# Non-conventional Determinants of Cardiovascular Health in Latin American Women 

# Determinantes no convencionales de la salud cardiovascular de la mujer en Latinoamérica 

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#### Abstract

Background: Besides traditional risk factors (RF), non-conventional determinants (NCD) of cardiovascular (CV) health are additional risk factors in women. Therefore, they should be explored to establish their prevalence and association with the female gender. Objective: The aim of this study is to know the prevalence of socioeconomic (SE) and psychosocial (PS) factors as NCD in CV health in Latin American (LATAM) women. Methods: We conducted an observational, cross-sectional study using an anonymous survey distributed among LATAM women between May and June 2022. The information gathered included SE and PS NCD, traditional RF and cardiovascular disease (CVD). Results: A total of 4915 women participated; mean age was $49 \pm 13$ years. Most respondents ( $49.6 \%$ ) lived in Argentina, $55.8 \%$ in large cities; $94.4 \%$ reported adequate access to healthcare services and $89 \%$ had access to some level of education. Although $79.9 \%$ had a paid job, more than half reported their salary was not commensurate (59.5\%) and $26.7 \%$ reported exposure to violence at the workplace. The most prevalent PS factors were low to moderate level of satisfaction (68.3\%), anxiety or irritability (51.9\%), apathy, negative thoughts, or unhappiness (41.7\%). Age > 45 years was significantly associated with overweight, obesity, unemployment, and violence at the workplace. On multivariate analysis, sleep disorders (OR 1.7; $\mathrm{p}=0.001$ ), living in a city with low population density (OR $0.5 ; \mathrm{p}<0.001$ ), violence at the workplace (OR 1.8; $\mathrm{p}=0.001$ ), anxiety (OR $1.5 ; \mathrm{p}=0.001$ ) and a history of pregnancy complications ( $\mathrm{OR} 1.6 ; \mathrm{p}=0.022$ ) were independently associated with CVD. Conclusion: The prevalence of PS and SE factors affecting the CV health of LATAM women was significant. Variables such as violence at the workplace, anxiety, or irritability, living in cities with low population density, sleep disorders and pregnancy complications were independently associated with CVD. This survey shows the impact of SE and PS factors as NCD on the cardiometabolic burden and CV health of women in LATAM, mainly in those $>45$ years.


Key words: Cardiovascular Diseases - Women - Latin America - Risk Factors - Psychosocial Factors - Socioeconomic Factors

## RESUMEN

Introducción: Más allá de los factores de riesgo (FR) tradicionales, hay determinantes no convencionales (DnoC) de la salud cardiovascular (CV) que operan en las mujeres como factores de riesgo adicional. Es por ello necesario explorarlos y establecer su prevalencia y vínculo con el género femenino.
Objetivo: conocer la prevalencia de los DnoC socioeconómicos (SE) y psicosociales (PS) y su impacto en la salud CV de la mujer en Latinoamérica (LATAM).
Material y métodos: estudio observacional, de corte transversal realizado a través de una encuesta anónima en mujeres de LATAM entre mayo y junio de 2022. Se recabaron datos sobre DnoC (SE y PS), FR convencionales y enfermedad cardiovascular (ECV).
Resultados: participaron 4915 mujeres con edad media de $49 \pm 13$ años. El 49,6 \% residía en Argentina, el 55,8 \% en grandes ciudades, el $94,4 \%$ declaró acceso adecuado a la salud y el $89 \%$ tuvo acceso a algún nivel de educación. Si bien el $79,9 \%$ expresó tener trabajo remunerado, más de la mitad refirió percibir un salario no acorde ( $59,5 \%$ ) y una exposición a la violencia en el ámbito laboral $(26,7 \%)$. Los determinantes PS más prevalentes fueron el bajo a moderado nivel de satisfacción (68,3 \%), la ansiedad o irritabilidad ( $51,9 \%$ ), el desinterés, los pensamientos negativos o la infelicidad ( $41,7 \%$ ). El grupo de edad mayor de 45 años se asoció significativamente a más sobrepeso, obesidad, desempleo y violencia laboral.
En el análisis multivariado se encontró asociación independiente con ECV para el trastorno del sueño (OR 1,7; p $=0,001$ ), residir en una ciudad de baja densidad poblacional (OR 0,$5 ; p<0,001$ ), la violencia laboral ( $O R 1,8 ; p=0,001$ ), la ansiedad ( $O R 1,5 ; p=0,001$ ) $y$ al haber padecido complicaciones del embarazo (OR 1,$6 ; p=0,022$ ).

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[^0][^1]Conclusión: se demostró una importante prevalencia de factores PS y SE que impactan en la salud CV de las mujeres en LATAM. Variables como la violencia laboral, la ansiedad o la irritabilidad, residir en ciudades de baja densidad poblacional, así como los trastornos del sueño y complicaciones del embarazo se asociaron de forma independiente con la ECV. Esta encuesta muestra el impacto de los DnoC SE y PS en la carga cardiometabólica (CCM) y la salud CV de las mujeres en LATAM, principalmente en aquellas mayores de 45 años.

Palabras clave: Enfermedades Cardiovasculares - Mujeres - Latinoamérica - Factores de Riesgo - Factores Psicosociales - Factores Socioeconómicos

## INTRODUCTION

The idea that the differences between men and women are exclusively due to biological differences is a reductionist concept, since there are emotional and sociocultural differences between both genders. In the emotional and psychological sphere, women are not only affected by hormonal fluctuations throughout their lives, but also by the complexity of their neurocognitive functions, shaped by the culture of different societies throughout history. (1)

Belonging to certain sociodemographic groups may have additional adverse health effects; many of these groups are underrepresented in randomized or observational studies. The factors contributing to this reality include problems with access to healthcare, low per capita income, educational level, assignment of multiple tasks and roles, and gender-based violence. Underrepresentation of women in clinical trials contributes to the lack of evidence of the impact of cardiovascular disease (CVD) on them. This could partly explain why CVD continues to disproportionately affect women, both in those conditions they share with men and in disorders that are more prevalent in women, as stroke, heart failure (HF) with preserved left ventricular ejection fraction, and myocardial infarction (MI) and nonobstructive coronary arteries. (2)

The Pan American Health Organization (PAHO) states that $80 \%$ of worldwide cardiovascular deaths occur especially in low- and middle-income countries and indicates that the incidence is the same in men and women. (3)

Poverty and the resulting impact on the psychosocial sphere have a greater impact on women, who are more likely to suffer a heart attack than their male counterparts. (4-8) The most marginalized and poorest populations are at greater risk for CVD, and among these populations, women are the most prone to suffer such episodes. (4)

In Latin America, unfavorable socioeconomic conditions have a major impact on female gender, affecting quality of life and access to decent housing, healthy diet or scheduled physical exercise, together with poor access to education since childhood, with unsatisfied basic needs. (9)

