

A Study To Evaluate The Effects Of Homeopathic Mother Tincture Olea Europea On Hypertension

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ABSTRACT

Background: Hypertension is the chronic elevation of systemic arterial pressure above a normal value. When blood pressure is >140 mg/dl it indicates the presence of hypertension, it is a major risk factor for cardiovascular and renal diseases. Over the next 20 years, the prevalence of high blood pressure may increase globally. Olea Europaea and many other natural products have been found effective for hypertension. Olea Europaea is widely used in traditional medicines and it is used to treat a wide range of ailments in many countries. Thus, this study was aimed to evaluate the effects of homeopathic mother tincture "Olea Europea" on hypertension

Methodology: A study to evaluate the effects of homeopathic mother tincture "olea europea" on hypertension was conducted in two different clinics of Lahore. Ethical approval was obtained for this purpose from respective clinics. Homeopathic physicians assessed the patients according to study protocols. To evaluate the effects of homeopathic mother tincture "olea europea" an efficacy criteria was set. Informed consent was obtained from all patients. Patients who were not interested in future visits were not enrolled in the study

Results: Total 48 patients were enrolled in this study. Patients basic demographics were includes, gender, age marital status, and occupation. Total 31 females and 17 males were enrolled in this study. Out of 48 patients, total 98% patients were married and 2% widow Total 28 patients showed excellent improvement in their blood pressure levels. Only five patients showed no change in their blood pressure levels. Good results were seen in 15 patients. Overall, very significant improvement was seen in 89.5% patients

Conclusion: Homeopathic mother tincture "Olea Europea" found to be effective in hypertensive patients. In male and female patients, Olea Europea showed excellent results. Total 89.5% patients showed significant results after using Olea Europaea mother tincture

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INTRODUCTION

DHypertension is the chronic elevation of systemic arterial pressure above a normal value (1, 2). When blood pressure is >140 mg/dl it indicates the presence of hypertension, it is a major risk factor for cardiovascular and renal diseases. Over the next 20 years, the prevalence of high blood pressure may increase globally (3). Hypertension is the fourth major reason of global morbidity and mortality (4-6). Hypertension risk factors include aging populations, tobacco use, low physical

activity, and an unhealthy diet (7). According to WHO, nearly 1.5 million people die every year due to hypertension in South-East Asia. However, due to inadequate management of high blood pressure currently South-East Asia facing a challenge of increased Cardiovascular (8)

High blood pressure is a more common public health problem in low-income countries like Pakistan (9). According to the National Health Survey of Pakistan, the prevalence of hypertension was 17.9% (10). Prevalence of

hypertension is increasing day by day in Pakistan and it is a major health problem not only in Pakistan but also in many other developed and underdeveloped countries (11). Olea Europaea and many other natural products have been found effective for hypertension. Olea Europaea is widely used in traditional medicines and it is used to treat a wide range of ailments in many countries (12)

Olea Europea has antioxidant, antihypertensive, hypoglycemic, hypocholesterolemic, and cardioprotective properties (13, 14). Olive belongs to family oleaceae whose scientific name is olea europaea (15) and it has been used to treat hypertension since ancient times (16). Olea Europaea has anti-oxidant, hypotensive, hypoglycemic and anti-inflammatory properties (17). Thus, this study was aimed to evaluate the effects of homeopathic mother tincture "Olea Europea" on hypertension.

METHODOLOGY

A study to evaluate the effects of homeopathic mother tincture "olea europeae" on hypertension was conducted in two different clinics of Lahore. Ethical approval was obtained for this purpose from respective clinics. Homeopathic physicians assessed the patients according to study protocols. To evaluate the effects of homeopathic mother tincture "olea europeae" an efficacy criteria was set as shown in table 1 and patients blood pressure values were monitored according to this table. Excellent control, good control and no control was the scale used to assess the blood pressure levels after the use of homeopathic medicine.

Remarks	Blood Pressure (mm Hg)
Excellent control	125-85
Good control	130-90
No control	No change

Table 1: Efficacy Criteria

INCLUSION AND EXCLUSION CRITERIA

In this study, only pre-diagnosed hypertensive patients were included. Both male and female patients of age 25-75 years were enrolled in this study. Informed consent was obtained from all patients. Patients who were not interested in future visits were not enrolled in the study.

