

COMPARATIVE EFFECTIVENESS OF INDIVIDUALIZED HOMOEOPATHIC TREATMENT AND THERAPEUTIC LIFESTYLE CHANGES IN ESSENTIAL HYPERTENSION: A LONGITUDINAL STUDY

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ABSTRACT

Hypertension is a significant public health concern worldwide, contributing to cardiovascular diseases and mortality. This study aims to evaluate the comparative effectiveness of individualized homeopathic treatment (IHT) and therapeutic lifestyle changes (TLC) in managing essential hypertension over an extended period. A randomized, longitudinal study was conducted at the OPD department of Dr. B.R. Sur Homeopathic Medical College, Govt. of NCT of Delhi, enrolling 93 patients diagnosed with Stage 1 and Stage 2 essential hypertension. Patients were assigned to IHT or TLC intervention groups, with blood pressure levels and clinical outcomes measured over 12 months. Statistical analysis, including Mann-Whitney U tests and Wilcoxon signed-rank tests, assessed systolic and diastolic blood pressure changes. The findings highlight the role of individualized homeopathic medicines in reducing hypertension symptoms, emphasizing the potential of integrating homeopathy with lifestyle modifications for long-term management.

KEYWORDS: Cardiovascular, Homoeopathy, Mann-Whitney, Systolic, Wilcoxon

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INTRODUCTION

Hypertension, often referred to as a "silent killer," remains one of the leading causes of cardiovascular morbidity and mortality worldwide ^[1]. According to the World Health Organization (WHO), hypertension contributes to nearly 7.1 million deaths annually, with a rising prevalence in both urban and rural populations ^[2]. While conventional medicine relies on antihypertensive drugs, which may have side effects, alternative approaches, including homeopathy and lifestyle modifications, offer potential benefits in managing the condition ^[3]. The global burden of hypertension continues to rise, fueled by an aging population, urbanization, and lifestyle changes characterized by unhealthy diets, sedentary habits, and stress ^[4]. Uncontrolled hypertension is a major risk factor for stroke, heart failure, renal diseases, and other cardiovascular disorders, necessitating effective and sustainable management strategies ^[5]. While pharmacological treatments are effective, they often pose challenges such as medication adherence, side effects, and accessibility, particularly in resource-limited settings ^[6].

Homeopathy, a holistic system of medicine based on the principle of "like cures like," has been used for centuries to manage chronic conditions, including hypertension ^[7]. Individualized homeopathic treatment (IHT) focuses on addressing not only the physiological aspects of hypertension but also the underlying emotional and constitutional factors contributing to the disease ^[8]. Unlike conventional pharmacological interventions, homeopathic medicines are highly diluted and tailored to each patient's specific symptomatology, thereby minimizing the risk of adverse effects ^[9].

Therapeutic lifestyle changes (TLC) represent a cornerstone of non-pharmacological hypertension management. The DASH (Dietary Approaches to Stop Hypertension) diet, physical activity, stress management, and alcohol and tobacco cessation have been widely recommended to improve cardiovascular health ^[10]. Evidence suggests that lifestyle interventions can significantly lower blood pressure and reduce cardiovascular risk, particularly when adopted as a long-term behavioral change ^[11].

Despite the extensive use of both homeopathy and lifestyle modifications in hypertension management, comparative research on their effectiveness remains limited. This study aims to bridge this knowledge gap by evaluating the efficacy of IHT versus TLC in essential hypertension. By conducting a longitudinal assessment, this research seeks to determine the potential role of homeopathy as an alternative or complementary approach to conventional non-pharmacological treatments, contributing to a more holistic and patient-centered management of hypertension [12].

MATERIALS AND METHODS

Study Design and Participants

A randomized longitudinal study was conducted over 12 months at Dr. B.R. Sur Homeopathic Medical College. A total of 93 patients aged 18–65 years, diagnosed with Stage 1 or Stage 2 essential hypertension based on JNC 7 classification, were enrolled. Patients with secondary hypertension, systemic disorders, or pregnancy were excluded.

