The Not-So-Subtle Body in Dais' Birth Imagery

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ABSTRACT

This paper explores the notions of the subtle body and how it has given shape and life to birth rituals and notions in the Dai tradition.

In my previous writings I have considered dais' imaging of the body, and their use of expressions such as narak, nasae and nadi (the latter terms shared by the more conventional ideas of 'subtle body') in terms of imagery serving them in their role as midwives, hands-on practitioners of indigenous birth knowledge and skills. In this paper I will explore MATRIKA data, and some scholarly material, from the perspective of notions of the subtle body—using that term in its broadest sense. The woman-centered nature of this exploration is intended to challenge prevalent hierarchies that privilege the subtle body over the gross body and consequently the male 'spiritual' body over the female material, reproductive and maternal body!

In Indian imagistic traditions the female body and the earth (body) have been abidingly conflated. This is not a symbolic relationship. The earth is not a symbol of woman, nor is woman a symbol of the earth. Rather song, image, myth and medicine have all celebrated the fertility of both, in the same breath, so to speak. The Sankhya philosophical system is foundational to this imagery in which *Prakriti* represents the entire phenomenal world, and *Purush*, consciousness. Strictly speaking the *Prakriti-Purush* dyad is conceptual, abstract and un-gendered. But in fact its exoteric, popular and gendered manifestation has had disastrous consequences for what is commonly termed 'the status of women.' Woman is identified

with the field/matter (*Prakriti*) and man, with 'knowledge of the field' (*Purush*). Although in pure Sankhya, this 'knowledge of the field' is equivalent to 'consciousness,' in social history it has played out as power, privilege and patriarchal.

In my morning newspaper, The Hindu June 26th 2007, a Religion column entitled 'Rise above the *Gunas*,' exhorts the reader to detect the observer of the body-mind complex. This is the classical non-attachment teaching of Hindu text and practice. Krishna is invoked to describe the human dilemma utilizing the language of subtle and gross bodies and equating them with the 'knower of the field' and the 'field'.

Lord Krishna explains the difference between the observer and the observed in terms of Kshetrajna (the knower of the field) and Kshetra (field), where the two entities—the subtle soul and the gross body—are seen to be together and yet distinct.

From the perspective of a practitioner of yoga or meditation, one can experientially identify the terms field-knower and field as aspects of the inner *lila* of attention (*dhyan*) and objects towards which attention is directed. Society, however, is not composed exclusively of philosophers, yogis and meditators.

Sociologist Leila Dube's "Seed and Earth: The Symbolism of Biological Reproduction and Sexual Relations of Production" exposes the socio-political consequences of this philosophic and folk homology. She quotes the Narada Smriti "Women are created for offspring; a woman is the field and a man is the

possessor of the field." Dube shows how this analogy has functioned to legitimize male rights over female sexuality (right to 'plow' the field), rights to both agricultural land and children ("the crop should belong to him who has sown the seed.")

Furthermore the assumption is that the earth/woman can 'bear' or support life—that women can suffer or bear pain in the support of life (i.e. children, family, domestic and agricultural responsibilities). This image or conflation translates into the common perception that pain is somehow 'natural' to woman in other domains as well as childbirth—and feminist writers have roundly critiqued that assumption. This naturalization of female pain is similar to the Biblical curse on Eve for eating the apple in the Garden of Paradise "and ye shall bring forth children in pain and suffering". I argue that a review and reclamation of the woman-earth conflation need not valorize female suffering and victimization.

I have modified and elaborated on this essential equation of earth equals woman of in my "The Conflation of the Female Body and Earth in Indian Religious Traditions: Gendered Representations of Seed, Earth and Grain" where I nuance a distinction between 'earth' and 'field'. A scrutiny of the dais' traditional use of grain in a ritual performance facilitating birth displays a woman-centered conflation of earth body and female body, a conflation valorizing the fecundity of both earth and woman. The custom entailed atta (flour) being placed on a tali (rounded plate) in one mound and the woman separating that mound of atta into two with her hand, invoking the goddess *Bemata* and the help of the *dai*. "With the power of Bemata, and the support of the dai, may the baby separate from me as easily as I separate this one mound into two." Interestingly the word 'dai' derives from dhatri, also related to *dharti* (earth)—the key sense is 'to support' or 'to bear'.

Foregrounding data from dais and birth traditions interrogates and challenges androcentric assumptions inherent in the 'religion' propounded by the newspaper article quoted above. It also refines the feminist analyses of Dube's paper. Data from dais, privileging their voices and customs, leads us to other understandings of female physiological processes. Their perceptions of birthgiving and the conflation of earth and female bodies require us to make an epistemological shift—allowing us to empathetically access their knowledge skills and lives. We are also provided with an imagistic mapping of reproductive bodies earthy, whole and sacred, which stands apart from the priestly, biomedical or 'new age' views.

Geoffery Samuels writes of the use of subtle body imagery and its power to situate the individual within culturally specific body praxis in both healing and birthing arenas.

"One of the more significant aspects of the subtle body language is the way in which it can open our picture of the individual out to include the relationship with others.... It is particularly relevant to any consideration of subtle body practices in the context of healing, since healing is always at some level about relationships between people."

"Such an approach would involve looking at childbirth practices in South Asia simultaneously in terms of physiology, and in terms of what these practices communicate to the birthing mother and other participants in the childbirth about how to make sense of the process of childbirth."

To paraphrase Samuels—as I have often stated in my childbirth preparation classes—"What a woman has between her ears (i.e. her mind-culture-beliefs) has more to do with the process of her labour than does the width of her pelvis." And, of course who is supporting and accompanying her, midwifing her. (And here I must acknowledge that in circumstances of poverty her all-too-real deprivation of basic bodily needs profoundly and negatively affects her at the time of parturition)

DIRTY OR FERTILE? BIRTH TRADITIONS AS A CONTESTED SITE

Today dais serve the poorest of the poor—and have always been associated with embodiment and not enlightenment—thus negotiating the energy flowing through the mother's body (not to mention the family!); getting the baby born; and the survival of mother and baby, are their central concerns. Nevertheless cosmos/body understandings have emerged from our analysis of their indigenous medical imagery and ritual enactments.

Socio-political and economic realities, however, do impinge on any consideration of birth attendants and practitioners. Dais and other birth workers in the informal sector still occupy the nether end of the caste hierarchy. Caste was a geographically varied social organization that was reenforced by Western imperial interventions. Privileged Indians in proximity to colonial powers and attitudes reflected and often exaggerated colonial disdain for lower caste birth work and women's health traditions. Katherine Mayo, in her now infamous, but then very influential, *Mother India*—a book Gandhiji referred to as 'a gutter inspector's report'—devotes a chapter to motherhood. She quotes a Dr. N.N. Parikh "Ignorance and the purdah system have brought the women of India to the level of animals. They are unable to look after themselves, nor have they any will of their own. They are

slaves to their masculine owners." Dais and birth customs were a terrain for bitter ideological writings about 'backwardness' and 'filth'. Again to quote from Mayo

The first dhai that I saw in action tossed upon this coal-pot, as I entered the room, a handful of some special vile-smelling stuff to ward off the evil eye—my evil eye. The smoke of it rose thick—also a tongue of flame. By that light one saw her Witch-of-Endor face through its vermin-infested elf-locks, her handing rags, her dirty claws, as she peered with festered and almost sightless eyes out over the stink-cloud she had raised.

I would argue that colonial ideologies segue into the contemporary scene. And that any kind of continuity, or reclamation of 'traditional' birth practices among middle and upper class women and their families are challenging because of attitudes and economics.

"...the attack on dais was an aspect of the way in which the new middle class and upper caste elites were defining themselves and shaping their identity. Interwoven with this attack were questions of who were the high and the low of the society, and how spaces hitherto accessible to women and the lower castes were to be prized open and appropriated for middle class men and women.

Further, the newly worked out concept of cleanliness was important for the definition of the middle class as well as the lower caste. The colonial state, entering the competitive world inhabited by a number of medical and semi-medical practitioners, picked on the 'dirt' and the 'filth' of the lower caste dai and the customs related to birthing to assert its hygienic, scientific and moral superiority. The colonial state used the notion of aseptic cleanliness as a weapon to introduce Western medicine, while for the Punjabi upper castes, sanitized cleanliness became an ideology for asserting middle class identity as it worked in tandem with notions of caste purity and pollution."

Not only were dais and traditional birthing practices 'dirty' aspect of low castes and classes, they were also harmful displays of female ignorance. Women and tradition needed to be revamped in the name of 'ideal motherhood'...that is nationalist re-construction involved imported Western notions of ideal motherhood.

"Lack of knowledge and education amongst women

was seen as causing harm not only to the family but even to the nation. It was pointed out that women who were ignorant of the rules of the body would not only harm themselves, but by producing weak and deficient children, would also destroy the nation. Thus, with the emergence of the family as a site where nationalist restructuring was to be carried out, women were awarded a special augmented status in remodeling the private domain of the nation. In the twentieth-century reconstruction of ideal motherhood, and in the activities of women's organizations, we find a broadening of the class basis of future mothers of the nation and incorporation of the poorer classes as being in need of education in mothercraft."

These ideological constructions were pervasive and still exist. A bulwark of 'safe motherhood' trainings has been the 'Five Cleans' a continuing attempt to clean up Mayo's filthy midwife—a project totally devoid of the cultural awareness put forward in this paper. The enterprise of 'development' extends these ideologies into domains of the modern and even the postmodern and globalization. It should not surprise us that today dais are considered dirty, ignorant, and superstitious by 'educated' Indians and held primarily responsible for high maternal-infant mortality and morbidity by global health establishments. Women who handle birth occupy the nether regions (pun intended) of all hierarchies—class, caste, and even gender (thanks to the wholehearted acceptance by feminists of the bio-medical, delivery of services approach to women's health).

MATRIKA research methodology and my analyses invert these hierarchies foregrounding the dais' worldview, philosophy and cosmology. Dais, demeaned with the term TBAs (traditional birth attendants) by the global and national health establishments are the inheritors of India's birth knowledge, ritual and hands-on skills. One woman Ayurvedic practitioner claimed, "Dais are the obstetricians of Ayurveda." Midwife literally means 'with woman'—being WITH her and mediating her own cultural understanding of the birth process. I am reminded of my own recent experiences with birth. I think of the doctor who entered the room where a young friend labored. The obstetrician held up her bloody gloved hands, as she was in the process of attending the woman in the room next door, and asked my friend how far apart her contractions were. This was no government hospital or middle class nursing home—it was the 5-star hotel of birth facilities in Delhi. Although I was channeling her Reiki and she was focusing on breathing with the contractions, we weren't counting pains per minute. Ironically there was a machine churning out a graphed tracking of the contractions—but of course one couldn't pick it up and look at it with bloody gloved hands. This doctor did not know how to be WITH a laboring woman.

I also remember the workshop I conducted for an NGO in Koraput District of south Orissa, helping them document an extremely remote and primitive tribe's birth practices. I was told by the doctor and nurses who had worked in the area for 10 years that these women gave birth alone—no system of dais and certainly no other biomedical practitioners or facilities in the area. The first day in a role-play an older tribal woman grabbed hold of a curtain (simulating a rope) with her legs straight out in front of her. Soon a neighbor came in and sat behind her, spooning her body with her own, then another and another—a train of laboring women. I felt in my own body the energy that would flow from one into the other, the laboring woman's back leaning against this literal support system—and I had been told that these women labored alone—NONSENSE! These were 'midwives' with women.(I am not, however, making claims about these tribal women's body knowledge in this paper.)

DIRTY MATTERS AND MATERNAL CONNECTIONS

When I first encountered the fact, confirmed in all our MATRIKA research locales, that traditional birth always involved severing the umbilical cord only after the placenta was delivered, I thought that it was so appropriate in this society that valued family bonds in general and the mother-child bond in particular. The dais reported their practical reasons for retaining this connection: they would stimulate the placenta with heat to revive a seemingly lifeless baby; the placenta was easier to deliver with the cord connected; and (illustrating the decentralized knowledge-culture system) the women attendants or family members would blame them if anything bad happened had they cut the cord!

