



Original Research

High Blood Pressure Contributing Factors in Young Age People: An Overview Study

Wafaq Mahdi Hadi¹ | Ahmed Mohammed Jasim Shlash² | Ameer Salah-Aldeen Abdulrazaq³

1. Adult Nursing, Faculty of nursing, Babylonian University
nur.wafaq.mahdi@uobabylon.edu.iq

2. Ph.D. Adults Health Nursing/ College of Nursing, University of Babylon, Iraq. Email:

dr.ahmed.shlash@uobabylon.edu.iq

3. Ph.D. Psychiatric and Mental Health Nursing, College of Nursing / University of Babylon-Iraq. Email:

nur.Ameer.razzaq@uobabylon.edu.iq

Corresponding author: Ahmed Mohammed Jasim Shlash, Ph.D. Adults Health Nursing/ College of Nursing, University of Babylon, Iraq. Email:

dr.ahmed.shlash@uobabylon.edu.iq



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Abstract:

Three of the six main causes of cardiovascular illness worldwide include hypertension. high blood pressure markedly raises the likelihood of coronary artery disease, stroke, and kidney damage. We searched Google Scholar and PubMed for articles on risk variables related to young-onset high blood pressure. The search terms we used were causes, being young individuals, and "high blood pressure. The qualification tests were administered in a non-blinded, standardized manner. For every manuscript, the initial writer, the year that it was published, the topic concerning young people's high blood pressure, and danger variables influencing younger adults' hypertension have been extracted. A query of the PubMed database produced 150 articles. We reviewed ten manuscripts in total, all of whose have been released within 2017 and 2021. Foreign study teams conducted the majority of the analyses that were taken into consideration. Individuals who have excess fat, cigarette smoke, chewing nicotine, drinking alcoholic beverages, lead dull lives, consume excessive amounts of saltwater, and lead poor habits were more likely to acquire high blood pressure. Apart from the previously mentioned causes, there exist other significant warning characteristics, including but not limited to lack of education, ignorance of disease, contempt regarding one's own wellness, and a societal norm that prioritizes men over women. Individuals who are adapting to occidental society are causing a profound change in their way of life. The main causes of high blood pressure were obesity, alcohol consumption, tobacco use, and a high sodium intake. This demonstrates that raising public knowledge of and perspectives regarding avoiding the development and treatment of high blood pressure is crucial for leading lives that are healthier and more enjoyable.

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Introduction:

In the previous many years, high blood pressure in younger people (18–24 years old) and middle-aged individuals (25–44 years old) has become a significant threat to global health [1]. The increasing incidence of high blood pressure

comprises among the primary worldwide concerns of mortality and disability. 9.4 million deaths globally are attributed to high blood pressure every year [2]. In 2008, chronic high blood pressure affected 28% of adult Indians [3].

Studies indicate that by 2025, more than 1.56 billion people will suffer from high blood pressure, which will increase the problem's global incidence during the subsequent decades [4]. High blood pressure, among the greatest causes of mortality in Western societies, may additionally contribute to kidney issues, cerebrovascular accidents, and eventually failure of the kidneys [5]. In 2001, high hypertension was a contributing factor to about 7.6 million fatalities globally [6]. High blood pressure has a reputation for being an undetectable killer because it rarely exhibits acute signs yet can have fatal results [7]. It is impossible to overestimate the importance of initial detection and therapy [8]. In Saudi Arabia, 15.2% of the population has high blood pressure, and 57.8% of those instances go undiagnosed, according to a recent national survey [9]. This is shocking in an economy where free medical care is widely provided [10]. Regardless of whether the prevalence of high blood pressure is lower in young people than in people of middle age and older people, prompt identification and appropriate care in such situations may prevent subsequent repercussions [11]. Chinese people who are older than 18 years old frequently have high blood pressure, while it is predominant in the elderly, there is increasing evidence of its prevalence in younger people [12]. Nonetheless, compared to middle-aged and older people, the rate of high blood pressure prescriptions amongst youngsters whose work meets the diagnostic needs is lower [13]. Therefore, concentrating health-related preventive measures on youth who have a greater likelihood of getting high blood pressure might be beneficial. Additionally, younger people require a lesser amount of effort to achieve treatments for hypertension than do those over 65 [14]. Furthermore, high blood pressure, a condition more frequent in youth than full-blown hypertension, is a significant risk factor for high blood pressure and heart failure in later years. If detected promptly, modifications to lifestyle can potentially lower high blood pressure, although occasionally successfully [15]. Considering this, younger individuals are not adequately screened for prehypertension and

