Effectiveness of Ashwagandha ghruta with milk in management of Premenstrual Syndrome with correlation of Prakruti.

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Abstract
Premenstrual syndrome is a neuroendocrine disorder with an unclear cause that is frequently detected shortly before menstruation. The last 7–10 days of the menstrual cycle are when a lot of symptoms cyclically occur. In ayurvedic terminology it can be correlated with Rituvyateetakala and pitttavritta vyan vayu. There is close relationship in Prakruti-Dosha-Vyadhi. PMS is lifestyle disorder occurred due to pitta prakopa with tridosha imbalance. Combinely ashwagandha ghruta has tridosha shamana properties. The study was planned to evaluate effectiveness of ashwagandha ghruta with milk before in correlation with prakruti. Total 50 females fulfilling inclusion criteria were selected, out of which 30 completed the full course of treatment. The females were randomly sepererated into two groups i.e. study/trial group and control group. Study group undergoes interventional drug therapy and dietary advice otherwise control group undergoes no treatment only dietary advice. Two follow ups are taken after menstrual cycle. Administration of ashwagandha ghruta with milk before meal shows highly significant improvement in subjective parameters like mood swings, anxiousness, abdominal pain/ bloating, constipation, change in appetite, anger/outbursts and breast tenderness. It shows significant improvement in back pain, poor concentration, acne flare ups, depression and slugginess/lethargy. Study group shows significant results in vaat, pitta or vaat-pitta, kapha or vaat-kapha type of symptoms. Hence administration of ashwagandha ghruta with milk before meal is effective in management of premenstrual syndrome.
Key words: Premenstrual syndrome, Ashwagandha ghruta, Prakruti,

Introduction:
These days, a variety of disorders are increasingly common in the younger population due to varying lifestyle choices, with women being more affected. Menstrual health is affected by modern culture, eating habits, shift work, and environmental factors. Most women suffer a set of symptoms a few days before their periods, known as premenstrual syndrome, or PMS. The weeks leading up to menstruation are often uncomfortable for the majority of women who are fertile. Although most symptoms are not too severe, they can nonetheless have a significant impact on day-to-day activity[1]

Globally, the combined prevalence of PMS-affected women in their reproductive years is 47.8%[2] and 5-8% of women experience severe PMS symptoms that interfere with their everyday activities, whereas the remainder women experience mild to moderate symptoms[3]
Dosha regulates all physiological function, whether it be chemical or physical. Each person is born with a distinct bodily type, defined as Prakriti. Although PMS is not specifically mentioned in Ayurveda, its symptoms are related to Rituvyateetakala, as it is known in Ayurvedic nomenclature. Rituvyateetakala follows a distinct pattern of Dosha dominance, just like in the Ayurvedic conception of menstruation.[4] VataSanchayavastha, or Kopana of Pitta Dosha, is dominant during Rituvyateetakala.
Ashwagandha is one on Ayurveda's classic reproductive tonics like shatavariashwagandha has been shown to boost cortisol, support healthy adrenals, and balance female hormonal activity.[5]

Ashwagandha, an adaptogen, alleviates vata and kapha, imparts strength, acts as rasayana (rejuvenation). mitigates physical and psychological symptoms in PMS.Ashwagandha has Medhya, Rasayana, Vatahara property.[6] Analytical study also reports Antistress effect of Sitoindoside&Withaferin-A,[7] diuretic, tranquilizer, relaxation effect ofAshwagandholine,[8] muscle relaxant,[9]anxiolyticproperty of Withanolides,[10]

Clinical applications of Prakriti determination are successful in diagnosis, therapy and prognosis of the illness. The current study was be done to access the effectiveness of Ashwagandhaghruta in PMS.

Materials and methods

1. Settings

This study was clinical trial study conducted at Datta Meghe Ayurvedic Medical College Hospital and Research Centre Wanadongri Nagpur. Patients of PMS was selected from OPD of Prasuti Tantra and Streerog Department for clinical study. The study was registered under Clinical Trial Registry India (CTRI/2024/03/064492).

2. Participants

- Patients – Premenstrual syndrome
- Gender - Female,
- Age- From 18 yrs-30 yrs of age.

3. Sampling procedure

Random sampling**.**

4. Sample size

Sample size to be taken = 30

- Group A [Study/Trial Group] =15

The patients in the study/trial group were given Ashwagandha ghruta with milk before meal along with the dietery advice.

- Group B [Control Group] =15

The patients in the control group were given only dietery advice.

5. Population

Patients of Premenstrual syndrome (PMS) was selected from OPD of Prasuti Tantra and Streerog Department for clinical study.

6. Data collection tools and process

Data of 105 subjects fulfilling inclusion criteria was collected. Out of 105 patients 50 patients fulfilling inclusion criteria and willing to give written consent was enrolled for study. The selected patients were informed about possible outcomes and side effects of interventional drug. Total 30 female patients completed whole course of treatment.

Inclusion criteria

1. Subjects who are willing to participate in the study.
2. Subjects who are in the age group of 18 –30 years.

Exclusion criteria

1. Participants who refuse to give the written consent.
2. Subjects who are below 18 years and above 30 years.
3. Subjects who are having acute or chronic illness and on medication.

Specific investigation

There is no test for PMS. To be diagnosed with PMS, a woman must have physical symptoms (eg, breast tenderness, bloating) and psychological symptoms like mood changes (eg, sadness, crying). These symptoms must occur before her menstrual period and disappear after the onset of the period.

7. Assessment criteria

a. Development of questionnaire for Prakriti assessment

It is based upon the description found in the Ayurvedic textbooks, including the Charaka Samhita, a questionnaire is designed to ascertain the prevalent Prakriti of the participants[28] The individuals were assessed both psychologically and physiologically. The questionnaire's proforma attested as Annexure I

b. **Development of questionnaire for PMS assessment**[29]

Based on the description provided in textbook "Patient Education: Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Disorder (PMDD) (Beyond the Basics)". a questionnaire was designed to assess the severity of PMS symptoms in various prakruti females. The questionnaire's proforma, attested as Annexure III

The assessment was done on the basis of following subjective and objective parameters.

A. Vaat:
   1.Mood swings 2. Anxious
   3. Abdominal pain or bloating 4. Headache
   5. Back pain 6. Joint muscle pain
   7. Constipation 8. Poor concentration
B. Pitta or Vaat-pitta:
   1. Food cravings 2. Change in appetite
   3. Acne flare ups 4. Anger/outbursts
   5. Red rashes 6.diarrhea / loose stools
   7. Breast tenderness
C. Kapha / Vaat-kapha :
   1. Breast swelling 2. Weight gain due to fluid retention
   3. Depression 4. Slugginess /lethargy

Preparation of drug[30]- Ashwagandha ghruta was prepare at GMP certified Dattatraya Rasshala, Mahatma Gandhi Ayurved College, Hospitaland Research Centre Wardha. according to formulation mentioned in Bhaishajya Ratnavali**.**

fig 3. Ashwagandha plant

fig. 4 Roots of Ashwagandha(dried)

