# Scientific Validation of Rajaswala Paricharya

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Abstract: Menstruation is the naturally occurring cleansing process in every woman. Overall intensity of a woman's period indicates her sexual rights. In our Ayurvedic texts, there are many Paricharyas (mode of living) like Rajaswala, garbhini, sutika etc described by our Acharya's to maintain the health of a woman. The do's & don'ts described for Rajaswala stree is termed as "Rajaswala paricharya" and is ignored in today's era. The corelation The value of current mechanics of menstruation as well as Rajaswala paricharya will highlight the need for more adhering to Rajaswala paricharya. The Rajaswala paricharya helps women to cope up with the physiological & psychological changes that takes place in the body during this period. The foundation of supraja or good progeny lies at the level of the beeja. Ayurveda lays great stress upon Shuddha Beeja and Artava as a basis for supraja. The selection of the dominant follicle happens on the 5th To 7th day of the cycle. It is therefore very obvious that the lifestyle followed by the menstruating woman will have an impact on the quality of the developing follicle. Hence, the concept of Supraja Jananam i.e healthy progeny begins at the very early level of Rajaswala paricharya. Therefore, in the present era, with the increasing incidence of menstrual irregularities, PCOD, infertility etc, there is an urgent need to follow Rajaswala paricharya.

**Keywords:** Dominant Follicle, Menstruation, Menstrual Irregularities, Rajaswala Paricharya, Reproductive Health.

#### 1. INTRODUCTION

"Yadapatyanam mulam naryah param nrunam" Stri is the root of progeny and diseases of reproductive organs causes impediment in procreation. Depending on her age, a woman passes through three phases in life —childhood, reproductive age group and old age. In the reproductive phase, women undergo cyclical changes which play a prime role in reproduction. A woman in her menstruating phase is termed Rajaswala in Ayurvedic classics.

#### 1.1.Importance of Rajaswala Paricharya

In this competitive world, a healthy and intelligent offspring is the need of the society. To induce desired psychosomatic features in an offspring, training of the baby is started right from the beginning when the baby is in the womb in the form of "Garbha Samskara". Science has also proved that the anatomical, physiological & psychological built up of an offspring is totally depend on parents' genes. The effect of diet, surrounding, maternal illness etc., also have a proven effect on the foetus in the womb. Acharya Bhavmishra quoted that if any women avoid to follow Rajaswala paricharya due to greed then it can cause "Garbhodoshastadaapnuyaat" i.e it may hamper the future offspring. Rajaswala phase or the period of menstruation, is the phase when follicles are recruited for the next cycle and the dominant follicle is chosen by the 5thTo7th day. Following Rajaswala Paricharya not only helps the women to adapt to the physiological & psychological changes occurring in the body during menstruation but also helps in conceiving a healthy offspring [1].

This same frequency of gynaecological problems is on the up and up. Diet and culture in the modern world has increased the incidence of menstrual irregularities, PCOD, infertility etc. Hence, to maintain the reproductive health of the women some do's & Don'ts are described by our acharyas.

# 1.2. Clinical Significance of Rajaswala Paricharya as Garbhadana Purva Samskara

Acharya Sushruta has mentioned four essential factors for the formation of Garbha. These includes - Ritu (Period near to ovulation), Kshetra (Healthy female reproductive organ), Ambu (Nourishing substances), Beeja (Healthy sperm and ovum). Further Acharya Vagbhata added the terms shuddha shukra and shuddha rakta as the essential factors for the formation of Garbha. Which further supports the importance of Rajaswala Paricharya and its significance in the attainment of healthy progeny. Table 1 shows the Rajaswala paricharya according to different Acharyas.

