Review of Literature
Hypertension is a trait as opposed to a specific disease, and represents a quantitative rather than a qualitative deviation from the norm. The risks associated with hypertension are dependent upon the combination of risk factors in the specific individual. These include age, gender (Male > Female), ethnic origin (Blacks > Whites), diet, family history, environment, stress and some personality determinants (Boon N.A. et al, 1999).

During last 30 years a series of randomised controlled trials have been demonstrated that hypertensive therapy reduces the incidence of stroke and to lesser extent coronary artery disease. The relative benefit was similar in all patients groups, so the absolute benefit of treatment is greatest in those at highest risk. For example, trial on mild hypertension (1985) by Medical Research Council in young patients, trial of antihypertensive treatment in elderly (1992) by MRC. Apart from this several research work has been made to evaluate and assess the hypertension.

O Neill, Mary F (Indiana State University, 1976) attempted to identify common psychological needs of patients with hypertension and to suggest appropriate nursing interventions. Edwards personal preference schedule (EPPS) was administered to 21 male & 15 female 33-63 years old Ss, and the personal orientation inventory (P. O. I.) was given to 10 of the same female Ss. Significant differences were found between male & females on 3 variables of the EPPS, whereas females had a greater need for affiliation, males had a greater need for dominance and heterosexuality. Males with hypertension had a significantly lower mean score on affiliation than the normal sample. Female Ss scored significantly greater on autonomy and on aggression than the female normotensive sample.
Females Ss also had significantly lower mean scores than the normotensive Ss on every POI variable, implications of these differences are discussed.

*Rime-Bernards; Bonami, Michel (University Louvain, Belgium) 1976* observed that in order to test F. Dunbar's (1943) theory about goalsetting behaviour in cardiovascular Ss, measures of performance and goal levels were taken on 25 coronary patients, 25 hypertensive patients and control group of 25 fracture patients (mean ages, 49-8, 47-3 & 45-2 years, respectively). The hypertensive pattern of goal setting behaviours was not significantly discriminated from that of control Ss, although data were in the direction predicted by Dunbar, hypertensive Ss being higher for success and for low goals. For coronary Ss, results agree with the tested theory; Ss showed a significantly higher rate of high goals than control Ss and record a higher rate of failure.

*Schwartz, - Gary E, Shapiro, David (Harvard U) 1973* notes that normo and hypertensive Ss are provided with feedback for relative increases or decreases in blood pressure and rewarded for these changes. They can learn to exert some control over their pressure. Biofeedback research on self regulation of systolic and diastolic pressure, heart rate & patterns of these functions is reviewed, and a general model of pattern learning is described. Application of these techniques to the control of systolic & diastolic pressure in patients diagnosed with essential hypertension is critically analysed. Problems of expectancy & motivation, personality & life style, and biologic constraints are emphasized. It is concluded that biofeedback techniques should be viewed as only 1 part of a combined behavioural treatment program for hypertensive patients.

*Mehle, Miran (1977)* discusses the method and results obtained by short psychotherapy with 60 patients (ages 23-54 yrs) with essential hypertension. The therapeutic procedure was directed towards patient-therapist conflict and interaction. If Ss manifested free associations, further treatment was aimed at specific
symptomatology and other conflicts. Aggressive tendencies were discovered psychoreactively, although these subjects appeared exuberant. The therapist’s attitude varied from passive listening to active attention to emotional oscillations. And Ss positive motivation was significant in achieving the therapeutic goal.

McClelland, David C, Harvard University 1979 examined the suppressed anger hypothesis, as related to the origins of essential hypertension, by using need for power (n power) relative to need for affiliation (n affiliation) as the measure of the disposition to be assertive or angry and by using activity inhibition as the measure of the tendency towards self control. In 3 samples (127 German men 235 male college freshmen, and 78 male college juniors) higher n power than n affiliation and high activity inhibition— the inhibition power motive syndrome— were associated with higher blood pressure than other motive combinations. In a longitudinal study it was found that the inhibited power motive syndrome, as measured in male Ss in their early 30s, significantly predicted elevated blood pressures & signs of hypertensive pathology appears 20 yrs later. The personality disposition predicted later elevated diastolic blood pressures, even when the possible contribution of an earlier physiological predisposition was controlled by a multiple regression analysis.

