

**“A CLINICAL STUDY OF *PANCHGAVYA GHRITA* AND
TAKRADHARA IN THE MANAGEMENT OF *MANO-AVASADA* W.S.R.
TO DEPRESSION”**

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ABSTRACT

Depression is a serious mental health concern that may touch most people's life directly or indirectly, affecting 350 million people worldwide. It can affect an individual's ability to figure, variety of relationships, and destroy their quality of life. At its most, severe depression can cause suicide. It persists as a social stigma with regard to prevalence and suffering, dysfunction, morbidity and economic burden. 80% of depressed people aren't currently having any treatment. Depression is mentioned in *Ayurvedic* classics in various scattered references. It's both a state of emotion (*Manasika Bhava*) in addition as a disease (*Manasika Vyadhi*). Previous scholars have tried to correlate the clinical condition with *Vishada*, *Avasada*, *Manodhukhaja Unmada* and *Kaphaja Unmada*. **Aims and Objectives:** Clinical assessment of the antidepressant effect of the *Ayurvedic* medication *Panchgavya*

Ghrta in combination with *Takra-Dhara*. To trace out *Nidana Panchaka* and *Doshas* involved according to *Ayurvedic* classics. To describe the aetiopathogenesis and symptomatology according to modern science. To determine the effectiveness of *Shamana* therapy in the treatment of a previously mentioned condition. To discover a depression treatment that is both safe and effective. **Selection of Drug:** *Panchagavya Ghrta* has been

chosen as the drug for this research. *Ayurveda* is a treasure trove of natural medicines from plants, animals and minerals. It uses a wide variety of varieties, including plant, animal, and mineral origins, in addition to single drugs. In *Ayurvedic* psychiatry, several drugs have been described. *Apasmara Chikitsa* mentions *Panchagavya Ghrita*. It is one of the most widely practised *Yogas*, not only for *Apasmara*, but also for a variety of other mental disorders such as OCD, Depression, and various forms of Schizophrenia. **Materials and Methods:** The study will be conducted on 30 clinically diagnosed and confirmed patients of depression. The selection of patients will be made from OPD and IPD wing of PG Department of *Kaya Chikitsa* in DSRRAU hospital, Jodhpur, voluntarily. **Results:** Statistically significant result was observed in all patients. **Conclusion:** Both drugs, *Panchgavya Ghrita* and *Takradhara* were found effective in reducing the symptoms of depression. No antagonist impact of the study drug was observed during the study.

KEYWORDS: *Vishada, Avasada, Kaphaja Unmada, Depression, Psychological Disorder, Panchgavya Ghrita, Takradhara.*

INTRODUCTION

Mind, soul, and body are like a tripod; their combination sustains the world; they serve as the foundation for everything.^[1] There is no such thing as physical health without mental wellness. Mental health is just as vital as physical health for our overall well-being.^[2] According to the World Health Organization (WHO), mental health is defined as “A condition of well-being in which the individual able to cope with typical challenges because the individual knows his or her own potential of life, can work professionally and fruitfully, and can contribute to his or her community.^[3]” When an individual has a perfect state of balance with the surrounding world, has harmonious relationships with others, has normal intelligence, memory, learning capacity and judgment, does not have any internal conflicts, accepts criticism cheerfully, has good self-emotional control, solves problems intelligently, has full self-confidence, and is well adjudicated, he or she is said to be mentally healthy.^[4]

Today's world has many more psychological issues than physical pain. According to global burden of illness data, psychiatric disorders account for 4 of the top 10 causes of morbidity and associated health-care expenses. In India, the number of people suffering from depression reached 56 million in 2015, accounting for 4.5 percent of the population. It has an estimated global impact of 322 million people.^[5] Depression rates have climbed by more than 18% since 2005, yet a shortage of mental health assistance, combined with a widespread fear of

stigma, means that many people do not receive the treatment they require to live healthy and productive lives. That is why it is critical to comprehend depression and eliminate the stigma associated with it.^[6]

NEED OF THE STUDY

According to the World Health Organization (WHO) on April 7, 2017, India is one of the world's most depressed countries. Modern medical research has made significant progress in the treatment of depression, but the result is dangerous side effects. As a result, the World Health Organization (WHO) has urged that only *Ayurveda* science be used to establish a long-term solution and fundamental cause for this serious ailment.

