

MATERIAL SUPLEMENTARIO

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7. Referencias

PRISMA CHECKLIST

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	4-5
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	6
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	6
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	6-7
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	7
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	7
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	7
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	8
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	8
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	8
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	8
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	8
	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	8-9
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	8-9
Synthesis methods	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	8-9
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	8-9
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	8-9
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	8-9
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	8-9
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	8-9
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	9
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	9
Study characteristics	17	Cite each included study and present its characteristics.	9
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	9-10
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	9-10
	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	10
Results of syntheses	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	10
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	10
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	10
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	10
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	10
DISCUSSION			
	23a	Provide a general interpretation of the results in the context of other evidence.	10-11
Discussion	23b	Discuss any limitations of the evidence included in the review.	11
	23c	Discuss any limitations of the review processes used.	11
	23d	Discuss implications of the results for practice, policy, and future research.	11

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Figura Suplementaria 1: Prevalencia agregada de hipertensión en Perú (en varones)

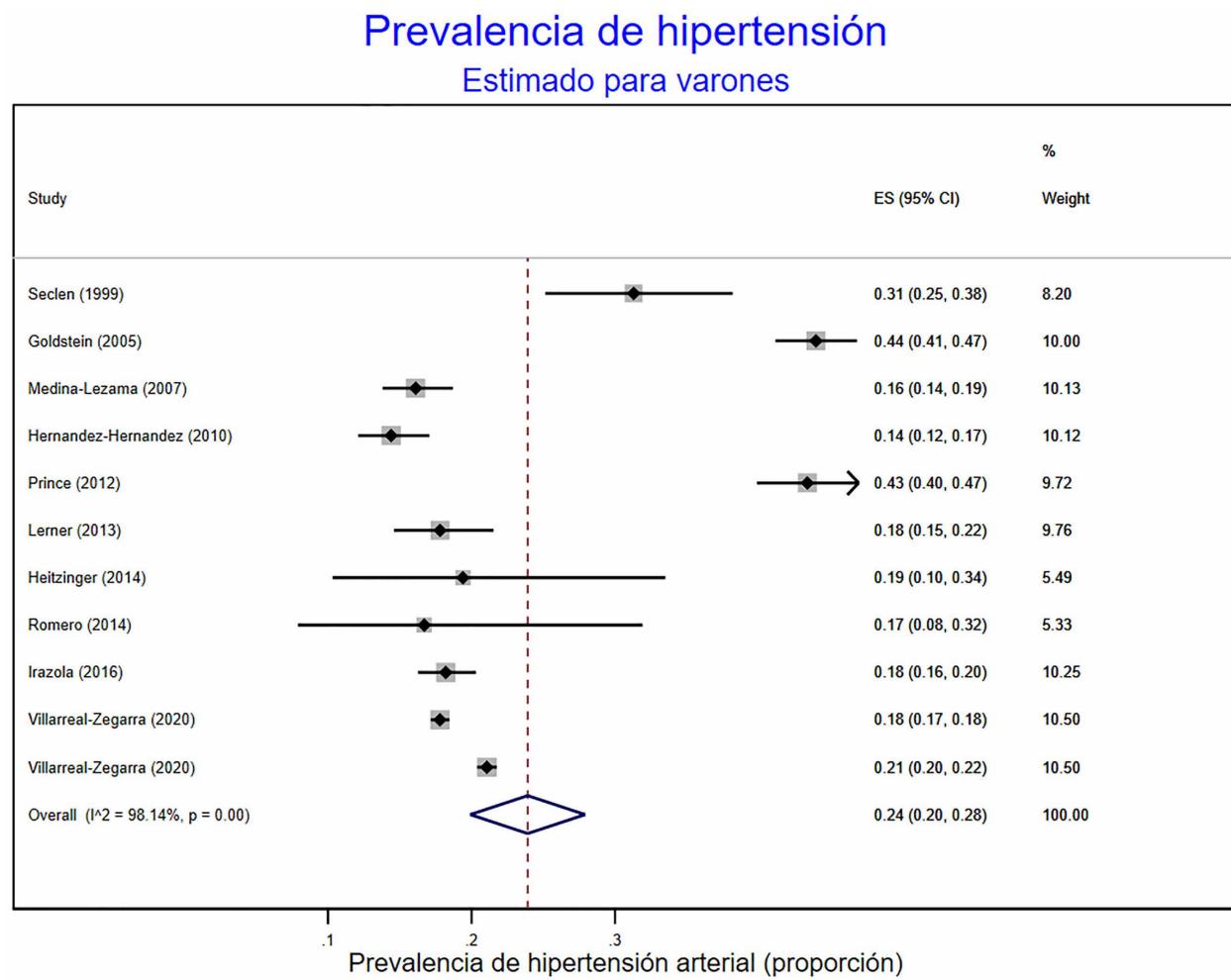


Figura Suplementaria 2: Prevalencia agregada de hipertensión en Perú (en mujeres)

