

A COMPARATIVE STUDY OF *HARIDRADI CHURNA* WITH *SHATAVARI CHURNA* IN
THE MANAGEMENT OF PRIMI GRAVIDA *STANYAKSHAYA*Dr. Prashant Fawade^{1*} and Dr. Shraddha Jadhav²¹Associate Professor, Department of Prasutitantra, and Streeroga Dhaneshwari Ayurved Medical College and Research Institute, Chhatrapati Sambhajnagar, Maharashtra.²Assistant Professor, Department of Prasutitantra and Stree Roga, Dhaneshwari Ayurved Medical College and Research Institute, Chhatrapati Sambhajnagar, Maharashtra.***Corresponding Author: Dr. Prashant Fawade**

Associate Professor, Department of Prasutitantra, and Streeroga Dhaneshwari Ayurved Medical College and Research Institute, Chhatrapati Sambhajnagar, Maharashtra.

Article Received on 08/02/2025

Article Revised on 28/02/2025

Article Accepted on 18/03/2025

ABSTRACT

Adaptation of western life style results into the stress and strain to the women and so are facing many problems. Among these *Stanyakshaya* is major one, which seems to be very simple condition but pertaining to a major problem. *Stanyakshaya* is a common problem noticed in our clinical practice. Lot of combined as well as single drug formulations are described in context with treatment of *stanyakshaya* in the classics. **Aim:** Comparative study of *Haridradi Churna* and *Shatavari Churna* in the Management of Primi Gravida *Stanyakshaya*. **Materials and Method:** A total 90 patients of the age group 20-35 years presenting with signs and symptoms of *Stanyakshaya* were selected randomly from OPD of the department of *streerog prasutitantra*. The 45 patients of group A were treated with *Haridradi Churna* and 45 patients of group B were subjected to *Shatavari Churna*. **Results:** *Haridradi Churna* is less effective as compared to *Shatavari Churna* in *Stanyakshaya*.

KEYWORDS: *Shatavari Churna*, *Haridradi Churna*, *Stanyakshaya*, Primi Gravida inadequate milk problems, breast milk inadequacy.

INTRODUCTION

Ayurveda is the flawless, authentic ancient science of life, and is genuinely called the “Mother of all healing”. *Stanya* is *Updhatu* of *Rasa dhatu*. *Rasa dhatu* is said to be *aadi dhatu* i.e., *pratham dhatu*. *Ayurveda* explains the importance of *Stanya* (Breast Milk) through its main function *pushti* and *jeevan* (growth and life). If *Rasa dhatu* formation is disturbed, its *Updhatu stanya* will also be disturbed.

The *Stanya* is *jeevana ansha* as it is the chief source of nutrition and diet to the infant due to *satmyatva*. Breast milk is the nectar to the child, which gives many benefits to mother and child. Breast milk is ultimately the best source of nutrition for new born baby. Breast milk is composed of immunoglobulin IgA, Fat, Proteins Carbohydrates, Minerals, Digestive enzymes, Antibodies so breast milk is the best than any other type or feeding.^[1]

The abnormalities (*vikruti*) of *stanya* are

- *Stanya Kshaya*
- *Stanya Vriddhi*
- *Stanya Dushti*

Stanya Kshaya is one of the *vikruti* of *Stanya*. In *Stanya kshaya*, there is *kshaya* of *stanya* due to *dhatukshaya* (mainly *Rasa dhatukshaya*) and *dhatudushti*. *Stanya kshaya* is the common problem noticed in about 35- 40% in our clinical practice.^[2]

No other milk can be compared with mother’s milk for proper growth and development of the baby. Artificial feeding exposes the infants to gastrointestinal infections like diarrhea, vomiting, sometimes allergic reactions or fever and results in over millions of deaths annually worldwide due to its all-ill effects. Baby Friendly Hospital Initiative (BFHI) was launched in 1992 as part of innocent declaration on promotion, protection and support of breast feeding by WHO and UNICEF.

Today’s computerized world has busy and hectic life with low calorie diet. The tendency of escaping from well balanced and nutritious diet and negligence towards personal health of the mother enables her to be the victim of lactational deficiency. *Stanyakshaya* which occurs with different reasons prescribed in *Ayurveda* like *Krodha*, *Shoka*, *Bhaya*, *Avatslyaya* etc^[3], and according to modern science stress, anaemia etc. We want to evaluate this topic because only *Shatavari* is popular

Ayurvedic drug for *stanyakshaya* and has satisfactory results. But in *Ayurvedic Samhitas* many galactagogue drugs are described which definitely need to be highlighted and studied for their hopeful and satisfactory results.