Nowadays we count with evidence about the impact of stressful triggers, as acute-chronic stress, anger-hostility complex, depression, vital exhaustion, anxiety, and gender-based violence at home and
at the workplace. Low sociocultural, economic, and demographic level, and even harmful environmental exposures, are associated with higher risk of developing physical and mental diseases. (4,10-19) Other pollutants, as tropospheric ozone, nitrogen dioxide and volatile organic compounds, play a role in the development of diseases,. More than 90 percent of the world's population lives in areas where pollution levels exceed World Health Organization guidelines. The effects of air pollution are associated with large urban centers, manufacturing centers and areas with heavy traffic. In addition, we must add "indoor" air pollution that mainly affects the population of low to middleincome countries who still cook and heat their homes with firewood or coal. $(10,11)$ All these factors have different effects according to gender, as in coronary syndromes, ischemia without obstructive coronary arteries (MINOCA/INOCA), takotsubo syndrome, and X syndrome. The latter are not associated with traditional risk factors, and adverse psychological and sociodemographic profiles seem to play a determining role. We now know that these conditions have a less benign course than was previously thought. $(20,21)$

In this context, it is necessary to implement a gender mainstreaming approach in trials, research, and medical practice. The lack of attention in this regard constitutes a gender bias or gap that has had a negative impact on the diagnosis and prognosis of a disease considered not prevalent in women, when in fact it has been disregarded or ignored. (22)

## objective

The aim of this study is to know the prevalence of SE and PS factors as NCD in CV health in a population of Latin American (LATAM) women.

## METHODS

We conducted an observational, cross-sectional study using an anonymous survey with closed questions developed in REDCap. The participation was voluntary. The survey was distributed among women $>18$ years between May and June 2022 through social networks (WhatsApp, e-mail, Facebook, and others) of members and district leaders of the Heart and Women Area of the Argentine Society of Cardiology (SAC) in different geographic regions of Argentina. The participation of the Council of Cardiovascular Disease in Women of the South American and Interamerican Society of Cardiology (SSC-SIAC) made it possible to distribute the survey in different LATAM countries. The survey is published in the Appendix. The questions dealt with personal
and occupational psychosocial sphere, gender-based violence (23), and conventional risk factors and CVD.

## Statistical analysis

The population was divided into two groups: the first group was made up of women aged $\leq 45$ years and the second group of those respondents $>45$ years, to explore differences in the main variables in two different generations. Mean age of onset menopausal transition (WHO), when estrogen levels decline and cardiometabolic changes begin to occur, was used to define the cut-off point (Figure 1). The association between non-conventional and traditional factors was also explored.

Qualitative variables are presented as frequencies and percentages. Quantitative variables are expressed as mean $\pm$ standard deviation (SD), or median and interquartile range (IQR 25-75), according to their distribution.

Discrete variables were analyzed using the chi square test or Fisher's exact test, as applicable. For continuous variables, the $t$ test or the Mann-Wihtney test were used, as applicable, and in case of 3 groups or greater, ANOVA or the Kruskall-Wallis test were used, as applicable. A p value $<0.05$ was considered statistically significant.

All the calculations were performed with the software package R.

## Ethical considerations

The survey was approved by the Committee on Ethics of the Argentine Society of Cardiology. An informed consent was not required due to the design of the study.

## RESULTS

A total of 4915 women responded the survey. Mean age was $49 \pm 13$ years.

Fourteen women ( $0.3 \%$ ) identified themselves as belonging to the LGTBIQ+ (acronym for lesbian, gay, bisexual, transgender, intersex and queer; the plus sign represents people with diverse sexual orientation and gender identity) community.

Most respondents (49.6\%) lived in Argentina, followed by Uruguay (15.5\%), Chile (4.3\%) and Peru (3.8\%), among other countries (Figure 1).

Of those surveyed, $55.8 \%$ lived in large cities and $10.5 \%$ in towns. Quick and easy healthcare access was reported by $94.4 \%$ of respondents, and mostly in the
private sector ( $83.6 \%$ ). Lower population density (< 500000 inhabitants) was associated with higher body mass index (BMI, 26 vs. $25 \mathrm{~kg} / \mathrm{m} 2, \mathrm{p}=0.002$ ) and CVD ( $9 \%$ vs. $5 \%$; p $=0.046$ ).

Most survey respondents have access to basic services, such as public water system (90.2\%), electrical grid ( $97.9 \%$ ) and sewage system ( $82.5 \%$ ); only $57 \%$ had access to pipe gas.

In terms of marital status, most respondents were married or had a partner ( $65.3 \%$ ) or were cohabiting with a partner or children (66.9\%). Hypertension (HTN) and tobacco use were more common in those without a partner ( $24 \%$ vs. $20 \%$, p $=0.002$, and $13 \%$ vs. $9 \%, \mathrm{p}<0.001$, respectively).

Eighty-nine percent received some level of education and $4.1 \%$ did not complete compulsory education. (24) Educational level less than secondary school graduation was significantly associated with HTN ( $30 \%$ vs. $2 \%$ ), diabetes (DM, $9 \%$ vs. $5 \%$ ) and CVD ( $10 \%$ vs. $5 \%$ ), in all cases with $\mathrm{p}<0.001$.

A total of $79.9 \%$ had a paid job, half of them were professionals ( $51.2 \%$ ) and most of them were employees (68.7\%). Forty-five percent reported working more than 44 hours per week, mainly those < 45 years ( $51 \%$ vs $40 \%$, p < 0.001); $38.7 \%$ considered the workload was excessive and $85.7 \%$ reported their physical and emotional health was compromised. The variable "salary not commensurate with workload" (59.5\%) was associated with HTN, higher BMI and CVD, in all cases with statistical significance. Labor inequity in terms of hierarchical positions or remuneration was reported by $33.8 \%$.

Unemployment was associated with HTN, DM, smoking habits and CVD ( $\mathrm{p}<0.001$ ).

Gender-based violence (physical, psychological, sexual, and institutional violence based on sexual orientation or gender identity, UN) occurred at the workplace ( $26.7 \%$ ) and at home ( $22.4 \%$ ). Violence at the workplace was associated with CVD ( $8 \%$ vs. $5 \%$, p $<0.001$ ), while violence at home was associated with dyslipidemia (DLP, $40.5 \%$ vs. $37 \%$, p $=0.047$ ], higher BMI ( 26.4 vs. $25.7 \mathrm{~kg} / \mathrm{m}^{2}, \mathrm{p}<0.001$ ) and smoking

Fig. 1. Proportion of participant from the different Latin American countries

habits ( $15 \%$ vs. $9 \%$, p $<0.001$, respectively).
A total of $25.4 \%$ of the respondents had experienced sexual violence or sexual abuse during their lifetime, associated with higher BMI ( $26.3 \mathrm{vs} .25 .7 \mathrm{~kg} /$ $\mathrm{m} 2, \mathrm{p}<0.001$ ) and smoking habits ( $13 \%$ vs. $9 \%, \mathrm{p}<$ 0.001 , respectively).

Only $31.7 \%$ reported high level of satisfaction in their personal life. Low to moderate level of satisfaction ( $68.3 \%$ ) was significantly associated with higher cardiometabolic burden, and higher rates of DBT, DLP, higher BMI, smoking habits, and CVD. Social discrimination was reported by $19.8 \%$, mainly due to physical appearance; this variable was associated with higher BMI ( $\mathrm{p}<0.001$ ), smoking habits ( $12 \%$ vs. $10 \%, \mathrm{p}=0.043$ ) and CVD ( $15 \%$ vs. $9 \%, \mathrm{p}<0.001$ ).

