



An open comparative clinical study (Phase II) of Siddhar Yoga Therapy and *Lavanga Pattai Thylam* (External) as add on Therapy for Uratha Pitham (Hypertension)

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ABSTRACT

Hypertension, often known as high blood pressure, is a complex condition that is influenced by a combination of variables that may be modified or cannot be modified. Furthermore, hypertension is a grave and enduring ailment that contributes to global death and morbidity. Conventional antihypertensive drugs induce prolong adverse effect upon sustained usage which implicates the need of the alternate therapeutic strategy for managing hypertension. The main aim of the present clinical investigation is to evaluate the clinical efficacy of Siddhar yoga therapy alone (30 patients) and in combination with external oil therapy with *Lavanga pattai thylam* (30 patients) for the management of hypertension. In the evaluation of blood pressure among individuals in group A who had Siddhar yoga treatment, a total of 30 patients were assessed. Among these patients, 10 cases (33.33%) shown a favourable prognosis, 8 instances (26.67%) exhibited a moderate prognosis, and 6 cases (20%) displayed mild or no improvement. In the evaluation of blood pressure among individuals in group B who underwent Siddhar yoga therapy in conjunction with *Lavanga pattai thylam* (oil bath), it was observed that out of a total of 30 patients, 12 (40%) cases exhibited a favourable prognosis, 9 (30%) cases displayed a moderate prognosis, 6 (20%) cases demonstrated a mild prognosis, and 3 (10%) cases did not exhibit significant improvement. When assessing the overall results of the study, it was seen that among the 60 patients included, 22 cases (36.67%) shown a positive outcome, 17 cases (28.33%) presented a moderate outcome, 12 cases (20%) exhibited a mild outcome, and 9 cases (15%) did not manifest any impact. In conclusion from the results of the study that there was a marginal increase (40%) in the clinical recovery of the patients belongs to group B who underwent Siddhar yoga therapy in conjunction with *Lavanga pattai thylam* in comparison with group A (33.33%) who had Siddhar yoga treatment alone.

KEY WORDS: Clinical study, Uratha Pitham, Hypertension, Siddhar yoga therapy, *Lavanga pattai thylam*, Oil therapy.

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1. Introduction

The Siddha system of medicine is an ancient medical system that began in the southern region [1]. The Siddhargal, also known as Siddhars, were esteemed scholars during ancient times. The term Siddha finds its etymological roots in the Tamil language, specifically derived from the word "siddhi," which conveys the concepts of an item to be achieved, perfection, or a state of heavenly happiness. The system of medicine is said to have been transmitted by Lord Shiva to his wife Parvathi, who then handed it on to Nandidevar. Nandidevar thereafter disseminated the knowledge of Siddha medicine to Siddhars, with the intention of benefiting humanity [2,3].

Siddhars refer to those who have achieved siddhi. The practitioners of astanga yogam have devised and diligently followed a system consisting of eight distinct stages in order to achieve a state of everlasting happiness. The contributions made by the individuals may be categorised primarily into the following four distinct categories: 1. Gnanam refers to the acquisition of spiritual knowledge. 2. Yogam encompasses the concepts of yoga and various meditation techniques. 3. Vatham pertains to the study and application of alchemy, along with its associated practices. 4. Vaidhyam encompasses the field of medicinal practises.

The implementation of preventive measures aimed at preserving bodily health contributes to the preservation of youthfulness and the achievement of spiritual excellence. The practise of Kaya karpam, which pertains to prevention and longevity, was historically employed as a proactive approach to ward off illnesses [4]. Engaging in the practise of kaya karpam is said to confer acquired immunity to the human body. Kaya karapam serves two primary functions, namely disease prevention and health restoration during periods of illness. Therefore, it possesses both preventative and constructive characteristics. The study of Kaya karpam is divided into three divisions, including Mooligai karpam. The concepts of "Thathu karpam" and "Seeva karpam" are being discussed. The practise of yoga karpam. Mooligai karpam pertains to pharmaceutical substances derived from plants. The field of Thathu and Seeva Karpam include the study and utilisation of minerals and animal-derived substances.

The use of phytotherapeutics has a notable increase in popularity across many contexts, mostly due to its perceived efficacy in promoting and preserving overall well-being. This approach is

believed to contribute to disease and sickness prevention [5,6]. The main aim of the present clinical investigation is to evaluate the efficacy of Siddhar yoga therapy alone and in combination with oil therapy for the management of hypertension

2. Materials and Methods

2.1. Study design

The study was done with the necessary authorization from the relevant governing body. During this clinical trial, individuals who presented at the Outpatient Department (OPD) of the Department of Siddhar Yoga Maruthuvam were assessed for elevated blood pressure over a period of three consecutive days. Patients who exhibited symptoms of hypertension, such as dizziness, sweating, headache, nausea, and fatigue, were selected for participation in the study based on predetermined inclusion criteria. The patients were provided with an explanation of the study's goal and the purpose of the surveys. The data were handled with a significant emphasis on maintaining anonymity and confidentiality.