DATA COLLECTION

Qualified homeopathic doctors assessed the patients according to inclusion and exclusion criteria. Patient's basic demographics were recorded like gender, age, marital status, occupation duration of disease, and medication history. Blood pressure levels were checked and recorded on a data collection form. Homeopathic mother tincture "Olea Europea" was dispensed to all patients. Homeopathic mother tincture "Olea Europea" 5-10 drops thrice a day for 15 days was recommended to all patients. Nutritional management advice was also given to all patients and patients were instructed to come for follow-up check up as shown in figure 1.

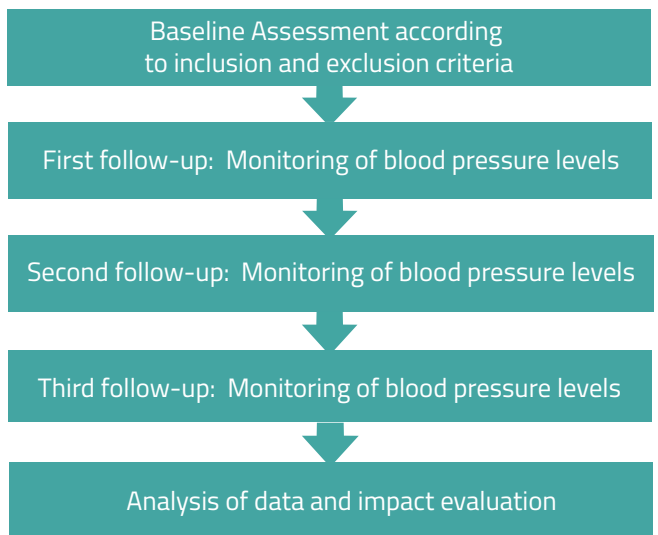


Figure 1: Overview of the study

RESULTS

Total 48 patients were enrolled in this study as shown in table 2. Patients basic demographics were includes, gender, age marital status, and occupation. Total 31 females and 17 males were enrolled in this study. Out of

48 patients, total 98% patients were married and 2% widow.

Parameters	No of Patients
Total patients	48 (100%)
Male	17 (35%)
Female	31 (64.5%)
Age groups	
30-45	19 (39.5%)
45-75	29 (60.4%)
Marital status	
Unmarried	0 (0%)
Married	47 (98%)
widow	1 (2%)

Table 2: Basic Demographics

DURATION OF DISEASE

Duration of disease was asked from every patient. Overall, 29.1% patients had hypertension from 3 years, 8.3% had this issue from 6 months, and 28% had this

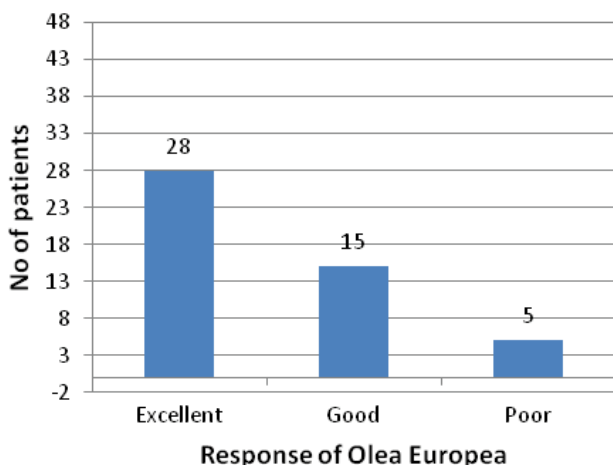
Parameters	No of Patients
6 months	4 (8.3%)
One year	8 (16.6%)
1.5 year	0 (0%)
2 year	12 (28%)
2.5 year	1 (2%)
3 years	14 (29.1%)

Table 3: Duration of Disease

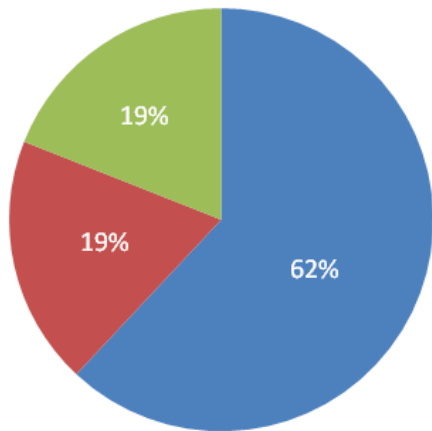
complaint from 2 years as shown in table 3. Only 2% patients had hypertension from 2.5 years and 16.6% patients had this complaint from 1 year.

