RESEARCH NOTE

THE ROLE OF MASSAGE IN SOUTH ASIA: CHILD HEALTH AND DEVELOPMENT.

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Abstract—Massage, together with breast-feeding, are the two fundamental nurturing practices of women in south Asia. In Mithila women are expected to massage their infants daily. If they do not, they lay themselves open to censure. Implicit in massage is the idea that a child's health is preserved by fostering its strength and invulnerability. Massage 'works' by instilling fearlessness, hardening bone structure, enhancing movement and limb coordination, and increasing weight. These practices, in turn, are premised on the idea that between birth and weaning the infant is highly impressionable such that its identity can be shaped by the women who nurture it.

Key words—south Asia, child health, child development, massage

From the time of their birth until late toddlerhood most babies in south Asia spend at least part of their day in the courtyard of their homes or upon the rooftop being massaged by the women of the household. By the term massage we refer to rubbing the body with oil or some other ointment and to warming one's hands over a fire and then pressing them, palms open, to the body such that the warmth is transferred to the other person. Both these actions, but especially the former, are structured by a variety of purposes: to clean, beautify, strengthen, limber up and fatten the baby as well as to instill in it positive mental-emotional qualities. Massage is also an important means of healing a sick, weakly child. The purpose of our research note is to recount the beliefs and practices connected with massage and to consider their implications for child development. Our material comes from Mithila, a country of some 20 million people living in northern Bihar, India and the eastern Tarai of Nepal. We believe our observations to be roughly true for other rural and urban peoples of the Ganges basin.

MAITHIL PERCEPTIONS OF THE NEONATE

Since the aim of baby massage is to modify the physical and moral identity of the baby, the practice only makes sense when seen in the light of Maithil notions of the neonate. These are somewhat at variance with European ones. Nature and nurture are seen in the West as the two determinants of a child's identity. These determinants focus medical and psychological attention on two starting points in life: conception when the genetic make-up is fixed and birth when the infant starts to develop his personhood in the context of his social environment. In Mithila conception and birth are also known as beginnings of life, yet the local ideas which inform massage suggest that these are not absolute beginnings. The neonate's physical identity can still be formed postpartum; and in some respects one can speak of antenatal personhood.

When a woman realizes that she has conceived, she refers to the foetus as 'flesh' (manis) in her stomach-womb (peh). From about the fifth month the foetus becomes recognizably human and her pregnancy becomes public knowledge. It is from this time that family and neighbours speak of there being a 'child' in the mother's womb, and this child is thought to possess a mind-soul (man) such that it is already a person. When the mother is awake, the child is awake; and when the mother sleeps, the child inside her also sleeps. The child eavesdrops in on its mother's conversations and uses the mother as a vehicle of its desires. The mother's pregnancy cravings are not hers, but those of the infant she carries. Ritual codes confirm that during the fifth month the foetus is endowed with a mind-soul (man); and hence with power of agency. Agency, known even in the west by the native term karma, is taken up in the religious literature in the idea of reincarnation: it is in the fifth month that the wandering soul is reincorporated, ready for its next life. The mother may not be aware of these theological notions, but the sense of foetal agency is implied lingually in the expression 'to take birth'. Unlike in English where the neonate is a passive object to which the mother 'gives birth', in Maithili (and other Indo-Aryan languages) the baby 'takes birth'. The reasoning is somewhat different. In the west childbirth is a painful experience caused by the foetus being expelled from the womb through the birth channel. In Mithila childbirth occurs because the mother comes down with a pain and the foetus, perforce, is involved with its mother's suffering. The child 'takes birth' in order to escape this pain. Thus it is not birth which creates the pain, but pain which leads to birth. The implication of these various ideas is that prior to birth the foetus is a mental-emotional nexus, endowed with personhood.
Although birth marks the physical separation of mother and child (it is the awareness of this separation that causes the infant to cry at birth), the mother is still linked to her child as his source of nourishment. Prior to birth she nourishes the child with the blood in her stomach-womb; after birth the blood turns to milk and she nourishes the child with the milk in her breasts. The close bond between mother and child is affirmed in the belief that the mother's moral, mental and physical qualities—both positive and negative—continue to be transmitted to the child through the medium of her milk [1]. Hence the baby remains strongly linked to its mother; and it is not until around three years of age, when the child is fully weaned, that it is thought to have knowledge, responsibility and autonomy. Between birth and weaning, however, the infant remains vulnerable, dependent and impressionable. During this period the child's physical, mental and moral character may still be shaped by the women of the courtyard. Massage is one of the ways in which this is done.

