CHAPTER VI

SUMMARY AND CONCLUSIONS
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The present study sought to investigate the efficacy of behavioural intervention in mild primary hypertension. The main objectives were to examine the effectiveness of Jacobson's progressive muscular relaxation and stress inoculation training in reducing blood pressure.

The sample for the study was selected from among those subjects who were referred to the Behaviour Therapy and Biofeedback Unit, Department of Clinical Psychology, NIMHANS from department of Medicine - Victoria and Bowring hospitals, Central government hospital services and few private practitioners. Subjects were included in the sample if they were males, with a diagnosis of primary hypertension with in the range of 140-159 mm Hg - Systolic pressure and 90-104 mm Hg - diastolic pressure, between the age of 25 to 50 years and were free from drug therapy for hypertension at the time of behavioural intervention. Those subjects who had a history of secondary hypertension, presence of psychiatric and other systemic illness, exposed to behaviour therapy prior to the present intervention and mild primary hypertension more than five years were excluded from the study. Sample of the study consisted of 30 subjects. 10 subjects each were randomly assigned to one of the 3 groups - Jacobson's progressive muscular relaxation (JPMR) group, JPMR plus stress inoculation training group and the control group, which received no intervention.
The experimental design of the present study was a within and between group outcome design with repeated measures. There were pre-, mid I-, mid II- and post therapy assessments to monitor the effects of intervention or no intervention on the two dependent variables i.e., systolic and diastolic blood pressure. The other assessments done at pretherapy only were the personal data sheet, state trait anxiety inventory-y1 and y2, Jenkins Activity Survey - Form C and the Repressor - Sensitization scale of the multiphasic questionnaire.

The data on the 30 subjects were analysed within each group and across the three groups, at the pre-, mid I-, mid II- and post therapy assessment. The two intervention groups were divided into responders and non responders based on their blood pressure status at post therapy. Responders were those whose blood pressure had reached the normal range at post therapy assessment. Analysis of responders and nonresponders on certain pre-treatment characteristics were also done.

The three groups were comparable as the homogeneity was established on certain pre-treatment characteristics. The subjects in the two intervention groups i.e., Jacobson's progressive muscular relaxation and JPMR plus stress inoculation training showed significant reduction in blood pressure at post assessment. However, there was no
statistical difference in outcome between the two groups, although the subjects who received stress inoculation training in addition to Jacobson's progressive muscular relaxation had a clinical advantage, in respect of being more relaxed in interpersonal situations. The control group did not show any change in blood pressure at post assessment.

Subjects who had state anxiety, low job involvement factor and high diastolic blood pressure at pre-treatment appeared to benefit most from the therapeutic programme. Social drinking and older age group were significantly associated with the nonresponders.

Systematic follow-up of all subjects was not possible. However, where ever follow-up was done, it was found that subjects maintained the improvement.

Thus, the results of the present study imply that Jacobson's progressive muscular relaxation alone or coupled with stress inoculation training can be utilised in the treatment of mild primary hypertension.

Suggestions for Future Research

As there is clinical benefit of the therapeutic procedures, it would be appropriate to investigate the different components of the treatment that have contributed to its efficacy. In this venture the following suggestions are made -
1. Comparison of three groups i.e., JPMR, SIT and a combination of the two.
2. Spreading of SIT over a long period as acquisition and application of skills occur better.
3. Comparison of shorter duration of JPMR sessions and longer follow-up with longer sessions of JPMR and follow-up.
4. Comparison of behavioural intervention with an antihypertensive drug group.
5. Behavioural intervention should also target at reducing drug dosage of those hypertensives who are in the moderate or severe range.
6. Emphasis on assessment of generalisation i.e., outside the clinic setting like home, work place.
7. A large sample in each group in order to study the factors associated with responders and nonresponders to therapy.
8. The psychological variables like state anxiety, type A behaviour pattern, especially job involvement factor of the Jenkins Activity Survey, to be studied in depth in relation to therapeutic outcome.
9. Variables like age, social drinking to be controlled as these factors have also been found to be associated with therapeutic outcome.
10. The effects of these behavioural techniques on sex differences.
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