Mood disorders (apathy, negative thoughts, or unhappiness) in the last two weeks ( $41.7 \%$ ), were associated with higher rates of DLP ( $40 \%$ vs. $36 \%$ ) and smoking habits ( $13 \%$ vs. $9 \%$ ), while irritability or anxiety ( $51.9 \%$ ) were associated with higher rates of smoking habits, higher BMI, and CVD (7\% vs. 5\%, p $<0.001$ ). Sleep disorders (57\%) were associated with DLP ( $40 \%$ vs. $34 \%$ ) and CVD ( $7 \%$ vs. $4.5 \%$, p < 0.001).

Regarding conventional RF, $21.6 \%$ had hypertension and were taking antihypertensive drugs, $5.2 \%$ were diabetics, $10.4 \%$ were current smokers and $30 \%$ were former smokers. Tobacco exposure was higher in transgender respondents ( $\mathrm{p}=0.026$ ).

More than half of the respondents (54.1\%) reported cholesterol levels $>200 \mathrm{mg} / \mathrm{dL}$, and $48 \%$ reported a waist circumference $>$ or equal to 88 cm .

Forty-six percent had a BMI below $25 \mathrm{~kg} / \mathrm{m} 2,34 \%$ had overweight (between 25 and $30 \mathrm{~kg} / \mathrm{m} 2$ ), mainly those $>45$ years ( $36 \%$ vs. $31 \%$, p $<0.001$ ) and $20 \%$ had obesity ( $\mathrm{BMI}>30 \mathrm{~kg} / \mathrm{m} 2$ ), which was also more common in those $>45$ years ( $22 \%$ vs. $17 \%$, p < 0.001).

Less than half ( $46.4 \%$ ) of the women surveyed perform at least 150 minutes of physical exercise per week; $63.9 \%$ mentioned having little or no time for personal leisure activities. A total of $58.8 \%$ did not follow a balanced and healthy diet; $9.5 \%$ drank more than 100 g of alcohol per week and $5.3 \%$ took drugs; both variables were associated with a higher prevalence of smoking habits.

Annual heart health check was reported by $43.4 \%$ and $77.5 \%$ underwent an annual gynecological exam.

Cardiovascular disease was reported by $6.6 \%$ : arrhythmias (50.3\%), coronary artery disease (21.8\%), heart failure (21.5\%), cerebrovascular disease (9.7\%), aortic and peripheral artery disease ( $6.7 \%$ ) and renal artery disease ( $0.7 \%$ ). Regarding coronary artery disease, $46.8 \%$ reported a history of angina, $35.5 \%$ myocardial infarction, $30.6 \%$ percutaneous coronary intervention with or without stenting, and $19.4 \%$ myocardial revascularization surgery.

Half of the respondents ( $50.3 \%$ ) were taking some type of medication on a regular basis. The most commonly used drugs were antihypertensive agents (34.6\%), lipid-lowering agents (21.7\%) and anxiolyt-
ics/antidepressants (25.2\%).
When asked about the obstetric history, $72.8 \%$ responded having at least one pregnancy and $15.6 \%$ of them reported one or more of the following complications: hypertension (44.9\%), premature delivery ( $58.6 \%$ ), miscarriage ( $2.9 \%$ ), voluntary termination (1.1\%) and gestational diabetes ( $16.9 \%$ ). An adverse obstetric history was associated with HTN ( $32 \%$ vs. $23 \%, \mathrm{p}<0.001$ ), DM ( $10 \%$ vs. $5 \%$, p < 0.001), higher BMI ( $27 \mathrm{vs} .26 \mathrm{~kg} / \mathrm{m} 2, \mathrm{p}<0.001$ ) and current CVD ( 9 $\%$ vs. $5 \%, \mathrm{p}=0.022$ ).

Cancer was considered the leading cause of death in women by $44.4 \%$ of respondents, followed by CVD (38.1\%) and feminicide ( $14.4 \%$ ).

On multivariate analysis, sleep disorders (OR 1.7, $p=0.001$ ), living in a city with low population density (OR 0.5, p < 0.001), violence at the workplace (OR $1.8, \mathrm{p}=0.001$ ), anxiety (OR $1.5, \mathrm{p}=0.001$ ) and a history of pregnancy complications (OR $1.6, \mathrm{p}=0.022$ ) were independently associated with CVD.

Age $>45$ years was significantly associated with overweight, obesity, unemployment, and violence at the workplace, while sexual violence, higher workload with commensurate salary and higher educational level were related with age < or equal to 45 years (Figure 2).

## DISCUSSION

This survey shows the impact of self-referred PS and SE determinants on the cardiometabolic burden (CMB) and CV health of women in LATAM, mainly in those $>45$ years.

In Latin America, the proportion of overweight and obese adults has significantly increased in recent decades, (25) and this epidemic has spread to lowand middle-income countries. Malnutrition in all its forms, whether overweight, obesity or undernutrition, is associated with poverty. (26) In Argentina, the prevalence of overweight and obesity over the years has shown a clear upward trend, particularly in the most socially vulnerable groups. (27)

A multinational South American cohort examined variations in the incidence and mortality rates of CVD and analyzed the contribution of modifiable risk factors to the development of CVD and to all-cause death. Deaths were higher in rural areas compared to urban areas, and low educational level ranked as the third risk factor. (28) In addition, exposure to an excessive workload associated with dissatisfaction with the salary earned in relation to workload, together with inequity, constitute chronic stress factors that affect mental and physical health ( $85.7 \%$ ), a situation that was exacerbated during the COVID-19 pandemic (the prevalence of depression and anxiety in Argentina reached $36.4 \%$ ). $(29,30)$ Mood disorders as apathy, negative thoughts or unhappiness in the last two weeks, and irritability or anxiety were significantly associated with higher CMB and CVD.

In 2021, the American Heart Association (AHA)


Fig. 2. Significant factors by age
published a scientific statement associating certain positive psychological factors (e.g., optimism, sense of purpose, happiness) and negative psychological factors (e.g., stress, depression, anxiety) to CV health and CV risk, respectively. (31) Emotional distress is considered a risk factor associated with increased CMB and CVD with increased platelet reactivity, risk of coronary heart disease, and incidence of depression, anxiety, and suicide. (32-34)

Gender-based violence is an emerging risk factor that begins early, affects adolescents and young women, and is more prevalent in low-income countries over lifetime. (35) In the population surveyed, gender-based violence occurred both at the workplace ( $26.7 \%$ ) and at home ( $22.4 \%$ ) representing a global public health problem and a violation of human rights. (36) Even cardiometabolic disorders developed after a childhood marked by abuse can lead to unhealthy lifestyle habits (sedentary lifestyle, unhealthy diet, sleep disorders, use of toxic substances and smoking) and psychological disorders (post-traumatic stress) with an impact on the immune, metabolic, neuroendocrine, and autonomic nervous systems. (37)

Sleep disorders were associated with CVD in the surveyed population. During 2022, the AHA published "Life's Essential 8" (LE8). (38) This update document included "quality of sleep" as an essential factor. The evidence demonstrates that fragmented sleep and inappropriate sleep duration (short duration, $<6 \mathrm{~h}$, or long duration, $>9 \mathrm{~h}$ ) is associated with increased morbidity and mortality, primarily from cardiovascular disorders and increased risk of type 2 diabetes. (39) Furthermore, short and fragmented sleep patterns are independently associated with higher atherosclerotic plaque burden in middle-aged individuals in multiple territories. (40)

## CONCLUSION

We demonstrated a significant prevalence of PS and SE factors affecting the CV health of women in LATAM, where variables such as violence at the workplace, anxiety, or irritability, living in cities with low population density, sleep disorders and pregnancy complications were independently associated with CVD. This is the most extensive survey to date showing the impact of SE and PS factors as NCDs on the

CMB and CV health of women in LATAM, mainly in those $>45$ years.

