Prevalence and determinants of hypertension among women of childbearing age in Jordan

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Abstract

Background: The burden of hypertension among women of childbearing age in Jordan is increasing, indicating the need to explore its prevalence and associated risk factors.

Aim: To assess the prevalence and determinants of hypertension among women aged 18-49 years in Jordan.

Methods: This study used secondary cross-sectional data on hypertension, diabetes and hypercholesterolemia from 2675 Jordanian and Syrian women aged 18–49 years from the 2019 WHO STEPS survey in Jordan. Data analysis was performed using SPSS version 28, and univariate analysis was conducted to determine the associations between the variables.

Results: Prevalence of hypertension among the study participants was 17% and women who had hypertension were also obese. Having hypertension was significantly associated with being married, having lower educational attainment and consuming high amounts of salt. Those who had hypertension were more likely to have a history of diabetes, hypercholesterolemia and cardiovascular disease (P < 0.05).

Conclusions: The 17% prevalence of hypertension among the study participants, alongside obesity, indicates the need for weight management and lifestyle modification interventions to reduce the burden of hypertension among women of childbearing age in Jordan.

Keywords: hypertension, obesity, diabetes, hypercholestrolemia, cardiovascular disease, weight management, lifestyle, Syria, Jordan

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Introduction

The global burden of noncommunicable diseases (NCDs) is increasing, with increasing morbidity and mortality (1). NCDs are the leading cause of morbidity among women of childbearing age (18–49 years) and significantly contribute to perinatal mortality worldwide (2,3). Effective preventive strategies include managing metabolic disorders, smoking cessation, physical activity and a healthy diet (1).

In Jordan, NCDs are the primary cause of morbidity and mortality, in accordance with global trends (4,5-7). Jordan hosts the second largest refugee population per capita globally (5). The high prevalence of NCDs, coupled with continuous humanitarian crises, significantly hinders the achievement of Universal Health Coverage (UHC) (5). High rates of smoking, obesity, unhealthy diets, and physical inactivity have been reported among Jordanians and Syrian refugees in Jordan which further contribute to the burden of NCDs (5,8).

Hypertension affects approximately 1.28 billion individuals worldwide, two-thirds of whom reside in lowand middle-income countries (8). The 2019 Jordan WHO STEPS survey estimates the prevalence of hypertension in Jordan to be 22%, with nearly half (47.8%) of the respondents not taking antihypertensive medications (4). One-third of the surveyed population reported adding salt to their food, and fruit and vegetable consumption was insufficient. Sixty percent were overweight or obese (4), only 21% of hypertensive patients had their blood pressure under control, and awareness of hypertension prevention measures was suboptimal (6).

Hypertension is a modifiable risk factor for cardiovascular disease (8,9). A global target for NCDs is to reduce the prevalence of hypertension by 33% between 2010 and 2030 (7,8). Despite being a common public health issue, hypertension management programmes remain inadequate (11). The prevalence of hypertension among women of childbearing age is increasing (12). Routine screening for hypertension during pregnancy is essential, as untreated hypertension can increase maternal and foetal morbidity and mortality (13).

Preeclampsia/eclampsia is the most common hypertensive disorder during pregnancy (12,13). Early diagnosis and prompt management are crucial to preventing complications, and potential teratogenic effects must be considered when initiating treatment (14). The incidence of hypertension among women of childbearing age is expected to increase due to increasing rates of obesity, metabolic syndrome and dyslipidaemia among young women worldwide (13,14). In 2019, age-standardised prevalence of hypertension among adults aged 30–79 years in Jordan was 38%, with 36% prevalence among women and 40% among men (10).

Recent research on hypertension prevalence and control in Jordan have identified family history of hypertension, increased waist circumference, elevated triglycerides level and high plasma glucose as significant risk factors (9). Hypertension was positively associated with age, illiteracy, body mass index, family history of hypertension, and diabetes mellitus in a recent study among urban communities in eastern Jordan (11). There was no association between hypertension and gender, smoking, and total serum cholesterol (11).

Given the limited evidence on the prevalence and risk factors for hypertension among women of childbearing age in Jordan, this study investigated the prevalence and determinants of hypertension among women of childbearing age in the 2019 Jordan WHO STEPS survey.