In *Ayurvedic samhita* s many galactagogue drugs are described. It is necessary to orient the material *haridradi churna* and the *Shatavari churna* from old text in the systematic manners. *Haridradi churna* and *Shatavari churna* both are galactagogue drug, used with *godhugdha* in *stanyakshaya* as its *stanyashodhana* and *stanyavardhana* effects.

AIM

Comparative study of *Haridradi Churna* with *Shatavari Churna* in the Management of primi *Stanyakshaya*.

OBJECTIVES

1) Primary Objective

To study the efficacy of *haridradi churna* in comparison with *shatavari churna* in the management of *stanyakshaya*.

2) Secondary Objective

- To study *Stanyakshaya* in detail.
- Comparison of *haridradi churna* and *shatavari churna* in the management of *Stanyakshaya*.

MATERIAL AND METHODS

A total 90 patients of the age group 20-35 years presenting with signs and symptoms of *Stanyakshaya* were selected randomly from OPD of the department of *streerog prasutitantra*. The 45 patients of group A were treated with *Haridradi Churna* and 45 patients of group

B were subjected to *Shatavari Churna*.

A) Criteria for selection of patients

1) Diagnostic Criteria

Patients were diagnosed which were having signs and symptoms of *Stanyakshaya* given in *Ayurveda* texts.

2) Inclusion criteria

- Age group in patient between up to 20 to 35 years.
- Patient from 7th day of delivery.
- The selection was irrespective of the caste and religion.
- Patients of *stanyakshaya* in *sutikawastha*.
- Patients of *stanyakshaya* in *stanapana kalawadhi* (lactating period not beyond 3 months).
- Patients willing for this study.
- Primi gravida female selected.

3) Exclusion criteria

- Patients who were having any pathology or disease i.e., Breast abscess, Mastitis, Breast atrophy, Cancers.
- Systemic diseases Ex. Severe anemia, hypertension, diabetes; infectious diseases such as pulmonary tuberculosis, AIDS (where disease was extensive and progressive).
- Mother who had stress or any mental tension like Puerperal psychosis.

B) Assessment Criteria

The clinical assessment was done on the basis of grading criteria with specific symptomology of *mata* like *stana mlanata stanya praman and mal pariksha, upachaya, nidra, rodana in balaka*.

1) Mata observation table^[4]

Parameters	Symptoms	Grade
(Laxity of Breast)	Normal	0
	Mild	1
	Severe	2
(Flow of Breast Milk)	Absent	0
	Mild	1
	Severe	2

2) Balak observation table

Symptoms	Criteria	Grades
(Weight gain of baby)	Absent	0
	100 to 200gm/wk	1
	above 200 gm/wk	2
(Sleep of baby)	1 to 2 hrs sleep	0
	2 to 3 hrs sleep	1
	3 to 4 hrs sleep fitfully	2
(Cry of baby)	Demand feeds before every 2 hrs	2
	Demand feeds after every 2-3 hrs	1
	Demand feeds after every 3-4 hrs	0

Follow Up: - Taken on 7th, 14th, 21st, 28th day.

The graded values were later totally and individually

scored and assessed statistically to find out the rate of effect of treatment. The age, gender, occupation, habitat wise distribution of patients with socioeconomic status

was also recorded and assessed statistically. The effect of treatment in each group was assessed separately by analyzing the pre-treatment and post treatment data,

scores and values. The comparison of the effect of therapy of two groups done by statistical analysis.

C) Ingredients and preparation of drug

Haridradi churna^[5]

Ingredients: - (Haridra, Daruharidra, Prishnaparni, Indrayava, Yashtimadhu)^[6]

Dravya ^[7]	Haridra.	Daru haridra.	Madhuk.	Kalashi	Kutajbeej
Family.	Zingiberaceae.	iridace ae.	minas ae.	Leguminasae	Apocynaceae.
Latine Name.	<i>Curcuma longa</i> . Linn.	<i>Berberis aristata</i> .	<i>Glycyrrhiza glabra</i> , Linn.	<i>Uraria picta</i> , Desv.	<i>Holarrhena antidiysenterica</i> a. Linn.
Rasa.	Tikta, madhur	Tikta, Kashay.	Madhur.	Madhur, Tikta.	Tikta, Katu, Kashay.
Virya.	Ushna	Ushna	Sheet	Sheet	Sheet
Vipak.	Katu	Katu	Madhur	Madhur	Katu
Guna.	Laghu, Ruksha.	Laghu, Ruksha.	Guru, Snigdha.	Laghu, snigdha, Sar.	Laghu, Ruksha
Doshaghn ata	Vatpittaghna	Kaphapitta ghna	Vatpittaghna, Kaphavardhak	tridoshaghna	tridoshaghna