AIMS AND OBJECTIVES

Clinical assessment of the antidepressant effect of the *Ayurvedic* medication *Panchgavya Ghrita* in combination with *Takra-Dhara*.

To trace out *Nidana Panchaka* and *Doshas* involved according to *Ayurvedic* classics.

To describe the aetiopathogenesis and symptomatology according to modern science.

To determine the effectiveness of *Shamana* therapy in the treatment of a previously mentioned condition.

To discover a depression treatment that is both safe and effective.

LITERARY REVIEW

According to *Ayurveda*, Life is the combination (*Samyoga*) of body (*Sharira*), organs of conation and cognition (*Indriya*), mind (*Satva*), and soul (*Aatma*).^[7] However, for practical purposes, the mind (*Manas*) and body (*Sharira*) were defined separately, with their respective entities and *Doshas*. The *Sharirika Doshas* (*Vata*, *Pitta*, *Kapha*) and *Manasika Doshas* (*Rajas*, *Tamas*) affect each another.

According to *Ayurveda*, the mind has enormous potential, as well as attributes of conscious and creative energy.^[8] *Manas* is the being responsible for observation and thinking, according to *Charaka*, the father of *Ayurveda*. *Manas* is derived from the root words "*Mana – Jnane*" and "*Mananat – Manah*". *Manas* is a Sanskrit word that means "to know," "to think," "to believe," and "to imagine." The mind is inactive (*Achetana*) on its own, but becomes active (*Chetana*) when it is stimulated by the self or spirit (*Atma* or *Atmana*). It is a material substance (*Dravya*) because it has both consistency (*Guna*) and action (*Karma*) coexisting within it, while being beyond sensory experience (it cannot be seen or felt). It is the internal

organ that allows us to perceive things. *Manas* connect the soul (*Atma*) to the sense organs and the sensory objects such as sound, touch, form, taste, and smell. The soul (*Atma*) is the source of all experience, while the mind (*Manas*) is merely the tool for it.^[9] The mind serves as a link between the soul (*Atma*) and the sense organs (*Indriyas*). Our ancient Indian system highlighted the principle of body-soul unity and clarified how to treat mental health issues through a psychosomatic approach.^[10] Any illness causes both psychological and physical effects, which have been discussed together. The mind's psychopathology can be understood in terms of *Trigunas* and *Tridoshas*.^[11] Concept of *Sadhaka Pitta* (one of the five subtypes of *Pitta Dosha*) tends to be a psycho physiological. The vitiation of one of the bodily humors, "*Vata*"*Dosha*, is causes delirium (*Pralapa*), insomnia (*Nidra Nasha*) etc. Vitiation of "*Pitta*"*Dosha* causes confused state of mind (*Bhrama*) and unconsciousness (*Murchchha*). Excessive sleep (*Atinidra*) and dullness (*Avasada*) were symptoms of "*Kapha*" vitiation.

Our bodies are regulated by our minds. Perception, thought, comprehension, and making the right decision at the right time are all functions of the mind.^[12] The body-mind apparatus is in distress if the mind is ill. When the mind is healthy, it is full of positive emotions such as passion, affection, sharing and care. The normal state of mind is disrupted, and these good emotions are pushed out, as a result of poor diet and behavior. They are then replaced by negative emotions such as sadness, anxiety, emptiness, hopelessness, worry, helplessness, worthlessness, remorse, irritability, hurt or restlessness.^[13]

MODERN REVIEW

Depression is a disease that changes the way a person feels about things and circumstances as it infiltrates the body system. It also has an impact on how a person thinks and how their brain reacts. It is a psychiatric condition that is followed by physical symptoms.^[14]

All experiences sadness or a sense of being "grey" at some point in their lives. It is normal to be sad at times. Often our grief stems from events in our lives, which we instinctively want to correct. However, there is a distinction to be made between "normal" feelings of distress and feelings induced by "Clinical depression." While it is natural for individuals to go through ups and downs in their lives, those who suffer from clinical depression experience specific symptoms every day for two or three weeks, making it difficult to function at work, in relationships and elsewhere. Women are almost twice as likely as men to suffer from depression.^[15]