EFFICACY OF HOMEOPATHIC MOTHER TINCTUR "OLEA EUROPEA"

Total 28 patients showed excellent improvement in their blood pressure levels. Only five patients showed no change in their blood pressure levels. Good results were seen in 15 patients. Overall, very significant improvement was seen in 89.5% patients as shown in graph 1.



Graph 1: Efficacy Of Homeopathic Remedy In Patients According to their therapeutic intervention, we categorized the patients in three groups, one allopathic group, second was homeopathic group plus Olea Europea, and third was patients who were not using any medicines. In the allopathic group, we included those patients who were using any oral anti-hypertensive medications. In homeopathic group, we included those patients who were using other homeopathic remedies rather than Olea Europea, in the third group, we include those patients who were not using any medicines, and they were on pure olea europea. After the use of Homeopathic medicine "Olea Europea", a tremendous improvement was seen in all groups as shown in graph 2.

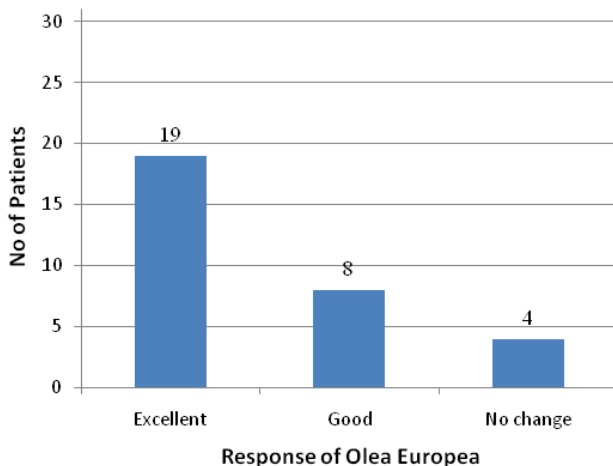


■ Homeopathic medicine plus Olea Europea
 ■ Allopathic medicines plus Olea Europea
 ■ Pure Olea Europea

Graph 2: Effects of Olea Europea Among Therapeutic Groups

EFFECTS OF OLEA EUROPEA IN FEMALE PATIENTS

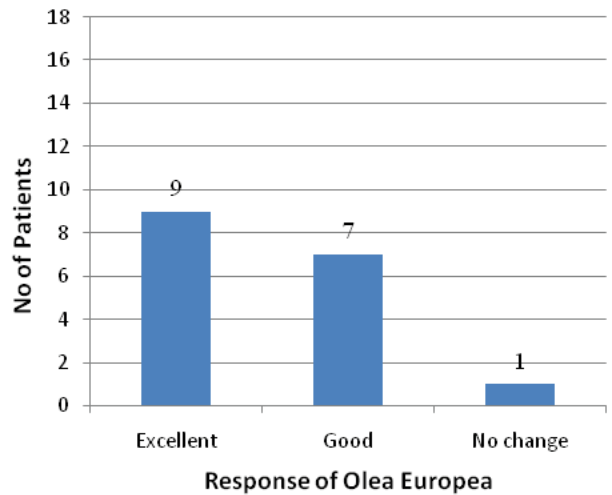
Total 31 hypertensive female patients were enrolled in this study. Excellent improvement was seen in 19 patients, while eight patients showed good improvement and four patients showed no change in their blood pressure levels as shown in graph 3.



Graph 3: Effects of Olea Europea in Female Patients

EFFECTS OF OLEA EUROPEA IN MALE PATIENTS

Total 17 hypertensive male patients were enrolled in this study. Excellent improvement was seen in nine patients, while seven patients showed good improvement and one patient showed no change in their blood pressure levels as shown in graph 4.



