CERTIFICATE- I

This is to certify that the thesis entitled "**Acceptability of scientifically validated indigenous maternal and child care practices**", submitted in partial fulfillment of the requirements for the award of the degree of **Doctor of Philosophy** in the subject of **Home Science Extension Education** of the CCS Haryana Agricultural University, is a bonafide research work carried out by **Mrs. Neetu Sharma** under my supervision and that no part of this thesis has been submitted for any other degree or diploma.

The assistance and help received during the course of this investigation have been fully acknowledged.

Asha Batra

Associate Professor

Major Advisor

CERTIFICATE- II

This is to certify that the thesis entitled " **Acceptability of scientifically validated indigenous maternal and child care practices**", submitted by **Mrs. Neetu Sharma** to the CCS Haryana Agricultural University, in partial fulfillment of the requirements for the degree of **Doctor of Philosophy** in the subject of **Home Science Extension Education** has been approved by the Student's Advisory Committee after an oral examination of the same.

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Major Advisor External Examiner

Head of the Department

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Place; Hisar *(Neetu Sharma)*

Dated: August, 2005

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CHAPTER – I

INTRODUCTION

Motherhood is the crowning act of the woman's feminine role in life. It provides the closest bond that can exist between two human beings. Woman is the one who is blessed by God with the capability to reproduce and carry out generations.

Motherhood is the basis of family life, which in turn, is the backbone of all the orders of the society and family life. Thus the approach towards motherhood, that is pregnancy and childbirth, is a holistic one.

Maternal care in the narrow sense, consists of the care of the pregnant women, safe delivery, post natal care of the newly born infant and maintenance during lactation. According to World Health Organization (WHO) technical report (1952) the main objective of maternity care is to ensure that every expectant and nursing mother maintains good health, learns the art of child care, has normal delivery and bears healthy children. Maternal care begins from the time of conception of the child, therefore, the prenatal and postnatal care of the expectant mother is included in the health care system. The prenatal care ensures that health of the expectant mother more, especially their nutritional status is safe guarded and avoidable complications of pregnancy are prevented or treated. The peri-natal care includes the care of expectant mother during childbirth, preferably by a trained health worker or a doctor. The post-natal care covers maternal health care services after delivery.

Hence these are important phases in women's life as she is the one who carries the baby during nine months of its prenatal life. Her body houses the foetus maintaining the ideal environment for his/her growth, protecting him/her from injury, and providing him/her with nutrients.

The plight of mother in our country especially in rural areas is no way better than the global conditions. The rural women in Himachal Pradesh play a significant role in the agricultural operations and allied fields including livestock, horticulture, post harvest operations and agro forestry, besides household chores (Kapur, 1991). On an average, a rural woman spends 15 to 18 hours per day in various agricultural and allied activities during peak period (Acharya, 1998; Kanwar 2002). Being busy from dawn to dusk, rural women are left with minimum time to take care of self and of children properly. This may be one of the major reasons to opt for indigenous maternal and childcare practices. Batra and Yadav (1996) studied the extent and rationale of these practices being practiced by rural women at prenatal, perinatal and post natal stages.

Another factor, which increases the magnitude of the problem, is the ignorance of mothers about the elementary knowledge of nutrition, health, sanitation and hygiene practices required for proper growth of children and mother across various stages of their development. It is also estimated that rural women constitute more than half per cent of the total women population of our country, are usually not aware of the fact that the period from conception till birth of a baby is the foundation period for future growth of baby. Various studies have revealed that despite the wide prevalence of

different child care practices being followed by the rural mothers, the recommendations of the experts/specialists pertaining to nutrition, sanitation, hygiene and health are generally overlooked by the mothers. Consequently, the children are deprived of the minimum level of development and that leads to high neonatal and postnatal mortality (Ahmed *et al*., 1988 and Srivastava, 1990).

Secondly, safe motherhood is still a dream for most of the Indians residing in rural areas where access to maternal health care remains far from universal. In such rural settings and ecology besides physical inaccessibility to services, poor quality and economic constraints, which exacerbates low utilization of maternal care services, large number of staunch traditional beliefs, customs, norms also mitigate against safe motherhood and pose a constraint in seeking maternal care in time (Nuken, 2002).

In a state like Himachal Pradesh, the difficult topography make villages inaccessible and provision of basic health amenities more expensive and difficult. Besides, there are areas, which are snow bounded and remain cut off for a long period of time.

Since independence, considerable progress has been made in the various branches of medical science in our country and the government is also making serious efforts for improving the overall health conditions of the pregnant and lactating mothers and children through health care programmes. A fairly extensive network of hospitals, community health centers, primary health centers (PHC's) and institutions providing specialized preventive and curative care have been developed. The benefit of these developments has

made an indent in to our countryside, but has not yet touched the rural areas. The indigenous system of care, with age-old procedure and beliefs is still in vogue among them.

The generations old prescription, decoctions and infusions ('Karhas' of country medicines) known to the village elders and experts have a strong hold in rural areas and are still practiced largely by them.

"Indigenous" means occurring or living naturally in a specific area, generated by their own and their ancestor's experience and including knowledge originating from elsewhere which has been internalized by local people (Reintjes *et al*., 1993).

'Indigenous knowledge' (IK) refers to the unique, traditional, local knowledge existing within and developed around the specific conditions of women and men indigenous to a particular geographic area (Grenier, 1998). Indigenous knowledge is stored in people's memories and activities. Some of the synonyms to the term are "traditional knowledge", "local knowledge" and "indigenous technical knowledge". These synonyms refer to the local origin and promotion by a community (Seeland, 2000).

"Traditional knowledge is unique of any society which is fabricated on their sound belief, norms and the culture of the society to which they belong. The wisdom is cherished by rural society is build upon day to day activity" (Verma *et. al*., 1997).

According to Farrington and Martin (1988), "Indigenous technological knowledge can be defined as basis of knowledge, beliefs and customs which are internally consistent and logical to those holding them, but at odds with

the objectively deducted findings of formal science. So, it is important for scientists to build upon the components of ITK, which are not consistent with scientific knowledge seeking to change over time any potentially counter productive practices associated with local belief system".

Indigenous knowledge is also termed as "Ethnoscience" (Knight, 1983; "Village Science", (Barker, 1977). "People Science", "Folk, Ecology", "Local Knowledge", (Korten and Uphoft, 1993); "Traditional Environmental Knowledge", "Farmer's Knowledge", "Well of Knowledge", (Barker and Cross, 1993); "Rural People's knowledge", (Thompson, 1993).

Indigenous knowledge is a valuable resource for development. It covers a wide range of subjects such as agriculture, food preparation, education, natural resource management, health care and many other subjects (Nirmale and Metar, 2003). However, some researchers have attempted to define the term to avoid the ambiguity and overlapping. With the advancement of science and medical technology, a lot of synthetic drugs are used. However, people have become conscious about the after effects of such systems. Therefore, people are becoming inclined towards the traditional medicines. It is estimated that 50-75 percent of the population, particularly in the developing countries, still rely on indigenous health practices, as a normative basis for the maintenance of good health (UNESCO, 1996). The indigenous knowledge has two powerful advantages over outside knowledge. It has little or no cost and is readily available (Kothari, 1995). Indigenous knowledge systems and technologies are found to be socially desirable, economically affordable, and sustainable

(*http://www.manage.gov.in/managelib/faculty/chary.htm*). The methods are women friendly, low tech and non invasive (Mehrotra, 2001).

The potentiality of indigenous health practices is increasingly being recognized. However, many indigenous knowledge systems are currently at risk of extinction because of rapidly changing natural environments and economic, political and cultural changes on a global scale. Practices can vanish, as they become inappropriate for new challenges or because they adopt too slowly. Moreover, many local practices may disappear because of the intrusion of foreign technologies or concepts that promise short-term gains or solutions to problems without being capable of sustaining them, thus necessitating their documentation. Accordingly, care must be taken not to undermine effective indigenous practices.

Documentation of indigenous knowledge is more a necessity now than ever before because this orally transmitted wisdom may be lost in mad race of modernization like many of our valuable genetic resources. As Swift (1979) argues that the body of knowledge, science and techniques used by rural people if well identified and documented, can make an important contribution to development.

Atteh (1989) expressed the view that “Indigenous technological knowledge, rather than being treated as obstacles to modern development might actually prove useful as vehicles for innovation and change”.

Today’s national health policy does not recognize the existence of the traditional barefoot doctors (‘dais’). The invisibility of these doctors may be due to the fact that they work in the poorest and most marginal sections of

society and the fact that they belong to the same communities they serve. Their invisibility is intensified because they work outside the framework of the formal health service and market economy (Hafeel and Shanker, 1999). Besides this the old and wise persons who are specialists in such practices are gradually leaving this world. There is an old African proverb, which goes: " When an old knowledgeable person dies, a whole library disappears". Hence the documentation of indigenous knowledge will serve very useful objective of such knowledge for posterity and blending for more useful innovations to provide technical support to the extension agencies for our resources and making development sustainable. Unless we make unrest and quicken efforts to track this valuable knowledge, it will be lost soon, not to be regained in future at any cost.

Swift (1985) believes that maternal and child care practices vary greatly in different ethnological milieu.

It is true that the practices advocated from generation to generation have both positive as well as negative effects. Many of these indigenous practices may be damaging to mother and child because of adherence to old traditions, customs, beliefs and superstitions. Yet, it is being felt that scientific component must be strengthened for revival and revitalization of traditional/indigenous practices. Scientific support can give validity to use a particular indigenous practice but in some cases we may have to educate the rural women to avoid certain practices. Thus the proper care of mother and child can be possible, provided the users accept the recommendations of scientists or experts. The only effective way to study acceptance is to communicate scientifically valid knowledge to the target group so as to bring

about changes in knowledge and attitude. It is high time to think about and preserve the indigenous knowledge scientifically through proper research work, institutionally and promote the values of their traditional knowledge about the human beings in general and women in particular. Therefore, now time has come when people and scientists should know and realize the importance of indigenous knowledge, as work done in this direction is scanty. The present study, therefore, is an attempt to study the indigenous maternal and child care practices with the following objectives:

1. To study the existing indigenous maternal and child care practices followed by rural women.
2. To conduct scientific validation of indigenous maternal and child care practices followed by rural women.
3. To study the acceptability of scientifically validated maternal and child care practices

Scope of the study:

- The present investigation would provide adequate information regarding various indigenous maternal and child care practices existing among rural people of Himachal Pradesh.
- By recognizing the value of indigenous knowledge and by integrating it with frontier Science and technology, we can conserve both the dying wisdom and genetic resources under threat of extinction, thus ensuring a better present and a better future of the world.
- The findings of the study will help the nutritionists to plan the diet of pregnant and lactating women in considerations with scientifically valid indigenous practices.

- The study will further help in knowing that whether these indigenous practices are having any scientific base or needs further research.
- Further, the findings of this study will be helpful to the people involved in development work to prepare scientifically valid indigenous technology kit for dissemination among society.
- Learning about indigenous knowledge/practices can improve a productive context for activities designed to help the communities.
- The prepared media can be used as ready reference by field functionaries of ICDS, department of health and by the rural mothers. The findings of the study can also be included in the package of practices of Home Science.
- Lastly the results of the present study would provide a base for discarding the practices that are not supported on scientific basis and accepting the practices found scientifically valid.

Limitations:

- The study was delimited to the married women having children below 5 years of age.
- The study was conducted only in one district of Himachal Pradesh, which is a limitation of the study, as findings of present investigation cannot be generalized for the whole state.

CHAPTER-II

REVIEW OF LITERATURE

This chapter attempt to present a brief resume of findings relevant to the objectives of the present study. Studies have been compiled under eight sections:

2.1 Indigenous practices related to pregnancy

2.2 Indigenous practices related to common pregnancy discomforts

2.3 Indigenous practices related to lactation

2.4 Indigenous practices related to care of infant and mother

2.5 Indigenous practices related to common infant health problems

2.6 Indigenous practices related to feeding and weaning

2.7 Indigenous practices related to post natal care

2.8 Importance of indigenous technical knowledge

2.1 INDIGENOUS PRACTICES RELATED TO PREGNANCY

Child rearing practices of Vietnamese culture prescribe hot foods including ginger, black pepper and alcohol to correct the excess of cold while cold foods such as spinach, green papaya and anti-tonic foods such as vinegar and lemon are avoided in first trimester. In the second trimester cold foods may be introduced in moderation. In last trimester, the woman is considered to be in a hot and tonic situation, she has to avoid tonic foods such as vitamins supplement and limit her daily diet which could cause a large baby thus leading to a difficult delivery.

Bhardwaj (1991), conducted a survey in rural areas of Jawan block, district Aligarh, observed the following traditional practices:

- Excess of deshi ghee, moonaka and milk was consumed in the last trimester for easy delivery of the child.
- Hot drinks were taken during the postnatal period.
- Certain home-made preparations made from locally available food stuffs were consumed during puerperium e.g. panjire, halwa etc.

Bhalla (1991) found that 66.60 percent pregnant women go to hospital for delivery while cent percent reported visit to hospital for regular check-up during pregnancy.

Kaur (1981) reported that majority (66.00%) of rural women had low level of adoption of immunization practices.

Regarding health facilities used by villagers during pregnancy, Bhattacharra and Tandon (1991) found that majority of the women did not use antenatal care facilities due to cultural and situational factors.

Rajyalakshmi (1991) reported that women of Andhra Pradesh after delivery were given a ground paste made with asafoetida and jagerry in small quantities of about betelnut size and it was believed to prevent abdominal pain.