Methods

We conducted a secondary analysis using data from 2675 women aged 18–49 years who participated in the 2019 Jordan STEPS survey, implemented by the Jordanian Ministry of Health with the support of WHO. The Ethics Committee of the Jordan Ministry of Health approved the survey protocol. The study complied with the ethics principles of the Declaration of Helsinki, the Good Clinical Practice (GCP) and the Jordanian Ministry of Health regulatory requirements.

The STEPS survey is a standardized WHO method for collecting, analysing and disseminating data on NCDs and related risk factors, including tobacco use, unhealthy diets, physical inactivity and harmful use of alcohol. The 2019 Jordan STEPS survey was conducted by the Ministry of Health in collaboration with the Centre for Strategic Studies of the University of Jordan, with technical support from WHO and financial support from the United States Agency for International Development (USAID).

Written informed consent was obtained from all participants. The survey included a nationally representative sample of 5713 adults aged 18–49 years, comprising Jordanians and Syrians of both genders residing in Jordan. Visitors and non-residents were excluded.

We analysed data from 2336 female participants aged 18–49 years, representing a subset of the original 2675 women after applying exclusion criteria. Data on NCDs were obtained from the WHO microdata repository. The analysis focused on hypertension, diabetes and hypercholesterolaemia among the women. Blood pressure measurements were taken using digital blood pressure monitors. Hypertension was the most prevalent among the NCDs examined. Data from women with hypertension were further analysed and presented as mean values ± standard deviation (SD).

Statistical analysis

Descriptive statistics were used to present the results in frequencies and percentages. Univariate analysis identified factors associated with hypertension, which were then included in the multivariate models. Analysis was performed using SPSS version 28 (15). P < 0.05 was considered significant.

All factors with P < 0.05 in the univariate analysis–including marital status, education level, salt intake, use of spices other than salt when cooking, vigorous physical activity (\geq 10 minutes), hypertension, history of cardiovascular disease (angina/stroke), hypercholesterolaemia, diabetes mellitus, body mass index (BMI), waist circumference and fruit consumption frequency – were included in the regression model.

Ethics approval

This study involved secondary analysis of anonymised data from a national survey conducted by the Jordanian Ministry of Health. As the data were anonymous, the Ethical Guidelines for Medical and Health Research Involving Human Subjects were not applicable, and ethics approval was waived. Permission to use the Jordan STEPS 2019 dataset for research purposes was granted by WHO on 25 May 2024 (Ref: 2006).

Results

Sociodemographic characteristics

Data from 1521 (56.9%) Syrian women and 1154 (43.1%) Jordanian women aged 18–49 years were analysed. Prevalence of hypertension was 17.0%. Most participants were married homemakers, with a higher proportion of Syrian and nearly one-third of the Jordanian participants residing in urban areas in the north. Some participants were smokers and majority did not consume alcohol (Table 1).

Characteristics of participants who had hypertension

Women who had hypertension were obese, with a mean BMI of 31.7 ± 7.3 for Jordanian participants and 31.3 ± 7.4 for Syrian participants. Most of them (63%) were not taking antihypertensive medication (Table 2).

Univariate analysis of factors associated with hypertension

Among Syrian and Jordanian participants, hypertension was significantly associated with being married, having lower educational attainment and consuming salt. Participants with hypertension were more likely to report higher salt intake, more engagement in physical activity and a history of diabetes, hypercholesterolaemia, or cardiovascular disease (P < 0.05). However, hypertension was not associated with smoking or overall physical activity levels. The univariate regression analysis identified variables for inclusion in the multivariate models (Table 3).

