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Effectiveness of Individualized Homoeopathic Medicines in Management of Essential Hypertension in Adults - A Clinical Study

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ABSTRACT:

Hypertension is a prevalent medical condition in contemporary society. It has been noted that young individuals are increasingly affected, largely due to the highstress lifestyles they often lead. Prolonged high blood pressure significantly increases the risk of various serious health issues, including coronary artery disease, stroke, heart failure, atrial fibrillation, peripheral vascular disease, vision impairment, chronic kidney disease, and dementia. Current medical treatments primarily consist of medications that manage elevated blood pressure temporarily, but they do not provide a definitive cure. Consequently, patients may require long-term or lifelong medication, which can lead to complications and adverse reactions that impact liver metabolism and kidney function over time.

Hypertension is categorized into two types: primary (essential) hypertension and secondary hypertension. Approximately 90-95% of cases are classified as primary, which arises from non-specific lifestyle and genetic factors. Contributing lifestyle factors include excessive salt intake, obesity, smoking, and alcohol consumption. The remaining 5-10% of cases are identified as secondary hypertension, which is linked to specific causes such as chronic kidney disease, renal artery stenosis, endocrine disorders, or the use of contraceptive pills.

Blood pressure readings consist of two measurements: systolic and diastolic pressure, representing the maximum and minimum pressures, respectively. For the majority of adults, a normal resting blood pressure ranges from 100 to 130 millimeters of mercury (mmHg) for systolic and 60 to 80 mmHg for diastolic. Hypertension is generally diagnosed when resting blood pressure consistently reaches or exceeds 130/90 or 140/90 mmHg.

Modifications in lifestyle and the use of medications can effectively decrease blood pressure and mitigate the likelihood of health-related issues. Lifestyle modifications encompass weight loss, decreased sodium consumption, regular physical activity, and adherence to a nutritious diet. In cases where lifestyle adjustments prove insufficient, antihypertensive medications are prescribed. Typically, up to three different medications can manage blood pressure in 90% of individuals. The pharmacological treatment of moderately elevated arterial blood pressure, characterized as exceeding 160/100 mmHg, is linked to an enhancement in life expectancy.

KEYWORDS: Essential Hypertension, High Blood Pressure, Homoeopathy, Homoeopathic Medicine.

INTRODUCTION:

We live in a rapidly changing environment. Around the world, human health is shaped by the same powerful forces: aging, rapid urbanization, globalization of unhealthy lifestyles. As a result, noncommunicable diseases such as cardiovascular disease, cancer, diabetes and chronic lung disease have overtaken infectious diseases as the world's leading cause of death. One of the key risk factors for cardiovascular disease is hypertension – or elevated blood pressure. Worldwide, nearly one billion people have high blood pressure (hypertension) of these, and approximately 7.1 million deaths per year are attributable to hypertension. In India, hypertension occurs in 25-30 percent of middle-aged individuals in urban areas and 15-20 percent in rural areas of the country. The Prospective Urban Rural Epidemiology (PURE) study reports that the prevalence of hypertension in South Asian adults aged 35-70 years ranges from 30.7 percent in India, 33.5 percent in Pakistan, and 39.3 percent in Bangladesh. According to the Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, the overall prevalence of hypertension in India will be 159.46/1000 population by 2020.

Treatment of hypertension includes both medication and therapeutic lifestyle changes. According to WHO statistics, homeopathy is the second most useful health system in the world. Various studies have shown the effectiveness of homeopathic treatment along with TLC in managing the condition and preventing disease progression.

HYPERTENSION

Hypertension (HTN or HT), also known as high blood pressure (HBP), is a long-term medical condition in which the blood pressure in the arteries is persistently elevated. High blood pressure usually does not cause symptoms. However, long-term high blood pressure is a major risk factor for coronary artery disease, stroke, heart failure, atrial fibrillation, peripheral vascular disease, vision loss, chronic kidney disease, and dementia.

High blood pressure is classified as either primary (essential) high blood pressure or secondary high blood pressure. About 90-95% of cases are primary, defined as high blood pressure due to non-specific lifestyle and genetic factors. Lifestyle factors that increase risk include excess salt in the diet, excess body weight, smoking and alcohol consumption. The remaining 5-10% of cases are categorized as secondary hypertension, defined as high blood pressure due to an identifiable cause such as chronic kidney disease, renal artery narrowing, an endocrine disorder, or the use of birth control pills.

