# Psychosocial Burdens of Hypertensive Patients

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## Abstract

Hypertension is a major risk factor and antecedent of cardiovascular and end organ damage (myocardial infarction, chronic kidney disease, descriptive design was conducted in Babylon city outpatients and health centers to identify psycho-social burdens of patients with hypertension,A questionnaire including demographic information and tow validated instruments assessing psychosocial burdens of hypertensive patients,Data were collected through self-administration of questionnaire regarding the study,Data were analyzed through applying descriptive analysis as frequency, percentage, The participants had 43-48 years aged (45.1%) and were married (88.0%) with Not educated (52.2%) and (71.7%) were Male, the physical indicators of sample weight 90 and more kg (50%) and height was 151-160 cm (38.6%) with normal BMI (38.0%).

Patients face stress and each day and the lack of enough time to relax and the lack of a holiday in the middle of the week, lead them to suffer various health problems such specially hypertension.

***Keywords:*** *Psychosocial and Hypertensive.*

## Introduction

Hypertension is a major risk factor and antecedent of cardiovascular and end organ damage (myocardial infarction, chronic kidney disease[1], ischaemic and haemorrhagic stroke, heart failure and premature death). It should not be treated alone, but include assessment of all cardiovascular risk factors in a holistic approach, incorporating patient-centred lifestyle modification.[1]Epidemiology of blood pressure Elevated blood pressure, known as hypertension, is an important and treatable cause of CVD morbidity and mortality. Hypertension is an independent risk factor for myocardial infarction, chronic kidney disease, ischaemic and haemorrhagic stroke, heart failure and premature death. Left untreated and/or uncontrolled, hypertension is associated with continuous increases in CVD risk, and the onset of vascular and renal damage. In 2012–13, 6 million Australians (34%) aged 18 years and over were hypertensive, as defined by blood pressure ≥140/90 mmHg, or were taking antihypertensive medication. Of these, more than 4.1 million (68%) had uncontrolled or untreated hypertension.The proportion of Australians with untreated or uncontrolled hypertension was greater in men than women (24.4% versus 21.7%), and was shown to increase with age peaking at 47% in individuals over 75 years of age. The incidence of untreated or uncontrolled hypertension was lowest in the Northern Territory (19.6%) and highest in Tasmania (28.6%).[4] The prevalence of hypertension has also been associated with lower household income and residing within regional areas of Australia.(1) Global systematic reviews and meta- analyses suggest that the prevalence of dementia is lower in sub-Saharan Africa and higher in Latin America than in the rest of the world.3,4 According to Chaves et al,5 in Brazil the incidence of mild cognitive impairment (MCI) is 13.2 per 1000 person-years and for Alzheimer's disease (AD) is 14.8 per 1000 person-years.(2).In Brazil, despite the reduction in mortality from these diseases between 1996 and 2007, this group still represented the leading cause of death in the country in 2011. In 2000, hypertensive heart disease occupied the 16th rank regarding mortality worldwide, rising to 10th place in 2012.(3)Stress plays a pivotal role in an individual life in day to day life and the strain faced by the individual has been associated as an independent factor contributing to hypertension

in number of occupation, Factors like work-related stress, resulting in the imbalance between job demands, job control and domestic chores are the factors that plays a significant role in the etiology of hypertension in the modern era. Stress is difficult to analyze at the physiological and psychosocial levels due to its multi factorial causes.[4]

Whenever a women experience anger they try to keep it unknown or secretive of a fear that it will menace not only their feminity but also their surroundings and relationships, essential hypertension was found to be related with specific social ability insufficiencies that are apparent only during the self-assured expression of anger.

Socioeconomic status (SES) has long been identified as a risk factor for hypertension. A review by Spruill suggests a complex interaction of social, psychological, and behavioral factors contributing to unequal distribution of diseases. Compared to their high SES peers, individuals of low SES are more likely to lack socio-political power and economic resources thereby resulting occupancy of less health enhancing educational, occupational, residential and recreational environments. These factors lead to differential exposures to stressors (e.g., unemployment, crime and violence) and fewer resources (e.g., recreation and physical activity) to cope with accumulation of stressors that combine to contribute to greater risk of hypertension. In a recent meta-analysis, multiple indicators of SES (i.e., income, occupation, and education) were associated with an increased risk of hypertension[5]

This study aims to identify the psycho-social burdens of hypertensive patients in Babylon, assess the psychosocial burdens at each clinic visit can benefit health care providers by addressing challenges faced and facilitate subsequent referral to appropriate specialists.

