PSYCHOSOMATIC DISORDERS AND THEIR RELATIONSHIP TO STRESS AND PSYCHOLOGICAL HARDNESS IN PATIENTS WITH HIGH BLOOD PRESSURE

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Abstract:. The current study aimed at revealing the effect of psychosomatic disorders and their relationship to pressures and psychological hardness among hypertensive patients in Hebron Governorate. The study population consisted of hypertensive patients and non-hypertensives. The study was conducted on a sample consisting of (218) patients and non-patients with blood pressure, who were chosen randomly.), and the scale of the researcher's preparation (Hedaya bin Saleh), **It came to answer the main question, which is:** What is the effect of psychosomatic disorders and their relationship to stress and psychological hardness in patients with high blood pressure? Which states his hypothesis: There are no statistically significant differences at the significance level (α≤0.05). Between the averages of the effect of psychosomatic disorders and their relationship to stress and psychological hardness in patients with high blood pressure. The study concluded that there is a negative inverse relationship between psychological hardiness and psychosomatic disorders
In individuals who do not have blood pressure disease from the study sample, and that there is a direct positive relationship between psychological stress and psychosomatic disorders in patients with blood pressure from the study sample,

- **The researchers reached several results, most notably:** The impact of psychosomatic disorders in individuals with blood pressure disease is high, as a result, they have high psychological stress and low psychological hardness.
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- **The most important recommendations reached by the two researchers:**

The need to develop the psychological toughness of patients with blood pressure through counseling and behavioral training programs that enable them to develop the psychological toughness they have to face the pressures of life and isolation. And working to address and control the psychological pressures, challenges, and obligations of patients with high blood pressure. And searching for the reasons leading to the spread of psychosomatic disorders among patients with high blood pressure, and identifying their psychological and material needs and supporting them. And the need to raise awareness among patients with high blood pressure about psychosomatic disorders in order to increase their knowledge of their negative effects on their mental health, through holding seminars and awareness sessions on blood pressure and psychosomatic disorders.

Keywords: psychosomatic disorders, psychological stress, psychological hardness, blood pressure.

INTRODUCTION:

Psychological factors play an important and influential role in the spread and prevalence of many diseases that are due to psychological causes or social crises, tensions, conflicts, and emotions that take different forms according to the individual's dealings with these pressures that generated a lot of trouble, stress, tension, fatigue, and then the infection of what is called psychosomatic disorders. One of these disorders is high blood pressure. (Hussain, 2005).

High blood pressure is considered one of the diseases of the era, which occurs as a result of changing lifestyles and is called the silent killer disease, as it is not accompanied by symptoms at the beginning of its occurrence. However, it is easy to detect during the periodic routine examination and control it by modifying the lifestyle and drug treatment if needed. (Barakat, 2012).

And blood pressure is the criterion that indicates the suitability of the heart to work as a valid pump that pumps blood into the circulatory system to meet the requirements of different organs and tissues, and at the same time, it gives us an indication of the validity of the arteries in which blood flows, as it gives us a general indication if these arteries are narrow Or stiff or flexible or narrow as required by the body. (Ghanem, 2015). Blood pressure depends on two main factors: the amount of blood that the heart pumps per minute, and the extent of resistance of the arteries to the secretion of this amount that is flowing through it. Hence the direct relationship between blood pressure and multiple heart diseases, because the relationship here is clear by determining the responsibility of blood pressure in the occurrence of multiple heart diseases associated with the arteries. (Ghanem, 2015).

Specialized experts believe that the blood pressure of a person whose scale is less than (90/140MMHG) is considered normal blood pressure, and that which is greater than MMHG (100/160) means that the person suffers from high blood pressure disease or high blood pressure, and such a person suffers from high blood pressure. from contracting this disease (Ghanem, 2015).

The World Health Organization revealed that high blood pressure is a serious medical condition that greatly increases the risk of heart, brain, kidney and other diseases. It is estimated that (1.28) billion adults between the ages of (30-79) years worldwide suffer from high blood pressure. Most of them (one-third) live in low- and middle-income countries. It is estimated that (46%) of adults with high blood pressure are not aware that they have this condition, and less than half (42%) of adults with high blood pressure are diagnosed and treated, approximately (1) in (5) adults (21%) People with high blood pressure under control, high blood pressure is the leading cause of premature death worldwide. Despite the foregoing, Arab studies, at least in the field of blood pressure disease, are still limited, and here the importance of the study highlights the many factors that play a role in stress and psychological hardness and its relationship to psychosomatic disorders in patients with blood pressure. (Suldo, et al, 2008) applied a measure in psychological stress and another in coping styles, and the study sample included (135) students, students participating in the International Baccalaureate Program in the United States of America, and a group of sixth-grade students in Florida, and it reached The results of the study indicated that the outstanding students suffer from stress to a greater extent than their normal peers. It also indicated that the outstanding students used coping methods based on anger and positive evaluation of the situation.

