

## **A STUDY OF HYPERTENSIVE PATIENTS AND NON HYPERTENSIVE PERSONS IN TERMS OF EMOTIONAL MATURITY**

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### **ABSTRACT**

*The present is an attempt to find out the effect of emotional maturity on hypertensive patients and non hypertensive persons. For this research work, a sample of 50 hypertensive (25 males and 25 females) and the 50 non hypertensive persons (25 males and 25 females) persons were selected from Haridwar district of Uttarakhand State with the help of incidental sampling technique. For the collection of research data Emotional Maturity Scale (EMS) construct and standardized by Singh and Bhargav (1984) was used. Emotional Maturity Scale measures the different dimensions of emotional maturity. Finding indicates that hypertensive patients and non hypertensive persons significantly differ on emotional maturity.*

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**Introduction:** Human beings are superior to other living beings because only human beings are able to do any kind of work after proper thinking or knowledge. Proper thinking comes from good mental health and good mental health depends on the state of both mind and body. In the present circumstances, children as well as youth are facing various difficulties or complexes in everyday life. These difficulties are creating many psycho-physiological problems such as

anxiety, tensions, frustration, emotional upsets, and hypertension (high blood pressure) in day to day life. Some people are basically discontented and over ambitious by nature. They try in vain to do a lot of things in a short span of time. They race against the time. Such people generally live under several mental stresses. Such a constant struggle stimulates some of the glands in the body and adrenal glands in particular, when their secretion steps up, hypertension (high blood pressure) is caused. Hypertension (high blood pressure) is a disorder which comes under the categories of both physiological and psychological problem.

Heart may be the most important organ in the body for the preservation of life in general, but the arteries are of equal importance for the preservation of life in individual organs and tissues. Just as the heart can never rest, so the arteries are under the continual strain of the pressure of blood. It is small wonder, then that degenerative changes are more common in the arteries than anywhere else in the body, and that these degenerations are amongst the most important of all causes of disease and death. Blood pressure is the force with which the heart pumps blood through the arteries and so allows the blood to reach the various parts of the body, without this pressure the blood would not be able to supply the body with necessary oxygen and food. When the elasticity of the arteries degenerates owing to disease, aging or continuous stress the arteries may become dilated. Loss of elastic fibers will interfere with the ability of the vessels to expand during systole, the effect of which may be a gradual rise in the blood pressure.

The blood pressure varies with each heart beat, being at its highest when the heart is pumping out the blood and at its lowest when it is filling up again. When we measure blood pressure we therefore record two pressure readings the highest or systolic and the lowest or diastolic. The blood pressure is measured by 'Sphygmomanometer'. In this a stethoscope is placed over the brachial artery, while a blood pressure cuff is inflated around the upper arm with so little pressure that when the artery remains distended with blood, no sound what so ever is heard by the stethoscope, despite the fact that the blood within the artery is pulsating. When the cuff pressure is greater enough to close the artery, a sound is then heard with each pulsation. These sounds are called Korotkoff sounds. These sounds are believed to be caused by blood jetting through the partly occluded vessel. The pressure in the cuff is then elevated until the blood flow is restricted and a pulse can no longer be felt in the arm. It is then inflated slightly more. Therefore no Korotkoff sounds are heard in the artery. Then the cuff pressure is gradually reduced. As soon as the pressure in the cuff falls below systolic pressure, blood slips through the artery beneath the cuff and one begins to hear tapping sound. As soon as these sounds are heard

they indicate systolic pressure. As the pressure in the cuff is lowered still more, the korotkoff sounds change in quality, first gradually and later suddenly. The point at which the loud clear sound changes abruptly to the dull muffled sound should be taken as the diastolic pressure.