The research recruited patients who met the inclusion criteria. The individuals who were previously receiving treatment are instructed to maintain their drug regimen. The concept of Siddhar yoga treatment was further elucidated and recommended, with the suggestion to engage in a practise duration of 45 minutes, twice daily, for a period of 30 consecutive days. The experimental medicine, lavanga pattai thylam external oil bath, was administered twice weekly for a duration of 30 days. The patient was advised to visit the hospital once in 7 days and of each visit, clinical assessment was done and prognosis was noted.

2.2. Study group

Study population were divided in to two group of which Group A comprises of 30 patients with Siddhar yoga therapy advised to practice Asanam such as Padmasanam, Vajrasanam, Makrasanam and Savasanam for the period of 20 minutes. Group B comprises of 30 patients with Siddhar yoga therapy along with trial drug oil batch are advised to practice pranayamam such as Naadi sudhi pranayamam, Bhramari pranayamamm, Setali

pranayamam for 15 minutes along with Dhiyanam
- Om chanting for 10 minutes

2.3. Trial Drug

Medicine: *Lavanga Pattai Thylam* [7]

Recommendation: External – oil bath – weekly twice

Duration: 30 days

2.4. Source and Formulation

The necessary raw pharmaceutical substances are obtained from a reputable local pharmacy. The medications utilised in the study were validated by the Department of Medicinal Botany at the Government Siddha Medical College in Chennai, India.

Cinnamomum Verum - 100 grams

Cuminum cyminum- 100 grams

Curcuma longa- 100 grams

Rosia centifolia - 100 grams

Cow milk - 400 ml

Sesamum indicum oil- 400 ml

An equivalent amount of channa lavaga pattai, narseeragam, manjal, and paneerpoo were measured and combined in a container. Two litres of water were added to the pot, then cooked until it was reduced to one-fourth of its original volume, and subsequently filtered. Subsequently, a homogeneous mixture consisting of cow's milk and gingelly oil in an equal proportion, akin to that of a decoction, is combined with the aforementioned decoction and subjected to boiling until it attains a granular texture resembling fine sand. Subsequently, the substance undergoes a filtration process, resulting in the extraction of oil.

2.5. Ethical approval and Data collection

Ethical approval for this study was obtained from the Institutional Ethical committee. IEC No: GSMC-C11-ME-2/015/2019. This study presents the findings of Phase II, an open comparative clinical trial aimed at assessing the efficacy of Siddhar yoga therapy and lavanga pattai thylam external as adjunctive therapies for uratha pitham (hypertension). The statistical analysis results are reported herein. This chapter focuses on the analysis and interpretation of data obtained from a sample of 60 study participants who presented with signs and symptoms of uratha pitham at the

outpatient department (OPD) of the Siddhar yoga maruthuvam Department at the Government Siddha Medical College, affiliated with AAGHIM. Between the years 2019 and 2021. The data that was gathered was structured and analysed using both descriptive and inferential statistical methods, and it was coded and examined in accordance with the study's goals. It was registered in Clinical Trials Registry – India (CTRI) and the reference number is REF/CTRI/2020/04/024507.

2.6. Statistical Analysis

The data was inputted into a computer system utilising MS Access software to identify logical flaws, and subsequently crosschecked manually to detect any data entry issues. Next, the data was analysed using STATA and SPSS software for both univariate and multivariate analysis. The significance of a certain impact variable was determined via the use of the Student's t-test and paired t-test.

3. Result

3.1. Descriptive Analysis of Socio - Demographic Variables

3.1.1. Age Interpretation

Among the sample of 60 patients, the largest proportion, specifically 32 individuals (53.33%), fell within the age range of 30-50 years. Additionally, 28 patients (46.67%) were classified within the 51-60 age category. As shown in Figure 1.

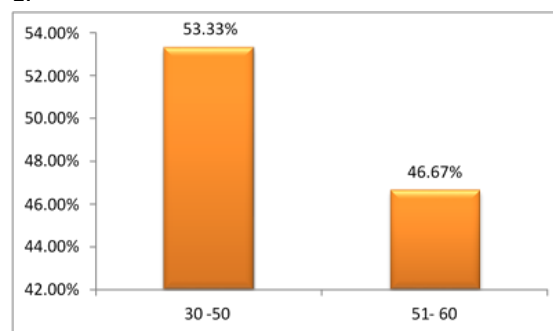


Figure 1: Age Interpretation

3.1.2. Gender Interpretation

Among the sample of 60 patients, a clear majority of cases, specifically 33 individuals (55%), were identified as male, while a minority of cases,

comprising 27 individuals (45%), were identified as female. As shown in Figure 2.