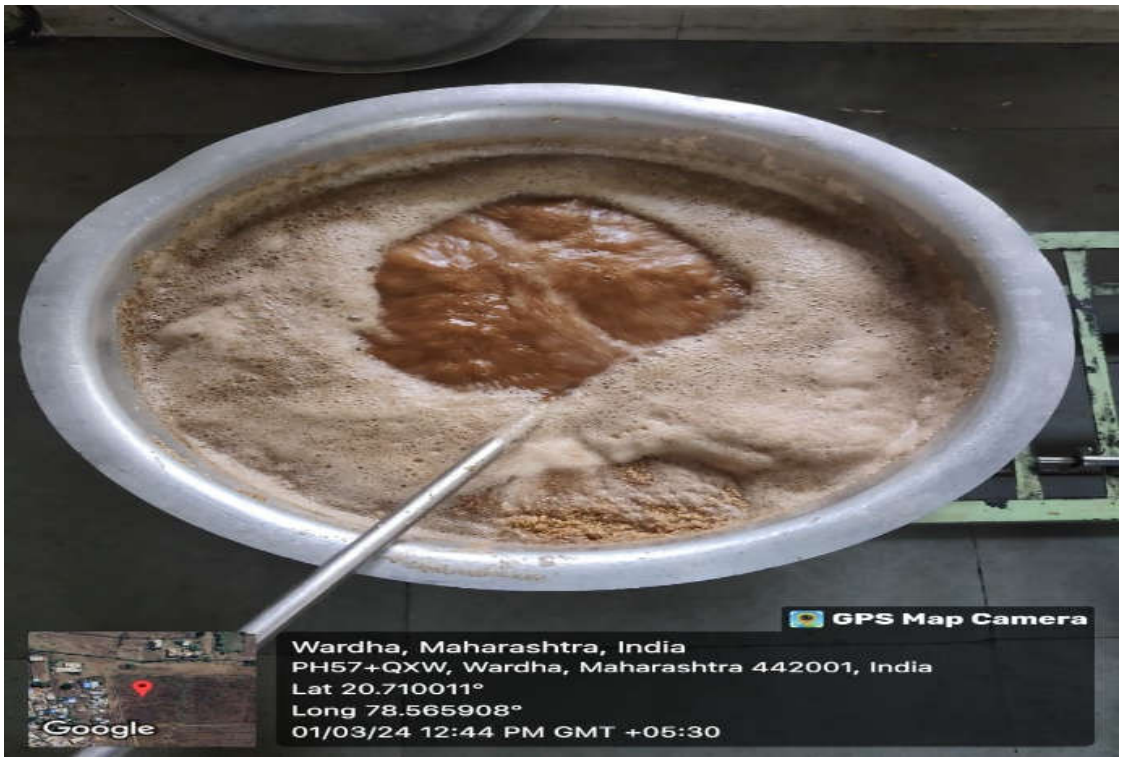


Fig.5 Kwath making

fig. 6 Ashwagandha ghruta making

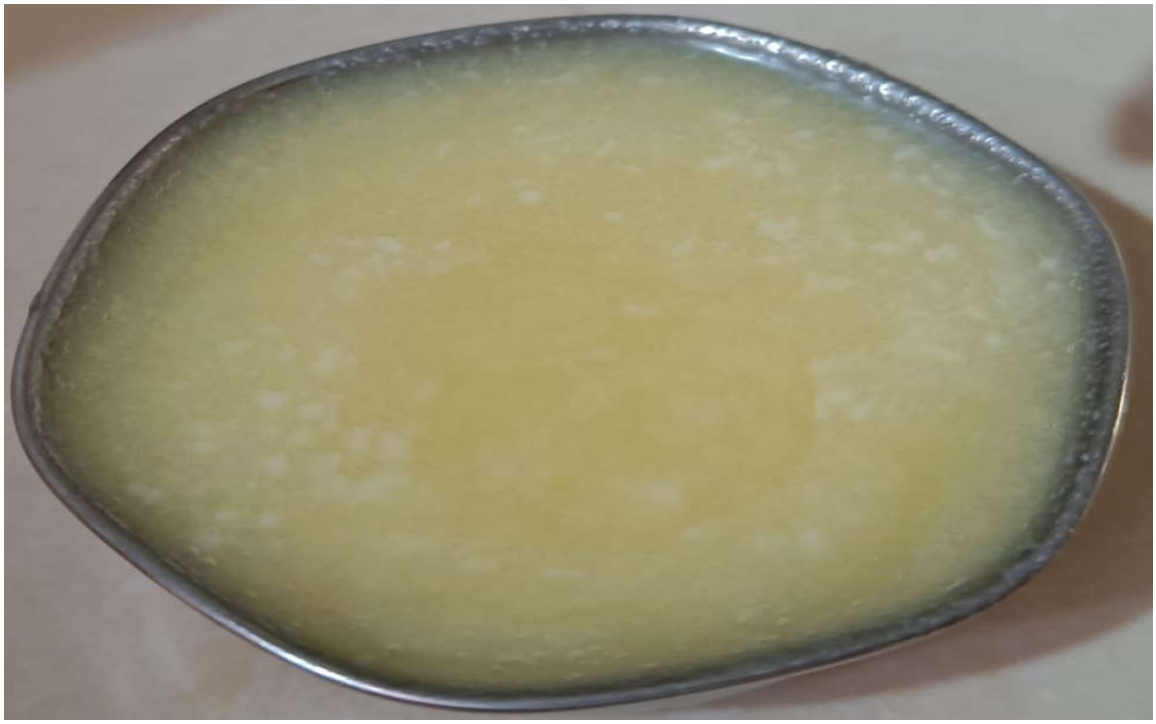


fig. 7 Ashwagandha ghruta

Fig.8 Packeging of drug

Drug intervention

Daily intake of 1 tsp of Ashwagandha Ghruta with milk before meal.(O.D.)
Before 10 days of menstrual cycle for 2 menstrual cycles.

Pathya-Apathya & Dietary advice

- Adviced to follow Rajaswala charya during menstruation.
- Adviced to sleep on time.
- Adviced to keep mind relax and calm to avoid stress and anxiety.
- Adviced to eat light diet(laghu), less quantity, avoid spicy, oily diet and junk food
- Adviced to avoid of increased intake of Amlapradhan, Lavana Pradhana and Ushna, Teekshna Vidahi Ahara

Follow Ups

Total 2 follow ups were taken after every menstrual cycle.

Methodology

This Control Trial study was conducted at Datta Meghe Ayurvedic Medical College Hospital and Research Centre Wanadongri Nagpur. and after obtaining ethical clearance from Institutional Ethics Committee, patients were selected from OPD of Prasuti Tantra and Streerog department , as per inclusion criteria. Total of 30 patients were selected with the assessment of Prakruti. Written consent was obtained from each patient. All subjects were treated by Ashwagandha ghruta with milk.

The present study also used for mass percentange of female who are suffering from PMS and relationship with prakruti. In addition, subjects were asked regarding their lifestyle.

Analysis plan

A Microsoft Excel spreadsheet was be used to record the data, and SPSS software version 20 will be used for analysis.

The data was analysed using SPSS (Statistical package for social sciences) version 23. Demographic data and other relevant information were analysed using descriptive statistics. Ordinal data was analyzed using non parametric tests like Wilcoxon's signed rank test and Man Whitney U test. The changes (one tailed) with p value<0.0001 was considered as statistically highly significant.