In the study of Atena et al. (2012), which aimed to reveal the relationship of psychological toughness to coping strategies among female athletic and non-athlete students, and to achieve the objectives of the study, the analytical descriptive approach was used. The study was applied to a sample of (180) female students. The psychological hardness scale, and the coping methods scale. The results revealed that the psychological toughness of athletes is much higher than that of non-athletes. It also found a significant difference between the two groups in the components of psychological toughness. With regard to coping strategies, athletes use coping strategies (cognitive, behavioral avoidance, focus on the problem) more than non-athletes.

The study of Banafshe and others (2013, Banafshe, et al) dealt with knowledge of the relationship between psychological hardness and attachment styles among creative university students. A statistically significant relationship between attachment styles and psychological hardness with creativity.

RESULTS:

This chapter included a statistical analysis of the data resulting from the study, in order to answer the study's questions and examine its hypotheses.

*** RESULTS OF THE FIRST QUESTION: WHAT IS THE LEVEL OF PSYCHOSOMATIC DISORDERS IN PATIENTS WITH HIGH BLOOD PRESSURE AND THOSE WITHOUT HIGH BLOOD PRESSURE?**

To answer the first question, the arithmetic means and standard deviations of the level of psychosomatic disorders were extracted in hypertensive patients and non-hypertensive patients. As shown in Table (1).

Table (1): Arithmetic means and standard deviations for the level of psychosomatic disorders in hypertensive patients and non-hypertensive patients..

Table (1).

The number	The field	Hypertensive patients			Non Hypertensive patients		
		Arithmetic mean	standard deviation	Rank	Arithmetic mean	standard deviation	Rank
1	I feel difficult to breathe.	4.11	1.09	7	2.76	1.08	4
2	My constant heartbeat worries me.	4.41	0.86	3	2.44	1.66	11
3	I suffer from cold extremities even in hot weather.	4.32	0.81	4	2.90	1.02	7
4	They woke up from a lot of sleep due to a bad dream.	4.45	0.76	2	2.23	1.12	8
5	I have pain in my eyes that makes me unable to focus.	3.67	1.47	10	2.15	1.78	1
6	I am experiencing changes in my blood pressure readings.	4.17	1.12	6	2. 08	1.05	6
7	I feel sluggish and lethargic during the day.	3.99	1.22	9	2.56	1.44	5
8	I have headaches and pains that make it difficult to do my work.	3.49	1.45	11	2.67	1.25	2
9	I get bouts of headaches.	4.04	1.30	8	2.23	1.98	9
10	I am so tired and exhausted that I can't even eat.	4.22	1.82	7	2.09	1.21	3
11	I suffer from nausea.	4.20	0.07	5	1.54	1.55	10

12	I have trouble concentrating and paying attention.	4.47	0.89	1	1.09	0.88	12
Overall degree of psychosomatic disorders		**4.06**	**0.47**		**2.32**	**0.49**	

The data shown in Table (1) indicate that the level of psychosomatic disorders in patients with high blood pressure was high, as the arithmetic mean of the total score for the level of psychosomatic disorders for patients with blood pressure was (4.06) and a standard deviation (0.47).
It is clear from Table (1) that the level of psychosomatic disorders among non-hypertensives was low, as the arithmetic mean of the total level of psychosomatic disorders among non-hypertensives was (2.32) and a standard deviation (0.49).
From the foregoing, it is clear that patients with high blood pressure suffer from psychosomatic disorders more than people without high blood pressure.

RESULTS OF THE SECOND QUESTION: WHAT IS THE LEVEL OF PSYCHOLOGICAL STRESS AMONG PATIENTS WITH BLOOD PRESSURE AND THOSE WITHOUT BLOOD PRESSURE DISEASE?

To answer the second question, the arithmetic means and standard deviations of the level of psychological stress were extracted for patients with hypertension and those without hypertension. As shown in Table (2).

Table (2).

The number	**The field**	**Hypertensive patients**			**Non Hypertensive patients**		
		Arithmetic mean	standard deviation	Rank	Arithmetic mean	standard deviation	Rank
1	I feel bad for no reason.	4.11	1.09	7	2.76	1.08	4
2	My constant heartbeat worries me.	4.41	0.86	3	2.44	1.66	11
3	I suffer from cold extremities even in hot weather.	4.32	0.81	4	2.90	1.02	7
4	They woke up from a lot of sleep due to a bad dream.	4.45	0.76	2	2.23	1.12	8
5	I have pain in my eyes that makes me unable to focus.	3.67	1.47	10	2.15	1.78	1
6	I am experiencing changes in my blood pressure readings.	4.17	1.12	6	2. 08	1.05	6
7	I feel sluggish and lethargic during the day.	3.99	1.22	9	2.56	1.44	5
8	I have headaches and pains that make it difficult to do my work.	3.49	1.45	11	2.67	1.25	2
9	I get bouts of headaches.	4.04	1.30	8	2.23	1.98	9
10	I am so tired and exhausted that I can't even eat.	4.22	1.82	7	2.09	1.21	3

11	I suffer from nausea.	4.20	0.07	5	1.54	1.55	10
12	I have trouble concentrating and paying attention.	4.47	0.89	1	1.09	0.88	12
Overall degree of psychosomatic disorders		**4.06**	**0.47**		**2.32**	**0.49**	

The data shown in Table (2) indicate that the level of psychological stress among patients with blood pressure was high, as the arithmetic mean of the total score for the level of psychological stress for patients with blood pressure was (4.12) and a standard deviation (0.50).
It is clear from Table (1) that the level of psychological stress among those without blood pressure disease was low, as the arithmetic mean of the total degree of the level of psychological stress among those without blood pressure disease was (2.28) and a standard deviation (0.63).
From the foregoing, it is clear that patients with high blood pressure suffer from more psychological stress than people without high blood pressure.

