

Role of Ayurveda in Promoting Maternal and Child Health

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ABSTRACT

This paper emphasises the need to nurture a plural healing approach in Maternal and Child Health Care so as to reduce Maternal and infant mortality rates. It highlights the strengths of Ayurveda and suggests ways to adopt these practices through the National Rural Health Mission.

Pregnancy and childbirth are one of the most critical events in a woman's life cycle that maintain the continuity and existence of human species in this world. However this natural phenomenon turns in to nightmare for a large number of communities, particularly those residing in South Asian Countries, having high maternal mortality ratios across the globe.

Every seven minutes one woman dies in India due to pregnancy and childbirth related causes. For every 1000 live births more than 50 infants lose their lives before they complete their first year and most of these deaths occur in the first few day of their birth. Most of these deaths occur among poor, tribal communities from remote, rural areas which are difficult to access.

The National Rural Health Mission (2003) has a mandate to reduce Maternal and Infant Mortality with a time bound outcome of reduction in MMR to 100/100,000 live births and IMR to 20/1000 live births by the year 2012. Also, two of the seven objectives of NRHM are: Revitalization of Local Health Traditions (LHT) and Mainstreaming of AYUSH (Ayurveda, Yoga, Unani, Siddha & Homeopathy) and promotion of healthy life styles. It still appears a distant

dream; as we are nowhere near any of the above objectives. However, a visionary amalgam of the use of the LHTs and Ayurveda to realize the objectives of reducing MMR and IMR can become a ground reality, if pursued in earnest.

However, most maternal and infant mortality reduction strategies focus only on enhancing access to curative and emergency obstetric care as prescribed internationally. These strategies, in India, have so far not yielded any superior results, since it is a possibility that in rural India where most of the births take place, there might not be any medical personnel at non-functional PHCs (Public Health Centre), or rooms to conduct labour. There just might not be any obstetric kits, or transport to ferry the pregnant women to distant CHCs (Community Health Centre) and of course no ASHAs or ANMs trained in conducting safe deliveries. So the chances of a pregnant woman getting the required emergency obstetric services would be very low, even if she is stationed well in time at the hospital for an institutional delivery.

India, with her unique geopolitical and social realities, need not go for those solutions that have worked for other countries. Instead, there is a need to carve out her own solutions, which are women centered, culturally acceptable, cost effective, and easily accessible. Such an approach can get operationalised at many levels. We can begin with integrating the existing traditional/ community service providers (dais) or people's health traditions or the formal Indigenous systems of health care like Ayurveda, unani, yoga etc with the existing

health care structures.

AYURVEDA

Ayurveda, the ancient science of life focuses on protection of health based on life style followed by curing the sick. Hence Ayurveda could play a significant role in prevention of obstetric complications, protecting the health of mother and baby as well as providing simple, healthier, effective cures for common ailments. Here we will provide a glimpse of the system's strengths in the area of maternal health, which have been put to use by the author in her work with the dais and community health in Gujarat.

PROMOTING NUTRITION

Care of the woman's body, according to Ayurveda, starts much earlier than her actual pregnant state. The nutritional status of parents, particularly woman has a direct bearing on pregnancy outcomes and health of the woman and the child. Ayurveda lays great emphasis on ensuring holistic nutrition. A combination of *aahar* (food), *vihar* (action), *vichar* (emotions/thoughts) and *aushadh* (medications) is essential to improve nutrition. A wholesome diet, based on locally available foods and herbs, compatible to ones' own body constitution, body requirements and seasons is essential. This needs to be accompanied by changes in actions and emotions before providing medications that are usually herbo-mineral combinations. Ayurveda has a detailed regimen based on various phases in a day, the changing season, the physical properties of foods and herbs. Specifically *Aswagandha*, *Shatavari*, *Gokshur*, and *Amla* are herbs of choice, which are recommended to be incorporated in one's diet.

In partnership with the Department of AYUSH, CHETNA initiated a nutrition awareness campaign in Sabarkantha and Mahesana district of Gujarat state. Common symptoms of nutrition deficiency and anemia were shared to correlate with the local term that was "*nablai*" (weakness). The reasons for this condition being a busy and hectic schedule of life, overwork and worries, and above all an inadequate intake of nutritive foods like milk, fruits, ghee etc. To counter anemia, various local herbs and foods such as aloe and garden cress (*Lepidium sativum*) were suggested as remedies. Interaction with the Ayurvedic physicians also led to a list of herbo- mineral preparations of which a combination of two was shortlisted-*Saptamrit loha* and *Arogya vardhini*. IEC activities with children, adolescents, young women, men were held to enhance access to nutrition and Ayurvedic treatment from the public health system.

