



AWARENESS AND BELIEF ON PREFERRING SIDDHA TREATMENT FOR FRACTURE MANAGEMENT BY KOMBU KATTAL – CROSS SECTIONAL STUDY

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ABSTRACT

Background: Kombu kattal is the best traditional bone setting procedure among the 32 Siddha external therapies. National Institute of Siddha, Chennai also having the Traditional bone setting unit. Nowadays 200 patients per month approaching the NIS for fracture management. So, this study was conducted to understand the awareness and belief with the patients about Fracture management in Siddha system of medicine. **Materials and methods:** This study was conducted with the patients who were all approaching the Bone Setting unit – National Institute of Siddha, Chennai for fracture management. A total of 100 patients were interviewed during the three-month period by a questionnaire. **Results:** 80% of patients expressed that word of mouth by relatives /friends were the means of contact of NIS. The location of NIS was the second major contributor for approaching it (13%). Reason for patronizing the National Institute of Siddha was 72% of patients were interested in Siddha and 26% of patients were not satisfied with other treatments and 100% of patients were satisfied and comfortable with this treatment. This study revealed that 100% patients were not affected by any complications. **Conclusion:** Nowadays people are mostly interested in Siddha fracture management for affordable, easily accessible treatment and it can reduce the fear of plaster of paris and complications of the treatment.

KEYWORDS : Kombu kattal, Cross sectional study, National Institute of Siddha, Siddha.

INTRODUCTION:

Fracture is a break in the surface of a bone, either across its cortex or through its articular surface¹. A bone fracture can be the result due to high force impact or stress, or trivial injury as a result of certain medical conditions that weaken the bones, such as osteoporosis, bone cancer or osteogenesis imperfecta, where the fracture is then properly termed a pathologic fracture². A new international report, The Asian Audit, by the International Osteoporosis Foundation, says over the past 30 years fractures have gone up threefold in Asia, with India and China topping the charts. India hobbles to second place in hip fractures with 4.4 lakh people falling per every year. More serious is the fact that Indians are prone to fractures at a much younger age than their Western counterparts³. The traditional bone setting is quite popular in India⁴. There is a general belief in most Asian & African communities that traditional bone setting is better at fracture treatment than orthodox practitioners and that there is a supernatural influence in their management of fractures. Most patients with fractures present first to the traditional bonesetters before coming to the hospital⁵.

The human race in different regions of the world has a unique system of medicine for maintaining health or treatment of diseases. Researchers have documented as many as five thousand 'Folklore medical practices' prevailing in different parts of the world⁶. Siddha system is the traditional system of medicine widely practised in Southern part of India. This system of medicine has 32 internal and 32 external medicines. Kombu kattal is one of the procedures in 32 external medicines. It is the best traditional procedure for treating fracture and dislocation. This comprises of immobilization of

fractured or dislocated bones using hard splints and bandages after proper reduction and normal union. Ancient sage "Theraiyar" explained about the kombu kattal in his book of "Theraiyar Tharu"⁷. Although this is a long traditional practice, with detailed literature in Siddha, Siddha doctors not much practised this treatment.

But National Institute of Siddha (NIS) located at Chennai treating many fracture or dislocation cases. Nearly 100 - 200 patients per month approaching the National Institute of Siddha for fracture management. Traditional bonesetters widely use coconut leaf sticks, bamboo sticks to manage fractures. Our life force is seated in our nerves which pass through all the organs of the body including bones and inner organs. These are called as varmam points. In NIS, Manipulation of these points used to join both fractured ends. During manipulation, the patient can feel pain only at that time. But after the manipulation, there is no pain. Then Immobilisation techniques such as splinting, Strapping or bandaging should be done. Institutionally qualified knowledge in Anatomy and Radiology with great experience in reduction method brings the least complication compared with unorthodox traditional practice in the bone setting. A Prospective study was undertaken to analyse the reasons which make a lot of people to approach the National Institute of Siddha means of contact for treatment and belief in Siddha medicine among the patients.

MATERIALS AND METHODS:

Study design & Study setting:

A facility based cross sectional study was conducted among the patients were approaching Bone setting OPD, National

Institute of Siddha, Tambaram Sanatorium, Chennai, Tamilnadu for fracture management. Outpatient department functioning from 8.00AM to 12.00PM.

Study population:

Patients who attended the Bone setting OPD were selected through non – randomizing method during the period of June to August 2018. The sample size of this study was 100.

Study tools:

Patients were presented with a semi-structured questionnaire consisted of patient's demographical data such as Name, age, gender, address, educational qualification, means of contact, the reason for patronizing Siddha bonesetters, comfortability and satisfaction of the treatment. The interview was carried out in their local language. Observations were made for the presence of complications like infection, Mal union, Delayed union, Non-union and Joint stiffness.

