



International Journal of
**Current Pharmaceutical & Clinical
Research**

www.ijcpcr.com

**EFFECT OF SIDDHA MEDICINE FOR GARBINI PAANDU (ANEMIA
IN PREGNANCY) IN THE TRIBAL COMMUNITY OF
VARAGAMPAADI HILLS, SALEM DT, TAMILNADU**

S.Sridhar¹, K.Laksmikanthan Barathi², S.Umabala³, P.Karthikeyan⁴, Karthik Nagarajan⁵

¹Siddha consultant (NRHM), Govt. Primary health center, Masinaickenpatti, Salem Dt, Tamilnadu, India.

²President, Gandhi Ashram thyagi PSR memorial trust, Salem and a former Commissioner of Dept of Indian medicine, Govt. of Tamilnadu, India.

³Trustee secretary, Gandhi Ashram thyagi PSR memorial trust, Salem, Tamilnadu, India.

⁴Assistant Professor in Biotechnology, Annamalai University, Chidambaram, Tamilnadu, India.

⁵Siddha graduate, Sivaraj Siddha Medical College, Salem, Tamilnadu, India.

ABSTRACT

Anemia in Pregnancy is a serious condition that affects the nutritional status of the mother and causes serious complications in the fetus. It causes stunted growth in the child. Siddhars have defined anemia as Rasa dhadu kuraivu which subsequently affects rattha dhadu. They have formulated potent siddha medicinal preparations to treat anemia during pregnancy. The present study was conducted to assess the effect of Siddha medicines such as *Annabedi chendura maathirai* and *Maadulai manappaagu* and selected Yoga practices to treat anemia and its complications in ANC pregnant mothers of the Tribal community from Varagampadi hills.

Key words: Anemia, Pregnancy, Annabedi chendura maathirai, Maadulai manappaagu, Yoga practices.

INTRODUCTION

Anemia in Pregnancy is a serious condition which not only affects the nutritional status of the mother but causes serious complications in the fetus. It will also cause stunted growth in the child, reported by Ministry of Tribal affairs, Govt. of India. Siddhars have defined anemia as Rasa dhadu kuraivu which subsequently affects rattha dhadu. They have formulated potent siddha medicinal preparations to treat anemia during pregnancy. According to Maternal Health Division, Ministry of Health & Family Welfare, Government of India, 2005, the maternal mortality ratio (MMR) in the tribal population in India is very high. The data given by the Registrar General of India for 1998 estimates the MMR is found to be around 407 per 100,000 live-births in the Tribal population.

Early detection and timely management is the better way of treating anemia in Pregnancy, since most of

the cases were not detected readily. National Population Policy 2000, have strongly stressed the need for significant reduction in maternal mortality rate and improvement in maternal health and reducing the incidence of stunted growth of Tribal children, particularly in the Tribal population. India is committed to reducing maternal mortality ratio to less than 100 per 100,000 live births by the year 2010 from the current 407/100,000 live births (SRS, RGI, 1998).

The present study was conducted to assess the effect of Siddha medicines and selected Yoga practices to treat Anemia and its complications in ANC pregnant mothers of the Tribal community from Varagampadi hills in a PHC setup and reducing the incidence of stunted growth in tribal children as per the road map drawn by the Ministry of Tribal affairs, Govt. of India.

Corresponding Author :- **P.Karthikeyan** Email:- cpkbiotech@yahoo.co.in

The Objective of the study

To study the effect of *Annabedi chendura maathirai* and *Maadulai manappaagu* in treating anemia in Pregnancy of the tribal population of Varagampaadi hills, Salem dt.tamilnadu.

METHODOLOGY

Study design: Open labeled randomized uncontrolled clinical trial.

Selection of patients: ANC mothers of the tribal community from Varagampaadi hills attending the special OP for ANC, on Tuesdays at GPHC, Masinaickenpatti.

Sample size: 35

Study center: Siddha wing, Govt. Primary health center, Masinaickenpatti, Salem dt.

Study period: July 1,2013 to December 31,2014

The first visit for the study was scheduled between the 4th and 6th month (around 26 weeks).