Blood pressure is expressed in two measurements, systolic and diastolic pressure, which are the maximum and minimum pressures. For most adults, normal resting blood pressure is between 100–130 millimeters of mercury (mmHg) systolic and 60–80 mmHg diastolic. In most adults, high blood pressure is present when resting blood pressure is consistently at or above 130/90 or 140/90 mmHg.

REVIEW OF LITERATURE:

HYPERTENSION is somewhat arbitrary, usually taken as the BP level above which there is an increased cardiovascular risk. Blood pressure fluctuates in the same individual, which can be demonstrated by 24-hour ambulatory BP measurement. There is a close correlation between ambulatory BP levels and the extent of target organ damage. According to the Joint National Committee (JNC-7), BLOOD PRESSURE is classified as

JNC 7 CATEGORY		SYSTOLIC BLOOD PRESSURE/DIASTOLIC BLOOD PRESSURE (mmHg)
1.	NORMAL	120/80
2.	PREHYPERTENSIVE	120-139/ 80-89
3.	HYPERTENSIVE	>140/90
4.	STAGE 1	140-159/90-99
5.	STAGE 2	>/=160/100

Isolated systolic hypertension is defined as systolic BP 140 and diastolic BP < 90 (in mmHg) Malignant or accelerated hypertension – is a severe form of hypertension in which BP is above 220/120 mmHg.

This leads to acute headaches, visual disturbances, hematuria, rapid development of cardiac and renal failure, high urea, nephropathy and elevated blood creatinine. etc.

CLASSIFICATION

1. Essential hypertension - 80-95% of hypertensives are diagnosed with primary or "essential" hypertension.

2. Secondary hypertension - In the remaining 5-20% of hypertensives, a specific underlying disorder causing the increase in blood pressure can be identified. In individuals with "secondary" hypertension, the specific mechanism of the blood pressure increase is often more apparent.

ETIOLOGY Causes / Risk factors of primary hypertension

1. Uncontrollable factors

• Age

- · Positive family history
 - 2. Modifiable factors
- Obesity
- · Increase your saturated fat intake
- · Low level of physical activity
- High salt intake
- Smoking
- · Psychological stress

Alcohol consumption

CAUSES OF SECONDARY HYPERTENSION-

RENAL DISEASES

- Renal vascular diseases –arteriosclerosis, fibromyalgia
- Renal parenchymal diseases (glomerulonephritis), renal cyst (polycystic renal diseases), renal tumor (rennin secreting tumor), obstructive uropathy

ENDOCRINE DISEASES

- Adrenal primary aldosteronism, cushing syndrome, pheochromocytoma, congenital adrenal hyperplasia due to 11βhydroxylase or 17 α- hydroxylase deficiency
- Thyroid, Parathyroid Hypothyroidism, Thyrotoxicosis, Hyperparathyroidism
- Other- Liddle syndrome, Acromegaly

NEUROGENIC

Psychogenic, acute increased intracranial pressure, acute spinal cord section

DRUGS

• Oral contraceptives, anabolic steroids, corticosteroids, NSAIDs, sympathomimetic

agents, tri cyclic anti-depressants, cocaine etc.

PREGANCY

• Eclamsia / pre-eclampsia

CO-ARCTAION OF AORTA

OBSTRUCTION SLEEP APNEA

DIAGNOSIS

Clinical presentation Most people with hypertension have no symptoms at all; therefore, it is known as the "silent killer". However, the patient should be evaluated for clinical history, signs and symptoms, blood pressure reading, physical examination, baseline examination to confirm the diagnosis, risk factor for other cardiovascular disease, and secondary cause of hypertension or target organ involvement.

History should include

- · Duration of hypertension
- Previous therapy: reactions and side effects
- · Hypertension and cardiovascular disease in the family history
- · Dietary and psychosocial history
- Other risk factors: weight change, dyslipidemia, smoking, diabetes, physical inactivity.

• Evidence of secondary hypertension: history of kidney disease; change in appearance; muscle weakness; sweating, palpitations, tremors; irregular sleep, snoring, daytime sleepiness; symptoms of hypo- or hyperthyroidism; use of substances that can increase blood pressure

• Evidence of target organ damage: history of TIA, stroke, transient blindness; angina pectoris, myocardial infarction, congestive heart failure; sexual function

SIGNS and SYMPTOMS can present as No symptoms or as common symptoms

- Headache
- Dizziness
- Insomnia
- · Lack of concentration
- Memory loss
- Palpitations
- · Nosebleeds Symptoms of hypertensive encephalopathy like
- · Acute severe headache
- Nausea and vomiting
- Vision disorders
- Transient speech disorders
- Paresthesia
- · Convulsions and loss of consciousness