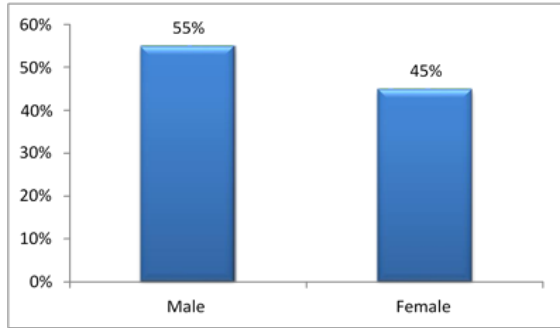


Figure 2: Gender Interpretation

3.1.3. Kaalam Interpretation

Among the sample of 60 patients, it was observed that 45 individuals (75%) fell inside the pitha kaalam category, while the remaining 15 individuals (25%) were classified under the vaadha kaalam category. As shown in Figure 3.

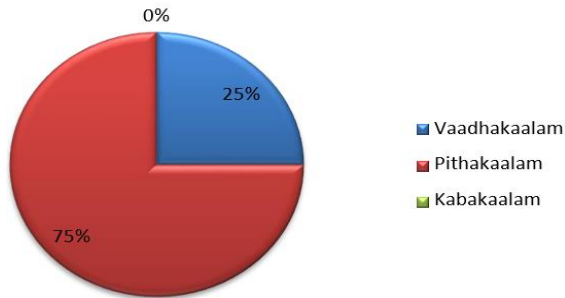


Figure 3: Kaalam Interpretation

3.1.4. Seasonal Interpretation

Among the Tamil case types, koothirkaalam had the highest occurrence (40 cases, or 66.7%), followed by munpanikaalam (20 cases, or 33.3%). As shown in Figure 4.

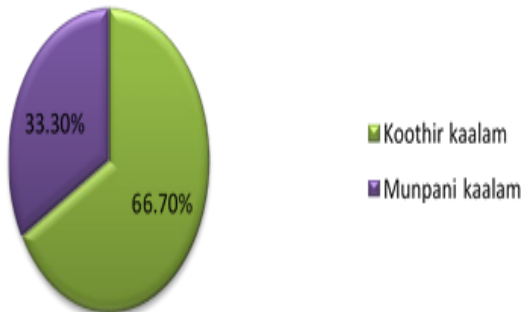


Figure 4: Seasonal Interpretation

3.1.5. Thinai Interpretation

Among the total sample size of 60 patients, it was seen that 38 individuals, accounting for 63.33% of the participants, originated from the Marutham region. Conversely, the remaining 22 patients, constituting 36.67% of the sample, were found to have come from the Neithal region. The Neithal thinai variety has a higher susceptibility to pitha illness. As shown in Figure 5.

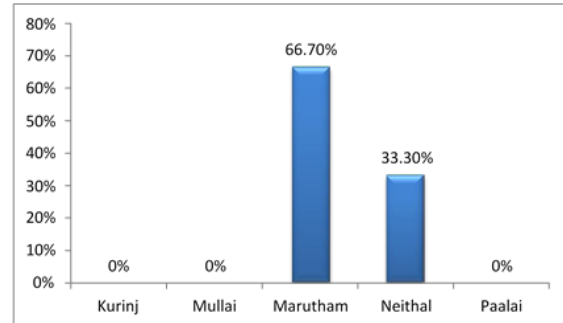


Figure 5: Thinai Interpretation

3.1.6. Occupation Interpretation

Given the intimate relationship between occupancy history and the exaggeration of the disease, a comprehensive and organised history was compiled and recorded. Out of the whole sample population, 10 individuals (16.67%) identified themselves as housewives, 12 individuals (20%) were engaged in labor-intensive occupations, 11 individuals (18.3%) were involved in business-related activities, 9 individuals (15%) worked as drivers, 8 individuals (13.3%) were retired, and 10 individuals (16.67%) pursued professional careers. As shown in Figure 6.

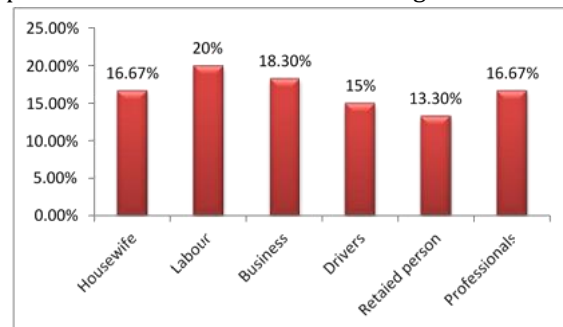


Figure 6: Occupation Interpretation

3.2. Socio-Economic Interpretation

Among the total of 60 instances examined, the largest proportion of cases, namely 24 cases (40%),

were observed within the low-income group. Additionally, 20 cases (33.33%) were identified within the middle-income group, while 16 cases (26.67%) were found within the high-income group. As shown in Figure 7.

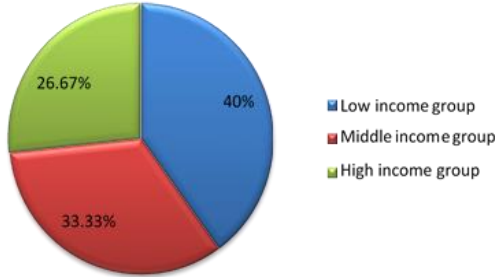


Figure 7: Socio-Economic Interpretation

3.2.1. Food Habit Interpretation

Among the sample of 60 patients, it was observed that 10 individuals (16.67%) adhered to a vegetarian diet, while the remaining 50 individuals (83.33%) followed a mixed diet. As shown in Figure 8.