The second visit was planned in the 8th month (32 weeks), and

The third visit in the 9th month (36 weeks).

Treatment strategy

Siddha medicines: (Test drugs)

Company	Quantity
1.Annabedi chendura maathirai	
Tampcol	1 tablet twice daily
2.Maadulai manappaagu	
Tampcol	10 ml twice daily

Ingredients

Annabedi chenduram tablet (100 mg)

Calcified Green vitreol – 100 mg

Lemon juice- sufficient qty.

Maathulai manappagu syrup (100 ml)

Pomegranate juice -50 ml

Honey - 50 ml

Yoga practices; Padmasana, Bhadrasana, Paschimottasana, Ushtraasana, Vakrasana, Trikonaasana, Anuloma viloma pranayaama.

Inclusion criteria

1. Age; 19-30 years
2. Pallor of Nails, eyes and skin
3. Hb% from 6% to 10 %
4. Pain in calf muscles
5. Tiredness and fatigue

Exclusion criteria

1. Age more than 30 years
2. Pedal oedema
3. Pregnancy induced hypertension
4. Gestational diabetes mellitus

Withdrawal criteria

1. If the patient requests to get withdrawn
2. If any complications arise due to the study

Assessment criteria

Group of Symptoms

1. Pallor of nails, eyes and skin
2. Pain in calf muscles
3. Palpitation during pulse reading (naadi)
4. Tiredness and fatigue
5. Dyspnoea on exertion

Assessment criteria were selected according to the statements given by the subjects and physical examination done by the doctor.

After giving Siddha medicines and Yoga practices, the ANC mothers were advised to come during next ANC checkup.

Laboratory investigations

The percentage of blood Hemoglobin was assessed before and after treatment.

Statistical data analysis

Statistical evaluation of the data was done using means, standard deviation, percentage, mean difference etc. 't' test was used to find out the significance before and after the study.

RESULTS

Diet recommendations for Pregnant mothers according to Siddha literature.

1. Diet should be wholesome, congenial and freshly cooked.
2. Pregnant lady should eat the food with full concentration and with affection towards the foetus.
3. She should always use ghee, butter and milk in her diet.
4. She should take the diet according to her digestive capacity and season, the place of living.

Do's and Don'ts in the lifestyle of the Pregnant mothers are as follows-

1. She should remain in high spirit of mind. She should make an attempt to cope up with mood swings.
2. She should wear clean garments

MONTH DIET

- 1 Milk boiled with Amukkira churnam
- 2 Medicated milk with sweet herbs like Sadavari kizangu.
- 3 Milk with honey and ghee, gruel prepared with rice and pulses
- 4 Medicated cooked rice, milk with butter.
- 5 Rice gruel, sweet rice, cooked rice with meat
- 6 Sweet curd, rice with ghee
- 7 Ghee with Amukkira group of siddha medicines
- 8 Rice gruel with milk and ghee, meat soup
- 9 Meat soup with cooked rice gruel and ghee.

Table 1. Grade Symptoms

Symptoms	Grade
All symptoms disappear	Grade-0
Three symptoms disappear	Grade-1
Two symptoms disappear	Grade-2
All 5 symptoms present	Grade-3

Table 2. Out of 35 subjects, division was made between Primipara, Second para, Third para etc.

No.of Paras	No. of ANC subjects	Percentage%
Primipara	18	51.43
Second para	9	25.71
Third para	8	22.86

Table 3. Symptoms taken for assessment of Paandu

Symptoms	No. of ANC subjects	Percentage%
Pallor of nails,eyes	35	100
Pain in calf muscle	34	97.14
Palpitation during pulse reading(naadi)	30	85.71
Tiredness and fatigue	34	97.14
Dyspnoea on exertion	25	71.43

Table 4. Effect on increase in Haemoglobin percentage after treatment

Increase in Haemoglobin	No. of ANC subjects	Percentage%
Upto 2 gm%	3	8.57
Upto 1.5 gm%	10	28.57
Upto 1 gm%	15	42.86
Upto 0.5 gm%	5	14.28
No change	2	5.72
Total	35	100