Results of a study in village community of Haryana revealed that 40.00 percent of women had avoided some food items where as 60.00 percent had their normal food during pregnancy. Singh (1992) further revealed that some foods were avoided because of fear of abortion.

SRRT (1992) conducted a study on beliefs and behaviour regarding diet during pregnancy in a rural area of Western India reported that like eggs, fish and milk as well as spices are believed to be harmful. The reason associated with this is that all these foods except milk may lead to abortions as these are hot in taseer and milk is usually perceived as a cold food, sometimes having an adverse effect on womens' health.

Rajan and Sethuraman (1992) reported that among Nilgiris' tribals pregnant women are forbidden to consume brinjal, tomato as these foodstuffs, according to ethos' are cold inducing in the body.

Sindiga (1992) concluded that Maasai women are given less food during pregnancy so that the foetus may not become too big, more medicinal herbs and water are given to them from the twentieth week to delivery to keep them slim so that they give birth to small babies that will not be difficult to deliver.

Study conducted in Haryana by Nehra (1995) found that majority of the respondents consumed the usual diet during pregnancy. Practice of consumption of some special food to have a male child during first trimester of pregnancy was quite common. Results also showed that majority of respondents were attending health clinics during third trimester of pregnancy.

According to Silva (1995) in a study on safe motherhood in Srilanka, it was reported that majority of the pregnant women avoided raw pineapple, parboiled rice and beef as they are believed to produce excess heat in the body and cause abortion. It was further revealed that from pregnancy

onwards, the mothers should be prepared for breast feeding by incorporating butter milk, meat and eggs in the diet of pregnant lady.

In a study on food beliefs of rural women during the reproductive years in Dharwad, Karnataka, it was reported by Rao (1995) that in a dietary survey of 68 pregnant women, 38 women reported that they ate less during pregnancy partly due to their decreased appetite and partly with a view to restrict the size of the baby and avoid difficult child birth whereas 30 women refused to indicate the specific amounts of food eaten by them.

In Ayurveda, the pulses are described to have the properties of creating dryness (ruksha) in the body, increasing gas (vaayo-vardhak) and heavy to digest, leading to stomach upset. Hence pulses in general should be avoided during pregnancy or eaten in small quantity, after adding herbs and spices that would reduce the heating and gaseous effect. Adding methi seeds or seasoning it with garlic/hing would help reduce the gaseous effect. Butter milk is recommended during pregnancy to help digestion (Mira, 1996).

Pandy *et al.* (1997) in a study on some aspects of birth related practices in the Pando tribe of Madhya Pradesh reported that the pregnant Pando women does not receive any special foods and there are no restrictions on food taboos.

Bhatnagar (1998) concluded that about 48 percent of the subjects were avoiding certain foods like spices, butter, fat, lady finger, tea and papaya due to certain fallacies.

In a study on traditional dietary practices of tribal during pregnancy and lactation, Telesara (2000) reported that according to majority of the

respondents the pregnant women was not given any thing special. It was further revealed that foods like milk, curd, ghee, oil, potato, cauliflower, jaggery and tea was avoided during pregnancy. The reason associated for avoiding such foods was that these foods harm child and the mother.

Saharan *et al.* (2001) in a study on preferences for food distribution and food belief among women under special conditions in sericulture household reported that papaya, drumstick leaves, banana, sesamum and jaggery are avoided by pregnant women as they are hot foods and lead to abortion.

It was reported by Mridula *et al.* (2003) in a study on dietary intake of expectant mothers that although the respondents consume egg once or twice, as it was considered to cause miscarriage since egg is believed to be a hot food.

2.2 INDIGENOUS PRACTICES RELATED TO COMMON PREGNANCY DISCOMFORTS

The report of the survey carried out by Lok Swaasthya Parampara Samvardhan Samithi (*http://www.healthlibrary.com/reading/mother/ appendix2. html)* advised decoction of roots of *Boheavia deffusa* mixed with paste of *Cedrus deodara* and *Mardensia tenacissima* with honey for treatment of oedema, while barley water and tender leaves of *Borassus flabelifer* with palm jaggery is advised in Tamil Nadu. Both of them are diuretics and help to reduce fluid retention. Similarly juice of *Asparagus racemosus* which acts as diuretic is consumed with sugar in Andhra Pradesh. Maikhuri et al., (1998)

reported that oil extracted from the seed kernels of *Juglans regia* (Akhrot) mildly heated and rubbed on the swollen legs of the pregnant women.

Oil massage and hot water is advised for body pain in Tamil Nadu, Kerela and Karnataka. The report from Andhra Pradesh (2000) advised consumption of pepper powder mixed with cinnamon powder for controlling cough and cold.

Tripathi (1998) reported that during pre-delivery stage to get rid of blemishes on face, women should use unripe papaya, as it is anthelmintic.

The general advice for relief from constipation is to include green and leafy vegetables and fruits like plantains while one should not drink fruit juice after cheese, because this leads to fermentation within the digestive system and provides flatulence (*http://www.indiangyan.com/books/yogabooks/yoga-preg/diet-during-preg.html).*

Aayurvedic Vaidyas (*http://www.healthlibrary.com/reading/mother/ appendix2.html)* suggested juice of *Asparagus racemosus* for dizziness and nausea. In Uttar Pradesh and Tamil Nadu, it is managed by oral administration of powder of *Coriandrum sativum* with sugar. Similarly juice of *Ocimum sanctum* is also used with sugar.

Weakness and anaemic conditions are managed by 'Dhaatri Loha' according to the prescription of Aayurvedic aacharyaas. Dhaatri Loha is a combination of *Phyllanthus emblica, Glycyrrhiza glabra* and *Tinospora cordifolia* which helps in alleviating the side effects. In Andhra Pradesh fresh juice of unripe *Punica granatum* is administered which improves levels of haemoglobin and controls anaemia. Decoction of cardamom seeds and

aniseed, chutneys and pickles made of ginger, mint leaf and leaves of *Bauhinia tomentosa* were given in Tamil Nadu, Utter Pradesh and Gujrat.

Vatta (2003) studied about problems of pregnant woman. It was found that 73.30 percent of respondents experience nausea and vomiting a major problem of pregnant women. Other problems like heart burn, anaemia, abortion, high blood pressure, cramps in muscles, constipation and swelling in legs were mentioned by only 33.30-36.60 per cent respondents.

2.3 INDIGENOUS PRACTICES RELATED TO LACTATION

In a study by Devi and Swain (1993) it was revealed that the lactating women was given :Achwani" which is prepared form dried ginger, gum, turmeric, pippermint, jaggery and ghee for a period of 2-3 months after delivery, 'Arhar dal' was given to the women immediately after child birth with the belief that this will provide energy to her.

Kawatra and Sehgal (1993) conducted a survey to study the nutritional practices followed by lactating mothers in rural areas of Hisar. On the first day of lactation 22.40 percent were eating halwa, 29.30 percent jeera, 22.60 percent ajwain mixture, 15.40 percent khichari and 10.30 percent were not consuming any food. Around 87.70 percent of the mothers avoided some foods during lactation like pulses (rajmash, black gram), cold foods, fruits and green leafy vegetables because of the feeling that these foods will upset the stomach of infant.

In a study on maternal and child health care among Birhors of Madhya Pradesh it was reported by Pandey and Lakra (1994) that after delivery,

mother is given a small quantity of mahua liquor and water mixed with haldi for drinking for about 2 days. They think that this drink will bring out all the harmful substances from the body of the mother. Mothers are advised to avoid sour foods, jack fruit and green vegetables because they could adversely effect health of the mother and child. If mother have problem in breast feeding due to production of small amount of breast milk then they are administered chikaanda (a kind of root locally available) along with mahua liquor, papaya and dudhiya grass.

In a study on urban lactating women of Udaipur city and Rajasthan, Trivedi and Choudhary (1995) reported that jaggery water, ajwain, sonth,lodh, batissa, gond, supari and turmeric laddoos and badam halwa were included as traditional supplementary foods given to the lactating mother.

Malhotra (1996) reported that foods avoided during lactation were spices, sour foods (tamarind, raw mangoes), potato, urd dal, chana dal, ladyfinger, oil, salt, banana, non-vegetarian and maize. The reason for avoiding these foods was that these were difficult to digest and cause stomach ailments/constipation and that sour foods cause swelling of the body. The intake of oil was not considered good with traditional supplementary foods.

Pandey *et al.* (1997) conducted a study on Pando tribe of Madhya Pradesh and reported that after delivery the mother is given pasir (few grains of rice cooked in a large amount of water) on the same day. To regain strength the mother is also administered a mixture of certain herbs (Rohma-Bokhada) and turmeric. She is given pasia till the 6^{th} day of delivery and the

parents of the child are not allowed to take salt for these 6 days. The lactating mother is allowed to eat rice, pulses, maize, wheat, potatoes, brinjal, goat's milk and green vegetables. However sour foods are considered to be harmful for the health of the mother and child therefore avoided for 5-6 months after delivery.

A booklet on " Eating well for you and baby" suggests that while breast feeding, the mother should eat foods that give energy like breads and cereals, fruits and vegetables, meat, chicken and fish, dairy products. It is important to drink 6-8 glasses of fluid everyday especially water. Limit coke, tea, coffee to 3-4 cups a day or baby will get shaky *(http://www.healthinfonet.ecu.edu.au/graphics / graphics programs /indig.pdf*)

Among Vietnamese child rearing practices it is believed that the mother loose heat during birth, so she has to eat highly seasoned foods to restore health. Foods provided for women after birth should be very spicy, hot and dry whilst some fruits like oranges and lemons are forbidden (*http://www. yarranet. net.au /resource/ rearing.html)*.

Sinha and Pandey (1998) reported that 85.00 percent of the lactating mothers consumed mandi (rice cooked with lots of water), rash (top layer of rice beer), cooked rice fermented overnight with common salt, tumeric soup, dried onion seeds, black gram dal, papaya and sathavari herb. All these food items are supposed to help in milk production while non-vegetarian foods and vegetables like lady finger, brinjal, green leafy vegetables, oil, spices and curd are restricted as they are believed to cause colic pain, diarrhea and green stools in the child and leads to inadequate secretion of breast milk

In a study on the general beliefs and taboos regarding food consumption during lactation, Devdas *et al.* (1999), revealed that most of the mothers were most conscious to omit foods like brinjal, cluster beans, bottle guard, potato, colocasia and eggs as these were considered to produce either allergy, knee joint pains.

Telesara (2000) in a study on traditional dietary practices of tribals during pregnancy and lactation reported that the mother was given 1-2 glasses of jaggery water and mixture of ground ajwain, ghee and jaggery, Gur rabdi, turmeric powder, ajwain laddoo, sonth laddoo and gond laddoo were given to mother from 4^{th} day onwards for next 15 days to regain lost strength.

According to Gaur (2001) it was reported that during the lactation period foods such as oil, curd, sour foods were avoided by all the mothers since they were not taken with traditional foods and were assumed to be harmful for stitches. Chillies and spices were avoided to prevent loose motions to the baby. Further it was revealed that rice, maize, potato, cauliflower, cabbage, brinjal were thought to cause flatulence.

In a study on socio-cultural reproductive health of primitive tribes of Madhya Prdesh , Pandey and Tiwari (2001) reported that among Birhors the lactating mother is not permitted to eat foods like green vegetables, maize and wheat as they are cold foods and effects the health of the child adversely. The woman who does not have sufficient breast milk is administered papaya chutni and urd dal to enhance breast milk. However, among Korwas the mother is given haldi powder in water and kulthi dal and rice to eat. Among Hamars, the mother is given rice with starch to eat and no

special diet is reported to be given to the lactating mothers. They feed lioness's milk diluted with water in case of low milk production.

In a study conducted by Mumani *et al.* (2001) on nutritional composition of traditional supplementary foods consumed by Gujarathi lactating mothers, it was revealed that they consume wheat rab, containing wheat flour, ghee, jaggery, dry ginger powder for first 15 days after delivery as it is light, increases milk flow and decrease pain. About 86.60 percent of the women consume khicheri as it is easy for digestion, laddoo was consumed by 70.00 percent mothers for a period of 40 days and sweet dish kotta (prepared from gond, ghee, jaggery, dry coconut, cashew nuts, dates, almonds) was consumed by 43.30 percent of the women for one month as they both are energetic foods and batissa laddoo were also believed to decrease back pain. They also believe that bajara roti with butter milk and methi baji, jawar roti with milk and fresh ginger and pipramoon, a powdered root used by mothers is galactogenic. By Duku a semi liquid food (prepared by 7 types of grains, salt and black pepper and gond ki sonth) was also consumed by women to increase breast milk and to provide strength to waist.

In a study on preference for food distribution and food beliefs among women under special conditions in sericulture households Saharan *et al.* (2001) reported that the women avoid wheat, bengal gram, cluster beans, amaranth, oil and curd during lactation. It was based on the belief that these produce heat, was difficult to digest and also cause septic and cold.

Megharaj and Choudhry (2002) in their study on dietary practices and macronutrient intake of women at varying periods of lactation reported that the

traditional supplementary foods are consumed by lactating women utp 40-45 days of lactation after which they returned to normal. They consumed gur pani (prepared by boiling jaggery and ghee in water) , haldi jhol (prepared by boiling sugar, turmeric powder and ghee in water), batissa laddoo (prepared from ghee, sugar, jaggery, gond and dry fruits), almond halwa (prepared from almond, wheat flour, sugar and ghee) and harisa (made of ghee, sugar, jaggery, wheat flour and dry fruits). These preparations were consumed on the belief that they increase milk secretion, help in regaining lost strength, regulate blood loss and clear the reproductive system.