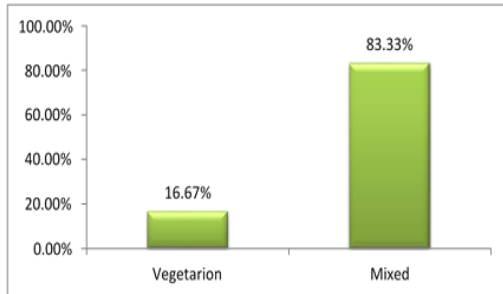


Figure 8: Food Habit Interpretation

3.2.2. Personal Habits Interpretation

Among the sample of 60 patients, it was observed that 9 individuals (15%) reported being smokers, 8 individuals (13.33%) reported being alcoholics, 5 individuals (8.33%) reported having a tobacco chewing habit, 10 individuals (16.67%) reported having a combination of these habits, and 21 individuals (33%) reported not having any of the aforementioned behaviours. As shown in Figure 9.

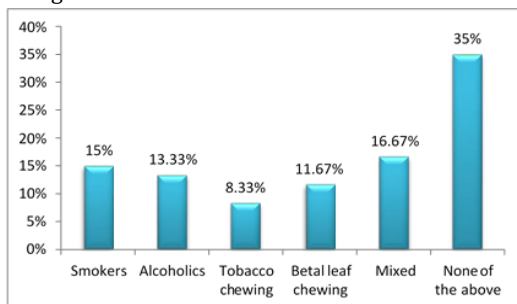


Figure 9: Personal Habits Interpretation

3.2.3. Yaakai Interpretation

Among the sample of 60 patients, it was seen that 18 individuals (30%) exhibited symptoms indicative of vatha pitha degi, while 4 patients (6.67%) had manifestations of vatha kaba degi. Additionally, 33 patients (55%) were found to have pithavatha degi, while 2 patients (3.33%) exhibited symptoms of pithakaba degi. Lastly, 3 patients (5%) were identified as having kaba vatha degi. As shown in Figure 10.

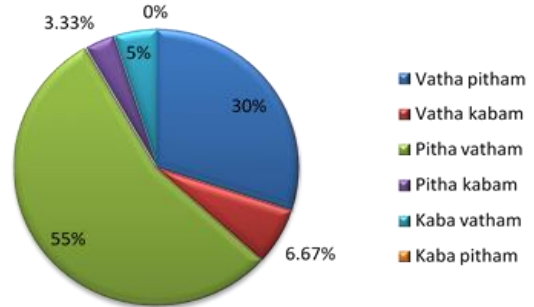


Figure 10: Yaakai Interpretation

3.2.4. Naadi Interpretation

Among the sample of 60 patients, it was observed that 3 individuals (6.67%) exhibited pitha naadi, 24 individuals (40%) displayed vatha pitha naadi, 30 individuals (50%) demonstrated pitha vatha naadi, and 2 individuals (3.33%) presented kaba vatha naadi. As shown in Figure 11.

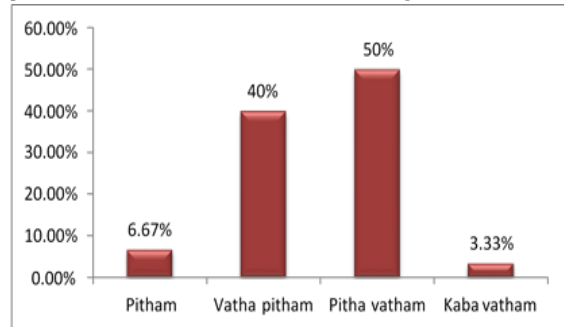


Figure 11: Naadi Interpretation

3.2.5. Neikkuri Interpretation

Among the sample of 60 patients, it was observed that 20 individuals (33.33%) exhibited symptoms of vatham (resembling a snake), 29 individuals (48.33%) displayed symptoms of pitham (resembling a ring), and 11 individuals (18.33%) presented symptoms of kabam (resembling a pearl). As shown in Figure 12.

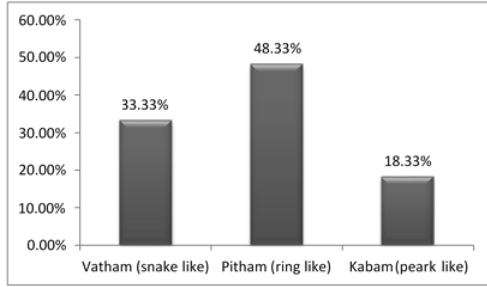


Figure 12: Neikkuri Interpretation

3.3. Assessment of Uyir Thathukkal

3.3.1. Assessment of Vatham

In the study population, it was observed that all 60 patients (100%) had symptoms related to vatham, viyaanan, and samaanan. Additionally, a subset of 5 patients (8.33%) displayed symptoms associated with koorman. The condition known as Praanan was seen to have an impact on 8 individuals, which accounts for 13.33% of the total patient population. The condition known as devathathan was shown to have an impact on 18 individuals, constituting about 30% of the total patient population. As shown in Figure 13.