The World Health Organisation (WHO) defines Hypertension as a “Systolic pressure equal to or greater than 160 mm Hg and a diastolic pressure equal to or greater than 95 mm Hg” The reading between these two i.e. normal and hypertensive is considered as bordering hypertension. From the etiologically point of view hypertension may be classified into following types:

1. Renal Hypertension 2. Endocrine Hypertension 3. Primary or essential Hypertension

1- **Renal Hypertension:** Kidney is directly and primarily responsible for some cases of raised arterial pressure. Among the many renal diseases known to be associated with curable Hypertension, Pyelonephritis (inflammation of that part of kidney known as Pelvis which is connected with urater.) Tuberculosis and perhaps most important obstruction in the main renal artery by atheroma (it is a degenerative change in the inner and middle coats of arteries) need to be mentioned. The link seems to be interference with blood supply to the kidney. Recent work has made much clear the way in which the kidney raised the hypertension and this includes experimental hypertension produced by a clip on the renal artery, first successfully accomplished by Goldblatt and his colleagues (1937). According to Goldblatt (1937) the anoxaemic kidney secretes rennin which reacts with the preexisting component of the blood (hypertensinogen) to form a presser substance hypertension. This is the most potent direct smooth muscle vasoconstrictor known. It also raises the arterial pressure by a direct action on vasomotor centers in the brain, especially the hind brain.

2- **Endocrine Hypertension:** Endocrine is ductless glands that produce various types of hormones. Over reactivity of these hormones produces various types of syndromes that may lead to hypertension, such as Cushing's syndrome (due to over production of hydrocortisones), conn's syndrome (due to over production of aldosterons), pheochromocytoma (due to over production of epinephrine and non-epinephrine from adrenal glands). Thus endocrine hypertension can be explained by excessive secretion of a normal presser substance; this could act either by causing general vasoconstriction or by producing local renal ischemia (blood less ness of renal artery due to contraction or blocking).

3- **Primary or Essential Hypertension:** It is the most common form of hypertension. About 90% of cases of hypertension are of this type. In spite of its being such a common condition, the origin of essential hypertension is still unknown. It may develop at any age from puberty to senility but has its maximum incidence between the ages of 45 and 55 years. Platt (1947) has pointed out that a family history of high blood pressure or one of its complications can be obtained in a high percentage of primary cases.

**Possible Consequences:** The main danger of having hypertension is not the fact that the blood pressure itself is raised, but the harmful consequences of raised blood pressure. There are many things which can go wrong as the blood vessels feed every organ of the body. When they are constricted, preventing the inflow of blood and thus the distribution of oxygen and removal of wastes, tissue damage occurs. This prevents the organs from functioning. In the case of the brain, heart, kidney, etc., this is lethal. Some manifestations are:

**Heart disease:** The heart, as it becomes more and more strained, increases in size, damaging its internal components such as the valves, and thus impairing total function. The heart also becomes more prone to heart attack (death of part of a muscle) as high blood pressure (hypertension) is associated with hardening of the arteries.

**The eyes:** Blurring of the vision and sudden, progressive loss of vision may result. There can also be doubling of the vision (diplopia) or other defects.

**Kidneys:** Dysfunction occurs which may result in the inability to produce urine. This allows the toxins of the body to build up and death can result.

**Malignant hypertension:** A serious form of the disease. The blood pressure may rise to astronomical heights and death approaches rapidly.

**The brain:** Oxygen supply to the brain is reduced so that it cannot function at optimum level. At first this may result in headaches, dizziness and a feeling of the world spinning (vertigo). Later, emotional imbalance and deterioration of concentration and memory occur followed by more serious complications of organic brain deterioration (encephalopathy), rupture of arteries (stroke) leading to paralysis and death.

**Psychological factors that affect hypertension:** Research on the relationship between psychological variables and hypertension has been intensively pursued for over 50 years. The work of Flanders (1943) and a number of other early investigators raised the hope of identifying specific personality factors associated with hypertension for example rigidity, high sensitivity to threat, and proneness to chronic underlying hostility Kidson (1973) found hypertensive patients

to be significantly more insecure, anxious, sensitive and angry than a non hypertensive control groups. Jenkins (1974) identified what he called 'Type A' people with those who strive diligently to achieve, are time conscious, tense, unable to relax and active. So even though personality make up seems to play an important role, we still do not know why some individuals with similar personality characteristics do not develop hypertension.