On another level the umbilical cord is understood by dais to contain channels/nadi and it is through this thread that the 'jee' or life force flows into the fetus. But the significance of this cord-connection is diverse. One dai in Rajasthan claimed to read the sex of women's subsequent births in form and twists of the cord; one Punjabi dai said she would never cut the cord of women in her own family, because that would be like cutting off her own roots (those of her family). Another very elderly dai claimed that it was said by others that cutting the umbilical cord was a great paap or sin.

None of the *dais* would have, on their own volition, cut the cord before the placenta emerges. As one *dai* said "The placenta and the baby have been together for nine months.

What is the hurry to separate them?" It is unfortunate that most 'dai training' teaches them to cut the cord immediately. The biomedical approach is a totally functional one. The purpose of the cord/bond has been served—now cut it. Delayed cord-cutting displays comfort with the 'mess' of merger, birth and the process of emerging slowly.

I have often speculated that the 'sin', filth, disdain, and pollution associated with the cutting of the cord—and the extent of this 'traditional belief' cannot be exaggerated in my experience—involve problematizing a form of violence. One can imagine a razor blade (or bamboo slice, sickle or arrowhead) encountering the rubbery, fleshy cord-of-life connecting mother-placenta-newborn. One Rajasthani *dai* claimed

The new mother can also cut the cord. If she is not fully conscious then Dai cuts it. Dai Mai (Dai mother) is as loveable as a mother...but the dai is Mai, Vaid, Kasai (mother, Ayurvedic practitioner, butcher). Dai cuts the cord, nobody else because it's a dosh (blemish, transgression). There is life in the naal equivalent to the life of a baby—it has 72 naari and by cutting one commits paap (sin). (Manori)

As Sara Pinto writes of her respondents in Uttar Pradesh

Even if they do not refer to their tasks as sinful, their work and silences speak of the cutting of the umbilical cord as a momentary and permanent violence in which bringing-into-life entails a small act of death, the severing of a channel for jivan and the bond between the earthly baby and not-quite-earthly placenta...the placenta enters the realm of death and decay and the baby enters the world, becoming human, social, alive.

The 'stuff' of relationship, connection, is often not visible, acknowledged. The placenta in polite parlance (even in biomedical, public health and safe motherhood discourses) is relegated to the domain of trash or the repulsive, the abject. It is the ultimate polluting substance in Brahmanical Hinduism.

A common practice is the *dai*'s burial of the placenta in the house or the *angan*, or even in the fields. I once heard of a resident of one of the villages swallowed up by Delhi—his younger brother challenged his right to inherit the family home because his placenta was not buried on that land, the man having been born in Safdarjang Hospital. Often it is only the baby boy's placenta which will be buried—because he will stay (the land is going to 'he who has the seed'), but the girl's placenta, in Pinto's research, was tossed on the trash heap,

because she will move on to another family, to 'belong to' another place.

However we interpret it, the act of severing that mother-baby connection, and the handling of the placenta, is fraught with meaning in the subcontinent. Ayurveda provides us with a concept relevant to this exploration of the most primal of all relationships in nomenclature of the pregnant woman as 'dauhrdaya' or the two-hearted one. Anuradha Singh writes of this seeming paradox.

In this enigmatic state (of being both one and two persons) the usual distinction between self and other is obliterated. The embryo is not 'other' nevertheless it is a different self. The umbilical cord that characterizes the one-who-is-two is said to have about 16000 nadi-s or channels. Interestingly both dais and texts make this claim.

Advaita philosophy, found in its purest form in the Upanishads, is foundational to this epistemological and ontological system. What has been termed in some Western cultural analysts' parlance 'cognitive dissonance' is actually a civilizational orientation towards both/and not either/or. Singh describes the Ayurvedic view of the maternal body during parturition as "...a microcosmic workplace, the site of creation and regeneration. Here macrocosmic forces were transacted in microcosmic bodily form."

And yet the female bodily power to manifest new life had been usurped long before colonial ideologies: by Tantric male rites utilizing menstrual blood of virgins and semen retention in couplings; yoni worship with no consideration of women as persons; early coins with yoni image. All these are constructions that harness 'barkat' or the energetics of the female power of manifestation, various forms of the 'magic' of concretizing desire, to specific ends.

THE RELATIONAL BODY

Some feminist slogans make absolutely no sense to me. "My body is mine" is of limited value during parturition. Not only because of the baby, but also because of the support a mother needs during that time. The following sohar or birth song sung at one of our MATRIKA workshops is blatantly proprietary of the jachcha (birthgiving woman). "My jachcha" is the first line. We don't know the relationship of the singer to the jachcha, allowing everyone to claim her.

My jachcha is the full moon of Sharad [as round/full/bright/ radiant/beautiful as] Beneath the mahal the dai waits With all that's needed for the jachcha.

Beneath the mahal saas (mother-in-law) waits With all that's needed to make charua. Beneath the mahal jethani (HBW) waits With all that's needed to make laddoos. Beneath the mahal nandi (HZ) waits With all that's needed for sathiya. Beneath the mahal devar (Hb) waits Ready to play the flute.

Not only is the pregnant woman conflated with the most beautiful 'full' moon of the year, but the activities of all her attendants are listed: the mother-in-law makes the herbal concoction; the older sister-in-law makes the celebratory sweets; the husband's sister prepares to draw the auspicious symbols on the walls—and the husband's younger brother is ready to play the flute—and they are all **beneath** the mahal/woman/jachcha.

This sohar exemplifies Samuels' notion of "modal states" or ways of being (and modes of action) which are both individual and cultural. Samuels sees these emotive states as "a repertoire of personal states...internalized during their lifetime...." Birth, especially if a son is born, is when the young wife reaps the benefits of her position in the family as mother.

The young wife has specific relations of deference, service and compliance towards her husband, her mother-in-law, father-in-law, and other kinds of patterned relationships with her husband's elder brother and his wife, her husband's younger siblings and their spouses if any, and so on. Equally, she has expectations of specific forms of behaviour in response from each of these persons.

The MATRIKA data is full of what we might term social or familial facilitations of birth. In one Bihar workshop we were told that a laboring woman might be made to drink a glass of water in which her mother in laws big toe was dipped. We were rather aghast at that until we learned that in Ayurveda the nadi for *prana vayu* (understood to be the carrier of knowledge and experience) exited the body through the big toes. Touching the feet of the elders may transmit wisdom; drinking the toe-water grants permission for the birth to proceed. As I have speculated "The social hierarchy of mother-in-law/daughter-in-law is perhaps encoded in this rite, transmitting the respected female elder's permission for the birth to proceed—granting the status of maternity to the *bahu*, but at the same time asserting her authority and primacy."

Another fascinating ritual I encountered in the once polyandrous mountain area of Jaunpur in the state of Uttaranchal was Matri masaan ka puja. If a young woman had

signs of a threatened miscarriage she would walk back, with her male sasural (in-laws) kinsmen, dressed in a black blanket, to perform this *puja* at the water source, spring, river or tap, of her natal home—where she herself had drawn water as a child. The understanding was that she had been afflicted by the figure "Matri Masaan" who resided there and needed to be worshipped and relinquished. "Matri" means mother, and masaan means the ashes-bone remnants of a cremated body in the cremation grounds. The woman performed puja, took off her shringar ka saman: bindi, bangles, earrings, kumkum etc which were offered and she was not supposed to return to her maike throughout the pregnancy. I read the term "masaan" as referring to memories (now ashes) of life with mother in the natal home, before marriage—the girl's incomplete transfer emotionally to her sasural (abode or relations through marriage).

The emotionally and socially profound switch from her natal home to her married home is implicated here—'out-married daughters' leave their maternal home and enter that of strangers (often at a very young age). Obeisance is paid to this entity (bhut, prêt, deity) and also the marks of feminine beauty are left here—speaking the transition not only from daughter to wife, but also that of wife to mother. The ritual performance of Matri Masaan ka puja is a public display of the vulnerable state of the young woman. Wordlessly her anguish is showcased to family, neighbors, all in the vicinity, inviting their care and consideration.

Both mother-in-law's big toe ritual and *matri masaan* can be read together insofar as each bestows permission on the new mother for the labor to proceed, and to carry the pregnancy to term. There are two kinds of female lineages, that of the *sasural* and of the *maike* 'mother's home'—which the new mother is betwixt and between. Reconciliation and relocation are ritually enacted; healing is effected.

COSMIC MOORINGS AND EARTHLY CONNECTIONS

Matri Masaan and another female deity/demon, Bemata, whom we will now consider, signify complex and multiple realities in what I have come to think of as geo-mysticism. According to some dais Bemata lives deep within the earth (narak). She rules that domain and is responsible for the conception, growth and birth of humans as well as all vegetation and animal life. Bemata, invoked at the onset of labour, must gradually leave the mother's body via the postpartum bleeding lest she be responsible for problems for the mother. It seems that the Bemata figure functions as a tracking modality for women postpartum, in much the same

way that the biomedical Apgar score is for the neonate.

The meaning of *narak*, a residence of *Bemata*, is classically understood as one of the three worlds (triloka). The triloka are swarg-bhu-narak or the celestial realms, the mundane earthly and visible, and the underground, unseen foundations of life—accepted categories of Puranic and classical Hinduism and folk culture as well. The dais' concept of Narak allows for a mapping of the unseen, inner world of the body, privileging senses and capacities other than the visual, primarily touch and intuition. And indeed dais have practiced non-invasive techniques which negotiate and affect the inner body without violating the integrity of the skin/body/life force. Their holistic health modalities utilize touch (massage, pressure, manipulation) and natural resources (mud, baths and fomentation, herbs) and application of 'hot and cold' (in food and drink, fomentation etc.) and isolation and protection (from domestic, maternal and sexual obligations).

In our MATRIKA data the post birth time, that of the 'closing' body was inextricably entwined with conceptions of *narak*. What is normally closed (the vagina, cervix, psyche of the birthing woman), is now open, vulnerable and leaking bodily fluids along with new life. Women who attend birth are more comfortable with this openness and fluidity than the rest of us. *Narak ka samay,* voiced by dais, carries a totally different valence than that of the pundits—and this is what I investigate here in terms of body/matter (mother, matrix, material—all etymologically connected in Indo-European languages)

The concept of narak structures and gives meaning to the time, care and social relations of the mother postpartum —and in keeping with the phenomenon of the 'open' body, menstruation is included in this rubric. My intent in this paper is to insert 'fertility' into health and healing debates and discourses rather than simply jettison the 'pollution' and uncleanness associated with menstruation and postpartum.

In our Bihar MATRIKA workshops we were told

Girls are considered holy before puberty. The marriage of a young girl (who has not had her periods) is performed with her sitting on her father's lap. After puberty the woman is considered unclean, and is unholy, because she bleeds, and this is narak.

The common term for the ritual that progresses the mother post partum from the time of *narak* back into the social world is '*chatti*' or 6th—though this may have traditionally fallen on different days with different castes and in different areas. In the quote below we see the infant handed to the women who will co-mother him or her!

On Chhati day (after birth) the narak period ends. The Dai checks if the umbilical cord has fallen off. Then she bathes the baby and beats a thaali (plate) and gives the baby to Chachi (husband's younger brother's wife). Chachi does Namaskar to God and gives the baby to Jethani (husband's elder brother's wife). Then the woman is bathed and she wears new clothes. The Dai then cleans the room where the delivery took place and the mother was kept separately for six days.

And from Rajasthan we heard that the place for dirt, blood, *narak* (and rest for the new mother) is located in her maternal home. Whereas the well worship is only done when she returns to her married home.

Rukma: It's the jachcha's mother's duty to have her daughter's birth in her pihar. Then her daughter gets rest. But jalwa puja is done only in sasural no matter how long the jachcha spends in her pihar.

Manori: this is because after delivery nau mahene ka narak nikalta hai (nine months of narak comes out). This is also called narak ka kund (reservoir of narak).

The phrase "narak ka kund" speaks the language of what I have called geo-mysticism. A kund is a spring-fed pond, again an earth body analogy with the maternal reproductive body—ritually and socially 'polluted' yet fertile.