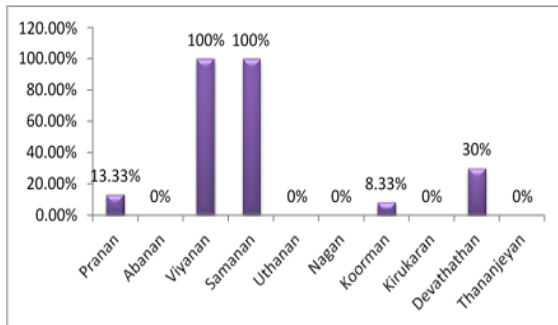


Figure 13: Assessment of Vatham

3.3.2. Assessment of Pitham

Out of the various varieties of azhal, it was observed that sathagam was present in 30 patients, accounting for 50% of the total cases. A total of 19 individuals, accounting for 31.67% of the sample, exhibited symptoms of Alosagam. As shown in Figure 14.

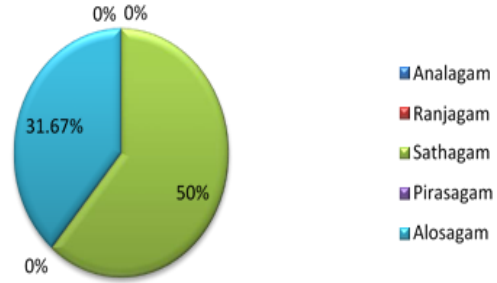


Figure 14: Assessment of Pitham

3.3.3. Assessment of Kabam

Among a sample of 60 patients in Kabam, it was observed that avalambagam was impacted in 10 individuals, accounting for 16.67% of the total patients. Similarly, tharpagam was found to be affected in 12 patients, representing 20% of the sample. As shown in Figure 15.

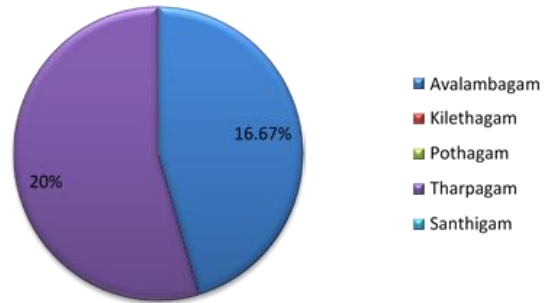


Figure 15: Assessment of Kabam

3.3.4. Assessment of Ezhu Udal Thathukkal

Among a cohort of 60 individuals, it was observed that the conditions of ezhu udal thathukkal, saram, and seneer were prevalent in all of the patients. As shown in Figure 16.

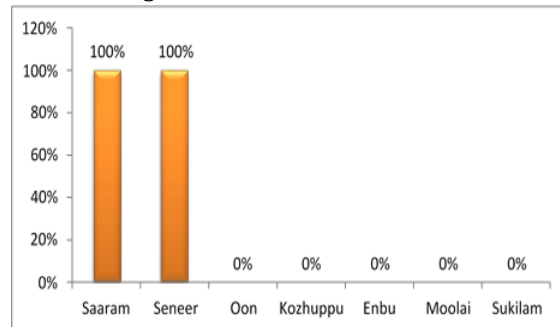


Figure 16: Assessment of Ezhu Udal Thathukkal

3.3.5. Assessment of Ennvagai Thervugal

Among the sample of 60 patients in the Ennvagai thervu study, naadi was examined in all 60 patients, accounting for 100% of the sample. Additionally, vizhi was found to be impacted in 8

patients, representing 13.33% of the sample. As shown in Figure 17.

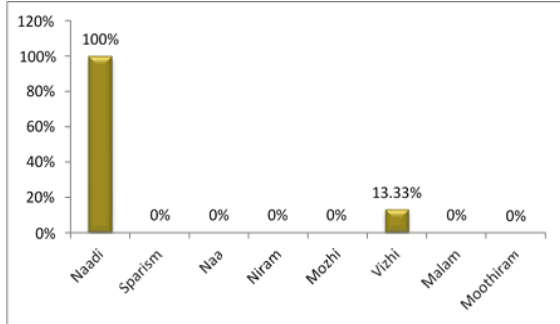


Figure 17: Assessment of Ennvagai Thervugal

3.4. Inferential Statistics Assessment of Diagnosis Tool Variable

3.4.1. Assessment of Clinical Prognosis

Among the sample of 60 patients, it was observed that 15 individuals (25%) experienced headaches prior to treatment. However, following the treatment, this number decreased to 2 individuals (3.33%). Similarly, 18 patients (30%) reported experiencing giddiness before treatment, which subsequently reduced to 6 patients (10%) after treatment. Furthermore, 12 cases (20%) involved insomnia prior to treatment, but this figure decreased to 2 cases (3.33%) post-treatment. Lastly, 10 patients (16.67%) exhibited palpitations before treatment, and this number decreased to 3 patients (5%) after receiving treatment. As shown in Figure 18.