**THE ROLE OF MASSAGE IN CHILDBIRTH**

The stomach-womb is thought to be a small, damp place in which the foetus lives, nourished by its mother's blood. As the foetus grows, the living conditions become increasingly cramped and the dampness softens its skin and bones. Moreover, the mother's blood, which accumulates in the womb throughout the pregnancy, renders the baby impure. When the pregnancy comes to term, the newborn baby is in several undesirable conditions. It is cramped, soft, vulnerable and dirty. Much of the massage in the immediate postpartum is to 'unfold', clean and beautify the baby.

The first person to massage the neonate is the untouchable midwife. She is also the first person to come into contact with the baby. The other women of the courtyard do not usually hold the baby until the cord has been cut and the baby cleaned. Midwives may differ in their procedures, but for most babies life begins with a massage. In fact, this initial massage is not called a 'massage', but the neonate must be cleansed and most women thought it better that the midwife rub clean, rather than wash, the newly born baby. The reason for this lies with the notion that pregnancy is a heating experience, due to the gradual accumulation of stale blood in the stomach-womb. Upon birth this blood is expelled, leaving mother and child (it is the awareness of this separation that causes the infant to cry at birth), the mother is still linked to her child as his source of nourishment. Prior to birth she nourishes the child with the blood in her stomach-womb; after birth the blood turns to milk and she nourishes the child with the milk in her breasts. The close bond between mother and child is affirmed in the belief that the mother's moral, mental and physical qualities—both positive and negative—continue to be transmitted to the child through the medium of her milk [1]. Hence the baby remains strongly linked to its mother; and it is not until around three years of age, when the child is fully weaned, that it is thought to have knowledge, responsibility and autonomy. Between birth and weaning, however, the infant remains vulnerable, dependent and impressionable. During this period the child's physical, mental and moral character may still be shaped by the women of the courtyard. Massage is one of the ways in which this is done.

The first person to massage the neonate is the untouchable midwife. She is also the first person to come into contact with the baby. The other women of the courtyard may have a go at the baby. The baby is massaged regularly every day by the women of the courtyard, and afterwards put to 'dry' in the sun for a while. The aim here is largely to warm the baby, but it is also to prevent damage to the skin caused by the vernix caseous (arava) which has not been parboiled, can cause sores if not completely rubbed from the skin. We were told that the midwife may also cleanse the infant of meconium (javar) by rubbing the body with the fine clay (kothvar) scraped from the exterior of the granary bin. We never saw this done, but the practice is consistent with the Hindu practice of cleansing oneself with clay after defecation. It is in this condition, therefore, that the midwife presents the baby to the women in the birth room.

The initial reaction of the women is to comment on the sex of the child and to correct certain physical defects while the neonate remains malleable. A high forehead and a straight nose are marks of beauty for both men and women. If the baby's head has become elongated in squeezing through the birth passage, the women reshape it by pressing their palms against the cranium. Attention is also focussed on the nose. The Tibeto-Burman speaking peoples of the Himalayas are thought unattractive by Maithils because they have 'flat' noses, a fact which Maithil women attribute to their not knowing the art of baby massage. At any rate from the first hours of birth a number of women of the courtyard may have a go at the baby. The midwife may also  cleanse the infant of meconium (javar) by rubbing the body with the fine clay (kothvar) scraped from the exterior of the granary bin. We never saw this done, but the practice is consistent with the Hindu practice of cleansing oneself with clay after defecation. It is in this condition, therefore, that the midwife presents the baby to the women in the birth room.

**THE ROLE OF MASSAGE IN CHILD DEVELOPMENT**

Throughout the first five days after the birth, both mother and child remain inside the birth room with the shutters drawn and the entrance guarded by ritual prophylactics. Throughout this time the infant is neither washed, dressed, nor exposed to wind or sunlight. Rather it is rubbed clean with mustard oil and kept warm by loosely covering it in an old sari. The baby remains in this condition until the sixth day when it is bathed, massaged, dressed and formally presented to various gods and relatives in the ceremony of the 'sixth', called chattifydr. From this time the baby is massaged regularly every day by the women of the courtyard, and afterwards put to 'dry' in the sun for a while. The aim here is largely to strengthen and protect the baby by developing his bone and muscle structure and by instilling positive moral-emotional qualities. It should be noted that although the mother may carry out the massage, this is not always the case. Other women of the courtyard, such as the child's father's brothers' wives and the father's mother, may take on the duty. Thus the positive values being literally rubbed into the child are as much those of the mother as it is of the child's paternal relatives. One need not elaborate the significance of this for a people who trace descent patrilineally.