RESULTS OF THE THIRD QUESTION: WHAT IS THE LEVEL OF PSYCHOLOGICAL HARDNESS AMONG PATIENTS WITH HIGH BLOOD PRESSURE AND THOSE WITHOUT HIGH BLOOD PRESSURE?

To answer the third question, the arithmetic means and standard deviations of the level of psychological hardiness were extracted for patients with high blood pressure and those without blood pressure. As shown in Table (3).

Table (3).

The number	**The field**	**Hypertensive patients**			**Non Hypertensive patients**		
		Arithmetic mean	standard deviation	Rank	Arithmetic mean	standard deviation	Rank
1	I feel bad for no reason.	4.11	1.09	7	2.76	1.08	4
2	My constant heartbeat worries me.	4.41	0.86	3	2.44	1.66	11
3	I suffer from cold extremities even in hot weather.	4.32	0.81	4	2.90	1.02	7
4	They woke up from a lot of sleep due to a bad dream.	4.45	0.76	2	2.23	1.12	8
5	I have pain in my eyes that makes me unable to focus.	3.67	1.47	10	2.15	1.78	1
6	I am experiencing changes in my blood pressure readings.	4.17	1.12	6	2. 08	1.05	6
7	I feel sluggish and lethargic during the day.	3.99	1.22	9	2.56	1.44	5
8	I have headaches and pains that make it difficult to do my work.	3.49	1.45	11	2.67	1.25	2
9	I get bouts of headaches.	4.04	1.30	8	2.23	1.98	9

10	I am so tired and exhausted that I can't even eat.	4.22	1.82	7	2.09	1.21	3
11	I suffer from nausea.	4.20	0.07	5	1.54	1.55	10
12	I have trouble concentrating and paying attention.	4.47	0.89	1	1.09	0.88	12
Overall degree of psychosomatic disorders		**4.06**	**0.47**		**2.32**	**0.49**	

The data shown in Table (3) indicate that the level of psychological hardness among patients with high blood pressure was moderate, as the arithmetic mean of the total degree of the level of psychological hardness for patients with high blood pressure was (2.79) and a standard deviation (0.67).

It is clear from Table (3) that the level of psychological hardness among those without blood pressure disease was of a medium degree, as the arithmetic mean of the total degree of the level of psychological hardness among those without blood pressure disease was (3.12) and a standard deviation (0.76).

From the foregoing, it is clear that patients with high blood pressure have less psychological hardness than people without high blood pressure.

Results of the fourth question: Is there a correlation between psychosomatic disorders and each of the psychological pressures and psychological hardness among patients with blood pressure from the study sample?

To answer the fourth question, it was converted into the following first main hypothesis:

- **The first main hypothesis: There is no statistically significant correlation at the level of significance (α ≤ 0.05) between psychosomatic disorders and each of the psychological pressures and psychological hardness among patients with blood pressure from the study sample.**

From the first main hypothesis, the following sub-hypotheses emerged:

- **The first null hypothesis: There is no statistically significant correlation at the level of significance (α≤0.05) between psychological hardiness and psychosomatic disorders among patients with high blood pressure from the study sample.**

To examine the first null hypothesis, the Pearson Correlation coefficient was used to find the relationship between psychological hardiness and psychosomatic disorders in patients with high blood pressure from the study sample, as shown in Table (4).

Table (4).

Results of Pearson correlation coefficient for the relationship between psychological hardness and psychosomatic disorders among patients with high blood pressure from the study sample

		psychosomatic disorders
Mental toughness	R	399 -**
	Sig.	0.000

** Statistically significant at the level of significance (¤≤0.01), * Statistically significant at the level of significance (¤≤0.05)

The data contained in Table (4) indicate that there is a negative inverse relationship between psychological hardiness and psychosomatic disorders in patients with high blood pressure, as the correlation coefficient for the relationship between psychological hardness and psychosomatic disorders in patients with high blood pressure was (-0.399), with a statistical significance of (0.000), and this indicates That the greater the psychological toughness of patients with blood pressure, the less psychosomatic disorders they have, and vice versa.