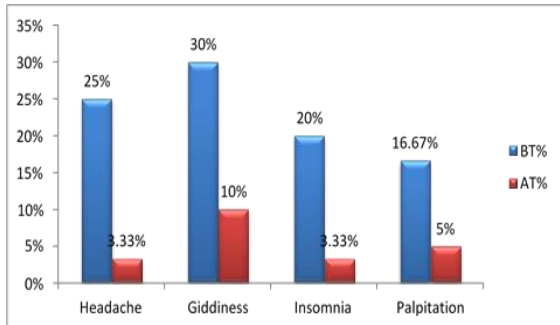
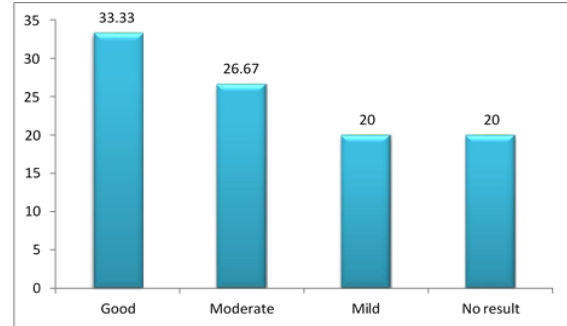


Figure 18: Assessment of Clinical Prognosis

3.4.2. Effect on Blood Pressure of Group A with Siddhar Yoga Therapy

In the evaluation of blood pressure among individuals in group A who had Siddhar yoga treatment, a total of 30 patients were assessed. Among these patients, 10 cases (33.33%) shown a favourable prognosis, 8 instances (26.67%)

exhibited a moderate prognosis, and 6 cases (20%) displayed mild or no improvement. As shown in Figure 19.

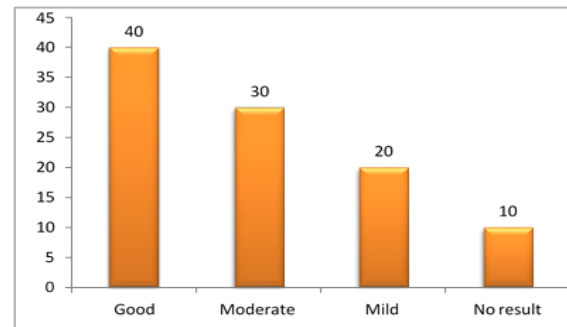


Good-120-129/80-89, moderate- 130-139/90-99, mild- >=140/>=100

Figure 19: Group A with Siddhar Yoga Therapy

3.4.3. Effect on Blood Pressure of Group B Siddhar Yoga Therapy with Oil Bath

In the evaluation of blood pressure among individuals in group B who underwent Siddhar yoga therapy in conjunction with Lavanga pattai thylam (oil bath), it was observed that out of a total of 30 patients, 12 (40%) cases exhibited a favourable prognosis, 9 (30%) cases displayed a moderate prognosis, 6 (20%) cases demonstrated a mild prognosis, and 3 (10%) cases did not exhibit significant improvement. As shown in Figure 20.



Good-120-129/80-89, moderate- 130-139/90-99, mild- >=140/>=100

Figure 20: Group B Siddhar Yoga Therapy with Oil Bath

3.4.4. Comparative analysis on Blood Pressure between siddhar yoga therapy and siddhar yoga therapy with oil bath

In the evaluation of systolic blood pressure among individuals underwent Siddhar yoga therapy, it was observed that out of a total of 30 patients, exhibited mean systolic pressure of about 135.83 mm Hg in comparison with Siddhar yoga therapy in

conjunction with *Lavanga pattai thylam* (oil bath) which exhibit mean systolic pressure of about 132.33 mm Hg. As shown in Table 1.

Table 1: Effect on Systolic Pressure between siddhar yoga therapy and siddhar yoga therapy with oil bath

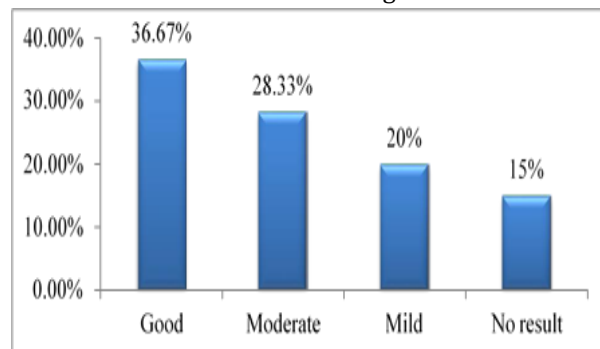
Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Systolic Pressure	Yoga	30	135.83	13.13611	2.39832
	yoga and oil bath	30	132.33	12.15796	2.21973

In the evaluation of systolic blood pressure among individuals underwent Siddhar yoga therapy, it was observed that out of a total of 30 patients, exhibited mean diastolic pressure of about 92.00 mm Hg in comparison with Siddhar yoga therapy in conjunction with *Lavanga pattai thylam* (oil bath) which exhibit mean diastolic pressure of about 89.50 mm Hg. As shown in Table 2.