Shatavari churna^[8]

- Latin Name: *Asparagus racemosus*. Willd.
- Family: Liliaceae.
- Gana: Balya, Madhurskandha. (Charak)
- Upayuktanga: Mula.
- Rasa: Madhur, Tikata.
- Virya: Shita.
- Vipak: Madhur.
- Guna: Guru, Snigdha.
- Doshaghnata: - Vata-pittashamak, Kaphkar.
- Anupan: Godugdha.^[9]

poured by clothes. Powder can be made by disintegrator also.

- Synonyms: Rajah, Kshods.
- Matra: 1 Karsh.

Process of *churna* preparation

- Equipments: Cleaned and dried drug, mortar and pestle.

➤ Process of Churna Preparation

The ingredient of *Haridradi churna* and *Shatavari churna*, were purchased from local trustworthy vendor. Then by grinding these drugs, both *churna* were prepared and standardization was done in Research laboratory of Ayurved College.

- Storage: - stored in tight glass container for future use.

METHOD OF PREPARATION OF CHURNA

➤ Churna Kalpana^[10]

Powder of dried *dravya* with or without any addition of liquid is called as *Churna*. *Churna* is any dry substance is bruised and made into fine powder by *vastra-galan* i.e.

Drug Regimen

Sr No	Groups	Haridradi Churna (Group-A)	Shatavari Churna (Group-B)
1	Dose (matra)	5 gm Twice a day	5 gm Twice a day
2	Duration	28 days	28 days
3	Route of administration	Oral (abhyantar)	Oral (abhyantar)
4	Kala	Abhakta kal	Abhakta kal
5	Anupana	Godugdha (100ml)	Godugdha (100ml)

Data thus collected during the study, summarized and statistically analyzed as per protocol.

STATISTICAL ANALYSIS, OBSERVATIONS^[11]

Test Statistics Factor: *Stana mlanata*

<i>Stana mlanata</i>	Median score			IQR of diff. (Q3 - Q1)	Sample size	Wilcoxon signed rank test (T+)	P - Value
	Bef	Aft	Median diff.				
Group A	1.5	0	1	1 (2 - 1)	45	435	< 0.001
Group B	2	0	2	1 (2 - 1)	45	465	< 0.001

Using one tailed Wilcoxon signed rank test, to test the hypothesis

H0: Median reduction in *Stana mlanata* score before and after treatment is zero.

H1: Median reduction in *Stana mlanata* score before and after treatment is significant.

For group A, the median reduction in *stana mlanata* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant reduction in *Stana mlanata* for Group A.**

For group B, the median reduction in *stana mlanata*

score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant reduction in *stana mlanata* for Group B.**

Comparative Analysis of Groups

Using: Mann-Whitney U test⁷, to test the hypothesis

H0: Reduction in *stana mlanata* score for group A and group B are equal (equally distributed) H1: Reduction in *stana mlanata* score for group A and group B are not equal (not equally distributed)

Group	Median difference bef-aft	Mean of difference bef - aft	S.D. of difference bef - aft	Mann-Whitney U statistic	P- Value
Group A	1	1.4	0.563	325.5	0.034
Group B	2	1.7	0.466		

Drug B can be considered as more effective in reduction of *Stana mlanata* as compared to drug A.

Test Statistics Factor: *Stanya pravartan*

<i>Stanya pravartan</i>	Median score			IQR of diff. (Q3 - Q1)	Sample size	Wilcoxon signed rank test (T+)	P - Value
	Bef	Aft	Median diff.				
Group A	0	2	2	1 (2 - 1)	45	0	< 0.001
Group B	0	2	2	0 (2 - 2)	45	0	< 0.001

Using one tailed Wilcoxon signed rank test, to test the hypothesis

H0: Median increase in *Stanya pravartan* score before and after treatment is zero.

H1: Median increase in *Stanya pravartan* score before and after treatment is significant.