## Method

**Design:** A descriptive design was conducted in Babylon city outpatients and health centers to identify psycho-social burdens of patients with hypertension and their job in different cities of Babylon

**Participants:** None randomly selected patients between Jan 2016 and April 2017. When they attended outpatient clinics or health centers were handed covering letters explaining the purpose of the study, and assuring the confidentiality of information. Once in the target number was (360) patients during the period of data collection, the sample of study was (184) patients.

**Instruments:** Instruments were developed and used in order to collect data. A questionnaire including demographic information and tow validated instruments assessing psychosocial burdens of hypertensive patients.

**Data Collection:** Data were collected through self-administration of questionnaire regarding the study. Participants provide self-report information across psychosocial burdens of teachers

**Data analysis:** Data were analyzed through applying descriptive analysis as frequency, percentage and mean score and the related data by using SPSS 23.0 software program. A level of $P < 0.05$ was considered statistically significant. Polite (1996).

**Ethical Considerations:** Ethical approval was obtained from a scientific research commute at the nursing college and governmental health department (2019/18).

## Results

**Table 1: Shows the demographic characteristics of the participants**

| **Hypertensive Patients Age** | **Frequency** | **Percent** |
|---|---|---|
| 25-30 | 6 | 3.3 |
| 37-42 | 24 | 13.0 |
| 43-48 | 83 | 45.1 |
| 49 and more | 71 | 38.6 |
| Total | 184 | 100.0 |
| **Patients Gender** | **Frequency** | **Percent** |
| Female | 52 | 28.3 |
| Male | 132 | 71.7 |
| Total | 184 | 100.0 |
| **Patients Marital Status** | **Frequency** | **Percent** |
| Single | 22 | 12.0 |
| Married | 162 | 88.0 |
| Total | 184 | 100.0 |
| **Patients Educational Status** | **Frequency** | **Percent** |
| Not educated | 96 | 52.2 |
| Educated | 88 | 47.8 |
| Total | 184 | 100.0 |

The participants had 43-48 years aged (45.1%) and were married (88.0%) with Not educated (52.2%) and (71.7%) were Male.

**Table 2: Indicate the physical characteristics of hypertensive patients.**

| **Hypertensive patients weight** | **Frequency** | **Percent** |
|---|---|---|
| 50-60 | 22 | 12.0 |
| 61-70 | 24 | 13.0 |
| 71-80 | 8 | 4.3 |
| 81-90 | 38 | 20.7 |
| 91 and more | 92 | 50.0 |
| Total | 184 | 100.0 |
| **Hypertensive patients height** | **Frequency** | **Percent** |
| 140-150 | 50 | 27.2 |
| 151-160 | 71 | 38.6 |
| 161-170 | 57 | 31.0 |
| 171-180 | 6 | 3.3 |
| Total | 184 | 100.0 |
| **Hypertensive patients BMI** | **Frequency** | **Percent** |
| Underweight | 43 | 23.4 |
| Normal | 70 | 38.0 |
| Overweight | 53 | 28.8 |
| Obese | 18 | 9.8 |
| Total | 184 | 100.0 |

This table showed the physical indicators of sample weight 90 and more kg (50%) and height was 151-160 cm (38.6%) with normal BMI (38.0%)

**Table 3: Shows the blood pressure measurement of the participants.**

| **Blood Pressure** | **Frequency** | **Percent** |
|---|---|---|
| No Hypertension | 7 | 3.8 |
| Risky for hypertension | 55 | 29.9 |
| Hypertension | 122 | 66.3 |
| **Total** | **184** | **100.0** |

This table showed that (66.3%) of patients had hypertension during visiting the outpatients