Characteristic	Category	Jordanian (n = 1154)	Syrian (n = 1521)	
Marital status	Never married	226 (10 E)	N (%)	
muntur stutus	Currently married	820 (71.1)	102 (0.7)	
	Separated	18 (1.6)	41 (2.7)	
	Divorced	49 (4.2)	45 (3.0)	
	Widowed	39 (3.4)	99 (6.5)	
Urban residence	Yes	930 (80.6)	1248 (82.1)	
	No	224 (19.4)	273 (17.9)	
Region	Centre	686 (59.4)	878 (57.7)	
5	North South	365 (31.6) 103 (8.9)	643 (42.3)	
Education	< Primary school	500 (43.3)	1257 (82.6)	
	Primary school	367 (31.8)	177 (11.6)	
	High school	104 (9.0)	43(2.8)	
	College/University	17 (1.5)	2 (0.1)	
Work status	Governmental employee	74 (6.4)	1 (0.1)	
	Non-governmental employee	44 (3.8)	21 (1.4)	
	Self-employed	8 (0.7)	12 (0.8)	
	Student	86 (7.5)	24 (1.6)	
	Homemaker	840 (72.8)	1378 (90.6)	
	Retired	11 (1.0)	1 (0.1)	
	Inemployed (able to work)	86 (7 5)	70 (4 6)	
	Unemployed (upable to work)	4 (0.2)	(4.5) 0 (0.6)	
Dreament		4 (0.3)	9 (0.0)	
Pregnant	ies	57 (4.9)	129(8.5)	
Constant and	NO	1024 (88.7)	1312 (80.3)	
Smoker	Yes	219 (19.0)	134 (8.8)	
	No	935 (81.0)	1387 (91.2)	
Body mass index*	< 25	346 (30.0)	418 (27.5)	
	25-25.99	306 (26.5)	410 (27.0)	
	30-34.99	229 (19.8)	295 (19.4)	
	≥ 35	143 (12.4)	189 (12.4)	
Physical activity	Vigorous	83 (7.2)	117 (7.7)	
	Moderate	144 (12.5)	103 (6.8)	
Alcohol consumption	Yes	2 (0.2)	1 (0.1)	
	No	1152 (99.8)	1520 (99.9)	
Salt consumption	Always	261 (22.6)	328 (21.6)	
	Often	115 (10.0)	159 (10.5)	
	Sometimes	137 (11.9)	210 (13.8)	
	Rarely	140 (12.1)	171 (11.2)	
	Never	501 (43.4)	652 (42.9)	
Hypertension	Yes	153 (17.3)	191 (16.7)	
	No	730 (82.7)	952 (83.3)	
Hypercholesterolemia	Yes	46 (19.9))	38 (27.3)	
	No	185 (80.1)	101 (72.7)	
Diabetes mellitus	Yes	58 (10.5)	67 (11.1)	
	No	439 (89.5)	539 (88.9)	
Characteristic	Jordanian (Mean	n = 1024)	Syrian (n = 1312) Mean + SD	
Heiaht (cm)	150.2 ±	7.0	150 2 + 6 2	
Weight (cm)	71,7 + 17.0		159.5 ± 0.2	
[*] Body mass index	/1./±1/.0 281+70		282+68	
Waist circumforon co (cm)	28.1 ± 7.0		20.5 ± 0.0	
Viaist curtuingerence (cm)	87.6 ± 15.8		00.2 ± 15.5	
Deve active for iteration	104.0 ±	14.1	104.7 ± 13.8	
Days eating fruits per week	3.3 ±	2.4	1.6 ± 2.5	
Days eating vegetables per week	6.1 ±	2.7	5.5 ± 4.6	

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Cable 2 Sociodemographic characteristics of study participants with hypertension						
Characteristic	Jordanian (n = 153) N (%)	Syrian (n = 191) N (%)				
Marital status						
Never married	5 (3.3)	6 (3.1)				
Married	123 (80.9)	145 (75.9)				
Divorced	4(2.0)	12 (0.3) E (2.6)				
Widowed	14 (9.2)	23 (12.0)				
Urban						
Yes	130 (85.0)	164 (85.9)				
No	23 (15.0)	27 (14.1)				
Smoker						
Yes	38 (24.8)	21 (11.0)				
	115 (75.2)	170 (89.0)				
Physical activity (Vigorous) Ves	8 (5 2)	11 (5 7)				
No	145 (94.8)	180 (94.2)				
Physical activity (Moderate)						
Yes	16 (10.5)	16 (8.4)				
No	137 (89.5)	175 (91.6)				
Taking medication for hypertension						
Yes	63 (41.2)	64 (33.5)				
	90 (58.8)	127 (66.5)				
Using traditional healer for hypertension	0 (5 8)	14 (7.2)				
No	9 (5.8) 144 (94.1)	14 (7.3) 177 (92.7)				
Taking herbal/traditional remedies for hypertension						
Yes	14 (9.2)	16 (8.4)				
No	139 (90.2)	175 (91.6)				
Characteristic	Jordanian (n = 153) Mean ± SD	Syrian (n = 191) Mean ± SD				
Weight (kg)	81.0 ± 18.6	80.4 ± 17.6				
Height (cm)	159.5 ± 7.6	159.3 ± 6.2				
Body mass index	31.7 ± 7.3	31.3 ± 7.4				
Waist circumference (cm)	95.1 ± 15.8	93.9 ± 15.1				
Hip circumference (cm)	110.3 ± 13.6	110.3 ± 13.6				
Days eating fruits per week	3.13 ± 2.3	1.32 ± 1.4				
Days eating vegetables per week	6.56 ± 6.0	5.45 ± 5.6				
Average BP reading 1, mean ± SD						
Systolic	128.7 ± 66.2	121.5 ± 19.0				
	91.1 ± 07.0	05.0 ± 13.5				
Average BP reading 2, mean ± SD	120.0 + 17.6	121.6 + 50.2				
Diastolic	83.9 + 12.3	121.0 ± 59.3 87.7 ± 60.4				
Average BP reading 2 mean + SD	0,00	01.1 - 00.4				
Systolic	118.9 ± 17.7	117.5 ± 16.5				
Diastolic	83.6 ± 11.9	83.7 ± 11.8				