Table 1: Rajaswala Paricharya According To Different Acharyas

ACHARYAS	DO & DON'TS
Clausk	He says that from the onset of means all 3 days and capto sky must —  "Observe (hands)  "Est in colvolors vessel placed in hand, and  "Should not usuk or take both or clean her body.
Sashrett.	Be says that from the lite day of cases of memoritation a woman should—  "Follow cellshary  "Avoid day sloop, Argans, Coying, Lepuns, Abbrings, Cotting ands, Reving, Lougharg, Talking too much, Listning to various topics, Canalong, Wash Discrime.
	<ul> <li>She must sleep on bed made of Daritha</li> <li>Ear Havattranne in meal code of gloria, Sah &amp; salk served as hand or palm or uterial made of clar, leaves six.</li> </ul>
Vaghtusta	Avoid spicy, sone and only food.

According to Ayurveda, Rajaswala Stree can be included under following three categories:

A person who has undergone Shodhana procedure

- Menstruation is the naturally occurring Shodhana procedure so, menstruating women is considered as Shodhita.
- In classics, Ashtau-Mahadoshakara Bhavas i.e the Bhavas which should be avoided by shodhita vyakti are described. Among these Bhavas, Maithuna, Ajirna Bhojana and Ahita Bhojana are those Bhavas which are also mentioned in Rajaswala paricharya.

A person having decreased digestive fire – Agnimandhya

- In Ayurvedic texts, it is mentioned that Agni of an individual gets decreased during or after any of the shodhana prakriya as menstruation is the natural shodhana, it will decrease the digestive fire.
- According to this, Havishyanna i.e the food offering in the holy fire is advised for the Rajaswala stree. The food offered in the holy fire slowly and steadily stokes and increases it.
- After the shodhana karma, Samsarjana karma is advised so that Jatharagni is increased upto the level, where it can digest the food properly.
- The Agneya Dhatu Rakta being expelled causes a reduction in the Agni of the menstruating woman therefore Laghu Anna is advised.
- In Rajaswala, the Havishyanna plays an important role to increase the Agni. Yava and milk (Godugdha) are easy to digest, so indicated for Rajaswala stree.
- 1.3. A person having a wound i.e Vranita Vyakti –
- Shedding of endometrium results in exposure of blood vessels, which can be considered as raw wound in the body.
- The Pathya Apathya prescribed for the Vranita vyakti are almost similar to the Pathya Apathya prescribed for the Rajaswala stree. These include eating Yava, Laghu Aahara in less quantity which is easily digestible. One should avoid maithuna karma.So, the menstruating women should follow the Rajaswala Paricharya in order to protect the Agnibala and to avoid complications arising due to Mandagni and Pradnyaparadh.Table 2 discloses the do and don'ts of the Ayurveda in the system.
- 1.4.The Ayurvedic Basis of Rajaswala Paricharya

Table 2: Illustratig the Do's And Don'ts's Of Ayurveda

DO'S & DON'TS	POSSIBLE AYURVEDIC EXPLANITAON	
1. Avoid sexual activity	As said by acharya sushruta that the penetration of Beeja (sperm during menstrual flow is not good, as a light article thrown in the flowing river against the current never reaches upwards, similarly sperm deposited during menstruation do not reach uterus, hence, fo 3 days the woman should avoid costus.	
<ol> <li>Eat Havishya (food made from Sali- rice, ghee and milk) and Yawaka (food made of barley &amp; milk) served in clay- utensils or leaves</li> </ol>	Vatanulomana so easy to digest hence producing abundance of facces and promotes stability. Also, helps in relieving constipation Similarly, Milk is sweet, refreshing, provides strength to the body. This is most useful in Kshat.	
3. Avoid bathing (head bath)	As menstruating woman is having low digestive fire and bathing is contraindicated in Agnimandhya by our acharyas.	
Marie Militare	Bathing can also cause tiredness and can cause vata prakopa in the long term.	
Should sleep on Darbha mat and avoid day sleeping	From the Vedic time, onwards Darbha is having its importance in rituals. The experiments proves that this grass protects the body from negative energies and from toxic radiations. Traditionally during eclipse, Darbha are placed on vessels containing food and water, so that negative effect of rays from eclipse doesn't spoil them.	
	Due to sts pittahara property, it may give soothing effect to menstruating women and also helps in treating raktapradara.	
5. Avoid laughing,	About half of menstrual flow is blood. This blood contains sodium,	

