

MATERNAL AND CHILD HEALTH CARE AMONG THE RURAL HILL KARBIS OF ASSAM, INDIA

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Abstract: The maternal and child health care is one of the most important factors for the development of a society as the future of humankind depends on the sound health of both, without which society cannot sustain properly. The health of the children is related with that of the mother, especially during the pregnancy period that is why utmost care of maternal health is equally important for the sound growth of the child. In Karbi Anglong district, the hill Karbis has its own indigenous way for the care of mother and child. The traditional health seeking behavior of the Karbi tribe is indispensably related to pristine medicare treatment. Presently several changes have percolated in Karbi societies, which encouraged them to adopt modern health care facilities and have also become conscious about the antenatal complications, vaccines and medicare during pregnancy. The present study was carried out to study the conception, birth, care during pregnancy, feeding practices, weaning, restrictions related to food and movement, an indigenous belief system, and modern medicare facilities for mother and child among the hill Karbis of East Karbi Anglong District, Assam, India in a rural context.

Keywords: Birth, Maternal Health, Child Care, Breastfeeding, Weaning.

INTRODUCTION

Pregnancy and childbirth is considered a significant event in all cultures in cross-cultural perspectives. Though it is a universal phenomenon of humanity yet some beliefs and customs vary from culture to culture. The first life-cycle change is associated with birth, and before this major event, human beings experienced the status change of pregnancy. The life cycle begins with conception and it produces pregnancy. The biological facts of conception, pregnancy and the birth process are interpreted differently among various cultures. "Pregnancy is characterized by some physiological and behavioral adaptations that serve to enhance the birth outcome, but there are also cases where these may pose some health challenges. These compromises are to be expected, as the mother's body is now supporting a fetus that has different physiological requirements (and different genes) than she does" (Wiley and Allen, 2009: 161). After birth, each society also has specific ways of raising the child. The birth process greatly influences the newborn's capacities for growth and development. Birth describes a situation where something has commemorates, in human society it is life. This is followed by the care of the newborn both during pregnancy as well as after birth and concept, taboos, beliefs, practices, rituals, etc., related with these two events varies from society to society. The religious taboos and restrictions during the time of pregnancy, restriction on food intake, preferences, and avoidance of pregnant mother as well as her husband are some of the criteria which are observed by the human being in one form or the other. Again, soon after

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the birth of the baby the removal and disposal of the umbilical cord, observance of a period of pollution, taboos and restrictions in participation of social events, indigenous treatment along with modern medical facilities are also other criteria that have great significance as well as varies from one society to another.

Health is an intrinsic part of human life. However, the concept regarding health varies from culture to culture, community to community, and region to region. Health care includes the total effort given to maintain the overall health of the individuals by professionals. The concept of health is integrally related with the healing which generally considered as a field of restoration of the health of the body and mind. The concept of healing varies from culture to culture and there are various ways through which culture influences healing. The World Health Organization (WHO) defines “health is a state of complete physical, mental and social well-being and not merely absence of disease or infirmity” (cited in Park, 2015:14). Maternal health means the health of a woman during pregnancy, childbirth, and the postnatal period which also involves the care of the baby during that period. Maternal and child health refers to the “Promotive, preventive, curative and rehabilitative health care for mother and children” (cited in Park, 2015:523). Health is an outlook of a community and not only an instrument because the health scenario of a community reflects the whole social and cultural condition at that given point of time. The Karbis under study are also much cautious and concerned regarding the health care system. The parturient women who want to have a baby are very conscious about the issues of childbirth. The care of the mother beginning from the time of conception up to delivery ensures the delivery of healthy children and hence is of utmost importance. The parturient mother’s care even in the post-delivery months assumes a lot of importance for the child as the mother only plays a vital role in the growth of the child in the later years. The care, attention, nutrition, movement, toilet training, speech training, along with the impacts of custom, culture, and tradition plays a significant role in the molding of an individual in a holistic way.

The Karbi mothers show total involvement in the care of the child and herself. They believe in both traditional and modern healthcare systems. A child is more delicate than others so utmost care and protection should be taken regarding the health of the child. Health care is important in every phase of life for every individual but the health of the child is of utmost importance. As soon as the child is born all types of care should be provided to adjust to the new environment. Newborn care includes quick and thorough drying of the skin, skin-to-skin touch of the infant and the mother, proper cord-cutting, early initiation of breastfeeding, and exclusive breastfeeding and naval care. If such newborn care is not considered as important then the baby may also die due to unfavorable environmental conditions and improper health care.

Health care of the parturient mother and child is one of the urgent necessities of human society. Feeding practices, weaning, toilet training,

bathing practices, sleeping, etc., are some of the criteria which are considered very significant in the upbringing of the child. An elaborate ethnographic study among the Karbis and other ethnic communities regarding the care of the newborn and the mother, customs, taboos, etc., related with pregnancy and birth were undertaken by different scholars like Karsten (1935), DuBois (1944), Van Gennep (1960), Mead (1963), Hurlock (1970), Arya (1972), Engle (1992), Medhi (1980), Pool (1986), Bhargava (1987), Mcneal and Amato (1998), Medhi, Saikia and Zaman (2005), Kar and Borthakur (2008), Das (2011), Zaman (2012, 2017), Terangpi, Basumatari and Teron (2014), Bhattacharjee (2013, 2015), Guo, Bai and Na (2015), Park (2015), Mitra and Ray (2013, 2016), Thakur, Goswami and Ray (2017), Bose, Teron and Tamuli (2018), Crettenden, Lam and Denson (2018), Mazumder and Mukherjee (2018), Ganguly and Ray (2020), Sharma and Mondal (2020), Singh and Vellakkal (2021), Dasgupta, Paul and Wheeler. (2021), et al., and some of them also focus on the correlation of beliefs and practices with birth and social life. But ethnographic works on the Karbis regarding maternal and child health care is very scanty among the Karbis living in the Hill areas of Assam, especially in the East Karbi Anglong District. So taking into consideration the above-mentioned fact in the present research endeavour an attempt has been made to study about the traditional and modern health care aspects of mother and child living in a homogeneous Karbi village situated in the hill areas of Assam.