Depression is a psychological condition marked by inability to focus, insomnia, loss of appetite, anhedonia, feelings of intense anxiety, remorse, helplessness and hopelessness and thoughts of death, according to modern science. It is often referred to as “Clinical Depression”.^[16]

A depressive disorder is a mental health condition that affects the body, mood and emotions. It has an effect on how a person eats and sleeps, how they feel about themselves, and how they think about things.^[17]

Clinical depression is a common psychological condition marked by a persistently low mood, a lack of interest in normal activities, and a reduced desire to feel pleasure.^[18]

Five major areas of functioning can be impacted in form of three ways:

- A. Behavioral Symptom- 1. Less movement, less productivity
- B. Cognitive Symptom- 2. Have negative thoughts about themselves
3. Blame themselves for their own misfortunes
4. Pessimism
- C. Physical Symptoms- 5. Headache, dizzy spells, and general discomfort

★ Doctors categorize depression according to its severity:

- Mild depression has an impact on your day-to-day life.
- Moderate depression has a major effect on your day-to-day life.
- Severe depression makes it difficult to function in everyday life, and some people with severe depression can experience psychotic symptoms.

MATERIALS AND METHODS

A. SELECTION OF CASES

The study was conducted on 30 clinically diagnosed and confirmed patients of depression. The selection of patients was made from OPD and IPD wing of PG Department of *Kaya Chikitsa* in DSRRAU hospital, Jodhpur, voluntarily.

B. SELECTION CRITERIA

i. Inclusion Criteria

- Patients diagnosed as per the criteria for mild and moderate depression as per Beck Depression Inventory (BDI).

- Age between 16-70 years.
- Patients of either gender, irrespective of socio- economic status.
- Patients with history of depression less than 2 years.
- Patients who were under medication for depression previously but not using now.
- Patient ready to sign consent form.

ii. Exclusion Criteria

- Patient with other psychiatric disorders.
- Depressive phase of substance abuse.
- Pregnant women.
- Patient with suicidal tendency / thoughts.
- Post schizophrenic depression.

C. STUDY DESIGN: Single group Open Randomized Trial.

D. ADMINISTRATION OF DRUG: 30 clinically diagnosed, confirmed and registered patients of Depression was given "*Panchgavya Ghrita*" in the dose of 20 ml with Luke warm water or milk empty stomach for 30 days along with "*Takradhara*" for 10 days.

E. TIMELINES

Treatment period

- *Panchgavya Ghrita* 30 days
- *Takradhara* 10 days

Follow up period- Follow up of patients was done regularly after every 10 days i.e., on 10th, 20th and 30th day.

F. CRITERIA FOR ASSESSMENT

The effect of trial drug was assessed in terms of subjective and laboratory parameters:

a) Subjective Parameters- Criteria for assessment of patients on the basis of **BDI (Beck Depression Inventory)**

1) Sadness

1.	I do not feel sad	0
2.	I feel sad	1
3.	I am sad all the time and I cannot snap out of it.	2
4.	I am so sad and unhappy that I can't stand it.	3

2) Pessimism

1.	I am particularly discouraged about the future	0
2.	I feel discouraged about the future	1
3.	I feel I have nothing to look forward to.	2
4.	I feel the future is hopeless and that things cannot improve.	3

3) Past Failure

1.	I do not feel like a failure.	0
2.	I feel I have failed more than the average person.	1
3.	As I look back on my life, all I can see is a lot of failures.	2
4.	I feel I am a complete failure as a person.	3

4) Loss of pleasure

1.	I get as much satisfaction out of things as I used to.	0
2.	I don't enjoy things the way I used to.	1
3.	I don't get real satisfaction out of anything anymore.	2
4.	I am dissatisfied or bored with everything.	3

5) Guilty Feelings

1.	I don't feel particularly guilty	0
2.	I feel guilty a good part of the time	1
3.	I feel quite guilty most of the time.	2
4.	I feel guilty all the time	3

6) Punishment Feelings

1.	I don't feel I am being punished	0
2.	I feel I may be punished	1
3.	I expect to be punished	2
4.	I feel I am being punished.	3

