

Comparative Study of B.P. Among People According to Age Group 1 Year To 60+ Year

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Abstract-Hypertension is major problem a now days. The magnitude of this disorder is huge. According to the latest survey 8-10 crores of people in India from all age groups are suffering from hypertension. However the disease remain easily diagnosable, potentially preventable & completely manageable with many of complication being reversible nevertheless the lifestyle modification are recommended to the prevention as well as for the management of the disorder.

In this we have studied a comparative study of BP person having age group 1 to 60+ & we have seen that there are many variations in age 45 & 60 yr

Keyword – Hypertension, age, diagnosis, disease

INTRODUCTION

In India, the incidence of hypertension is arising & becoming the most important public health problem. It is a common, asymptomatic, readily detectable and as usually easily treatable if untreatable

The Joint Nutritional committee (JNC) published in 1997. The committee experts felt the need for new recommendation due to following are spouse to- To avoid of the result of new clinical trials and observations.

To provide a simple classification of BP.

To provide clear and consume guidelines.

To create awareness the (JNC) guidelines.

Have not been utilized to the max.

In the seventh JNC (JNC express report in Dec. 2002 and report was submitted to the journal of the American medical association in Apr. 2013. it was published in an electronic format on 14 may 2003 and print on may 21, 2003) The use of tobacco, obesity and the under treatment of hypertension is the reason of more than 70% of premature mobility in the general population. Also we can trace down a lot of adulthood diseases origin back in early stage of childhood [1]

It has been proven that high blood pressure in adulthood is a result of its negligence in childhood [2-4]

That was on prevention, retraction, evaluation and treatment of BP provides the latest for the management of hypertension. It emphasis several key message such as risk assignment and therapeutic management of patients with or with risk factors for hypertension.

Blood percentiles were first published in a report in 1977[5]

The first message concerned cardiovascular risk associated with hypertensive disease and the significance of hypertension in general population

The risk of cardiovascular disease (CVD) beginning at 110/76 mmhg. Doubles with each increment of 20/10 mmhg.

Persons who normotensive at age 55 have a 90 % lifetime risk for developing hypertensive.

In person older than 50 systolic BP greater than 140 mmhg is a much more important CVD risk Factor than diastolic BP

The second message relates to the restructuring for the diagnostic classification of hypertension. Individual with a systolic BP of 120-139 mmhg. Or diastolic BP of 80-89 mmhg should consider.

This led to subsequent task force reports, in which incorporated new data [6]. Moreover; it was found that BP was strongly under the influence of height in addition to age and sex. Among these 3 effective factors height is more applicable and a quite suitable primary reference metric even in comparison with age ,it is a precise measure of body size and maturation which are the primary determinants of the natural rise of BP throughout childhood[7,8]. Therefore height percentiles have been included in the determination of BP percentiles.

On average, systolic blood pressure rises with age, while diastolic blood increases until approximately 50 years and then declines [9]

Pre hypertensive and require health promoting life style modification to prevent CVD.

Stage2& stage3 of hypertension for treatment purposes were similar the new guidelines had combined these two stages to simplify the approach to treatment. The new pre hypertension terminology has intended to increase awareness among family physician and patients of the continuously increasing risk for clinical hypertension & its associated CVD risk.

The diagnostic criteria for hypertension as given in JNC6-JNC8 was as follows-

Classification of BP in adults as suggested in JNC6 (1997)

CATEGORY	SYSTOLIC	DIASTOLIC
Optimal	<120	<80
Normal	<130	<80
High normal	130-139	80-89
Stage 1HTN	140-159	90-99
Stage2HTN	160-179	100-109
Stage3HTN	>180	>110

As Suggested in JNC 7(May21, 2003)

CATEGORY	SYSTOLIC	DIASTOLIC
Normal	<120	<80
High normal	120-139	80-89
Stage 1HTN	140-159	90-99
Stage2HTN	160	>100

As Suggested in JNC8 (Published on Dec18, 2013)

In all person <60yr or in person>18 yr initiate pharmacologic treatment to lower SBP>140 or DBP>90 mmhg and treat to a goal BP of <140/90mmhg

Difference between JNC7 &JNC8

JNC7 recommended a treatment threshold of 140/90 mmhg regardless of age, whereas JNC8 raises the systolic threshold at age 60 in addition JNC7 recommended a lower treatment threshold (130/80 mmhg) for diabetes patients but JNC 8

Materials & Method-

A lifestyle changes with traditional oil and fat use dietary approach to stop. Hypertension DASH [(Dietary approaches to stop hypertension)(It was sponsored by the National Heart, Lung and blood institute and conducted at four medical centers; has

found that diet affect the development of high BP or hypertension can brought better quality of life with nutritional status controlling hypertension.

Sample Selection- A purposive sampling method will be used for filling the interview schedule.

Study Area-Cases from medical outdoor a descriptive and experimental research design will be followed

Analysis of Data-Collect data will be evaluated and analyzed in accordance with statistical and scientific methods.