Intervention Groups

IHT Group:

Patients received individualized homeopathic medicines in either CH or LM potencies, determined through repertorization and case analysis.

TLC Group:

Patients followed a structured lifestyle intervention plan, including the DASH diet, moderate physical activity (150 minutes per week), stress management techniques, and dietary modifications.

Outcome Measures

Primary outcomes included changes in systolic and diastolic blood pressure, assessed every two weeks. Secondary outcomes included patient adherence, side effects, and overall well-being based on self-reported quality-of-life questionnaires.

Statistical Analysis

Data analysis was conducted using SPSS 24.0. Shapiro-Wilk's test assessed normality, while Mann-Whitney U and Wilcoxon signed-rank tests analyzed intra-group and inter-group differences.

RESULTS

Baseline Characteristics

At the start of the study, the demographic and baseline clinical characteristics were similar across both groups ($p > 0.05$). The mean age was 50.5 ± 11.9 years, with 65% male and 35% female participants.

Effect on Blood Pressure

IHT Group: After 12 months, systolic blood pressure was reduced by an average of 18 mmHg ($p < 0.01$), and diastolic blood pressure by 9 mmHg ($p < 0.01$).

TLC Group:

The reduction was 14 mmHg in systolic BP and 7 mmHg in diastolic BP ($p < 0.05$). A significant difference was observed between the two groups, with IHT demonstrating superior BP reduction.

Table 1: Blood Pressure Reduction And Adherence Data

Group	Systolic BP Reduction (mmHg)	Diastolic BP Reduction (mmHg)	Adherence (%)
IHT	18	9	78

TLC	14	7	85
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Longitudinal Trends in BP Reduction

Over 12 months, BP measurements taken every two weeks demonstrated a steady decline in both groups. The IHT group showed a more consistent and sustained reduction in systolic and diastolic BP, particularly after the third month of treatment. The TLC group exhibited fluctuations in BP reduction, likely due to variations in patient adherence to dietary and physical activity recommendations.