M. Seth (1981) has assessed the manifests needs of hypertensive & normal subject on Edwards personal preference schedule (EPPS). He has reported that hypertensive have greater need to achievement, dominance, abasement, endurance & aggression while normal expressed the need for affiliation and change.

Groen, J.J. (1982, Journal of Psychosomatic Research) in his study has observed Heart Rate intra aortal B.P., cardiac output, & peripheral vascular resistance were registered in 11 hypertensive Ss (aged 18-56 yrs) during exercise on bicycle ergometer, a semi standardized interview concerning personal life situations, and pressure on a hand ergometer. B.P. in all Ss increased under all conditions. During
exercise this was associated with in HR and cardiac output & a decrease in peripheral resistance. During the interview, HR & cardiac output increased to a lesser degree, and in 15 to 22 cases the peripheral resistance rose. During the hand ergometer test, Ss showed a combination of the hyperkinetic and hypertonic response. Result support the hypothesis that essential hypertension is a quantitative "exaggeration" of the same physiological process that regulate the B.P. in normotensive individuals. 

*Ariano, R. & Cocchi, R, 1982* studied the therapy with GABA ergic drugs in essential hypertension associated with emotional depression. Two groups of 20 elderly Ss suffering from essential hypertension and depression were treated to 1 to 2 therapies: sodium valporate, Livo-glutamine and lorzepam or chlorthalidone, methyl dopa, amitriptyline/imipramine. Both treatment showed good efficacy on hypertensive disease as well as depressive symptoms. While there were no significant differences between the two treatments on hypertension, the first treatment had a better effect on depression. Findings confirm the hypothesis that essential hypertension is homeostatic mechanism of compensation against GABA ergic depression.

*Lyketsos, G. Et al 1982* studied the psychological characteristics of hypertensive and ulcer patients. 51 hypertensive and duodenal ulcer patients were compared with 29 physically ill patients at admission and discharge on personality traits and states of anxiety and depression. Both the hypertensive & ulcer Ss were less dominant and more anxious than the control group at admission, while depression differentiated only the hypertensive group. Hypertensive Ss were more depressed & more anxious than ulcer patients at admission. At discharge both experimental groups remained less dominant than the control group, & the hypertensive remained more anxious & more depressed than the ulcer & control groups. Low dominance was correlated with high B.P. & high extra punitiveness was correlated with EKG abnormality in hypertensive Ss. Result are discussed with respect to the role of aggression and low dominance in this psychosomatic disorders.
Van Reek, Jan et al (1982) examined the relationship between B.P. & somatic complaints in 3 groups of normo or hypertensive males: 156 Ss aged 21-65 yrs in a population representative sample, 152 Ss in a middle age group (aged 51-56 yrs). A curvilinear relationship was found between diastolic B.P. & dizziness and the total number of complaints for the representative and the middle aged samples, after controlling for age, smoking, & knowledge about elevated B.P. status.

N. Lal, Ahuja & Madhukar (1982) have observed that hypertensive reported more number distressing life events and gave higher mean distress rating than normals. This observation was more characteristics of male who were over 45 years of age.

Knardahl et al (1982) investigated behavioural responsiveness and habituation to discrete stimuli in 27 spontaneously hypertensive (SHR) renovascular hypertensive (RHR) and normotensive (NR) wister kyoto rats in 3 experiments. In exp no-1 responsiveness to an auditory stimulus, as measured by amplitude and duration of the orienting response (OR) was enhanced in SHR compared to the two groups. In addition, SHR needed more trials to attain the habituation criterion. In exp no-2 no difference were found between the groups in terms of arrest response to an auditory stimulus. In exp no-3 the SHR exhibited increased amplitude & duration of the OR to an olfactory compared to two other groups, but there was no difference in trials needed to attain habituation when the stimulus was repeated. These data together with previous behavioural and psycho-physiological data indicate increased general level responsiveness in the SHR.