running, heavy exercises, crying	weakness in menstruating women as blood and electrolytes is lost in menstruation.
	To prevent vitiation of vata dosha which can cause painful menstruation along with alteration in shuddha Artava Lakshanas.
6. Avoid use of Anjana, cosmetics and ornaments	Anjana is prepared from Ghee and Pittashamak herbs for cooling effect but during menstruation normal pitta function is required for proper menstrual flow, so use of Anjana may decrease blood flow.
	During menstruation, progesterone level is low while testosterone production increases a women's sex drive. Adorning and decking herself with jewellery is likely to increase the chances of sexual activity.
7. Avoid use of Abhyanga,	In a menstruating woman sweat releases toxins and pheromones which can be hampered from these processes.
Udavartan and Lepana	Local therapies like Abhyanga, Udavartan etc. need local Agni to be absorbed through sukshma pachana. Therefore, these therapies should be avoided to protect Agni.
	Also, these activities are contraindicated in Agnimandhya.
8. Avoid Tikahna (pungent), Katu	Such diet can increase pitta dosha which further can increase in the amount of menstrual blood flow.
(spicy) and Lavana (salty) food	As said by Acharya Charak "katuka raso shonita sanghatam bhimati" so excessive intake of katuras can cause bleeding disorders like Asrigdara in Rajaswala Stri.
9. Avoid all Panchkarma procedures	As menstruating women has Agnimandhya and she is categorised under Vramita (a person having wound). Any type of shodhana is contraindicated in Vramita vyakti.
10. Should harbour good thoughts	Thoughts and mental stability are closely related with menetual cycle. Ayurveda recognises this relation while describing "chintyanam cha ati chintanat" as a cause of rasa dushti. Stress generated by negative thoughts can therefore affect the Rasa dhatu and its updhatu Artava.
<ol> <li>Avoid listening to loud sounds</li> </ol>	To svoid Vata prakops and Rass dhatu kshaya and to keep mind calm, women should avoid to listen loud sounds. Rass dhatu loosely refers to blood plasma and quantitate decrease of Rasa dhatu takes place due to blood lost in menstruation. It further causes intolerance to loud sound.

1.5.Rajaswala Paricharya and Their Scientific Validation

• Avoid sexual activity

During menstruation ph is increased which can provide the favourable environment to the growth of yeast infections. The shedding of endometrium also leaves a raw area in the uterus. These factors can cause rapid growth of any fungal or bacterial infections. Sexual activities during this period may transmit STIs, which can reach up to peritoneal cavity via uterus and fallopian tube. So, women should maintain celibacy during this period [2], [3].

Eat Havishya (rice, ghee, and buttermilk) and Yawaka (barley and milk) with terracotta spoons or leaves –

Prostaglandins causes the uterus to contract to slough off the uterine lining during menstruation. If prostaglandins are present in excess, they can lead to uterine cramps and discomfort. Also, it is possible that excess level of prostaglandins could be the cause of diarrhoea and gurgle noises, as it causes increased contractions and motility of smooth muscle of the digestive tract.

Barley (Hordeum vulgare) is a good source of dietary fibre, minerals and antioxidant. The phenolic compounds extracted from barley Oxygen radical absorbance capacity (ORAC) and cellular antioxidant activity (CAA) studies revealed strong antibacterial activity, as well as substantial anticancer potential against HepG2 living creature nk cells.

Barley's soluble fiber promotes the growth of beneficial gut bacteria that create summary fatty acids, which helps to decrease gut inflammation. The majority of the fiber in malt is immiscible with water, meaning it does not absorb water as oatmeal does. Instead, it bulks up your stool and speeds up your digestive rotation, lowering your chances of digestive disorders. [4],[5].