- **Results of the fifth question: Is there a correlation between psychological hardiness and psychosomatic disorders among individuals who do not have blood pressure disease from the study sample?**

- **The second null hypothesis: There is no statistically significant correlation at the level of significance (α≤0.05) between psychological hardiness and psychosomatic disorders in individuals without blood pressure from the study sample.**

To examine the second null hypothesis, Pearson Correlation was used to find the relationship between psychological hardiness and psychosomatic disorders in individuals who did not have blood pressure from the study sample, as shown in Table (5).

Table (5).

The results of the Pearson correlation coefficient for the relationship between psychological hardness and psychosomatic disorders in individuals without blood pressure disease from the study sample

		psychosomatic disorders
Mental toughness	R	264 -**
	Sig.	0.000

** Statistically significant at the level of significance (¤≤0.01), * Statistically significant at the level of significance (¤≤0.05)

The data contained in Table (5) indicate that there is a negative inverse relationship between psychological hardiness and psychosomatic disorders among individuals without blood pressure disease from the study sample, as the correlation coefficient of the relationship between psychological hardness and psychosomatic disorders among individuals without blood pressure disease from the study sample (-0.264) with a statistical significance (0.000), and this indicates that the greater the psychological hardness of individuals who do not have blood pressure disease from the study sample, the less psychosomatic disorders they have, and vice versa.

- **Results of the sixth question: Is there a correlation between psychological stress and psychosomatic disorders among patients with high blood pressure from the study sample?**
- **The third null hypothesis: There is no statistically significant correlation at the level of significance (α≤0.05) between psychological stress and psychosomatic disorders among patients with high blood pressure from the study sample.**

*To examine the third null hypothesis, Pearson Correlation was used to find the relationship between psychological stress and psychosomatic disorders among hypertensive patients from the study sample, as shown in Table (6).

Table (6).
The results of the Pearson correlation coefficient for the relationship between psychological stress and psychosomatic disorders among patients with high blood pressure from the study sample

		psychosomatic disorders
Mental toughness	R	591 -**
	Sig.	0.000

** Statistically significant at the level of significance (¤≤0.01), * Statistically significant at the level of significance (¤≤0.05)
The data contained in Table (6) indicate that there is a direct positive relationship between psychological stress and psychosomatic disorders among patients with blood pressure from the study sample, as the correlation coefficient for the relationship between psychological stress and psychosomatic disorders among patients with blood pressure from the study sample was (0.591), with a statistical significance (0.000).), and this indicates that the greater the psychological stress among patients with blood pressure from the study sample, the more psychosomatic disorders they have, and vice versa.

- **Results of the seventh question: Is there a correlation between psychological stress and psychosomatic disorders among individuals who do not have blood pressure disease from the study sample?**
- **The fourth null hypothesis: There is no statistically significant correlation at the level of significance (α≤0.05) between psychological stress and psychosomatic disorders among individuals without blood pressure from the study sample.**

To examine the fourth null hypothesis, the Pearson Correlation coefficient was used to find the relationship between psychological stress and psychosomatic disorders in individuals without blood pressure from the study sample, as shown in Table (7).

Table (7)

The results of the Pearson correlation coefficient for the relationship between psychological stress and psychosomatic disorders in individuals without blood pressure disease from the study sample

		psychosomatic disorders
Mental toughness	R	603 -**
	Sig.	0.000

** Statistically significant at the level of significance (¤≤0.01), * Statistically significant at the level of significance (¤≤0.05)

The data contained in Table (7) indicate that there is a direct positive relationship between psychological stress and psychosomatic disorders among individuals without blood pressure disease from the study sample, as the correlation coefficient of the relationship between psychological stress and psychosomatic disorders among individuals without blood pressure disease from the study sample reached (0.603) with a statistical significance of (0.000), and this indicates that the greater the psychological stress among individuals who do not have blood pressure disease from the study sample, the more psychosomatic disorders they have, and vice versa.

- **Results of the eighth question: Are there differences between the mean scores of the study sample (patients with high blood pressure) in psychosomatic disorders, psychological stress, and psychological hardness due to the variables (sex, age, marital status, work, income, and educational level)?**

To answer the eighth question, it was converted into the following main hypothesis:

* The second main hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the mean scores of the study sample (hypertensive patients) in psychosomatic disorders, psychological stress, and psychological hardness due to the variables (sex, age, marital status, work, and income). and educational level).

To examine the second main hypothesis, the dependent multivariate analysis of variance (MANOVA) was used for the purposes of examining the differences between the mean scores of the study sample (hypertensive patients) in psychosomatic disorders, psychological stress, and psychological hardness due to the variables (sex, age, marital status, work, income, and educational level).), as indicated in Table (8):

Table (8)