A GENDERED POETICS OF REPRODUCTIVE RODIES

Martha Ann Selby's exploration of the Charaka's Ayurvedic text^{XVI} attends to the poetics of sexed bodies. The schema of maleness and femaleness she describes, especially the openness and susceptibility of the pregnant woman, is omnipresent in our MATRIKA data. Selby uses the word "poetics" in a broad cultural sense which she claims is grounded both in texts as well as in practice; what she terms a "cultural semiotics."

Women and the "feminine" are red; men and the "masculine" are white. The redness of women and the whiteness of men are based on the colors of their observable sexual effluents: menstrual fluid in the case of women, and semen in the case of men. White and red exist in a dominant/subordinate relationship, both in the medical texts themselves and within the larger and more articulated contexts of quasi-Hindu social hierarchy. In general, white

always predominates, with red and other colors ranked below it. White is the color of coolness, celibacy, virility, purity and goodness, whereas red represents heat, sexuality, permeability, taint and energy.

Selby's writing contributes to our consideration of the relational body. The male body/self is more 'individual' and the female body/self is more permeable.

White is "male" and "closed"; red is "female" and "open." It is a woman's redness and openness that cause her susceptibility to all kinds of outside influences, both good and bad, and her porousness and fluidity allow for an exchange to occur in which elements in the environment—sights, sounds, and smells, as well as foods and medicines that are actually prescribed and ingested—all leave impressions in a woman's body that are incorporated into any embryo that she is actually carrying or might soon be carrying..."

The valuation of white over red hearkens back to the gendered polarity of the 'field knower' and the field. Interestingly in one of our Rajasthan workshops discussions turned towards death. We learned that, in accordance with common funereal practice, a stillborn baby or dead neonate were ushered into the next life according to this poetics. "If a dead baby is born then we dig a place with hoe and bury it and plant a bush there. If the baby is a boy then we cover him with a white cloth and if it is a baby girl, then a red cloth is used." And touchingly, it was mentioned that if the family was too poor, just a little square patch of red or white fabric was buried along with the tiny body.

THE COSMIC 'NARAK'—NOT 'HELL' BUT WOMB FOR THE UNBORN

I had always interpreted 'narak' as referring to the innards of the female body and the earth body and made brief incursions into its Puranic meanings^{XVII} until I listened to teachings by Khentse Rimpoche at Deer Park in Himachal Pradesh. There the Tibetan text that he was teaching used the phrase 'narak' in its Sanskrit version and I asked him the meaning of narak in this context. From his reply I understood that narak was a kind of holding space for the atma of those awaiting rebirth.

If I consider *narak* in light of this more cosmic notion of the cycles of birth/death/rebirth, my understanding of dais meanings extends beyond the more 'spiritual' concepts of the transcendent and the need to escape endless cycles of death and rebirth and the curse of the womb. From *dais'* mouths the

phrase, in keeping with geo-mysticism, may denote the sacred cyclicity of cosmic processes (seasons, lunar and menstrual rhythms, re-incarnations) of which human beings are a part. Geo-mystical because the earth element, along with matter and mother is sacred and not demonic. A seamless web of life and death, spirit (or rather 'jee', life force) and matter emerges from our data.

In the philosophical traditions of India there has been an abiding merger between form and meaning, not only the fertility of woman and earth, but also between the image and what is signified—there is wholeness, a oneness. The British colonizers perceived this as weakness and this cultural semiotics of representation has been deeply disturbed by modernity.

Dais, their notions of the sacred and birth rituals are dying, literally. Oxytocin injections are replacing rituals invoking Bemata—because the power to birth is increasingly understood not to reside in nature or in the mother's body, but rather in 'science.' This 'belief' and exaggerated faith in science results in the ritual use of scientific medicine. Similarly professionalization, standardization, pharmaceuticalization, and commercialization exert their hegemony over the fertile female body.

Now, more than ever, it is essential that that Ayurvedic practitioners, other Asian systems of medicine and dais collaborate in Maternal Child Health policies and programs—to offer non-invasive, supportive and culturally appropriate services for childbearing women. India possesses rich traditions in both human resources (dais) and an Ayurvedic theoretical base (texts) that can explain many of their practices. Let us not abandon them.

- ¹ MATRIKA (Motherhood and Traditional Research, Information, Knowledge and Action) was an NGO research project devoted to documenting traditional midwives' skills, knowledge and religio-cultural context. Workshops were conducted in 4 areas of North India, Bikaneer District, Rajasthan; Fategarh District, Punjab; Gomia District, Bihar and the resettlement colonies of Delhi.
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- XII Samuels, Geoffrey "Healing and the Mind-Body Complex: Childbirth and Medical Pluralism in South Asia'
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Food In Pregnancy An Ayurvedic Overview

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ABSTRACT

This paper outlines the various kinds of diet to be followed during pregnancy month by month based on the teachings of Ayurveda.

"The life of all living things is food; the entire world seeks food,

Complexion, clarity, good voice, long life, understanding, happiness,

Satisfaction, growth, intelligence etc. are all because of food."(CS)

Pregnancy period is a very special time in a woman's life. This is the condition of having a child developing inside the body. The first trimester is the most critical period. If the mother has harmful substances present in her blood, the baby may have birth defects. It is the best rule to use no medicine during this period (first trimester) unless prescribed by a physician / Vaidya.

The fetus's movements can be felt by the mother at the end of Fourth month. The fetus begins to crowd the mother's internal organs and may cause various kinds of discomfort, such as back pain, shortness of breath, piles, muscle cramps, constipation etc. Prenatal care under skilled Vaidya's supervision can make it possible to prevent or treat most of the

physically and mentally for the easy birth of her healthy baby. This paper will provide guidelines for the aforesaid purpose.

MONTHLY FOOD REGIMEN

The first trimester: Sweet, cold, (cooling to the body) and liquid forms are helpful in this period—says Sushrut. (Because the foetus is unstable in the uterus in the early months) Some examples of the dietary substances are: -

Singhoda (Trapa natans) (Water chestnut) - This is a 'Garbhasthapan food (stabilizes fetus). It helps to fix the placenta. Singhoda powder 1 table spoon with luke warm milk and ghee is very useful. If possible, she should take 3 to 4 cups of whole milk every day. Daily use of Cow's ghee with milk is useful at this time of the pregnancy.

In the **third month** rice with milk is advised to be taken frequently and in more quantity in the first course of the meals like early breakfast and lunch.

Fourth Month: Heart of the foetus starts working in this month. More pure kahpa and rakta is essential for the fetus here. Curds with rice and ghee are to be consumed more in this month. More quantity of food is to be taken in a day time like breakfast and lunch.

Fifth Month: Mana or mind becomes promptly active. All 'Hridya' (wholesome to Mana and heart) are to be provided to develop mental faculties in proper manner. Rice with cow's milk is advocated by Ayurveda. This milk is boon to the making of mind.

Sixth month: *Smriti* (recollecting power) *buddhi* (power of perception) starts functioning hence cow's ghee is recommended in this month. One should consume a judicious amount of ghee with rice.

Seventh Month: The genesis of all the body organs is c body components like *rakta* (Blood), *asthi*(Bones) *medhya* (intellect) etc. This requires a specific prescription for each individual body constitution.

AVERAGE DIET FOR PREGNANCY

Cereals (Anna Varga): Rice, Jowar, Barley, Wheat, Ragi, Maize, Bajra.

Pulses (Shimbi Varga): Green gram, green pea, black gram, bengal gram, soya bean, red gram, cluster beans, kidney beans (red), french beans, double beans.

Fruit Vegetables: (*Phala–Shaka Varga*): Bottle gourd, snake gourd, cucumber, tinda, lady's finger, parwal, ridge gourd, red pumpkin, drum stick, ash gourd, tomato.

Root and Tubers (*Mool - Kanda Varga*): Potato, sweet potato, carrots, radish, onion, garlic, ginger, yam, turmeric, beet root, tapioca (sago)

Green Leafy vegetables: Spinach, Lettuce, Cauliflower leaves, Curry leaves, Coriander leaves, Mint, Cabbage, Fenugreek, Drum stick leaves, Amaranth leaves.

Milk and milk products (*Dugdha Varga*): Whole milk, Ghee, Butter, Paneer, Buttermilk, Curds, Cheese, Shrikhanda, Ice creams can be consumed. Cow's milk and ghee is the boon to expecting mother.

Milk and milk products mixed with any fresh fruit is a bad combination hence to be avoided

Flesh foods (*Mamsa Varga*): Goat meat, Titer (Partridge, Bird variety), Chicken, Sardine fish, Crabs, Goat liver, Chicken liver, Eggs, Cod-liver oil and Salmon.

(Dry salted fish causes digestion problems hence better to avoid. Pork in excess should be avoided.)

Fruits: (Phala Varga) (Fresh and Dry) Banana, Apple, Dates, Grapes, Pomegranate, figs, Jackfruit, lime, oranges, Mango, Pear, Phalsa, Dried figs, Resins, Apricot, Almond, Dried dates, Fresh Amla is a boon for expecting mothers. One Amla every day is very useful in every aspect of nutrition in pregnancy. Dried amla powder can be used in off seasons. (Guava, Berries, Custard apple are not good for digestion hence it is better to avoid)

Other healthy foods: Garden cress seeds, Cardamom, Corriender leaves, Clove, Nutmeg, Onion, Tamarind, Dry

Ginger powder, Black pepper, Rock salt, Arrowroot, Sugar, Jaggery, (Mushrooms, Tea, Coffee, Soft drink, Wines and Alcohols should be avoided)

SOME HEALTH PROMOTERS

- Garden cress seeds (Chandrashura / Ahaliva / Halim) is used every where in India during last months of the pregnancy and to lactating mother. Seeds roasted in cow's ghee and mixed with milk and sugar is given as tonic for expectant mother. This helps in general debility and pregnancy anemia.
- Crab, Corn and Egg soup is very helpful after second trimester. This helps to build strong bones of foetus.
- Soya milk and Egg yolk is good for bone development.
- Spinach soup with Onions and Carrots help in pregnancy anemia and provides good nutrition to bones of both, expectant mother and foetus.
- Apricots with honey are a very effective nerve-tonic. It
 increases blood and cures constipation. It prevents
 infections and lowers the chances of degeneration of cells. It
 is a fruit rich in vitamin A according to modern nutrition.
 Hence it is a very valuable fruit in the prevention of all the
 diseases caused by its deficiency.
- Banana with dates, figs and ghee every day in pregnancy is one of the best natural tonic foods. It also improves and increases the blood during pregnancy and hence prevents pregnancy anemia to a great extent. (Milk and banana is not a healthy combination and it is best to avoid in pregnancy)
- Black currents are also rich nutrition for pregnant women.

 Black current Juice (prepared by soaking and grinding them with water) is an ideal soothing in all types of urine disorders in pregnancy. Scanty urination with hyper acidity can be very well prevented by this. It tones up the large intestine which helps in curing constipation. Addition of fresh dates to the mixture gives good results.
- **Dates-** Soak 4 to 6 dates in fresh cow's milk overnight and grind the mixture next morning. This preparation with a pinch of cardamom powder and one tea spoon honey is used regularly to generate blood and bones of foetus.
- Mangoes are very nutritious and preventive for frequent attacks of the common infections like sinusitis, colds etc. Drinking Mango juice (Amra ras) with ghee and milk two times a day during pregnancy prevents one from fetal abnormalities. It increases the resistance of the foetus against infections, helps in proper development, eases the delivery and prevents post-partum complications.
- Fresh salads can also be part of the diet of expecting mothers Cabbage, Cucumber, Onions, Fresh Asparagus, Lettuce and Spinach are good to have in salad.

• **Spinach:** Regular use of spinach prevents threaten abortion and hemorrhage. Fresh juice of spinach leaves one ounce (6 tea spoons) with a bowl of liver soup, thrice a day is a perfect treatment in lack of breast milk, anemia's and general debility after delivery. Fresh juice and tender coconut water is a best diuretic. It can be safely given in pregnancy to remove all toxins.

The average regular diet (with some modifications with a view as to what is good for her and what is not) is adequate for the average expecting mother. She should be more concerned with the quality of what she eats. She should supply her body

with good nourishing diet and at the same time eat foods that will build her baby's body tissues.