hypertension, and physicians are more unlikely to recommend antihypertensive medicine to youngsters with high blood pressure compared to the elderly, This makes it an important tool since it can help avoid hypertension and achieve greater control of blood pressure by reducing risk factors such as smoking. The danger is increased by meals high in salt, fatty tissue, inactivity, insufficient dietary vegetable and fruit intake, and too much alcohol consumption [16]. The study on the prevalence of high blood pressure in aspiring physicians has been extensive [17]. Numerous epidemiological studies have been conducted on high blood pressure worldwide [18]. Several serious conditions associated with hypertension include coronary artery disease, stroke, congestive cardiomyopathy, and ongoing kidney damage or impaired renal function [19]. Younger individuals are especially susceptible to high blood pressure due to associated risks such as continuous intoxication with tobacco [20]. A small number of investigations have found no connection between exercise and high blood pressure, yet all of the forms of immobility that were listed are associated with high blood pressure [21].

Contributing Factors Associated with Hypertension

1. Excessive Salt Intake

One of the primary causes of elevated blood pressure in adults and elderly individuals is an inappropriate salt intake. A number of the studies examined demonstrated the existence of this risk factor. Studies carried out across multiple regions have revealed that individuals who consume more than 10 grams of salt daily are more likely to acquire high blood pressure [22]. A major risk factor in these studies ($p < 0.001$) was found to be a high use of salt, as it was prevalent amongst the experiment's volunteers, a 2017 investigation by [23], found that an ordinary Asian meal contains more salt compared to the standard Western meal reducing the amount of sodium consumed might be beneficial for the Indian community in its entirety because it has quickly emerged as an important health danger throughout the nation. [24]

2. Alcohol Consumption, Tobacco, and Smoking

Three of the greatest causes of hypertension in adulthood today are nicotine, alcohol, and tobacco [25]. Research has shown that these variables are particularly likely to cause high blood pressure to appear [26]. Two of the most significant risks for young people are alcohol and smoking use. In the study by [27], the p-value for consumption of alcohol was 0.001, and the p-value for using cigarettes was 0.01 [28], discovered that fifty-four percent of the individuals consumed drinks, and 88% of them chewed tobacco. According to reports, individuals living in Bengal use cigarettes for chewing (13.7%) and smoking (46%). Tobacco smoking was highly common among the study participants of every age. The study's findings showed that consuming any form of nicotine raised the likelihood of high blood pressure in cigarette users, regardless of their age [29].

3. Body mass index and obese

Higher waist-to-hip ratios, being obese or overweight, as well as an elevated body mass index (BMI), are indicators of danger for non-communicable diseases such as high blood pressure [30]. Someone's body mass index (BMI) and proportion of waist to hips were the primary measurements used to assess their level of being obese or overweight [31]. According to research [32], having a high body mass index (BMI > 25 kg/m²) is an elevated risk for the development of high blood pressure in young women [33]. A high body mass index (BMI > 25 kg/m²) or a significant waist-to-hip ratio (>0.85) was present in nearly every one of the people involved in the research they conducted [34], and 58% of those who took part had high blood pressure [35].

4. Diet and Physical Fitness

The nation's poor diet and rising fondness for fast food are contributing factors to high blood pressure [36]. Furthermore, as evidenced by the research of [37], the increased consumption of fat and oil in recent years may be a factor in the rise in the incidence of obesity. A poor diet heavy poor in proteins and high in saturated fatty acids and carbs is common among people with hypertension [38].

Reduced consumption of produce as well as berries has been related to a higher cause of hypertension, according to research [39]. Lifestyle along with inactivity additionally play significant factors in the onset of pressure [40]. A significant number of those who participated led idle lives, cigarette smoking frequently during the daytime, drinking quantities, and consumption of fewer veggies and fruits [41]. Due to the fact that being overweight raises the chance of developing elevated blood pressure, consuming meals heavy in greasy and oily foods, moving rarely, and not training can all have a substantial effect, Activities to raise attention about nutritious meals have been vital to preventing disease [42].