The results of multiple analysis of variance (MANOVA) for the differences between the mean scores of the study sample (hypertensive patients) in psychosomatic disorders, psychological stress and psychological hardness due to the variables (sex, age, marital status, income, educational level, work)

source of contrast	dependent variables	sum of squares	degrees of freedom	mean of squares	Calculated (q) value	Statistical significance
sex	psychosomatic strikes	0.25	1	0.25	1.19	0.278
	Psychological stress	0.00	1	0.00	0.01	0.942
	Mental toughness	0.21	1	0.21	0.49	0.487
the age	psychosomatic strikes	0.09	2	0.04	0.21	0.808
	Psychological stress	0.10	2	0.05	0.19	0.827
	Mental toughness	1.39	2	0.69	1.64	0.200
marital status	psychosomatic strikes	0.16	3	0.05	0.26	0.853

source of contrast	dependent variables	sum of squares	degrees of freedom	mean of squares	Calculated (q) value	Statistical significance
	Psychological stress	1.30	3	0.43	1.71	0.170
	Mental toughness	1.70	3	0.57	1.34	0.267
income	psychosomatic strikes	1.06	2	0.53	2.52	0.086
	Psychological stress	0.14	2	0.07	0.28	0.758
	Mental toughness	0.65	2	0.32	0.77	0.468
Educational level	psychosomatic strikes	0.06	4	0.01	0.07	0.992
	Psychological stress	1.07	4	0.27	1.06	0.381
	Mental toughness	2.53	4	0.63	1.50	0.209
the job	psychosomatic strikes	0.12	2	0.06	0.27	0.760
	Psychological stress	0.59	2	0.29	1.16	0.319
	Mental toughness	0.39	2	0.19	0.46	0.633
The error	psychosomatic strikes	19.74	94	0.21		
	Psychological stress	23.80	94	0.25		
	Mental toughness	39.75	94	0.42		
the total	psychosomatic strikes	1817.94	109			
	Psychological stress	1877.88	109			
	Mental toughness	894.33	109			

** Statistically significant at the level of significance (¤≤0.01), * Statistically significant at the level of significance (¤≤0.05)

It is clear from the results presented in Table (8) that:

- **Fifth null hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the mean scores of the study sample (hypertensive patients) in psychosomatic disorders, psychological stress and psychological hardness due to the gender variable.**

* The results presented in Table (8) showed that there were no statistically significant differences at the level of significance (α ≤ 0.05) in the mean scores of the study sample (hypertensive patients) in psychosomatic disorders due to the gender variable, where the value of the statistical significance of the total score for psychosomatic disorders was (0.278), which is greater than (0.05) and is not statistically significant.

* There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychological stress due to the gender variable, where the value of the statistical significance for the total degree of psychological stress was (0.942), which is greater than (0.05). and not statistically significant.

* There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychological stress due to the gender variable, where the value of the statistical significance for the total degree of psychological stress was (0.942), which is greater than (0.05). and not statistically significant.

- **The sixth null hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the mean scores of the study sample (hypertensive patients) in psychosomatic disorders, psychological stress and psychological hardness due to the variable of age.**

- The results presented in Table (8) showed that there were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychosomatic disorders due to the age variable, where the value of the statistical significance of the total score for psychosomatic disorders was (0.808), which is greater than (0.05) and is not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertension patients) in psychological stress due to the age variable, where the value of the statistical significance of the total degree of psychological stress was (0.827), which is greater than (0.05). and not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychological hardness due to the age variable, where the value of the statistical significance of the total degree of psychological hardness was (0.200), which is greater than (0.05). and not statistically significant.

- **The seventh null hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the mean scores of the study sample (hypertensive patients) in psychosomatic disorders, psychological stress and psychological hardness due to the social status variable.**

- The results presented in Table (8) showed that there were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychosomatic disorders due to the social status variable, where the value of the statistical significance was for the total degree of psychosomatic disorders (0.853), which is greater than (0.05) and is not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertension patients) in psychological stress due to the social status variable, where the value of the statistical significance of the total degree of psychological stress was (0.170), which is greater than (0.05).) and not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychological hardness due to the social status variable, where the value of the statistical significance of the total degree of psychological hardness was (0.267), which is greater than (0.05).) and not statistically significant.

- **The eighth null hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the mean scores of the study sample (hypertensive patients) in psychosomatic disorders, psychological stress and psychological hardness due to the income variable.**

- The results presented in Table (8) showed that there were no statistically significant differences at the significance level (α ≤ 0.05) in the mean scores of the study sample (hypertensive patients) in psychosomatic disorders due to the income variable, where the value of the statistical significance of the total score for psychosomatic disorders was (0.086), which is greater than (0.05) and is not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertension patients) in psychological stress due to the income variable, where the value of the statistical significance for the total degree of psychological stress was (0.758), which is greater than (0.05). and not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychological hardiness due to the income variable, where the value of the statistical significance of the total degree of psychological hardiness was (0.468), which is greater than (0.05). and not statistically significant.

- **The ninth null hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the mean scores of the study sample (hypertensive patients) in psychosomatic disorders, psychological stress and psychological hardness due to the educational level.**

- The results presented in Table (8) showed that there were no statistically significant differences at the significance level (α ≤ 0.05) in the mean scores of the study sample (hypertensive patients) in psychosomatic disorders due to the educational level variable, where the value of the statistical significance was for the total degree of psychosomatic disorders (0.992), which is greater than (0.05), and is not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertension patients) in psychological stress due to the educational level variable, where the value of the statistical significance of the total degree of psychological stress was (0.381), which is greater than (0.05).) and not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychological hardness due to the educational level variable, where the value of the statistical significance of the total degree of psychological hardness was (0.209), which is greater than (0.05).) and not statistically significant.