7) Self – Dislike

1.	I feel the same about myself as ever	0
2.	I have lost confidence in myself	1
3.	I am disappointed in myself	2
4.	I dislike myself	3

8) Self – Criticalness

1.	I don't criticize or blame myself more than usual	0
2.	I am more critical of myself than I used to be	1
3.	I criticize myself for all of my failure	2
4.	I blame myself for everything bad that happens	3

9) Suicidal- Thoughts or Wishes

1.	I don't have any thoughts of killing myself	0
2.	I have thoughts of killing myself, but I would not carry them out	1
3.	I would like to kill myself	2
4.	I would kill myself if I had the chance	3

10) Crying

1.	I don't cry any more than usual	0
2.	I cry more now than I used to	1
3.	I cry all the time now	2
4.	I used to be able to cry, but now I can't cry even though I want to	3

11) Agitation

1.	I am no more restless or wound up than usual	0
2.	I feel more restless or wound up than usual	1
3.	I am so restless or agitated that it's hard to stay still	2
4.	I am so restless or agitated that I have to keep moving or doing something	3

12) Indecisiveness

1.	I make decisions about as well as ever.	0
2.	I put off making decisions more than I used to	1
3.	I have much greater difficulty to make decisions more than usual	2
4.	I have trouble making any decisions	3

13) Worthlessness

1.	I don't feel I am worthless	0
2.	I don't consider myself as worthwhile and useful as I used to	1
3.	I feel more worthless as compare to other people	2
4.	I feel utterly worthless	3

14) Loss of Interest

1.	I have not lost interest in other people	0
2.	I am less interested in other people than I used to be	1
3.	I have lost most of my interest in other people	2
4.	I have lost all of my interest in other people	3

15) Loss of energy

1.	I have much energy as I ever	0
2.	I have less energy than I used to have	1
3.	I don't have enough energy to do very much	2
4.	I don't have enough energy to do anything	3

16) Change in sleeping pattern

1.	I can sleep as well as usual.	0
2.	I don't sleep as well as I used to	1
3.	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep	2
4.	I wake up several hours earlier than I used to and cannot get back to sleep	3

17) Irritability

1.	I am no more irritated by things than I ever was.	0
2.	I am slightly more irritated now than usual.	1
3.	I am quite annoyed or irritated a good deal of the time.	2
4.	I feel irritated all the time.	3

18) Changes in Appetite

1.	My appetite is no worse than usual.	0
2.	My appetite is not as good as it used to be.	1
3.	My appetite is much worse now.	2
4.	I have no appetite at all anymore.	3

19) Concentration Difficulty

1.	I can concentrate as well as ever.	0
2.	I can't concentrate as well as usual	1
3.	It is hard to keep my mind on anything for very long.	2
4.	I find I can't concentrate on anything.	3

20) Tiredness or Fatigue

1.	I don't get more tired than usual	0
2.	I get tired more easily than I used to.	1
3.	I get tired from doing almost anything.	2
4.	I am too tired to do anything.	3

21) Loss of Interest in Sex

1.	I have not noticed any recent change in my interest in sex.	0
2.	I am less interested in sex than I used to be.	1
3.	I have almost no interest in sex	2
4.	I have lost interest in sex completely	3

The norms below give the idea of the level of depression:

SCORE	LEVEL OF DEPRESSION
0-9	Normal
10-18	Mild
19-29	Moderate
30-63	Severe

b) Objective Parameters

Following investigations was assessed for objective parameters:

Laboratory investigations- (As per requirement)

Routine Blood Examination > Hb, TLC, DLC, Fasting Blood Sugar (FBS)

Urine Examination > Blood urea

ASSESSMENT OF RESULTS

Criteria for overall assessment of therapy on depression:

Complete remission	below the 10 (<10) BDI scoring after treatment were considered as complete remission
Markedly improved	below the 17(<17) BDI scoring after treatment considered as markedly improved
Moderately improved	below the 24 (<24) BDI scoring after treatment were considered as moderately improved
Improvement	below the 31 (<31) BDI scoring after treatment were considered as improved
Unchanged	Higher the 31 (>31) BDI scoring after treatment were considered as Unchanged