In this context, it is necessary to implement a gender mainstreaming approach in trials, research, and medical practice. The lack of attention in this regard constitutes a gender bias or gap that has had a negative impact on the diagnosis and prognosis of CVD in women.

Changes in policies, education and training, innovations in health care delivery, and diversification of cardiology are essential to overcome disparities that affect cardiovascular health in LATAM women. It is necessary to think of women as part of a whole rather than a simple part of a whole.

## Study limitations

As this study is based on a non-probabilistic sample, it is difficult to accurately establish the prevalence of RFs in the target population. There is also a disproportion among respondents, with high participation of Argentine women and low representation of the rest of LATAM countries. The information gathered was self-reported by the participants, without corroborating the answers.

## Conflicts of interest

None declared.
(See authors' conflict of interests forms on the web).

## Financing

None.

## REFERENCES

1. Lopez Rossetti D. Ellas. Cerebro, corazón y psicología de la mujer. 2016 Editorial Planeta. ISBN 978-950-49-5125-4
2. Lindley KJ, Aggarwal NR, Briller JE, Davis MB, Douglass P, Epps KC, et al. Comité de Enfermedades Cardiovasculares en mujeres del Colegio Americano de Cardiología y el Grupo de Trabajo de Equidad en Salud del Colegio Americano de Cardiología. Socioeconomic Determinants of Health and Cardiovascular Outcomes in Women. JACC 2021;78:1919-29. https://doi.org/10.1016/j. jacc.2021.09.011
3. La salud en las Américas Organización Panamericana de la Salud, Pan American Health Organization. https://www.paho.org/ es
4. Vogel B, Acevedo M, Appelman Y, Bairey Merz CN, Chieffo A, Figtree GA, et al. The Lancet women and cardiovascular disease Commission: reducing the global burden by 2030. Lancet. 2021;397:2385-438. https://doi.org/10.1016/S0140-6736(21)006845. Pan American Health Organization and WHO. Mortality in the Americas. https://www.paho.org/salud-en-las-americas2017/?tag=cardiovascular-diseases (accessed April 23, 2021).
5. Tejero ME. Cardiovascular disease in Latin American women. Nutr Metab Cardiovasc Dis 2010;20:405-11. https://doi. org/10.1016/j.numecd.2010.02.005
6. Xu X, Bao H, Strait KM, Edmondson DE, Davidson KW, Beltrame JF, et al. Perceived stress after acute myocardial infarction: a comparison between young and middle aged women versus men. Psychosom Med 2017;79:50-8. https://doi.org/10.1097/ PSY. 0000000000000429
7. Anand SS, Razak F, Davis AD, Jacobs R, Vuksan V, Teo K, et al. Social disadvantage and cardiovascular disease: development of an index and analysis of age, sex, and ethnicity effects. Int J Epidemiol