THE PEOPLE

The Karbis are one of the major indigenous communities of Assam occupying the hilly areas of the state and more specifically the West and East Karbi Anglong Districts. Racially, they belong to the Mongoloid group, while linguistically they are Tibeto-Burman. Earlier they were known as the Mikirs, mentioned with the same name in the constitution order, Government of India. Stack and Lyall (1908: 4) said “The name Mikir that given to the race by the Assamese, its origin is unknown. They call themselves Arleng, which means man in general. In the feature, the men resemble Assamese of the lower classes more than most of the Tibeto-Burman races”. Nowadays instead of Mikir they like to address themselves as Karbi. Traditionally the Karbi is a hill tribe, but for different reasons, they scattered over plain areas also. The Karbis are Animists however crude form of Hinduism is found its manifestation in some of their worshipping of gods and deities. Arnam sansar recho, Hempu, Peng, Arnam Kethe are some of the animistic god’s worship by the Karbis with parochial rituals. The people of the two study villages where the present research work was conducted are predominantly Christians. There are five exogamous clans (*kurs*)— Inghi, Ingti, Terang, Teron, and Tumung found among the Karbis with various sub-clans. The father is the head of the family and his authority is undisputed in domestic life. Bordoloi, Sharma Thakur and Saikia (1987:63) mentioned that “a Karbi family is a unitary one and

joint family system is also still prevalent to a limited extent among them. At the death of the father, his sons inherit the movable and immovable properties and not by his daughters. If the father dies without any male issue, his property is inherited by the nearest male relative of his clan". The Karbis are patrilineal and follow the patriarchal system of inheritance and family structure. The main livelihood pattern of the Karbis is agriculture and they depend on slash and burn type of cultivation in their hilly abbot.

OBJECTIVES

The present research study was designed to studies about the maternal and child health care practices during antenatal, natal and postnatal period among the rural hill Karbis of Assam. Here both traditional and modern health care measures were taken into consideration for a better understanding of continuity and change of maternal and child health care practices of the community under study.

METHODOLOGY FOR FIELD STUDY

The intended study is based on socio-cultural dimensions of indigenous health care system of mother and child among the Karbis of Kakojan village, one of the homogeneous Hill Karbi Villages located at East Karbi Anglong District, Assam, India. The East Karbi Anglong is a newly formed District of Assam carved out from the earlier Karbi Anglong District in the year 2016. The village Kakojan was considered as the base village for the collection of empirical data, which is a remote one, has less impact of modernity, located around 15 km away from the nearby town Bokakhat of Golaghat District, Assam. Another Karbi village named Deithor, which is situated comparatively nearer to the town area than the Kakojan, located around 4km away from the nearby town of Numaligarh of Golaghat District, was also visited for cross verification of empirical informations as and when the situation arises. The total number of the household of Kakojan is 87 consisting of 505 individuals out of which 276 (54.65%) are males and 229 (45.35%) are female. The ethnographic data for the present study has been collected at an irregular interval during the months of December-January, 2018, June - July 2019 and February – March 2020. In this present study child up to 4 years of age and mothers who have at least one child within that age group were randomly selected. Information has mostly been collected from elderly women of the villages, mid-wife, who have experience and knowledge about pregnancy and child care. Primary data for the study was collected with standard anthropological field methods like nonparticipant observation, household survey schedule, structured and unstructured interview, case study, etc. Data gathered from informants of one village was cross verified with informants of the same and another village as and when it was found necessary.

TABLE 1: DISTRIBUTION OF POPULATION ACCORDING TO SEX

Total number of Households	Male		Female		Total	
	No.	%	No.	%	No.	%
87	276	54.65	229	45.35	505	100

The table 1 shows the distribution of the total population of the Kakojan village according to sex. During the time of the survey using the household survey schedule, it was found that the total number of households is 87 with a total population of 505. Out of this 276 were males with a percentage of 54.65% and the number of females is 229 with a percentage of 45.35%. However, it can be noticed that the number of females is significantly less than the number of males. There are approximately 83 females per 100 males.

TABLE 2: DISTRIBUTION OF POPULATION BY AGE (0-4 YEARS) AND SEX

Sl no.	Age group (in yrs)	Male		Female		Total	
		No.	%	No.	%	No.	%
1	0-4	42	54.55	35	45.45	77	100.00

Table 2 shows the distribution of the total population within the age group of (0-4) years of the Kakojan village according to sex. From the survey, it was found that the total number of individuals is 77, out of which 42 were males with a percentage of 54.55% and the number of females is 35 with a percentage of 45.45%. It was again noticed that in this age group too, the number of females is less than the number of males. There are approximately 83 females per 100 males.