Clay has alkaline properties so utensils made of clay neutralises the Ph balance of the food by interacting with acids in food, thus enhances the digestion. Clay contains more than 16 natural minerals which are beneficial for health. These include calcium, phosphorus, magnesium, iron, copper and manganese presented in right quantities.

• Avoid Day Sleeping and Over Exertion

Hans A Keizer in his much cited article states that, Adjustments in the episode secretion pattern of LH, as seen in lethargic women with prefrontal amenorrhoea and runners with intense exercise, are most likely responsible for menstrual cycle disruption. The increasing corticotrophin-releasing hormone (CRH) production, which suppresses the release of gonadotrophin-releasing hormone (GnRH), might be the reason of the altered LH secretion. Relatively high CRH tone also causes a rise in release candidate levels, this inhibits the GnRH signaller. Finally, continual adrenal activity leads to increased catecholamine synthesis that might be translated to catecholestrogens. GnRH discharge is believed to be inhibited by these substances.

• Harbour good thoughts

Oestrogen & progesterone are the main hormones in regulating menstrual cycle. Oestrogen affects the part of the brain that control emotions so, this hormone is closely related with women's emotional well-being. The level of

these hormones is relatively low during menstruation which may lead to impulsive decision making. Consciously creating positive thoughts helps in maintaining mental and emotional stability [6],[7].

Rivier in his article states that increased circulating corticosteroids levels may decrease pituitary responsiveness to GnRH. It therefore follows that stress can result in disturbing the mechanism of the menstrual cycle and may affect fertility and general health of a woman.

## • Avoid Katu (Spicy) Ras

Katu Ras is having thrombolytic activity i.e. ability to breakdown the blood clot, therefore, aggregation of platelet does not takes place and bleeding continues in the form of Abnormal uterine bleeding.

#### • Avoid Bathing (Head Bath)

According to modern physiology, it is observed that there is fluctuation and high temperature during menstrual cycle. This fluctuation is due to hormones. Oestrogen causes a fall in the body temperature before ovulation and progesterone rise the temperature after ovulation and until menstruation. During menstruation, if head bath is taken it will disturb the haemostasis maintained by the hypothalamus. Bathing with hot water enhances peripheral blood circulation. This can reduce the blood flow to the uterus, and the expected purification may be compromised. During menstruation internal os is open, this can cause ascending infections into the uterine cavity due to altered ph of vagina. So, water treatments should be limited during this period.

#### Sleep on Darbha mat

Darbha has antimicrobial, anti-cancerous and antioxidant properties. Some volatile compounds in this plant have antibacterial properties. This facility's hydro alcoholic preparation has been shown to have anti-oxidant properties. Isopropanol, benzene acetate, brandy, and an extracts of the entire plant have also been shown to have anaesthetic, hypotensive, and pro-government properties. In dysmenorrhoea, this is really beneficial. Sleeping on Darbha mat helps to get relief from backache and body ache also.

## • Oxidative Stress during Menstruation

During menstruation the lining of the uterus, called endometrium, breaks down and sheds. Explicit sexual aggravation and an influx with granulocytes, such as effector cells, are linked to epithelial separation and repair. This indicates an increase in the production of toxic oxygen radicals at the time of menstruation. Under non-menstruating phase, the hormone oestrogen plays an important role in neutralizing toxic oxygen radicals. All oestrogens have a strong affinity to phenolic acids they have reactive oxygen species (ROS) scavenging, chain-breaking, and glutathione action as a result. However, during menstruation, oestrogen is at an all -time low. In addition, the loss of blood results in the loss of RBCs which are also known to act as antioxidants that protect the target cells from reactive oxygen species. Studies reveal increased oxidative stress and decreased antioxidants as one of the important contributing factors in the pathogenesis of primary dysmenorrhoea. Micronutrients in the diet such as vitamins A, C and E, as well as antioxidant enzymes, are known to neutralize oxygen free radicals and inhibit oxidative stress. Studies indicate that menstruating woman should be supplemented with natural antioxidants like vitamin E, C and beta-carotenoids, which would be extremely useful and may be helpful in combating primary dysmenorrhoea.