A related approach has focused on the possible relationship between stressful situations and the coping pattern he develops. Graham (1962) found that a hypertensive patient feels endangered, threatened with harm, has to be ready for anything, to be on guard. Many individuals suffering from hypertension appear unable to express their emotions adequately by verbal means nor have they learned to use various ego-defence mechanisms-such as rationalization, fantasy, and intellectualization - to alleviate their emotional tension. As a consequence, they rely primarily on repression, which does not screen their feelings from conscious awareness. However, the physiological components of the emotions continue and finally lead to structural damage. Generally hypertensive patients have lifelong and largely unconscious conflict which centered on the expression of hostility, aggression and dependency.

Personality, Stress and Emotions: Research by psychiatrist Thomas has led other researchers to believe that constant stress, whether mental or emotional weakens bodily resistance to disease. In one study Holmes and Richard Rahe (1980), found that over seventy-nine percent of those people who had undergone major life changes, such as taking a new job, divorce, death in the family, developed some kind of illness within two years of the change. Only thirty-seven percent who experienced minor life changes developed such illnesses. Investigators have used emotional stress to trigger high blood pressure in experimental animals for over thirty years. It was suggested that emotional arousal leads to high blood pressure via the sympathetic nervous system and cell metabolism. Changes in metabolism may alter the structure of the blood vessels, increasing their resistance to flow. In their study of the increased incidence of heart disease, cardiologists Friedman and Rosenman (1974) turned from such factors as diet, exercise and blood type to personality and work-related factors. They changed their approach when an upholsterer who was refurbishing their waiting room remarked that the chairs were only worn on the front edge. The two workers consistently found that almost all of their cardiac patients had in common a competitive, aggressive, ambitious, stressful lifestyle. They demonstrated that career men, climbing the prestige ladder at a breakneck pace, have a higher level of fat in the blood-stream, excreting larger quantities of stress hormones, indicating that these hormones are

produced in excess. They called this group Type A personality and found they were more prone to heart attacks than Type B, who is more easygoing people. Friedman and Rosenman (1974) suggest that Type A people can alter their personalities and reduce the chance of heart disease if they become more open and relaxed.

### **EMOTIONAL MATURITY**

Emotional maturity is a process in which the personality is continually striving for greater sense of emotional health and both intra psychically and intra personally. Emotional maturity is one of the important personality correlate. Emotionally mature person is better able to cope with adverse life situations in befitting and socially approved manner. According to Young (1966). A person who has control over his emotions is said to be emotionally mature. Emotional maturity leads to independence and integration of personality. Another way of defining emotional maturity is in terms of continually wider circle of interpersonal activity. If this circle of interpersonal activity gets stuck at any particular stage the emotional maturity of the individual is impaired. According to Chamberlain (1960). an emotionally mature person is one whose emotional life is well under control. He is not subject to excessive moods, anger, under panic or under outbursts of temper. A mature person is cool but has persistent courage which meets the exigencies of diverse nature in his daily life situations. An adolescent whose pattern of life is satisfactory, whose urges and leisure are meeting with satisfaction, tends to enjoy life and is an emotionally mature individual acquiring emotional maturity is an important milestone in the process of transition from children to adulthood.

Criteria of Mature Emotional Behaviour: Seoul (1951) has indicated eight characteristics of emotionally mature behaviour. They are: One of the most obvious pathways of development, long emphasized is form parasitic dependence of the fetus to the independence of the parent. Increased capacity for responsibility and productivity and its decreased receptive needs. A third characteristic of maturity is relative freedom from the well known constellation of inferiority feelings, egotism and competitiveness. Another aspect of maturity consists in the conditioning and the training necessary from socialization and domestication.