Table 5. Comparison of the percentage of blood Hemoglobin before and after treatment schedule

Hb%	No. of ANC subjects	Percentage %
Increase in Hb%	32	91.43
Decrease in Hb %	2	5.81
No change	1	2.86

Table 6. Effect on assessment criteria of Anemia in pregnancy**Effect on assessment criteria of Anemia in pregnancy - Before Treatment**

Severity	No.of Subjects	Percentage %
Grade-0	0	0
Grade-1	1	2.86
Grade-2	24	68.58
Grade-3	10	28.86

Table 7. Effect on assessment criteria of Anemia in pregnancy - After Treatment

Severity	No.of Subjects	Percentage %
Grade-0	8	22.86
Grade-1	22	62.86
Grade-2	5	14.28
Grade-3	0	0

Table 8. Overall effect of Siddha treatment and Yoga for Anemia in Pregnancy

Percentage of Improvement	No. of ANC subjects	Percentage %
0-25%	1	2.86
26-50%	10	28.57
51-75%	16	45.71
76-100%	8	22.86

Figure 1. Division between Primipara, Second para, Third para

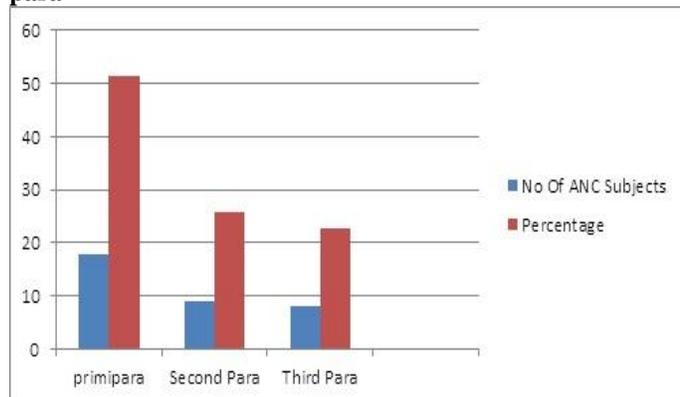


Figure 2. Symptoms taken for assessment of Paandu

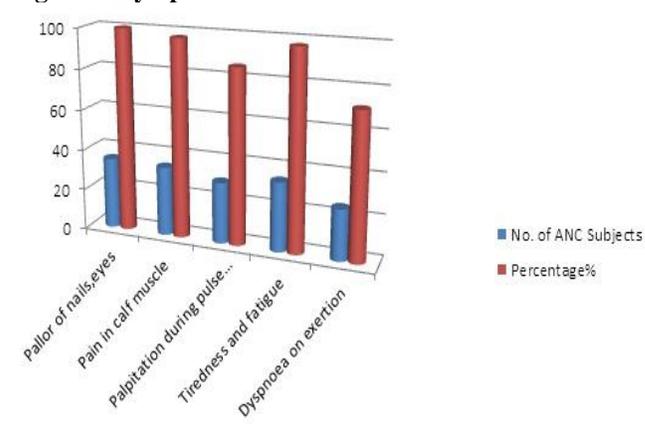


Figure 3. Effect on increase in Haemoglobin percentage after treatment

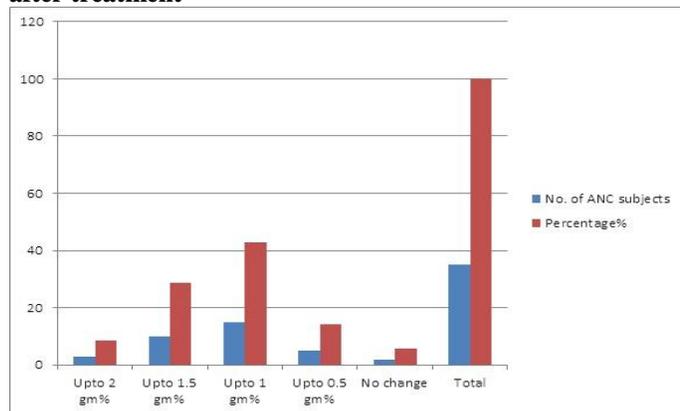


Figure 4. Effect on Both Increase and Decrease of Hb% in comparison with before and after treatment