2.4 INDIGENOUS PRACTICES RELATED TO CARE OF INFANT AND MOTHER

The care of mother is important in all the three phases i.e. antenatal, perinatal and postnatal but antenatal care is the most important aspect. This is so because all other aspects depend on this phase. The proper care of pregnant woman would result in the proper development of the foetus, its delivery, the health of the mother and thus her ability to withstand the strain of labour and have an eventless post partum phase. The care of the pregnant woman reflects on the quality and health of the off spring.

Bhave and Rao (1980) reported that various oils used for massage of the baby include mustard oil, coconut oil, til oil, groundnut oil, castor oil, and white butter. The reasons for massage are nearly the same like it improves circulation, is a form of exercise, protects skin and promotes sound sleep.

In a national seminar on traditional practices in mother and child care (1989) it was reported that in Maharashtra castor oil, turmeric and ash are applied on the cord whereas in Punjab ghee, ash, and surma are used in cord care. In eastern Uttar Pradesh catechu powder, betel nut, and mustard oil are also applied.

Vanlalfeli (1991) found that all the mothers bathed their infants daily during morning and bath consisted of oil massage and change of clothes.

Singh (1992) reported that all women used oil for massaging the children. Gram flour (besan) was used by 35.81 percent for bathing the child. Butter and curd were also used for same purpose. Most of the respondents changed the child's bedding material monthly followed by 33.00 percent who changed it weekly.

Punia (1993) found that a variety of indigenous food preparations were given to mother just after birth of child. During lactation period , mothers avoid consumption of green gram, black gram. Use of ash and sand for making the bed of mother was a common practice after birth while mother was allowed bath on the third day.

Pandit (1993) revealed that bathing of infants was reported twice a day. They did not put their infants to sleep according to any fixed schedule. To protect the child from 'evil eye' black thread round the neck, black tika on forehead or an iron object near the infant's bed were some of traditional practices followed (Singh, 1994).

In the survey conducted by LSPSS, it is reported in Maharashtra, U.P., M.P. and Tamilnadu that the woman is allowed to do her normal daily house

hold chores and some specify that she should not exert herself too much by carrying heavy load or by running.

Bhandari (1995) in her study reported that according to books on Tibetan medicine the cord of newly born child should be cut leaving as much as eight fingers in length. The newborn should be washed only with luke warm water and some ghee and honey should be given.

Nuken (2002) while studying about maternal health care among lactating women of Bihar reported that increased age at delivery and higher order births are negatively associated with the utilization of maternal health care services. This may be because younger women may be more likely to realize the benefits of availing maternal care services of women are more concerned with obtaining care for the first delivery compared to the subsequent deliveries, which is related to fear of complications or excitement over first pregnancy.

2.5 TRADITIONAL PRACTICES RELATED TO COMMON INFANT HEALTH PROBLEMS

“Uncertain of all the changed conditions they enter the new world naked and need to be saved and pampered”

- William Carlos William

The above quotation reported by William rightly says that the child before birth is completely protected within her mothers’ womb. The child is so closely related to the mother that any type of discomfort to the baby becomes the discomfort of mother and she is recommended a particular care to

overcome it. However after birth, since a child becomes an individual personality so any type of problematic symptom is cured by administering one or other precaution/care to the child itself to get rid of it. While suffering from any problem, the child is first of all fed on household level treatments before going immediately to hospitals.

Shariff and Farsana (1990) in a study on the belief and taboos of breast feeding reported that colostrum was avoided on the belief that it may gets stick to the infant's intestine causing diarrhoeal problem.

Garg *et al.* (1992) reported that a gargle consisting of the juice or the essential oil from the betel leaves mixed in warm water or the inhalation of leaf oil vapour have been recommended in the treatment of diptheria.

Mossi farmers from Boussou (1992) treat measles with a remedy obtained by soaking chicken droppings in water. This in then filtered and mixed with millet or sorghum flour and then taken internally.

Rajan and Sethuraman (1992) in their study mentioned that leaves of neem (*Azadirachta indica*) boiled in water, given to children with liquid as remedy for all types of stomach problem due to worm infestation.

Verma *et al.* (1993) in their study on experience on traditional wisdom reported that rural people treat common diseases with locally available food stuffs, such as nutmeg, turmeric, neem, black pepper, cardamom, harad for diseases like gastroenteritis, pneumonia, fever, malaria, cold and cough, measles, typhoid, ear discharge etc. and eye infection with boric powder.

If the child suffers from any problem like cold/cough, stomachache etc. various herbal preparations were being used. For checking fever respondents use decoration of black pepper and tulsi (Jain, 1995).

Brooks (1997) reported that flowers of *Leucas aspera* collected in the morning , boiled with water and then can be given as cough medicine for infants.

Anonymus (1998) in a magazine “Herald of Health” mentioned that the decoction of kathal root is a best remedy for diarrhoea and fever.

A study on indigenous knowledge system of child health and care (0-2 years) prevalent in the rural areas of Bikaner district revealed that rural women gave decoction of tulsi leaves, jaiphal, harad and supari (beetle nut) for treating fever of baby. For cold/cough baby was given brahmi tablet mixed in breast milk and for checking vomiting, syrup of lavang and sugar or ground pepper, pudina (mint) and lemon juice was given. To relieve of stomachache, powdered ajwain with black salt, tumba medicine and mixture of lemon, ginger and black salt water was given(Jain, 2000).

Anonymous (2000) in “Herald of Health” it was mentioned that seeds of koyal (*Clitoria termate*) a climbing vine with slender stems were roasted and made into a powder to be used for children having griping pains in the stomach and enlargement of the abdominal organs.

In an article on “ Is there a cure for jaundice” it was reported by Bakhru (2000) that the patient suffering from it may take fruit juice like juice of lemon, grapes, pear, carrot, beet and sugar cane. It was also reported that the use of

juice obtained from green leaves of radish is also a valuable remedy for jaundice.

Thrash and Thrash (2001) reported that a blend of two cloves and garlic should be given with warm water to the children to cure pin worm problem. It's also useful for influenza and fevers as the garlic constituents are absorbed directly into the blood stream.

2.6 INDIGENOUS PRACTICES RELATED TO FEEDING AND WEANING

To have best start in life, it has been widely accepted that an infant should be put to breast as soon as possible after birth. Breast milk is the ideal food for all infants as it contains nutritional requirements of an infant and also contributes a very high proportion of energy and nutrients from six months of age onwards. Moreover breast-feeding reduces the chances of an infant developing infection. Breast milk or colostrums is very high in anti bodies, which protects the infant from infection. Therefore, feeding must be viewed as a part of total communication process in which not only he mother's breast but also the quality of her movement, voice and touch affects the quality of infant's sensory emotional lease on life.

Regarding the age of initiation of weaning foods, Ray and Reddy (1988) revealed that average age of introduction of solid and semi-solid food was 9.0 $\pm$ 3.0 months although majority (76.80%) introduced after first birthday. In poor section 91.70 percent mothers delayed weaning till first birthday while among well to do 65.60 percent of mothers introduce semi-solid/solid foods between 6-12 months of age.

Shariff and Farsana (1990) reported that 53.00 percent of respondents had initiated supplementary feeding when the baby was less then four months old. But 31.00 percent of the rural mothers did not initiate supplementary food by one year after birth and until the time when child picked up foods, which were commonly introduced after one year.

Hadimani *et al*. (1990) reported that 84.00 - 91.00 percent labourer mothers did not feed colostrum to their infants due to family traditional belief. Vanlalfeli (1991) found that all mothers were found to breast fed their infants but with no specific rules for the time the child is first put on the breast. Most mothers from joint and nuclear families had given the infants colostrums. Children till the age of 3 months were fed in sitting upright position. Majority started weaning their infants between 3-6 months of age. All mothers reported giving commercial foods such as cereal and farex to their infants. All mothers fed their infants the semisolid food with a spoon.

Nirmala *et al.* (1991) observed that mothers in majority were ignorant about the nutritive value of colostrum which is rich in anti-infective factors. Mothers breast feed the baby for a longer period upto three years without giving adequate supplementary foods, foods given to infants were the ones available to the families.

Gupta *et al.* (1992) concluded that initiation of breast-feeding was delayed in nearly half of the cases beyond 24 hours and was practiced by 78.00 percent of women, only one in five practiced exclusive breast-feeding till 4-6 months and very few avoided bottle feeds.

In a longitudinal study on the infant feeding practices in a rural area, Das *et al*. (1992) found that hundred percent mothers breast-fed their infants from birth to one year, almost every day.

A study conducted by Punia (1993) in village community of Haryana reported that majority of respondents were using a variety of pre lacteal feeds for first two to three days. None of the respondents fed colostrums to the infants. Majority of women preferred sitting, while some of them used both sitting and lying posture for feeding.

Biswas *et al.* (1993) found that water was offered to feed more than half (52.60 %) of infants whereas breast milk to only one quarter (24.60%) of them. They further pointed out that majority of infants (61.40%) had received artificial milk. Amongst them, 42.90 percent got it with in first 3 months of age and another 34.3 percent infants received ready made solid/semisolid food supplements. Amongst them 54.50 percent received weaning food before 6 months of age and another 36.40 percent before completion of 9 months. Most common weaning food items were soft rice (100%) and vegetables (27.30 %).

Singh (1994) stated that restriction of leafy vegetables, pulses and spicy food were followed. Colostrum was not given to infants. Breast-feeding was universally practiced.

Bhandari (1995) stated in her study that Tibetan medicine strongly recommends initiation of breast feeding and giving of colostrums immediately after birth.

A survey regarding breast-feeding practices in rural and urban communities in a hilly districts of northen India was conducted by Gupta *et al* (1997). They observed a high exclusive breast feeding rate which was 0.74 in rural and 0.72 in urban children in the age group of less than four months. Timely supplementary rate was 0.84 and 0.75 in rural and urban areas respectively.

Kusuma (1997) reported that the tradition of discarding colostrum is rooted since ages and therefore many mothers still avoid the practice of colostrum feeding. The respondents breastfed their children after three days of delivery and reported that colostrum is harmful to infants because it is considered to have remained in the breast for all the nine months of pregnancy.

Sinha and Pandey (1998) while studying the maternal and infant feeding practices of 'HO' tribe women in Bihar revealed that only 45.00 percent respondents put their babies to the breast within 9-12 hours while 38.00 and 17.00 percent breast fed the baby after 24 and 48 hours respectively, because of lock of milk secretion. The pre lacteal liquids introduced were generally: goat's milk, jaggery, ghee, honey and sugar water, glucose, water and cow's milk and castor oil and honey, indicating that major portion of colostrum is wasted by the women of above tribes.

Mandkar (2001) while discussing about breast milk concluded various myths like malnourished mothers produce lesser quantities of milk, small breast produce less milk, the mothers should not breast feed her baby during illness, a baby who wants to nurse constantly is not getting enough milk and

the fresh yellowish milk should be discarded as it is stale and not good for the baby.

Bikash (2002) studied that just after the birth, breast milk is must for the new born baby as colostrum present in the breast provides the necessary nutrients and immunological protection for the infants. Breast milk provides warmth to the child and protects from infection and is one of the best food for baby.

2.7 INDIGENOUS PRACTICES RELATED TO POST NATAL CARE

Mahendrajah (1992) reported feeding of deer meat for pregnant women after delivery that has been preserved in honey and stored in honey trunk.

Obikeze (1997) while studying indigenous pospartum maternal and child health care practices among the Igbo of Nigeria reported that after delivery the new mother is given a hot soup made with dried fish, meat, yams, plenty of pepper and a special herbal seasoning called ‘udah’. This diet, according to ethos, help to restore blood lost during child birth, facilitate the healing of wounds and restore normal bodily functions and promote milk flow.

In another cultural area of Haryana it was further found by Nehra (1995) that variety of food preparations rich in fats and protein in form of halwa, gola kutti and goond kamarkas were given to mother after delivery. Intake of foods like chapatti, pulses and milk were restricted during first ten

days where as certain foods like butter milk, green gram, black gram and gram dal were avoided during lactation by majority of the respondents,

Skidmore (2002) reported that past partum period is viewed as a time of susceptibility to illness as the mother's body is 'cold' from blood loss. The body should be warmed with external heat as well as worm drinks and foods with "hot properties", sour and bitter foods are also taken post partum as these are thought to reduce blood flow.

Khullar (1997) concluded that cultural taboos restrict food availability to women during pregnancy and lactation. Rural women are mostly caught in the web of superstition and ignorance. Therefore, their understanding of health and disease is ill conceived.

Mehrotra (2001) reported that indigenous system has the advantage of low cost, accessibility and sustainability. The methods are women-friendly, low tech and non-invasive, while medical methods are permitted as invasive. Relatives, neighbours or friends are not permitted to participate in the birth. Private medical facilities charge high rates, speed up labour and undertake caesarians that may actually not be needed.

2.8 IMPORTANCE OF INDIGENOUS TECHNICAL KNOWLEDGE

Swift (1979) stated that the body of knowledge, science and techniques used by rural people if will identified and documented can make an important contribution to development.

Atteh (1989) expressed the view that “Indigenous technological knowledge, rather than being treated as obstacles to modern development might actually prove useful as vehicle for innovation and change”.

Dangbegnan and Benn (1990) emphasized that researchers could identify some indigenous technologies to list or to improve before transferring it to extension service. They should view the extension service as an intermediately in identifying indigenous technology and not limiting it to being an intermediately for technology transfer.