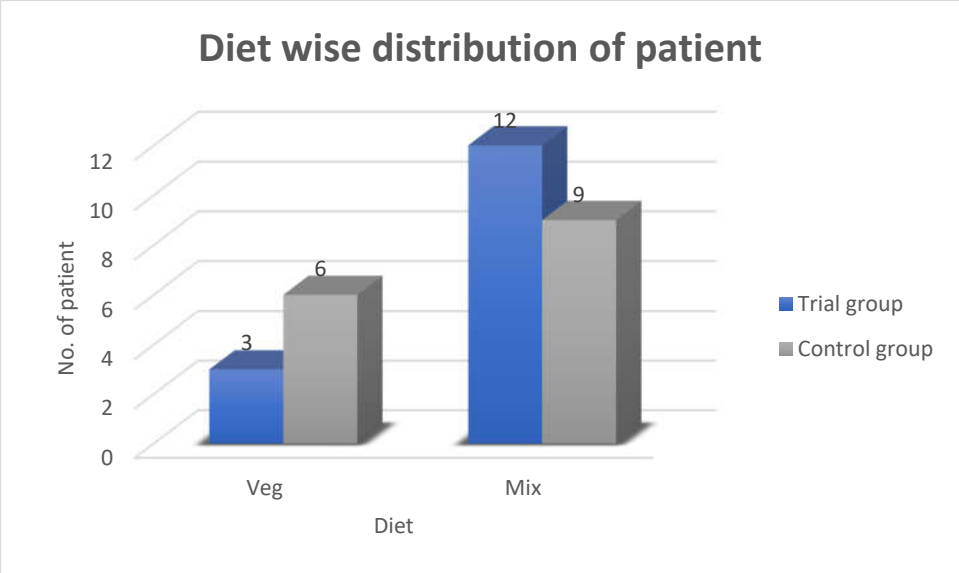
Observations and Results:

Analysis report

1) Diet

Table no. 1 – diet wise distribution of patient

Diet	Study/Trial group		Control group		Total	
	No. of PT	%	No. of PT	%	No. of PT	%
Veg	3	20	6	40	9	30
Mix	12	80	9	60	21	70
Total	**15**	**100**	**15**	**100**	**30**	**100**



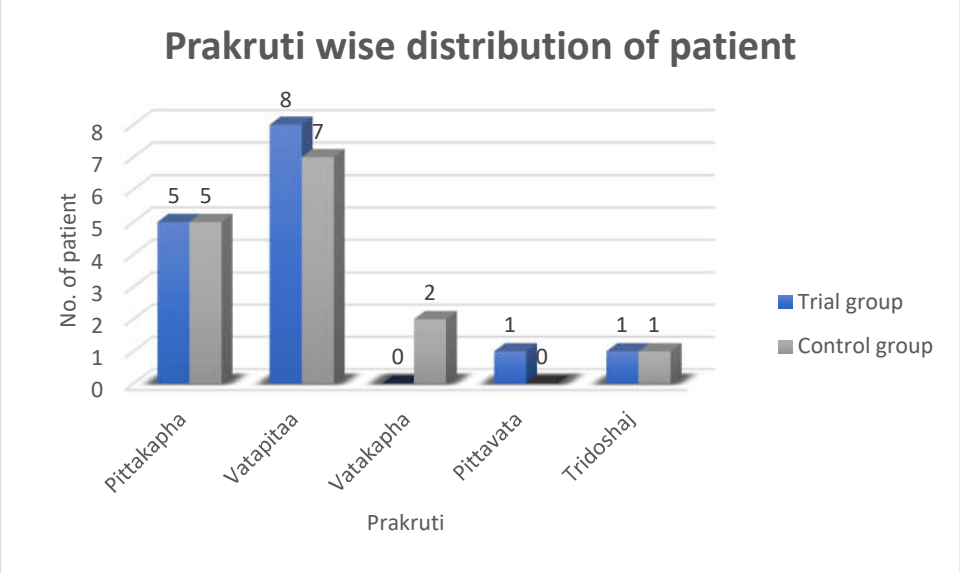
Graph no 1 – showing diet wise distribution of patient

2) Prakruti

Table no 2 – showing prakruti wise distribution of patient

Prakruti	Study/Trial group		Control group		Total	
	No. of PT	%	No. of PT	%	No. of PT	%
Pittakapha	5	33.33333	5	33.33333	10	33.33333

Vatapitaa	8	53.33333	7	46.66667	15	50
Vatakapha	0	0	2	13.33333	2	6.666667
Pittavata	1	6.666667	0	0	1	3.333333
Tridoshaj	1	6.666667	1	6.666667	2	6.666667
Total	**15**	**100**	**15**	**100**	**30**	**100**



Graph no 2 – showing prakruti wise distribution of patient

Statistical analysis

Subjective parameter

1) **Vata symptoms total score**

Wilcoxon signed ranked test for Vata in both trial and control group

Table no 1 – showing Wilcoxon signed ranked test for vata in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	5.6	6	-120	0.000605
	AT	15	1.13	1		
Control Group	BT	15	4.6	4	-50	0.399396
	AT	15	4.26	5		

Trial Group: As value of p is 0.000605, significant difference was observed between mean of Before Treatment and After Treatment score in vata symptoms. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on vata symptoms of PMS.
Control Group: As value of p is 0.399396, no significant difference was observed between mean of Before Treatment and After Treatment score in vata symptoms. Hence it is concluded that only dietary changes does not shows significant result on vata symptoms of PMS.

Man Whitney U Test'

2) Comparison between Vata symptoms total score of both the groups

Table no 2 – showing Man whitney U test for comparison between Vata symptoms total score of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	1.13	139	19	<0.0001
Group B	15	4.26	326		

As value of p is less than 0.0001, significant difference was observed between mean of Trial Group and Control Group score in vata symptoms. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in vata symptoms of PMS scale.

3) Pitta or vata-pitta symptoms total score

Wilcoxon signed ranked test for Pitta or vata-pitta in both trial and control group

Table no 3 – showing Wilcoxon signed ranked test for Pitta or vata-pitta in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	3.33	3	-120	0.000632
	AT	15	0.33	0		
Control Group	BT	15	2.73	3	-22	0.187462
	AT	15	2.4	2		

Trial Group: As value of p is 0.000632, significant difference was observed between mean of Before Treatment and After Treatment score in Pitta or vata-pitta symptoms. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on Pitta or vata-pitta symptoms of PMS.
Control Group: As value of p is 0.187462, no significant difference was observed between mean of Before Treatment and After Treatment score in Pitta or vata-pitta symptoms. Hence it is concluded that only dietary changes does not shows significant result on Pitta or vata-pitta symptoms of PMS.

Man Whitney U Test'

4) Comparison between Pitta or vata-pitta symptoms total score of both the groups

Table no 4 – showing Man whitney U test for comparison between Pitta or vata-pitta symptoms total score of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.33	134.5	14.5	<0.0001
Group B	15	2.4	330.5		

As value of p is less than 0.0001, significant difference was observed between mean of Trial Group and Control Group score in Pitta or vata-pitta symptoms. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in Pitta or vata-pitta symptoms of PMS scale.