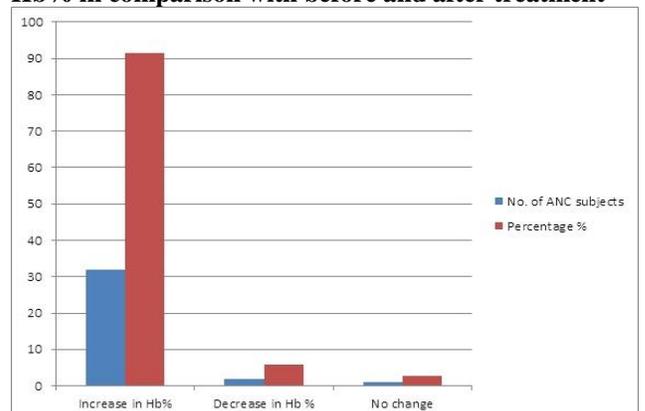


Figure 5. Effect on assessment criteria of Anemia in pregnancy - Before Treatment

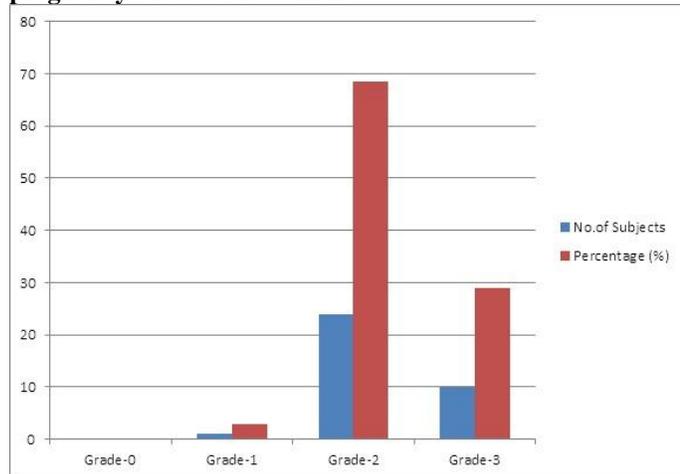


Figure 6. Effect on assessment criteria of Anemia in pregnancy - After Treatment

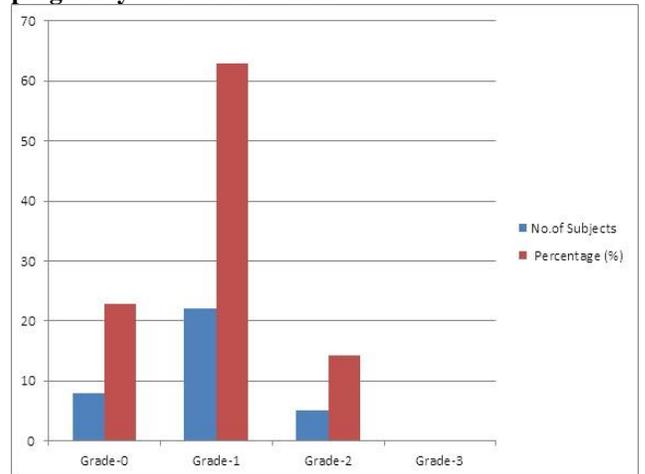
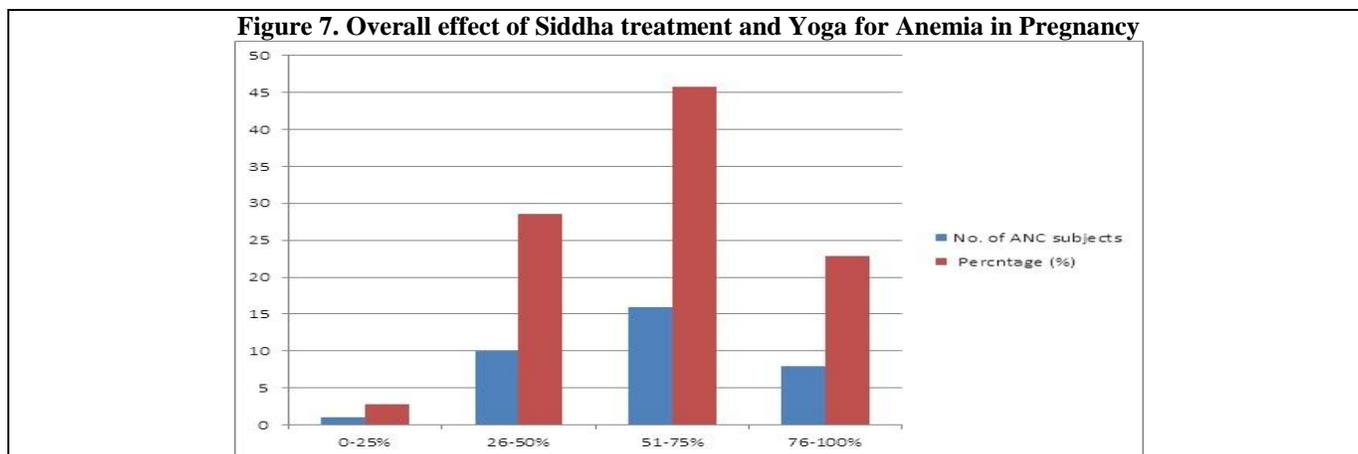