Grover and Khetarpal (1993) stated that with the advancement of urbanization and modernization the vast volume of indigenous knowledge is getting diverted and therefore, it is imperative to document our rich cultural heritage in various areas of Home Science.

Dogra and Varma (1993) conducted a study in Haryana to access the use of indigenous system of treatment and were encouraging to note that for common nutritional problems and health problems of women and children to a large percent of rural community is relying on indigenous treatment for fertility, retained placenta , anemia, malaria, pyrexia, rheumatism and cuts.

CHAPTER- III

METHODOLOGY

The main objective of this chapter is to describe the sampling procedure adopted for the study and analysis undertaken to draw the interpretation from collected data. The research procedure followed has been distinctively described under the following sub-heads:

3.1 Locale of study

3.2 Sampling procedure

3.3 Variables and their measurements

3.4 Identification of indigenous maternal and child care practices

3.5 Scientific validation of identified indigenous maternal and child care practices

3.6 Documentation of scientifically validated maternal and child care practices

3.7 Exposure of media

3.8 Acceptability of scientifically validated maternal and child care practices

3.9 Approaches and techniques of data collection

3.10 Data analysis

3.1 Locale of study

For the present study Himachal Pradesh was selected purposively, as being the native of that area, the researcher is well acquainted with the culture and local dialect of the rural community.

3.2 Sampling procedure

Multi-stage sampling procedure was adopted for the selection of district, blocks, villages and respondents.

3.2.1 Selection of district

At first stage out of 12 districts of Himachal Pradesh, Kangra district was selected randomly, at the second stage two blocks, at the third stage four villages and at the last stage one hundred and twenty rural women were selected.

3.2.2. Selection of blocks

From development point of view, the district is divided into thirteen developmental blocks, out of which two blocks i.e. Panchrukhi and Nagrota Bagwan were selected randomly for the present study.

3.2.3 Selection of villages

For the selection of villages, comprehensive lists of villages in the selected blocks were obtained from the offices of Block Development and Panchayat officer. From Panchrukhi block, village Saliana and Deogran while from Nagrota Bagwan block, village Samloti and Ustehar were selected randomly.

3.2.4 Selection of respondents

According to the requirement of the study, two categories of the respondents i.e. rural women and experts/scientists were included for the present study.

3.2.4.1 Rural women

A list of rural women having children below five years of age and who were actively engaged in child rearing practices was prepared from the selected villages. From each village 30 rural women were selected randomly making a total sample of 120 respondents.

3.2.4.2. Experts/Scientists

For scientific validation, a sample of 50 experts/scientists was purposively drawn from Chaudhary Sarwan Kumar Himachal Pradesh Krishi Vishvavidyalaya, Palampur, Chaudhary Charan Singh Haryana Agricultural Uiniversity, Hisar and civil hospital, Palampur.

3.3. Variables and their measurements

On the basis of pertinent literature and suitability of variables to research topic, various variables were selected for the study. A detailed account of these variables alongwith their operational definitions have been presented below:

3.3.1 Socio-economic and personal variables

3.3.1.1. Age: It is one of the basic characteristics of an individual linked with his maturity, physical well being, productivity level and work efficiency. In this study, it refers to the chronological age of the respondent in years at the time of investigation. Chronological age was taken with following categories:

Sr. No.	Categories	Scores
1.	Young (below 25 years)	1
2.	Middle (26-50 years)	2
3.	Old (above 50 years)	3

3.3.1.2. Caste: According to Dahama (1976) " Caste is a collection of families or a group of families bearing a common name, which usually denotes and is associated with a specific occupation, claiming common

descent from a mythical ancestor, human or divine professing to follow the same calling and regarded by those who are competent to give an opinion as forming a single homogenous community". It was measured by the application of scale of Trivedi (1963).

The castes were categorized into low, medium and high caste categories with scores as indicated below:

Categories	Caste
Low	Chamar/Dhobi/Nai/Chhimbe/Dumne
Medium	Lohar/Kumhar/Baniya/Sonar/Ahir/Julaha/Saini
High	Brahmin/Rajput

3.3.1.3. Respondent's Education: It refers to the respondent's academic qualification acquired through formal schooling. Education was measured by modified SES scale developed by Trivedi (1963). The following scoring pattern was adopted.

Educational Categories	Scores
Illiterate	0
Can read only	1
Can read and write only	2
Primary	3
Middle	4
High school and above	5

3.3.1.4. Family Type: Sahay (1969) stated that family might be nuclear or joint. Nuclear may be defined as the social group, consisting of married man and woman with their children living together under the same roof and sharing

a common hearth. In the present investigation the term nuclear was applied to family units consisting primarily of a husband, wife and children.

Joint family was defined by Sahay (1969) as the social groups, consisting of several related individual families, especially those of a man and his sons (in case of patrilineal) or of a woman and her daughters (in case of matrilineal) residing in a single large dwelling. Operationally, the term joint was applied to the families, having at least two married couples, living in common residence and where the males were related as father, son or as brother-brother and earning from all sources are pooled together and managed by one family head.

The type of family was quantified as follows:

S. No.	Categories	Scores
1.	Nuclear	1
2	Joint	2

3.3.1.5. Family Size: Operationally, family size referred to the total number of members in the family consisting of husband, children and other dependents. Measurement of the variable was done by using the modified scale of Kulshreshtra (1980). The score assigned were as follows:

Categories	No. of members	Scores
Small	Upto 5	1
Medium	6-10	2
Large	11 and above	3

3.3.1.6. Family income: It refers to the total income of the household per month in money terms as noted from the income sources of respondents. Average monthly income was quantified as follows:

Categories	Income per month	Scores
Low	Upto Rs. 1000/-	1
Medium	Rs. 1000-Rs.2000	2
High	More than Rs. 2000	3

3.3.2. Psychological Variables

3.3.2.1. Change Proneness: It was operationally defined as favourable attitude towards new ideas and intentions to adopt them. This was estimated on the self-rating scale of Moulik (1965) with slight modifications. Scores assigned to the low, medium and high category are indicated below:

Categories	Score range	Scores
Low	6-8	1
Medium	9-11	2
High	12-14	3

3.3.2.2 Localiteness-cosmopoliteness: Localiteness-cosmopoliteness was operation alised as the respondents tendency to learn more about scientifically validated practices not only from the village but by going outside the village. This variable was measured by using scale of Achanta (1983) with slight modifications, scores assigned to different categories have been indicated below:

Categories	Score range	Scores
Low	6-8	1
Medium	9-11	2
High	12-14	3

3.3.3. Communication Variables

3.3.3.1. Mass media exposure: It refers to the degree to which a respondent has contact with the mass media such as radio, television, newspaper, magazine, and printed material for obtaining required information.

It was measured with the help of scale developed by Bhatti (1985) and quantification was done in three categories as low, medium and high with scores as shown below:

Categories	Score range	Scores
Low	Upto 5	1
Medium	6-10	2
High	11-15	3

3.4. Identification of indigenous maternal and child care practices

The rural women were interviewed in order to investigate different practices pertaining to health, nutrition, sanitation and hygiene and education. This objective covered the practices followed for pre-natal, peri-natal and post-natal stages. The information was collected for different food preparations, ingredients added, method of preparation and logic for using any particular practice. During the investigation, various plant specimens were collected and photographs of selected medicinal plants in the area were taken by the researcher in order to incorporate in thesis.

3.5 Scientific validation of identified indigenous material maternal and child care practices

After investigating about indigenous knowledge of rural women regarding different components pertaining to health, nutrition, sanitation and hygiene at prental, perinatal and postnatal stage, the scientific validation of these practices was done. It was done by consulting fifty experts/scientists from Chaudhary Charan Singh Harana Agricultural University, Hisar and Chaudhary Sarwan Kumar Himachal Pradesh Krishi Vishva Vidyalaya, Palampur and civil hospital, Palampur. The identified indigenous practices were enlisted and administered to the concerned expert/scientists who had atleast 5 years of experience.

3.6 Documentation of scientifically validated maternal and child care practices

During the study, a large number of indigenous maternal and child care practices were collected. In order to find out their scientific validity, all the practices were exposed to the experts. The opinion of experts was sough in terms of three response categories i.e. highly valid, valid and somewhat valid Thus the practices which were considered highly valid by more than seventy five per cent of the experts, were considered scientific. These practices were compiled in the form of a booklet that has been enclosed in the thesis.

3.7 Exposure of media

As envisaged in the objectives for assessing the acceptability of identified scientifically validated indigenous practices, the posters were used at awareness stage to acquaint people with the maternal and child care.

Initially pre-exposure knowledge, attitude and symbolic adoption score of the respondents were collected with the help of structured interview schedule. Then leacture on maternal and child care was delivered and booklet on the same topic was distributed among the respondents. The post-exposure knowledge, attitude and symbolic adoption of the message was collected from the respondents after seven days of exposure.

3.8 Acceptability of scientifically validated maternal and child care practices : Acceptability was studied in terms of three components namely knowledge gain, attitudinal change and symbolic adoption.

a. Knowledge gain: Knowledge is a body of understood information possessed by an individual about a particular thing, act or process. In the present study “knowledge gain” has been operationalised as the amount of understood knowledge of scientifically validated maternal and childcare practices. This was estimated by calculating the difference between post and pre-exposure knowledge of respondents regarding scientifically validated maternal and childcare practices. Knowledge inventory was prepared to assess the gain in knowledge. To prepare knowledge inventory aspect-wise information was collected from relevant literature and experts from Department of Foods and Nutrition and Child development, CCS Haryana Agricultural University, Hisar and CSK HPKV, Palampur. Due care was taken to incorporate pertinent information for all the aspects of the message to be disseminated. The respondents were asked to reply for each item under the dichotomous response categories of Yes/No. The 'Yes' reply was scored one and ‘No' replies were given zero score. Thus aggregate scores were computed to find out the overall knowledge scores for the message.

Pre-exposure and post-exposure knowledge scores of the respondents were taken for scientifically validated maternal and childcare practices. Further, the differences between pre and post-exposure was taken as gain in knowledge. As the bulk of knowledge scores was accumulated so by using the median, that is the measures of central tendency, the obtained scores were categorized into moderately low and moderately high categories, respectively.

The total number of questions in the knowledge inventory provided knowledge potentiality scores, whereas obtained scores depicted the knowledge extent. On the basis of these, knowledge gain index was computed.

$$KG\ I = \frac{E}{P} \times 100$$

Where

KGI = Knowledge Gain Index

E = Extent (obtained limit)

P = Potentiality (maximum limit)

b. Attitudinal change: Attitude is an important component of human behaviour. It would be difficult to theories that an individual would behave to a stimulus falling contrary to his/her attitude. Attitude refers to the degree of positive or negative effect associated with some psychological object (Thurston, 1946). Attitudinal change has been operationalised as the difference in the attitude of the respondents towards the scientifically validated maternal and child care practices before and after the exposure to prepared

media (Booklet). It was measured with the help of an attitude scale developed specifically for study purpose.

Pre-exposure and post-exposure scores of the respondents exposed to scientifically validated maternal and child care practices were obtained on three-point continuum i.e. favourable, neutral and unfavourable. Aggregate scores were computed to find out the overall attitude scores.

Procedure followed in the development of attitude scale

i) Collection of statements: A large number of statements with respect to maternal and childcare were collected from the available literature, by discussion with experts and by holding informal discussions with rural women. In this way 40 statements were collected on scientifically validated maternal child care practices. These statements were edited, modified and put to a logical scrutiny as per criteria suggested by Edwards (1969). Thus, 35 statements were retained.

ii) Selection of the statements: The edited statements were given separately to 40 judges, who were asked to examine the statements for its being favourable, neutral and unfavourable. Based on the judges' response, 28 items were retained. These statements were rewritten in the light of consensus of the judges. The judges rating scores have been furnished in appendix-II.

iii) Analysis of the statements: The selected statements were then given to 40 rural women from non-sampled village. They were asked to give their reaction to each item on a three point rating scale viz., favourable, neutral, unfavourable which were assigned the weightage of 3,2 and 1 for positive

statements and reversed in the case of negative statements. By summing up the scores for all items, the total scores for each respondent were calculated. As suggested by Edwards (1969), 25 percent of the subjects with the highest and lowest total scores formed the criterion group for the evaluation of individual items/statements.

For determining the relevance of a particular statement and eliminating those that did not discriminate between persons holding different attitudes. The critical ratio was calculated with the help of following formula:

$$t = \frac{\overline{X}_H - \overline{X}_L}{\sqrt{\frac{\sum (X_H - \overline{X}_H)^2 + \sum (X_L - \overline{X}_L)^2}{n(n-1)}}}$$

where,

$\overline{X}_H$ = the mean score on a given statement for the high group

$\overline{X}_L$ = the mean score on a given statement for the low group

$\sum (X_H - \overline{X}_H)^2$ = the variance of the distribution of the response of the high group to the statements

$\sum (X_L - \overline{X}_L)^2$ = the variance of the distribution of the response of the low group to the statements

n = number of respondents in high and low groups.

The statements subjected to item analysis with their 't' values have been given in appendix-III. The statements having 't' values equal to or greater than 1.75 were retained in the final scale. The aggregate scores obtained through attitude scale were divided by the median and placed under two categories viz., less favourable and more favourable attitudinal change. The total number of statements in the scale constructed under study provided attitude

potentiality scores, whereas obtained scores depicted the attitude extent. On the basis of these attitudinal change index scores were computed.

$$ACI = \frac{E}{P} \times 100$$

Where,

ACI = Attitudinal change index,

E = Extent (obtained limit)

P = Potentiality (maximum limit)

These attitudinal change index scores have been used to calculate the acceptability index.