RESULTS AND DISCUSSIONS

Pregnancy and antenatal care

Pregnancy is a significant event in an individual woman's life. When conception takes place the Karbi woman first breaks the news to her husband and then to the family members. Among them, pregnancies are mostly unplanned. The Karbi women of the village reported that after the first child issue, they do not have a regular menstruation cycle for the next year. The time they had menstruation again, they conceive once again. Karbi women of the village are not debarred from co-habitation during pregnancy. They consider childbirth as a natural process and involve in all types of domestic activities during the pregnancy period. The womenfolk in a Karbi community consider vomiting, loss of appetite, and cessation of menstruation as the signs of pregnancy. In earlier times they did not visit doctors until the time of delivery or even after the delivery. But presently they used to visit hospitals for health checkups and consultation with the doctors.

During the pregnancy period, a restriction regarding food and movement was reported to prevent the baby and the mother from harmful negative forces. The mother is taken care of during as well as after the birth of the baby. At the time of pregnancy nutritional care is required to attain a healthy baby. If the mother is physically and mentally sound, then the appropriate rising of the child can be anticipated. However, a women's pre-pregnancy wellbeing is very much necessary to know whether she can give birth to a child or not. When it comes to caring of the mother and the child, there are three important aspects: antenatal, natal, and postnatal care. Antenatal care incorporates normal wellbeing checkups by a restorative specialist, appropriate diet, work and rest, work out, etc. Natal care comprises the method of conveyance by a prepared birth specialist, utilization of secure supplies, cleanliness, etc. and postnatal care alludes to wellbeing checkups, losing weight, rest, etc. The newborn child's health, improvement, and development have an incredible impact on the care of the mother in these three stages. It is so very important for all the family members including the husband to take utmost care of the parturient mother so that she can enrich good and sound health.

Diet during pregnancy

A woman during the gestation period follows all the traditional beliefs and practices imposed on her knowingly or unknowingly the reason behind such rules. At times she just has to obey the restrictions and taboos prescribed for her without asking the reason behind it. Some of these beliefs are advantageous to the mother whereas some are just followed without any reason. People usually follow such rules only to get mental satisfaction. They believe that such things make them feel active, energetic, and stable during the period, which in turn helps to retain a stress-free mind not only for the mother but also for the other members of the family.

The Karbi women of the study village take extreme care of their diet during the pregnancy period. Meat especially pork was avoided from conception till delivery with the belief that these are hot foods. The egg was also considered hot food so it was also avoided for the first three months for the belief that it will cause bleeding. She is also restricted from taking twin fruits to avoid the birth of twins. However, the birth of twins is welcomed and considered auspicious. The Karbi women of the study village mentioned that duck and pork contain high fat. Avoiding pork during pregnancy may be beneficial as if pork is not cooked properly it may affect the intestines and may cause stomach disorders. Fishes like Borali (*Wallago attu*), Mirika (*Cirrhinus cirrhosus*), Kusia (*Synbranchus marmoratus*) were avoided up to three months of pregnancy because of vomiting tendency.

The Karbis have a habit of including smoked fish every day which fulfills the requirement of protein among pregnant women. Excess consumption of salt was avoided because it may increase blood pressure. Alkali (*khar*) is used by Karbis in almost every dish. Moreover, pregnant women avoided it for the belief that it

increases the blood pressure level and reduces the nutrients found in food. The Karbi pregnant women also avoid bottle gourd, white gourd, and bitter vegetables, especially bitter gourd. Bottle gourd and white gourd are avoided up to delivery for fear of or to get rid of cough and cold. Sugarcane was avoided for the first two months of pregnancy for fear of miscarriage and also because it may induce blood sugar level which may hamper the growth of the fetus leading to miscarriage. In the first trimester, they do not consume papaya, pineapple, as they consider that it would cause abortion (*pi so unhe*).

Non-vegetarian foods and indigenous green leafy vegetables were included by the Karbi women during pregnancy and believed that these foods were beneficial for the mother as well as the baby. A special curry containing chicken is prepared by adding ginger (*henso*), garlic (*harso*), leaves of *Mir sak-su* (*Crataeva nurvala*), *mempo* (sesame), which is cooked or steamed in a bamboo tube. This dish is considered as very nutritious and healthy and is given to the mother so as to get strength. Egg is included after the first trimester till delivery. So these proteins rich animal foods are included which helps in the proper growth and development of the fetus. All types of green leafy vegetables which are good sources of vitamins, minerals are included every day in Karbi pregnant women's meals.

Vaccination and health checkups

It is recommended by a modern health practitioner that a woman during pregnancy should go for checkups at least once a month during the first two trimesters and then in the next trimester twice a month and in the last few days once a week. The Karbi women of the study village also go for health checkups during pregnancy due to the encouragement and influence of modern healthcare activists especially the ASHA and Anganwadi workers. The present scenario of the village has been reflected into the following table analyzed basing on the data gathered from 40 numbers of mothers considered for the present study.

TABLE 3: TABLE SHOWING THE RESPONDENTS ACCORDING TO THE ANTENATAL HEALTH CARE RECEIVED

Health Care	Number Of Mothers	Percentage (%)
TT Vaccine	38	95.00
Folic Acid and Iron Tablets	36	90.00
Regular Checkups	23	57.50

The above table reflects that the entire important antenatal care which is essential for pregnant women is being received by the women of the studied villages. Receiving vaccination was highest among the mothers 95%. Next comes the consumption of iron and folic acid tablets to overcome iron deficiency during pregnancy. It was observed that 90 % consume iron and folic acid tablets. Only 57.5

% went for regular health checkups to a medical practitioner. From the above table, it can be concluded that a woman during pregnancy among the Karbi community goes for vaccination and iron and folic acid supplementation but not for regular health checkups.