- **The tenth null hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the mean scores of the study sample (hypertensive patients) in psychosomatic disorders, psychological stress and psychological hardness due to work.**

- The results presented in Table (8) showed that there were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychosomatic disorders due to the work variable, where the value of the statistical significance of the total score for psychosomatic disorders was (0.760), which is greater than (0.05) and is not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (blood pressure patients) in psychological stress due to the work variable, where the value of the statistical significance for the total degree of psychological stress was (0.319), which is greater than (0.05). and not statistically significant.

- There were no statistically significant differences at the significance level (α≤0.05) in the mean scores of the study sample (hypertensive patients) in psychological hardness due to the work variable, where the value of the statistical significance for the total degree of psychological hardness was (0.633), which is greater than (0.05). and not statistically significant.

Discussing results with comments on studies and recommendations

- **First: Discussing the results with comments on the studies:**

***Discussing the results of the first question: What is the level of psychosomatic disorders in hypertensive patients and non-hypertensive patients?**

The results showed that the level of psychosomatic disorders in patients with high blood pressure was high, as the arithmetic mean of the total score for the level of psychosomatic disorders for patients with high blood pressure was (4.06) and a standard deviation (0.47).

In contrast, the level of psychosomatic disorders among non-hypertensive individuals was low, as the arithmetic mean of the total score for the level of psychosomatic disorders among non-hypertensive individuals was 2.32 with a standard deviation of 0.49.

It is evident from the above that hypertensive patients suffer from psychosomatic disorders more than non-hypertensive individuals.
This result is consistent with the study conducted by Al-Askar (2020), which found that the level of psychosomatic disorders among abused women was high. However, it differs from the study conducted by Al-Momani and Al-Fraihat (2016), which found that the level of psychosomatic disorders was moderate.

The researchers attribute this to the fact that hypertensive patients often have poor physical health, which can lead to difficulty breathing, increased heart rate, and a constant feeling of coldness in their extremities, unlike non-hypertensive individuals.

In conclusion, the study suggests that hypertensive patients may be more susceptible to psychosomatic disorders due to their physical health status, which can affect their psychological well-being. It is essential to consider the psychological impact of hypertension and to provide adequate psychological support to hypertensive patients to improve their overall health and well-being.
The second question was about the level of psychological stress among hypertensive and non-hypertensive individuals.
The results showed that the level of psychological stress among hypertensive patients was high, as the arithmetic mean of the total score for the level of psychological stress among hypertensive patients was 4.12 with a standard deviation of 0.05.

In contrast, the level of psychological stress among non-hypertensive individuals was low, as the arithmetic mean of the total score for the level of psychological stress among non-hypertensive individuals was 2.28 with a standard deviation of 0.63.

It is evident from the above that hypertensive patients suffer from higher levels of psychological stress than non-hypertensive individuals. This may be due to the physical discomfort and health problems associated with hypertension, which can lead to increased psychological distress. Therefore, it is essential to address the psychological impact of hypertension and provide adequate psychological support to hypertensive patients to improve their overall well-being Individuals with high blood pressure tend to have more psychological issues than those who are not affected by the disease. The researchers attribute this result to the fact that it is normal for individuals with chronic diseases to experience psychological distress, due to the anxiety that accompanies the patient about their life, in addition to physical pain, fear of the unknown regarding their health status, and the development of the disease in them.

Discussion of the results of the third question: What is the level of psychological resilience among patients with high blood pressure and those who are not affected by high blood pressure?

The results showed that the level of psychological resilience among patients with high blood pressure was moderate, with an average score.
The overall level of psychological resilience for patients with high blood pressure was (2.79) with a standard deviation of (0.67). The level of psychological resilience among those who are not affected by high blood pressure was also moderate, with an average score of (3.12) and a standard deviation of (0.76). This indicates that patients with high blood pressure have lower psychological resilience than those who are not affected by high blood pressure.

The researchers attribute this result to the fact that patients with high blood pressure experience psychological and physical distress due to the disease, which further lowers their psychological resilience For patients with high blood pressure, the correlation coefficient for the relationship between psychological rigidity and psychosomatic disorders was found to be -0.399 with a statistical significance of 0.000. This result agrees with the study conducted by Steinhardt et al. (2000), which found a negative correlation between overall rigidity and its sub-dimensions (commitment, control, challenge) and technical coping strategies. The results showed a fit of the relationship model between psychosomatic symptoms and the influencing factors (psychological rigidity, coping strategies, and perceived stress).
The researchers attribute this result to patients with high blood pressure who suffer from psychosomatic disorders, leading to feelings of fear and anxiety about their health. This in turn leads to a decrease in their level of psychological rigidity, as they begin to believe in any prescription, even if it is not from a specialized doctor, in the hope that it will cure their illness.