Reliability of the scale

A scale is reliable when it produces the same results when applied to the similar group of respondents. Thus, the reliability of the attitude scale was determined by introducing the scale to another group of 20 rural women by split-half method. The reliability coefficient was found to be 0.74. It is apparent from the figure that reliability co-efficient was significantly high. Hence it was established that instrument developed to measure the attitude of rural women was reliable.

Validity of the scale

The contents of attitude scale so developed were derived from an inventory containing a long list of items, which were collected from various sources described earlier. Subsequently, the statements were finalized after strict adherence to judges' opinion that were furnished with specific directions for making judgments as well as with specifications of what they were to judge. Therefore, it was confirmed that the instrument developed to measure the attitude of rural women towards the message satisfied the content validity.

c. Symbolic adoption: It was operationalised as mental readiness of the individual for the acceptance scientifically validated maternal and child care practices after having gone through the stages of adoption but yet to put the idea to action in future.

Six parameters were taken to compute symbolic adoption. The score of one and zero were assigned for affirmative and negative responses respectively. Thus, symbolic adoption scores ranged between 0-6. These scores were then divided by median value to obtain two categories of symbolic adoption viz., moderately low and moderately high.

The total number of parameters in the index developed provided symbolic adoption potentiality scores, whereas, obtained scores depicted the symbolic adoption extent. On the basis of these, symbolic adoption index was computed:

$$SAI = \frac{E}{P} \times 100$$

Where,

SAI = Symbolic adoption index

E = Extent (obtained limit)

P = Potentiality (maximum limit)

Acceptability index: Acceptability has been operationalised as the sum total for knowledge gain, attitudinal change and symbolic adoption. It was measured and quantified by summing the individual index of each component (knowledge gain, attitudinal change and symbolic adoption) as acceptability index of every individual member.

Acceptability index was developed with the help of following formula:

$$AI = \sum \frac{E(KGI)}{P(KGI)} + \frac{E(ACI)}{P(ACI)} + \frac{E(SAI)}{P(SAI)}$$

where,

AI = Acceptability index

E = Extent to which practices were rated as applicable by the respondents

P = Potentiality to which practices were rated as applicable by the respondents

KGI = Knowledge gain index

ACI = Attitudinal change index

SAI = Symbolic adoption index

3.9 Approaches and techniques of data collection

The data were collected in two phases

Phase I: In the first phase of data collection, the respondents i.e. the rural women were interviewed with the help of pre-tested interview schedule

Phase II: In this phase, the data was collected from the second category of respondents i.e. the experts/ scientists. The indigenous practices related to maternal and childcare were supplied to the experts for scientific relevance of the indigenous maternal and child car practices, which is of great importance for the sound health of both mother and child.

3.10 Data analysis

The data was analyzed using simple statistical tools such as frequency distribution, mean, percentages, ranking and coefficient of variation. Coefficient of variation was computed with the help of the following formula:

$$C.V. = \frac{S.D.}{Mean} \times 100$$

Where,

C.V. = Coefficient of variation

S.D. = Standard of deviation

CHAPTER- IV

RESULTS AND DISCUSSION

The present chapter deals with the research findings and their discussion. Following are the main sections under which research findings have been presented and discussed.

4.1 Personal traits of the respondents

4.2 Indigenous practices followed by rural women at pre-natal stage

4.3 Indigenous practices followed by rural women at peri-natal stage

4.4 Indigenous practices followed by rural women at post- natal stage

4.5 Indigenous practices followed by rural women regarding childcare

4.6 Scientific rationale of identified indigenous practices followed by rural women regarding maternal and childcare

4.7 Scientific validation of identified indigenous practices followed by rural women regarding maternal and childcare

4.8 Mean score and coefficient of variation identified indigenous practices followed by rural women regarding maternal and childcare

4.9 Recommendation status of various identified indigenous practices practised by rural women regarding maternal and childcare

4.10 Acceptability of scientifically validated indigenous maternal and child care practices

4.1 PERSONAL TRAITS OF THE RESPONDENTS

The data on the profile of respondents collected during the study are presented in table 1.

4.1.1 Age

The data presented in table 1 revealed that a little more than half of the respondents (52.50%) belonged to middle age group followed by young respondents (47.50%).

4.1.2 Caste

With respect to caste (Table 1) it was reported that exactly forty percent of the respondents were from high caste followed by 31.67 percent respondents from medium and 28.33 percent from low caste.

4.1.3 Family type

As regards to family type, it was observed that among all the respondents 78.33 percent had joint families and remaining 21.67 percent belonged to nuclear families (Table 1).

4.1.4 Family size

Data regarding family size revealed that more than sixty percent of respondents (65.00%) had medium family size followed by 20.00 and 15.00 percent having large and small family size, respectively (Table 1).

4.1.5 Education of the respondents

The results regarding education of the respondent in table 1 depicted that little more than fifty percent of the respondents (55.83%) had education upto primary level and rest of them (44.17%) had above primary level.

4.1.6 Family educational status

The analysis of data furnished in table 1 revealed that majority of the respondents that is 58.33 percent belonged to families having medium

educational status followed by low (25.00%) and high (16.67%) educational status.

4.1.7 Family income

A careful perusal of the data indicated that exactly 21.67 percent of the respondents fall in the category of low income group while 35.83 and 42.50 per cent of the respondents were in medium and high income group, respectively (Table 1).

Table 1. Personal traits of the respondents. N=120

Sr No	Variables	Categories	Frequency	Percentage
1.	Age	Young	57	47.50
		Middle	63	52.50
		Old	0	00.00
2.	Caste	Low	34	28.33
		Medium	38	31.67
		High	48	40.00
3.	Family type	Nuclear	26	21.67
		Joint	94	78.33
4.	Family size	Small	18	15.00
		Medium	78	65.00
		Large	24	20.00
5.	Education of respondent	Upto primary	67	55.83
		Above primary	53	44.17
6.	Family educational status	Low	30	25.00
		Medium	70	58.33
		High	20	16.67
7.	Family income	Low	26	21.67
		Medium	43	35.83
		High	51	42.50
8	Change proneness	Low	14	11.67
		Medium	32	26.67
		High	54	45.00

9	Localiteness cosmopoliteness	Low	21	17.50
		Medium	52	43.33
		High	47	39.17
10	Mass media exposure	Low	86	71.67
		Medium	25	20.83
		High	9	07.50

4.1.8 Change proneness

The analysis of data furnished in table 1 revealed that 45.00 percent of the respondents had high change proneness followed by nearly twenty five percent of the respondents (26.67%) with medium change proneness and only 11.67 percent had low change proneness.

4.1.9 Localiteness cosmopoliteness

With respect to this trait, the respondents were distributed in low, medium and high categories. Results revealed that 43.33 percent of the respondents were in medium category followed by 39.17 percent and 17.50 percent in high and low categories respectively (Table 1).

4.1.10 Mass media exposure

The percentage distribution of the respondents pertaining to mass media exposure in table 1 indicated that a little more than seventy percent (71.67%) of the respondents had low exposure to mass media and approximately twenty one percent (20.83%) and eight percent (7.50) had medium and high mass media exposure.

4.2 INDIGENOUS PRACTICES FOLLOWED BY RURAL WOMEN AT PRENATAL STAGE

4.2.1 Health

Reliable and disaggregated statistics on health are difficult to come by. The problem is particularly acute in the case of women's health. Many so-called "female conditions" are not considered health problem at all, either by health care professional or by women themselves. As a result most illness remain unrecognized and go unreported.

4.2.1.1 Utilization of maternal care services

Regarding utilization of maternal care service at pre natal stage, the present study shows poor performance on pre natal care, where mothers of only 58.33 per cent of births went to pre natal clinic for check up. Exactly fifty per cent of them realized the need to visit the clinic while 22.86 per cent were forced to the clinic due to pregnancy complications (Table 2). For births to mothers who did not receive any prenatal check up, two-thirds (66.00%) of mother did not consider as having a check up to be necessary. These truly reflect women's reluctance, poor motivation and poor attitudes towards the importance of health care.

Another factor cited by 10.00 per cent of the respondents was physical inaccessibility to health care i.e. clinic is located at far off place. Rosario and Geoffrey (2002) reported another reason for not visiting pre -natal clinic. He presented the fact that the majority of doctors in rural areas are men thus women are reluctance to describe their symptoms to a male doctor, or allow themselves to be physically examined by men.

Table 2. Frequency distribution of respondents on the basis of utilization of maternal care services at pre-natal stage

N=120

Sr. No.	Practice	Response	F (%)	Logic as per respondents	F (%)
1	Visit to pre natal clinic	Yes	70 (58.33)	Realize the need of it	35 (50.00)
				Economically could afford	07 (10.00)
				Due to pregnancy complications	16 (22.86)
				Clinic is located at approachable site	09 (12.86)
				Got awareness from mass media	03 (4.28)
		No	50(41.67)	Did not consider need of it	33 (66.00)
				Clinic is located at far off places	05 (10.00)
				Restrictions of elderly people	12 (24.00)
				Lack of awareness regarding these clinics	0
2	Visit to local dai for check up	Yes	68 (56.67)	Have faith on them	32 (47.05)
		No	52 (43.33)	Do not feel the need to go to local dai	40 (76.92)

While enquiring about visit to local dai, 56.67 per cent responded positively. This shows that along with check up at pre-natal clinics some of the respondents still rely on advice of local dais.

4.2.1.2. Discomforts during pregnancy / therapeutics during pregnancy

The physical and psychological disorders of pregnant women are no different from any other individual. However, the principles of management differ, as strong medicines would harm the foetus. In the words of Charaka, the pregnant woman should be treated with all the care as when carrying a pot filled with oil. Just as the slightest oscillation of the pot causes spilling of oil, the slightest excitement to the pregnant woman can initiate complication like abortion.

In this context, an attempt has been made to outline some of the most common conditions and discomforts that are encountered during pregnancy. Information was gathered regarding indigenous foods and practices followed to cure them.

4.2.1.2.1. Morning sickness

Regarding treatment of morning sickness, 17.50 percent suggested juice of onion (*Allium cepa*) and mint (*Mentha longifolia*) along with water as it gives a cool hearted feeling. Nearly thirty percent of the respondents prescribed darmashtik which is most frequently used practices. Other curative measures included churan of saunf (*Foeniculum vulgare*), ajwain (*Trachyspermum ammi*) and kooja ki mishri which is consumed with lukewarm water. It is believed that mishri is cool, while saunf and ajwain help in improving digestive system (Table 3).

The findings are in tune with the findings of Sharma (2003). Exactly 7.50 percent of the respondents reported that oranges (*Citrus aurantium*) should be consumed because they are cool in nature and provides better feeling.

Table 3. Indigenous foods/ practices followed by respondents to cure morning sickness

N=120

Sr. No	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F(%)	Rank	Logic as per respondents
1	Onion and Mint juice **Ingredients** Onion*(Allium cepa)*-2 Mint leaves*(Mentha longifolia)*- a few Salt- as per desire	Crush onion and mint along with water and add salt. Consume it as per desire	21 (17.50)	II	Gives a cool hearted feeling
2	Darmashtik	Given simply as phaki	39 (32.50)	I	Provides better feeling
3	Churan **Ingredients** Kooja ki mishri- 1 piece Meethi saunf (*Foeniculum vulgare)*- 50 gm Ajwain *(Trachyspermum ammi)*-10 gm	Meethi saunf, mishri and ajwain are roasted and all the three ingredients are coarsely grounded and one teaspoon per day is given with lukewarm water	12 (10.00)	III	Mishri is cool, meethi saunf and ajwain are helpful in improving digestive system.
4	Amla powder in milk **Ingredients** Amla powder(*Emblica officinales)*- 1teaspoon Milk- 1 glass	Consume this mixture once a day	05 (4.17)	V	Amla increases appetite
5	Orange (*Citrus aurantium*)	Orange should be consumed as per desire	09 (7.50)	IV	It is cool in nature and provide better feeling
6	Lemon juice(*Citrus limon)*-2 teaspoon Sugar- according to taste	Extract juice of lemon. Add sugar and juice to one glass of water	04 (3.33)	VI	Provides better feeling

* Frequency denotes multiples response

Few of respondents (4.17%) reported consumption of amla (*Emblica officinales*) powder in milk once a day as amla increases appetite. Lemon (*Citrus limon*) water was also prescribed by some of the respondents. While discussing about the pregnancy discomforts, Batra (1995) reported about a similar mixture but instead of ajwain, elaichi was added.

4.2.1.2.2. Constipation

Regarding constipation, majority of the respondents (31.67%) recommended quath of harad (*Terminalia chebula*), bahera and amla in water (Table 4).

Table 4. Indigenous foods/ practices followed by respondents to cure constipation

N=120

Sr. No	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Karha **Ingredients** Harad (*Terminalia chebula)*-1 piece Bahera((*Terminalia bellirica)*-1piece Amla(*Emblica officinales)*-2 Water-2 glasses	Prepare decoction of all the ingredients till it reduces to Half glass. Consume once a day till problem persists	38 (31.67)	I	Helps to remove indigestion.
2	Karha **Ingredients** Ajwain (*Trachyspermum ammi*)-1 teaspoon Gurlakdi (*Cassia fistula*)-2 cm piece Meethi saunf *(Foeniculum vulgare)* -1teaspoon Sugar-1teaspoon	Grind all the ingredients and mix them. Boil in water and strain. Consume 2-3 times a day	17 (14.17)	VI	Helps to remove indigestion.