Taboos during Pregnancy

The Karbis observe certain taboos during the pregnancy. A woman at that period is restricted to pass the burial ground, forest, etc., as such places are infested by spirits. The pregnant woman always keeps a knife or iron implements, mustard seeds, etc., to protect herself from the attack of spirits. The parturient mother is also abstaining from killing animals, fishing, looking at an eclipse of the sun, which may cause defects in the unborn child. The parturient mother and her husband both are tabooed from killing animals as they believe that the newborn may possess the features of the killed animals and visit a household where someone has expired recently.

Place of delivery and natal care

In Kakojan village, before delivery when the labor pain of the expectant mother starts, she is taken to the sleeping room where she is made to sit on the floor with kneel position. A strong cord is firmly tied to one of the bamboo posts of the room which is allowed to hold by the woman with both of her hands so that she could put stress in expediting delivery easily. The expectant mother in such a situation is normally attended by a trained midwife (*sarpi*) along with some elderly lady of the village. After the birth of the baby, the midwife cuts the umbilical cord with a bamboo splinter (*terno*). For treatment of vaginal wounds after delivery, the twig of an indigenous shrub locally known as *Bap bongnai phulok* (*Eupatorium odoratum* L.) is used by the midwife. The tender twigs are heated and massaged gently on the genital wound of the parturient woman. The midwife does not demand any reward in return, but if something in cash or kind is offered she does not refuse. In some cases when the mothers face some complications during pregnancy or at the time of delivery they approach the civil hospital and take the help of physicians. At present some of the villagers are aware of the maternity service provided by hospitals or health centers. Not only the expectant mother with complicity is sent to the hospital but also a very conscious person prefers to send the expectant mother to the hospital or seek the help of doctors at home for safe delivery.

TABLE 4: TABLE SHOWING THE PLACE OF DELIVERY

Place	Number Of Mothers	Percentage (%)
Home	23	41.25
Hospital	27	58.75
Total	40	100.00

For In the above table, information was gathered from the 80 mothers interviewed having a child within 4 years of age. However due to the advancement of modern medicare facilities 27 mothers (58.75%) reported cases of hospital delivery. And the rest 23 mothers (41.25%) reported the case of home delivery.

Care during Post-Natal Period

The care of post parturient mother should be of great concern. Personal and environmental cleanliness is very essential to keep the mother away from harmful infection. The parturient mother of the Kakojan village is taken care of by providing rest and giving her nutrition during the post-natal period. The daily routine work is shared among the family members so that adequate rest and care is given to the parturient mother until she becomes fit and gains enough strength to carry on with the normal routine. Except for cradles, a separate bed for the newborn was not found anywhere. The newborn of the Kakojan village sleeps with the mother in the same bed. Pillows stuffed with mustard seeds were reported by the majority of the mothers to give proper shape to the head of the baby.

Food after Delivery

During the early period soon after delivery, the mother is not provided with a heavy amount of meal. Instead, she is fed with a soft and easily digestible mixed diet. Giving a special diet to the mother immediately after the delivery is very common in many societies. In the Kakojan village also the mother received a special curry with rice. It is a kind of soup and generally prepared with chicken by adding ginger (*henso*), garlic (*harso*), a leaf used to provide strength which is known in their local language as *Mir sak-su* (*Crataeva nurvala*), *mempo* (sesame) is cooked or steamed in a bamboo tube. *Mir sak-su* because of its medicinal value it is believed that it heals the internal organs of the mothers that had ruptured during delivery and provide strength to the mother. After delivery, the mother is advised to eat papaya as it is believed that papaya increases the breast milk of the mother. They also take curry of catfish (*Magur*) with papaya. Along with these green leafy vegetables, milk, etc., are also consumed by the mother in order to gain strength.

Initiation of Breast Feeding and Pre-Lacteal Feeds

Breastfeeding is not only important for the growth of the infant but also helps the enlarged uterus to contract easily and revert back to its normal position. In the Kakojan village after the birth breastfeeding was initiated immediately by majority of the mothers. Nobody reported discarding colostrums. Prevalence of pre-lacteal feed was found in some households of the Kakojan village. The pre-lacteal feeds are given to the babies if the mother's milk is delayed. However, after initiating breast milk they have never given any other foods except breast milk.

They mostly use a bowl and spoon to feed the baby. The use of feeding bottles is not so common among the village people. The majority of the mother applied some material to the navel of the baby for early healing like mustard oil, baby powder, etc. Majority of the mothers prolonged their breastfeeding beyond 1 ½ year of the child. In case mother's milk is not available immediately i.e. initially when the mother's milk secretion is not there then the cow's milk diluted with water is given to the baby. The introduction of semi-solid or supplementary food to the majority of the babies was at their right age. However, some mothers initiated very early. Rice is the main food item that was given by the majority of the mothers. Next to sticky rice is cerelac, the readymade market food was found giving to their babies. Boil foods are given to them. In addition, bananas, apples, grapes, biscuits soaked in water, etc. were also reported.

Food for the infants

Among the Karbis of the present study, the newborn child mostly depends on the mother's milk for the first 6 months after the birth. The common reason for sudden termination of the milk is the advent of another pregnancy. The causes like insufficient secretion of milk, the baby's refusal to suckle mother's milk, are very frequent among them.