The result was evaluated on the basis of clinical parameters, obtained before and after the completion of trial and the assessment will be carried out on the basis of following scale:

SYMPTOMS RELIEVED	GRADING	ASSESSMENT
Less than 25 %	Mild Relief	Non satisfactory
25% to 50%	Moderate Relief	Good
50% to 75%	Significant Relief	Satisfactory
75% to 100%	Complete Relief	Excellent

SELECTION OF DRUG

Panchagavya Ghrita has been chosen as the drug for this research:

Ingredients^[19]

The combination contains 5 ingredients- *Goshakrit* (Cow dung), *Godadhi* (Curd), *Goksheera* (Milk), *Gomootra* (Cow's urine), *Goghrita* (Ghee)

गोशकृद्रसदध्यम्नक्षीरमूत्रैः समैर्घृतम् ।

सिद्धं चातुर्थकोन्मादग्रहापस्मारनाशनम् ॥ (चक्रदत्त - अपस्मार चिकित्सा प्रकरण)

S. No.	Drug Name	Proportion
1.	<i>Goksheera</i>	1 part
2.	<i>Godadhi</i>	1 part
3.	<i>Goghrita</i>	1 part
4.	<i>Gomaya</i>	1 part
5.	<i>Gomootra</i>	1 part

All the drugs are taken in equal quantities and the *Ghrita* is prepared as per the common preparatory techniques regarding *Ghrita*.^[20]

Method of preparation of trial drug

Panchagavya Ghrita: *Panchagavya Ghrita* was prepared by following the classical method described in *Charaka Samhita*. The raw materials namely dung, urine and milk were obtained from cow. The curd and ghee were prepared by processing milk from the same source. Freshly collected cow dung was mixed homogenously with same quantity of water and mixture was strained through a cloth. This dung extract (equal to quantity of water), along with same quantity each of freshly collected cow urine, cow milk (boiled and cooled), cow curd (night old) and molten cow ghee were mixed and heated on mild heat with continuous stirring. The process was continued uninterruptedly for about 3-3.5 hour till separation of phases occurred and then allowed to cool. After keeping it overnight, next day, the processing was continued on mild heat till *Siddhi Lakshanas* were obtained.

Hence, 36 kg of *Panchgavya Ghrita* is prepared.

Takradhara: 150gm *Amalaki Churna* should be placed in a vessel with 3 lit. water and boiled on a gas stove, with 1/6th of the entire quantity.^[21] *Amalaki Kashaya* is ready for *Takradhara*. After that, correctly mix the prepared *Takra* and *Amalaki Kashaya*, which should be Luke warm in nature. The combination is utilized in the *Dhara* process.

OBSERVATIONS

Maximum incidence of Depression was found in between Age group of 21-40 years (63.33%), Male and Female patients are equal (50% each), Hindu Religion (100%), Married (80%), Urban (80%), Upper Middle class (66.66%), Graduates (56.66%), Students and In Services (36.66% each).

Maximum incidence of Depression was found in between patients of *Pitta Kaphaja Prakriti* (46.66%), *Rajasika Prakriti* (50%), *Madhyama* and *Avara Sara* (40% each), *Madhyama Samhanana* (60%), *Madhyama Satva* (43.33%), *Vyamishra Satmya* (60%), *Samagni* (36.66%). Maximum incidence of Depression was found in between patients who had *Madhya Koshta* (63.33%), *Madhyama Abhyavaharana Shakti* (50%), *Madhyam Jarana Shakti* (70%), *Madhyam Vyayama Shakti* (50%).

Maximum incidence of Depression was found in between patients who had nuclear type of Family status (70%), Vegetarian dietary habits (90%), None Addiction (90%), Positive Family history (73.33%) and having 7-12 months old chronicity of disease (36.66%). 80% patients were having Sadness. 90% patients were having Pessimism, Agitation, Change in Appetite and Tiredness. 50% patients were having Past Failure. 100% patients were having Loss of Pleasure, Loss of Interest, Irritability and Concentration Difficulty. 40% patients were having Guilty Feelings and Self-Criticalness. 26.66% patients were having Punishment Feelings, 60% patients were having Self-Dislike. 30% patients were having Crying. 20% patients were having Indecisiveness and Worthlessness. 83.33% patients were having Loss of Energy. 93.33% patients were having Change in Sleeping Pattern. 40% patients were having Loss of Interest in Sex.