Ayurveda understands food and nutrition in a different way than what is advocated by the modern science of nutrition. Only when Ayurvedic understanding becomes part of the common man/woman's psyche, that it will also become part of their every day living. Dietary measures for special situations like pregnancy or postpartum are only extensions of this grand science of nutrition. Till that time it is wise for the pregnant woman to attention to her diet under the supervision of a Vaidya.

Anaemia among women and children of India

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ABSTRACT

Anaemia is a major public health issue in India today. Anemia can be called our national disease and in fact it is a national calamity. The figures for anemia among women and children of India are truly staggering. It is estimated that more than half of all Indian women and 34th of Indian children suffer from anemia. The paradox about anemia is that, in India the level of anemia does not seem to have any relationship with the =material wealth of the state- measured in terms of Net State Domestic Product (NSDP). Nor does anemia seem to have any relationship to the nutritional intake in different states measured in terms of calories proteins and fat. Neither the nutritionists nor the economists and sociologists of our country are able to provide any insight into this paradox. The only explanation possible for this paradox is provided by an Ayurvedic perspective. Ayurveda understands and treats anemia effectively and can offer a solution for this national problem.

In this paper we will focus on anemia among women and children of India. We will examine the nature and extent of the problem facing our women and children.

WOMEN

According to the National Family Health Survey (NFHS-II, 1998-99) 52% of Indian women are anemic. However, other (informal) estimates put this at 90%. (See for instance, The Hindu dated 4th September, 2005.) In major states like Bihar, Orissa, West Bengal more than 60% of the women suffer from

anemia, whereas in Kerala anemia level is the lowest in the country – 22.7%. Data from the National Nutrition Monitoring Bureau (NNMB-2003) indicate that in India nearly 75% of the pregnant mothers are anemic. For the eight states for which data is available, anemia among pregnant mothers ranges from a low of about 50% in Kerala, to a high of about 84% in Madhya Pradesh.

Anemia has a major detrimental effect on women's health. Anemia during pregnancy increases the risk of death or disease of both the mother and the child. In India, anemia is by far the most significant cause of maternal mortality (MMR), that is death from pregnancy and childbirth related causes. Every year, more than 100,000 women die from these causes in India. It is estimated that 40% of these maternal deaths are caused by anemia and anemia- related complications. Maternal mortality (MMR) in India is among the highest in the world- 540 deaths per 100,000 live births. Putting this in some perspective, MMR in India is about 100 times that of Sweden and ten times that of China.

Complications during pregnancy and childbirth due to anemia among pregnant mothers have been well documented. Conditions such as abortions, premature births, bleeding during childbirth and low birth weights of infants are associated with anemia during pregnancy. In general, anemia increases the susceptibility of women to diseases especially after childbirth. It is known that anemic mothers give birth to anemic children. The more acute the anemia of the mother the more severely the child is affected.

Anaemia among children, women and pregnant women by state, India									
State		% of Children with anaemia	% of Women with anaemia*	% of Pregnant wome with anaemia **					
India		74.3	51.8	74.6					
North	Delhi	69.0	40.5						
	Haryana	83.9	47.0						
	Himachal Pradesh	69.9	40.5						
	Jammu & Kashmir	71.1	58.7						
	Punjab	80.0	41.4						
	Rajasthan	82.3	48.5	83.8					
Central	Madhya Pradesh	75.0	54.3						
	Uttar Pradesh	73.9	48.7						
East	Bihar	81.3	63.4						
	Orissa	72.3	63.0	81.5					
	West Bengal	78.3	62.7	77.1					
Northeast	Arunachal Pradesh	54.5	62.5						
	Assam	63.2	69.7						
	Manipur	45.2	28.9						
	Meghalaya	67.6	63.3						
	Mizoram	57.2	48.0						
	Nagaland	43.7	38.4						
	Sikkim	76.5	61.1						
West	Goa	53.4	36.4						
	Gujarat	74.5	46.3						
	Maharashtra	76.0	48.5	75.9					
South	Andhra Pradesh	72.3	49.8	73.8					
	Karnataka	70.6	42.4	79.8					
	Kerala	43.9	22.7	50.1					
	Tamil Nadu	69.0	56.5	69.0					

CHILDREN

The health status of Indian children is a cause for great concern. The health of Indian children seems to be even worse than that of the mothers. The levels of Anemia among infants and children of India are truly worrying. About 3/4 th of Indian children are anemic. In the age group of 6-35 months nearly 75% are anemic. In this the most vulnerable group is that of 1-2 years and in this group anemia affects 77.7%. In states like Haryana, Rajasthan, Bihar, and Punjab more than 80% of the children in the age group 6-35 months are anemic. Deficiency in blood in the beginning of life affects all aspects of a child's growth and development. With more than 75% of pregnant mothers chronically anemic more often than not children are born with low birth weight (weight below2.5 kgs). Children born with low birth weight are inherently weak. They lack resistance to diseases. Low birth weight constitutes a very important cause for infant mortality – death before the age of one. It is estimated that at least one third of the new born in India are of low birth weight.

If we compare the different states in India the statistics on Kerala are very revealing. The percentage of women in Kerala having anemia is 22.7%, the lowest in the country. The percentage of children with anemia in the age group of 6-35 months in Kerala is 43.9%, which is also the lowest in the country. The infant mortality rate in kerala is also the lowest in the country. Now if we compare the material wealth of different states, the per capita Net State Domestic Product (NSDP) of Kerala is far below that of most other states. Punjab, which is one of the richest states in India in terms of NSDP, has one of the highest percentage of children who are anemic, 80%. Tamilnadu and Kerala both have about the same per capita NSDP but if we compare the anemia figures for women, pregnant mothers, and children as well as infant mortality, the figures of Tamilnadu are far higher than those of Kerala. This is so inspite of near 100% institutional deliveries in Tamilnadu, with high quality medical care, attended by health professionals, equipped with good infrastructure and with modern equipments and modern medical professionals.

The National Sample Survey (NSS) is the primary source of nutritional information in India. The data given here are from the 55th round of the NSS, 1999-2000]th

Average per capita intake of Calorie, Proteins and fat Per diem by major states * and % of women and children with anemia**

	Calorie		Protein		Fat		Anemia	Anemia
	Rural (Kcal)	Urban (Kcal)	Rural (gm)	Urban (gm)	Rural (gm)	Urban (gm)	Women %	Children %
A.P.	2021	2052	49.4	50.8	29.5	41.5	49.8	72.3
Assam	1915	2174	47.7	56.5	22.3	38.7	69.7	63.2
Bihar	2121	2171	58.7	61.0	26.5	34.2	63.4	81.3
Gujarat	1986	2058	54.2	54.7	53.8	67.0	46.3	74.5
Haryana	2455	2175	75.3	62.5	59.1	56.3	47.0	83.9
Karnataka	2028	2046	54.2	53.5	36.6	45.1	42.4	70.6
Kerala	1982	1995	52.4	55.2	38.8	42.9	22.7	43.9
M.P.	2062	2132	58.2	60.6	31.3	43.5	54.3	75.0
Maharashtra	2012	2039	56.5	55.9	39.7	52.6	48.5	76.0
Orissa	2119	2298	49.5	57.8	16.3	27.4	63.0	72.3
Punjab	2381	2197	71.7	64.8	58.7	57.9	41.4	80.0
Rajasthan	2425	2335	76.9	70.4	53.5	61.5	48.5	82.3
T.N.	1826	2030	44.9	51.7	29.5	43.2	56.5	69.0
U.P.	2327	2131	69.7	62.0	37.6	45.5	48.7	73.9
W.B	2095	2134	51.6	55.5	24.2	40.2	62.7	78.3
All India	2149	2156	59.9	58.5	36.1	49.6	51.8	74.3

** NFHS (2) 1998-1999

One conventional argument by economists and sociologists is that the women and children in Kerala have benefited from a wide spread modern health care system. However it is instructive to note that in the case of Tamilnadu modern medical interventions have not brought about a reduction in anemia levels. Another state where anemia levels of women and children are low is Manipur, which does not seem to have a wide-spread modern system of health care. Therefore the reach of modern system of health care is also not a factor, which explains low levels of anemia.

Source: * NSS 55th round 1999-2000

NUTRITION AND ANEMIA

CALORIE INTAKE

Now let us look at nutrition and anemia, ie., the relationship between anemia and food intake in terms of calories, proteins and fats. If we compare the per capita calorie consumption of Kerala, it is lower than most other states in India. Both in urban and rural Kerala the calorie intake is lower than the national average. This pattern remains consistent for all the years in which the NSS data is available – 1972-73, 1983, 1993-94, 1999-2000. Only two other states, Assam and Tamilnadu have lower calorie intake than Kerala. Some of the states which have a relatively high calorie intake are

Rajasthan, Hariyana and Uttar Pradesh. In these states the levels of anemia among women are more than double that of Kerala. In Punjab which also has a relatively high level of calorie intake, the anemia level among women is nearly double that of Kerala.

PROTEIN INTAKE

Kerala also has a protein intake, which is less than the national average, both in urban and rural areas. This is also true for all the NSS rounds, 1972-2000. Rajasthan, Haryana, Punjab and U.P., all have protein intake far higher than that of Kerala.

FAT INTAKE

Fat intake of Kerala is lower than the national average in the urban areas and only marginally higher in the rural areas. Fat intake of Kerala is far below that of Gujarat, Haryana, Punjab and Rajasthan.

From the above, it seems that a diet high in calories, proteins and fats does not ensure a corresponding reduction in anemia levels. Sociologists and economists call this the Kerala Paradox, that Kerala which has fairly low levels of calorie, protein and fat intake also has the lowest levels of anemia among women and children. Some attribute this to the spread

of literacy in Kerala, as if to say that highly educated people are not anemic! Others attribute this phenomenon to the spread of modern healthcare and modern health interventions. But as we have seen this is not necessarily true, as in the case of Tamilnadu. Some go to the extent of attributing this paradox to the source of data itself—that there is something wrong with the data, since it goes against our pre-conceived notion of the outcome!

NATIONAL NUTRITIONAL ANAEMIA PROPHYLAXIS PROGRAMME

It is not as if the crisis of anemia has escaped the attention of the Indian State. During the 4th Five year plan, the Govt. of India introduced the National Nutritional Anemia Prophylaxis Programme. The stated objective of this programme was to prevent anemia among mothers and children (1-12 years). The programme involves daily supplement of Iron and Folic Acid (IFA) tablets to prevent 'mild' and 'moderate' anemia. The target groups are 'at risk' groups - pregnant women, lactating mothers and children under 12 years of age. As part of this programme pregnant women are expected to consume 100 tablets of iron and folic acid over a period of 3 months during pregnancy. Advice on so-called "iron-rich food" is given. This programme is now a part of the Reproductive and Child Health Programme (RCH) in every state. However, to say that this programme has been a failure is an understatement. After all these decades, with many hundreds of crores spent, women and children of India continue to be chronically anemic, as can be seen from the data.

THE NEED FOR AN ALTERNATIVE PERSPECTIVE -THE AYURVEDIC APPROACH

Obviously, even after several decades if we have not succeeded in getting rid of anemia it only means that we have not understood the disease. We have not understood the various factors related to food and regimen that give rise to Anemia. In Ayurveda this disease is called Pandu. It affects one of the seven *Dhatus* in the human body. (*Rasa* etc.) These seven *Dhatus* or tissue elements are the building blocks of the body. These *Dhatus* are formed from the food that we consume. Of these, the second is *Rakta* or blood. Blood is responsible for the sustenance of life itself. When blood is vitiated resulting in a loss of its quality and quantity, one is afflicted by the disease Pandu or Anemia. Therefore Anemia leads to whole host of problems affecting the life-sustaining factors in the body.

There are various factors that lead to a deficiency of blood in a human being. Improper food is one of the important causes of anemia. For instance, a diet excessively sour, salty and pungent is one of the causative factors for anemia. So also is the consumption of alcohol, physical exertion and day sleep. Excessive physical exertion combined with wrong kind of food can leave anyone anemic. That is why the majority of Indian women, specially the poor, are anemic. Therefore, someone who consumes more than the stipulated levels of calories, proteins and fats and even iron, may still be anemic if the diet, work and regimen are not proper.