Regarding the discussion of the results of the second null hypothesis, which states that there is no statistically significant correlation at the significance level ($\alpha \leq 0.05$) between psychological rigidity and psychosomatic disorders in non-hypertensive patients from the study sample, the researchers found no significant correlation between the two variables among the non-hypertensive patients.

The study found a negative inverse relationship between psychological rigidity and psychosomatic disorders among individuals who are not suffering from hypertension from the study sample. The correlation coefficient for the relationship between psychological rigidity and psychosomatic disorders among individuals who are not suffering from hypertension from the study sample was found to be -0.264 with a statistical significance of 0.000.

This result differs from the study conducted by Al-Shammary (2021), which found a relationship between psychological rigidity and the occurrence of psychosomatic disorders among both prisoners and non-prisoners from the study sample, showing an increase in the correlation.
The researchers attribute this result to the fact that ordinary individuals who are not suffering from hypertension, if they experience some psychosomatic disturbances, it leads to a decrease in their psychological resilience due to their perception of the nature of the disease they are suffering from. Even if the symptoms are mild and not concerning, humans by nature fear disease and death.

Discussion of the results of the third null hypothesis: there is no statistically significant correlation relationship at the significance level ($\alpha \leq 0.05$) between psychological pressures and psychosomatic disturbances in hypertensive patients from the study sample
The study found a positive direct correlation between psychological pressures and psychosomatic disturbances in hypertensive patients from the study sample, with a correlation coefficient of (0.591) and statistical significance (0.000).

The researchers attribute this result to the fact that individuals suffering from hypertension experience anxiety and fear about their health status, as well as varying pains in different parts of their bodies from time to time. Therefore, their doubts about their health can lead to an increase in psychological pressures and exacerbate their psychosomatic symptoms The possibility of recovery from hypertension exposes patients to psychological pressures that negatively affect their mental health.

Discussion of the results of the fourth null hypothesis: there is no statistically significant correlation relationship at the significance level ($\alpha \leq 0.05$) between psychological pressures and psychosomatic disturbances in individuals who are not suffering from hypertension from the study sample.

The study found a positive direct correlation between psychological pressures and psychosomatic disturbances in individuals who are not suffering from hypertension from the study sample, with a correlation coefficient of (0.457) and statistical significance (0.001).
The researchers attribute this to the fact that anyone who experiences some pain, even if it is minor, feels anxious and afraid for their health, because delusions and doubts dominate their thinking about the type of disease that may have affected them, which exposes them to psychological pressures.

Discussion of the results of the fifth null hypothesis: There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of the scores of the study sample (patients with hypertension) in somatic disorders, psychological stress and psychological resilience attributed to the gender variable.
The results showed no statistically significant differences in the means of the scores of the study sample (patients with hypertension) in somatic disorders attributed to the gender variable.

Similarly, there were no statistically significant differences in the means of the scores of the study sample (patients with hypertension) in psychological stress attributed to the gender variable.

Additionally, there were no statistically significant differences in the means of the scores of the study sample (patients with hypertension) in psychological resilience attributed to the gender variable.

The researchers attribute this result to the fact that the Palestinian community receives the same medical care, whether in private clinics or government hospitals, and that psychological and

medical counseling in the Palestinian community is almost nonexistent. Therefore, the responses of the study sample, who are patients with hypertension, were similar.

Discussion of the results of the sixth null hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the means of the scores of the study sample (patients with hypertension) in somatic disorders, psychological stress, and psychological resilience attributed to the age variable.

The results showed no statistically significant differences in the means of the scores of the study sample (patients with hypertension) in somatic disorders attributed to the age variable.

This result differs from the study conducted by Al-Momani and Al-Fraihat (2016), which found that age is one of the variables that predict somatic disorders. It also differs from the study by Al-Askar (2020), which found statistically significant differences in the level of somatic disorders in different areas among women who were victims of violence in the social protection unit based on the age group variable.

The results showed no statistically significant differences in the means of the scores of the study sample (patients with hypertension) in psychological stress attributed to the age variable.

This result agrees with the study by Al-Shammari (2014), which found no statistically significant differences in the attitudes of the study participants towards psychological stress attributed to the age variable.

Additionally, there were no statistically significant differences in the means of the scores of the study sample (patients with hypertension) in psychological resilience attributed to the age variable.

This result is in agreement with the study conducted by Al-Shammari (2014), which found no statistically significant differences in the attitudes of the study participants towards psychological resilience attributed to the variable of age. The researchers attribute this result to the fact that despite the age differences among hypertensive patients, they receive the same medical care and live in the same community that lacks medical awareness and psychological guidance. Therefore, they suffer from the same degree of psychological stress and almost the same level of psychological resilience.

Discussion of the results of the seventh null hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the means of the scores of the study sample (patients with high blood pressure) in somatic disorders, psychological stress, and psychological rigidity attributed to the social status variable.
The results showed no statistically significant differences in the means of the scores of the study sample (patients with high blood pressure) in somatic disorders attributed to the social status variable.