3	Sanai leaves (*Cassia angustifolia*) 3-4 leaves	Chew 3-4 leaves of sanai	04 (3.33)	VII	Not known
4	Isabgol (*Plantago ovata*)-1teaspoon Water-1/2 glass	Soak dried husk of isabgol in water overnight and take it in morning. Consume 1-2 times a day	32 (26.67)	III	Removes indigestion
5	Saag of spinach and dudali **Ingredients** Few leaves of spinach (*Spinacia oleracea*) and dudali	Prepare saag of these leafy vegetables	18 (15.00)	V	Helps in proper digestion
6	Churan **Ingredients** Dalchini (*Glycyrrhiza glabra*)-1" Small cardamon (powdered)(*Elletaria cardamomum*)-2 teaspoon Meethi saunf (*Foeniculum vulgare*) -1 teaspoon	Grind all the ingredients and make a powder. Consume it early in the morning with boiled water before taking anything.	28 (23.33)	IV	Helps to remove indigestion/ dyspepsia
7	Fruits like banana should be consumed		34 (28.33)	II	Banana cures constipation

* Frequency denotes multiples response

Respondents believed that this quath helps to remove indigestion. Another decoction suggested by 14.17 percent respondents was prepared by boiling ajwain, gurlakdi (*Cassia fistula*) (plate no. 11), meethi saunf and sugar in water. Some of the respondents reported to chew 3-4 leaves of sanai (*Cassia angustifolia*), 26.67 percent respondents recommended to consume isabgol (*Plantago ovata*) 1-2 times a day, while fifteen percent used saag of

spinach (*Spinacia oleracea*) and dudhali as this saag helps in proper digestion.

Nearly twenty five percent respondents (23.33%) reported that they gave churan of dalchini, small cardamon and meethi saunf. They believe that this churan removes indigestion and cures constipation. About one fourth respondents (28.33%) suggested to consume fruits.

In Gujarat, it is reported that if the constipation is mild, grapes (*Vitis vinifers*) and dry rose buds (*Rosa centifolia*) can be given. Constipation may be caused due to the iron supplement so while administering any loha (iron) preparation, always augment it with drugs or preparations which would prevent constipation (*http: //www.healthlibrary.com/reading/mother/appendix 2.html*).

4.2.1.2.3. Abdominal pain

One of the major disturbing conditions during pregnancy is abdominal pain. It may be due to various reasons, before treatment actual cause should be detected. Majority of the respondents used to give ajwain in water as it is believed that ajwain helps in better digestion and relieves pain. Similar percentage of respondents advised to consume jeera (*Cuminum cyminum*) with water, which is believed to be effective for gastric pain. These two practices got rank 1 as are used by most of the respondents.

Nearly fifty percent of the respondents reported that decoction of bhabhri (*Ocimum basillium*), mint leaves (*Mentha longifolia*), and ajwain can be given to provide relief from pain in abdomen (Table 5). According to thirty percent of the respondents, it can also be treated by giving decoction of a

local plant called kakarsinghi (*Pistacia khinjuk*) (Plate no. 4). Exactly one-fourth of the respondents responded that if pain is due to accumulation of gas, then she should be given decoction of kasturi (*Moschus moschiferus*), black pepper, (*Piper nigrum*) jaggery, ginger (*Zingiber officinalis*) and tea leaves.

Table 5. Indigenous foods/ practices followed by respondents to cure abdominal pain N=120

Sr. No.	**Indigenous foods/ practices** (Ingredients and quantity)	**Method of preparation and consumption**	**F (%)**	**Rank**	**Logic as per respondents**
1	Ajwain water **Ingredients** Ajwain (*Trachyspermum ammi*)-1teaspoon Water-1 glass	Boil ajwain in water till it reduces to half or roast 2 teaspoon of ajwain and take with water	93 (77.50)	I	Helps in better digestion
2	Karha **Ingredients** Bhabri (*Ocimum basillium*)-3gm Mint leaves (*Mentha longifolia*)- 6 to 7 Ajwain (*Trachyspermum ammi*) -2teaspoon Water-2 glasses	Prepare decoction of the ingredients till water reduces to ½ glass. Consume when pain arises	55 (45.83)	II	Provides relief from pain
3	Karha **Ingredients** Kakarsinghi (*Pistacia khinjuk*)-4cm (pod) Water-1 glass	Prepare decoction of kakarsinghi pod in one glass of water till it reduces to half	36 (30.00)	III	Not known

4	Karha **Ingredients** Kasturi (*Moschus moschiferus*)- a little bit Jaggery-according to taste Black pepper (*Piper nigrum* –3 to 4 seeds Ginger (*Zinziber officinale*)-1/2 inch Tea leaves-a few	Prepare decoction of all the ingredients and consume before going to bed	30 (25.00)	VI	Not known
5	Jeera with water **Ingredients** Jeera (*Cuminum cyminum*)-1teaspoon	Consume jeera along with water	93 (77.50)	I	Effective for gastric pain
6	Pateesh *(Aconitum heterophyllum)-1 gm root powder*	Mix powder of 1g root in a glass of water and consume	28 (23.33)	V	Not known

* Frequency denotes multiples response

Near about twenty percent of the respondents suggested to consume 1gm root powder of pateesh (*Aconitum heterophyllum*) and water.

In support of the above findings, Sharma (2003) revealed that tribal women of Himachal Pradesh also consumed ajwain, jeera for curing pain in abdomen.

4.2.1.2.4. Swelling on limbs

This is another common condition during pregnancy. The treatment here is two fold oral medication and external application.

Oral medication is prescribed when swelling is due to coolness. One fourth of the respondents reported that decoction of small cardamon (*Ellettaria cardamomum*), cloves and sugar with water can be given because these foods are hot in nature thus reduces swelling while 22.33 percent respondents also suggested juice of sathavar (*Asparagus racemosus*) for treating swelling on limbs. Some of the respondents also recommended avoidance of certain foods like 10.00 percent reported avoidance of potato as it causes obesity while nearly thirty five percent avoided rice (33.33%) and radish (37.50%) as it is believed that these items are cold in nature and thus aggravates the problem (Table 6).

External application includes fomentation with hot water. Majority of the respondents (69.17%) reported fomentation with water boiled along with leaves of gandhala (*Murraya koenigii*) (Plate no. 12) and salt (Rank 1), while exactly sixty percent fall in the category of those who reported fomentation with agas bel (*Cuscuta reflexa*) (Plate no.9) boiled in water. Only 11.67 percent suggested massage with the leaves of eucalyptus (*Eucalyptus citridora*) and agas bel boiled in water.

The general advice for relief from oedema/swelling on limbs is to place a heated leaf of castor (*Ricinus communis*) on the swollen feet reported by 17.50 percent respondents followed by 9.17 percent who advised to consume low salt foods while 3.33 percent were of the opinion that less quantity of water should be consumed. The report from survey carried out by LSPSS advised fomentation with hot water boiled with ajamoda (*Apium graveolans*).

Table 6. Indigenous foods/ practices followed to cure swelling on limbs. N=120

Sr. No	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
A.	**Foods Given:**				
1	Karha Ingredients Small cardamon (*Elletaria cardamomum*)-2 to 3 Cloves (*Syzygium aromaticum*)-4 Sugar –according to taste	Boil all the ingredients in a glass of water till it reduces to ½ glass. Serve adding sugar to it. Consume at night	30 (25.00)	V	Swelling is due to coolness and these foods are hot in nature.
2	Satavar(*Asparagus racemosus*)	Juice of satavar is consumed with sugar	28 (23.33)	VI	Reason not known
B.	**Foods Avoided:**				
	Potato		12 (10.00)	IX	Causes obesity
	Rice		40 (33.33)	IV	Cold in nature and thus aggravates the problem
	Radish		45 (37.50)	III	
C.	**Massage**				
	Gandala **Ingredients***:* Gandala Leaves (*Murraya koenigii*)-a few Salt-3 teaspoon	Leaves of gandala are boiled in water. Salt is added and feet are dipped in this water.	83 (69.17)	I	Reason not known
	Agas bel (*Cuscuta reflexa*)	Vine is boiled in water and feet are dipped for 20-40 minutes	72 (60.00)	II	Reason not known
	Eucalyptus leaves (*Eucalyptus citriodora*) –7 to 8 leaves agas bel (*Cuscuta reflexa*)	Boil leaves of eucalyptus and agas bel in water and massage with leaves using this water	14 (11.67)	VIII	Reason not known
D.	**Miscellaneous**				
1	Treatment with castor leaf (*Ricinus communis*)	Leaf is heated over fire and is placed on swollen feet	21 (17.50)	VII	Reason not known
2	Consume low salt foods		11 (9.17)	X	
3	Consume less quantity of water		04 (3.33)	XI	

* Frequency denotes multiple response

4.2.1.2.5. Cold and cough

With respect to information about cold and cough, scrutiny of table 7 clearly reveals that suggested medication reported by 30.83 percent respondents consists of a quath of small cardamon, black pepper and tejpatta adding salt and sugar to it. A little more than thirty five percent of respondents (35.83%) reported consumption of bengal gram soup adding black pepper and salt.

Table 7. Indigenous foods/ practices followed by respondents to cure cold and cough N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Karha **Ingredients** Small cardamon *(Elletaria cardamomumum*)-2 Black pepper (*Piper nigrum*)-1/2 teaspoon Tejpatta (*Cinnamomum tamala*)-3 leaves Salt- a pinch Milk-1/4 glass	Boil all the ingredients in one glass of water and add sugar and milk to it. Consume half glass per day	37 (30.83)	III	Cardamon and black pepper help in removing cold and cough
2	Bengal gram soup **Ingredients** Black pepper (*Piper nigrum*)-according to taste Salt- according to taste	Consume Bengal gram soup adding black pepper and salt	43 (35.83)	II	Helps in relieving out the phlegm
3	Karha **Ingredients** Cardamon *Elletaria cardamomumum*)-3 Banafshah (*Viola serpens*)-5 Mulathi (*Glycyrrhiza glabra*)-3cm	Grind all the ingredients and boil them in water till it reduces to ½ glass. Give 2teaspoon per serving	61 (50.83)	I	Cardamon provides warmthness Banafshah and mulathi helps to take out the mucus

* Frequency denotes multiples response

Fifty percent of the respondents advised decoction of ground small cardamon, banafshah (*Viola serpens*) (Plate 1) and mulathi (*Glycyrrhiza glabra*) and is ranked 1 among the various practices. The observations are in tune with the findings of Sharma (2003).

4.2.1.2.6 Backache

This is another common condition which pregnant women face. It can be due to number of reasons, may be due to weakness, cold or any other. The respondents presented different practices/foods considering different reasons of backache. Consumption of four teaspoons per day of roasted sonth or dried ginger (*Zingiber officinale*) was advised by majority of the respondents (26.67%). It is prepared by roasting crushed sonth, adding desi ghee and sugar in equal amounts. The logic for consuming sonth is that it provides strength if backache is due to weakness (Table 8).

Exactly 20.83 percent of the respondents reported that women could also be given milk containing methi, which has been soaked in water for a day. Respondents believed that methi is hot in nature thus relieves of backache which is due to cold. Another method of treating backache, reported by near about fifteen percent was to heat the yellow leaves of aak (*Calotropis gigantea*), apply mustard oil and place on the back. This practice was suggested by least number of respondents.

Table 8. Indigenous foods/ practices followed by respondents to cure backache N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Roasted sonth **Ingredients** Sonth (*Zinziber officinale*)-1 small piece Desi ghee-3 table spoons	Crush sonth then roast and add ghee and equal amount of sugar. Consume 4 tea spoons per day	32 (26.67)	I	Sonth provides strength if backache is due to weakness
2	Methi milk *Ingredients* Methi (*Trigonella foenum graecum*)-2 teaspoons Milk-1 glass	Soak 2 teaspoon of methi in water for a day. Drain water and boil methi in a glass of milk and consume in the night before going to bed	25 (20.83)	II	Hot in nature thus relieves of backache which is due to cold.
3	Treatment with aak leaves (*Calotropis gigantea*)	Warm up the yellow leaves, apply mustard oil on leaves and place on the back.	17 (14.16)	III	Not known

* Frequency denotes multiples response

4.2.1.2.7. Blemishes on face

In condition of blemishes, respondents suggested of various pastes to be applied on face. Nearly fifteen percent of them (14.17%) advised to apply paste of ground leaves of bittergourd (*Momordica charantia*) and malai.

Majority of the respondents (43.33%) reported that application of mixture of soaked and crushed almonds (*Prunus amygdalus*) with milk on face is useful, while 37.50 percent were of the view that if mixture of turmeric (*Curcuma longa*) and gramflour is applied on face it is helpful in erasing

blemishes (Table 9). The logic presented for using almonds or gramflour and turmeric was that these ingredients improve complexion thereby reducing blemishes. While 35.83 percent of the respondents reported that pregnant women should use unripe papaya (*Carica papaya*) to get rid of blemishes on face. Tripathi (1999) while studying indigenous health technologies also recommended use of unripe papaya.

Exactly thirty five percent of the respondents believed in the application of crushed bark of pine (*Pinus roxburgi*). Some of the respondents suggested to apply paste of ground garlic (*Allium sativum*) and wash the face with first bath of the child.

