**1. Title & project number**

Project Name : Revitalization of Local health Traditions scheme.

-Documentation and assessment of “PATTRU” (POULTICE THERAPY) –a traditional Siddha medical practice followed by the local healers of Salem and Dharmapuri districts of Tamilnadu, India.

Project Ref.Number : F.No.Z.15014/83/08. E & C

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**DOCUMENTATION AND ASSESSMENT OF SIDDHA PATTRU PREPARATIONS**

**ABSTRACT**

**Introduction:**

PATTRU in Siddha Medicine:

It is a known fact that Traditional Siddha system of Medicine has provided time tested therapies both in the form of Internal medicines and External medicines. One such external application which is a boon for patients is PATTRU medicine, which is a specialized treatment suggested by siddhars.
Objectives

The main objective of this project is to document the Patru therapy followed by the Local traditional healers of Salem and Dharmapuri districts of Tamilnadu.

Of all the documented formulas the best Patru medicine for a specific disease will be selected by Experts and prepared in GMP conditions.

The Patru medicine will be subjected for Biochemical standardization in a reputed laboratory.

Clinical trial will be conducted to assess the benefit of Patru-External application in patients as a lot of research is now being done worldwide about Topical applications in the form of ‘Transdermal Penetration Studies’.

The scientists worldwide are now concentrating on the mode of external medication because it has been found to be more effective to apply medicines over the skin, than oral route or Parenteral route, because the medicines By-pass the Gastro-intestinal tract environment which affects the Bio-availability and hepatic bio transformation metabolism.

The skin is the largest organ with a large proportion of the Body’s total surface area. The best advantage of this external medication is the ability to maintain applied medicines for prolonged periods and ensure adequate absorption.

Research methodology:

Stage-1: Documentation of Patru formulations used by traditional Siddha vaidyas of Salem and Dharmapuri districts of Tamilnadu

Stage-2: Preparation of a selected Patru as per GMP standards

Stage-3: Scientific Standardization

Physiochemical analysis, Phytochemical analysis, HPTLC fingerprinting

Stage-4: Clinical Study – External application

Stage-1: Documentation of Patru formulations used by traditional Siddha vaidyas of Salem and Dharmapuri districts of Tamilnadu
The present documentation of local health traditions is confined to two districts of Tamilnadu namely Salem and Dharmapuri districts. The vaidyars (or) Traditional healers are found throughout the length and breadth of the two districts. A pilot study was conducted to identify their distribution and settlements. Attempts were made for establishment of field rapport with their folk healers association for easy data collection.

Field visits were carried out in the locality where the vaidyars were practicing Siddha medicine. This was to ensure that the vaidyar was genuine in practicing local health traditions.

Method of Data Collection

Systematic field visits were carried out to the clinics of various vaidyars practicing local health traditions. A Questionnaire was prepared and given to the vaidyars during preliminary visit. A seminar was organized locally to assemble the vaidyars in a particular place. This was arranged to segregate the genuine practitioners from quacks.

In the next step personal interviews and Bilateral discussions were carried out in the premises of the vaidyar to collect the poultice formulations practiced by them. The questionnaire was filled by the vaidyar or his representative. The responses of all informants were consolidated and quantified in each of the disease category into an Index known as Informants consensus Index (Fic) using the recommended formula (Trotter & Logan, 1986)

\[
Fic = \frac{\text{No. of Medicinal reports} - \text{No.of Taxa}}{\text{No. of Medicinal uses reported} - 1}
\]

The product of this factor ranges from 0-1. A high score (close to 1) indicates high rate of agreement between the vaidyas on the use of a particular poultice practiced in that particular locality. A low value shows fewer consensuses on that particular poultice in a defined category of disease.

Stage-2: Preparation of Pattru Medicine as per Standard operating procedure.

The best preparation of PATTRU was selected for analysis by experts in Siddha medicine

Reference:

A pattru formulation called Keelvadha pattru was selected for study as it was found to be an effective poultice for reducing pain and swelling of joints, given hereditarily by a Siddha practitioner of Salem, Dr.Srinivasan. This Pattru had been prescribed to patients with good results for the past 50 years. Due to its proven efficacy, this particular medicine was selected for study.
Stage-3: Scientific Standardization

Physiochemical analysis, Phytochemical analysis, HPTLC fingerprinting were carried out in Herbal and Indian Medicine Research Laboratory (Department of Biochemistry) Sri Ramachandra University, Porur, Chennai.

Stage.4: CLINICAL EVALUATION – External application

Clinical evaluation of a selected Pattru medicine on the patients suffering from “Vali Aiiya Keelvayu” in the knee joints was conducted.

As this is only an external application, ethical committee certification is not required.

The symptoms of the disease *Vali aiiya keel vaadham* was selected according to the siddha text “Sabaapathi kaiyedu” The Criteria for inclusion and exclusion was selected as per the descriptions mentioned in Chamberlain-1980, Hutchinson-1980 and Rheumatology. (Copeman.1978,Kelly.et.al-1981)

Pain and swelling were studied by the points given in the criteria per the statement given by the patients

Outcomes/Conclusion

Overall results of Treatment in reduction of Pain and Swelling in both. Male and Female patients treated with Pattru medicine (Total 50 patients)

<table>
<thead>
<tr>
<th>Results</th>
<th>No. of patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete cure</td>
<td>29</td>
<td>58 %</td>
</tr>
<tr>
<td>Moderate cure</td>
<td>10</td>
<td>20 %</td>
</tr>
<tr>
<td>Mild cure</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>No relief</td>
<td>4</td>
<td>8%</td>
</tr>
<tr>
<td>Drop out</td>
<td>5</td>
<td>10%</td>
</tr>
</tbody>
</table>
Reduction in joint circumference after treatment in patients cured completely (Total 29 patients)

<table>
<thead>
<tr>
<th>Sex</th>
<th>No. of patients</th>
<th>Reduction in circumference (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before tmt.</td>
<td>After tmt.</td>
</tr>
<tr>
<td>Male</td>
<td>16</td>
<td>40</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>39</td>
</tr>
</tbody>
</table>

**Conclusion**

Whenever modern science faces trouble in finding a cure for any disease, it turns towards alternative system of medicines to understand their capabilities. The efficacy of Siddha Medicine in controlling Pain and swelling due to Arthritis is already proven. The present study was undertaken on considering the above facts and overall evaluation was carried out.

Clinical evaluation carried out in 50 patients revealed that the patients effectively shielded against increase in the symptoms after 15 days of review. and found considerable improvement in 30-45 days of application of pattru(78%).

Salem and Dharmapuri districts are regarded as traditional hot spots of Siddha Medicine. The traditional health care practices of this region involved many native herbs of good therapeutic value which cry for their immediate documentation and attention.

‘Pattru’ the special form of external application has evoked a special interest in siddha practitioners for a long time due to its quick action. The results of the scientific studies carried out on pattru medicine have proven the rapid and long lasting action of pattru in comparison with allopathic medicines.

Research studies about external medicines has gained importance in recent times after a finding that Transdermal penetration is 20% more effective than even parenteral route.

By summarizing all the research activities carried out it is confirmed that pattru medicine is very effective in reducing the conditions locally at a rapid rate.

The present study is highly needed as little poultice formulations are available in the market. These highly potent and efficient medications can be developed as novel products and manufactured commercially at competitive rates to reduce the sufferings of Humanity.