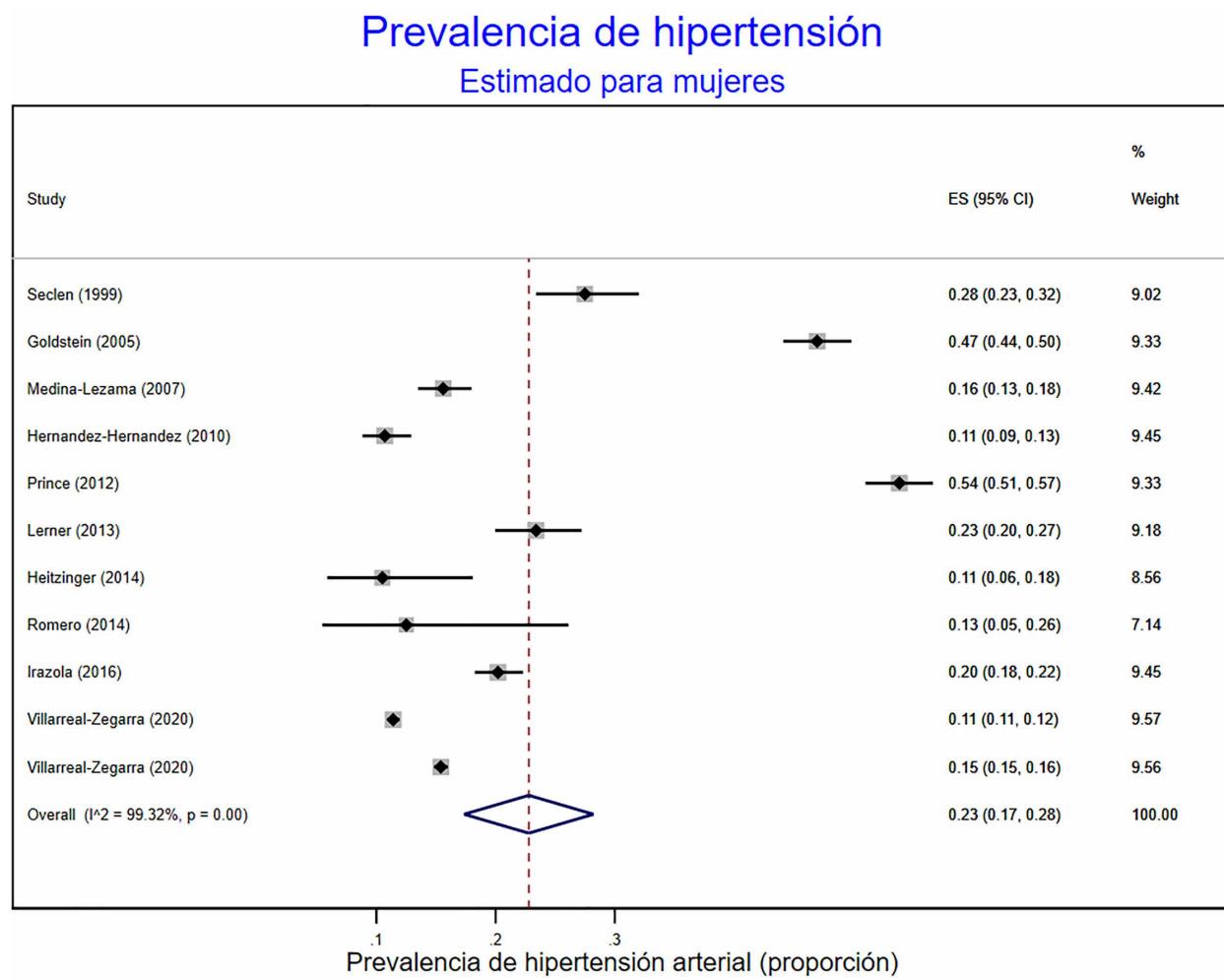


Figura Suplementaria 3: Prevalencia combinada de conciencia de enfermedad hipertensiva en Perú