ANEMIA AND PREGNANCY

The food and regimen recommended in Ayurveda for a pregnant mother ensures an anemia-free pregnancy. This is because the diet and regimen which are beneficial and those which are harmful for a pregnant mother are the same as those for a person with anemia. It is therefore easy to see that when pregnant mothers are treated in the Ayurvedic way, there is very little chance of their being afflicted by anemia.

CONCLUSION

Kerala, which has by far the lowest levels of anemia in the country, enjoys a major advantage over other states, namely the survival and practice of the traditional system of healthcare based on Ayurveda. The household food and healthcare practices of the people of Kerala are even today based largely on Ayurvedic principles. It may not be wrong then to conclude that the low levels of anemia among women and children of Kerala are due to healthcare practices that are deeply rooted in the Ayurvedic tradition. Incidentally, Kerala also has the best sex-ratio (female/male) in the whole country. It may also be said that wherever the position of women in society and family has remained relatively unaffected, women have continued to practice the traditional diet and healthcare practices in their households. As these practices have remained largely unaffected, they have also ensured a better health for women and children. This may not hold good for other states like U.P., Bihar or Tamilnadu, which seem to have undergone major changes during the period of British rule. Perhaps there may be other factors also which need to be studied. One major problem that sociologist, economists and other social scientists face, has to do with the paradigm. With the modern Western paradigm it is not possible to understand or interpret these phenomena, which affect our society in a major way. It is the task of our sociologists and economists to stop blindly following the paradigms of modern medicine and science. The subject of anemia clearly shows that without an appreciation of the Indian Systems of medicine (ISM) we will come to utterly wrong conclusions and act based on such conclusions. Unless there is a shift in this paradigm, our economists and sociologists will continue to find it difficult to explain many of these paradoxes.

Garbhini Paricharya

(Regimen for the pregnant woman)

Vaidya Mrs. S Koppikar Bombay Vaidya Koppikar was a practicing Ayurvedic Physician at Poddar Ayurveda Hospital, Mumbai specializing in Women's health, specially reproductive health. She is no more with us. Including one of her articles is a small tribute to her phenomenal contribution to the legacy of Ayurvedic use in maternal health.

ABSTRACT

Ayurveda considers food to be the best source of nourishment as well as medication for the pregnant woman. The nine monthly diet is singularly unique to Ayurveda. It changes in accordance with the growth of the fetus in the womb and at the same time ensures health of the mother. One can find remnants of this dietics with midwives and older women, but a detailed and comprehensive diet plan is being practiced only by the vaidyas of the classical medical tradition. In this paper we are giving a broad expanse of the month wise diet, which can be modified according to the age, season, place, constitution and the digestive fire of the pregnant woman.

AHAR (FOOD)

Purusha (human) is born and grows from *Ahar Rasa*. So *Ahar Rasa* should be maintained healthy. The food and behavior should be such that the *Ahar Rasa* is protected at all cost. As the *Garbha* (foetus) is a small form of Purusha, the birth and growth of the child depends upon the food and actions of the mother.

The food taken by a pregnant woman:

- Nourishes and helps the growth of the foetus.
- Nourishes the mother's own body.
- Nourishes the breasts by which the breast milk formed maintains newborn baby.

Study Results

It was found during survey of local traditions in villages in different parts of India (LSPSS-CHETNA survey) that many practices of this diet regimen still persist among masses. On following most of this diet regimen in Poddar Hospital, Bombay, following result were obtained:-

Out of 1000 deliveries between Oct'88 and Feb'90;

- The low birth weight babies were 59 i.e. 5.9%
- Still births 31 (3.1%)
- L.S.C.S. 45 (4.5%)
- Due to Basties in 9th month of pregnancy and vaginal oil swab (Yoni Picchu) the prolonged deliveries were less and vaginal tears negligible.

So the Garbhini should follow a careful regimen of food and behavior during pregnancy. This Regimen is known as "Garbhini Paricharya".

The growth of the foetus is marked by a certain growth pattern. Thus in the 5th month there is a predominant growth of Mamsa (flesh) and Rakta (blood) dhatus. In 6th month there is predominant development of *Bala, Varna*, Nails, hairs, *Roma*, ligaments, bones etc. Accordingly the management changes every month according to 'Charaka Samhita.

FIRST MONTH OF PREGNANCY

Diet: Cold milk in small quantity but frequently. Mathur (sweet), Sheet (cooling to the body) and liquid diet is preferred in 2nd month for maintenance of foetus.

Medicine: *Jeshthamadhu* with white sandalwood power, red sandalwood powder in cow's milk.

Jeshthamadha, Saagbee, Ksheerkakoli, Devdaru (Cedrus deodara) milk.

SECOND MONTH OF PREGNANCY

Diet: Cold milk in small quantity but frequently *Madhur*, *sheet* and liquid diet like milk, coconut water, fruit juices, *peya*, *kanji* which has not become sour.

All these should be in small quantity but taken frequently. Fruits to be avoided are Pineapple, Papaya, Sugarcane.

Medicine: Ashmantaka (Apta) til, Pippali (Piper longum), Manjishtha (Rubia cardifolia) Shatavari (Asparagus recemosus). These are taken in same quantity and a Kashay (decoction) is prepared and taken with milk and sugar. Lotus stem, Nagakeshar Milk, or butter-milk, lotus, bel fruit, Camphor and Goat milk.

THIRD MONTH OF PREGNANCY

Diet: Rice with milk or Ghee (clarified butter) and honey in unequal quantity with milk and same type of fruit juices that are told in 2nd month.

Medicine: Vrikshadani, Ksheerkakolki, Priyangu, Sariva.

- Sugar, Nagkeshar Milk
- Sandalwoood powder, Khus, lotus, cold water with milk.

FOURTH MONTH OF PREGNANCY

Diet: Butter taken out of milk, Rice with curds, fruit juice, coconut water, Hridya Fruits viz. Mango, watermelon, white pumpkin, yellow pumpkin, snake gourd (chichinda) Berry

(Badar), pomegranate, Amratak (Ambada)

Medicine: Sariva, Rasna, Bharangi or Jeshthamadhu decoction.

• If pregnanat woman feels thirst, burning and pain in abdomen then milk boiled with banana root, lotus, *Khus* is given in the same quantity.

For Thirst: Shunthi, Mustha, sandalwood powder.

Diet: Meat-soup, rice, chicken

FIFTH MONTH OF PREGNANCY

Diet: Rice and milk, ghee from butter, Rice milk, Ghee. *Mamsa Vardhak* (foods which promote bulk in fetus) – meat soup, back gram; *Rakta Vardhak* (which increase blood)– Pomegranate, *Chikoo*, Apple, spinach, beatroot, Amalki, guava etc.

Medicine – Ground pomegranate leaves, sandal wood paste should be mixed with curd and honey.

Kantakari (Solanum xanthocarpum) *Laghu Kantakari* (Gmelina arborea) leaves of *Ksheeri* trees (like Pipal – Ficus religiosa) banyan, *udumbar* (Ficus glomerata), Plaksha – (Ficus lactor) powder with milk.

 Ground blue lotus, Renukbeej, Nagkeshar, pumpkin with water.

SIXTH MONTH OF PREGNANCY

Diet: Ghee, Rice, *Gokharu* (Tribulus terrestris) *Siddha* ghee (processed ghee), *Yavagu* (Rice *kanji*).

Medicine: *Gairik*, cow's dung, black mud heated and put in water and after setting for some time, take upper water only and in that mix sandal powder, sugar and drink it.

 Prishniparni (Uraria picta), Bala, Gokharu, Drum stick, Jeshthamadhu decoction.

Balya (Strengthening):

Endri, Gorakshakarkati (papaya), Vidarikanda, Shatavari, Ashwagandha, Mashparni, Bala, Atibala.

Varnya (for complexion):

Sandalwood power, lotus, *ushir, Sariva, Jeshthamadha, Manjishtha*, White *Durva, Vidarikanda*.

SEVENTH MONTH OF PREGNANCY

If there is itching on her lower abdomen, thigh or breast, the following medicine are used:-

- *Berry Kashay:* processed in sweet medicines, butter milk.
- Kanheri siddha oil massage
- Parishek of Jai, Jeshthamadhu decoction.
- Avoid salt and large quantity of water.
- Take bala, Gokharu, Musta, Lajjalu, Nagkeshar powder, Honey. In 7th month all parts of foetus are well

- developed.
- Take Water Chestnut (Trapa Bispinosa) lotus, grapes, *Musta*, sugar, *Jeshthamadhu* docoction.

EIGHTH MONTH OF PREGRNANCY

Diet – *Yavagu* in milk.

Medicine: Take *Lodhra*, *pippali* powder with honey and milk.

- Milk processed in *Kapittha* (Eeronia elephantum) *Laghu Kantakari* and snake gourd, *Bruhat Kantakari*, Cane Sugar.
- Asthapana Basti(decoction enema) Berry Kashaya, Bala, Atibala, Milk, oil, salt, honey and ghee.
- After this give Anuvasana Basti(Oil enema) of milk, madhuraushadhi siddha kashay (decoction prepared with drugs of sweet taste)oil, so that pregnant woman has got strength and soft vaginal passage and she will deliver easily.

NINTH MONTH OF PREGNANCY

Anuvasan Basti with madhurashadhi siddha oil and put oil tampon in vagina. In 8th and 9th month there is pain in abdomen and some time bleeding through vagina also. So use pain killing and stambhana (drug to stop bleeding) medicine.

Medicine — *Shunthi*, (Zigiber officinale) *Jeshthamadha*, *Deodaru* are pain killers. *Sariva*, *Jeshthamadha*, *Ksheerkakoli Kashaya* medicines.

If pregnancy continues upto 10th month then only take – *Shunthi, Ksheervidari Kashay* or only *Shunthi Siddha* milk.

PREGNANCY HARMING FACTORS

Along with the diet, Ayurveda lists out certain factors, which can cause disturbances or harm to the pregnant woman and fetus. These are as follows:-

- Travel on irregular roads, travel in speeding vehicles
- Wearing of red clothes
- Sitting on hard and irregular surface
- Intercourse, smoking, narcotic drugs, wine or sedatives.

- Sleeping in supine position, lest the cord twists around the neck.
- Taking fish in large quantity,
- Guru(heavy), Tikshna(spicy), Ushna (hot)Diet.
- Holding of natural urges
- Excessive exercise
- Predominant use of one taste in large quantity. If she takes:-
- Sweet Baby will be fat and may develop diabetes.
- Sour Skin diseases, diseases of eyes and allergies.
- *Salty* Hair become white early, graying hairs, wrinkles on the skin.
- Pungent Weak and may cause infertility.
- *Bitter* Weak and dry.

The pregnant women were supervised to take most of the above diet and other regimen to ensure anemia free, pains free and enjoyable pregnancy. Most of the women also had normal, trouble free deliveries.

Botanical names of the herbs used in the paper:

Jeshtamadhu Glycyrhiza glabra Lilium polyphyllum Ksheerakakoli Devdaru Cedrus deodora Manjishta Rubia cordifolia Shatavari Asperagus racemosa Be1 Aegle marmelos Withania somnifera Aswagandha Nagakesar Mesua ferrea Vrikshadani Dendrophthoe falcata Callicarpa macrophylla Priyangu Sariva Hemedesmus indicus Pluchea lanceolata Rasna Bharangi Clerodendron serratum Zingiber officinalis Shunti Musta Cyperus rotundus Bala Sida cordifolia Mashaparni Phaseolus sublobatus Prsnaparni Desmodium gangeticum Kantakari Solanum xanthocarpum Ksheeri trees Ficus religiosa

Ficus religiosa
Ficus benghalensis
Ficus racemosa
Ficus glomerata

Atibala - Abutilon indicum Ksheeravidari - Ipomoea mauritiana

Gairik - Red ochre

Diet and regimen during pregnancy

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ABSTRACT

To rely on Ayurveda is the best way to ensure a safe and natural childbirth. Ayurveda understands all the factors, which bring about a hazard-free childbirth. By following a regulated diet and regimen, the pregnant mother is prepared for a natural delivery. By helping nature to take its course, women enjoy a risk-free childbirth. This paper provides a broad view of the diet and regimen during pregnancy

Throughout the period of pregnancy, Ayurveda advises the mother to follow a specific diet and regimen designed appropriately to take care of the requirement and needs of the pregnant woman. Generally the pregnant woman is advised to follow a diet, which is predominantly sweet in taste, easy to digest, cooling to the body and liquid in consistency. She is also recommended a month-wise diet regimen throughout the period of pregnancy. The rationale for such a diet is explained below.