Post campaign review indicated an increase in hemoglobin levels up to 2gm% in a period of three months as well as change in nutrition and lifestyle practices.

Responses of women from the region:-

"Earlier I used to cook and rush off to work with just a cup of tea. Now we eat before going out. "

"Despite having cattle in my own house, I never used to drink milk. But now I take milk daily and this makes me feel so good"

"I had these foods (colocassia, guava, Amaranthus) growing in my field and never thought that they could be eaten. Now we eat these at least three to four times in a week. "

"I was suffering with weakness and a host of other problems since last 14 years. I knew this dispensary provided herbal treatment but was not aware that they would be able to treat me. I took this treatment for more than a month and now my problem has been solved."

Anemia, one of the most common nutrition deficiencies among women and children in India and an indirect cause of maternal mortality could be addressed using food and herb based approaches. However, the role and solution to the problem of severe anemia in maternal deaths need to be taken up as one of the highest priority areas.

PRE CONCEPTION CARE

Measures for a healthy pregnancy and childbirth begin even before conception. Ayurveda lays emphasis on-physical and-emotional maturity at the time of conception. Rituals and dietary modifications are suggested to ensure optimum quality of ova and sperm as well as a balanced state of body processes and emotions. This understanding, that is, to ensure health and maturity before conception needs to be included in all formal and non-formal life skill education efforts of young people.

CARE DURING PREGNANCY

Ayurveda, to ensure that the health of mother and child is maintained, suggests a comprehensive, holistic regimen-*garbhini paricharya*. The regimen corresponds to the growth and development of the foetus and comprises of measures related to *aahar* (diet), *vihar* (activity) and *vichar* (thoughts/emotions). Some of the specific measures as suggested in *garbhini paricharya* include: a liquid and sweet diet in the first three months since the foetus is in a fluid state, fulfillment of all the desires of the women, particularly during the fourth month corresponding to the foetal heart, a sweet, liquid and heavy diet focusing on intake of cereals in the next

three months for optimal foetal growth, measures like abdominal oleation and a liquid and solid diet rich in fats and proteins (according to modern nutrition) during the last three months is suggested. One of the critical measures is the use of *yonipichu*-vaginal tampon to be used after the eight month. This is a swab soaked in medicated oil, placed in the vaginal canal, on a daily basis to ensure a smooth passage during delivery. Emphasis is laid on a happy emotional-mental state of the woman indicating the active role of families during pregnancy.

A study done by the Department of Obstetrics and Gynecology- Ayurveda; Benares Hindu University (1989) indicated that the use of *yonipichu* and intake of a combination of three nutritive herbs-*Ashwagandha*, *Shatavari* and *Gokshur* during pregnancy lead to positive outcomes in terms of the time interval of labour, smooth passage of the foetus, no morbidity and disability in the woman and the baby and their healthy survival

An observational study by Poddar Medical College-Mumbai indicated fewer morbidities and disabilities among women who followed the traditional *garbhini paricharya*. (Koppikar in this volume)

We have found in our own practice also that a good and holistic care during pregnancy is essential to improve pregnancy outcomes and overall health and well being of the woman and the child.

CARE DURING CHILDBIRTH

Childbirth is regarded as a natural process at the same time Ayurveda lays emphasis on preparedness and readiness to deal with any complication.

For a safe and easy childbirth Ayurveda proposes that before the ninth month of pregnancy, a wooden hut must be prepared for delivery in the vicinity of the woman's residence. This hut must be equipped with light, fire, water and necessary medicines and equipments. Curtains must be put to ensure privacy and to avoid direct light falling into the eyes of newborn (a direct contrast to the modern room which is bright lit to the maximum). This hut must be neat and clean and with well fitted doors and windows. About 10 herbs and foods-oil, *hing*, *langli*, *vacha* etc. that are considered essential during labour must be kept at hand. Equipments such as needles, resuscitation tools and other relevant instruments must be kept ready.

The woman is expected to be in this maternity hut in the ninth month of pregnancy. Ayurveda says that she must be accompanied and assisted by wise women (*dais*??) who

themselves have given birth; who are good hearted, have an attitude to serve others; affectionate; have a strong character; free from grief, having endurance and capable of making the woman happy and at peace. The woman must feel comfortable to give birth in company of these women. Physician or surgical intervention is required only if serious complications arise.