Graph 4: Effects of Olea Europea in Male Patients

DISCUSSION

Homeopathy is a popular form of traditional and complementary medicine (18). Homeopathic medicines are prepared from natural substances and used for the treatment of various chronic conditions in many countries (19). Like many antihypertensive medicines (allopathic) are used to control high blood pressure but all have some adverse effects (20). That is why about 80% of people in developing countries still using traditional medicines for the treatment of hypertension (21).

Hypertension is a silent killer as it is usually presenting no symptoms. Complications of hypertension include heart failure, stroke, and kidney failure. High blood pressure is a major health problem especially for elderly patients (22). The most common form of hypertension is essential or

primary hypertension. As there is no cure of hypertension but it can be controlled with proper treatment and lifestyle modifications (23). The *Olea europaea* is a plant especially found in the Mediterranean region. It belongs to family oleaceae (24).

Olea Europaea is used as an antihypertensive, and vasodilator agent (6, 23, 25, 26). Its oil is used medically as a nutrient, demulcents, and laxative (23). Thus, this study was conducted to evaluate the effects of homeopathic mother tincture "*Olea Europaea*" in hypertensive patients. Duration of study was 15 days and instructions were given to all patients regarding their follow-up visits.

Total 48 patients were enrolled in this study, 31 females and 19 were male. After the use of *Olea Europea*, significant improvement was seen in the majority of patients. Out of 48 patients, an excellent improvement was seen in 28 patients and no improvement was seen in five patients. Total 89.5% patients showed significant results after using *Olea Europaea* mother tincture. Many studies revealed that *Olea Europea* has anti-hypertensive properties and in Europe, it is widely used in folk medicines (17). In male and female patients, *Olea Europaea* showed excellent results despite number of patients in both groups was different.

Total 31 hypertensive female patients were enrolled in this study. Excellent improvement was seen in 61% patients, while 25% patients showed good improvement and 12% patients showed no change in their blood pressure levels. Total 17 hypertensive male patients were enrolled in this study. Excellent improvement was seen in 9 (53%) patients, while 7 (41.1%) patients showed good improvement and 1 (5.9%) patient showed no change in their blood pressure level. Excellent results were seen in

patients who were using homeopathic medicines already likewise 19% improvement was seen in patients who were using allopathic antihypertensive medications and 19% improvement was seen in those patients who used only *Olea Europea*.

CONCLUSION

Homeopathic mother tincture "*Olea Europea*" found to be effective in hypertensive patients. In male and female patients, *Olea Europea* showed excellent results. Total 89.5% patients showed significant results after using *Olea Europaea* mother tincture.

REFERENCES

1. Giles TD, Materson BJ, Cohn JN, Kostis JB. Definition and classification of hypertension: an update. *The journal of clinical hypertension*. 2009;11(11):611-4.
2. Latif B. Role of Homeopathy in the treatment of hypertension. *stroke*. 2017;5:8.
3. Giles TD. Assessment of global risk: a foundation for a new, better definition of hypertension. *The Journal of Clinical Hypertension*. 2006;8:5-14.
4. Varanasi R, Kolli R, Rai Y, Dubashi R, Reddy GRC, Patole T, et al. Effects of Individualized Homeopathic Intervention in Stage I Essential Hypertension: A Single-Blind Randomized, Placebo-Controlled Trial. *Homeopathy*. 2020;109(01):A032.
5. Phing TC. A retrospective cohort study on the efficacy of homeopathy compared to homeopathy plus conventional medicine in the treatment of hypertension. *Homeopathy*. 2016;105(01).
6. Talha J, Priyanka M, Akanksha A. Hypertension and herbal plants. *Int Res J Pharm*. 2011;2(8):26-30.
7. Neupane D, McLachlan CS, Sharma R, Gyawali B, Khanal V, Mishra SR, et al. Prevalence of hypertension in member countries of South Asian Association for Regional Cooperation (SAARC): systematic review and meta-analysis. *Medicine*. 2014;93(13).
8. Khan W, Moin N, Iktidar S, Sakrani J, Abid R, Afzal J, et al.