Psychoanalytic studies have traced the libidinal development of mature capacity to 'Object-interest' in people and things outside oneself and the capacity for love and productivity both social and sexual. Hostile aggressiveness such as all sorts of anger, hate, cruelty and belligerence are rather absent from a mature adult. Another attribute of maturity is a firm sense of reality. Flexibility and adaptability is another characteristic of mature behaviour.

Emotions are the root forces in behaviour reaction. Maturity in expression and control of emotions seem to play a vital role in the formation of personality pattern. Emotional maturity is often thought of as an ideal state toward which, like truth and beauty and goodness, one aspires and can perhaps approximate, but seldom achieve. It is more useful, however, to think of emotional maturity as a process rather than as a state. The extent to which an individual gives evidence of mastery over his emotions derives from the experience that he has had in life and from statement about human conduct made by philosophers, leaders of society and more recently, by anthropologist, psychiatrists, and psychologists. The concept "Mature" emotional behaviour at any level is that which reflects the fruits of normal emotional development. A person who is able to keep his emotions under control that is able to brook delay and to suffer without self pity, might still be emotionally stunned and childish.

Kaplan and Boron (1995) elaborate the characteristics of an emotionally mature person say that he has the capacity to withstand delay in satisfaction of needs. He has the ability to tolerate a reasonable amount of frustration. He has belief in long term planning and is capable of delaying or revising his expectations in terms of demands of situations. An emotionally mature child has the capacity to make effective adjustment with himself, members of his family, his peers in the school, society and culture. But maturity means not nearly the capacity for such attitude and functioning but also the ability to enjoy them fully.

According to Seoul (1951) by studying adults, one finds that exaggerated or chronic Hostility regularly stems from unresolved emotional problems of childhood which impair adult adaptation. Childish hates and rages, never outgrown, persist in the adult and form an inner source of irritation and aggression which can continue for a lifetime. Revenge for mistreatment as a child, feeling of weakness from being driven into submissiveness and every other type of unresolved childhood problem can wrap the development and cause permanent irritation and aggressiveness. Another important attribute of maturity is a firm sense of reality. This is not nearly a matter of intelligence but also of emotional outlook, as is shown by contrasting the familiar figure of the brilliant but impractical and unworldly professor with the equally familiar realism of even relatively dull but practical peasant.

The sense of reality, especially of psychological reality, evolves gradually through a long course of development and experience. Disturbances in development impair and wrap it. The overprotected child whose mother has been his eyes and ears never learn to use his own. The loved and favoured child tends to be unduly optimistic, while the internally frustrated person

takes a depressed and gloomy view of life. The guilty person tends to feel threatened and put upon by others. Thus each man tends to colour reality in accordance with his own feelings and these in turn represent the results of childhood reactions which have not been overcome in other words, disturbances in the achievement of maturity.

Another characteristic of maturity is flexibility and adaptability. A child learns what to expect of other persons from its early experiences with those who reared it. The personality of every adult is, of course, shaped and coloured by the emotional influences of childhood. But in some people the childhood reactions do more than this—they are so powerful and fixed that they dominate the behaviour. Then the normal enjoyment of loving and working, giving and creating is impaired by fixed patterns of repeating over and over throughout life reactions which were appropriate to traumatic situations of childhood. For proper maturation children need what young plants need, to be given the proper conditions of warmth, light, nourishment and protection and then to be allowed to unfold in their own way with only such interference as is really necessary.

Thus all these characteristics represent an ideal ‘Nevertheless’ this ideal is based upon sound clinical experiences. Therefore the normal, full, emotional development may be rare in our culture or in the world, and yet this may be because we all have psychological pockmarks because of errors in upbringing.