*P < 0.05

Binary logistic regression analysis

Binary logistic regression analysis identified significant risk factors for hypertension among the women. Among Jordanian women, hypertension was strongly associated with living in the central region (OR = 2.77, 95% CI = 1.067-7.227, $P = 0.036^*$) and a history of diabetes (OR = 5.410, 95% CI = 1.805-16.214, $P = 0.003^*$). Among Syrian women, hypertension was primarily associated with high salt intake (OR = 3.964, 95% CI = 1.144-13.737, $P = 0.030^*$), BMI (OR = 1.115, 95% CI = 1.007-1.234, $P = 0.036^*$), and a history of cardiovascular disease (Table 4).

Discussion

Hypertension negatively impacts women's quality-of-life and overall health, particularly during their childbearing years (18–49 years), and it is associated with adverse effects on maternal and foetal health (12–14,16,17,20). A larger proportion of the Syrian participants resided in northern Jordan, as most refugees lived in Al-Zaatari Camp, located in the northeast near the Syrian border. The lower cost of living in the north, than in Amman, makes it a more affordable option for refugees, who often experience higher poverty rates than Jordanian nationals

Table 3 Univariate analysis of factors assoc	associated with hypertension prevalence among study participants Iordanian (n - 882) Syrian (n - 1142)					
	Having Not having P		Having Not having			
	hypertension (n = 153)	hypertension (n = 730)	Ĩ	hypertension (n = 191)	hypertension (n = 952)	Ĩ
Urban			0.110			0.104
Yes	130	579		27	182	
No	23	151	*	164	770	0
Region Centre	106	431	0.042^	107	530	0.879
North	39	229		84	413	
South	8	70		0	0	
Marital status	_			ć		<0.001*
Never married Married	5 123	112	< 0.001*	6 145	49 809	
Separated	4	9	(0)001	12	19	
Divorced	6	31		5	20	
Widowed	14	22		23	54	
Employment status	2	50	0.001*	0	1	0.882
Non-government employee	5	59 29		3	1	
Self-employed	1	6		2	11	
Student	1	43		0	14	
Retired	139	537		0	1040	
Unemployed (able to work)	3	45		9	45	
Unemployed (unable to work)	0	2		1	9	
Education level	24		4	<i>.</i>	<i>.</i>	< 0.001*
< Primary Primary	86	292	<0.001*	161	765	
Secondary	59 17	65		3	33	
High school	9	122		2	29	
College/university	1	12		0	2	
Smoking	29	140	0.113	21	50	0.229
No	38 115	140 590		170	79 873	
Salt addition before or while eating		0,00	<0.040*		15	<0.018*
Always	43	142	(0.049	107	648	(0.010
Often	15	74		38	137	
Sometimes Rarely	16	89		25	76 36	
Never	9 70	335		14	55	
Use of spices other than salt when cooking			0.968			0.005*
Yes	61	295	ŗ	63	288	-
No	91	429		121	656	
Vigorous training (≥ 10 minutes	0		0.429*		<i>.</i>	0.031*
Yes No	8 145	51 679		11 180	61 801	
High salt intake	-+5	-15	< 0.001*	100	0)1	< 0.001*
Yes	60	70	< 0.001	85	26	< 0.001
No	61	421		59	926	
Advised by a doctor to reduce fat in the diet			< 0.001*			< 0.001*
Yes	48	95		63	118	
	75	394	*	80	497	+
Advised by a doctor to start or do more physical activity	54	120	< 0.001"	60	158	< 0.001"
No	68	369		75	460	
Advised by a doctor to maintain a healthy body weight			< 0.001*			< 0.001*
Yes	54	114		71	147	
	69	370	¥	-73	472	
History of caraiovascular diseases (angina/ stroke)			0.004^			< 0.001*
Yes	11	19		23	26	
No	142	711		168	926	