Table 9. Indigenous foods/ practices followed by respondents to cure blemishes on face

N=120

Sr. No	**Indigenous foods/ practices** (Ingredients and quantity)	**Method of preparation and consumption**	**F (%)**	**Rank**	**Logic as per respondents**
	Apply paste of:				
1	Bittergourd leaves (*Momordica charantia*)- a few Malai-1teaspoon	Grind leaves of bittergourd, mix malai and hen apply on face. Repeat every day till blemishes disappear	17 (14.17)	V	Malai possesses cleansing action
2	Almond milk **Ingredients** Almonds (*Prunus amygdalus*)-7 to 8 Milk-1teaspoon	Soak almonds in water overnight. Then crush and mix 1teaspoon of milk and apply	52 (43.33)	I	Almonds are nourishing.

3	Turmeric and Gram flour **Ingredients** Turmeric (*Curcuma longa*)-1/2 teaspoon Gramflour-1teaspoon Malai-1/2 teaspoon	Mix all the ingredients and apply its pack on face.	45 (37.50)	II	Turmeric and gramflour improve complexion
4	Papita (*Papaya carica*)	Apply paste of unripe papita on face	43 (35.83)	III	Reason not known
5.	Bark of pine (*Pinus roxburghii*)	Crush bark of pine and use it as liniment on face	42 (35.00)	IV	Reason not known
6	Garlic cloves (*Allium sativum*)- 5	Apply paste of ground garlic till blemishes disappear	07 (5.83)	VII	Reason not known

* Frequency denotes multiples response

4.2.2 Nutrition

Life cannot be sustained without adequate nourishment. Once the pregnancy is suspected then the people in different communities follow different practices regarding dietary care of pregnant women. Hence the efforts were made to collect information regarding nutrition of the pregnant women at pre natal stage.

4.2.2.1. Increase in usual diet intake at pre-natal stage

It is evident from the table 10 that majority of the pregnant women (70.83%) had almost a normal diet because fifty percent of them eat moderately for the fear of having a large baby, causing obstruction and pain during delivery. In Tamil Nadu, instead of increasing the diet, the dietary intake of pregnant women was intentionally reduced on the fear that large food intake results in big foetus, causing difficulty in delivery (Manocha, 1995).

Table 10. Frequency distribution of respondents on the basis of increase in usual diet intake at pre-natal stage N=120

Sr. No	Practice	Resp-onse	F (%)	Logic as per respondents	F (%)
1	Increase in usual diet intake	Yes	35 (29.17)	Consumption of extra diet leads to normal delivery	09 (25.72)
				Avoids loss of health status of both mother and child	13 (37.14)
				No restrictions of elderly people	06 (17.14)
				Doctor advised	07 (20.00)
		No	85 (70.83)	Consumption of extra diet leads to larg size of baby causing difficulty in delivery	43 (50.59)
				Poor economic condition	10 (11.76)
				Control of food distribution is in the hands of mother-in –law	07 (8.24)
				Extra diet creates cramps during pregnancy	09 (10.58)
				Mother feels uneasy	16 (18.53)

In support of above findings child rearing practices of Vietnamese culture prescribe restriction of tonic foods, such as vitamin supplement to pregnant women and restrict her daily diet which could cause a large baby thus leading to a difficult delivery (*http://www.yarranet.net.au/acacia/ resource/ rearing.html*).

In the present study, few of the respondents (18.53%) did not increase their diet as they feel uneasy or due to poor economic condition (11.76%).

Out of total, 29.17 percent of the respondents had increase in their usual diet intake, as they are aware of the fact that good diet during pregnancy avoids loss of health status of both mother and child (37.14%).

Sharma (2003) reported that mother's poor diet during pregnancy causes complications and also affects the health of the new born leading to anaemia, rickets etc.

4.2.2.2. Extra diet intake during pregnancy

Regarding extra diet intake during pregnancy, the results in the table 11 reveals that the respondents were not aware of the balanced diet required for pregnant women who is supporting the child growing inside her.

As Shukla (1994) suggested that during pregnancy, women should include milk, curd, pulses, ghee, green leafy vegetables and fruits in their diet to have a healthy baby. In the present study, out of the total, only 14.17 percent had included fruits and vegetables, 26.67 percent included ghee, 10.00 percent included pulses while green leafy vegetables and extra milk was taken by 12.50 percent and 29.16 percent respondents, respectively. The respondents considered fruits and vegetables as good for health, ghee and pulses provide energy, pulses keep the pregnant woman healthy and extra milk helps in growth of foetus.

Table 11. Frequency distribution of respondents on the basis of extra diet intake at pre-natal stage N=120

Sr. No	Foods	F (%)	Logic as per respondents	F (%)
1	Fruits and vegetables	17 (14.17)	Good for health	14 (82.35)
2	Ghee	32 (26.67)	Provides energy	32 (100.00)
3	Pulses	12 (10.00)	Provides energy	07 (58.33)
4	Green leafy vegetables	15 (12.50)	Keeps healthy	07 (46.67)
5	Extra milk	35 (29.16)	Helps in growth of foetus	12 (34.29)
			Good for health of mother	08 (22.86)

* Frequency denotes multiples response

4.2.2.3. Foods avoided during pregnancy

During pregnancy, dietary taboos are invoked to protect the foetus and the mother. An additional and important aspect of prenatal care is food restrictions.

It is evident from the table 12 that exactly fifty percent of the respondents avoided ghee and banana as these are believed to form a sticky layer on child and cause difficulty in delivery and other reason cited was that the child gets healthy and causes difficulty in delivery. Papaya is forbidden by forty percent respondents for the fear of abortion and diarrhoea. Rajan and Sethuraman (1992) also reported that papaya is considered to be hot and abortifacient. In the present study only 32.50 percent of the respondents avoided citrus fruits as they feel that citrus fruits can cause cold, cough and pain in joints to the pregnant woman during winter season.

Table 12. Frequency distribution of respondents on the basis of foods avoided at pre-natal stage

N=120

Sr. No.	Foods	F (%)	Logic as per respondents	F (%)
1.	Ghee and banana	60(50.00)	Forms a sticky layer on child & causes difficulty in delivery	42(70.00)
			Child gets healthy and causes difficulty in delivery	18(30.00)
2.	Papaya	48(40.00)	Causes abortion and diarrhoea	48(100.00)
3.	Citrus fruits	39(32.50)	Causes cold and cough	23(58.97)
			Causes pains in joints during winter season	16(41.03)
4.	Eggs	86(71.67)	Causes abortion and gastric problems	49(56.98)
			Causes baldness and debility in foetus	37(43.02)
5.	Brinjal	51(42.50)	Causes constipation	38(74.51)
			Affects complexion of baby	13(25.49)
6.	Til and Jaggery	77(64.17)	Hot in nature thus leads to abortion	52 (67.53)
7.	Meat, fish	82(68.33)	Foetus may become oversized	63 (76.83)
8.	Coconut	89(74.17)	Forms a sticky layer on scalp of baby which causes problem in delivery	62(69.67)
			Child becomes healthier thus causes difficulty in delivery	04(4.49)
			Coconut is hot in nature so may lead to abortion	23(25.84)
9.	Walnuts	82(68.33)	Difficulty in delivery as child becomes healthier	26(31.71)
			Forms a sticky layer on child and causes difficulty in delivery	34(41.46)
			Hot in nature so may lead to abortion	22(26.83)
10.	Curd, Lassi (should be consumed in limited amount	34(28.33)	Causes cold and cough	16(47.06)
			Coolness gets stagnated inside the body thus may lead to delayed delivery and cold pains at delivery	25(73.54)

Frequency denotes multiple response

Near about seventy percent of the respondents reported that the foods of animal origin like eggs, meat or fish are believed to be harmful thus are avoided. The reason associated with this is that by consuming meat, fish foetus may become oversize and cause difficulty in delivery while eggs may cause abortion, gastric problems or may cause baldness and devility in foetus.

Avoidance of brinjal was reported by 42.50 percent of the respondents as they believed that it might cause constipation and affect complexion of baby. Nearly sixty five percent of the respondents (64.17%) reported that they did not consume til and jaggery for the fear of abortion as these are hot in nature.

Majority of the respondents (74.17 %) avoided fruits like coconut, as they are believed to form a white sticky layer on scalp of baby, which causes problem while delivery. Few respondents believe that coconut is hot in nature so may lead to abortion.

Similar reasons were reported by 68.33 percent respondents, for not consuming walnuts while only 28.33 percent avoided curd, lassi as it is believed that by consuming them, coolness gets stagnated inside the body thus may lead to delayed delivery and cold pains at delivery or can cause cold and cough.

Among Nilgiri Irulas also pregnant women are forbidden to consume brinjal, tomato as these foodstuffs, according to ethos are cold inducing in the body (Rajan and Sethuraman, 1992).

4.2.2.4. Specific food / non food items intake during pregnancy

While enquiring about specific food/non food items intake during pregnancy, it was reported by 43.33 per cent of the respondents that they consumed orange as it improves baby's colour while 26.66 per cent were of the view that extra milk and coconut should be consumed because it makes the child's complexion fair (Table 13). Nearly seventy (69.17%) and seventy-six (76.67%) percent reported consumption of multanni mitti and tamarind. They did not have any logic for consuming these items but the only reason was that they feel like to eat them.

Table 13. Frequency distribution of respondents on the basis of specific food / non food items intake at pre-natal stage N= 120

Sr. No	Food/Non food items	F (%)	Logic as per respondents	F (%)
1	Orange	52(43.33)	Improves baby's complexion	52 (100.00)
2	Extra milk and coconut	32(26.66)	Makes the child's complexion fair	32 (100.00)
3	Multanni mitti	83(69.17)	Feels like to eat	83 (100.00)
4	Tamarind	92(76.67)	Feels like to eat	92 (100.00)

* Frequency denotes multiples response

4.2.2.5. Special foods consumed to have a male child

Practice of consumption of some special foods to have a male child during first trimester of pregnancy is quite common in India.

Scrutiny of table 14 clearly reveals the special foods consumed by the rural women of Himachal Pradesh to have a male child. Nearly fifty percent of

the respondents (49.17%) reported that they consumed raw coconut seed while ten percent consumed methi seed, as it is believed that these items lead to birth of male child. Punia (1993) while studying child rearing practices of Haryana reported that the respondents consumed raw coconut seed, central portion of peacock feather, sona bhasam, methi seed, turmeric with milk and saunf to have male child.

Table 14. Frequency distribution of respondents on the basis of special foods consumed to have male child N=120

Sr. No	Foods	F (%)	Logic as per respondents	F (%)
1.	Raw coconut seed	59(49.17)	Changes the sex. Leads to birth of male child	59(100.00)
2.	Methi seed	12(10.00)	Changes the sex. Leads to birth of male child	12(100.00)

* Frequency denotes multiples response

4.2.2.6. Indigenous foods served during last trimester of pregnancy

Information was gathered to know special indigenous foods given to the pregnant lady during the last trimester of pregnancy.

Table 15 clearly indicates that more than fifty percent of the respondents (56.67%) reported that a pregnant woman was given wheat flour halwa prepared in desi ghee. It is believed that during last trimester, the mother needs energy thus ghee added to halwa is energy rich, provides strength to the body and is good for smooth delivery of baby.

Special foods are introduced especially in the ninth month of pregnancy. Majority of the respondents (75.83%) reported that pregnant mother should be given a mixture of roasted karwi saunf, meethi saunf, sugar powder and ghee in the morning. They consider meethi saunf as an appetizer

Table 15. Indigenous pre delivery foods served during last trimester of pregnancy N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
A.	**For Last Trimester**				
1	Wheat flour Halwa Ingredients Wheat flour-50 gm Desi ghee-50 gm Grinded sugar-100 gm Water-250 ml	Heat ghee, roast wheat flour in ghee on slow flame till it becomes light brown. Now add sugar. Add water and constantly stir it. Cook it till halwa leaves ghee.	68 (56.67)	IV	Ghee is energy rich and provides strength to the body and is good for smooth delivery of baby.
B.	**Foods given in 9th month of pregnancy**				
1	Desi ghee-1teaspoon Karwi saunf-1teaspoon Meethi saunf (*Foeniculum vulgare*) -1 teaspoon Sugar powder-1 teaspoon	Mix desi ghee, meethi saunf and karwi saunf, and then roast them properly. Add sugar powder. Consume it in the morning before taking anything.	91 (75.83)	I	Karwi saunf helps in improving digestive system Meethi saunf is an appetizer.
2	Karwi saunf(*Foeniculum vulgare*) -1teaspoon Jaggery-according to taste Dates (*Phoenix dactylifera*)-3 Milk-1 glass	Boil saunf, dates and jaggery in milk and take it every night	88 (73.33)	II	If something sticks to the body of foetus, karwi saunf helps in removing it. Dates, milk and jaggery provides energy.
3.	Karha *Ingredients* Til (*Sesamum indicum*)-50 gm Methi *Trigonella foenum graecum*)- 10gm Desi ghee-1 table spoon Dates (*Phoenix dactylifera*)-2; Milk-1 glass Water-1 glass	Boil dates, til and methi in water till it reduces to half glass. Then add milk and again boil it to half glass. Add desi ghee and consume daily in the night after dinner.	74 (61.67)	III	Provides energy to bear the stress of delivery and aids in comfortable delivery.
4.	Karha *Ingredients* Cloves (*Sygygium aromaticum*)-3 to 4 Small cardamon (*Elletaria cardomomum*)- 4 to 5 Bay leaves (*Cinnamomum tamala*)-2 Water-1 glass	Boil all the ingredients in a glass of water till it becomes ½ glass. Serve daily adding sugar.	60 (50.00)	V	Hot in nature, may lead to increased body temperature and removes coolness through excessive urination thus favors faster and easier delivery.