TABLE 5: ESTIMATION OF MOTHERS ACCORDING TO THE REASONS FOR STOPPING BREASTFEEDING

Reasons	Number of Mothers	Percentage (%)
Another pregnancy	16	40.0
Another delivery	04	10.0
Milk production decreased	03	7.5
Baby stopped by himself	10	25.0
Cumbersome to continue	02	5.0
Baby grown-up (after 1 year)	05	12.5
Total	40	100

In table 5 among 40 mothers, the majority of the mothers (40.0%) reported another pregnancy as a reason for stopping breastfeeding. The next 25.0% of mothers said that the babies stopped sucking the breast by themselves. 12.5 % of mothers reported that the baby is grown up. Only 5.0% said that it was cumbersome to continue.

From the study instances of non-secretion of mother's breast milk have been reported and, in such a situation, the newborn is provided with cow's milk till the mother's milk is available for initiation. The cow's milk is provided in diluted form so that the baby's stomach may not get upset. Again, soon after initiating mother's

milk, the baby is frequently provided with the same only. The newborn is also given honey diluted with warm water so that it cleans the mouth and removes contaminated sticky materials present inside the mouth, thus making it easy in sucking the breast.

Weaning

Weaning is an important phase in children's life. It is the process that refers to the manner in which the infant is departed or weaned from the mother's breast. The women of the Kakojan village reported using some bitter substances like neem leaves (*Azadirachta indica*), grinded paracetamol tablets, black pepper, and rarely chili powder, etc., in the nipples of the mother's breast for the weaning of the child. In some cases, the mothers do not use any measures to wean away from their children as the children themselves gradually refuse to suckle the mother's breast. The reason may be due to pregnancy of the mother or birth of the younger one as when the mother becomes pregnant again, their milk becomes watery and the babies are not found of it and stop taking it.

In table 6 it has been found that 30.0 % applied bitter substances to make their baby refuse breast milk. Again 25% of mothers from the study area reported that they used paracetamol, black pepper to wean the child, while 45.0% of mothers reported no measures are taken to stop sucking breast milk. Among the people under study, weaning is a smooth and gradual process of child care practices.

TABLE 6: POSITIONS OF MOTHERS ACCORDING TO MEASURES INITIATED TO STOP BREASTFEEDING

Measures Used	No of Mothers	Percentage (%)
No measures	18	45.0
Use of bitter substance	12	30.0
Grinded paracetamol tablet	03	7.5
Use of black pepper	07	17.5
Total	40	100.00

Complementary feeds

The Karbis are much conscious regarding the well-being of the child. When the child is 4-6 months old, its growth becomes very rapid and if proper nutritious food is not provided, it becomes stunted. At this stage, most of the cases of the community under study reveals that milk secretion of the mother starts decreasing and cannot fulfill the requirements of the body of the baby. Here, the matter of complementary food arises which means the full spectrum of food in case an infant is of the above-mentioned age.

Rice is the complimentary food item used among the Karbis as a substitute for mother's milk which is mashed and frequently taken with vegetable curries, such as potato, leafy vegetables, roots, and milk but devoid of spices/chilies. Besides

rice items like biscuits and bananas, roasted rice flour is prepared to feed the baby.

TABLE 7: DISTRIBUTION OF MOTHERS ACCORDING TO THE TYPE OF COMPLEMENTARY FOODS INITIATED

Type of Food	No of Mothers	Percentage (%)
Rice	16	40.0
Potato and Leafy Vegetable Soup	09	22.5
Roasted Rice Flour and banana (<i>Musa balbisiana Colla</i>)	06	15.0
Cerelac/Barley	02	5.0
Biscuit Soaked in Water or Milk	07	17.5
Total	40	100

From table 7 it is evident that out of 40 Karbi mothers who initiated complimentary food, 40.0% reported that they used rice as the first complementary food item. Roasted rice flour mixed with *banana (Musa balbisiana Colla)* was used by 15.0% of mothers. The use of readymade items like cerelac and barley was mentioned by only 5.0% of mothers.

The baby's food items are devoid of oil and mostly consist of boiled items. They use separate utensils to feed their children and mothers mostly fed the same. The children are also encouraged to eat on their own. Ready to feed commercial items like cerelac, barley, etc., are also reported from some households who have exposure to the modern outside world.

Bathing Practices

Bathing is very closely related to our culture and climate. There are variations seen regarding bathing practices among the Karbi children. Some mothers use warm water for their child while some others regard cold water to be useful. Bathing also depends on the season. During winters the mothers consider that regular bathing may make their child more prone to diseases. The materials used for bathing also differ from mother to mother. The womenfolk of the village invariably use oil, soap, turmeric, and so forth for the purpose of bathing.

TABLE 8: DISTRIBUTION OF MOTHERS ACCORDING TO FREQUENCY OF GIVING BATH TO THEIR CHILDREN

Frequency	No of Mothers	Percentage (%)
Daily	13	32.5
Every alternate day	04	10.0
Whenever the mother feels	02	5.0
Twice in a week	05	12.5
Daily in summer and alternate day in winter	16	40.0
Total	40	100

In table 8 it has been seen that 32.5% of mothers give baths to their children

daily. Again 12.5% and 10% of the mothers give baths to their child twice a week and every alternate day respectively, because they think that child may susceptible to cold and cough if they are provided bath regularly. However, the majority of the mothers i.e. 40.0% give baths daily during summers and alternate days during winters. During winters the Karbi mothers give baths on alternate days due to the reason that the child may get affected by certain diseases as said by the older members of the family.