5) Kapha or vata-kapha symptoms total score

Wilcoxon signed ranked test for Kapha or vata-kapha in both trial and control group

Table no 5 – showing Wilcoxon signed ranked test for Kapha or vata-kapha in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	1.06	1	-78	0.000921
	AT	15	0.2	0		
Control Group	BT	15	1.4	1	-18	0.119814
	AT	15	1.06	1		

Trial Group: As value of p is 0.000921, significant difference was observed between mean of Before Treatment and After Treatment score in Kapha or vata-kapha symptoms. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on Kapha or vata-kapha symptoms of PMS.

Control Group: As value of p is 0.119814, no significant difference was observed between mean of Before Treatment and After Treatment score in Kapha or vata-kapha symptoms. Hence it is concluded that only dietary changes does not shows significant result on Kapha or vata-kapha symptoms of PMS.

Man Whitney U Test'

6) Comparison between Kapha or vata-kapha symptoms total score of both the groups

Table no 6 – showing Man whitney U test for comparison between Kapha or vata-kapha symptoms total score of both the groups.

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.2	171	51	0.004626
Group B	15	1.06	294		

As value of p is less than 0.004626, significant difference was observed between mean of Trial Group and Control Group score in Kapha or vata-kapha symptoms. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in Kapha or vata-kapha symptoms of PMS scale.

TOTAL SCORE OF PMS SCALE

7) PMS Score

Wilcoxon signed ranked test for PMS Score in both trial and control group

Table no 7 – showing Wilcoxon signed ranked test for Kapha or vata-kapha in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	10	10	-120	0.000686
	AT	15	1.66	1		
Control Group	BT	15	8.73	9	-55	0.208488
	AT	15	7.86	9		

Trial Group: As value of p is 0.000686, significant difference was observed between mean of Before Treatment and After Treatment score in PMS Score. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on PMS Score.

Control Group: As value of p is 0.208488, no significant difference was observed between mean of Before Treatment and After Treatment score in PMS Score. Hence it is concluded that only dietary changes does not shows significant result on PMS Score.

Man Whitney U Test'

8) Comparison between PMS total score of both the groups

Table no 8 – showing Man whitney U test for comparison between PMS total score of both the groups.

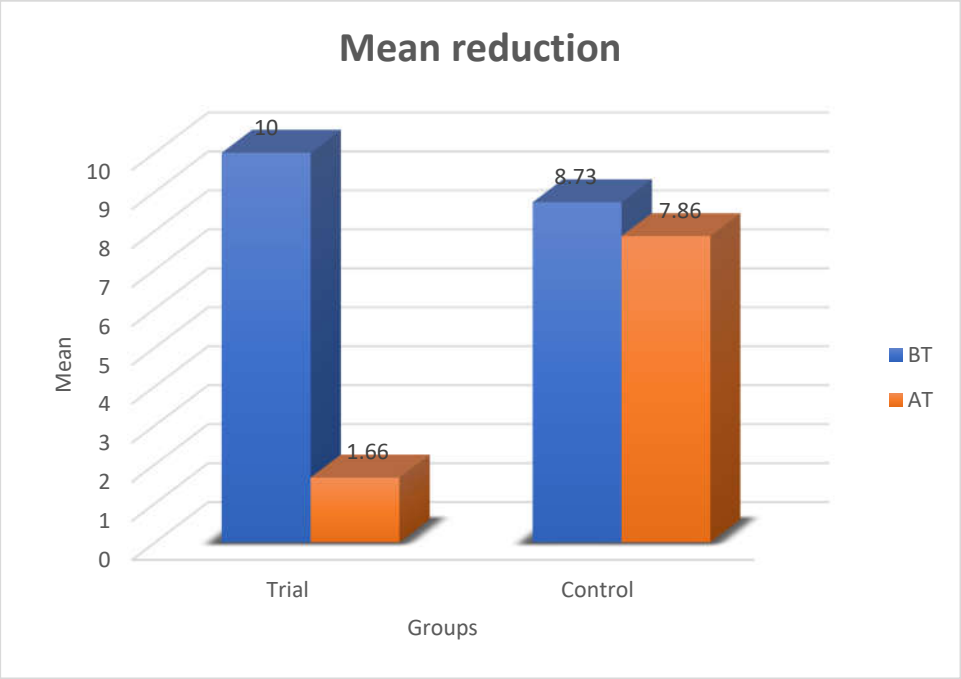
Group	N	Mean	Sum of Rank	U	P
Group A	15	1.66	133	13	<0.0001
Group B	15	7.86	332		

As p value is less than 0.0001, significant difference was observed between mean of Trial Group and Control Group score of PMS scale. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result on symptoms of PMS scale.

Overall result –

From above analysis we can conclude that ashwagandha ghrut with milk compared with only dietary changes shows significant result on symptoms of PMS scale.

Mean score before and after treatment of both the groups



Graph no 3 – showing Before treatment and After treatment mean reduction

As shown in above graph, before treatment mean was 10 and after treatment mean was 1.66 mean in trial group. In control group before treatment mean was 8.73 which was reduced to 7.86 after treatment.

Analysis of individual symptom

A) VATA

a) Mood swing

1) Wilcoxon signed ranked test for Mood swing in both trial/study and control group

Table no 1 – showing Wilcoxon signed ranked test for Mood swing in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.8	1	-60	0.007737
	AT	15	0.2	0		
Control Group	BT	15	0.6	1	-16	0.776814
	AT	15	0.66	1		

Trial Group: As value of p is 0.007737, significant difference was observed between mean of Before Treatment and After Treatment score in Mood swing. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on Mood swing in PMS.

Control Group: As value of p is 0.776814, no significant difference was observed between mean of Before Treatment and After Treatment score in Mood swing. Hence it is concluded that only dietary changes does not shows significant result on Mood swing in PMS.

2) Man Whitney U Test'

Comparison between Mood swing of both the groups

Table no 2 – showing Man whitney U test for comparison between Mood swing symptom both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.2	171	51	0.006747
Group B	15	0.66	264		

As p value is less than 0.006747, significant difference was observed between mean of Trial Group and Control Group score in Mood swing. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in Mood swing in PMS.

b) Anxious

3) Wilcoxon signed ranked test for Anxious in both trial/study and control group

Table no 3 – showing Wilcoxon signed ranked test for Anxious in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.733	1	-55	0.001904
	AT	15	0.066	0		
Control Group	BT	15	0.6	1	-3	0.345779
	AT	15	0.466	0		

Trial Group: As value of p is 0.001904, significant difference was observed between mean of Before Treatment and After Treatment score in Anxious. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on Anxious in PMS.
Control Group: As value of p is 0.345779, no significant difference was observed between mean of Before Treatment and After Treatment score in Anxious. Hence it is concluded that only dietary changes does not shows significant result on Anxious in PMS.

4) Man Whitney U Test'

Comparison between Anxious of both the groups

Table no 4 – showing Man whitney U test for comparison between Anxious symptom both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.066	187.5	67.5	0.01602
Group B	15	0.466	277.5		

As p value is less than 0.01602, significant difference was observed between mean of Trial Group and Control Group score in Anxious. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in Anxious in PMS.

c) Abdominal pain and bloating

5) Wilcoxon signed ranked test for Abdominal pain and bloating in both trial/study and control group

Table no 3 – showing Wilcoxon signed ranked test for abdominal pain and bloating in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.866	1	-66	0.001089
	AT	15	0.133	0		

Control Group	BT	15	0.666	1	-1	1
	AT	15	0.6	1		

Trial Group: As value of p is 0.001089, significant difference was observed between mean of Before Treatment and After Treatment score in abdominal pain and bloating. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on abdominal pain and bloating in PMS.