For group A, the median increase in *stanya pravartan* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant increase in *Stanya pravartan* for Group A.** For group B, the median increase in

stanya pravartan score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant increase in *stanya pravartan* for Group B.**

Comparative Analysis of Groups

Using "Mann-Whitney U test^[12]", to test the hypothesis

H0: Increase in *stanya pravartan* score for group A and group B are equal (equally distributed) H1: Increase in *stanya pravartan* score for group A and group B are not equal (not equally distributed)

Group	Median difference bef-aft	Mean of difference bef - aft	S.D. of difference bef - aft	Mann-Whitney U statistic	P- Value
Group A	2	1.70	0.466	510	0.230
Group B	2	1.83	0.379		

Drug B can be considered as more effective in increase of *stanya pravartan* as compared to drug A.

Test Statistics Factor: *Balak sharir bhar*

<i>Balak sharir bhar</i>	Median score			IQR of diff. (Q3 - Q1)	Sample size	Wilcoxon signed rank test (T+)	P - Value
	Bef	Aft	Median diff.				
Group A	0	2	2	1 (2 - 1)	45	0	< 0.001
Group B	0	2	2	0.75 (2 - 1.25)	45	0	< 0.001

Using one tailed Wilcoxon signed rank test, to test the hypothesis.

H0: Median increase in *Balak sharir bhar* score before and after treatment is zero.

H1: Median increase in *Balak sharir bhar* score before and after treatment is significant.

For group A, the median increase in *balak sharir bhar* score after treatment is significant (P- value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant increase in *Balak sharir bhar* for Group A.** For group B, the median increase in *balak sharir bhar* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is**

significant increase in *balak sharir bhar* for Group B.

Comparative Analysis of Groups

Using Mann-Whitney U test, to test the hypothesis

H0: Increase in *balak sharir bhar* score for group A and group B are equal (equally distributed) H1: Increase in *balak sharir bhar* score for group A and group B are not equal (not equally distributed).

Group	Median difference bef - aft	Mean of difference bef - aft	S.D. of difference bef - aft	Mann-Whitney U statistic	P- Value
Group A	2	1.57	0.679	492	0.444
Group B	2	1.73	0.450		

Drug B can be considered as more effective in increase of *Balak sharir bhar* as compared to drug A.

Test Statistics Factor: *Nidra*

<i>Stana mlanata</i>	Median score			IQR of diff. (Q3 – Q1)	Sample size	Wilcoxon signed rank test (T+)	P – Value
	Bef	Aft	Median diff.				
Group A	1.5	0	1	1 (2 – 1)	45	435	< 0.001
Group B	2	0	2	1 (2 – 1)	45	465	< 0.001

Using one tailed Wilcoxon signed rank test, to test the hypothesis – H0: Median increase in *Nidra* score before and after treatment is zero.

H1: Median increase in *Nidra* score before and after treatment is significant.

For group A, the median increase in *nidra* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant increase in *Nidra* for Group A.** For group B, the

median increase in *nidra* score after treatment is significant (P- value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant increase in *nidra* for Group B.**

Comparative Analysis of Groups

Using “Mann-Whitney U test”, to test the hypothesis

H0: Increase in *nidra* score for group A and group B are equal (equally distributed)

H1: Increase in *nidra* score for group A and group B are not equal (not equally distributed).

Group	Median difference bef-aft	Mean of difference bef - aft	S.D. of difference bef - aft	Mann-Whitney U statistic	P- Value
Group A	1	1.4	0.563	325.5	0.034
Group B	2	1.7	0.466		

Drug B can be considered as more effective in increase of *Nidra* as compared to drug A.

Test Statistics Factor: *Rodan*.

<i>Rodan</i>	Median score			IQR of diff. (Q3 – Q1)	Sample size	Wilcoxon signed rank test (T+)	P – Value
	Bef	Aft	Median diff.				
Group A	0	2	2	1 (2 – 1)	45	0	< 0.001
Group B	0	2	2	0 (2 – 2)	45	0	< 0.001

Using one tailed Wilcoxon signed rank test, to test the hypothesis.

H0: Median reduction in *Rodan* score before and after treatment is zero.

H1: Median reduction in *Rodan* score before and after treatment is significant.

For group A, the median reduction in *rodan* score after

treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant reduction in *Rodan* for Group A.** For group B, the median reduction in *rodan* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant reduction in *rodan* for Group B.**

Comparative Analysis of Groups

Using Mann-Whitney U test, to test the hypothesis

H0: Reduction in *rodan* score for group A and group B

are equal (equally distributed)

H1: Reduction in *rodan* score for group A and group B are not equal (not equally distributed).