2006;35:1239-45. https://doi.org/10.1093/ije/dyl163
9. www.paho.org/es/temas/determinantes-sociales-salud.
10. Norris CM, Yip CY, Nerenberg KA, Clavel MA, Pacheco C, Foulds HJ. State of the Science in Women's Cardiovascular Disease: A Canadian Perspective on the Influence of Sex and Gender. J Am Heart Assoc. 2020;9:e015634. https://doi.org/10.1161/JAHA.119.015634 11. Rajagopalan S, Al-Kindi SG, Brook RD. Air Pollution and Cardiovascular Disease. JACC State-of-the-Art Review. J Am Coll Cardiol 2018;72:2054-70. https://doi.org/10.1016/j.jacc.2018.07.099
12. Brauer M, Casadei B, Harrington R, Kovacs R, Sliwa K. Taking a stand against air pollution - the impact on cardiovascular disease. A joint opinion from the World Heart Federation, American College of Cardiology, American Heart Association, and the European Society of Cardiology. Eur Heart J 2021;0:1-4. https://doi. org/10.1161/CIRCULATIONAHA.120.052666
13. World Health Organization. WHO | Violence Against Women. WHO; 2018. Available at: http://www.who.int/mediacentre/factsheets/fs239/en/
14. Maas AH, Rosano G, Cifkova R, Chieffo A, van Dijken D, Hamoda H. Cardiovascular health after menopause transition, pregnancy disorders, and other gynaecologic conditions: a consensus document from European cardiologists, gynaecologists, and endocrinologists. Eur Heart J 2021:00:1-18. https://doi.org/10.1093/ eurheartj/ehaa1044.
15. Arnett DK, Blumenthal RS, Albert MA, Buroker AB, Zachary D, Goldberger EH, et al. ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical PracticeGuidelines. Circulation. 2019;140:e596-e646. https:// doi.org/10.1161/CIR. 0000000000000678
16. Piepoli MF, Hoes AW, Agewall S, Albus C, Brotons C, Catapano AL, et al. European Guidelines on cardiovascular disease prevention in clinical practice: The Sixth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of 10 societies and by invited experts). Eur Heart J 2016;37:2315-81. https://doi.org/10.1093/eurheartj/ehw106
17. Cho L, Davis M, Elgendy I, Epps K, Lindley KJ, Mehta PK, et al, for the ACC CVD Womens Committee Members. Summary of Updated Recommendations for Primary Prevention of Cardiovascular Disease in Women JACC State-of-the-Art Review. JACC 2020;75:2602-18. https://doi.org/10.1016/j.jacc.2020.03.060
18. Agarwala A, Michos ED, Samad Z, Ballantyne CM, Virani SS. The Use of Sex-Specific Factors in the Assessment of Women's Cardiovascular Risk. February18, 2020. Circulation. 2020;141:592-9. https://doi.org/10.1161/CIRCULATIONAHA.119.043429
19. Young L, Cho L. Unique cardiovascular risk in women. Heart 2019;0:15. https://doi.org/10.1136/heartjnl-2018-314268
20. Shimokawa H, Suda A, Takahashi J, Berry C, Camici PG, Crea F, et al, en nombre del Grupo de Estudio Internacional de Trastornos Vasomotores Coronarios (COVADIS). Características y pronóstico clínico en pacientes con angina microvascular: Un estudio de cohorte internacional y prospectivo por el grupo de estudio internacional de estudio de trastornos vasomotores. COVADIS. Eur Heart J 2021;00:1-9. https://doi.org/10.1093/eurheartj/ehab282
21. Figtree GA, Vernon ST, Hadziosmanovic N, Sundström J, Alfredsson J, Arnott C, et al. Mortality in STEMI patients without standard modifiable risk factors: a sex-disaggregated analysis of SWEDEHEART registry data) The Lancet. https://doi.org//10.1016/ S0140-6736(21)00272-5.
22. van Diemen J, Verdonk P, Chieffo A, Regar E, Mauri F, Kunadian V , et al. La importancia de lograr la equidad basada en el sexo y el género en los ensayos clínicos: un llamado a la acción. Eur Heart J 2021;42:2990-4. https://doi.org/10.1093/eurheartj/ehab457 23. ONU Mujeres. Preguntas frecuentes: Tipos de violencia contra las mujeres y las niñas [Internet]. ONU Mujeres. Available from: https://www.unwomen.org/es/what-we-do/ending-violence-against-women/faqs/types-of-violence
24. https://www.argentina.gob.ar/sites/default/files/ley-de-educ-nac-58ac89392ea4c.pdf
25. FAO-OPS-WPF-UNICEF (2018).
26. OPS-OMS (2014). Monteiro, Moura, Conde y Popkin (2004). McLaren (2007). Dinsa, Goryakin, Fumagalli y Suhrcke (2012). Ver informe de la $2^{\circ}$ Encuesta Mundial de Salud Escolar, desarrollada por el Ministerio de Salud y Desarrollo Social de la Nación,
en: http:// www.msal.gob.ar/ent/images/stories/vigilancia/pdf/2014-09_informe-EMSE-2012.pdf.
27. Ver informe de la Tercera Encuesta Nacional de Factores de Riesgo para Enfermedades No Transmisibles, desarrollada por el Ministerio de Salud y Desarrollo Social de la Nación, en: http://www.msal.gob.ar/images/stories/bes/graficos/0000000544c nt-2015_09_04_encuesta_nacional_factores_riesgo.pdf.
Ver Programa Nacional de Salud Escolar. Situación de niños, niñas y adolescentes en Argentina. 2019. Disponible en: http://www. msal.gob.ar/ images/stories/bes/graficos/00000001405cnt-Valoracin-antropomtrica-inicio-y-al-finalizar-ciclo-educacin-primaria-Argen-tina-07-03-2019.pdf.
Ver Sobrepeso y obesidad en niños, niñas y adolescentes según datos del primer nivel de atención en la Argentina, publicado por el Ministerio de Salud y Desarrollo Social en 2018. Disponible en: http://www. msal.gob.ar/images/stories/bes/graficos/0000001387cnt-2019-01_so-brepeso-y-obesidad.pdf.
Vandevijvere, Chow, Hall, Umalia y Swinburn (2015).
28. Lopez-Jaramillo P, Joseph P, Lopez-Lopez JP, Lanas F, Avezum A, Diaz R, et al. Risk factors, cardiovascular disease, and mortality in South America: a PURE substudy. Eur Heart J 2022;43:2841-51. https://doi.org/10.1093/eurheartj/ehac113
29. T.D. Shanafelt, C.P. Oeste, Sinsky C et al Changes in burnout and satisfaction with work-life integration in physicians and the general workforce between 2011 and 2017. Mayo Clin Proc. 2019;94:1681-94. https://doi.org/10.1016/j.mayocp.2018.10.023
30. Santomauro DF, Mantilla Herrera AM, Shadid J, Zheng P, Ashbaugh C, Pigott DM, et al. Prevalencia mundial y carga de trastornos depresivos y de ansiedad en 204 países y territorios en 2020 debido a la pandemia de COVID-19. Lancet 2021;398;1700-12.
31. Levine GN, Cohen BE, Commodore-Mensah Y, Fleury J, Huffman JC, Khalid U, et al. Psychological Health, Well-Being, and the Mind-Heart-Body Connection: A Scientific Statement From the American Heart Association. Circulation. https://www.ahajournals. org/doi/10.1161/CIR. 0000000000000947
32. Chandan JS, Thomas T, Bradbury-Jones C, Taylor J, Bandyo-
padhyay S, Nirantharakumar K. Risk of Cardiometabolic Disease and All-Cause Mortality in Female Survivors of Domestic Abuse. J Am Heart Assoc 2020;9:e014580. https://doi.org//10.1161/ JAHA.119.014580.
33. Goldstein BI, Carnethon MR, Matthews KA, McIntyre RS, Miller GE, Raghuveer G, et al. Major Depressive Disorder and Bipolar Disorder Predispose Youth to Accelerated Atherosclerosis and Early Cardiovascular Disease. Circulation. 2015;132:965-86. https:// doi.org/10.1161/CIR. 0000000000000229
34. UK Government. Guidance: Domestic Violence and Abuse. UK Gov; 2016. Available at: https://www.gov.uk/government/news/new-definition-of-dome stic-violence.
35. Sardinha L, Maheu-Giroux M, Stöckl H, Meyer SR, GarcíaMoreno C. Global, regional, and national prevalence estimates of physical or sexual, or both, intimate partner violence against women in 2018. Lancet 2022;399:803-13.
36. World Health Organization. WHO | Violence Against Women. WHO; 2018. Available at: 38 http://www.who.int/mediacentre/factsheets/fs239/en/
37. Suglia SF, Koenen KC, Boynton-Jarrett R, Chan PS, Clark CJ, Danese A, et al. Childhood and adolescent adversity and cardiometabolic outcomes: a scientific statement from the American Heart Association. Circulation. 2018;137:e15-28. https://doi.org/10.1161/ CIR. 0000000000000536
38. "Life's Essential 8: Updating and Enhancing the American Heart Association's Construct of Cardiovascular Health: A Presidential Advisory From the American Heart Association". Circulation. 2022;146:e18-e43. https://doi.org//10.1161/CIR. 0000000000001078
39. Tobaldini, E., Fiorelli, E.M., Solbiati, M. et al. Corta duración del sueño y riesgo cardiometabólico: desde la fisiopatología hasta la evidencia clínica. Nat Rev Cardiol 16, 213-224 (2019). https://doi. org/10.1038/s41569-018-0109-6.
40. Domínguez F, Fuster V, Fernández-Alvira JM, FernándezFriera L, López-Melgar B, Blanco-Rojo R, et al. Association of Sleep Duration and Quality With Subclinical Atherosclerosis. J Am Coll Cardiol 2019;73:134-44. https://doi.org/10.1016/j.jacc.2018.10.060