43.33% patients were having Mild level of depression, 56.66% patients were having Moderate level of depression.

RESULTS

The effect of therapy on subjective parameters is shown (Wilcoxon matched-pairs signed ranks test)

S. No.	Clinical Feature	Mean Score			% Relief	S.D.±	S.E.±	P-Value	S
		B.T.	A.T.	X					
1.	Sadness	1.27	0.60	0.67	52.63%	0.7581	0.1384	<0.0001	ES
2.	Pessimism	1.30	0.67	0.63	48.72%	0.4901	0.08949	<0.0001	ES
3.	Past Failure	0.50	0.27	0.23	46.67%	0.4302	0.07854	0.0078	VS
4.	Loss of Pleasure	2.10	0.60	1.50	71.43%	0.5724	0.1045	<0.0001	ES
5.	Guilty Feelings	0.43	0.27	0.17	38.46%	0.3790	0.06920	0.0313	S
6.	Punishment Feelings	0.27	0.17	0.10	37.5%	0.3051	0.05571	0.1250	NS
7.	Self-Dislike	0.87	0.47	0.40	46.15%	0.5632	0.1028	0.0005	ES
8.	Self-Criticalness	0.73	0.47	0.27	36.36%	0.4498	0.08212	0.0039	VS
9.	Crying	0.43	0.23	0.20	46.15%	0.4068	0.07428	0.0156	S
10.	Agitation	1.43	0.70	0.73	51.16%	0.5833	0.1065	<0.0001	ES
11.	Loss of Interest	1.90	0.87	1.03	54.39%	0.6149	0.1123	<0.0001	ES
12.	Indecisiveness	0.27	0.17	0.1	38%	0.3051	0.05571	0.1250	NS
13.	Worthlessness	0.27	0.17	0.1	38%	0.3051	0.05571	0.1250	NS
14.	Loss of Energy	1.50	0.53	0.97	64.44%	0.6149	0.1123	<0.0001	ES
15.	Change in Sleeping pattern	1.53	0.30	1.23	80.43%	0.6261	0.1143	<0.0001	ES
16.	Irritability	1.93	0.70	1.23	63.79%	0.6261	0.1143	<0.0001	ES
17.	Changes in Appetite	1.57	0.53	1.04	65.96%	0.5561	0.1015	<0.0001	ES
18.	Concentration Difficulty	2.10	0.80	1.30	61.90%	0.5960	0.1088	<0.0001	ES
19.	Tiredness	1.67	0.53	1.13	68%	0.5713	0.1043	<0.0001	ES
20.	Loss of Interest in Sex	0.50	0.13	0.37	73.33%	0.5561	0.1015	0.0010	ES

The effect of therapy on objective parameters is shown (Paired t-test)

S. No.	Variable (n=30)	Mean Score			% Relief	S.D.±	S.E.±	P-Value	S
		B.T.	A.T.	X					
1.	Hb gm%	12.14	12.71	0.57	4.69%	0.3864	0.07055	<0.0001	ES
2.	TLC mm ³	11803	10093	1710	14.48%	720.80	131.60	<0.0001	ES
3.	ESR mm/hr.	25.43	16.20	9.23	36.30%	7.137	1.303	<0.0001	ES

Overall effect of therapy on Subjective and objective parameters

% Relief in Subjective Parameters (On the basis of BDI)

SYMPTOMS RELIEVED	EFFECT OF THERAPY	No. Of Symptoms	% Of Symptoms
Less than 25 %	MILD RELIEF	0	0%
25% to 50%	MODERATE RELIEF	9	45%
50% to 75%	SIGNIFICANT RELIEF	10	50%
75% to 100%	COMPLETE RELIEF	1	5%

EFFECT OF THERAPY ON PATIENTS

EFFECTS	BDI Scoring	No. Of Patients	% Of Patients
Complete remission	<10	13	43.33%
Markedly improved	10-16	17	56.66%
Moderately improved	17-23	0	0%
Improvement	24-31	0	0%
Unchanged	>31	0	0%

30 patients were treated by *Panchgavya Ghrita* and *Takra Dhara*

Significant ($P < 0.05$) result was found in Guilty Feelings and Crying.