Shapiro et al (1982) studied the variables that influence blood pressure & hypertension include family history, personality & stress (Natural disasters, culture & urbanisation, occupational stress in individuals with a family history of hypertension and type a behaviour). Other factor such as obesity, physical activity, dietary sodium, caffeine and alcohol are also noted. The major nonpharmacologic approaches to treatment of hypertension involve modification of physical risk factors
(Sodium restriction, weight loss, reduced caffeine and alcohol, physical training, during adherence) and behavioural treatment methods (direct regulation of B P with biofeed-back, regulation of sympathetic nervous activity, regulation & stress management). These methods are appraised and suggestions are offered on improving the quality of treatment research in selection of patients and initial assessments, maintenance and follow up & generalisation of treatment effects.

**Mattes, Richard D at al (1983)** attempted to identify a taste dependent marker for hypertensiveness in 87 white American adults (aged 20-60 yrs) divided in to three groups, normotensive, prehypertensive & hypertensive. No statistically significant differences between groups were found in mean taste responsiveness or preference towards NaCl or towards the sucrose-sweetened beverage. NaCl acceptability and intake were also similar. The result suggests that NaCl suprathreshold taste responsiveness & preference are not useful predictors for hypertension in the population studied.

**Vaidya AK, Srivastava SN and Kumar Anand (1983)** administered the maudsley personality inventory (MPI) to 200 22-59 years old hypertensive Ss 200 control Ss to examined differentiated personality co-relates of extraversion & neuroticism in hypertensives. Result show that hypertensive subject scored similarly to controls on extraversion scale & significantly higher than controls on neuroticism scale of the MPI. Findings are discussed in the terms of previous on Eysenckian personality theory.

**Whitehorn D et al (1983)** in investigated that spontaneously hypertensive rat (SHR) exhibit locomotor hyperactivity in comparison to its normotensive Progenitor Wistar Kyoto (WKY) strain. The authors investigated whether the hypertensive behaviour was a direct consequence of elevated blood pressure, in the hypertensive rat. Three experimental protocols were used to chronically alter BP. In the 1st protocol, 8 (SHR) were given hydralazine (20 mg/kg/day) in their drinking water to lower the blood
pressure. These Ss exhibited a significant decrease in BP but no change in locomotor activity. In the 2nd protocol 20 male SHRs (4 weeks of age) were treated with same dosages of hydralazine until 16 weeks of age. BP was significantly decrease in this Ss is no change in locomotor activity. In the 3rd protocol normotensive WKY and Sprague Dawley rats were made hypertensive with unilateral renal clips. The resulting increased in BP did not alter locomotor activity. Result suggest that locomotor hyperactivity in an inherent property of SHR and is independent of BP.

Gentry W Doyle et al (1983) reports on an ongoing study of social, psychological & ecological factors may combined to increase an individual risk for essential hypotension. Data are from a subject (n = 719) of 2523 adults selected on the basis of anger copying style, findings to that indicate that anger copying style play an active role in predisposing an individual to elevated BP and/or essential hypertension. Further research directions and therapeutics are discussed.

Thomas, John et al (1983) reviewed the literature indicate that relevant precursor of hypertension are early elevated casual systolic blood Pressure, positive family history and obesity (in females). Addition predisposing a enhancing factors point to high sodium ingestion, heavy smoking and high socio-ecologic stress. Evidence for a high risk hypertensive personality is not inclusive. There is a paucity of longitudinal data on hypertension in the black population.

Burch ct al (1983) investigated that depression develop in the hypertensive patient for a variety of reasons, including reaction to the diagnosis to the hypertension and pharmacological effects and can present complex problems of combination treatment. Case management should being with a determination of etiology through a survey of psycho-social stress, possible medical causes and personal & family histories of depression.