- Real-life effectiveness, safety, and tolerability of amlodipine/valsartan or amlodipine/valsartan/hydrochlorothiazide single-pill combination in patients with hypertension from Pakistan. *Therapeutic advances in cardiovascular disease*. 2014;8(2):45-55.
9. Shafi ST, Shafi T. A survey of hypertension prevalence, awareness, treatment, and control in health screening camps of rural central Punjab, Pakistan. *Journal of epidemiology and global health*. 2017;7(2):135-40.
10. Dodani S, Mistry R, Khwaja A, Farooqi M, Qureshi R, Kazmi K. Prevalence and awareness of risk factors and behaviours of coronary heart disease in an urban population of Karachi, the largest city of Pakistan: a community survey. *Journal of public health*. 2004;26(3):245-9.
11. Ishtiaq S, Ilyas U, Naz S, Altaf R, Afzaal H, Muhammad SA, et al. Assessment of the risk factors of hypertension among adult & elderly group in twin cities of Pakistan. *J Pak Med Assoc [Internet]*. 2017:1664-9.
12. Hashmi MA, Khan A, Hanif M, Farooq U, Perveen S. Traditional uses, phytochemistry, and pharmacology of *Olea europaea* (olive). *Evidence-Based Complementary and Alternative Medicine*. 2015;2015.
13. Özcan MM, Matthäus B. A review: benefit and bioactive properties of olive (*Olea europaea* L.) leaves. *European Food Research and Technology*. 2017;243(1):89-99.
14. Nicolì F, Negro C, Vergine M, Aprile A, Nutricati E, Sabella E, et al. Evaluation of phytochemical and antioxidant properties of 15 Italian *olea europaea* L. Cultivar Leaves. *Molecules*. 2019;24(10):1998.
15. Ferreira D, Pinto D, Silva AM, ML A. *Olea Europaea* L.: Facts and Myths Regarding Cardiovascular Health. *Herbal medicine: back to the future*. 2017;1:57-128.
16. Susalit E, Agus N, Effendi I, Tjandrawinata RR, Nofiarny D, Perrinjaquet-Mocchetti T, et al. Olive (*Olea europaea*) leaf extract effective in patients with stage-1 hypertension: comparison with Captopril. *Phytomedicine*. 2011;18(4):251-8.
17. Omar S. Olive: Native of Mediterranean region and Health benefits. *Pharmacognosy Reviews*. 2008;2(3):135.
18. Qi Z. WHO Traditional Medicine Strategy. 2014-2023. Geneva: World Health Organization. 2013.
19. Parmar V, Prasad A, Patel J, Dodiya P, Javia B, Mathpati B. Therapeutic management of clinical mastitis caused by *Pseudomonas SPP* with special reference to homeopathy medicine in Jafarabadi buffalo—A case study. *Ruminant Science*. 2015;4(2):245-6.
20. Singh P, Mishra A, Singh P, Goswami S, Singh A, Tiwari KD. Hypertension and herbal plant for its treatment: a review. *Indian Journal of Research in Pharmacy and Biotechnology*. 2015;3(5):358.
21. Agrawal M, Nandini D, Sharma V, Chauhan N. Herbal remedies for treatment of hypertension. *Int J Pharm Sci and Res*. 2010;1(5):1-21.
22. Baharvand-Ahmadi B, Bahmani M, Tajeddini P, Rafieian-Kopaei M, Naghdi N. An ethnobotanical study of medicinal plants administered for the treatment of hypertension. *Journal of renal injury prevention*. 2016;5(3):123.
23. Ronander G. The relative effectiveness of *Olea europea* subsp. *africana* aqueous leaf extract and of *Olea europea* subsp. *africana* 6CH on mild to moderate hypertension 2000.
24. Batllori Coll M. Effects of bioactive compounds of *Olea europaea* L. on blood pressure. 2019.
25. Ahmad F, Hassan A. Hypertension-an approach to diagnosis, examination and investigations in young adults. *Continuing Medical Education*. 2008;24(5):256.
26. El SN, Karakaya S. Olive tree (*Olea europaea*) leaves: potential beneficial effects on human health. *Nutrition reviews*. 2009;67(11):632-8.