#### • Consequences Of Indulgence In Restricted Acts

If the women does not avoid the restricted acts due to ignorance or greed, the vitiated dosas lead to the following abnormalities in the foetus. Table 3 illustrated the contraindicated actions of mother cause abnormalities.

Table 3: Contraindicated Actions of Mother Cause Abnormalities in the Child.

ACTIVITIES OF MOTHER	ABNORMALITIES OF FOETUS
Divaswapna (day sleeping)	Swapasheela (over sleeping)
Use of Anjana (collyrium)	Dagdha (partial blindness)
Rodhana (weeping)	Vikrita drishti (defective vision)
Snanam (bathing)	Dukha sheela (gloomy)
Abhyanga (oil massage)	Kushta (skin disease)
Nakhapakartana (nail cutting)	Kunakhi (deformity of nails)
Pradhavana (fast running)	Unsteady both physically and mentally
Hasana (laughing)	Black colour of teeth, lips and tongue
Pralapa (over talking)	Talkative
Atishabdha sravana (over hearing)	Deafness
Combing the hair	Baldness
Exposure to the breeze and too much exertion	Mentally trouble
Use of nasya	Menstrual abnormalities

Scientific Validation of These Restricted Acts

Divaswapna is known to increase kleda. At the sukshma level an ovum nourished with rasa having excess kleda may cause lethargy in the individual thus conceived. The vitiation of doshas at the sukshma level of the ovum may be postulated to be the cause of fetal abnormalities arising out of improper Rajaswala paricharya. Foetal Origin of Adult Diseases (FOAD) is first popularized According to Dr. David Barker, events in one's childhood life have a significant influence on one's likelihood of developing future adult disorders. The Developmental Beginnings of Health and Diseases (DOHaD) hypothesis is based on the idea that the interrelationship among both heredity and environment shapes the origins of life of luxury illness throughout fertilized, embryonic, fetal, and neonate phases. The notion of pre-conception care, which has lately gained popularity in mainstream medicine, attempts to prevent perinatal disease while simultaneously improving the odds of a healthy pregnancy. conception when pregnancy is desired.

We can safely say that the practices advocated in Rajaswala paricharya are provisions of biomedical behaviour and social health interventions to women who wish to bear healthy progeny.

• Consequences of Coitus during Menstruation

If copulation occurs during the first day of menstruation, it affects the health and lustre of the husband. During this time, entry of sperm into the uterine cavity is not possible and does not results in pregnancy. So, Acharya's have directed to follow Bramhacharya for three days otherwise it will worsen the condition of the mother and the foetus. Table 4 illustrated the cycle of the menstruation and the effect on the baby.

Menstruation Effect on the Baby 1st day pregnancy/Intrauterine foetal death Abortion/Stillbirth 2nd day 3rd Defective body parts and short life day 4th Normal and healthy day life

Table 4: Menstruation Cycle and Its Effect on the Baby

• Review of menstrual practices among different cultural & religions

There are many studies published about the scientific practices of Rajaswala paricharya but they are not practised till now. Many survey studies of various religions, rural and urban women's populations, adolescent and premenopausal groups have all been studied. Therefore, comparable research conclude that reproductive customs are unsanitary activities, and so that superstitions around menstruating are a universal phenomenon. Periodic blood has been considered as impurity, filth, hazard, and evil by societies everywhere across the globe. As a result, the

shame associated with menstrual persists, and women are still considered as unreachable and dirty, isolating her and restricting her everyday activities.