Table 2: Effect on Diastolic Pressure between siddhar yoga therapy and siddhar yoga therapy with oil bath

3.4.5. Assessment on Overall Outcome of the Study

In evaluating the overall outcome of the study, it was seen that out of a total of 60 patients, 22 instances (36.67%) exhibited a favourable outcome, 17 cases (28.33%) shown a moderate outcome, 12 cases (20%) displayed a mild outcome, and 9 cases (15%) did not exhibit any discernible effect. As shown in Figure 21.



Good-120-129/80-89, moderate- 130-139/90-99, mild- >=140/>=100

Figure 21: Overall Outcome of the Study

4. Discussion

The global prevalence of hypertension (HTN) is estimated to affect approximately one-third of the adult population, with evidence indicating a positive correlation between age and the likelihood of developing this condition [8]. The prevalence of

hypertension is increasing in sub-Saharan nations, which were formerly unaffected by this public health issue. Within this particular demographic, hypertension (HTN) exhibits distinct features such as a sudden onset, inadequate management, and an early occurrence of damage to target organs [9]. Inadequate management of hypertension (HTN) significantly contributes to the substantial burden of cardiovascular diseases (CVDs) and the resulting morbidity and death. A pertinent systemic meta-analysis has demonstrated that a notable drop in the risk of cardiovascular disease (CVD) is observed with each reduction of 10 mmHg in systolic blood pressure (BP) [10]. Multiple categories of antihypertensive drugs have been formulated with the objective of lowering blood pressure (BP) and, subsequently, mitigating the related hazards [11].

The prevalence of hypertension among people in India is around 30%, with urban areas seeing a prevalence of 34% and rural areas experiencing a prevalence of 28%. Regrettably, the treatment

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
Diastolic Pressure	Yoga	30	92.00	7.61124	1.38962
	yoga and oil bath	30	89.50	8.44352	1.54157

rates for individuals with hypertension in rural and urban areas of India are at 25% and 38% respectively. The control rate of hypertension in India is very low, with approximately 10% of the rural and 20% of the urban Indian hypertensive population successfully managing their blood pressure levels [12]. In the present study the patients underwent treatment with Siddhar yoga therapy and lavanga patai thylam (external) oil bath for a duration of around 30 days. Blood and urine samples were collected before to and during the administration of therapy. Among the sample of 60 patients, a significant proportion of individuals, specifically 32 patients (53.33%), fell within the age range of 30-50 years. Additionally, 28 patients (46.67%) were categorised within the 51-60 age category. Among the cohort of 60 patients, a significant proportion of cases, namely 33 individuals (55%), were identified as male, whereas a smaller proportion of cases, specifically 27 individuals (45%), were identified as female. Among the sample of 60 patients, it was observed that 45 individuals (75%) fell into the pitha kaalam category, while the remaining 15 individuals (25%) were classified as vaadha kaalam. According

to the Tamil categorization, the largest occurrence of instances, accounting for 66.7%, was seen during koothirkaalam, while 33.3% of cases were identified during munpanikaalam. Among the total sample size of 60 patients, it was observed that 38 individuals, accounting for 63.33% of the participants, originated from the region of Marutham. Conversely, the remaining 22 patients, constituting 36.67% of the sample, hailed from the Neithal area. The Neithal thinai variety has a higher susceptibility to pitha illness.

Due to the intimate association between occupation history and the amplification of the disease, a comprehensive and organised record of detailed history was compiled and calculated. Out of the whole sample population, 10 individuals (16.67%) identified as housewives, 12 individuals (20%) were engaged in labor-intensive occupations, 11 individuals (18.3%) were involved in business-related activities, 9 individuals (15%) worked as drivers, 8 individuals (13.3%) were retired, and 10 individuals (16.67%) were professionals.

The regulation of blood pressure (BP) is subject to the effect of both genetic and environmental factors. The effect of dietary factors on the control of blood pressure is a crucial aspect of maintaining blood pressure homeostasis, thereby establishing them as an important environmental factor [13]. The aetiology of hypertension remains mainly elusive, with variables such as genetics, advanced age, male gender, obesity, and bad lifestyle choices, including inadequate physical exercise and excessive salt consumption, believed to have a role. Additionally, several environmental factors, including socioeconomic status, have been implicated in the development of this condition. Extensive research has been undertaken on socioeconomic status (SES) disparities in relation to the prevention and treatment of hypertension, with varying and contentious findings [14]. In the present study majority of instances, out of a total of 60, were seen among the low income category. Out of the total sample size of 60 cases, 24 cases (40%) were from the intermediate income group, whereas 20 cases (33.33%) were from the high income group. Among the sample of 60 cases, it was observed that 10 individuals (16.67%) adhered to a vegetarian diet, while the remaining 50 individuals (83.33%) followed a mixed diet. Among the sample of 60 patients, it was observed that 9 individuals (15%) reported being smokers, 8 individuals (13.33%) reported being alcoholics, 5 individuals (8.33%) reported having a tobacco

chewing habit, 10 individuals (16.67%) reported having a combination of these habits, and 21 individuals (33%) reported not having any of the aforementioned behaviours.