Discussion of the results of the seventh null hypothesis: There are no statistically significant differences at the significance level (α≤0.05) between the means of the scores of the study sample (patients with high blood pressure) in somatic disorders, psychological stress, and psychological rigidity attributed to the social status variable.
The results showed no statistically significant differences in the means of the scores of the study sample (patients with high blood pressure) in somatic disorders attributed to the social status variable.

Furthermore, this study found no statistically significant differences in the means of the scores of the study sample (patients with high blood pressure) in psychological rigidity attributed to the social status variable.
This result agreed with the study by Al-Shammari (2014), which found no statistically significant differences in the attitudes of the study participants towards psychological rigidity attributed to the social status variable.
The researchers attribute this result to the fact that the Palestinian society in Hebron is still relatively cohesive, meaning that a person with high blood pressure, regardless of their social status, receives support.

Discussion of the results of the eighth null hypothesis: There are no statistically significant differences at a significance level ($\alpha \leq 0.05$) between the mean grades of the individuals in the study sample (hypertensive patients) in somatic disorders, psychological pressures, and psychological rigidity attributed to the income variable.

The results showed no statistically significant differences in the mean grades of the individuals in the study sample (hypertensive patients) in somatic disorders attributed to the income variable. Additionally, there were no statistically significant differences in the mean grades of the individuals in the study sample (hypertensive patients) in psychological pressures and psychological rigidity.

These results are consistent with the study conducted by Al-Shammary (2014), which found no statistically significant differences in the attitudes of the study participants towards psychological pressures attributed to the income variable.

Additionally, the results showed no statistically significant differences in the mean grades of the individuals in the study sample (hypertensive patients) in psychological rigidity attributed to the income variable. This finding also aligns with Al-Shammary's (2014) study, which found no statistically significant differences in the attitudes of the study participants towards psychological rigidity attributed to the income variable

These researchers attribute these findings to the fact that the disease does not distinguish between the rich and the poor. When a person suffers from hypertension, they experience psychological pressures, although there may be differences in the pain relief treatment methods because hypertension has no cure and is a chronic disease.

Discussion of the results of the ninth null hypothesis: There are no statistically significant differences at a significance level ($\alpha \leq 0.05$) between the mean grades of the individuals in the study sample (hypertensive patients) in somatic disorders, psychological pressures, and psychological rigidity attributed to the educational level variable.

The results showed no statistically significant differences in the mean grades of the individuals in the study sample (hypertensive patients) in somatic disorders attributed to the educational level variable.

This finding differs from the study conducted by Al-Askar (2020), which found statistically significant differences in the level of somatic disorders in their various domains among women who were victims of domestic violence and received social protection unit services, according to their educational level variable.
Additionally, the results showed no statistically significant differences in the mean grades of the individuals in the study sample (hypertensive patients) in psychological pressures attributed to the educational level variable.

This finding aligns with the study conducted by Awda (2010), which found no significant differences in psychological pressures attributed to the educational level variable of parents.

Additionally, the results showed no statistically significant differences in the mean grades of the individuals in the study sample (hypertensive patients) in psychological rigidity attributed to the educational level variable. This finding is consistent with the study conducted by Awda (2010), which found no significant differences in psychological rigidity attributed to the educational level variable of parents.

The researchers attribute this result to the fact that regardless of the educational level of hypertension patients, when a person becomes ill, they become helpless and powerless like a small child. Therefore, when a person develops hypertension, they are exposed to a lot of psychological disturbances and pressures that lead to a weakening of their psychological resilience.

Discussion of the results of the tenth null hypothesis: There are no statistically significant differences at the significance level ($\alpha \leq 0.05$) between the means of the scores of the study sample (hypertension patients) in psychosomatic disorders, psychological pressures, and psychological resilience attributed to work.

The results showed no statistically significant differences in the means of scores of the study sample (hypertension patients) in psychosomatic disorders attributed to work, psychological pressures attributed to work, and psychological resilience attributed to work.

The researchers attribute these results to the fact that the patient's work does not alleviate their psychosomatic disorders and psychological pressures caused by the disease, which leads to a weakening of their psychological resilience. Therefore, no differences were observed in the psychosomatic disorders, psychological pressures, and psychological resilience of the study sample.

Secondly, based on the study's results, the researchers recommend the following:

1. The necessity of developing the psychological resilience of hypertension patients through counseling and behavioral training programs that empower them to enhance their psychological resilience to cope with life pressures.
2. Treating psychological stress, challenges, and commitments, and controlling them in patients with high blood pressure.
3. Investigating the reasons for the spread of psychosomatic disorders in patients with high blood pressure, identifying their psychological and material needs, and providing support.
4. Raising awareness among patients with high blood pressure about psychosomatic disorders in order to increase their knowledge of their negative effects on their mental health, through holding seminars and awareness-raising courses specifically for high blood pressure and psychosomatic disorders.
5. Conducting further studies related to psychosomatic disorders and linking them to other chronic diseases, such as: Diabetes, stomach ulcers, heart disease, ...etc.

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