Again a detailed regimen- (*prasav paricharya*) comprising of diet, emotions and postures is suggested with a view to facilitate smooth labour and ensure survival. The placenta, cord and the foetus are seen as a unit and the expulsion of placenta is included in the process of childbirth. It is also considered that the life force exists in all the three components, the foetus, cord and the placenta. Therefore the survival of a baby is linked to the other two – cord and the placenta. Measures are suggested to ensure downward movement of *apaaan vayu*-responsible for expulsion processes of the body.

During the birthing process, the woman is encouraged to drink warm herbal decoctions to facilitate strong contractions, light massage in the flanks, abdomen, thighs and back with luke warm medicated oil; hot water bath, vaginal fumigation using herbs; to walk around but avoid exertion and not to bear down in absence of labour pain. She has to balance between movement and rest. Wise women (Dai / midwife) are advised to utter words of encouragement to the women in labour. As soon as the baby is born, the cord must be felt and cut when the pulsations stop, at eight fingers from the navel. The cord must be tied with a strong, clean thread before cutting with clean, preheated, sharp knife and the end of the thread must be put loosely around the neck of the newborn.

The mental-emotional linkages with childbirth and expulsion of placenta are strongly emphasized highlighting the fact that if the woman is tense, worried or shocked, childbirth or expulsion of placenta may be delayed. Various methods are suggested to assist the expulsion of placenta-light massage, herbal fumigation, application of herbal pastes in birth canal, placing of a swab dipped in herbal oil, use of herbal decoction per rectum, oral medications. Manual removal is suggested only if these measures fail.

CARE AFTER CHILDBIRTH

To regain the lost strength in child birth, Ayurveda focuses on both the mother and the new born up to forty five days so as to bring back the pre pregnancy health to the mother and make the child strong and healthy. It is realized that after childbirth, the digestive power of the woman is weak at the same time her nutritional needs increase to meet the dual purpose of

regaining her strength and to breast feed the child. Therefore a light, carminative, nutritious and liquid diet is suggested in contrast to the sweet, oily and heavy diet during pregnancy. Her diet should be gradually stepped up from liquid to semi solid and solid by the 10th day after childbirth. After a period of 30 days she should gradually return to her routine diet. The dietary regimen allows time for the body to recuperate as well as protect the digestive functions of the woman's body thereby reducing morbidities related to the digestive system in her ensuing normal life cycle.

DIET AND REGIMEN

Diet for the initial five days comprises of: rice gruel with medicated herbs like *laghu panchmula* (a group of light and digestive herbs like *chavya*, *chitrak*, *pippali*, *pippali mool* and *shunthi*).

Her diet from 5th to 10th day after childbirth comprises of: rice, *kulaththa* (horse gram) green gram soup, mutton soup, barley, fruits, ghee, vegetables like pumpkin, carrots, cucumber and always drink warm/hot water to help with the digestion.

Her diet from 11-30th day should include rice, ghee, jaggery, *khas khas kheer* (poppy seed pudding), sweets made from *musali*, *ajowain*, *methi*, *shatavari*

Besides diet, a woman is advised to take rest and abstain from exertion. Her body is to be massaged with oils according to the season-coconut in summer, mustard in winter and sesame in all seasons, A cloth is tied across the abdomen to support the muscles and vaginal fumigation is done by using various locally available herbs. Proper dietary regimen and other measures i.e, *abhyanga* etc are to help the body regain its strength and vigour. The family must be actively involved in ensuring this regimen and on a constant vigil to identify any complications and refer to a physician.

In order to support breast-feeding, a woman is advised to include foods that promote breast milk as well as maintain a happy mental-emotional state and take adequate rest. A sweet, salty diet comprising of milk, meat, cereals, sugar, wine, curds, ghee, oil and plenty of fluids help to increase breast milk. Some of the specific foods are: blackgram, sugar cane, jaggery, garlic, onion, *shinghada* (*Trapa natans*), pumpkin, coconut, potato, tender stalk of banyan and peepal tree. Herbal decoctions made from bark of tress that secrete milk like banyan tree, *peepal*, *shatavari*, *aswagandha*, *yashtimadhu* are useful in increasing breast milk.