Sleeping : The Lullabies

Sleeping is also an important part of the proper growth of a child. As reported by the Karbi women, a child sleeps most of the time at the first 2-3 months after birth and this sleeping tendency is decreases with an increase in age. When the child is about one year they gradually take two naps a day. In the Kakaojan village, it is found that they have no separate child's bedding as we found in this modern day. A newborn child used to sleep along with parents at one bed, there is no separate pillow, mattress specially made for the child.

In most of the houses of Kakojan, there found a cradle made of cloth. The cradle is made in this way that the two edges of a long cloth is tied on two pillars very tightly in such a way that the cloth does not touch the ground while swinging. The cradle is used to keep the baby while the mother is busy with other activities. Sometimes, the elders of the family sit near the cradle and make it swing with the help of a rope that is tied on the cradle and makes the baby sleep there. These Karbi people also sing a lullaby in their Karbi language to make a baby sleep.

(a)

*Tu ah ae ah ahah
Mek so jengnong de bong
Ae ah do nong de de.....*

Meaning

*Don't cry baby,
stay in the cradle
and do sleep well.*

(b)

*Oi midita surud minakta suruye
Suruyek musjang
Oh... , obang
Nang ag singkhrap*

*King sang arong domed
 Suruyek musjang
 Akhoi adum uwane tang
 Oh ... , obang.*

Meaning

*Don't cry dear
 Your father has gone to the market
 Oh..., dear little one
 He will bring sweets for you
 Be happy and enjoy sweets
 Oh..., dear little one.*

Toilet Training

It can be said that toilet training is the first moral training that the child receives. The proper training to a young child, to control defecation and urination so as to release them at proper place and time plays an important role in child-rearing practice. The Karbi mother begins to care for the toilet values of the infants after the birth of a child. Since the early days, they used only cotton clothes. If the cloth gets wet, it has to be changed and the body of the child also has to be cleaned with water. When the child attains about one and a half or two years the mother and other members of the family instruct him to go out of the home for urination and defecation. Most of the children used the toilet for defecation at around four years. Before that, they used to do in the open areas.

Name Giving Ceremony

In every society, the child is named to give him or her identity in the society. Organizing a function or ceremony on the occasion of giving a name to the child is very common in many societies of India. In the Kakojan village, the name of the baby is given within one month by their parents or family members and relatives. There is a custom prevalent among them for naming a child on the basis of its gender. In their local dialect, a male child is called *aso-pinso* and a daughter as *aso-pi*. It has already been mentioned that there are five clans (*kurs*)—Inghi, Ingti, Terang, Teron, and Tumung among them, and each clan is further divided into subclans. The Karbis used to write their generic clan names as suffixes with their first name. In the case of a girl child, they add the word *pi*, i.e., if an individual is surnamed Teron then in the case of female they used to write it as Teronpi. When they decide the name of the baby they do not directly disclose the name to other people instead they keep it as a secret until it is revealed by the pastor

in the church on the day of name-giving ceremony. The parents write the names which they have decided for their baby on a sheet of paper and that sheet is given to the pastor on that commemorative day of naming the newborn which is held on Sunday at 9 am in the morning. All the people of the village gather at the church and the pastor read the holy Bible and give blessings to the baby and tell the parents their responsibilities and duties towards their baby and then the name of the baby is revealed in front of all the people of the village and from that day onwards the baby is considered as a member of that community.

Indigenous medical care: Ethno-medicines

Pristine healing practice is a living culture in Assam. In the context of the tribal society particularly in North East Region of India, it is seen that the tribal population of this region has an elaborate knowledge about the medicinal value of plants, trees, shrubs, etc., present in their environment as a result of their experience gained from long term relationship with nature. The tribes and communities who live amidst natural surroundings are aware of the use of plants and animal products as medicines for curing diseases. The environment with a variety of plants and animals plays a significant role with regard to the health of the tribal population in general, and the Karbis of the villages in particular. The Karbis of the study area also possess their own traditional beliefs and herbal remedies for curing any disease. They have a conspicuous and elaborate system of indigenous healing practices of their own. The main pedestal of their medicare systems mostly depends on the materials available in their own ecological setting, although sometimes they also borrow some such ingredients from outside of their habitat. Their traditional medicines are mostly derived from floral ingredients, roots, herbs, etc. Various types of locally available herbs and leaves of wild plants are used by them as medicine for curing fever, cold and cough, dysentery, jaundice, and so forth. The Karbi names of some of the medicinal plants commonly used by Karbi people are discussed below with Botanical names, part of the plant used, and folk use. Henceforth the Karbi name, Botanical name, part used and folk use will be written as K,B,P,F, respectively.

1. K: *Hanso*; B: *Zingibar officinale*; P: Rhizome; F: Pieces of rhizome with salt and Juice extracted are mixed with or without honey and are eaten to get relief from cough, sore throat, and indigestion. A small portion of the rhizome is applied to the affected gum to get relief from toothache.
2. K: *Phelo*; B: *Gosypium herbaceum*; P: Root and leaf; F: Juice extracted from root and paste of leaf is consumed to create and accelerate labour pain.
3. K: *Siming*; B: *Spondias mombin*; P: Fruit; F: Ripe fruit or curry of fruit is consumed to cure dysentery.
4. K: *Nok*; B: *Saccharum officinarum*; P: Stem; F: Juice extracted from the stem is consumed to cure jaundice.