The diet of a pregnant mother should satisfy four requirements:

- 1. Diet should nourish the mother during pregnancy
- 2. It should help the growth and development of the
- 3. It should ensure a hazard-free and smooth child birth
- 4. It should help in the secretion of breast milk

Therefore, the food substances recommended for consumption during pregnancy possess qualities, which serve the above objectives. The food recommended during pregnancy is based on the month-wise requirement of the pregnant woman.

During the first three months of pregnancy, the focus is mainly on retaining the foetus. Therefore, a sweet, cooling and easy to digest diet is recommended to the mother. This type of food ensures that the foetus remains stable and there is no bleeding. Bleeding occurring during the first three months can lead to loss of the foetus. This diet ensures that there is no bleeding throughout the entire nine months of pregnancy.

The second phase of the pregnancy, i.e., from the fourth to the seventh month, is when the foetus gains maximum growth and development. The diet during this phase enables this.

During the last phase of pregnancy, the eighth and ninth month, the mother is prepared for undergoing a normal delivery, which is hazard-free and comfortable. The diet and regimen of the mother are designed to make this possible.

FOOD

The pregnant woman's diet is predominantly sweet in taste. Among the six tastes, sweet taste is ideal for a pregnant mother for various reasons. Substances, which are sweet in taste, are usually cooling to the body. Sweet taste helps in the building up and strengthening of all bodily tissues. It prevents emaciation and helps prolong life span. It increases stoutness, helps to unite bones, and improves strength and complexion. It is good for the sense organs, skin, hair and throat. Sweet taste gives a feeling of contentment. It is nourishing and gives stability to the body. It helps in the production of breast milk, mitigates burning sensation in the body and cures thirst and fainting. Sweet taste provides oiliness to the body. Sweet taste is ideal for children since it helps in growth. Substances with sweet taste control Vayu and Pitta. This taste is most important for children, the elderly, the emaciated and the wounded.

As sweet taste possesses all these qualities, it is considered the best for pregnant mothers. Some examples of food and herbs, which are sweet in taste are, milk, ghee, rice, wheat, raisins, dates, banana, jackfruit and sugarcane. Indian asparagus (*Satavari*) and *Vidari*, *Bala*, *yasti* and *gokshura* are some of the herbs, which are sweet in taste and rich in medicinal values.

As sweet taste is the one, which brings about nourishment and growth, it is included in the diet throughout pregnancy. Food which is usually cold in potency (cooling to the body), which is low in sour, salty and pungent tastes, and high in sweet taste ensures that the pregnant mother does not

have premature bleeding. It also protects her from anaemia.

On the contrary, food that is predominantly pungent (chilli hot), astringent and bitter in taste, can cause dryness in the body and obstruct the movement of faeces, urine and flatus. This type of food does not contribute to the nourishment of the mother, growth of the foetus or secretion of breast milk. It also does not help in the easy passage of the foetus during delivery. Foods, which are sour, salty, hot and pungent, make the mother anaemic.

Food and regimen recommended in Ayurveda for a pregnant mother ensures anemia-free pregnancy. Throughout pregnancy, the mother is advised to consume nourishing foods such as milk, ghee, butter, green gram, rice etc. Herbs, which are sweet in taste and cold in potency, are used during this period. In other words, she is advised to avoid food, which is pungent, sour, hot and spicy, which is one of the contributory factors for anemia. Intake of alcohol, day sleep and hard physical labour are forbidden throughout pregnancy. These are also among the causative factors for anemia.

FIRST MONTH

The diet of a pregnant mother should be mostly liquid in consistency. A liquid rice porridge is easy to digest, and helps in eliminating urine and feces. The most important diet recommended for the pregnant woman is milk.

Milk is the best food during pregnancy. Especially during the first month, milk should be consumed in adequate quantity. The pregnant mother should consume that quantity of milk, which she is able to digest without difficulty. It is very important to consume milk right through the nine months of pregnancy. Here let us look at the properties of milk.

MILK: Generally milk is sweet in taste. It is unctuous (it has oiliness). It promotes growth of tissues (Dhatus) and is cooling to the body. Cow's milk especially, improves intelligence, sustains life and acts as a rejuvenator. Milk cures fatigue, excessive thirst and hunger. It is an ideal food for persons suffering from emaciation. It helps in preventing bleeding. It increases strength and breast milk. For these reasons milk is the ideal food for pregnant mothers.

During the first month, milk should be consumed at room temperature. It need not be processed with any medicinal herbs. However, processing milk with the *Bala* (Sida Cordifolia) is useful. Bala is a commonly available herb with very good medicinal properties. Bala is cold in potency (or it is cooling to the body) and sweet in taste. It bestows strength and improves complexion. It is oily or unctuous in nature. Like milk *Bala* also has the property to prevent

bleeding. It is an excellent herb for regulating *Vayu* and for pacifying *Pitta*.

Sweet, cooling (in potency), liquid and wholesome diet twice during the day is the ideal food for a pregnant mother. The woman should consume food in moderate quantity. She should neither eat too much nor eat too little. During this month, rubbing or massaging the body with medicines, oils etc. should be avoided.

SECOND MONTH

During this month, milk is processed with medicinal herbs, which possess sweet taste and are cooling to the body. There are many drugs that can be recommended. Some of the commonly available drugs, usually prescribed are *Bala*, *Satavari*, *Yashti*, *Vidari* etc. These herbs are boiled along with water and milk till the water evaporates and given to the woman. Food during this month should be (preferably) liquid in consistency.

THIRD MONTH

Honey mixed with milk (at room temperature) and ghee is a drink recommended for pregnant mothers in the 3rd month. This kind of food helps the woman to fight nausea and vomiting which are the most obvious and common symptoms in the early part of pregnancy. Some women suffer from this a great deal. It usually troubles them from around the third month. The diet during this month helps them address this problem. Honey possesses the property of preventing vomiting. Rice porridge with milk is the recommended diet for this month.

Honey is a highly medicinal substance. It improves vision, relieves thirst and prevents bleeding (premature bleeding in case of pregnancy) as well as vomiting. Honey is also useful in case of cough, respiratory problems and diarrhea. It is important to note that wherever honey is used, it is to be added to the drink at room temperature.

There are many preparations, which can be included in the diet, especially for women who suffer from severe bouts of vomiting. For example:

- Paste of Daniya (*dhanyaka*) with rice-wash added with sugar is good for controlling vomiting during pregnancy.
- A drink made with the powder of popped paddy (*Laaja*) mixed with honey and sugar is very good for preventing nausea and vomiting.
- Pulp of *Bilva* fruit mixed with the water of popped paddy relieves vomiting during pregnancy.
- A soup made of green gram mixed with the seeds of pomegranate, salt and *ghee* relieves vomiting.

- A soup made of goat's meat, without salt, soured with pomegranate and mixed with spices that are appetizing, cures vomiting, especially vomiting caused by the aggravation of *Vayu*.
- Rice wash mixed with sugar, honey, powder of popped paddy, made tasty by adding spices such as cardamom, cinnamon and cloves, is especially effective in treating vomiting caused by the aggravation of Pitta.
- A decoction of tender leaves of mango and Jamun mixed with honey is good for vomiting caused by an aggravation of Kapha (phlegm).

During the first three months of pregnancy, extreme care is taken to prevent bleeding. From the fourth to the seventh month, the emphasis shifts to growth and development of the foetus.

FOURTH MONTH

By this month, all body parts are fully manifested. The food for this month includes butter extracted directly from milk. (This is called *Ksheera Navanitam – Ksheera* is milk and *Navanitam* is butter.) This butter should be taken along with milk. The quantity of butter can be about 12 grams.

Butter extracted from milk is best among oily, fatty substances for pregnant mothers. It is sweet in taste and very cold (cooling) in potency. It has the property of preventing bleeding during pregnancy. Butter improves strength, digestion and complexion. It helps cure cough, consumption, piles and disorders of *Vata*, *Pitta* and blood. It is very good for improving eyesight. During pregnancy it is an ideal food and it helps to create softness of body parts. Among the women of rural Tamilnadu, consuming butter with warm rice-water (the supernatant water while boiling rice) is a practice, which is widely prevalent even to this day.

In the fourth month, soup made from meat is a recommended diet. The meat should be free of fat. In general, use of meat soup during pregnancy is recommended in specific months and regular and continuous use is however discouraged. During pregnancy, food that is light (easy to digest) is preferred. Regular intake of meat can result in increase in the size of the foetus. The foetus should be neither too big nor too small. This can be achieved if the diet of the mother is managed carefully. Meat soup in the fourth month is aimed at improving the growth of the foetus.

Meat possesses many good properties. Meat in general, is the best food for controlling the *Vayu* in the body. Meat soup bestows stoutness, strength and nourishment to the body. It also gives contentment (*Preenanam*). It is good for improving vision and is an aphrodisiac. Meat in general, is heavy to digest. Properties of different meats differ slightly from one

another. Among the meats, which are commonly available in the market, soup of goat's meat is preferable. Goat's meat prepared as a fat-free soup is easy to digest. It does not aggravate any dosha in the body. It gives stoutness to the body.

FIFTH MONTH

- Ghee should be added to milk gruel and consumed
- Porridge with milk and rice
- Light and easy to digest meat soup

Like milk, ghee is a very important diet for women throughout pregnancy. Ghee is a substance with numerous medicinal qualities. There is no other substance that can be compared with ghee in its qualities. Ghee possesses a very special property, which is that it enhances intellect, memory and other mental faculties. Even though it is a fat, it improves the power of digestion, unlike other fats. Ghee increases life span and fertility. It also improves sight, voice and complexion. It is a good tonic for children and the elderly. It gives softness to the body. Ghee is also an ideal tonic for persons suffering from emaciation, injuries and wounds from weapons and fire. For disorders caused by *Vata* and *Pitta*, ghee is an ideal medicine. It is also used as a medicine in the treatment of poisons, insanity, and consumption and in certain kinds of fevers. Ghee is the best among all fatty substances. It is cooling to the body and the best tonic for retaining youthfulness. It is capable of giving thousands of beneficial effects if it is processed in different ways along with herbs. Ghee made from butter which is extracted from milk, is ideal for pregnant women as it also helps in preventing bleeding.

SIXTH MONTH

- Watery *kanji* (rice or wheat gruel) preparations
- Gokshura, processed in ghee and added to Kanji (gruel)
- Ghee (made from butter derived from milk) processed with sweet herbs

Gokshura is a commonly found small thorny herb and it is found all over India. These thorns have high medicinal value and are particularly useful during pregnancy. Gokshura is cooling and strengthening to the body. It is sweet in taste and helps in improving digestion. One very important property of Gokshura is that it is an excellent herb in all problems related to the urinary system. It cleanses the urinary bladder, removes urinary stones, controls diabetes and relieves difficulty in urination. It is nourishing to the body and is an aphrodisiac. It is useful in treating respiratory problems, cough, piles and heart disease. It is useful in controlling aggravated Vayu in the body. A handful of Gokshura can be added to two glasses of water and boiled down to a quarter glass. This decoction is strained and added to the Kanji. Ghee (prepared from butter

extracted from milk) is added to this gruel and the pregnant woman can adopt this simple diet during this month. This gruel can be consumed twice daily if possible. By this, the flow of urine becomes free and unobstructed. This also prevents swelling in the feet of the pregnant mother. This diet is cooling, nourishing and strengthening for the mother. It helps in regulating *Vayu* during pregnancy. Diet during the sixth month also includes ghee processed with sweet herbs.

SEVENTH MONTH

By now all parts of the foetus are fully developed and the foetus is nourished well. The regimen for the seventh month is the same as that of the sixth. Herb, which is specially recommended for this month, is *Vidari*. Ghee processed with *Vidari* is a valuable supplement in this month. *Vidari* abounds in medicinal properties ideal for pregnant mothers.