An observational study by Poddar Medical college, Mumbai (1990) indicated that women who followed the *garbhini*,

prasuti and *prasuta paricharya* (the three regimens) had fewer post child birth complications and illnesses. The effect of *nimbadi quath* (decoction made from *neem* and other herbs) post partum indicated lesser severity of after-pains.

NEW BORN CARE

The baby should be wiped with a clean cloth and the vernix removed by applying oil. The baby should be given a bath soon after, if it is health and the climate is warm. A quick warm water bath is suggested. Emphasis is in keeping the cord clean and dry. Routine bathing is advised according to baby's strength. If it is weak, bath is not advised. A massage with *bala taila* (medicated oil) followed by a quick bath with water boiled with herbs according to the season is suggested. Herbal paste made from *amla* should be used for bathing the newborn.

While there is no specific mention of discarding the colostrums (*piyush*) as such but some of the classical medical texts suggest that first few drops of the first breast milk should be discarded as it is considered heavy for the digestion by the newborn. It is clogged and curdled part of the uninitiated breast (feeding). It is heating to the newborn's body. (*paittic*) Modern medicine should work on this issue of nature of colostrums in relation to the child's ability to absorb it, rather than aggressively declaring Ayurvedic view as 'unscientific'.

CONCLUSION

Ayurveda-the science of life could contribute significantly in improving mother's and newborn's health as well as reducing diseases and disabilities. The holistic regimen advised during various stages of pregnancy and childbirth comprising of thoughts, action, dietary modifications and herbs aims to ensure a healthy and smooth childbirth at the same time sustain the overall health, nutrition and well being of both the woman and the baby. The measures are simple, easy to follow by women and families at the household level since the emphasis is on the use of locally available resources.

The main focus of this regimen is woman herself, if she is healthy; the child is going to be healthy. There are various measures to support and assist the woman so that she remains at the core of the pregnancy and childbirth processes (It is woman who delivers, not the clinician). The high emphasis on the assistance by wise and experienced women during childbirth (we can call them *dais*), with a supportive role played by the physician (in case of complications) highlights the home based maternity care with back up facility. The use of locally available resources in preventive and promotive regimen reduces cost of curative obstetric services. The role of Āyurveda is immensely important in prevention of obstetric

complications. It not only reduces the various potential risks to the pregnant women it is also cost effective for the delivering women and their families. The approach underlying this regimen can become one of the core strategies essential to improve over all health of the women.

WORK AHEAD

There is a need to have a plural healing approach to reduce MMR and IMR. It will require to build on the existing indigenous resource base like dais and Ayurveda and to adopt women sensitive health services.

In the National Rural Health Mission, the role of AYUSH in Maternal and Child Health needs to be specified and included specifically in the service delivery.

To propagate the preventive aspects of Ayurveda and to educate on the use of medicinal plants, create a village herbal garden. Distribute locally available herbs kit at the households level. Provide easy to understand education material on the role of nutrition during and after pregnancy. Educating communities on these elements should to be included in the curriculum of ASHA's, Dai's, Anganwadi workers, female Health workers and Medical officers of the Primary Health Centers.

The Ayurvedic approach to maternal health must be included in the service delivery by the Ayurvedic hospitals, dispensaries and mobile services as well from the PHC. Since the AYUSH doctors are suppose to be posted at the PHC level, Ayurvedic care and treatment must be made available to make a difference to the maternal health status in the country.

Botanical Names of herbs used in the paper

1. *Aswagandha*- Withania somnifra(lin)
2. *Shatavari*-Asparagus racemosus wild.
3. *Gokshur*-Tribulus terrestris(linn)
4. *Amla* –Emblica officinalisGaertn.
5. *hing*-Ferula narthex Boiss
6. *langli*-Gloriosa superba Linn.
7. *vacha* -Acorus calamus Linn

8. *chavya*-Piper retrofractum Vahl
9. *chitrak*-Plumbago zeylancia Linn
10. *pippali*-Piper longum Linn
11. *pippali mool* –roots of pippali
12. *shunthi*-Zingiber officinale Rosc
13. *musali*-Asparagus adscendensRoxb
14. *ajowain*-Trachyspermum ammi(Linn)
15. *methi*-Trigonella foenum grarcum Linn
16. *peepal*- Ficus relifiosa Linn
17. *yashtimadhu* Glycyrrhizza glabra Linn
18. *neem*-Azadirachta indica A
19. *bala*-sida cordifolia Linn.

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