## APPENDIX

1) Analysis of variables

|  | Without partner ( $\mathrm{n}=1692$ ) | With partner $(n=3177)$ | p |
| :---: | :---: | :---: | :---: |
| HTN, \% | 24 | 20 | 0.002 |
| Diabetes, \% | 5.7 | 5 | NS |
| Dyslipidemia, \% | 39 | 37 | NS |
| BMI, mean (SD) | 26 (6) | 25 (6) | NS |
| Current smoking, \% | 13 | 9 | <0.001 |
| Cardiovascular disease, \% | 7 | 6 | NS |
|  | Educational level less than secondary school graduation ( $\mathrm{n}=550$ ) | Secondary education or higher ( $\mathrm{n}=4327$ ) | p |
| HTN, \% | 30 | 2 | <0.001 |
| Diabetes, \% | 9 | 5 | <0.001 |
| Dyslipidemia, \% | 41 | 37 | NS |
| Current smoking, \% | 16 | 9 | <0.001 |
| BMI, mean (SD) | 25 (3) | 25 (5) | NS |
| Cardiovascular disease, \% | 9.5 | 6 | 0.001 |
|  | Unemployed $(\mathrm{n}=919)$ | Employed $(n=3862)$ | p |
| HTN, \% | 30 | 19 | <0.001 |
| Diabetes, \% | 7.25 | 4.75 | <0.001 |
| Dyslipidemia, \% | 39.5 | 37 | NS |
| Current smoking, \% | 10 | 10 | NS |
| BMI, mean (SD) | 25 (3) | 25 (5) | NS |
| Cardiovascular disease, \% | 10 | 5 | <0.001 |
|  | Violence at the workplace $(n=1300)$ | No violence at the workplace $(n=3562)$ | p |
| HTN, \% | 20 | 16.5 | 0.003 |
| Diabetes, \% | 5 | 4 | NS |
| Dyslipidemia, \% | 39.5 | 33 | 0.001 |
| BMI, mean (SD) | 25 (5) | 26 (6) | 0.003 |
| Current smoking, \% | 10 | 11 | NS |
| Cardiovascular disease, \% | 5.5 | 5 | NS |
|  | $\begin{aligned} & \text { Workload < } 44 \text { h/week } \\ & \quad(n=2051) \end{aligned}$ | Workload 44 h/week or more $(n=1681)$ | p |
| HTN, \% | 20 | 16.5 | 0.003 |
| Diabetes, \% | 5 | 4 | NS |
| Dyslipidemia, \% | 39.5 | 33 | 0.001 |
| BMI, mean (SD) | 25 (5) | 26 (6) | 0.003 |
| Current smoking, \% | 10 | 11 | NS |
| Cardiovascular disease, \% | 5.5 | 5 | NS |


|  | Violence at home $(n=1088)$ | No violence at home $(n=3769)$ | p |
| :---: | :---: | :---: | :---: |
| HTN, \% | 20 | 22 | NS |
| Diabetes, \% | 5 | 5 | NS |
| Dyslipidemia, \% | 40.5 | 37 | 0.047 |
| BMI, mean (SD) | 26.4 (6) | 25.7 (6) | <0.001 |
| Current smoking, \% | 15 | 9 | <0.001 |
| Cardiovascular disease, \% | 7 | 6 | NS |
|  | Sexual abuse $(n=1229)$ | No sexual abuse $(n=3618)$ | p |
| HTN, \% | 18 | 22.5 | 0.001 |
| Diabetes, \% | 4.5 | 5.5 | NS |
| Dyslipidemia, \% | 39 | 37 | NS |
| BMI, mean (SD) | 26.3 (6) | 25.7 (6) | $<0.001$ |
| Current smoking, \% | 13 | 9 | <0.001 |
| Cardiovascular disease, \% | 6 | 6 | NS |
|  | Discrimination $(n=962)$ | No discrimination $(n=3894)$ | p |
| HTN, \% | 19 | 22 | NS |
| Diabetes, \% | 6 | 5 | NS |
| Dyslipidemia, \% | 36 | 38 | NS |
| BMI, mean (SD) | 27 (6) | 25.6 (6) | <0.001 |
| Current smoking, \% | 12 | 10 | 0.043 |
| Cardiovascular disease, \% | 9 | 5 | <0.001 |
|  | Psychotherapy $(\mathrm{n}=918)$ | No psychotherapy $(n=3937)$ | p |
| HTN, \% | 16 | 23 | <0.001 |
| Diabetes, \% | 4 | 6 | 0.029 |
| Dyslipidemia, \% | 38 | 38 | NS |
| BMI, mean (SD) | 25 (6) | 26 (6) | <0.001 |
| Current smoking, \% | 12 | 10 | 0.042 |
| Cardiovascular disease, \% | 6 | 6 | NS |
|  | High satisfaction level $(n=1543)$ | Moderate and low satisfaction level $(n=3331)$ | p |
| HTN, \% | 20 | 22 | NS |
| Diabetes, \% | 3 | 6 | <0.001 |
| Dyslipidemia, \% | 35 | 38 | 0.045 |
| BMI, mean (SD) | 25 (5) | 26 (6) | <0.001 |
| Current smoking, \% | 7 | 12 | <0.001 |
| Cardiovascular disease, \% | 5 | 7 | 0.004 |
|  | Alcohol intake $(n=462)$ | No alcohol intake $(n=4412)$ | p |
| HTN, \% | 20 | 22 | NS |
| Diabetes, \% | 5 | 5 | NS |
| Dyslipidemia, \% | 40 | 37 | NS |
| BMI, mean (SD) | 26 (6) | 25 (6) | NS |
| Current smoking, \% | 20 | 9 | <0.001 |
| Cardiovascular disease, \% | 5 | 6 | NS |


|  | Drug abuse $(n=257)$ | No drug abuse $(n=4618)$ | p |
| :---: | :---: | :---: | :---: |
| HTN, \% | 7 | 22 | <0.001 |
| Diabetes, \% | 3 | 5 | NS |
| Dyslipidemia, \% | 37 | 37 | NS |
| BMI, mean (SD) | 25 (5.6) | 26 (6) | 0.020 |
| Current smoking, \% | 28 | 9 | <0.001 |
| Cardiovascular disease, \% | 4 | 6 | NS |
|  | Sleep disorders $(n=2781)$ | No sleep disorders $(n=2093)$ | p |
| HTN, \% | 22 | 21 | NS |
| Diabetes, \% | 6 | 5 | NS |
| Dyslipidemia, \% | 40 | 34 | <0.001 |
| BMI, mean (SD) | 26 (5.9) | 25.7 (5.7) | 0.26 |
| Current smoking, \% | 10 | 10 | NS |
| Cardiovascular disease, \% | 7 | 4.5 | <0.001 |
|  | Apathy and unhappiness $(n=2028)$ | No apathy or unhappiness $(n=2840)$ | p |
| HTN, \% | 20 | 23 | 0.003 |
| Diabetes, \% | 5 | 5 | NS |
| Dyslipidemia, \% | 40 | 36 | 0.019 |
| BMI, mean (SD) | 26 (6) | 25 (5.5) | NS |
| Current smoking, \% | 13 | 9 | <0.001 |
| Cardiovascular disease, \% | 7 | 6 | NS |
|  | Anxiety and irritability $(n=2528)$ | No anxiety and irritability $(\mathrm{n}=2343)$ | p |
| HTN, \% | 20 | 23 | 0.018 |
| Diabetes, \% | 5 | 5 | NS |
| Dyslipidemia, \% | 39 | 36 | NS |
| BMI, mean (SD) | 26 (6) | 25 (5.5) | 0.017 |
| Current smoking, \% | 12 | 8 | <0.001 |
| Cardiovascular disease, \% | 7 | 5 | <0.001 |
|  | Pregnancy complications $(n=562)$ | No pregnancy complications $(\mathrm{n}=3052)$ | p |
| HTN, \% | 32 | 23 | <0.001 |
| Diabetes, \% | 10 | 5 | <0.001 |
| Dyslipidemia, \% | 40 | 37 |  |
| BMI, mean (SD) | 27 (6.4) | 26 (6) | <0.001 |
| Current smoking, \% | 7 | 11 | 0.007 |
| Cardiovascular disease, \% | 9 | 6 | 0.022 |
|  | Cardiovascular disease $(n=298)$ | Without cardiovascular disease $(n=4617)$ | p |
| HTN, \% | 57 | 19 | <0.001 |
| Diabetes, \% | 14 | 5 | <0.001 |
| Dyslipidemia, \% | 39 | 37 | NS |
| BMI, mean (SD) | 27 (5.8) | 25.8 (5.8) | <0.001 |
| Current smoking, \% | 8 | 9 | NS |