Vidari is sweet in taste and cold in potency. It is oily, stoutening and strengthening to the body. It is diuretic in action. For secreting breast milk *Vidari* is an ideal herb. It improves voice, complexion and prolongs life. *Vidari* is rejuvenator and improves fertility. It controls burning sensation, reduces aggravated *vata* and *pitta* and is good for blood disorders. Dried pieces of *Vidari* are available in the market, which can be used for medicinal purposes.

During the seventh month, a pregnant woman may experience certain discomfort. She may experience itching or burning sensation in the body. Many mistake this condition to be some allergic reaction or result of some insect bites. Due to the pressure of the growing foetus, the three doshas vata, pitta and kapha get pushed up the chest causing itching and burning of the body. During this time the woman should refrain from scratching and damaging the skin. If the itching is very severe, kneading and massaging with mild friction may be done. The chest and abdomen and wherever she experiences itching, paste of sandal wood or sandalwood paste along with usheera (khas in Hindi and vettiver in Tamil) can be applied over her chest, abdomen and thighs for relief. She should consume food in small quantity, avoiding salt and oil or add salt and oil in small quantities. She should also drink water in small quantities after consuming food. Food should be sweet in taste, easy to digest and that which pacifies vata.

EIGHTH & NINTH MONTH

The main thrust of the prescribed diet and regimen of these two months is to prepare the mother towards the forthcoming delivery. During the eighth month the ideal food for the pregnant woman is thin gruel mixed with milk and ghee. This helps the woman to keep good health while also nourishing the foetus. During the ninth month, food mixed with ghee and meat soup or thick gruel mixed with large quantities of fat is

ideal for the woman. This gives her the health and strength to withstand the delivery.

From the ninth month onwards, the pregnant woman should always apply oil on the body and never remain without it. Cotton soaked in oil is placed in the vaginal area to make the birth canal oily, soft and flexible. This practice of placing cotton soaked in oil in the vagina was very much in vogue in the villages of Tamilnadu until recently. Women were actively discouraged from following this practice by modern medical practioners on the ground that it leads to infection!

During the ninth month, a medicated oil enema is administered to the pregnant woman. By this, feacal matter is eliminated and this also prepares the woman towards childbirth. By the use of oil tampon and oil enema and constant application of oil on the body, the birth canal and perineum become soft and stretched paper thin during birth without tearing.

After delivery too the mother is recommended a diet and regimen. Her body is massaged with oil, sprinkled with hot water and her stomach is tied with a cloth. This prevents air (vayu) from occupying the space left behind by the foetus. She is given medicines immediately after this, which helps to expel the dirt and clean the uterus. Initially for a week she is maintained on a light diet. She is administered *lehyams* and *arishtams* to improve health and secretion of milk. After a week or ten days a large variety of food is introduced in her diet. All this helps the mother to recover quickly her lost strength and vitality.

To understand and value the strengths of the Ayurveda, the modern mind has to unlearn some of the biases that inhibit the total acceptance of the efficacy and safety of the traditional system. Also it is time to review the role of Ayurveda in public health care facilities in all MCH programs and policies. Such a policy reform will reshape the future of health care in India.

Botanical names for Herbs mentioned:

Bala - Sida cordifolia
Bilva - Aegle marmelos
Dhanyaka - Coriandrum sativum
Gokshura - Tribulus terrestris
Laaja Puffed rice

Sariba — Hemidesmus indicus
Shatavari — Asparagus racemosus
Usheera — Vetiveria zizanoides
Vidari — Ipomoea digitata
Yashti — Glycyrrhiza glabra

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Maternal care through mainstreaming Ayurvedic approach

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ABSTRACT

Reviving and re establishing the practices which were prevalent in India along with some orientation towards Ayurvedic approaches shall be a suitable answer to the burning issues of women' health. Mainstreaming the Ayurvedic practices in women health care appears to be the most effective remedial measure to lower MMR and promote maternal health. The present paper is a narrative of exemplary practices in the management of the most important phases like puberty, pregnancy and post natal care in accordance with Ayurveda

WOMEN IN MODERN INDIA

The health status of a country is determined by the status of women and children's health of that country. They are perennially vulnerable to health problems. Women's health is a low priority area in India due to lack of education, ignorance, gender discrimination against girls and women, inadequate care and management during reproductive period as well as poor socio economic status. This is a grim story of the country, which has a great heritage of health practices, and women, by and large, have been the carrier and propagators of this heritage within the family or outside it. These health practices have their roots in the most ancient medical system of the world Ayurveda. The principles of this medical science are relevant even today. It is the need of the hour to re establish these practices. To a certain extent this needs empowering women in addressing their health needs. It is also evident that in spite of implementing various programs related to women's health, the results are not very encouraging. The need of the

hour is to revive and re-establish the health practices, which were prevalent in the Indian society. These practices (founded on strong theoretical foundations of Ayurveda) are safe, cost effective and relevant in management of the most important phases like puberty, pregnancy, birth and postnatal care.

India accounts for 20 percent of the world's maternal deaths, with a woman dying every five minutes. The questions that follow this finding are-"Why is the Indian rate six times worse than China's, eight times worse than Cuba's, whose people have been living under an embargo for some decades? And why is it 14 times worse than Chile's?" According to U.N. reports, more women in India die during pregnancy or childbirth than in any other country in the world. India needs to improve its public health system to cut the rate of maternal mortality. There can be many reasons and excuses and explanations for this. Still this bitter fact needs to be changed. Though the government has taken steps in this regard (schemes like Janani Suraksha Yojana and other programs like safe motherhood etc) still the mortality rate is alarming in India. An estimated 300 million women today - or a quarter of the women in the developing world - have sustained problems in pregnancy and childbirth that have profoundly affected their lives. Statistically, while a woman who gives birth in a developing country faces as high as a 1 in 13 chance of dying, in industrialized countries that risk falls to 1 in 4,100. It is estimated that 515,000 women die every year as a result of pregnancy and childbirth. More than 99 per cent of these deaths occur in the developing world. While these facts and figures seems quite alarming, the UNICEF reports show the variation in maternal mortality ratios between the developed and developing world, which indicates that with proper attention and investment, woman's lives can be saved. Studies in this regard indicate that women continue to die during pregnancy, during birth and immediately after childbirth mainly because of low or negligible access to healthcare services. Ignorant to their rights to health care, powerless due to poverty and lack of education, their ability to pursue information that would empower them to make the best decisions on childbearing, health and nutrition remains compromised. A mother's death is especially harsh on her surviving children. A child's chance of survival drops dramatically when deprived of a mother's care.

These figures and facts can be changed with proper awareness, education, skill full utilization of the available resources, proper monitoring, accessibility for good nutritious food as well as the safe and effective medicines during pregnancy care, child birth and at postnatal period. So far this has not happened despite much efforts in this direction. It is my serious contention that we need to look at what Ayurveda has to offer to make a world of difference to the maternal health care.

TRADITIONAL INDIA

It appears that from the beginning Indian women had no access to health care and were not able to make decisions. This may be true in certain instances. But in ancient India, there was altogether a different picture which shows that the women in the community were the caretaker of the family, themselves as well as the community. This knowledge of healthcare tradition was given to the generations that followed. Women of ancient India were capable of looking after themselves during pregnancy, delivery and child rearing too.

The practices we come across, recorded so far, all have their source in the ancient medical science of Ayurveda.

Ayurveda can provide the life cycle approach in health care for women. The preceptors of Ayurveda had very well appreciated the necessity of women health in the maintenance of a health community. While realizing the importance of women's role played in propagation and the uplifting of the society, the emphasis on promoting health of the women by all means was encouraged. This approach could be seen in the reference from *Ashtanga Sangraha* written by *Acharya Vagbhata*.

Stree hi mulamapathyaanaam stree hi rakshathi rakshitha | sarvashramanaam prathamam gruhasthatvam anindhitham | thikshnairapi kriya yogaih striyam yathnena palayeth ||

This means that "the woman is the root cause for progeny and it is the *grihasthashrama* (one's life in a family) that takes care of the other (stages of life) too. The woman plays the key role in this *ashrama*. Hence the health of the woman should be protected by all means. If woman is protected in turn she will protect the whole community."

PREVALENT HEALTHCARE PRACTICES IN DIFFERENT LIFE STAGES

Excluding the phase of child hood that may require similar care for both the boy and girl child, from the time of menarche, the female is to be cared for with special regimen during various stages of life.

If we observe the practices prevalent during puberty, it can be noted that every special food delicacies the girl child gets are aimed at enhancing the growth and development of the reproductive system in specific and the whole body in general.

Let us look at the region of Karnataka (other regions have same or different ingredient to serve the same purpose). The girl is given the combination of fried sesame(*til*) seeds and jaggery with good quantity of *ghee*(clarified butter). Sesame is said to help in *garbhashaya shodhana* (cleansing the uterus) in the sense that it helps in proper establishment of menstruation and clear flow without pain being experienced by the girl. Sesame is also said to have the property of weight promotion (*Brumhana*), which is essential during this phase.

Similarly we find the practice of giving the cooked flour of *methika*(fenugreek seeds) and little rice flour with salt and ghee. Fenugreek is rich in proteins and possesses the property of weight promotion. It relieves congestion in the pelvic region and removes associated inflammation. It also promotes good physical growth in the girl, when given for three months.

Another food preparation by name *Antina unde* is given to the girls after menarche, during pregnancy, and after delivery. Dates form the main ingredients in this preparation. Dates act as haemostatic thus prevent excess bleeding either during menstruation, pregnancy or after labour. Dates are also known to increase weight, enhance energy and improve the immunity (*Balya*). All these activities are required during this period. Another ingredient is resins(grapes), which have calming effect; promote weight, increase energy, and act as mild laxative. Similarly gum/ Babbul gum (sourced from Acacia Arabica tree) is another ingredient in the above food preparation. It is haemostatic and also prevents excess bleeding.

On analysis, it is found that every ingredient in this preparation has very appropriate pharmacological activity that is essential during this phase of life. Depending upon the region, community, available sources, there are numerous such examples of dietetic practices that are based on Ayurveda principles. The practice of providing a special extra quantity and quality of food, which also have some pharmacological activities, act like preventive, promotive and curative measures.

Though under Kishori Shakti initiative there are many programmes organized, the teenage girls are normally neglected. The focus is mainly on sex education rather than on nutritional needs of this age group. Because they are in the phase of growth spurt, their deficiencies are often masked and overlooked. Like the supplementations in the form of weaning food etc. are supplied it is essential to provide healthy, growth promoting and energy promoting natural food compositions to this group of children too. Given the fact, that there are more underage pregnancies in India than one can comfortably count, despite laws prohibiting such marriages, there is a need for nutritional counseling for this age group.

Few examples of such supplements:-

Standard combination that can serve as nutritional supplement as well as prophylactic medicament is given here

Formula One

Fenugreek seeds powder-50gms,

Roasted Green gram flour 100gms

Roasted Black gram flour-100gms,

Roasted Sesamum seeds flour -50gms along with jaggary mixture or a sweet can be prepared by adding a small quantity of cow's Ghee.

Formula Two

A time tested combination is given here:-

- Shathavari (Asparagus racemosus tubers)
 churna 100gms
- Tila(sesemum)churna

-50gms

- Ashvagandha (Withania somnifera roots)
 churna -100gms
- Methika (Femugreek seeds) churna
 -50gms
- Pippali (Powder of dried fruits of Long Pepper)

 churna 25gms

Each of the above mentioned ingredients are powdered separately and mixed well. This mixture is to be administered with jaggery and milk. Even the jaggery may be added to make a ready to use mixture.

After the menarche, the girl should be motivated to have this mixture that will take care of her total health.

Shathavari Rasayana, shathavari ghrita, or shathavari churna along with milk shall be the choicest drug that fulfills all the requisite activities. Shatavari- (Asperagus racemosus) in any of the above forms can be made available for distribution to the adolescent girls or after menarche under the national programme.