Cottington, Eric M.; Matthews, Koren A; Talbott, Evelyn & Kuller, Lewis H. (1986) examined the effect of supressed anger on the relationship between job stress &
hypertension in 366 randomly chosen male homely workers (age 40-65 yrs) free of antihypertensive medication and employed at two manufacturing plants. Ss completed inventories of perceived job stress and a multidimensional anger inventory. Results indicate that hypertension was more strongly associated with the self-reports of an uncertain job future and dissatisfaction with co-workers and promotions among Ss who suppressed their anger than among Ss who did not habitually suppressed their anger. The interactions between suppressed anger and job stress significantly predicted hypertension status, controlling for age, body mass index, smoking, alcohol consumption, & family history of hypertension. It is suggested that a coping-related characteristic, such as anger expression, may be an important modifier of the relationship between job stress & hypertension.

*Sosa, C-D; Pelechano, V; Capafons, J-I (ULa Laguna Tenerife, Spain 1991)* studied 136 adult hypertensive dialysis and transplant patients (aged 18-60 years) were administered measures of coping skills, rigidity, & motivation. Result show that Ss (renal & non renal) obtained scores away from the normal, suggesting that the chronic illness situation plays an important role in the assessed personality and motivation factors. Ss that showed the most significant differences in personality and motivation were those in which the consequences of the illness were more constraining & life threatening (dialysis & kidney transplant). Result do not suggest links between specific personality type & type of illness.

*Capafons, J-I; Pelechano, V, Sosa, C-D (1991)* examined the relationship between coping strategies & motivational and personality factors in 136 hypertensive, dialysis, transplant, and chronic illness patient (aged 18-60 yrs.) Ss were administered 5 questionnaires, coping strategies, rigidity, locus of control, motivation & performance anxiety, & extreme motivation performance. The types of patients reactions to illness were explained by variables such as treatment distress, closeness or threat of dying, and presence or absence of symptomatology matched with pain. Given evidence for
active, passive, and rigid fundamental attitudes result suggest that coping strategies may not be sufficient psychological criteria to elaborate intervention programs and that other variables (treatment distress, pain, or personality dimensions) should be incorporated to design efficient intervention programs.

Miller, Patricia, Wikoff, Richard, Hiatt, Audrey (Brian cliff coll, sioux, IA, USA) 1992 tested a casual model based on M Fishbein's (I Ajzen and M Fishbein, 1980) Model of reasoned action in a hypertensive population. Intention was hypothesized to affect compliance behaviour (CPB) of hypertensive Patients directly and to mediate the effect of other variables. Attitude, perceived beliefs of others, and motivation to comply were hypothesized to directly affect intentions and indirectly affect CPB as mediated by intention. 56 newly diagnosed hypertensive patients (aged 21-75 year) completed the variable measures 6 month after receiving out patients instructions of diet, smoking, activity, and stress, but not for medication. CPB was directly influenced by intention which in turn, was influenced directly by attitude and motivation to comply and indirectly by perceived beliefs of others mediated by motivation to comply for the prescriptions of diet, activity, smoking, and stress prescriptions.

Harsh Taluja and Mrs Roquiy Zainuddin (1993) studied to explore the relationship of child rearing practice of mothers and development of need autonomy, need achievement & need affiliation among children. 260 children were randomly selected for the study. The age range of the children 6 to 10 yrs. The multiple regression analysis was conducted. The independent variable of child rearing practice was found to significant, predictors of need autonomy, but not need achievement & need affiliation, strictness, approval of activity, avoidance of communication and intrusiveness have their unique contribution to the dependent variable of need autonomy. Stricness & defication have their unique contribution to need affiliation.

Sudha Katyal and Harpreet Bindra (1993) conducted a study in four randomly
selected Govt. model Sr. Sec schools of Chandigarh on high & low academic achievers of class IXth showed a significant difference between the mean scores of intelligence and test anxiety of high & low academic achievers. However achievement motivation was found to have an significant effect on academic achievement. 