**Table 4: Shows the descriptive of blood pressure of the teachers**

| **Descriptive Statistics** | | | | | |
|---|---|---|---|---|---|
| **B/P** | **N** | **Minimum** | **Maximum** | **Mean** | **Std. Deviation** |
| BPSYS | 60 | 100 | 180 | 141.67 | 17.866 |
| BPDYS | 60 | 60 | 120 | 90.83 | 12.391 |
| Valid N (list-wise) | 60 | | | | |

The mean of systolic blood pressure was more the normal with St.d (17.866) (12.391)

**Table 5: Shows the correlation between age of the patients and the blood pressure.**

| **Blood Pressure** | **Age of the Patient/Years** | | | | **Total** |
|---|---|---|---|---|---|
| | **25-30** | **37-42** | **43-48** | **49 and More** | |
| No Hypertension | 0 | 3 | 0 | 4 | 7 |
| Risky for hypertension | 3 | 6 | 24 | 22 | 55 |
| Hypertension | 3 | 15 | 59 | 45 | 122 |
| **Total** | **6** | **24** | **83** | **71** | **184** |

## Discussion

Hypertension is regarded as a preventable public health problem. Despite increased prevalence of hypertension in many countries, treatment and control rates appear to improve as a result of effective public health strategies and changes in antihypertensive treatment

Iraq is one of the countries with a high prevalence of hypertension. According to study in Iraq (2016) showed that the prevalence of hypertension was 40.4%13. Ministry of Health, Directorate of public health and primary health care and Ministry of Planning and Development in collaboration with World Health Organization. Chronic non communicable diseases risk factors survey in Iraq.

In result of study (Prevalence of hypertension and Association of stress with Hypertension among teachers in primary School in - Hillah city) was proportion (66.7% - table 3) this proportion represent high prevalent of hypertension among teachers in Iraq compared to many studies in world countries was 25.2%. Al-Nozha et al. [16] reported a prevalence rate of 26.1% among Saudis

Results of the Egyptian National Hypertension Project showed that the prevalence of HTN was 26.3%, (17) Ibrahim MM, Hypertension prevalence, awareness, treatment, and control in Egypt: Results From the Egyptian National Hypertension Project (NHP).

Many patients find that the disease has a significant restricting impact on their physical activity and impacts work and employment, household chores, social outings and travel, and their relationships.

In Canada, 85% of patients' activities of daily living are affected by their symptoms such as walking up a flight of stairs, having a telephone conversation, or walking a short distance (Pulmo- nary Hypertension Association of Canada, 2013). Caregivers similarly were impacted, as they expressed feeling exhausted from having to complete the extra tasks that patients were unable to complete. Caregivers often spent more than 50% of their time caring for the patient (Pul- monary Hypertension Association of Canada, 2013)Patients and caregivers reported that PAH affected their work, resulting in reduced household incomes. The sudden loss of a job and associated health insurance can cause a patient to feel a loss of independence and a loss to family contributions (Wryobeck, Lippo, McLaughlin, Riba & Rubenfire, 2017). In the Weber et al. (2017))

## Conclusion

PAH is a devastating and progressive chronic illness with no known cure and carries with it a high mortality rate. Patients and their caregivers may experience many psycho- social burdens that are not often addressed at the time of clinic visits with their PAH health care providers. Left unaddressed, patients and caregivers suffer many forms of emotional distress. While many clinics do not have social workers or psychologist, a simple questionnaire assessing psychoso- cial burdens and maladaptive coping is suggested at each clinic visit in order to refer patients to appropriate services for assistance in their local community. Offering psychosocial support is best practice for PAH patients

**Recommendations:** If we believe that patients are indispensable for the success of life systems, must be care of this large segment of society that is struggling to raise the life reality in Iraq, we have to know the most important problems that suffer them, including psychological and social problems that pose a significant burden on teachers. Patients face stress and each day and the lack of enough time to relax and the lack of a holiday in the middle of the week, lead them to suffer various health problems such specially hypertension.

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**Conflict of Interest:** None to declare.

**Ethical Clearance:** All experimental protocols were approved under the Babylon Health directorate and all experiments were carried out in accordance with approved guidelines.

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