Very Significant ($P < 0.01$) results were found in symptoms of Past Failure and Self-Criticalness.

Extremely Significant ($P < 0.0001$) results were found in symptoms of Sadness, Pessimism, Loss of Pleasure, Self-Dislike, Agitation, Loss of Interest, Loss of Energy, Change in Sleeping Pattern, Irritability, Change in Appetite, Concentration Difficulty, Tiredness and Loss of Interest in Sex.

Not Significant ($P > 0.05$) results were found in symptoms of Punishment feelings, Indecisiveness and Worthlessness.

For comparison of Objective parameter **Paired t-test** was used which revealed that- Extremely Significant ($P < 0.0001$) results were found in Hb gm%, TLC mm³ and ESR mm/hr.

OVERALL EFFECTS OF CLINICAL TRIAL

% Relief in Subjective parameters

9 symptoms (45% symptoms) show moderate relief (25-50%), 10 symptoms (50% symptoms) show significant relief (50-75%) and 1 symptom (5% symptoms) show complete relief (75-100%).

% Relief in Objective parameters

Hb gm% and TLC mm³ shows not satisfactory (<25%) relief and ESR mm/hr. shows good relief (25-50%).

EFFECT OF THERAPY ON PATIENTS

According to BDI Scoring assessment is done and found that complete remission is found in 13 patients (43.33% patients) and markedly improvement is found in 17 patients (56.67%).

EFFECT OF TREATMENT

Overall Effect of Treatment in Subjective Parameters

The result showed that **54.17% relief** was observed which **Satisfactory (50%-75%)** was.

Overall Effect of Treatment in Objective Parameters

The result showed that 18.49% relief was observed which was **non-Satisfactory (<25%)**.

DISCUSSION AND SUMMARY

Probable mode of action of *Panchgavya Ghrita*

Panchgavya Ghrita is Ayurvedic drug which is a combination of 5 ingredients- *Goshakrit* (Cow dung juice), *Godadhi* (Curd), *Goksheera* (Milk), *Gomootra* (Cow's urine), *Goghrita* (Ghee).

Goksheera (Milk): Milk improves cognitive function, increases *Ojus*, nourishes *Dhatus*, is a sexual enhancer, and is a *Rasayana*. It may be used for convalescence and is recommended for debilitating conditions. Cow's milk is a rich source of vital nutrients for human physical and mental health, and is thus considered a well-balanced diet.

Godadhi (Curd): *Dadhi* increases *Bala* and *Agni*, it is good in malabsorption syndrome. It is indicated in dysuria and remittent fevers.

Goghrita (Ghee): Cow's ghee has higher digestibility and a better rate of absorption than any other vegetable and animal fats. It can be used in all age groups and is good as immune enhancer, improving intelligence and improving vision.

Goshakrit (Cow dung juice): It is rich in organic matter and nitrogen.

Gomootra (Cow's urine): It includes all of the elements necessary for a balanced life to compensate for nutrient deficiencies in our bodies. As a result, it acts as an elixir, preventing or delaying the ageing process. Copper, gold, and salts are among the minerals found in it, and they protect against disease. *Gomootra* possesses the *Rasaayana* property, which regulates a variety of bodily functions, including immunity.

Panchagavya Ghrita Properties

It is quite clear about the action on three *Ayurvedic Doshas* by measuring the *Rasapanchaka* of the five ingredients. The drug is a natural pacifier for the three *Doshas*, with *Kaphavatashamana* dominating. It is also *Agnideepaka* and *Srotoshodhaka*.^[22]

Some of its ingredients have the *Anulomana* property, which helps to relieve *Vata*. *Medhya*, *Ojasya* and *Rasayana* are the three components of the drug. Given all of these characteristics, the substance clearly affects the mind and its functions. The drug's *Srotoshodhana* action aids in acting profoundly on the mind, destroying the *Aavarana* of *Tamas* and restoring clarity.

Many of the drugs listed in *Ayurvedic* terminology are still being researched; one of them is *Panchagavya Ghrita*. Given that it is listed alongside *Apasmara Chikitsa*, it appears to be extremely useful in a variety of psychiatric conditions referred to as *Unmada*.