PHYSICAL EXAMINATION

- · Weight, height
- · Heart rate, rhythm and character

• Evidence of cardiac enlargement (displaced apex, extra heart sounds) or signs of decompensation (cracks, renal or abdominal bruits, radiofemoral delay, abdominal aortic aneurysm)

- · Proven kidney disease (palpable kidneys)
- Evidence of endocrine system abnormality (enlarged thyroid gland)
- COMPLICATION-
- Heart failure
- Coronary artery disease
- Left ventricular hypertrophy
- · A stroke caused by a brain bleed or heart attack
- · Progressive renal failure
- · Hypertensive retinopathy
- Atherosclerosis

HOMEOPATHY AND HYPERTENSION -

A meta-analysis conducted in 2005 by Shang et al. concluded that the clinical effects of homeopathy are nothing more than placebo effects; although another meta-analysis by Linde et al. In two double-blind, randomized controlled trials of hypertension, homeopathy failed to produce statistically significant results. However, none of these studies tried individualized homeopathy instead of using a "specific remedy" or "combination formulas". A few observational studies, although methodologically inadequate, have revealed some effectiveness of individualized homeopathy in the treatment of essential hypertension and total cardiovascular mortality. Saha et al in a "Prospective, double-blind, randomized, placebo-controlled, parallel-arm clinical trial" conducted at the Mahesh Bhattacharyya Homeopathy Medical College and Hospital, West Bengal, concluded that individualized homeopathy has a significantly different hypotensive effect than placebo.

Treatment of hypertensive cases: The Dietary Approaches to Stop Hypertension (DASH) study conclusively demonstrated that over an 8-week period, a diet high in fruits, vegetables, and low-fat dairy products reduced blood pressure in individuals with high normal blood pressure or mild hypertension. Reducing daily NaCl intake to <6 g (100 meq) increased the effect of this diet on blood pressure. Fruits and vegetables are a fortified source of potassium,

magnesium and fiber, and dairy products are an important source of calcium. Pharmacological therapy Drug therapy is recommended for individuals with blood pressure 140/90 mmHg. The degree of benefit of antihypertensive drugs is related to the magnitude of the reduction in blood pressure. A reduction of 10-12 mmHg in systolic blood pressure and 5-6 mmHg in diastolic blood pressure reduces the relative risk of stroke by 35-40% and cardiomyopathy by 12-16% within 5 years of starting treatment. The risk of heart failure is reduced by >50%. Control of hypertension is the single most effective intervention for slowing the rate of progression of hypertension-related chronic kidney disease. The term resistant hypertension refers to patients with blood pressure persistently > 140/90 mmHg despite the use of three or more antihypertensive drugs, including a diuretic, in a reasonable combination and in full doses. Homeopathic remedies for high blood pressure symptoms

As part of the long-term treatment process, homeopathic remedies for high blood pressure are extremely effective and reliable methods:

1. Aconitum: Certain instances of elevated blood pressure can manifest suddenly, leading to intense fear of death and acute anxiety disorders. The homeopathic remedy Aconitum proves to be highly beneficial in such circumstances.

2. Argentum Nitricum: Elevated blood pressure may sometimes stem from anxiety and mental unrest. The homeopathic remedy Argentum Nitricum serves as an effective treatment for these conditions.

3. Natrum Muriaticum: Some instances of high blood pressure are linked to repressed anger and stress. Disturbing past events and unresolved matters can elevate blood pressure levels. Natrum Muriaticum is an ideal remedy for addressing these issues.

4. Veratrum Viride: Veratrum Viride is effective in alleviating arterial tension and stabilizing heart rate.

5. Natural Supplements: Homeopathy provides various natural supplements, such as Coenzyme, Hawthorn, Omega-3, and Vitamin E, to address health issues related to high blood pressure. These supplements enhance cardiac function and help prevent blood clot formation.

6. Ignatia: The homeopathic remedy Ignatia is commonly utilized to manage high blood pressure resulting from emotional upheavals, grief, and trauma, making it a valuable option in such cases.

7. Belladonna: This condition represents a medical emergency characterized by severe arterial pulsation that may lead to bleeding. Belladonna is instrumental in managing such critical medical situations.

8. Lachesis: Certain physiological changes, particularly in women, can lead to high blood pressure. The onset of menopause often coincides with increased blood pressure. Lachesis is employed to treat these high blood pressure conditions.