Group	Median difference bef - aft	Mean of difference bef - aft	S.D. of difference bef - aft	Mann-Whitney U statistic	P- Value
Group A	1.5	1.5	0.509	405	0.445
Group B	2	1.6	0.498		

Distribution of “reduction in *rodan* score” for group A and group B is not significantly different. (p –value =

0.445) Thus **both drug A and drug B can be considered as equally effective in reducing *Rodan*.**

Effect of therapy

Parameter	Effect of therapy				Comparative efficacy
	Group A		Group B		
	Remark	Mean % improvement	Remark	Mean % improvement	
<i>Mata stanamlanata</i>	Marked	84.44%	Marked	100.00%	Group-B more effective.
<i>Stanyapravartan</i>	Moderate	66.67%	Marked	86.67%	Group-B more effective.
<i>Balaksharirbhar</i>	Marked	91.11%	Marked	100.00%	Group-B more effective.
<i>Nidra</i>	Marked	86.67%	Marked	95.56%	Group-B more effective.
<i>Rodan</i>	Marked	93.33%	Marked	93.33%	Equally Effective

DISCUSSION**1) General Observations****A) Gender**

In this study all female patients were included.

B) Age

The tendency of *mithya ahar-vihar* and negligence towards personal health was observed in most of them. We selected patients having age between 20 years to 35 years and we distributed it in three - sub age groups. In trial group out of 45 patients' maximum number of patients were found in age group 20 to 24 years were 21[46.67%], in 24 to 28 yrs. age group they were 18 [40%] in 28 to 35 years age group 6 [13.33%] in numbers and percentage respectively. In control group out of 45 patients' maximum number of patients found in age group 20 to 24 years were 20[44.44%], in 24 to 28 years age group they were 15 [33.33%] in 28 to 35 years age group 10 [22.22%] in numbers and percentage respectively.

C) Socioeconomic Status

A physical and mental sound health of a mother is responsible for good health of the baby. A lactating mother needs a healthy and nutritious diet to survive the sound health of her baby. Most of the times socioeconomic status of mother is responsible for her sufferings due to absence of well balanced and nutritious food. Out of 90 patients, maximum patients were found having lower-middle socioeconomic status 39 (43.33%) followed by upper-lower, lower, & upper-middle class. They were 21 [23.34%], 16[18.33%], 14[15.56%] in numbers and percentages respectively.

D) Prakriti

Out of 90 patients in study maximum numbers of patients were found in *kapha pradhan pitta prakruti* followed by *vata pradhan pitta*, *pitta pradhan vata*, *pitta pradhan kapha*, *kapha pradhan vata*, and lastly *vata pradhan kapha*. They were 28 [31.11%], 16 [17.79%], 12 [13.33%], 12 [13.33%], 10 [11.11%] in numbers and percentage respectively.

2) CLINICAL OBSERVATIONS**1) Stana Mlanata**

Breast becomes tense and heavy due to filling of milk in lactiferous ducts. If mother has not enough milk and breasts are felt light, this is called *stana mlanata* (*stana shaiithilya*). There is *Prakrut stana mlanata* after feeding the baby and *stana* become tense before feeding the baby.

Trial Group-A

Out of 45 patients, 22(48.88%) and 23(51.11%) patients were in both *alpa* and *adhik stanamlanata* group at first visit. On 3rd follow up visit on 14th day, 18 (40%) patients were in *prakrut* and 27 (60%) patients were in *alpa* group, *adhik stanamlanata* was not found. On the last visit on 28th day, 38 (84.44%) patients were in *prakrut* group and 7 (15.56%) in *alpa* group. *Adhik stanamlanata* was not found.

Out of 45 patients, 38(84.44%) patients are cured i.e., *stanamlanata* is significantly improved. *Haridradi Churna* improves the process of galactogenesis and poiesis hence gradually decreases *stanamlanata*.

Control Group-B

Out of 45 patients, 15 (33.33%) and 30(66.67%) patients

were in both *alpa* and *adhik stanamlanata* group at first visit respectively. On 3rd follow up visit on 14th day, 15 (33.33%) patients were in *prakrut* and 30 (66.67%) patients were in *alpa* group, *adhik stanamlanata* was not found. On the last visit on 28th day, 45 (100.00%) patients were in *prakrut* group.