GARBIHINI CHARYA- ANTE NATAL CARE

The pregnancy care in Ayurveda has a very special emphasis on the principles of care (as we will see later in this paper) that are often not considered important enough in modern medicine. Holistic approach of Ayurveda is more than replacement of vitamins or mineral deficiencies. Ayurveda stresses the responsibility of the physician from the date of confirmation of pregnancy. The intensity of the involvement of the physician or of the wise woman (who is taking care of the pregnant woman) increases as the pregnancy progresses and towards the date of delivery. This is because as the pregnancy advances anything unpredictable can happen. This is indicated by Kashyapa in his work Kashyapa samhita which is the first written book dedicated exclusively for paediatrics.

'Garbhath prabhruthi suthayam bhishag bhavathi karyavan| katham thu kale sapurne suyedhityaparaparam | prapthe prasavakale cha bhayamuthpadhyathe yathaha asminnekasthitho padho bhavedhanyo yamakshaye.'

A monthly dietetic regimen is advocated in Ayurveda. Milk and milk derivatives (butter and ghee) are used along with honey. These fulfill the required nutrition to the growing fetus. Ayurveda considers that Milk is the total food, ghee has the virtues to help in the formation of tissues especially the nervous tissue and butter in addition to the lipid requirement supplies adequate amount of vitamin A' too.

The following table shows how the monthly regimen should be during pregnancy care. This should be followed in addition to the compatible food the woman practiced earlier. This regimen will supplement the nutritional requirement and also helps in promoting total health to the mother and prevents many complications occurring frequently during pregnancy period.

MONTHLY DIETETIC REGIMEN

During the first trimester, which is the formative stage, use of lipid-based medicament is essential. This is the reason why the ancient Indian physicians have encouraged the use of medicinal plants processed in ghee. Ashvagandha ghrita made out of the roots of Withania somnifera processed in milk and ghee is the choicest of all the ghee preparations. One teaspoonful of this *ghrita* is to be given twice daily during the first trimester. This will ensure the proper formation of all the tissues/organs in the foetus. As Withania somnifera is a proven for its mild anxiolytic activity, it will be able to keep the woman calm and cool and thus making the pregnancy period an enjoyable and acceptable experience. Withania somnifera is also dhathuvardhana (builds tissues) which is essential during this phase of pregnancy. Ashvagandha and ghritha (ghee)both are immuno modulators and improve the immunity both in the mother and the foetus.

Ashvagandha is vata hara (pacifies vayu) and since vata is the most important principle that governs the whole event of pregnancy and child birth, can be maintained in its normal balanced status.

The second trimester is featured with the further development and growth of the fetus. The mother who might have suffered form minor problems like nausea and vomiting needs good nutrition. During this phase there needs to be more focus on the overall health of the mother. The growth of fetus and the health of the mother can by assessed through many modes. Most common being the weight gain by the mother. Total weight gain during pregnancy is 12-14 kgs. During the second trimester the use of *Rasa* and *Raktavardhaka* foods and medicaments are recommended. Use of *kushmanada avalaehya*, mineral preparations like *mandura bhasma*, *navayasa louha*, *garbhapala rasa*, *abhrak bhasma*, *pravala* or *moukthika bhasma* are to be used.

Third trimester sees the fetus growing in all vital aspects. This is the phase where the women are anxious, have many questions, often develop aches and pains and digestive disturbances. During this phase one needs to focus on preparing the woman mentally for the delivery related stress etc. Along with the health of the mother, specific areas require more attention like -Birth canal, *Garbhashaya*-the Uterus and all the dietary do's and don'ts. Also the breasts need to be nourished for an adequate quantity of lactation after delivery.

To achieve all these requirements Ayurveda has unique dietetic and therapeutic modules. The *rasaayana* therapy that nourishes all the *dhathus* are administered during this phase. Most important is the use of *Shathavari* (Asparagus racemosa) in various forms like powder, gritha, lehya and granules. Use of *shilajeet* (Shilajita Mumiyo); prevents the common occurrence of edema in feet and legs, prevents the unnecessary addition of weight and promotes good sleep. In this trimester, the adaptation of *basthikarma* (transe rectal administration of medicament) and yoni *tail pichudharana*(transe vaginal oil plug) are the special therapies adapted during 8th month of pregnancy.

OBSERVATIONAL STUDIES

Garbhini charya (Ante Natal care) in its totality is being adapted by the author since late seventies at Tribhuvan Clinic Bangalore. To evaluate this, **forty** Antenatal cases with out high risk factors were registered for the study. This was an observational single blind clinical study carried out during 1984-1986 at Tribhuvan Medicare Center, Bangalore. All the registered volunteers were described about the method and the after obtaining the consent were subjected to the similar management.

The treatment schedule-

- * Garbha pala rasa-one tab twice daily with milk through out pregnancy.
- * Phalagrutha-one teaspoon once a day followed by a glass of milk during the first trimester.
- * *Kshirabala tail abhyanga* (light massage) from third trimester till term.
- * Matra basthi with Names of medicines and procedures used in Ayurvedic practice Kalyanaka gritta. 60ml of ghrita per day for seven days during 8th month of pregnancy.
- * Yoni tail pichu (vaginal oil plug) administered for seven days during the course of matrabasthi itself.

Note: volunteers received no other medication during whole of the period.

The results were very encouraging. All the phases of pregnancy were incidence free. Commonly observed simple deviations like indigestion, aches and pains were not observed.

All the cases had onset of labour pain in the appropriate time. Two cases needed caesarian section because of contracted pelvis. The rest had normal labour. The laceration in the birth canal healed early.

The babies born weighed between 3-3.5kgs. No child had low birth weight. All were well matured.

Some of the findings which were made during the course of the above observational study are as follows:-

Tribulus terristrus fruits powder boiled with milk was given during third trimester. This plant has the pharmacological activities like brumhana-weight promoting, muthrala- mild diuretic, shothagna-anti inflammatory, vedana shamaka-analgesic etc. Also can act as raktha pitta hara-haemostatic and prevent hemorrhages. Above all it is an effective rasayana- having adaptogenic activity.

Another study was conducted in the Department of Post Graduate studies in Dravyaguna, Govt. Ayurveda Medical College Bangalore. This was a single blind comparative clinical study carried in collaboration at Vanivilas Hospital Bangalore.

Two groups were made among the selected antenatal cases. Group-I received the conventional treatment and the group II the trial group received the *Gokshura* granules with milk. Though the text advocate the *ksheerapaka* (milk decoction) the preparation cannot be standardized and because of its very short shelf life, *gokshura* granules were selected as the dosage form. *Gokshura* with milk was administered to the pregnant women during third trimester with out supplementing with any other medicaments. This study revealed the effect of this drug in maintaining pregnancy with no complications whatsoever along with appreciable foetal maturity. All the children that had born showed good birth weight. This is part of author's practice since three decades.

Matrabasti During the eighth month, matrabasti (Rectal administration of ghee) is advocated. It is a well-established fact that the absorption of medicine is about 80% in the rectum. It is also known that if the medicament is in the lipid medium, absorption is faster. A course of matrabasti with ashvagandha gritha or shathavari grutha, or kushmanda grutha will take care of the whole body. The passage of delivery of the child is softened. The muscle strength improves, provides energy and promotes good growth to the fetus. It prevents local congestion, improves digestion, relieves constipation, and promotes good sleep. The stress endurance capacity will be improved.

Tailabhyanga -Oil massage from third moth of pregnancy till the delivery is beneficial. It prevents undue exhaustion and takes care of aches and pains. It enhances energy and improves immunity. It builds up physical strength and stamina, improves muscle bulk and strength, improves the skin texture and prevents the stretch marks. Generally the oil

used in the locality can be used like *til* or sesame oil, caster oil, coconut oil, etc. Oil processed with herbs like *ksheerbala taila, masha taila* can also be used.

Many other plant and mineral formulations are used during antenatal care. Each one has its own merits. There are plenty of substances for the physician to utilize while monitoring the antenatal case. Most of these measures have their proven efficacy. Some of these practices and prescriptions can be brought into the main stream in order to achieve total maternal health and to prevent maternal as well as fetal mortality. Used judiciously in the training of the traditional birth attendants, the Ayurvedic practices will revitalize the traditional knowledge base of TBAs who constitute the backbone of the public health delivery system for both mother and child.

Recommendations

- As the malnourished children get their food supplement from anganavadi, even the pregnant mother should be provided with the milk, ghee, butter, and honey through the pregnancy.
- Amalaki-Emblica officinais, Kushmand- ashgourd or white pumpkin, leaves of Bringaraja-or Eclipta alba, leaves of agasthya- or Sesbania grandiflora as food and also as medicament during pregnancy should be given.
- Supply of medicated oil for regular massage should be made available.
- Simple combination of herbs that can take care whole of pregnancy should be available.
- The awareness about the use of this facility should be provided.
- Door services should be provided rather than women coming to the centers.
- Advice needs to be given on a regular basis on the life style that comprises of Ahara-Food and Nutrition, viharathe physical activity that keeps her physically fit with out causing undue burden, and Vichara-the mental activities that keep her cool, balanced, joyful though out the pregnancy. Each pregnant mother is unique and her life style needs to be monitored properly through timely guidance.

If this method is adapted properly without compromising with the quality of services provided to this group, the alarming statistical data of maternal death and disability can be changed. The pregnancy related complications could be prevented totally or minimized resulting in normal deliveries.

POSTNATAL PERIOD-(SUTIKAVASTHA)

Most deaths after delivery are preventable if proper care is available to the women after birth. Ayurveda considers this phase equally critical as the pregnancy phase. Many complications can arise leading to life long ill health and some times death also.

The woman who had undergone the stress and strain of the labour needs some time to recover completely. Even after birth, the child is dependent on the mother, hence increasing her responsibility to nourish herself as well as nurturing the child too.

In order to bring the woman to her pre pregnancy health, she needs to follow certain regimen. This is composed of again Ahara-the food and nutrition, Vihara-the physical activities, and Vichara-the mental activities.

Ahara-Food and nutrition.

First 3 to 5 days light food in less quantity is given which can promote energy. The practice of using spices like ginger and garlic help in proper flow of lochia and helps uterus to return to its original size. These also act as galactogagues (enhancing breast milk production). Thus this is seen as a very common practice in many cultures of our country and this can be encouraged. Greens like fennel (*shathapushpa*) and *jivanthi* (Leptadenia reticulata) can be used as a curry in daily diet. Milk, ghee and butter are again good sources of nutrition and should be encouraged to be consumed in accordance with the power of digestion and the physical activity.

Vihara – the physical activities

In case of normal deliveries the woman should be encouraged to indulge in simple physical exercises especially those that would tone up the abdominal muscles. Fumigating the room with *guggulu*, *neem ghee* and other materials keeps the atmosphere pure and these ingredients do not cause any harm to either the mother or the infant. Attention should be given to the excretory functions like defectaion and micturition etc. At this juncture the suppression of the natural urges as well as initiation of the same can become cause for various diseases.

Vichara-the mental activities

During this period many a times the women can suffer from hysteria and depressions. Keeping her happy and nourished can prevent any psychological trauma.

Tailabhyanga-oil massage

Oil massage with *Narayana taila* and *ksheerabalataila* is beneficial after delivery. At least for three months oil massage should be encouraged.

INTERNAL MEDICATION

Though this is not a stage of illness, but there is an increased need of supplementation for food and special nutrition. After delivery, for three months, women should be given *shathavari rasayana* one teaspoonful twice daily followed by milk. This will enhance lactation and also helps in overall well being of the woman. Alternatively, one can give half teaspoonful of *Shathavari churna* twice daily with milk Proper monitoring with suitable life style shall bring back the sound health in women.

Given the strengths of Ayurveda knowledge in maternal and child health care, if we implement these Ayurvedic principle based practices through the public health services, we can positively ensure a safe motherhood.

$List \, of \, Ayurvedic \, Formulations \, Mentioned: \,$

Shathavari rasayana
Shathavari ghrita
Shathavari churna
Kushmanada avalaehya
mandura bhasma
navayasa louha
garbhapala rasa
abhrak bhasma
pravala or moukthika bhasma
kshirabala tail abhyanga
kalyanaka gritta
ashvagandha gritha
shathavari grutha
kushmanda grutha