Table 3 Univariate analysis of factors associated with hypertension prevalence among study participants (concluded)							
Characteristic	Jordanian (n = 883)			Syrian (n = 1143)			
	Having hypertension (n = 153)	Not having hypertension (n = 730)	Р	Having hypertension (n = 191)	Not having hypertension (n = 952)	Р	
History of hypercholesterolaemia			0.001*			<0.001*	
Yes	22	21		20	18		
No	44	132		18	79		
History of diabetes			0.001*			0.001*	
Yes	32	25		32	32		
No	77	391		85	426		
Body mass index	31.7 ± 7.3	27.8 ± 6.9	< 0.001*	31.3 ± 7.4	28.1 ± 6.7	< 0.001*	
Waist circumference	95.1 ± 15.8	87.1±15.3	<0.001*	93.9±15.1	87.9±15.3	< 0.001*	
Number of days eating fruits per week	3.13 ± 2.3	3.4 ± 2.4	0.144	1.3 ± 1.4	1.6 ± 1.6	0.038*	
Number of days eating vegetables per week	6.1 ± 1.7	6.6 ± 6.0	0.068	5.5 ± 5.6	5.6 ± 4.5	0.601	

^{*}P < 0.05

 Table 4 Binary logistic regression analysis of factors associated with hypertension among study participants

Covariates	OR	В	95% CI	Р
Jordanians				
Region (centre)	2.77	1.02	1.07-7.23	0.036*
History of diabetes	5.410	1.69	1.81-16.21	0.003*
Syrians				
High salt intake	3.96	1.38	1.14-13.74	0.030*
History of cardiovascular disease (angina/stroke)	4.37	1.47	0.84-22.75	0.080
Body mass index	1.12	0.11	1.01-1.23	0.036*

(18,19). Syrian participants consumed less fruits and vegetables per week than Jordanians, likely due to a lower affordability and purchasing power, with basic staples, such as wheat, being prioritised over fresh produce.

The multivariate logistic regression model did not show a significant association between smoking and hypertension in this study. This aligns with findings from a Jordanian recent study on the prevalence, awareness and management of hypertension in an urban community in eastern Jordan, which also found no association between hypertension and smoking (11). The small proportion of smokers in this sample may explain the lack of association, because smoking is a wellestablished risk factor for hypertension globally.

The prevalence of hypertension in this study was 17%, and most of the participants were obese. This underscores the need for weight management and lifestyle modification programmes for women of childbearing age in Jordan. Over half of the participants were not taking antihypertensive medication, posing a significant challenge to achieving UHC. A recent study noted that hypertension prevention and intervention programmes remain inadequately structured and limited in Jordan (9).

This study's findings indicate that hypertension among Jordanian participants was significantly associated with living in the central region. This region is highly urbanized, with sedentary lifestyle likely contributing to the observed association. A history of diabetes was a key risk factor for hypertension among Jordanian women. Conversely, among Syrian participants, hypertension was significantly associated with high BMI. These findings underscore the need for targeted prevention and management programmes to reduce the burden of hypertension among women of childbearing age in Jordan.

These results align with those of a recent cross-sectional study conducted in Karnataka, which highlighted the importance of increasing awareness of hypertension prevention and management through health education and community-based disease management programmes (20).

Strengths and limitations of the study

To the best of our knowledge, this is the first large-scale study to examine risk factors for hypertension among women of childbearing age in Jordan. A key strength is the inclusion of Jordanians and Syrian refugees, providing a comprehensive analysis of hypertension determinants across different populations. The data were collected at the national level using the 2019 Jordan STEPS survey, a standardised tool for assessing noncommunicable diseases.

However, this study has limitations. The cross-sectional design prevented the establishment of causality, and reliance on self-reported data may have introduced reporting bias.

Conclusion

Among Jordanian participants, hypertension was associated with living in the central region and having a history of diabetes, while among Syrian participants, it was linked to high salt intake. This underscores the need for targeted prevention and management programmes to address these risk factors and reduce the burden of hypertension among women of childbearing age (18–49 years) in Jordan.