Control Group: As value of p is 1, no significant difference was observed between mean of Before Treatment and After Treatment score in abdominal pain and bloating. Hence it is concluded that only dietary changes does not shows significant result on abdominal pain and bloating in PMS.

6) Man Whitney U Test'

Comparison between abdominal pain and bloating of both the groups

Table no 4 – showing Man whitney U test for comparison between abdominal pain and bloating symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.133	180	60	0.009804
Group B	15	0.6	285		

As value of p is less than 0.009804, significant difference was observed between mean of Trial Group and Control Group score in abdominal pain and bloating. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in abdominal pain and bloating in PMS.

d) Headache

7) Wilcoxon signed ranked test for headache in both trial and control group

Table no 3 – showing Wilcoxon signed ranked test for headache in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.466	0	-1	1
	AT	15	0.4	0		
Control Group	BT	15	0.2	0	-4	0.77
	AT	15	0.266	0		

Trial Group: As value of p is 1, no significant difference was observed between mean of Before Treatment and After Treatment score in headache. Hence it is concluded that

administration of ashwagandha ghrut with milk does not shows significant result on headache in PMS.

Control Group: As value of p is 0.77, no significant difference was observed between mean of Before Treatment and After Treatment score in headache. Hence it is concluded that only dietary changes does not shows significant result on headache in PMS.

8) Man Whitney U Test'

Comparison between headaches of both the groups

Table no 4 – showing Man whitney U test for comparison between headache symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.4	247.5	97.5	0.461614
Group B	15	0.266	217.5		

As p value is less than 0.461614, no significant difference was observed between mean of Trial Group and Control Group score in headache. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes does not shows significant result in headache in PMS.

e) Back pain

9) Wilcoxon signed ranked test for Back pain in both trial and control group

Table no 3 – showing Wilcoxon signed ranked test for back pain in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.866	1	-66	0.001089
	AT	15	0.133	0		
Control Group	BT	15	0.933	1	-15	0.036888
	AT	15	0.6	1		

Trial Group: As value of p is 0.001089, significant difference was observed between mean of Before Treatment and After Treatment score in back pain. Hence it is concluded that administration of ashwagandha ghrut with milk shows significant result on back pain in PMS.

Control Group: As value of p is 0.036888, significant difference was observed between mean of Before Treatment and After Treatment score in back pain. Hence it is concluded that only dietary changes shows significant result on back pain in PMS.

10) Man Whitney U Test'

Comparison between back pain of both the groups

Table no 4 – showing Man whitney U test for comparison between back pain symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.133	180	60	0.009804
Group B	15	0.6	285		

As p value is less than 0.009804, significant difference was observed between mean of Trial Group and Control Group score in back pain. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in back pain in PMS.

f) Joint/Muscle pain

11) Wilcoxon signed ranked test for Joint/muscle pain in both trial and control group

Table no 3 – showing Wilcoxon signed ranked test for joint/muscle pain in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.4	0	-12	0.233028
	AT	15	0.2	0		
Control Group	BT	15	0.266	0	-14	0.484018
	AT	15	0.4	0		

Trial Group: As value of p is 0.233028, no significant difference was observed between mean of Before Treatment and After Treatment score in joint/muscle pain. Hence it is concluded that administration of ashwagandha ghrut with milk does not shows significant result on joint/muscle pain in PMS.

Control Group: As value of p is 0.484018, no significant difference was observed between mean of Before Treatment and After Treatment score in joint/muscle pain. Hence it is concluded that only dietary changes does not shows significant result on joint/muscle pain in PMS.

12) Man Whitney U Test'

Comparison between joint/muscle pain of both the groups

Table no 4 – showing Man whitney U test for comparison between joint/muscle pain symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.2	210	90	0.250546
Group B	15	0.4	255		

As p value is less than 0.250546, no significant difference was observed between mean of Trial Group and Control Group score in joint/muscle pain. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes does not shows significant result in joint/muscle pain in PMS.

g) Constipation

13) Wilcoxon signed ranked test for constipation in both trial and control group

Table no 3 – showing Wilcoxon signed ranked test for constipation in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.733	1	-66	0.001089
	AT	15	0	0		
Control Group	BT	15	0.533	1	-5	0.841481
	AT	15	0.533	1		

Trial Group: As value of p is 0.001089, significant difference was observed between mean of Before Treatment and After Treatment score in constipation. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on constipation in PMS.

Control Group: As value of p is 0.841481, no significant difference was observed between mean of Before Treatment and After Treatment score in constipation. Hence it is concluded that only dietary changes does not shows significant result on constipation in PMS.

14) Man Whitney U Test'

Comparison between constipation of both the groups

Table no 4 – showing Man whitney U test for comparison between constipation symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0	172.5	52.5	0.00128
Group B	15	0.533	292.5		

As p value is less than 0.00128, significant difference was observed between mean of Trial Group and Control Group score in constipation. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in constipation in PMS.

h) Poor concentration

15) Wilcoxon signed ranked test for poor concentration in both trial and control group

Table no 3 – showing Wilcoxon signed ranked test for poor concentration in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.666	1	-55	0.001904
	AT	15	0	0		
Control Group	BT	15	0.8	1	-3	0.345779
	AT	15	0.666	1		

Trial Group: As value of p is 0.001904, significant difference was observed between mean of Before Treatment and After Treatment score in poor concentration. Hence it is concluded that administration of ashwagandha ghrut with milk shows significant result on poor concentration in PMS.

Control Group: As value of p is 0.345779, no significant difference was observed between mean of Before Treatment and After Treatment score in poor concentration. Hence it is concluded that only dietary changes does not shows significant result on poor concentration in PMS.

16) Man Whitney U Test'

Comparison between poor concentration of both the groups

Table no 4 – showing Man whitney U test for comparison between poor concentration symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0	157.5	37.5	0.000155
Group B	15	0.666	307.5		

As value of p is less than 0.000155, significant difference was observed between mean of Trial Group and Control Group score in poor concentration. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows highly significant result in poor concentration in PMS.

B) PITTA or VATA-PITTA

i) Food cravings

17) Wilcoxon signed ranked test for food cravings in both trial/study and control group

Table no 3 – showing Wilcoxon signed ranked test for food cravings in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.466	0	-24	0.072601
	AT	15	0.133	0		
Control Group	BT	15	0.733	1	-1	1
	AT	15	0.666	1		

Trial Group: As value of p is 0.072601, no significant difference was observed between mean of Before Treatment and After Treatment score in food cravings. Hence it is concluded that administration of ashwagandha ghrut with milk does not shows significant result on food cravings in PMS.

Control Group: As value of p is 1, no significant difference was observed between mean of Before Treatment and After Treatment score in food cravings. Hence it is concluded that only dietary changes does not shows significant result on food cravings in PMS.