Because each family has its own traditions, one cannot describe a 'standard' Maithil massage. The features described below, however, extend well beyond the range of the idiosyncratic [3]. The massage begins with the child's mother (or its paternal aunts or paternal grandmother) seated on the ground with legs outstretched and the baby lying on its abdomen across her thighs. The mother dips her fingers into a cup of mustard oil and lets a few drops fall into the baby's left then right ear. This is said by some to clean the ear. Others said that it warmed the ear passage.
Bugs, crawling about the courtyard floor and onto the sleeping baby, would sense the warmth and, finding it uncomfortable, would not enter the ear. Then oil is smeared across the backside of the baby, being heavily rubbed with the heel of the hands. The movement is from the extremities to the torso—the back and the back of the thigh to the buttock (see Fig. 1).

The baby is then turned on its back and placed parallel to and between the mother's legs with its head supported by its mother's ankles and its feet pointing toward the mother's abdomen. First the upper torso is massaged and then the arms. The mother pulls the limbs, stretching them outward, and rubs from the extremities to the centre of the body. (In massage positive qualities are always rubbed into the body from the limbs to the torso; harmful qualities are removed by reversing the direction.) Attention is given to each of the fingers. The mother then turns to the lower part of the body, massaging the legs in the same manner as the arms (see Fig. 2). These actions are thought to 'straighten' the baby and to overcome the cramped postures it developed in the womb.

Then follow a series of stretching movements which resemble yogic exercises and which serve to

Fig. 1. Rubbing in 'good' qualities from the extremities of the body to the torso.
limber up the baby. These start by pulling the baby together on a transversal axis, extending the left arm and right leg and then bringing them together over the torso; and then doing the same with the right arm and the left leg (see Fig. 3). Next the baby's left and right legs are folded over each other as if the baby were sitting cross-legged. The arms are similarly wrapped over each other so that the baby is almost folded into a ball. In this position the baby is sat upright on the mother's lap with one hand supporting the baby's sternum and the other the baby's neck. Next the mother smears an ointment, called ubtan, on the baby's face. This is done especially in the first few weeks postpartum. The unguent is prepared from turmeric root (and sometimes fenugrec) which has been pulverized and mixed with mustard oil to form a paste. The paste is smeared across the baby's face. Some women said that this unguent is an antiseptic, killing any sort of infection which may appear on the neonate's face. This might come from several sources: from the baby having been inadequately cleaned at birth or from the heat which continues to be released from the baby's body after birth and which takes the form of pimples or sores. Other women, however, said that ubtan lightens the complexion of the skin, making the baby more beautiful.

The mother then takes whatever mustard oil remains and pours a liberal amount on top of the
baby's head, which she lightly smears, particularly on the fontanelle. Also some oil is saved for the chest, which is smeared on and around the sternum. Again, these actions are done especially in the first few weeks postpartum. The effect of the mustard oil is said to harden the bone structure, making the child invulnerable to external danger. Should the neonate's fontanelle seem especially weak and depressed, the mother may also apply a paste made from roughly equal measures of cummin, fenugrec, mangurel, camphor and turmeric. The ingredients are dried in the sun, then pulverized and mixed with mustard oil. The resultant paste is then placed in the depression. A datur leaf is then cut in a circular shape, and a small hole is cut in the leaf. The leaf is warmed by a fire and pasted to the fontanelle. The procedure is repeated in the evening and then twice daily until the fontanelle is closed.

Next follow a series of actions which instill fearlessness in the child. The mother, taking the baby by the head and neck, holds it in the air and lightly swings the torso back and forth (Fig. 4). Then the baby is held aloft by the ankles and swung back and forth, upside down (Fig. 5). Finally the baby is cradled in his mother's arms and then tossed about six inches into the air five times. This part of the

![Image](image.png)

**Fig. 3. Enhancing movement and coordination of limbs.**
massage does not start until about ten days postpartum. As the baby grows older, the swings become exaggerated and the height to which the baby is thrown increases to about a foot and a half. All these actions are thought to instill fearlessness. This positive moral-emotional quality is thought central to the development of the child's strength and invulnerability, and thus of its health. Some of our informants, who had obviously given thought to issues of child development, roundly condemned those mothers who control children by playing upon their fears. By instilling Tearfulness, their children would become weak and sickly.