Figure 7. Overall effect of Siddha treatment and Yoga for Anemia in Pregnancy



DISCUSSION

Anemia in pregnancy is a national problem to be taken care of immediately because it not only affects the mother but it also affects the foetus. Siddha medicine has contributed a lot for antenatal care. There are references about diet regimen, behavior of ANC mother, improper diets to be avoided, balanced diet to nourish the seven dhatus of the foetus, Siddha traditional texts have also mentioned that paandu rogam will lead to kaamalai which mentions about neonatal jaundice.

Highly encouraging results were observed in all the assessed parameters. The marked symptoms were significantly reduced and the Hb concentration was significantly increased. The presence of various herbal components in the preparations have expressed their pharmacological actions in a holistic way that results in better improvement in treated subjects. Hence it can be concluded that Siddha medicines *Annabedi chendura maathirai* and *Maadulai manappaagu* were more effective in anemia in pregnancy. The results substantiated the claim found in classical siddha texts about the anti anemic properties of the two siddha medicines.

CONCLUSION

From the results it can be concluded that Siddha medicines and Yoga practices are found to be very

effective in treating anemia and its complications during pregnancy in a short period of time. Siddha medicines get adapted to the tribal population easily as the medicines are organic in nature. They are relatively safe to the patient as it does not cause any harmful side effects.

The study conducted on Tribal ANC mothers of Varagampaadi hills, attending the special OPD in Primary health setup, with Siddha medicines has clearly proven that Siddha medicines and Yoga practices are able to control anemia in pregnancy to a large extent.

Suggestions

1. Siddha medicines should be supplemented with other medicines supplied to pregnant mothers during ANC special OPD in all Primary health centres and Govt. hospitals in Tamilnadu.
2. Siddha doctors working in Govt. setup should be encouraged to attend to ANC mothers and provide them Siddha medicines for Anemia.
3. To make our country Anemia free , Government should post Permanent Siddha doctors in all hospitals with immediate effect and provide them with Siddha medicines.
4. We should immediately start a “National campaign to Cure anemia in Pregnancy with Siddha treatment“.

REFERENCES

1. Bihar school of Yoga for yoga practices.
2. Annabedichenduram tablet - Pharmacopoea of Siddha medicines; The Indian medical Practitioners co operative pharmacy and society, Chennai, 1956.
3. Maathulaimanappagu syrup - Pharmacopoea of Siddha medicines; The Indian medical Practitioners co operative pharmacy and society, Chennai, 1956.