**Bernard (1954)** as given the following criteria of mature emotional behaviour: Inhibition of direct expression of negative emotions. Cultivation of positive, up building emotions. Development of higher tolerance for disagreeable circumstances. Increasing satisfaction from socially approved response. Increasing dependence of actions. Ability to make a choice and not brood about other choices. Freedom from unreasonable fear. Understanding and action in accordance with limitations. Awareness of the ability and achievement of others. Ability to err without feeling disgraced. Ability to carry victory and prestige with grace. Ability to bounce back from disappointing experiences. Ability to delay the gratification of impulses. The Enjoyment of daily living.

**OBJECTIVE AND HYPOTHESES:** The main objective of this study is to compare the emotional maturity of hypertensive patients and non hypertensive person.

**RESEARCH METHODOLOGY:** Every study in its planning phase is concerned with the important problem of suitable methodology. **Kerlinger (1964)** said “scientific research is systematic controlled, empirical and critical investigation of hypothetical proposition about the presumed relation among natural phenomena”.

**Selection of Sample:** The main objective of any sampling procedure is to secure a sample which, subject to limitation of size, will reproduce the characteristics of the population as closely as possible.. In this study only those hypertensive patients were included in the samples who were suffering from the disorder for last two years. The total samples taken for this study were one hundred (100). In 100 respondents altogether 50 hypertensive and same number of normal person (non-hypertensive control group) were included in the present study. Out of each 50 subjects 25 males and same number of females were taken with the help of incidental sampling

**Table-A:** Showing the distribution of hypertensive and normal persons on the basis of sex (2X2 factorial design)

<b>Group/Sex</b>	<b>Hypertensive</b>	<b>Non Hypertensive Persons</b>	<b>Total</b>
Male	25	25	50
Female	25	25	50
<b>Total</b>	<b>50</b>	<b>50</b>	<b>100</b>

**Test Materials Used:** The main objective of the present study is to study the emotional maturity among male and female hypertensive patients. To accomplish the prime objectives of the study the demographic information of respondents and one psychological test was used:

**Emotional Maturity Scale (EMS):** The present ‘Emotional Maturity Scale’ constructed and standardized by *Singh and Bharagav (1984)* has been designed to measure the 5 factors of emotional maturity of normal individual.

## **RESULTS AND DISCUSSION:**

In the present research work the main hypothesis was" there would be significant difference between hypertensive patients and non hypertensive person in terms of emotional maturity". It is clear from the table-1 that the hypertensive patients were having significantly higher mean score (M=180.06) than non hypertensive persons (M= 127.94) on emotional maturity. The higher score on EMS show the level of emotional immature. When data were analysed with respect to different dimensions of EMS (table-2), it shows that hypertensive patients were having

significantly higher mean score on all dimensions of emotional maturity i.e emotional unstaability, emotional regression, social maladjustment, personality disintegration and lack of independence than the non hypertensive persons.

**Table-1: Showing scores of hypertensive patients and non hypertensive persons on emotional maturity.**

Respondents	Emotional Maturity Scores		"t" value
	Mean	S.D	
Hypertensive Patients (N=50)	180.06	23.84	<b>11.00 *</b>
Non hypertensive Persons (N= 50)	127.94	23.54	