As previously mentioned, *Panchagavya* is a bio product that has been used for spiritual and therapeutic purposes for a long time. It becomes highly effective in various conditions affecting brain functioning when prepared in a *Ghrita* form, as it can cross the lipid blood brain barrier.

The drug is *Kaphavatashamana* in nature, with far more *Kaphaharatva* than *Vataharatva*, based on its action on the *Doshas*. It also cleanses the body's channels, bringing clarity to the mind and its functions. *Ayurveda* says that *Ghrita* is the best medicine for potentiating *Dhee*, *Dhriti*, and *Smriti*, which are all components of *Budhi*.^[23]

In today's world, *Panchagavya Ghrita* is commonly used in psychiatric practice. *Panchagavya Ghrita* is successful against ccl4-induced hepatotoxicity in rats, according to a study published in the journal of pharmacology.^[24]

It resembles the evidence that *Panchagavya Ghrita* is effective in *Kamala*, as stated by our *Acharyas*.^[25,26]

सर्पिस्तैलं वसा मज्जा सर्वस्नेहोत्तमा मताः।

एषु चैवोत्तमं सर्पिः संस्कारस्यानुवर्तनात्॥१३॥ (च.सू. 13/13)

घृतं पित्तानिलहरं रसशुक्रौजसां हितम्।

निर्वापणं मृदुकरं स्वरवर्णप्रसादनम्॥१४॥ (च.सू. 13/14)

Procedural effect of *Takra-Dhara*

Shirodhara's procedural effect appears to be more powerful in alleviating *Manoavasada's* (Depression) varied signs and symptoms.

Continuously pouring butter milk in a relaxed and comfortable position provides an impact that is comparable to a mother's carding of her kid. This has a sedative and relaxing impact on the brain, causing sleep to be induced. Butter milk also has *Kapha-Shamaka* properties when it enters the circulation.

Stress and depression can be caused by an imbalance of *Prana*, *Udana*, and *Vyana Vayu*, *Sadhaka Pitta* and *Tarpaka Kapha*. *Shirodhara*, with its mechanical impact, restores the functional integrity between these three *Dosha* subtypes.

The natural respiratory path (invisible) is said to be present over the forehead in *Yogic* philosophies, and its obstruction causes psychological diseases. By its operation, the constant pouring of Butter milk reduces the barrier in this channel.

Pituitary and Pineal glands are housed in the *Aagya Chakra* (the space between the two brows). The pituitary gland, as we all know, is one of the most important glands in the endocrine system. *Shirodhara* activates it through its penetrating effect, which lowers cortisol and adrenaline levels in the brain, synchronizes brain waves (alpha waves), and strengthens the mind and spirit, and this impact lasts long after relaxation.

According to *Ayurvedic* Classics, the forehead and head are home to many critical points (*Marma*), including *Sthapani*, *Utkshepa*, and *Avarta Marma*. It is also a site of *Aagya Chakra*, as previously stated. The *Sthana* of *Chitta (Mana)* is *Bhrumadhya*, or *Sthapani Marma*, according to *Acharya Bhela*. *Shirodhara* encourages the patient to focus on this location, which is where mental stability is achieved.

The patient is asked to lie down in a supine position, similar to *Shavasana*, during *Shirodhara*. In *Yogic* science, this pose is employed for relaxation. Patients should focus on the forehead, in between the brows, during *Shirodhara*. Then he is cut off from his environment, which aids in the de-stressing of his mind. The cognitive process slows down when the patient focuses on a specific location, and the entire physiology relaxes as a result.

CONCLUSION

Among 30 registered patients, complete remission is found in 13 patients (43.33%) and markedly improvement is found in 17 patients (56.67%).

As a result, the current study, while being a time-bound examination, has been done completely from a different perspective. It has generated a wealth of fresh knowledge, which may open up new avenues for future research. It is possible to conclude that the trial drugs *Panchgavya Ghrita* and *Takra Dhara* are mild to moderately efficient for *Manoavsada* treatment (Depression).

The current thesis, which is part of an educational programme, only describes the technique and observations in order to serve as a starting point for future research.

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