5. Genetic Factors:

It is common for parents to transfer their characteristics down through the generations to their children. Many diseases can be transferred from parents to children. These illnesses may or may not affect their children. Scientists are now investigating the precise process via which this exchange occurs. When a disease strikes a descendant, it can strike them early in life or later in life. As per reference [43], hypertension can also be inherited. The likelihood of developing hypertension in oneself is higher in children whose parents have the illness. Because of this, a child's chance of having hypertension is increased if both of their If both spouses have been diagnosed with the disease, along with whether the child is subjected to other danger signs, like consuming alcohol, cigarette smoking, consuming an excessive amount of fat, and living an idle life [44], The study by [45], found a substantial (p<0.001) connection between ancestry and high blood pressure. Twenty-five percent or so of the study's hypertensive participants had relatives with histories of the illness, while they also had lower exposure to the other warning variables. The male individuals involved in this study ranged in age from 20 to 49, and fifty-eight percent of the subjects had high blood pressure [46]. Their largest danger came from their combined weight and family history. This makes sense given the familial correlations between obesity and high blood pressure.

This study included a big rate of young female were high body mass index. They also have a tendency toward hypertension because their family has a history of the condition [47].

6. Sex:

Accurately determining the precise way in which sex influences blood pressure is difficult. Most everyone is aware of the substantial differences between the physiological, psychological, and hormonal makeup of the bodies of men and women. According to another article examined, women are primarily affected by hypertension. Of all those being treated, 399 were high-blood-pressure individuals. It's probable that there are more female hypertension patients among those who are young adults in Lebanon, where this study was done, because the majority of nomadic women are mothers who stay home. Due to their lack of activity and infrequent outings, people are more likely to develop high blood pressure. These factors might be more significant in explaining the increased incidence of non-communicable diseases (NCDs) in women, including high blood pressure [48]. However, the proportion of men to women has been shown to be higher, according to [49], the disproportionately significant percentage of men in these studies may be the fault of those who take part [50]. Within the research study, respondents, dependency on substances and cigarette smoking were among the most susceptible to intervention variables. In India, men tend to consume both tobacco and alcohol more frequently than women. These factors might have played a role according to development of hypertension in male person [51].

7. Illiteracy

The Indian region of Banaras served as the study's site for [52]. The main predictor for hypertensive was a higher percentage of illiteracy in urban dwellers. Pervasive ignorance is a major obstacle for non-communicable ailments like high blood pressure in Indian. Malnutrition, lack of education, and various health issues can be caused by it in most other countries. India and other emerging countries face universal poverty and low levels of educational.

8. Socioeconomic Status
The socioeconomic status of an individual would contribute to high blood pressure as well as serve as a predictive indicator for it.

Most Indians with high blood pressure come from [53], these groups of people have higher prevalence rates of obesity, hypertension, and other non-communicable diseases. In this class on elevated blood pressure, male and female were eventually vulnerable for disease. Due to the fact that many middle-class and superior jobs don't entail much manual labor, individuals can be more vulnerable than people with lower incomes. It's also conceivable that people in wealthier demographic groupings are healthier since they have more access to wholesome meals as well as more leisure time. But this might make children acquire kilograms, and it raises their chance of hypertension and other health issues such as cardiovascular illness and attack. But people with greater resources are not the only ones who suffer from hypertension. The majority of people in lower socioeconomic categories do not have the ability to consume nutrient-dense diets and do not understand enough about high blood pressure. Inadequate potassium and too much salt are two potential causes of hypertensive that can be prevented by eating a greater number of vegetables and fruits on a daily basis. Their susceptibility is made even greater by their ignorance regarding the illness's hazards.

Conclusion

In young individuals, high blood pressure is a condition that is often ignored. Young people have a problem with underdiagnosed high blood pressure. According to the study, compared to the general population, young adults with hypertension had greater rates of being overweight, having dyslipidemia, smoking, and excessive salt intake. To prevent and efficiently manage high blood pressure, controlling such factors is just as important as getting medicines. The study's results are positive because they suggest ways to manage high blood pressure and associated danger signs more effectively. To tackle every facet of high blood pressure and related issues, with a focus on youth, the complete execution of the national designed, so as avoidance, also management of heart dysfunction, Cancer, hyperglycemia, Strokes (NPCDCS) alongside additional national or international-level programs is required.

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