18) Man Whitney U Test'

Comparison between food cravings of both the groups

Table no 4 – showing Man whitney U test for comparison between food cravings symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.133	172.5	52.5	0.00365
Group B	15	0.666	292.5		

As value of p is less than 0.00365, significant difference was observed between mean of Trial Group and Control Group score in food cravings. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in food cravings in PMS.

j) Change in appetite

19) Wilcoxon signed ranked test for change in appetite in both trial/study and control group

Table no 3 – showing Wilcoxon signed ranked test for change in appetite in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.8	1	-78	0.000627
	AT	15	0	0		
Control Group	BT	15	0.2	0	-1.5	0.637352
	AT	15	0.2	0		

Trial Group: As value of p is 0.000627, significant difference was observed between mean of Before Treatment and After Treatment score in change in appetite. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on change in appetite in PMS.

Control Group: As value of p is 0.637352, no significant difference was observed between mean of Before Treatment and After Treatment score in change in appetite. Hence it is concluded that only dietary changes does not shows significant result on change in appetite in PMS.

20) Man Whitney U Test'

Comparison between change in appetite of both the groups

Table no 4 – showing Man whitney U test for comparison between change in appetite symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0	210	90	0.079231
Group B	15	0.2	255		

As value of p is less than 0.079231, no significant difference was observed between mean of Trial Group and Control Group score in change in appetite. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes does not shows significant result in change in appetite in PMS.

k) Acne

21) Wilcoxon signed ranked test for acne in both trial/study and control group

Table no 3 – showing Wilcoxon signed ranked test for acne in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.666	1	-55	0.001904
	AT	15	0	0		

Control Group	BT	15	0.4	0	3	0.345779
	AT	15	0.266	0		

Trial Group: As value of p is 0.0019.4, significant difference was observed between mean of Before Treatment and After Treatment score in acne. Hence it is concluded that administration of ashwagandha ghrut with milk shows significant result on acne in PMS.

Control Group: As value of p is 0.345779, no significant difference was observed between mean of Before Treatment and After Treatment score in acne. Hence it is concluded that only dietary changes does not shows significant result on acne in PMS.

22) Man Whitney U Test'

Comparison between acne of both the groups

Table no 4 – showing Man whitney U test for comparison between acne symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0	202.5	82.5	0.037799
Group B	15	0.266	262.5		

As value of p is less than 0.037799, significant difference was observed between mean of Trial Group and Control Group score in acne. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in acne in PMS.

l) Anger / outbursts

23) Wilcoxon signed ranked test for anger/ outbursts in both trial/study and control group

Table no 3 – showing Wilcoxon signed ranked test for anger/ outbursts in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.533	1	-36	0.005962
	AT	15	0	0		
Control Group	BT	15	0.733	1	-3	0.345779
	AT	15	0.6	1		

Trial Group: As value of p is 0.005962, significant difference was observed between mean of Before Treatment and After Treatment score in anger/ outbursts. Hence it is

concluded that administration of ashwagandha ghrut with milk shows highly significant result on anger/ outbursts in PMS.

Control Group: As value of p is 0.345779, no significant difference was observed between mean of Before Treatment and After Treatment score in anger/ outbursts. Hence it is concluded that only dietary changes does not shows significant result on anger/ outbursts in PMS.

24) Man Whitney U Test'

Comparison between anger/ outbursts of both the groups

Table no 4 – showing Man whitney U test for comparison between anger/ outbursts symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0	165	45	0.000466
Group B	15	0.6	300		

As p value is less than 0.000466, significant difference was observed between mean of Trial Group and Control Group score in anger/ outbursts. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows highly significant result in anger/ outbursts in PMS.

m) Diarrhea/ Loose stools

25) Wilcoxon signed ranked test for diarrhea/ loose stools in both trial and control group

Table no 3 – showing Wilcoxon signed ranked test for diarrhea/ loose stools in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.333	0	-3	0.345779
	AT	15	0.133	0		
Control Group	BT	15	0.066	0	-1.5	0.637352
	AT	15	0.066	0		

Trial Group: As value of p is 0.345779, no significant difference was observed between mean of Before Treatment and After Treatment score in diarrhea/ loose stools. Hence it is concluded that administration of ashwagandha ghrut with milk does not shows significant result on diarrhea/ loose stools in PMS.

Control Group: As value of p is 0.637352, no significant difference was observed between mean of Before Treatment and After Treatment score in diarrhea/ loose stools.

Hence it is concluded that only dietary changes does not shows significant result on diarrhea/ loose stools in PMS.

26) Man Whitney U Test'

Comparison between diarrhea/ loose stools of both the groups

Table no 4 – showing Man whitney U test for comparison between diarrhea/ loose stools symptom of both the groups

Group	**N**	**Mean**	**Sum of Rank**	**U**	**P**
Group A	15	0.133	247.5	97.5	0.307295
Group B	15	0.066	217.5		

As value of p is less than 0.307295, no significant difference was observed between mean of Trial Group and Control Group score in diarrhea/ loose stools. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes does not shows significant result in diarrhea/ loose stools in PMS.

n) Breast tenderness

27) Wilcoxon signed ranked test for breast tenderness in both trial and control group

Table no 3 – showing Wilcoxon signed ranked test for breast tenderness in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.533	1	-36	0.005962
	AT	15	0	0		
Control Group	BT	15	0.6	1	-1.5	0.637352
	AT	15	0.6	1		

Trial Group: As value of p is 0.005962, significant difference was observed between mean of Before Treatment and After Treatment score in breast tenderness. Hence it is concluded that administration of ashwagandha ghrut with milk shows highly significant result on breast tenderness in PMS.

Control Group: As value of p is 0.637352, no significant difference was observed between mean of Before Treatment and After Treatment score in breast tenderness. Hence it is concluded that only dietary changes does not shows significant result on breast tenderness in PMS.

28) Man Whitney U Test'

Comparison between breast tenderness of both the groups

Table no 4 – showing Man whitney U test for comparison between breast tenderness symptom of both the groups

Group	N	Mean	Sum of Rank	U	P
Group A	15	0	165	45	0.000466
Group B	15	0.6	300		

As value of p is less than 0.000466, significant difference was observed between mean of Trial Group and Control Group score in breast tenderness. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in breast tenderness in PMS.

C) KAPHA or VATA-KAPHA

o) Depression

29) Wilcoxon signed ranked test for depression in both trial/study and control group

Table no 3 – showing Wilcoxon signed ranked test for depression in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.466	0	-28	0.010733
	AT	15	0	0		
Control Group	BT	15	0.4	0	-1.5	0.6373552
	AT	15	0.4	0		

Trial Group: As value of p is 0.010733, significant difference was observed between mean of Before Treatment and After Treatment score in depression. Hence it is concluded that administration of ashwagandha ghrut with milk shows significant result on depression in PMS.

Control Group: As value of p is 0.6373552, no significant difference was observed between mean of Before Treatment and After Treatment score in depression. Hence it is concluded that only dietary changes does not shows significant result on depression in PMS.

30) Man Whitney U Test'

Comparison between depression of both the groups

Table no 4 – showing Man whitney U test for comparison between depression symptom of both the groups

Group	N	Mean	Sum of Rank	U	P
Group A	15	0	187.5	67.5	0.007752
Group B	15	0.4	277.5		

As value of p is less than 0.007752, significant difference was observed between mean of Trial Group and Control Group score in depression. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in depression in PMS.

p) Slugishness/ lethargy

31) Wilcoxon signed ranked test for sluggishness/ lethargy in both trial and control group

Table no 3 – showing Wilcoxon signed ranked test for sluggishness/ lethargy in both trial and control group

Group	B.T/A.T	N	Mean	Median	W	P
Trial Group	BT	15	0.6	1	-21	0.019656
	AT	15	0.2	0		
Control Group	BT	15	0.933	1	-10	0.071861
	AT	15	0.666	1		

Trial Group: As value of p is 0.019656, significant difference was observed between mean of Before Treatment and After Treatment score in sluggishness/ lethargy. Hence it is concluded that administration of ashwagandha ghrut with milk shows significant result on sluggishness/ lethargy in PMS.