Out of 45 patients, 45(100.00%) patients are cured i.e., *stanamlanata* is significantly improved. Due to *vatashamaka*, *pittashamaka* and *rasayana* properties, *Shatavari churna* helps to reduces *dhatukshinata* and improves the process of galactogenesis and poiesis hence gradually decreases *stanamlanata*.

For group A, the median reduction in *stana mlanata* score after treatment is significant (P- value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant reduction in Stana mlanata for Group A.** For group B, the median reduction in *stana mlanata* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant reduction in stana mlanata for Group B.**

Distribution of “reduction in *stana mlanata* score” for group A and group B is significantly different. (p –value = 0.034) Thus **drug B can be considered as more effective in reduction of Stana mlanata as compared to drug A.**

2) *Stanya pravartan*

Breast milk increases on rest and after a meal. In ayurvedic text, the *pramana* of *stanya* is given two *Anjali*. But we cannot measure the *pramana* of *stanya* practically.

Trial Group-A

Out of 45 patients, 40(88.89%) patients were in absent (*stanya apravartana*) group and 5 (11.11%) in *alpa* group at first visit. On 3rd follow up visit on 14th day, 34 (75.55%) were in *alpa* group and 9 (20%) in *adhik* group and only 2 (04.44%) patients in absent group. On the last visit on 28th day, 30 (66.67%) patients were in *adhik* group and 15 (33.33%) in *alpa* group.

Out of 45 patients, 30 (66.67%) patients are cured i.e., *stanya pravartana* is significantly improved. *Haridradi Churna* improves the process of galactogenesis and poiesis.

Control Group-B

Out of 45 patients, 45 (100.00%) patients were in absent (*stanya apravartana*) group. On 3rd follow up visit on 14th day, 34(75.56%) were in *alpa* group and 11 (24.44%) in *adhik* group. On the last visit on 28th day, 39 (86.67%) patients were in *adhik* group and 6 (13.13%) in *alpa* group.

Out of 45 patients, 39 (86.67%) patients are cured i.e. *stanya pravartana* is significantly improved. Due to *vatashamaka* and *pittashamaka* properties, *shatavari*

churna helps to reduces *dhatukshinata* and improves the process of galactogenesis and poiesis.

For group A, the median increase in *stanya pravartan* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant increase in Stanya pravartan for Group A.** For group B, the median increase in *stanya pravartan* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant increase in stanya pravartan for Group B.** Distribution of “increase in *stanya pravartan* score” for group A and group B is significantly different. (p –value = 0.510) Thus **drug B can be considered as more effective in increase of stanya pravartan as compared to drug A.**

3) *Balak Sharirbhar vrudhhi*: (B-SHB) (Normal weight gain pattern of baby)

Direct evidence of the amount of milk of lactating mother is difficult to measure but the indirect evidence of its insufficiency is in the form of inadequate weight gain of the baby. Loss of weight in first few days (up to 10% loss) due to loss of extra cellular fluids and poor intake. Birth weight attains at 7 to 10 days. The measurement of weight is the most reliable criteria of assessment of health and nutritional status of baby. Weight is a measure of total body mass and is sensitive to changes in body fluids, fat, muscle, mass, skeleton and body organs. The weight may be recorded on electronic weighing scale for infants. Depending upon the actual weight of the child, weight gain should be expressed by consulting the standard growth chart.

In our hospital there is not available an electronic weighing machine or beam type weighing machine. Zero error was adjusted before weighing every time. It was checked (compare) with standard weighing machine. There was difference of +/- 25 gm. So, I decided to take weight after every 7 days. I took four follow ups and recorded the weight and it was compared with the reference standard. A series of readings over some time is more important than just one weight record.

Trial Group-A

Out of 45, all 45 (100%) babies were in absent/ no *vrudhhi* group at first visit. On 3rd follow up visit on 14th day, 13 (28.89%) were in absent group and 29 (64.44%) in *alpa* group and only 3 (6.67%) patients in *adhik* group. On the last visit on 28th day, 32 (71.11%) patients were in *adhik* group and 9 (20%) in *alpa* group. Only 4 (08.89%) babies had no *sharirbhar vrudhhi*.

Out of 45 babies, 41 (91.11%) babies are cured i.e., *Sharirbhar vrudhhi* is significantly improved.

Control Group-B

Out of 45, all 45 babies were in absent/ no *vrudhhi* group at first visit. On 3rd follow up visit on 14th day, 6 (13.33%) babies were in absent group and 36 (80%) in

alp group and only 3 (6.67%) patients in *adhik* group. On the last visit on 28th day, 34 (75.56%) patients were in *adhik* group and 11 (24.44%) in *alpa* group. zero babies had no *sharirbhar vrudhhi*.