5. K: *Soprim*; B: *Psidium guyava*; P: Leaf; F: Paste of leaf with honey, the tender leaf is consumed to cure Bruiser or ulcer, blood dysentery.
6. K: *Nim*; B: *Azadirachta indica*; P: bark, leaf, and twig; F: Powdered dried leaves or water extracted after boiling leaves is applied to affected areas to treat all type of skin diseases, piles, and pox; raw or fried leaves is consumed to control worm; twig is used to brush teeth to cure an infection of teeth. It is also taken for antifertility in Karbi women.
7. K: *Siluka*; B: *Terminalia chebula*; P: Fruit; F: Powder of dry fruit is consume for treatment of acidity, constipation, cough, fever, piles, stomach pain, etc.
8. K: *Thelu*; B: *Phyllanthus embilica*; P: Fruit; F: Fruit is eaten to cure acidity, dysentery, and powder of dry fruit is applied at the mouth of the uterus to cure excessive bleeding during menstruation.
9. K: *Nunthe parlin*; B: *Achyranthes aspera* L.; P: Twig; F: Grounded tender twigs are boil with water which is consumed to reduce labour pain in women.
10. K: *Mahar alosam*; B: *Clerodendrum hastatum* L.; P: Leaf; F: The leaves are boiled and allowed to cool. It is then gently massaged in the female genitalia to reduce itching.
11. K: *Thermit*; B: *Curcuma longa.*; P: Rhizome; F: Extracted juice is consumed to cure severe pain of the abdomen after childbirth; bleeding. The juice is also consumed with hot water or milk to get relief from the internal wound and severe body ache; Paste of the the rhizome is eaten to cure acidity, cough, distaste, gout, worm, etc.; it is also taken to cure boil of women's breast; powdered of dry rhizome burnt and smoke is inhaled to treat headache due to cold and cough; turmeric powder is added to lime and applied to set the dislocated bone and rejoining of a broken bone.
12. K: *Dalim*; B: *Punica grantam.*; P: Fruit, leaf, and root, F: Ripe fruit is taken to cure fever, tender fruit is slightly burnt which is then provided to children to control worm, the juice of the root is taken to cure tapeworms; juice extracted from the root is consumed to stop excessive bleeding during pregnancy.
13. K: *Parok jangphong*; B: *Ananas comosus*; P: Tender leaf; F: Decoction of extracted juice of the leaf is consumed to cure upset stomach; Juice extracted from a paste of the leave is taken to cure worm infection, and vomiting in children.
14. K: *Thepli*; B: *Aegle marmelos*; P: Leaf; F: Juice extracted from leaves is taken to minimize worm infection, and vomiting, and easy delivery.
15. K: *Bap therak*; B: *Mimosa pudica* L.; P: Root; F: The root extract of the plant is used for permanent sterility and also for temporary contraceptive

for birth control.

16. K: *Lothe*; B: *Musa paradisiaca* ; P: Sheath; F: The sheath is boiled with water and the filtrate is allowed to cool. It is taken orally for abortion.
17. K: *Samlok*; B: *Plumbago zeylanica*; P: Stem, root; F: The glabrous erect stem of the plant is inserted through the vagina to initiate abortion during the first trimester. Extract of the root is taken for permanent sterility.
18. K: *Nusador* B: *Musa balbisiana*; P: Fruit and inflorescence; F: Ripe fruit is eaten to cure dysentery; curry of the inflorescence is consumed to overcome the iron deficiency in the body.
19. K: *Soprim* B: *Psidium guajava*; P: Leaf; F: Paste of tender leaf is consumed to cure blood dysentery.
20. K: *Chong mok* B: *Centella asiatica*; P: Whole plant; F: Paste of leaves is applied to cure pimples and skin disease; extract from the plant and curry is consumed to treat acidity, blood dysentery, indigestion, epilepsy, distorted breast of women.
21. K: *Bap keho* B: *Swertia chirata*; P: Leaf; F: Leaves are soaked in water and the extracted juice is taken especially by children to control the worm infecting the intestine; It is also consumed for the treatment of Malaria and blood dysentery.
22. K: *Hunmili* B: *Mirabilis jalapa*; P: Leaf; F: Paste of leaf is consumed to treat malaria.
23. K: *Panilao* B: *Lageneria siceraria*; P: Fruit; F: Curry prepared from the fruit is consumed by the parturient mother to increase breast milk.

Modern health care measures

In relation to the care of the health of the mother and the newborn, the Karbis are inclined towards their indigenous preventive and curative medicare system. However, with the establishment of the modern medicare system within their rural tribal areas they avail the benefits of the same along with integrally sticking to their pristine healthcare system. There are various health resources in the area under study. The Karbi women of these villages are nowadays aware of family planning and have started using contraceptive pills given from the health centers. In the Kakojan village the ASHA (Accredited Social Health Activist) the worker provided information to the village people. This health activist counsels about the modern health care measures of the mother and child care to the villagers. In the Kakojan village the health activist provides information about the services of the mother which includes T.T. vaccination, immunization, prevention and treatment of anemia, delivery by trained personnel, institutional delivery and birth spacing. The ASHA worker themselves visit the houses and provide polio to the

children from each and every household and they hand over the contraceptives only to the women in the absence of the male family members. The primary health center has not been opened yet in the village. They visit the Nahorjan hospital and Bokakhat hospital for the medical purpose which is located about 5 km and 10 km away from the village. They also have Integrated Child Development Services (ICDS) center also provides them with essential things like rice, pulses, etc. The health activist gives all the information like T.T. vaccine, iron, and folic acid supplements, etc. children are also given polio and all types of vaccines. Thus they provide a great role to encourage the Karbi women to take medical treatment during pregnancy and provide them health-related information about various facilities and benefits allotted by the government.