Sonnega- John Robert (Johns Hopkins U USA 1997) examined that anger has been identified as a risk factor for cardiovascular disease and violence. However, there is conceptual & methodological confusion surrounding anger research thus hindering interpretation of results. A social contextual model is proposed that looks at the processes by which people generate anger. In this model anger is expressed in terms of social competencies, defined as goals & skills. This study explored the role that personal goals & social skills play in fostering anger among adolescents at risk for hypertension. The population consisted of 160 adolescents from two schools in Baltimore. A strength of this was the balance of race, sex and neighbourhood groups. Anger was assessed with three dimensions inventory, multiple independent measures (goals & skills) were used in this study, including several novel interview assessments. Neighbourhood stress, race sex were moderators. There was a wealth of significant results with anger dimensions. Anger was associated with interpersonal motives, both social dominance and intimacy goals, rather than personal motives. Deficits in social skill, both broad and specific, were related to greater trait anger. The tendency to anticipate interpersonal threats during school (a hostile attribution bias) was also related to anger. The results revealed different patterns of goal & skill correlates for each anger dimension. Classifying anger dimensions by their social competence patterns may facilitate clearer anger conceptualizations. Considerable evidence for moderation effects was found. The pattern of correlates with anger clearly differed by race, sex & neighbourhood. The meaning of anger score appeared to vary by socio-demographic subgroup. The results of this study reflected multiple social congnitive processes by which goals and skills may generate anger, goal
blockage, goal content, goal norm violations, broad & domain specific social skill deficits, skill tendencies or biases & norm skill violations. The social contextual model of anger allows for the integration of these diverse phenomena, and suggest that anger is a syndrome composed of multiple components. Information derived from this study may increase the ability to intervene in a meaningful way before anger becomes problematic.

Eriksson, Sofia, Kaati, Gunnar, Bygren, Lars-Oloy (UMEA U, Dept. of social medicine, Umea, Sweden 1998) assessed the determinants of patients abilities and motivation to reduce their excess morbidity by benefiting from patient education designed to effect such change, 493 patients (mean age 50 years) suffering from hypertension, diabetes, or post myocardial infarction participated in the course, which consisted of a 4 wk full time program & four day refresher course 1 year later. The 295 consecutive patients who returned for the refresher had substantially reduced their over risk for stroke or coronary heart disease. Personal ability to accomplish the desired change, such as standard of education, was found to be un important, where as motives like having other people dependent on one were deemed important. One reason why resources such as education were found not to be important could be that the course was lengthy, requiring nearly 5 WKS, and particularly oriented.

Wilkes, Scott, Evans, -Angela (Broomhill Health ctr, Coquet medical group, Morepeth, England 1999) examined to compare the motivation to stop smoking of the patients with either ischaemic heart disease, hypertension or diabetes (diseased smokers) with apparently healthy smokers (Controls) and content on smoking cessation rates at 18 mo following nurse led active intervention in those who are motivated to stop smoking. Questionnaires were sent out to 220 patients in each group. Those patients who had expressed a desire to stop smoking were invited to attend one to one or within a group. In total, 328 questionnaires were returned. Significantly more patients in the diseased group were ex smokers, 28%, vs 18%
expressed a desire to stop smoking, 45%, vs 30% and stated that they would like to receive individual support, 38%. Vs 23% 34 Patients attended for professional help to stop smoking. At 18 mo follow up, 4 patients remained not smoking. The findings in this study suggest that individual who smoke and have either ischaemic heart disease, hypertension or diabetes may be more motivated to give up smoking and are more receptive to individual support. However smoking cessation rates at 18 mo are disappointing.

N.H. Deshmukh (2000) attempted to compare high and low self concept groups of junior college students with anxiety, achievement motivation, intelligence, goal discrepancy and academic achievement. 832 self concept scores of students are classified into two extreme groups viz : high & low, P73 & P27 being the cutting points. Results reveals that high & low self concept groups of junior college students differ significantly on anxiety, achievement, intelligence. These groups donot differ significantly on goal discrepancy and academic achievement.