9. Glonoinum: This homeopathic remedy is particularly effective when blood pressure rises due to heat and prolonged sun exposure. Glonoinum aims to regulate blood pressure levels in these scenarios.

CONCLUSION:

"Homoeopathy is a lot of science and Homoeopath is an artist"

The law of Homoeopathy says that the substance which is capable to produce a certain set of sign and symptoms in any individual is capable of curing the same set of signs and symptoms in any individual.

Thus, we have the disease called Essential Hypertension and we have tested using few drugs depending on symptom similarity.

Homoeopathic case taking is an art, in order to evolve the portrait of the sick. Greater is the task to analyse it and to arrive at a similimum. Homoeopathic materia medica due to its magnanimous existence, becomes difficult for a human brain to memorize each and every manifestation of all drugs. Thus, in order to overcome these difficulties, better way is to abridge the art with the help of certain defined classifications..

There have been many cases where the patient is already on some modern medicines for Essential Hypertension and due to its long term use, they are suffering from its adverse reactions like kidney dysfunction, liver metabolism failure, etc. Also, in such cases when the modern medicine has been missed by the patient for once in a while, the patient may land up into grave complications like Stroke, Myocardial infarction, etc which could lead to death or some permanent disability.

That is the reason that I thought we should have some medicine in Homoeopathy which can replace, slowly and gradually, the Allopathic counterpart and we can thus avoid the adverse effects of it.

My objectives of the study were -

- 1. To compare the effectiveness of individualized homoeopathic medicines in management of essential hypertension in adults.
- 2. To compare the pre and post treatment WHO Quality of Life scores between individualized homoeopathic medicines.
- 3. To compare the pre and post treatment JNC-7 criteria between individualized homoeopathic medicines.
- 4. To assess predominant miasm in the cases of essential hypertension.

Cases were selected from OPD, IPD and various camps by randomized clinical sampling. Patients from various age groups, both the sexes, various economic strata and from different occupations were studied. Detailed case taking was taken according to the data collection form and questionnaire prepared. Each patient was assessed with JNC-7 criteria and WHO QOL BREF criteria. Follow ups were taken every 15 days with outcome assessment criteria. The study was continued for 3 months on each patient. Each patient received medicine depending on the Group he came under. Each patient from received a different medicine depending on its Totality of symptoms. The potency and repetition of the medicine was decided depending on the susceptibility of the patient. Tables, bars and pie-charts were used as a tool for greater understanding statistically. Paired t-test was used to analyze the data and test the hypothesis. Tables, bars and pie-charts were used as a tool for greater understanding statistically. Statistical test of significance namely Chi-square and Student''s Paired 't' test will be applied at 5 % and 1 % level of significance to analyze the data and test the hypothesis.

From the study, I found that both individualized homoeopathic remedies act effectively in management of essential hypertension in adults. Group was found to show good response in 70% of the cases, moderate response in 20% of the cases and poor response only in 10% of the cases; whereas, Individuals of age 45-55 years showed around 48% of total cases, whereas patients from

35-45 years showed 37% of total cases and 15% patient from 55-65 years of age. A mean of 26.5% males were found hypertensive whereas a mean of 73.5% females were found hypertensive at the start of the study. A mean of 12% patients were found to be Psoric, 61.5% to be Sycotic, 20% to be tubercular, and 6.5% to be Syphilitic miasm in background. Also, 43.33% patients received Mineral group of remedy in Group A, 36.67% received Plant group remedies, 13.33% received Animal group remedy and 6.67% received Nosodes. Natrum Muriaticum was prescribed the highest followed by Sepia, Pulsatilla and Staphysagria in Group A.

The most important and beneficial part of my study was that I was able to learn many remedies in detail from various source books and I was also able to correlate its similarity to Adrenalinum as a Homoeopathic Materia Medica remedy. It paved a way to understand the correlation between drugs easily and also to develop a drug picture where it was found to be useful and effective in treatment of Essential Hypertension. It was tedious and a challenging task to take whole mentals, physical generals and particulars and examine each patient and then come down to a remedy after analyzing each and every symptom without prejudicing myself in which group does the patient come (study or trial group) which made me learn the art of being unprejudiced and learn many aspects of case taking as well as various remedies prescribed.

Clinically, I learnt and practiced how to measure blood pressure in all patients at 15 days interval. I also learnt the importance of physical and clinical examination, especially measuring blood pressure in each and every case.

After observing and analyzing my study, I would like to extend my study to find out the answer to my question with a larger sample size that - can we replace modern medicine anti- hypertensive drugs.

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