Data entry and Data analysis:

All the data obtained from the study was entered in the Microsoft Excel and then analysed through the Graph pad software.

Ethical approval:

This study protocol was reviewed and approved by Institutional Ethical committee. IEC NO: NIS/IEC/2018/42. This study also enrolled in Clinical Trial Registry India Reg.no. CTRI/2018/06/014389.

RESULTS:

Table: 1 shows sex of the patients have been reported that 52% of male patients and 48% of female patients. **Table: 2** shows the educational status of illiterate (7%), primary schooling (12%), secondary schooling (26%), high school (18%), degree course (37%) have been reported. **Table: 3** shows 80% patients expressed that word of mouth by Relatives/Friends were the means of contact of NIS than media (5%) and the location of NIS was the second major contributor for approaching it (13%). Since the NIS located at the edge of Kancheepuram district adjoining Chennai District and could be easily reached by road/train.

Table: 4 reveals that Fracture of Radius (31%) and Metatarsal (23%) was found to be more in this study than Others (18%). Others comprise Fracture of Phalanges, Ribs and Vertebra. Maximum patients responded that traditional skill is the only way to patronize this treatment. 51% of patients already approaching the Traditional bone setting centre or modern treatment. It is shown in **Table: 5**.

Table:6 depicts that reason for patronizing the National Institute of siddha was 72% of patients were interested in siddha and 26% of patients were not satisfied with other treatment. **Table :7** shows maximum patients (100%) were satisfied and comfortable with this treatment. 100 out of 100 patients had no complications after the treatment.

Table 1: Sex of the patients

Gender	Percentage
Male	52%
Female	48%
Total	100%

Table 2: Educational qualification

Educational qualification	Percentage
Illiterate	7%
Primary schooling	12%
Secondary schooling	26%
High schooling	18%
Degree course	37%

Table: 3 Source of contact

Source of contact	Percentage
By friends/relatives	80%
Media	5%
Notice on road	13%
Visited earlier	2%
Degree course	37%

Table: 4 Site of fracture

Location	Percentage
Radius	31%
Metatarsal	23%
Others	18%
Tibia	8%
Humerus	7%
Clavicle	2%
Femur	2%
Radius & Ulna	3%
Tibia & fibula	3%
Fibula	2%
Ulna	1%

Table:5 Traditional bone setters

Approached	51%
Not approached	49%

Table:6 Reason for patronizing the NIS

1.Low - cost service	2%
2.Interested in Siddha	72%
3.Not satisfied with other medicine	26%

Table: 7 Satisfaction and comfortability with the treatment

Satisfaction	100%
Comfortability	100%

DISCUSSION:

This study was conducted to find out why patients patronize the National Institute of Siddha, Chennai for Fracture management and analyse the belief with fracture management in Siddha. There was a slight male predominance seen in this study. This is because males are more commonly involved in outdoor activities and hence the incidence of fracture was more common in males⁸. Mostly educated people strength is comparatively higher than others, which is contrary to that reported in earlier studies of Thanni⁹. Fracture of the radius is higher than other types of fractures like the previous study conducted in puttur¹⁰.

Outpatients reporting the National Institute of Siddha steadily increasing every year. The average general OPD reporting per day was 2032 during 2015 – 16. Source of contact is by old patients that means Friends / Relatives (80%) were main¹¹. Interestingly, 59% of studied cases opted for this treatment after receiving the other treatment methods. Nowadays people are approaching the other medicines for fast relief and not satisfied with the side effects. Then finally patronizing the Siddha treatment. Although we would have thought that cheaper fees are the main reason for approaching the NIS. But it is not true. Because this study revealed the fact that 72% of people interested in Siddha.

The traditional bone setting has minimum complications and satisfaction rate, but many failures of bone setting procedures have been reported with minimum success rate, leading to a bad reputation of the traditional bone setting providers. Bonesetters have been widely criticized for their use of "irrational" methods¹². Various complications with the traditional bone setting including ankylosis, avascular necrosis, infections, gangrene, mal-union fractures as well as non-union fractures and ischaemic contractures. But bone setters in NIS claim a nearer to 100% satisfaction and comfortability through their extensive clinical knowledge and

experience in Bone setting. Bone setting treatment in Siddha medicine is the orthodox training, which is regulated, open and subject to regular review based on new evidence. So, if it will be practised by many Siddha physicians, patients and Siddha system will get benefits and clinical studies with Varmam based Siddha fracture management should be documented in future.

CONCLUSION:

Recent years have witnessed that there is an exponential growth and demand in traditional medicine due to new global trend of "Return to Nature". Even though modern orthopaedic care and Traditional bone setting is easily available but people continue to patronize the National Institute of Siddha, Chennai which is an apex Institute for Siddha medicine. This study revealed that the people are mostly interested in Siddha for affordable, easily accessible treatment and it can reduce the fear on plaster of paris and complications of the treatment.

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