The practise of yoga has been found to have a substantial impact on reducing heart rate as well as systolic and diastolic blood pressures. The provided text lacks sufficient information to be rewritten in an academic manner. Please provide a more complete sentence or context for me to work. Research findings indicate that the practise of yoga has been shown to have an immediate calming impact on the hypothalamic-pituitary-adrenal (HPA) axis, which is responsible for the physiological reaction to stress. Although the exact mechanism of action remains uncertain, it has been postulated that some yoga activities may induce a shift towards a state of parasympathetic nervous system predominance.

Yoga significantly decreases heart rate and systolic and diastolic blood pressures [15,16]. Studies suggest that yoga has an immediate quieting effect on the HPA axis response to stress. While the precise mechanism of action has not been determined, it has been hypothesized that some yoga exercises cause a shift toward parasympathetic nervous system dominance, possibly via direct vagal stimulation [17]. In our study among the sample of 60 patients, it was observed that 15 individuals (25%) experienced headaches prior to receiving treatment. Following the treatment, the incidence of headaches decreased to 2 cases (3.33%). Similarly, 18 patients (30%) reported experiencing giddiness before treatment, which decreased to 6 cases (10%) after treatment. Additionally, 12 individuals (20%) suffered from insomnia before treatment, which reduced to 2 cases (3.33%) after receiving treatment. Lastly, 10 patients (16.67%) experienced palpitations before treatment, which decreased to 3 cases (5%) after treatment. In the evaluation of blood pressure among individuals in group A who had Siddhar yoga treatment, a total of 30 patients were assessed. Among these patients, 10 cases (33.33%) shown a favourable prognosis, 8 instances (26.67%) exhibited a moderate prognosis, and 6 cases (20%) showed little or no improvement.

Yoga, an ancient discipline with its origins in India, has been the subject of several studies that have demonstrated its potential efficacy in mitigating stress when combined with pranayama practise. Pranayama encompasses the deliberate control and manipulation of breath, serving as a dynamic

conduit connecting the physical body and the mental faculties [18]. Pranayama has three distinct stages, namely "Puraka" (the inhaling phase), "Kumbhaka" (the retention period), and "Rechaka" (the exhalation phase). These phases can be executed at several speeds, either fast or slow [19]. The user's text does not contain any information to rewrite. Pranayama has a significant part in the Ashtanga Yoga system developed by Maharishi Patanjali, and it is seen as being of greater importance than yogasanas in maintaining optimal physical well-being [20]. The user's text is already academic and does not require any rewriting. Prior research has indicated that rapid and slow pranayamas have beneficial effects [21], however they elicit distinct cardiovascular responses in healthy individuals [22]. The user's text does not contain any information to rewrite in an academic manner. Previous studies have demonstrated that the use of slow pranayama techniques such as Nadishuddhi, Savitri, and Pranav may lead to a reduction in heart rate (HR), systolic blood pressure (SBP), and diastolic blood pressure (DBP), while simultaneously increasing pulse pressure (PP) [23]. In the evaluation of blood pressure among individuals in group B who underwent Siddhar yoga therapy in conjunction with Lavanga pattai thylam (oil bath), it was observed that out of a total of 30 patients, 12 cases (40%) exhibited a favourable prognosis, 9 cases (30%) demonstrated a moderate prognosis, 6 cases (20%) displayed a mild prognosis, and 3 cases (10%) did not exhibit significant improvement. In evaluating the overall outcome of the study, it was seen that out of a total of 60 patients, 22 instances (36.67%) shown a favourable outcome, 17 cases (28.33%) exhibited a moderate outcome, 12 cases (20%) displayed a mild outcome, and 9 cases (15%) did not show any discernible effect.

4. Conclusion

Hypertension is positioned as the second most prominent risk factor for men and the foremost risk factor for women on a worldwide scale. It is responsible for around 90 million disability adjusted life years (DALYs) among women and over 125 million DALYs among men. Ischemic heart disease (IHD) is the primary contributor to disability-adjusted life years (DALYs) associated with elevated systolic blood pressure (SBP), with haemorrhagic stroke and ischemic stroke ranking second and third, respectively. The growing prevalence of adverse effects associated with

traditional antihypertensive treatment necessitates the exploration of alternative medical approaches. Based on the findings of the study, it can be concluded that there was a little improvement (40%) in the clinical recovery of patients in group B who received Siddhar yoga therapy together with Lavanga pattai thylam, compared to group A (33.33%) who received Siddhar yoga treatment alone.

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