Control Group: As value of p is 0.071861, no significant difference was observed between mean of Before Treatment and After Treatment score in sluggishness/ lethargy. Hence it is concluded that only dietary changes does not shows significant result on sluggishness/ lethargy in PMS.

32) Man Whitney U Test'

Comparison between sluggishness/ lethargy ion of both the groups

Table no 4 – showing Man whitney U test for comparison between sluggishness/ lethargy symptom of both the groups

Group	N	Mean	Sum of Rank	U	P
Group A	15	0.2	180	60	0.01202
Group B	15	0.66	285		

As value of p is less than 0.01202, significant difference was observed between mean of Trial Group and Control Group score in sluggishness/ lethargy. Hence it is concluded that administration of ashwagandha ghrut with milk compared with only dietary changes shows significant result in sluggishness/ lethargy in PMS.

Discussion

Premenstrual syndrome disease of unknown etiology occurred due to imbalance of Dosha during luteal phase of menstrual cycle.i.e. Rituvyateetakala. Prakruti-Dosha-Vyadhi has the close relationship. This dominance of specific dosha are more prone to diseases of specific dosha. For example, Based on the characteristics of the Pitta body type, it may be expected that these people may be more likely to experience blood disorders, ulcers, skin illnesses, etc. more common. Likewise premenstrual is lifestyle disorder suffered by female due to Dosha imbalance. Symptoms of PMS vary from female to female according to their prakruti but due to changing lifestyle, eating habits, apathya ahaar-vihar, etc.it is seen that females shows variable symptoms due to dosha imbalance.

With the effects of Snigdha Guna, Vata Pitta Shamana18, Kapha Vardhaka, and Madhura Vipaka, ashwagandha is brumhana, balya, and rasayana.[31-32]

Aswagandha Ghruta has deepana property also helps in Agnidipti and Srotoshodhana. [33]

Ashwagandha has Medhya, Rasayana, Vatahara property.[6] Analytical study also reports Antistress effect of Sitoindoside&Withaferin-A,[7] diuretic, tranquilizer, relaxation effect ofAshwagandholine,[8] muscle relaxant,[9]anxiolyticproperty of Withanolides,[10]

Acharya Charaka *used word* 'sahasraveerya*' for* Ghee *and* 'yogvahitwa*' for* ghruta *by way of which it enhances the therapeutic efficacy and potency of plant ingredients it is processed with. As Ghruta is best among the oily substances(sarvasnehottama*). It is sweet (maddhur) in taste and vipaka . It has Sheeta virya, increses memory(smirti), intelligence(buddhi), agni, shukra, oja, kapha. It decreses vata, pitta, and kapha type of insanity.

The extract from the roots of ashwagandha plants lowers the levels of psychological and physiological stress markers, enhances mental health, lowers blood cortisol levels, and modifies eating habits. [34]

The combine effect of Ashwagandha and Ghruta shows major effect on Dosha imbalance vyadhi like premenstrual syndrome. Ashwagandha is Vataghna due to madhur vipak and ushna virya, Kaphaghna due to Tikt Kashaya and Ushna .Ghruta is the main treatment of Pitta prakopa. Combinely Aswagandha Ghruta decreases tridosha vaat, pitta, kapha.

Premenstrual syndrome is correlated with Rituvyateetakala. In this kala there is sanchay of vaat, prakopa of pitta and shamana of kapha happens. Ashwagandha ghruta helps to reduce effects of vitiated Vaat,Pitta and Kapha during this phase. Milk(anupan) is heavy(guru), sweet(madhur), sticky(picchila), unctuous(snigdha) minute(sukshma), fast spreading (sara). Administration of ashwagandha ghruta with milk before meal does agnidipan and srtoshodhana. The clinical trial study was carried out on study group (n=15) and control group(n=15). By virtue of this qualities Administration of Ashwagandha ghruta with milk before meal in study/trial group compared to control group, it is seen that it helps to relieve vaat type, pitta or vaat-pitta type, kapha or vaat-kapha type symptoms sigificantly in premenstrual syndrome.

Mainly it shows highly significant result in mood swings, anxiousness, abdominal pain/ bloating, constipation,change in appetite, anger/outbursts and breast tenderness. Hence ashwagandha ghruta with milk before meal is effective in management of premenstrual syndrome.

12. Conclusions summarizing the achievements and indication of scope for future work:

- From data collected from 30 patients it is observed that females with following prakruti suffered from premenstrual syndrome Vaat-Pitta(n=15), Pitta-Kapha(n=10), Vaat-Kapha(n=2) Pitta-Vaat(n=1), Tridoshaj(n=2)
- Due to changing lifestyle,, behavior, eating habits this disease is mainly seen in vaat pitta pradhan prakruti.
- Through this study we find out Premenstrual syndrome occur due to Pitta prakopa involving dosha imbalance which shows variable symptoms.
- Administration of ashwagandha ghruta with milk before meal shows highly significant improvement in mood swings, anxiousness, abdominal pain/ bloating, constipation, change in appetite, anger/outbursts and breast tenderness. It shows significant improvement in back pain, poor concentration, acne flare ups, depression and slugginess/lethargy.
- Comparing to study/trial group with control group, it is seen that study group shows betters results in vaat type, pitta or vaat-pitta type, kapha or vaat-kapha type symptoms significantly in premenstrual syndrome.
- During conduction and after completion of clinical trials, adverse effects were not seen.
- Ashwagandha ghruta with milk before meal is effective in management of premenstrual syndrome
- In future clinical trial study assessment should be done by gradation method to check results of mild, moderate and severe symptoms. In order to validate our results and those from earlier experiments, more clinical trials with bigger sample sizes, varying ages, prakruti, and longer durations are required.

17 Outcomes of the project

- Due to change in lifestyle, eating habits, behavior females have to go through many diseases.
- Balance of dosha play major role in healthy reproductive life.
- Prakruti-Dosha-Vyadhi has the close relationship.
- Clinical trials are important for discovering new treatments for diseaseas as well as new ways to detect, diagnose.
- A researcher has direct contact with patients to to check efficacy and adverse effects of interventional drug.
- Clinical trials helps to provide evidence based patient care and to ensure accuracy of classical knowledge in samhitas.
- Thus administration of Ashwagandha Ghruta with milk before meal is effective in management of Premenstrual syndrome.

Significance

The idiosyncratic feature of Ayurveda is its personalized approach to treating illnesses.Ashwagandha, an adaptogen, alleviates vata and kapha, imparts strength, acts as rasayana (rejuvenation). mitigates physical and psychological symptoms in PMS.

This knowledge can be effectively used in clinical settings for disease diagnosis, treatment (including choosing the right medication, dosage, length of treatment, nutrition, and lifestyle), and prognosis. This also includes poor internal and physical health. thus, changing one's life is necessary for both the treatment of this condition and its forestallment. These Ayurvedic- grounded styles are doable to borrow and yield positive results.