1.6. Some Socio-cultural restrictions among different religions are as follows:

In the rural villages of Nepal's Achham area, there are two regularly recorded menstruation practices: seclusion (Chhaupadi) and separation. Women in the Chhaupadi practice are confined to a range in size farm away from the situation and are only allowed to wash or bathe in public groundwater for the first 5-7 days of their periods, whereas women in the interfacial practice are allowed to stay in the house but are subjected to a number of restrictions.

In South Asia and Africa, the holy reed house 'Giparu', Golla is a particularly built hut outside hamlet for seclusion of menstruation women among primitive civilizations and tribal faiths. Stages of the procurement process women are not permitted to meditate in Mahayana, and then they are not permitted to interact with priests or participate in wedding rituals. They think that when a woman is menstruation, she loses spiritual energy, which attracts spirits and poses a danger to others. In Vedic literature, "Manusmriti" indicates that a dude's knowledge, energy, power, might, and vitality evaporate if he comes into touch with a woman who is having menstrual exertions.

Menstruating women are historically regarded ritually unclean in Hindu culture and are subjected to strict prohibitions. Menstruating women are not permitted to participate in religious activities, are not permitted to enter the kitchen, and must use separate kitchenware. Most menstruation rituals were discovered in tribal and impoverished rural communities as a result of globalization. However, a demographic research in Tamil Nadu's Cuddalore region found that these traditions are very common among urban respondents, but that, apart from religious and ceremonial prohibitions, women do not favour the performance of other prohibitions [8]–[11].

• Observational/Interventional Studies on Effect of Rajaswala Paricharya on Menstrual Symptoms

In a case study, 30 married girls of age group 18-24 years were studied after following Rajaswala paricharya for 3 days for 6 consecutive cycles. There was significant decrease in menstrual symptoms like backache, legs pain, pimples, headache, breast tenderness, cramps, diarrhoea, constipation, loss of appetite, vomiting, weakness etc.

A Case study on a 25 year old female having Dysfunctional uterine bleeding reported observance of Rajaswala paricharya for four consecutive cycles. The result is return of her menstrual to normal from heavy bleeding. A Case report on effective management of Premenstrual syndrome with ayurveda. In this article along with internal medication Rajaswala paricharya was advised.

#### 2. DISCUSSION

- Ayurveda texts describes female reproductive tract disorders under Yonivyapad and the samanya nidana of all the yonivyapad in Mithya achara i.e incompatible diet and lifestyle, vitiated Artava, Beeja dosha (defect in sperm & ovum quality) and God grace.
- Non adherence to the Rajaswala paricharya may predispose the woman to yonivypadas Kunapagandhi (foul-smelling), Pootipuya (pyogenic), Granthibhuta (clotted), Ksheena (scanty), or Artavavriddhi (excessive menstruation) and Artavakshaya are examples of Ashtaartavadushti (scanty and irregular).
- According to Ayurveda, Rajaswala period is marked by Agnimandhya, Klama, and Dhatu kshaya. It is a period of cleansing and detoxification of the mind and the body.
- The HPO axis starts a new cycle in this period and the recruitment of follicles begins during this phase. Biomedical behaviours and social interventions adopted during this period can have an impact on the developing ovum, endometrium and fertility of a woman. Not only with regards to her ability to conceive, but also to bear a normal and healthy foetus and carry it to term.
- Rajaswala paricharya helps to reduce oxidative stress which triggers potentially damaging biochemical reactions. It also helps to counteract free radical activity through a diet rich in antioxidants.

#### 3. CONCLUSION

Social interventions like seclusion promote contemplation and inward journey which is required to keep the mind balanced. The Saumanasyam gained thereafter is vital for healthy progeny. A balanced mind, healthy body and joyous spirit which will result through this mode of discipline, will attract a joyous and strong spirit or atman in the conception that occurs thereafter. Strong, healthy, balanced individuals with empathy for fellow human beings is the requirement of today's world. Rajaswala paricharya if followed with faith and purpose will guide today's woman to not only lead a joyous life but also perform the duty bestowed on her by nature "procreation".

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