Diagnóstico previo de enfermedad hipertensiva Estimado global

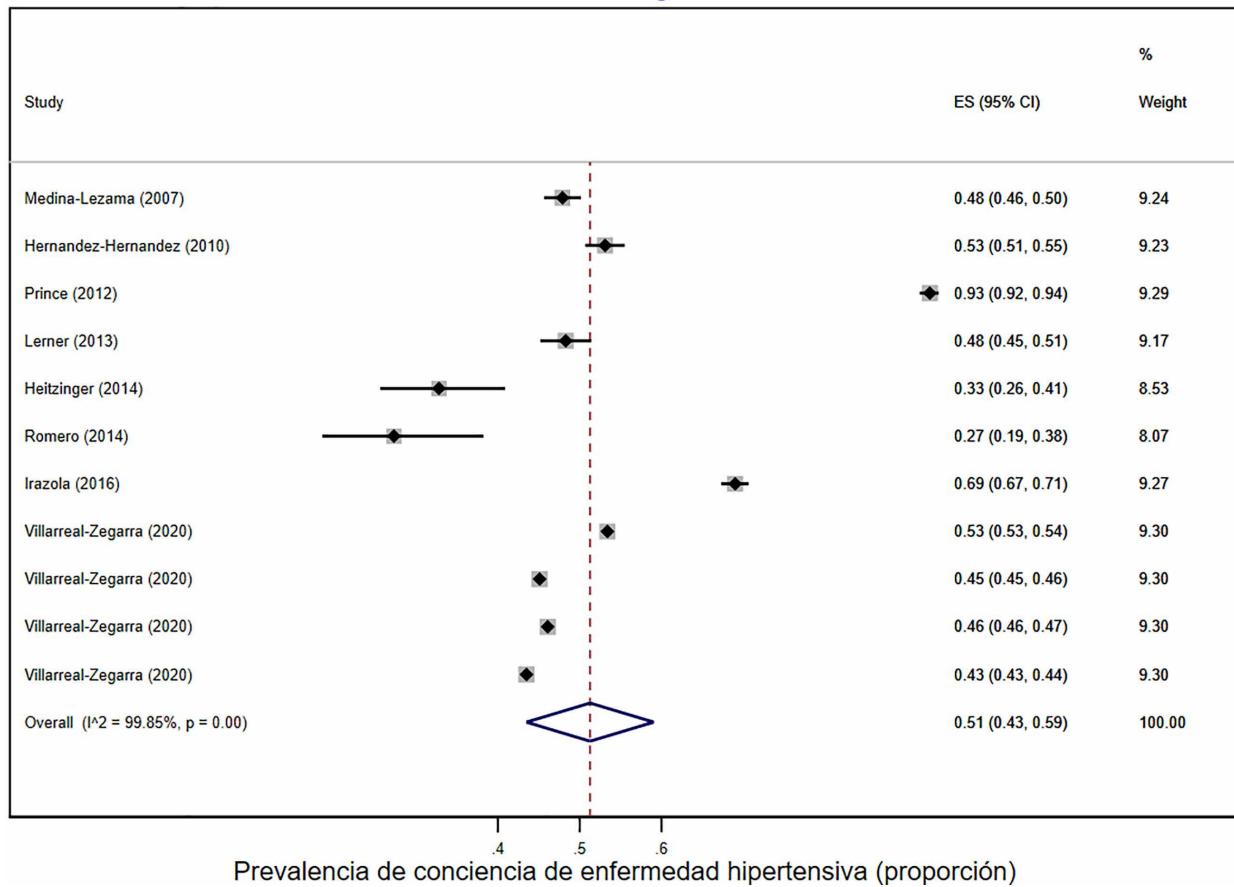


Tabla Suplementaria 1: Términos de búsqueda

OVID (Embase, Medline and Global Health)