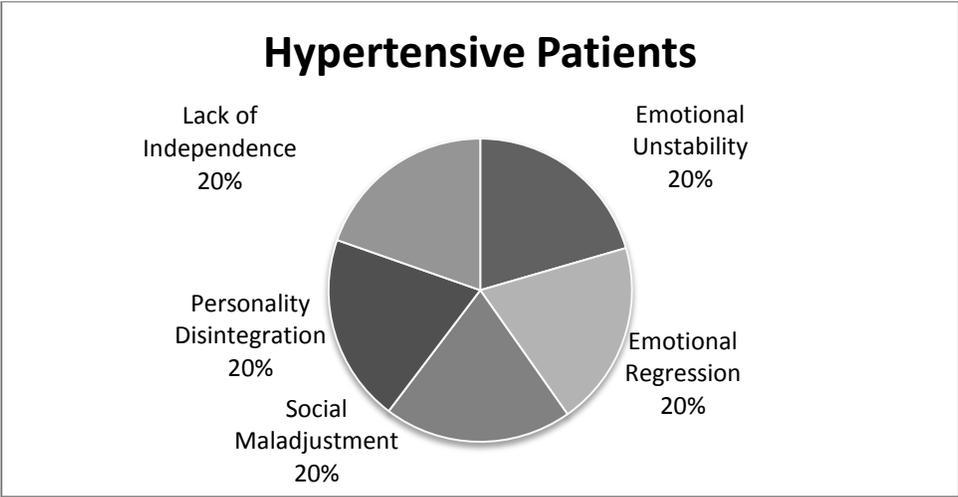
\* Significant at 0.01 level

**Table-2: Showing scores of hypertensive patients and non hypertensive persons on emotional maturity.**

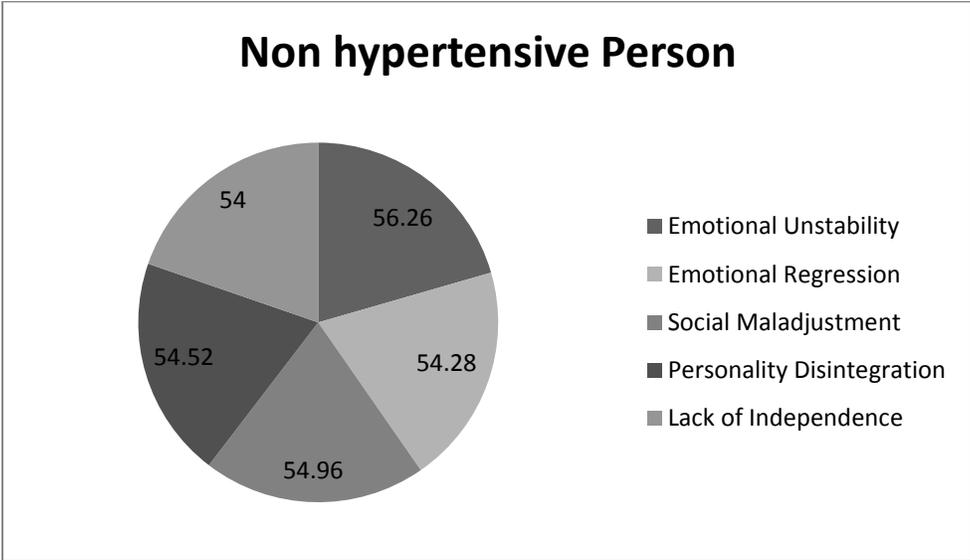
Dimensions of emotional maturity	Respondents				"t" value
	Hypertensive Patients (N=50)		Non hypertensive Patients (N=50)		
	Mean	S.D	Mean	S.D	
Emotional Unstability (EU)	78.96	5.83	56.26	5.84	27.68*
Emotional Regression (ER)	75.94	7.61	54.28	6.71	21.44*
Social Maladjustment (SM)	77.22	7.31	54.96	6.62	22.71*
Personality Disintegration (PD)	77.18	7.74	54.52	7.06	20.60*
Lack of Independence (LI)	75.58	8.22	54.00	8.08	18.76*
Overall	385.32	34.54	274.20	30.42	24.16*

\* Significant at 0.01 level

**Fig-1: Pie diagram shows the comparative analysis of hypertensive patients on various dimensions of emotional maturity.**



**Fig-2: Pie diagram shows the comparative analysis of Non hypertensive person on various dimensions of emotional maturity.**



Finding reflect that hypertensive patients may have greater degree of vulnerability, stubbornness, temper tantrums, feeling of inferiority, aggressiveness, self-centeredness, lack of social adaptability and disturbed sense of reality. Present finding corroborate the finding reported by Malik and Sabharwal (1998) they found that hypertension score are associated with emotional immaturity. *James (2000)* concluded that defensiveness, feeling of inferiority, aggressiveness and disintegration of personality are more closely related to hypertension.

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