Future research should focus on longitudinal studies to monitor changes in hypertension prevalence, lifestyle patterns and the effectiveness of preventive measures over time.

Funding: None.

Conflict of interest: None declared.

Prévalence et déterminants de l'hypertension chez les femmes en âge de procréer en Jordanie

Résumé

Contexte : La charge de l'hypertension chez les femmes en âge de procréer est en augmentation en Jordanie, ce qui montre la nécessité d'étudier sa prévalence et les facteurs de risque associés.

Objectif : Évaluer la prévalence et les déterminants de l'hypertension chez les femmes âgées de 18 à 49 ans en Jordanie.

Méthodes : La présente étude a utilisé des données transversales secondaires sur l'hypertension, le diabète et l'hypercholestérolémie provenant de 2675 femmes jordaniennes et syriennes âgées de 18 à 49 ans dans le cadre de l'enquête STEPS de l'OMS menée en 2019 en Jordanie. Le traitement des données a été réalisé à l'aide du logiciel SPSS version 28, et une analyse univariée a été effectuée pour déterminer les associations entre les variables.

Résultats : La prévalence de l'hypertension parmi les participantes à l'étude était de 17 %, et les femmes souffrant d'hypertension étaient également obèses. L'hypertension artérielle était associée de manière significative au fait d'être mariée, à un faible niveau d'instruction et à une consommation élevée de sel. Les femmes concernées étaient également plus susceptibles d'avoir des antécédents de diabète, d'hypercholestérolémie et de maladie cardiovasculaire (p < 0,05).

Conclusion : La prévalence de 17 % d'hypertension parmi les participantes à l'étude, en plus de l'obésité, indique la nécessité d'interventions en matière de gestion du poids et de modification du mode de vie afin de réduire la charge de l'hypertension chez les femmes en âge de procréer en Jordanie.

مدى انتشار ارتفاع ضغط الدم ومُحدِّداته بين النساء في سن الإنجاب في الأردن

نادين عبدالهادي، ميرفت الصوص

الخلاصة

الخلفية: لوحظ تزايد عبءُ ارتفاع ضغط الدم بين النساء في سن الإنجاب في الأردن، مما يشير إلى الحاجة إلى استكشاف مدى انتشاره وعوامل الخطر المرتبطة به.

الأهداف: هدفت هذه الدراسة الى تقييم معدل انتشار ارتفاع ضغط الدم ومحدِّداته بين النساء في الفئة العمرية بين 18 و49 عامًا في الأردن.

طرق البحث: استخدمت هذه الدراسة بيانات مُقطعية ثانوية عن ارتفاع ضغط الدم والسكري وفرط كوليستيرول الدم العائلي لدى 2675 امرأة أردنية وسورية تتراوح أعهارهن بين 18 و49 عامًا، ووردت هذه البيانات في مسح منظمة الصحة العالمية للنهج التدريجي للترصد لعام 2019 في الأردن. وحُللت البياناتُ بالإصدار 28 من برنامج SPSS، وأُجريَ تحليل أحادي المتغيرات لتحديد الارتباطات بين المتغيرات.

النتائج: تبينِّ أن معدل انتشار ارتفاع ضغط الدم بين اللائي شملهن المسحُ 17٪، وأن النساء المصابات بارتفاع ضغط الدم مصابات بالسمنة أيضًا. وارتبطت الإصابة بارتفاع ضغط الدم ارتباطًا وثيقًا بالزواج، وانخفاض مستوى التحصيل العلمي، واستهلاك كميات كبيرة من الملح. وعلاوة على ذلك، فإنه يُرجح أن تكون المُصابات بارتفاع ضغط الدم لديهن تاريخ مرضي من الإصابة بمرض السكري وفَرُط كوليستيرول الدَّم وأمراض القلب والأوعية الدموية (القيمة الاحتمالية < 0.05).

الاستنتاجات: يشير معدلُ انتشار ارتفاع ضغط الدم البالغ 17٪ بين المشمولات في المسح، إلى جانب السمنة، إلى الحاجة إلى تدخلات ترمي إلى التحكم في الوزن وتعديل نمط الحياة لتخفيف عبء ارتفاع ضغط الدم بين النساء في سن الإنجاب في الأردن.

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