1	exp hypertension/
2	hypertens\$.mp
3	"high blood pressure".mp
4	"raised blood pressure".mp
5	"elevated blood pressure".mp
6	(("high" OR "elevated" OR "raised") AND "systolic blood pressure").mp
7	(("high" OR "elevated" OR "raised") AND "diastolic blood pressure").mp
8	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8
9	Peru
10	Peru*.mp
11	9 or 10
12	8 AND 11
13	remove duplicates from 12

LILACS

((hipertensión) OR (presión arterial elevada) OR (presión arterial alta) OR (hipertensión sistólica) OR (hipertensión diastólica) OR (presión arterial sistólica elevada) OR (presión arterial diastólica elevada) OR (presión arterial sistólica alta) OR (presión arterial diastólica alta)) AND ((Perú) OR (Peru) OR (peru))

Tabla Suplementaria 2: Detalles de la evaluación de riesgo de sesgo en cada estudio incluido la revisión sistemática y metaanálisis

Estudio	Representatividad de la muestra ¹	Tamaño de muestra ²	No respuesta ³	Evaluación del desenlace de interés ⁴	Test estadístico ⁵
<i>Estudios de Prevalencia</i>					
Seclen, 1999 [1]	B	B	C	D	B
Goldstein, 2005 [2]	A	A	C	A	A
Medina-Lezama, 2007 [3]	A	A	A	A	A
Hernández-Hernández, 2010 [4]	A	A	C	A	A
Prince, 2012 [5]	A	A	A	A	A
Lerner, 2013 [6]	A	A	A	A	A
Heitzinger, 2014 [7]	A	A	A	A	A
Romero, 2014 [8]	B	A	A	A	A
Arribas-Harten, 2015 [9]	A	A	C	A	A
Irazola, 2016 [10]	A	A	A	A	A
Tayne-Rondan, 2017 [11]	A	A	A	A	A
Geldsetzer, 2019 [12]	A	A	A	A	A
Barboza, 2020 [13]	B	B	C	A	B
Bernabe-Ortiz, 2020 [14]	A	A	A	A	A
Villarreal-Zegarra, 2020 [15]	A	A	C	A	A
<i>Estudios de incidencia</i>					
Bernabe-Ortiz, 2017 [11]	A	A	A	A	A
Bernabe-Ortiz, 2017 [16]	A	A	A	A	A
Bernabe-Ortiz, 2020 [14]	A	A	A	A	A
Ruiz-Alejos, 2020 [17]	A	A	A	A	A

1) A) Realmente representativa de la muestra B) Parcialmente representativa de la muestra

2) A) Justificada y satisfactoria B) No justificada

3) A) La comparabilidad de las características entre los participantes y los no respondedores está establecida y la tasa de respuesta es satisfactoria.

B) La tasa de respuesta es insatisfactoria, o la comparabilidad entre los participantes y los no respondedores es insatisfactoria.

C) El estudio no presenta descripción de la tasa de respuesta, o de las características de los participantes vs no respondedores.

4) A) Evaluación ciega e independiente D) No descripción

5) A) El test estadístico utilizado es claramente descrito y apropiado para la medida del desenlace de interés, incluyendo los valores de intervalo de confianza y el nivel de valor de p D) No descripción o incompleta