BMI: body mass index; HTN: hypertension; SD: standard deviation
2) Questionnaire of non-conventional determinants in Latin American women

| Questions | Options | Results |
| :---: | :---: | :---: |
| Age |  | 49 (13) |
| Marital status | -Single/Not cohabiting with partner <br> -Married <br> -With partner <br> -Separated/Divorced/Widow | $\begin{aligned} & (857 ; 17.6 \%) \\ & (2218 ; 45.6 \%) \\ & (959 ; 19.7 \%) \\ & (835 ; 17.1 \%) \end{aligned}$ |
| Gender | -Biologically female <br> _Transgender <br> -Transsexual | $\begin{aligned} & (4682 ; 99.7 \%) \\ & (12 ; 0.3 \%) \\ & (2 ; 0.0 \%) \end{aligned}$ |
| Educational level (choose the highest level achieved) | -Incomplete primary level <br> -Complete primary level <br> -Incomplete secondary level <br> -Complete secondary level <br> -Incomplete tertiary level <br> -Complete tertiary level <br> -Incomplete university level <br> -Complete university level | $\begin{aligned} & (16 ; 0.3 \%) \\ & (40 ; 0.8 \%) \\ & (147 ; 3.0 \%) \\ & (347 ; 7.1 \%) \\ & (214 ; 4.4 \%) \\ & (711 ; 14.6 \%) \\ & (495 ; 10.1 \%) \\ & (2907 ; 59.6 \%) \end{aligned}$ |
| Country of residence | Argentina <br> Bolivia <br> Brazil <br> Chile <br> Colombia <br> Costa Rica <br> Cuba <br> Ecuador <br> El Salvador <br> Guatemala <br> Honduras <br> México <br> Nicaragua <br> Panama <br> Paraguay <br> Peru <br> Puerto Rico <br> Dominican Republic <br> Uruguay <br> Venezuela <br> Other | $\begin{aligned} & (2388 ; 49.6 \%) \\ & (147 ; 3.1 \%) \\ & (128 ; 2.7 \%) \\ & (208 ; 4.3 \%) \\ & (175 ; 3.6 \%) \\ & (3 ; 0.1 \%) \\ & (82 ; 1.7 \%) \\ & (5 ; 0.1 \%) \\ & (5 ; 0.1 \%) \\ & (107 ; 2.2 \%) \\ & (143 ; 3.0 \%) \\ & (28 ; 0.6 \%) \\ & (2 ; 0.0 \%) \\ & (0 ; 0.0 \%) \\ & (134 ; 2.8 \%) \\ & (182 ; 3.8 \%) \\ & (73 ; 1.5 \%) \\ & (129 ; 2.7 \%) \\ & (744 ; 15.5 \%) \\ & (71 ; 1.5 \%) \\ & (56 ; 1.2 \%) \end{aligned}$ |
| Which other country? |  |  |
| Population density of the place where you live? | -Small town up to 1999 inhabitants <br> -Large town from 2000 to 19999 inhab. <br> -Small city from 20000 to 49999 inhab. <br> Intermediate city from 50000 to 499999 inhab. <br> -Large city > 500000 inhab. | $\begin{aligned} & (136 ; 2.8 \%) \\ & (374 ; 7.7 \%) \\ & (574 ; 11.9 \%) \\ & (1053 ; 21.8 \%) \\ & (2697 ; 55.8 \%) \end{aligned}$ |
| Do you have easy and rapid healthcare access? | $\begin{aligned} & \text {-Yes } \\ & \text {-No } \end{aligned}$ | $\begin{aligned} & (4580 ; 94.4 \%) \\ & (272 ; 5.6 \%) \end{aligned}$ |
| Regularly accesses medical care | -Public <br> -Private | $\begin{aligned} & (793 ; 16.4 \%) \\ & (4055 ; 83.6 \%) \end{aligned}$ |

(Continuation)

| Housing domain |  |  |
| :---: | :---: | :---: |
| How do you get access to water? | -Public water system (running water) <br> -Water supply from a well/borehole with pump or hand pump <br> -Other | $\begin{aligned} & (4372 ; 90.2 \%) \\ & (389 ; 8.0 \%) \\ & (87 ; 1.8 \%) \end{aligned}$ |
| Do you have electricity? | -No <br> -Yes, electrical grid <br> -Yes, from generator (combustion engine) <br> -Others | $\begin{aligned} & (16 ; 0.3 \%) \\ & (4739 ; 97.9 \%) \\ & (45 ; 0.9 \%) \\ & (42 ; 0.9 \%) \end{aligned}$ |
| What type of sewage system do you have? | -Connected to public sewer network <br> -Connected to septic tank <br> -Connected to drywell <br> -Others | $\begin{aligned} & (3862 ; 82.5 \%) \\ & (427 ; 9.1 \%) \\ & (349 ; 7.5 \%) \\ & (42 ; 0.9 \%) \end{aligned}$ |
| What do you use to cook or heat your house? (You can choose several options) | -Piped gas <br> -Bottled gas (tank or cylinder) <br> -Firewood <br> -Coal <br> -Electricity <br> -Others | $\begin{aligned} & (2700 ; 57.0 \%) \\ & (1458 ; 30.8 \%) \\ & (281 ; 5.9 \%) \\ & (20 ; 0.4 \%) \\ & (1456 ; 30.7 \%) \\ & (67 ; 1.4 \%) \end{aligned}$ |
| Cohabitants (You can choose several options) | -Single <br> -With partner <br> -Partner and children <br> -Other persons <br> -Pets | $\begin{aligned} & (692 ; 14.6 \%) \\ & (985 ; 20.8 \%) \\ & (2180 ; 46.1 \%) \\ & (982 ; 20.8 \%) \\ & (1010 ; 21.4 \%) \end{aligned}$ |
| Workplace domain |  |  |
| Do you have a paid job? | $\begin{aligned} & \text {-Yes } \\ & \text {-No } \end{aligned}$ | $\begin{aligned} & (3862 ; 79.9 \%) \\ & (969 ; 20.1 \%) \end{aligned}$ |
| You are | -Self-employed <br> -An employee | $\begin{aligned} & (1165 ; 31.3 \%) \\ & (2558 ; 68.7 \%) \end{aligned}$ |
| You work as: | -Domestic worker/caregiver -Industry or factory worker <br> -Retail clerk <br> -Administrative employee <br> -Teacher/professor <br> -Professional <br> -Entrepreneur <br> -Retired <br> -Others | $\begin{aligned} & (51 ; 1.4 \%) \\ & (49 ; 1.3 \%) \\ & (93 ; 2.5 \%) \\ & (522 ; 13.9 \%) \\ & (384 ; 10.2 \%) \\ & (1928 ; 51.2 \%) \\ & (166 ; 4.4 \%) \\ & (224 ; 5.9 \%) \\ & (348 ; 9.2 \%) \end{aligned}$ |
| Do you work more than 44 hours per week? | $\begin{aligned} & \text {-Yes } \\ & \text {-No } \end{aligned}$ | $\begin{aligned} & (1681 ; 45.0 \%) \\ & (2051 ; 55.0 \%) \end{aligned}$ |
| Do you find your workload excessive? | $\begin{aligned} & \text {-Yes } \\ & \text {-No } \end{aligned}$ | $\begin{aligned} & (1445 ; 38.7 \%) \\ & (2286 ; 61.3 \%) \end{aligned}$ |
| Do you consider your workload has affected your physical or emotional health? | $\begin{aligned} & \text {-Yes } \\ & \text {-No } \end{aligned}$ | $\begin{aligned} & (1237 ; 85.7 \%) \\ & (207 ; 14.3 \%) \end{aligned}$ |
| Do you consider your salary commensurate with your workload? | $\begin{aligned} & \text {-Yes } \\ & \text {-No } \end{aligned}$ | $\begin{aligned} & (1511 ; 40.5 \%) \\ & (2222 ; 59.5 \%) \end{aligned}$ |