The massage terminates with the infant being protected from the harmful gaze of witches and envious women. The baby is cradled on its mother's lap, and the ubtan paste is washed from its face. Lampblack, which has been prepared in the kitchen, is smeared across the upper and lower eyelids of the right and left eye, and then a dot of lampblack is dabbed on the child's forehead. In the case of a baby boy the dot is to the right of centre and in the case of a baby girl to the left (Fig. 6). Lampblack may also be dabbed on the palms and soles of the neonate, but by the sixth day postpartum the mother has probably bound black thread or black bangles to the baby's
wrist and ankles, which serve the same effect of distracting the envious person's attention, thereby deflecting the 'evil eye' away from the neonate's mouth.

After the bath and massage the baby is put out to 'dry' in the sun for a half hour or more. The baby should not take its nap in strong sunlight, but the mild morning or afternoon sun is thought to be beneficial. This is especially the case in the first few months postpartum, for the baby is still thought to be 'wet' from its time in the womb. This wetness evaporates as perspiration. In adulthood peasants who overly perspire in the sun are thought to have been insufficiently 'dried out' at birth, due to their mothers being overprotective.

### THE ROLE OF MASSAGE IN CHILD HEALTH

Massage is also thought to have important therapeutic benefits. Belief in its efficacy is based on two related ideas. The first is that the skin possesses the capacity to absorb healing substances. By massaging the body with ointments or medicines mixed with oil, the beneficial power of the medicine seeps into the

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*Fig. 5. Instilling fearlessness by swinging the baby upside down.*
skin alongside the hair. Upon reaching the hair follicles, the medicine pervades the surrounding tissue. In order to achieve such an effect the massage should last about 15 min. From the 'flesh', the medicine spreads into the 'fat' and penetrates the bone tissue reaching the marrow in about six days. The second idea which gives therapeutic sense to massage is that the movement of blood gives movement to the body. Stiffness, soreness in the joints and paralysis are thought to be caused by stiffening of the blood. Joints are sore points because they constrict the blood vessels, reducing the flow of blood. As the blood slows down, the joints begin to feel stiff. Massage serves to remove soreness and restore fluidity to the body. Here massage entails, not the rubbing of the skin with an unguent, but the pressing and releasing (sedab) of sore points. The hands may first be warmed by a fire, for the transfer of warmth also loosens the blood and gets it flowing again.

Much illness is understood domestically in terms of the disequilibrium of hot and cold qualities; and in the treatment of such illnesses massage plays an important role. This is especially the case with everyday illnesses that 'go around' the neighbourhood. For coughs and colds mustard oil is effective, for it is said to have heating qualities. These qualities are
enhanced by the addition of other heating substances. Each household has its own recipes, but of common use are: mustard oil mixed with ground nutmeg and cummin; mustard oil mixed with ground asafoetida; and mustard oil steeped in garlic. These preparations are then rubbed on the infant's body. A further recipe, used in the treatment of coughs, entails mixing camphor with ghee and rubbing that on the chest and throat of the infant. The aroma is rather like that of Vicks Vaporub (it should be added that this popular remedy for coughs and colds is marketed by the Indian subsidiary firm as an 'ayurvedic' medicine). By contrast, 'cooling' substances are not generally used in infant massage. A cooling massage can be given, using coconut oil; but we were told that coconut oil should not be used for the daily massage, nor to dress the hair, until the infant has attained two years of age. In the case of fever equilibrium is restored by letting the warmth radiate from the body (e.g. by loosenning or uncovering the child's garments) until body temperature returns to normal.

Massage is also thought to help the child put on weight and thus to make him look 'healthy'. One word which evokes this contented state of healthiness is plump (mo). Plumpness is a symptom of a healthy appetite and a beneficent household. It is attained largely through regular breast-feeding, but it is enhanced by massage. Oil is thought to be a fatty substance which, when absorbed by the skin, adds to the fatty tissue in the body. Should a baby be thin, massage is particularly recommended. Massage is also used to treat dehydration. One case of dehydration (due to the mother's engorged breasts rather than to infantile diarrhea) was treated by massage, with liberal applications of mustard oil up to five times daily.

CONCLUSION

We do not vouch for the bio-medical value of these practices. But for primary health care workers—poised between the medical profession and local people—the promotion of community health depends as much upon their knowledge of the community as it does upon their knowledge of health. Such considerations are especially relevant to child health because for most peoples child birth and development are not 'medical' problems. Instead, infant care remains within the remit of parental competence. One of the contributions which medical anthropology can make to tropical pediatrics is to the exact description of that competence.

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