REFERENCIAS

1. Seclén Santisteban S, Leey Casella J, Villena Pacheco AE, Herrera Mandelli BR, Menacho J, Carrasco A, et al. Prevalencia de obesidad, diabetes mellitus, hipertensión arterial e hipocolesterolemia como factores de riesgo coronario y cerebrovascular en población adulta de la Costa, Sierra y Selva del Perú. *Acta Med Peru* 1999;17(1):8-12.
2. Goldstein J, Jacoby E, del Aguila R, Lopez A. Poverty is a predictor of non-communicable disease among adults in Peruvian cities. *Prev Med* 2005;41(3-4):800-6. doi: 10.1016/j.ypmed.2005.06.001.
3. Medina-Lezama J, Zea-Díaz H, Morey-Vargas OL, Bolaños-Salazar JF, Postigo-Macdowall M, Paredes-Díaz S, et al. Prevalence and patterns of hypertension in Peruvian Andean Hispanics: the PREVENCION study. *J Am Soc Hypertens* 2007;1(3):216-25. doi: 10.1016/j.jash.2007.02.003.
4. Hernández-Hernández R, Silva H, Velasco M, Pellegrini F, Macchia A, Escobedo J, et al. Hypertension in seven Latin American cities: the Cardiovascular Risk Factor Multiple Evaluation in Latin America (CARMELA) study. *J Hypertens* 2010;28(1):24-34. doi: 10.1097/HJH.0b013e328332c353.
5. Prince MJ, Ebrahim S, Acosta D, Ferri CP, Guerra M, Huang Y, et al. Hypertension prevalence, awareness, treatment and control among older people in Latin America, India and China: a 10/66 cross-sectional population-based survey. *J Hypertens* 2012;30(1):177-87. doi: 10.1097/HJH.0b013e32834d9eda.
6. Lerner AG, Bernabe-Ortiz A, Gilman RH, Smeeth L, Miranda JJ. The “rule of halves” does not apply in Peru: awareness, treatment, and control of hypertension and diabetes in rural, urban, and rural-to-urban migrants. *Crit Pathw Cardiol* 2013;12(2):53-8. doi: 10.1097/HPC.0b013e318285ef60.
7. Heitzinger K, Montano SM, Hawes SE, Alarcón JO, Zunt JR. A community-based cluster randomized survey of noncommunicable disease and risk factors in a peri-urban shantytown in Lima, Peru. *BMC Int Health Hum Rights* 2014;14:19. doi: 0.1186/472-698X-14-19.
8. Romero C, Zavaleta C, Cabrera L, Gilman RH, Miranda JJ. [High blood pressure and obesity in indigenous Ashaninkas of Junin region, Peru]. *Rev Peru Med Exp Salud Publica* 2014;31(1):78-83.
9. Arribas-Harten C, T. B-U, Rodriguez-Tevés MG, Bernabe-Ortiz A. Asociación entre obesidad y consumo de frutas y verduras: un estudio de base poblacional en Perú. *Rev Chil Nutr* 2015;42(3):241-7. doi: 10.4067/S0717-75182015000300003.
10. Irazola VE, Gutierrez L, Bloomfield G, Carrillo-Larco RM, Dorairaj P, Gaziano T, et al. Hypertension Prevalence, Awareness, Treatment, and Control in Selected LMIC Communities: Results From the NHLBI/UHG Network of Centers of Excellence for Chronic Diseases. *Glob Heart* 2016;11(1):47-59. doi: 10.1016/j.ghart.2015.12.008.
11. Taype-Rondan A, Abbs ES, Lazo-Porras M, Checkley W, Gilman RH, Smeeth L, et al. Association between chronic conditions and health-related quality of life: differences by level of urbanization in Peru. *Qual Life Res* 2017;26(12):3439-47. doi: 10.1007/s11136-017-1649-7.
12. Geldsetzer P, Manne-Goehler J, Marcus ME, Ebert C, Zhumadilov Z, Wesseh CS, et al. The state of hypertension care in 44 low-income and middle-income countries: a cross-sectional study of nationally representative individual-level data from 1·1 million adults. *Lancet* 2019;394(10199):652-62. doi: 10.1016/S0140-6736(19)30955-9.
13. Barboza Palomino EE. Prevalencia de factores de riesgo para enfermedades crónicas no transmisibles en Perú. *Rev Cuid* 2020;11(2):e1066.
14. Bernabe-Ortiz A, Sal YRVG, Ponce-Lucero V, Cárdenas MK, Carrillo-Larco RM, Diez-Canseco F, et al. Effect of salt substitution on community-wide blood pressure and hypertension incidence. *Nat Med* 2020;26(3):374-8.
15. Villarreal-Zegarra D, Carrillo-Larco RM, Bernabe-Ortiz A. Short-term trends in the prevalence, awareness, treatment, and control of arterial hypertension in Peru. *J Hum Hypertens* 2020.
16. Bernabe-Ortiz A, Sanchez JF, Carrillo-Larco RM, Gilman RH, Poterico JA, Quispe R, et al. Rural-to-urban migration and risk of hypertension: longitudinal results of the PERU MIGRANT study. *J Hum Hypertens* 2017;31(1):22-8. doi: 10.1038/jhh.2015.124.
17. Ruiz-Alejos A, Carrillo-Larco RM, Miranda JJ, Gilman RH, Smeeth L, Bernabé-Ortiz A. Skinfold thickness and the incidence of type 2 diabetes mellitus and hypertension: an analysis of the PERU MIGRANT study. *Public Health Nutr* 2020;23(1):63-71. doi: 10.1017/S1368980019001307.