## (Continuation)

| Have you suffered gender-based violence at the | -No, never | (3562; 73.3\%) |
| :---: | :---: | :---: |
| workplace? (Physical, psychological, sexual and | -Yes, in the past | (1169; 24.0\%) |
| institutional violence based on sexual orientation or gender identity) | -Yes, at present | (131; 2.7\%) |
| Is there gender equity (equality) at your workplace in | -Yes | (2462; 66.2\%) |
| terms of hierarchical positions or remuneration? | -No | (1259; 33.8\%) |
| Personal matters domain |  |  |
| Have you ever suffered sexual violence or sexual | -Yes | (1229; 25.4\%) |
| abuse? | -No | (3618; 74.6\%) |
| Have you suffered gender-based violence at home? | -No, never | (3769; 77.6\%) |
| (Physical, psychological, sexual and institutional | -Yes, in the past | (1028; 21.2\%) |
| violence based on sexual orientation or gender identity) | -Yes, at present | (60; 1.2\%) |
| Have you ever been socially discriminated against? | -Yes | (962; 19.8\%) |
|  | -No | (3894; 80.2\%) |
| The social discrimination was related to: | -Your ethnic/racial status | (151; 16.1\%) |
|  | -Your physical appearance | (443; 47.3\%) |
|  | -Your culture | (74; 7.9\%) |
|  | -Your religion | (85; 9.1\%) |
|  | -Your socioeconomic situation | (321; 34.3\%) |
|  | -Your gender | (269; 28.7\%) |
|  | -Your disability | (25; 2.7\%) |
| Do you have time for personal leisure activities? | -No | (450; 9.3\%) |
|  | -Yes, sometimes | (2652; 54.6\%) |
|  | -Sí, regularly | (1755; 36.1\%) |
| Do you consider that the current health situation | -No | (1136; 30.3\%) |
| (COVID-19 pandemic) has resulted in excessive | -Yes, a little | (1281; 34.2\%) |
| workload? | -Yes, to a large extent | (1328; 35.5\%) |
| Do you consider that the current healthcare situation | -No | (1355; 28.0\%) |
| has resulted in excessive demands on yourself? | -Yes, a little | (2079; 43.0\%) |
|  | -Yes, to a large extent | (1399; 28.9\%) |
| Weight (kg) |  |  |
| Height (cm) |  |  |
| Waist circumference | $-<88 \mathrm{~cm}$ | (2520; 52.0\%) |
|  | $\geq$ to 88 cm | (2324; 48.0\%) |
| Do you have hypertension? (high blood pressure) | -Yes | (1052; 21.6\%) |
|  | -No | (3816; 78.4\%) |
| Are you taking any medication for your blood | -Yes | (1054; 21.7\%) |
| pressure? | -No | (3808; 78.3\%) |
| Do you check your blood pressure regularly? (each | -Yes | (2270; 46.7\%) |
| month) | -No | (2594; 53.3\%) |
| Do you know your total cholesterol levels? | -<200 mg/dL | (2234; 45.9\%) |
|  | -Between 201 and $240 \mathrm{mg} / \mathrm{dL}$ | (1140; 23.4\%) |
|  | -> $240 \mathrm{mg} / \mathrm{dL}$ | (202; 4.2\%) |
|  | -Don't know | (1289; 26.5\%) |
| Are you diabetic? High blood sugar levels | -Yes | (255; 5.2\%) |
|  | -No | (4609; 94.8\%) |
| Do you smoke? | -Yes | (509; 10.4\%) |
|  | -No, never | (2910; 59.6\%) |
|  | -I used to smoke but don't smoke now | (1463; 30.0\% |

(Continuation)

(Continuation)

| Did you have pregnancy complications? | -Yes | (562; 15.6\%) |
| :---: | :---: | :---: |
|  | -No | (3052; 84.4\%) |
| Which complication? | -Hypertension | (244; 44.9\%) |
|  | -Diabetes | (92; 16.9\%) |
|  | _Premature delivery (less than 37 weeks) | (318; 58.6\%) |
| Do you feel motherhood limited your professional growth? | -Yes, to a large extent | (358; 10.1\%) |
|  | -Yes, slightly | (1115; 31.4\%) |
|  | -No | (2075; 58.5\%) |
| Do you consider having a balanced and healthy diet? | -No | (751; 15.4\%) |
|  | -Yes, slightly | (2115; 43.4\%) |
|  | -Yes, regularly | (2012; 41.2\%) |
| Have you recently had trouble to fall asleep or to stay asleep? | -No | (2093; 42.9\%) |
|  | -Yes, sometimes | (1453; 29.8\%) |
|  | -Yes, regularly | (1328; 27.2\%) |
| Have you felt apathy or had negative thoughts or been unhappy in the last 2 weeks? | -Yes | (2028; 41.7\%) |
|  | -No | (2840; 58.3\%) |
| Do you feel anxious or irritable? | -Yes | (2528; 51.9\%) |
|  | -No | (2343; 48.1\%) |
| Which do you consider is the leading cause of death in women? | -Cardiovascular diseases | (1856; 38.1\%) |
|  | -Infections | (39; 0.8\%) |
|  | -Respiratory diseases | (42; 0.9\%) |
|  | -Cancer | (2164; 44.4\%) |
|  | -Feminicide | (709; 14.6\%) |
|  | -Other | (62; 1.3\%) |


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