Out of 45 babies, 45 (100%) babies are cured i.e., *Sharirbhar vrudhhi* is significantly improved.

For group A, the median increase in *balak sharir bhar* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant increase in Balak sharir bhar for Group A.** For group B, the median increase in *balak sharir bhar* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant increase in balak sharir bhar for Group B.**

Distribution of “increase in *balak sharir bhar* score” for group A and group B is significantly different. (p –value = 0.444) Thus **drug B can be considered as more effective in increase of Balak sharir bhar as compared to drug A.**

4) *Nidra*

If the infant is satisfied after each nursing period, sleeps 2-4 hours and gains weight adequately, the milk supply is sufficient. However, if the infant nurses avidly and completely empty both breasts but appears unsatisfied afterwards, does not go to sleep or sleeps fitfully and awakens after 1-2 hours and fails to gain satisfactory weight, the milk supply is probably inadequate.

Trial Group-A

Out of 45 babies, 30 (66.67%) babies were in *alpa* group and 15 (33.33%) in *madhyam* group at first visit. On 3rd follow up visit on 14th day, 30 (66.67%) were in *madhyam* group and 12 (26.67%) in *prakrut* group and only 3 (6.67%) babies were in *alpa* group. On the last visit on 28th day, 39 (86.67%) babies were in *prakrut* group and 6 (13.33%) in *madhyam* group and *alpa* group has no babies.

Out of 45 babies, 39 (86.67%) babies are cured i.e., *nidra* is significantly improved.

Control Group-B

Out of 45 babies, 27 (60%) babies were in *alpa* group and 18(40%) in *madhyam* group at first visit. On 3rd follow up visit on 14th day, 31 (68.89%) were in *madhyam* group and 12 (26.67%) in *prakrut* group and 2 (04.44%) babies were in *alpa* group. On the last visit on 28th day, 43 (95.56%) babies were in *prakrut* group and 2(04.44%) in *madhyam* group and *alpa* group has no babies.

Out of 45 babies, 43 (95.56%) babies are cured i.e., *nidra* is significantly improved.

For group A, the median increase in *nidra* score after treatment is significant (P-value < 0.001) at 5% level of

significance. **i.e., it can be said that There is significant increase in *Nidra* for Group A.** For group B, the median increase in *nidra* score after treatment is significant (P- value < 0.001) at 5% level of significance. **i.e., it can be said that There is significant increase in *nidra* for Group B.**

Distribution of “increase in *nidra* score” for group A and group B is significantly different. (p –value = 0.034) Thus **drug B can be considered as more effective in increase of *Nidra* as compared to drug A.**

5) *Rodan*: (According to cry for demand feeding)

Crying of the baby is usually due to hunger. Baby cries when he is hungry or at discomfort soiling by urine and stool. Experienced mother or doctor can distinguish baby's cry for food or cry for discomfort. Cry stops on remedy. If the milk is adequate the baby will gradually make a 3 to 4 hourly schedule for himself. This is the self-demand schedule and is nothing new. It is much simpler and more logical to feed the baby when baby wants it.

Trial Group-A

Out of 45 babies, 24 (53.33%) babies were in *adhik rodan* group and 21 (46.67%) in *alpa rodan* group at first visit. On the last visit on 28th day, 42 (93.33%) babies were in *prakrut* group and 3 (6.67%) in *alpa* group and no babies in *adhik rodan* group.

Out of 45 babies, 42 (93.33%) babies are cured i.e., *rodan* is significantly improved.

Control Group-B

Out of 45 babies, 32 (71.11%) babies were in *adhik rodan* group and 13 (28.89%) in *alpa rodan* group at first visit. On the last visit on 28th day, 42 (93.33%) babies were in *prakrut* group and 3 (6.67%) in *alpa* group and no babies in *adhik rodan* group.

Out of 45 babies, 42 (93.33%) babies are cured i.e. *rodan* is significantly improved. For group A, the median reduction in *rodan* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant reduction in *Rodan* for Group A.** For group B, the median reduction in *rodan* score after treatment is significant (P-value < 0.001) at 5% level of significance. **I.e., it can be said that there is significant reduction in *rodan* for Group B.**

Distribution of “reduction in *rodan* score” for group A and group B is not significantly different. (p –value = 0.445) Thus **both drug A and drug B can be considered as equally effective in reducing *Rodan*.**

CONCLUSION

1. Breast milk is the best gift a mother can give her baby. Significant and long-term health benefits are associated with breast feeding for the individual

mother, baby and society. Breast feeding is the ideal way to feed babies.