With regard to modern healthcare facilities of the mother and the newborn certain vaccinations are being recorded from their health center.

For mother:-

Three months : a. Folic acid b. Calcium
 After four months : Iron tablet
 IFA tablet for 100 days – 100gm- prophylaxis therapy
 Therapeutic treatment – for the anemic patient (hemoglobin
 below 9gm)
 If hemoglobin is below 7gm then sucrose injection is injected
 After four months : Tetanus Toxide (T.T.)
 After five months : Tetanus Toxide (T.T.)

For child

The Karbis though inclined to traditional practices yet they also follow modern healthcare practices in regard to the health of the child. They go to their nearby health centers from time to time vaccination of the child. The vaccinations given to the child are as follows:-

At first:- a. BCG (0.05 dose) – tuberculosis prevention, Bacillus Camlute Guim
 b. Hepatitis B (0.05 dose), c. OPV (0 dose) Oral Polio Vaccine
 At one and half month: - a. DPT (0.5ml) Diptheria Partusis Tetanus
 1st dose b. Hepatitis B (0.5ml), c. OPV (2 drops)
 Ten weeks: 2nd dose DPT + Hepatitis B + OPV
 Fourteen weeks: 3rd dose DPT + Hepatitis B + OPV
 After nine months: a. Measles (0.5ml)
 b. Japanese Encyphlytis (JE) (0.5ml)
 c. Vitamin A solution (1 lakh unit) (1ml)

One and half year: DPT + OPV Booster + JE + Measeles + Vitamin A
(2nd dose)

After every six months till five years total nine mega-doses of Vitamin A is administered.

Five years: DPT Booster (2nd dose)

If a woman is under second pregnancy and the first child is within three years then the mother will get a booster dose. During the pregnancy period, women should intake a sufficient amount of water for proper movement of the foetus. She should also take two hours rest during the daytime and five times meal a day. Apart from these, she should also eat less boiled vegetables, rice, flour, fish, meat, milk, fruits and also do some kind of exercises, sweeping and walking regularly.

Family Planning

There was practically no prevalence of traditional birth control measures or practices among the Karbi women of the study village. They don't use any contraceptive measures. On the contrary, they gave a greater number of births as they have the belief that a large number of children will be helpful for carrying out agricultural work and enhance their population. But at the present day, the married couple is aware of the family planning measures which they learn from sources like newspaper, magazine, medical personal, and so forth.

TABLE 9: DISTRIBUTION OF MOTHERS ACCORDING TO THE SOURCE OF INFORMATION FROM WHICH THE MOTHERS CAME TO KNOW ABOUT FAMILY PLANNING MEASURES

Sources	Number Of Mothers	Percentage (%)
Medical Staff	24	68.57
Neighbours	04	11.43
Media	03	8.57
Book	01	2.86
Anganwadi Worker	03	8.57
Total	35	100

From the above table, it could be said that out of 40 mothers studied, 35 mothers (87.5%) were aware of family planning. Out of which 68.57% first came to know about family planning from the medical staff. 11.43% came to know about the measures from their neighbours. 8.57% came to know from media i.e. TV and radio, 2.86% from books, and the rest 8.57% from the Anganwadi workers.

TABLE 10: DISTRIBUTION OF MOTHERS ACCORDING TO THE FAMILY PLANNING METHOD USED

Method Used	Total Number of Mothers	Percentage (%)
Oral pill	07	25.93
Operation	02	7.41
Copper T	04	14.81
Herbs	01	3.70
Condom	13	48.15
Total	27	100

Information regarding use of family planning method was gathered from informant mothers having knowledge about it. However, it was found that 27 mothers (77.14%) out of 35 mothers took measures till the time of data collection. Majority of them i.e. 48.15% preferred condoms, followed by use of oral pills (25.93%), Copper T (14.81%), then comes operation (7.41%) and lastly use of locally available herbs (3.70%).

It is primarily the ladies who go forward for family planning measures than their husbands. Nevertheless, no one in her family restricts her from taking such steps. Though the husbands do not initiate the approach for such measures in reality they always incite their spouses whenever she contemplates such a situation. However, some mothers also reported of taking family planning measures totally by themselves without seeking permission from other family members and the husband as well.

CONCLUSION

Thus, among the Karbis of the studied village, maternal and child health care was a concerning matter for the people but they had used their traditional medical practices to take care of the pregnant women and the newly born infant. During earlier times, Karbi people were less concerned about the concept of health care and did not maintain any dietary plan during pregnancy. Presently, change and development have been taking place in the Kakojan village regarding maternal and child health services. Especially the Karbi women have changed their outlook for maternal health care and become aware of the antenatal care and check-up and for institutional delivery. The present study revealed the fact that, nowadays, Karbi women, especially the literate section of people have preferred to go for consulting with the gynaecologist and other medicinal doctors for an antenatal check-up. They are becoming conscious about the antenatal complications, vaccines during pregnancy, and drugs during pregnancy, etc. ASHA workers are also working in the villages and they are providing a great role to encourage the Karbi women to take modern medical treatment during

pregnancy and provide them health-related information, various facilities, and benefits allotted by the government.

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