *How many health check-ups do you have each year?* Options: "none", "1–2", or ">3".	Dichotomic variable "yes" or "no"	- -	-

N=weighted study population. INEC= Spanish language for "National Institute of Statistics and Census". PAB=Panamanian Balboa. METs= Metabolic Equivalents.

Reference:

1. National Institute of Statistics and Census. Glossary of terms [cited 28 June 2021]. Available from: https://www.inec.gob.pa/glosario/Default.aspx?ORDEN=L&ID_IDIOMA=1
2. Torres JE. Population, economy, and society in Panama: a contribution to the critique of Panamanian historiography. Editorial Universitaria "Carlos Manuel Gasteazoro"; 1999; p. 307.
3. Global Adult Tobacco Survey. Panama 2013. Fact sheet [cited 9 July 2021]. Available from: https://www.who.int/tobacco/surveillance/survey/gats/pan_factsheet2013.pdf
4. World Health Organization. Global Physical Activity Surveillance [cited 9 July 2021]. Available from: https://www.who.int/ncds/surveillance/steps/GPAQ_EN.pdf
5. Harvard T.H. Chan website. Obesity Prevention Source: Why Use BMI? [cited 27 July 2021]. Available from: https://www.hsph.harvard.edu/obesity-prevention-source/obesity-definition/obesity-definition-full-story/