2. *Stanya kshaya* is the common problem noticed in our clinical practice.
3. *Haridradi* and *Shatavari* are drugs of choice for *stanyajanana*.
4. After the present study, conclusion is that *Haridradi churna* (Trial drug) is effective on *Stanyakshaya*.
5. Since in the symptom *stana mlanata*, *stanya pravartan*, *balak sharir bhar* and *nidra* treatment given to group B (*Shatavari Churna*) shows slightly better results over treatment given to group A (*Haridradi Churna*) and in the symptom *rodan* treatment given to group A and group B shows on an average equal effects. Hence, we conclude that treatment *Shatavari Churna* given to group B shows better results over *Haridradi Churna* given to group A in disease *Stanyakshaya*.
6. In both group-A and B this treatment does not show any toxicity.
7. This treatment does not show any side effects during follow up.
8. This remedy is cheaper in cost and easy to use, store, carry and can be used by poor class women also.
9. '*Haridradi*' being a '*Rasayana*' *dravya* aims at enriching the quality of the dhatus or tissues but it requires a sincere and honest approach towards the use of this *dravya* to get the fruitful outcomes. For this '*Yukti*' is the single most quality of Physician. This prestigious *dravya* is honestly helpful in treatment of *stanyakshaya* as it is the most celebrated *Ayurvedic* herbs and is renowned for its lots of benefits.

Results of this study are encouraging. Thus, more research in this work is necessary, to boost up the result which can serve the mankind.

REFERENCES

1. D.C. Datta, commentary on "Text book of Obstetrics" New Central Book Agency, edition-7-2013, (page no-449.).
2. Dr. Ankit Agrawal, Dr. Deepika Mehra, Dr Sujit kumar, Dr Mariya Husain, Dr vaidehi. V. Raole, and Dr Sunil P. Nikhate. A conceptual study on stanya an ayurvedic review the pharma innovation journal., 2019; 8(5): 118-122.
3. Acharya Sushruta, Sushruta Samhita Sharir sthan edited with Nibandhsangraha commetry, by Dalhan, by Ambikadatta shastri Aayurvedacharya, Chaukhamba Surbharati Prakashan Varansi, edition reprint 2014. (Sushrut Sharirsthan 10/34- Page no-106).
4. Acharya Sushruta, Sushruta Samhita Sutrasthan edited with Nibandhsangraha commetry, by Dalhan, by Ambikadatta shastri Aayurvedacharya, Chaukhamba Surbharati Prakashan Varansi, edition reprint 2014. (Sushrut Sutrasthan 15/16- Page no-77).
5. Indradev Tripathi, Commentary on "*Chakradatta*", published by Chaukhamba Sanskrit Sansthan Varanasi. (Streerog Chikitsa Prakaran Page No - 391.)
6. Indradev Tripathi, Bhanumati teeka on "*Chakradatta*", published by Chaukhamba Sanskrit Sansthan Varanasi. (Streerog Chikitsa Prakaran Page No -432.)
7. Dr. Deshpande, Dr. Jawalagekar, Dr. Ranade, Commentary on "*Dravygunvidnyan*" 1st edition, Anmol Prakashan Pune, 1988. (page no - Haridra - 563, Daruharidra - 519, Yastimadhu -809, Kutaj - 652, Prushnaparni - 977.)
8. Dr. G. S. Pande, Commentary on "*Bhavprakash*", 8th edition, published by Chaukhamba Orientalia, Varanasi. (Guduchyadi varga -186-188).
9. Dr. G. S. Pande, Commentary on "*Bhavprakash*", 8th edition, published by Chaukhamba Orientalia, Varanasi. (Dugdha varga - page no- 434-435).
10. Acharya Shriradhakrishna Parashar Commentary on "*Sharangdhar samhita*", 4th edition, published by Shri Baidyanath Ayurved Bhavan Pvt. Ltd, 1994. (Sha.Sa.madhyam khand 6/1, page no -116).
11. B.K. Mahajan, Commentary on "*Methods in Biostatistics*", published by Jaypee Brothers. (page no -260-265.)
12. Dr. Amol Velhal commentary on "Research Methodology and Medical Statistics" published by Shri Dhanvantari Book Publisher, edition -1-2017. (page no-328-332)