Dietary intervention- The required investigation and parameters included in the study via based on available literature.

A dietary intervention will be done to assess for recording their effects on controlling hypertension

Inclusive factors

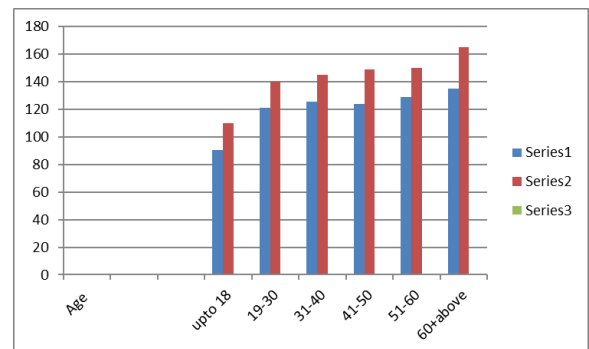
Age group of patients is (1 to 60+)

Category of Patients on BP

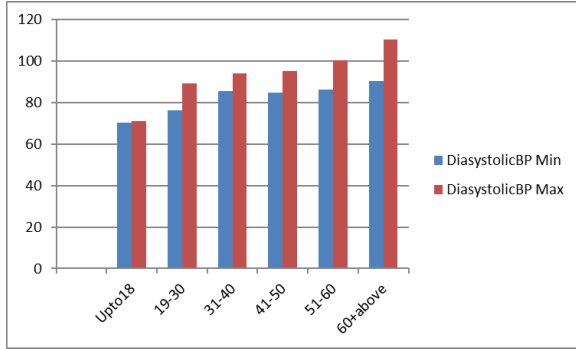
CATEGORY	SYSTOLIC	DIASTOLIC
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High normal	120-139	80-89
Stage 1HTN	140-159	90-99
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OBSERVATION

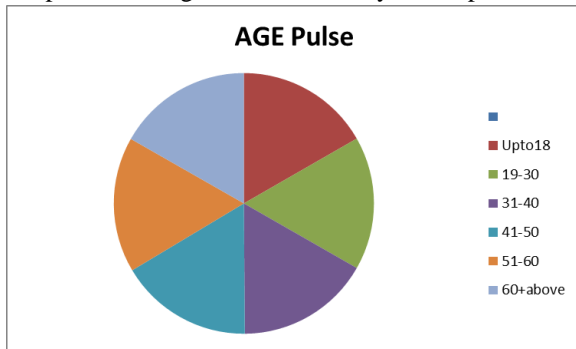
Age in year	Systolic BP	Diastolic BP	Pulse
1-18	Min90.65± Max110.65±	Min70.27± Max71.11±	73±
19-30	Min121.2± Max140.4±	Min76.25± Max89.4±	72.2±
31-40	Min125.4± Max145.25±	Min85.64± Max94.22±	72.6±
41-50	Min123.62± Max148.74±	Min84.75± Max95.2±	72.2±
51-60	Min128.65± Max150.24±	Min86.45± Max100.24±	73.4±
60+above	Min135.24± Max165.2±	Min90.41± Max110.24±	73.2±



Graph 1 Showing max & min systolic bp



Graph 2 Showing max & min Diastolic bp



Graph 3 Pulse rate indication from 1 to 60 above age

RESULT

In the given table 1 the study has been under gone through 0 to age of 60+. The result shows many variations in the ages. In the 0-18 the BP systolic is least and in the age of 60 + it is highest as study shows .The diastolic shows low in age of 0-18 and high in the age of 60 and above. There are many variations in the different age groups. Maximum systolic BP was 165 and minimum was 100 recorded

In the 1-18 age group the maximum 110 and minimum 90 was recorded in systolic and 71 maximum and 70 minimum was recorded in diastolic.

In the age of 19-30 the max systolic 140 and minimum 121 systolic recorded and in diastolic max 71 and minimum 70 recorded as in the age group of 31-40 the systolic max was 145 and min was 125 and in diastolic max was 94 and min was 85 recorded.

We found the BP changed little in relation to age in all groups.

In 41-50 the max systolic BP was recorded 148 and min was 123 and in diastolic max 95 and min 84 was recorded.

In 51-60 yr group max systolic 150 and min 128 and in diastolic max 100 and min 86 was recorded. This shows that most of the person was suffering from

hypertension after the age of 60 and above max systolic were recorded 165 and min 135 and diastolic max 110 and min 90 was recorded.

The results show that there are many in the age from 0 to 60 + the pulse rate varies from 72-74.

It has been proven that high blood pressure BP in adulthood is a result of its negligence in childhood. [2-4]

The survey conducted between the age group 0 to 60+ showed that in the age of 30-40 the BP is still in control but as the age increases it starts increasing. The main cause which comes in survey was increasing liabilities and other responsibilities are main reasons.

Elevated systolic or diastolic blood pressure is associated with an increased risk of cardiovascular disease and death [10] indeed is dated systolic hypertension is a major cause of morbidity and mortality in older adults. [9]

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