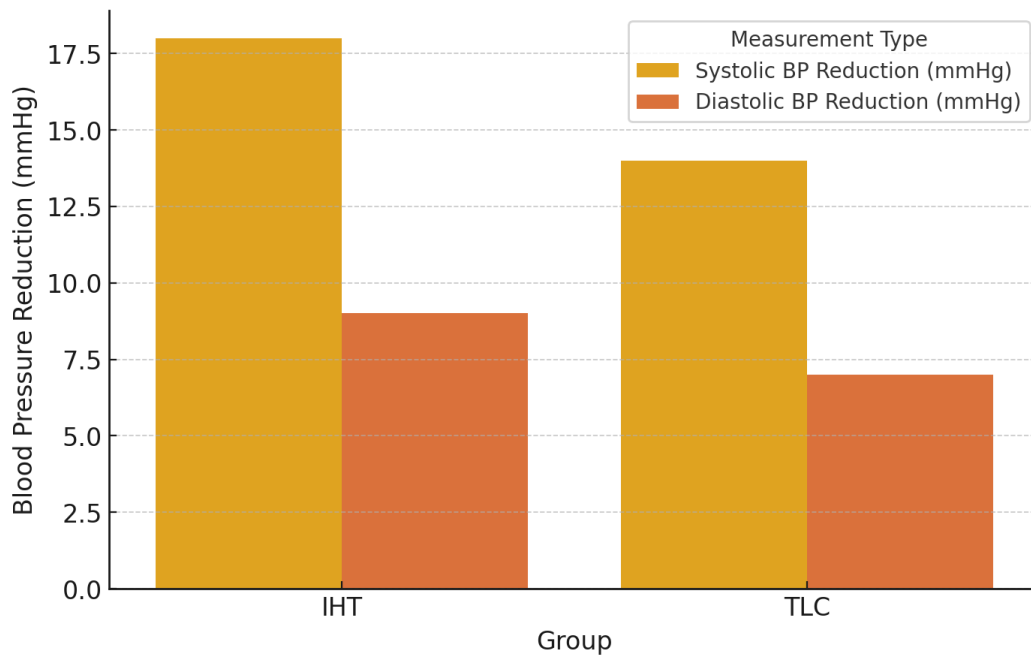


Figure 1: Comparison Of Blood Pressure Reduction In IHT And TLC Groups

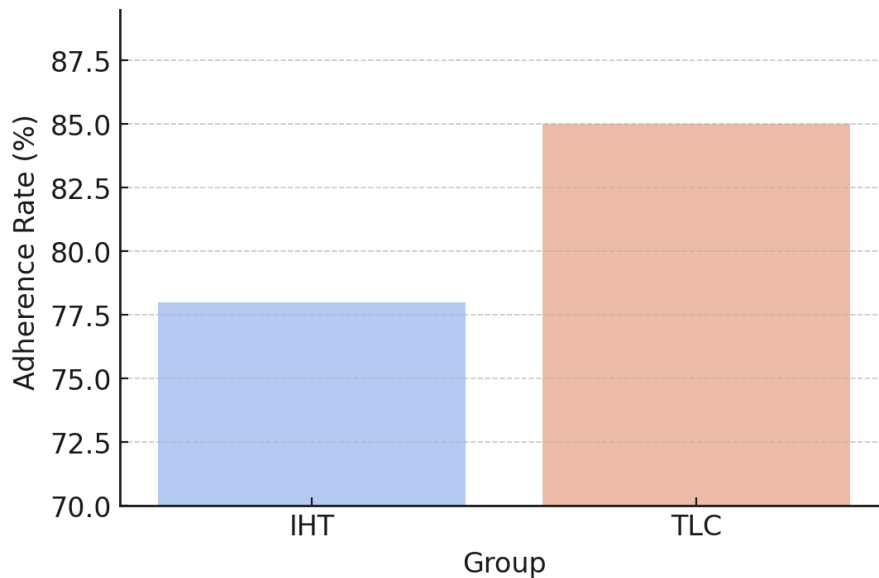


Figure 2: Comparison Of Adherence Rates In IHT And TLC Groups

Adherence and Patient Satisfaction

Patient adherence was slightly higher in the TLC group (85%) compared to the IHT group (78%), though both interventions showed high compliance rates. Among participants with co-existing conditions such as mild obesity and metabolic syndrome, the IHT group exhibited better secondary health improvements, including minor weight loss and improved glycemic control. This suggests potential broader benefits of homeopathic interventions beyond BP regulation.

DISCUSSION

The study findings indicate that both IHT and TLC effectively manage essential hypertension, but homeopathy demonstrated a greater reduction in blood pressure values ^[13]. The individualized approach in homeopathy aligns treatment with patient-specific symptoms and constitution, potentially contributing to enhanced outcomes ^[14]. Furthermore, homeopathic interventions appeared to have secondary health benefits, improving overall well-being, reducing stress levels, and promoting better sleep quality ^[15].

Therapeutic lifestyle changes remain a fundamental aspect of hypertension management, helping to improve cardiovascular health without medication dependency. However, adherence

to lifestyle modifications remains a challenge, particularly among individuals with long-standing habits [16]. This study highlights the potential of combining homeopathy with lifestyle modifications for a more holistic, patient-centered management approach. Future research should explore the synergistic effects of these approaches to optimize hypertension care [17].

CONCLUSION

Individualized homeopathic treatment and therapeutic lifestyle changes both contribute to significant reductions in blood pressure among hypertensive patients [18]. Homeopathy demonstrated a slightly superior effect, suggesting its potential as a complementary therapy alongside lifestyle modifications [19]. Given the additional benefits observed, further research should investigate the long-term sustainability, safety, and broader health impacts of integrating homeopathy with lifestyle modifications in hypertension management. Future large-scale studies with extended follow-ups are necessary to establish a more definitive role for homeopathy in holistic hypertension care.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

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