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Annexure I

Effectiveness of Ashwagandha Ghruta with milk in management of Premenstrual Syndrome with correlation of Prakruti.

Proforma of Questionnaire

Name- Age- Sex-
Birth date- Actual birth place- Place of intra- uterine life-
Height- Weight- kg Body mass index - kg/m2

	Vaat	**Pitta**	**Kapha**
Total points			

Sr no	Characters	Vaat	Y/n	Pitta	Y/n	Kapha	Y/n
1 2	Body frame Body Mass Index	Lean long 19		Medium		Large, plump, fleshy, fatty > 25	
3 4 5	Speech Speed Clarity Character	Fast Diffuse words Easily deviates from the-topic, more talkative		Fast Clear Impressive speaker		Slow Clear Less talkative, likes to be reserved	
6	Eyes 6. Colour- Scle	Blackish		Reddish, brown		Milky white Edges- reddish	

	ra						
7 8	Lips Cha ract er Col our	Cracked, shapeless Blackish		Smooth, soft, tSoft& Delicate Gray/ Brown Medium Smooth, soft, thin Soft & Shiny Black Morehin Reddish		Smoot h, glossy, Proport ionate Pinkish	
9 1 0	Nail s Cha ract er Col our	Small cracking,beaking,rou gh,easily break Blackish		Small, smooth and flat Reddish		Big, smooth , glossy Pinkish	
  1 1 1 2 1 3	Hair Text ure Col our Thic knes s	Rough & Dry Black Less		Soft & Delicate Gray/ Brown Medium		 Soft & Shiny Black More	
1 4 1 5 1 6	Skin Cha ract er Col our	Cracking, rough Blackish tinge		Soft, oily, with moles, pimples, freckles Yellowish Tinge		Smoot h, glossy Fair, Pinkish	
1 7	Tem pera ture	Cold		Warm		Cold	
1 8	Bod y odo ur	Absent		Present		Absent	
	App						

19	etite Frequency of eating Quantity at meal Habit If meal Is skipped/meal timings are changed/style of food is changed	More Less irregular Constipation		More More profound		Less More not much Nothing special	
20	Thirst	Irregular		More		Less	
21	Stool Habit Consistency Colour	 Irregular Hard Blackish		 Regular Semisolid Yellowish		 Regular Well found Yellowish	
22	Sleep Charact	Interrupted ,less 6 hrs		Uninterrupted,less 6 to 8 hrs		Sound profound 8hrs or	

	er Duration					>8hrs	
23	Excitement	Quickly, cools down quickly		Quickly, does not cool down quickly		Rarely	
24	Working style	Quickly		Medium		Slowly	
25	Other movements	Fast, unneccessary		Fast, precise		Slow, steady	
26	Strength	Less, feels exhausted after doing some work		Medium, moderately gets tired		Good, do not feel tired	
27	Control on desires.	Hardly, doesn't work hard for the same		Cannot, work hard, achieve it.		Can control easily.	
28	Style of tackling problems	Worrying continuously without expressing problems		Loosing self control, becoming angry/irritated		With cool and stable mind.	
29	Concentration on work	Lack of concentration		Can concentrate on thing of interest		Can easily concentrate	
30	Cognition Process Grasping Store	Quick poor Poor Less		Quick good Average Average		Delayed Good Good	

	me mor y						

Prakruti -

Annexure II

Name - _____ Age - __

Menstrual periods – Regular/ Irregular.

Prakruti according to Ayurveda - _____

Table: Questionnaire for PMS assessment. (symptoms face 7 to 10 days before menstrual periods)

Sr.no.	Prakruti	Symptoms	YES	NO
1	**Vaat**	Mood swings		
2		Anxious		
3		Abdominal pain Bloating		
4		Headache		
5		Back pain		
6		Joint muscle pain		
7		Constipation		
8		Poor concentration		
9	**Pitta or Vaat-Pitta**	Food cravings		
10		Change in appetite		
11		Acne flare ups		
12		Anger/outbursts		
13		Red rashes		
14		Diarrhea/loose stools		
15		Breast tenderness		
16	**Kapha or Vaat-Kapha**	Breast swelling		

17		Weight gain due to fluid retention		
18		Depression		
19		Sluggishness/lethargy		

Annexure III
CASE RECORD FORM

Name : **Date :**
Age : **OPD no. :**
Sex : F **Religion:**
Marital Status: Married/Unmarried **Occupation:**
Social Status: **Mob. No.:**
Postal Address:

CHIEF COMPLAINTS :
Duration:

HISTORY OF PRESENT ILLNESS:

HISTORY OF PAST ILLNESS:

FAMILY HISTORY: Yes/No

PERSONAL HISTORY:
1]Ahara: Veg /Mixed Quantity- Frequency- 1/2/3/4/ or More
Type-Carbohydrate/Protein/Fat/Fruits & Vegetables.
2] Vyasana: Tobacco / Smoking / Alcoholic / Tea

3]Nidra:..... Hours /day
Divaswapna.....Hours/day,Daily/Occasional

4]Type of Work-
Any other:

KOSHTHA : Krura / Mrudu / Madhyam
MENSTRUAL HISTORY:
Last menstrual period : Menstrual periods: Regular/ Irregular
Duration of cycle : Blood flow : Scanty / Normal / Heavy
Interval between 2 cycles :

DRUG HISTORY-

ASTHAVIDH PARIKSHA:-

Nadi: / min, Regular /Irregular
Doshabaladhikya: - ---
Mala: - Samyak /Asamyak
Mutra: - Samyak / Asamyak
Jivha: - Saam /Niram
Shabda: -Spashta /Aspashta
Sparsha: -- Ruksha / Snigdha/ Anushnasheet / Shita /Ushna
Druka: -Prakrut / Vikrut (Raktabha / Pitabha /Shwetabh)

Akruti: -- Krush / Madhyam/Sthula

Bodyweight- **Height-**

GENERAL EXAMINATION:

Pulse ..... / min, reg./ irreg.
Temperature .....oF.
Respiratory rate..... / min.
B.P ..... mm / Hg.

Treatment:
Group A: Daily intake of 1 tsp of Ashwagandha ghruta with milk before meal for 10 days before menstrual period and dietary advice.
Anupan : Lukewarm milk.

Group B: Dietary advice
Assessment for subjective or objective criteria

			Before treatmet		After 1 month treatmet		After 2 month treatmet	
Sr. no.	**Prakruti**	**Symptoms**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
1	**Vaat**	Mood swings						
2		Anxious						
3		Abdominal pain Bloating						
4		Headache						
5		Back pain						
6		Joint muscle pain						
7		Constipation						
8		Poor concentration						
9	**Pitta or Vaat-Pitta**	Food cravings						
10		Change in appetite						
11		Acne flare ups						
12		Anger/outbursts						
13		Red rashes						
14		Diarrhea/loose stools						
15		Breast tenderness						
16	**Kapha or Vaat-Kapha**	Breast swelling						
17		Weight gain due to fluid retention						
18		Depression						
19		Sluggishness/ lethargy						

Here 1 month indicates 1 menstrual cycle*

Follow Up 1 : **Follow Up 2 :**