* Frequency denotes multiple response

and karwi saunf as helpful in improving digestive system. This practices was most frequently used by the respondents.

A little more than seventy percent (73.33%) respondents reported that the pregnant mother was given karwi saunf, dates and jaggery after boiling in milk as it is believed that if something sticks to the body of foetus, karwi saunf helps in removing it while dates, jaggery and milk provides energy.

Half glass of kadha of til (*Sesamum indicum*), methi (*Trigonella foenumgraecum*), dates, desi ghee is recommended by 61.67 percent respondents for pregnant women after dinner. This kadha provides energy to bear the stress of delivery and aids in comfortable delivery.

Exactly fifty percent of the respondents suggested a kadha of cloves (*Syzygium aromaticum*) , cardamon (*Ellettria cardamomum*) and tej patta (*Cinnamomum tamala*) in water. It is considered to be hot in nature thus may lead to increased body temperature and removes coolness through excessive urination, thus favours faster and easy delivery.

4.2.3. Sanitation and hygiene

Sanitation and hygiene is a very important component of pre-natal care. Thus an attempt has been made to determine the practices related to this aspect followed by respondents daily, alternately and weekly. Majority of the respondents (61.67%) reported that they took bath daily, while only two respondents were there who brushed their teeth weekly (Table 16).

None of the respondents was found who cleaned their hair daily as majority (79.17%) used to clean weekly. Combing of hair was practiced daily by almost all the respondents except for two respondents. Nearly seventy

percent (69.17%) of the respondents massage their hair weekly while only 10.00 per cent daily massage their hair. As regards cutting of nails hundred percent respondents did it weekly.

Table 16. Frequency distribution of respondents on the basis of practices related to sanitation and hygiene at pre natal stage N=120

Sr. No.	Practices	Daily	Alternately	Weekly
1	Bathing	74 (61.67)	34 (38.33)	12 (10.00)
2	Brushing of teeth	112 (93.33)	06 (5.00)	02 (1.67)
3	Cleaning of hair	0 (00.00)	25 (20.83)	95 (79.17)
4	Combing of hair	118 (98.33)	02 (1.67)	0 (00.00)
5	Massage of hair	12 (10.00)	25 (20.83)	83 (69.17)
6	Cutting of nails	0 (00.00)	0 (00.00)	120 (100.00)

* Frequency denotes multiples response

4.2.4. Physical rest and work

With respect to information about physical rest and work during pregnancy, scrutiny of table 17 clearly reveals that almost all the respondents (97.50%) do not take rest while only 19.17 percent reported that they avoided heavy work.

Table 17. Frequency distribution of respondents on the basis of physical rest and work at pre-natal stage N=120

Sr. No	Practice	Yes	No
1	Take rest	03 (2.50)	117 (97.50)
2	Avoid heavy work	23 (19.17)	97 (80.83)

In relation to the above findings, the studies conducted in Haryana were found quite suitable. It was reported by Batra (1995) that pregnant women continue working in fields, as they believe that it helps in easy delivery. Punia (1993) revealed that heavy work was not avoided by the rural women of Haryana as they believe that it leads to difficult delivery. While in Maharastra, U.P. and Tamil Nadu excessive hard work is prohibited for pregnant women, because over exertion may lead to abortion or other complications. Not doing any work is also not advisable as it would make the child dull and sleepy (*http:// www. healthwarary.com /reading/ mother/ appendix. 2html)*.

It can be concluded that pregnant women in rural areas of Himachal Pradesh being predominantly engaged in agricultural work, burdened with heavy workload, continue to work until the time of birth. This work appears to perpetuate the low status of women and the situation worsens when the women are from households with poor economic status.

4.2.5. Stress and strain

Table 18 depicts that 76.67 percent of the respondents never avoided lifting heavy weight. According to them, it keeps body fit and leads to normal delivery while remaining 23.33 percent respondents avoided heavy work. Among them 75.00 per cent fear of abortion while 7.15 percent reported that body does not allow to perform heavy work.

Regarding traveling, exactly seventy five percent of the respondents did not avoid traveling while only 25.00 percent never traveled in the third

trimester as it is believed that jerks may lead to abortion or movement may be harmful to foetus.

Table 18. Frequency distribution of respondents on the basis of practices related to stress and strain work at pre-natal stage N=120

Sr. No.	Practice	F(%)	Logic as per respondents	F(%)
1	Avoid lifting of heavy weight Always	28(23.33)	Chances of abortion are more	21 (75.00)
			Body does not allow	02 (7.15)
	Never	92(76.67)	Otherwise leads to difficult delivery	86 (93.47)
			Keeps body fit	06 (6.53)
2	Avoid traveling Always (in IIIrd trimester)	30(25.00)	Jerks may lead to abortion	27 (90.00)
			Movement may be harmful to foetus	03 (10.00)
	Never	90(75.00)	Helps in easy delivery	90 (100)

4.2.6. Miscellaneous

The mother or mother-in-law that is the principal person playing a significant role in assisting, observing and applying some very strict rules to the pregnant women. Information was also gathered regarding various such practices. Exactly sixty percent of the respondents avoid looking at solar/lunar eclipse as they believed that it could cause clubbing of organs of foetus, while fifty five percent reported that they never see the dead body or visit the places where someone has died. According to them if a pregnant women do not follow the practice then the body of foetus inside womb squeezes and few of

them also fear of evil spirits shadow. Nearly fifty percent of the respondents (48.33%) believed that high healed shoes/chappals should be avoided as they may cause imbalance and lead to some mishappening. Application of mehendi on bands was also avoided by 40.00 per cent respondents for the fear of having any colured mark on body of baby (Table 19).

In some communities, pregnant women are advised to listen to sweet and soft music, which would amuse her and help the unborn child to develop 'artistic' skills in the future (*http://www.yarranet.net.au/acacia /resource /rearing.htm*). While a survey conducted by LSPSS (Lok Swaasthya Parampara samvardhan samithi) revealed that in Maharastra, U.P., M.P. and Tamil Nadu a pregnant woman is prohibited from sleeping in supine position with stretched extremities as it may cause the twisting of the umbilical cord around the neck of the foetus.

Table 19. Frequency distribution of respondents on the basis of miscellaneous practices followed at pre-natal stage N=120

Sr. N0.	**Practice**	**F (%)**	**Logic as per respondents**	**F (%)**
1	Avoid looking at solar/lunar eclipse	72 (60.00)	Causes clubbing of organs of foetus	66 (71.67)
2	Not to see dead body/ visit the place where someone has died	66 (55.00)	Body of foetus inside womb squeezes	56 (84.85)
			Fear of evil spirits shadow	10 (15.15)
3	Avoid high heel shoes/chappals	58 (48.33)	May cause imbalance and lead to some mishappening	58 (100.00)
4	Avoid application of Mehendi on hands	48 (40.00)	There may be any coloured mark on the body of the baby	48 (100.00)

* Frequency denotes multiples response

4.3. INDIGENOUS PRACTICES FOLLOWED BY RURAL WOMEN AT PERI NATAL STAGE

4.3.1. Health

With the completion of all the three trimesters of pregnancy women have to face the challenging stage i.e. the time to deliver a child.

4.3.1.1. Posture at the time of delivery

While delivering the baby posture of expectant mother also matters. In the present study 73.33 percent of the respondents reported to deliver the baby in lying position while 26.67 percent delivered in squatting position. They were of the view that in squatting position, the mother can deliver the baby easily and quickly.

In Madhya Pradesh, the lady is asked to sit in a squatting position making possible to have faster and easy delivery.

Table 20. Frequency distribution of the respondents on the basis of posture at the time of delivery N=120

Sr. No.	Posture	F (%)	Logic as per respondents	F (%)
1	Squatting	32 (26.67)	Leads to fast and quick delivery	32 (100.00)
2	Lying	88 (73.33)	Doctor's advice	88 (100.00)

4.3.2. Nutrition

A woman requires lot of energy to deliver a child and tolerate the pains. Although it was found that the pregnant women in rural areas were not given due attention during whole of pregnancy period but at the time of onset of labour pains special indigenous foods were served to have faster and easier delivery.

4.3.2.1. Indigenous pre delivery foods served on onset of labour pains

Scrutiny of table 21 clearly represents that 91.67 percent of the respondents reported of decoction of cloves, small cardamon, jeera , dried ginger, mulathi powder, til, dates, desi ghee, jaggery. According to them this decoction is hot in nature, removes coolness through excessive urination, which is believed to be the cause for delayed delivery. This practice got first rank. Exactly seventy percent of the respondents used to gave kadha of dried ginger powder, big cardamon (*Amomum subulatum*), ajwain and dates at the onset of labour pains as it is believed that the kadha increases pains and aids in comfortable delivery.

Nearly sixty per cent (58.33%) of the respondents reported to give kadha of tej patta, dates, small cardamam, jaggery and desi ghee as it stimulates and aids in comfortable delivery.

One-third of the respondents suggested to boil seed pods and spongy part of a plant called gurlakdi (*Cassia fistula*) in 500 ml of water. When it reduces to half the quantity add jaggery and give to pregnant women. They believe that this decoction produces heat and facilitates in easiest and quickest delivery.

In support of above findings, Pandey and Tiwari (2001) clearly revealed that at the onset of labour pains for an easy and less painful delivery the tribal people of M.P. used to gave haldi, gur and hot water.

Table 21. Indigenous pre delivery foods served on onset of labour pains N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Karha Ingredients Cloves-5 t 6 Small cardamon *Elletaria cardamomum*)-2 t 4 Jeera (*Cuminum cyminum*)-1 teaspoon Dried ginger (*Zingiber officinale*)-1/4th piece Mulathi powder (*Glycyrrhiza glabra*)-1/2 teaspoon Til (*Sesamum indicum*)-1 teaspoon Dates (*Phoenix dactylifera*)-2 to 4 Desi ghee-2 to 3 teaspoon Jaggery- according to taste	Boil all the ingredients in a glass of water till it becomes half glass. Consume adding ghee.	110 (91.67)	I	It is hot in nature an removes coolness through excessive urination which is believed to be the cause for delayed delivery.
2.	Karha Ingredients **Dried ginger powder** **(*Zingiber officinale*)-1 teaspoon** Big cardamon (*Amomum subulatum)*-1 Ajwain(*Trachyspermum ammi*)-1 teaspoon Dates (*Phoenix dactylifera*)-2 to 3 Sugar	Boil all the ingredients in half glass of water till it reduce to half katori. Add sugar and consume when labour pains start.	84 (70.00)	II	Increases pains and aids in comfortable delivery
3	Karha Ingredients Tej patta-2; Dates-1 t 2 Small cardamon (*Elletaria cardamomum*)-2 Jaggery-1 teaspoon Desi ghee-1 teaspoon	Boil all the ingredients in one glass of water till it reduce to half glass. Consume when labour pains start.	70 (58.33)	III	Stimulates pain and aids in comfortable delivery
4.	Karha *Ingredients* Black spongy part of gurlakdi seed pod (*Cassia fistula*)-200 gm Water-500ml Jaggery-20 gm	Take seed pods and spongy part. Boil them in water. When half of the water is left add jaggery to it. Consume just after starting of labour pains.	40 (33.33)	IV	Produces heat thus aids in comfortable delivery.

* Frequency denotes multiple response

4.3.3. Sanitation and hygiene

4.3.3.1. Material used to cut the umbilical cord

The practice of cutting the cord only after the placenta is delivered, is traditionally observed throughout the Indian subcontinent. Almost all dais wait until the placenta is out before tying and cutting the cord.

While gathering information regarding material used to cut the umbilical cord, 55.83 percent of the respondents used sterilized blade while unsterilized blade was used by 13.33 percent because of the absence of the trained nurse. Scissors was used by 29.17 percent of the respondents. Sharma (2003) in her study on gaddi tribes of North Western Himalayan region also concluded that majority of the respondents were using sterilized blade followed by those who used scissors. In the present study it was found that few of the respondents were also there who are still using sickle to cut the umbilical cord as their value systems and traditions do not allow them to use any other implement to cut the cord.

Table 22. Frequency distribution of respondent on the basis of material used to cut the umbilical cord N=120

Sr. No	Material used	F (%)	Logic as per respondents	F (%)
1	Sterlised blade	67 (55.83)	Presence of trained doctors	60 (89.55)
			Prevent spread of disease	07 (10.45)
2	Unsterlised blade	16 (13.33)	Absence of trained nurse	16 (100.00)
3	Scissors	35 (29.17)	Non-availability of other implement	25 (71.43)
			Lack of trained nurse	10 (28.97)
4	Sickle	02 (1.67)	Value systems do not permit	02 (100.00)

4.3.3.2. Material applied on naval of child

With regard to material applied on naval of child, majority of the respondents i.e. 93.33 percent used heated paste of turmeric and mustard oil. Out of these 88.40 percent responded that these ingredients help in healing of naval and make it dry, while 1.80 - 7.14 percent presented various other reasons like these prevent infection or elderly women favour it.

Table 23. Frequency distribution of respondent on the basis of material applied on naval of child N=120

Material used	**F(%)**	**Logic as per respondents**	**F(%)**
Heated paste of turmeric and mustard oil	112(93.33)	Helps in healing of naval and making it dry	99 (88.40)
		Prevents infection	02 (1.79)
		Commonly used practice	08 (7.14)
		Elderly women favour it	03 (2.67)
Cures automatically	08(6.67)	-	-

A joint WHO/UNICEF publication (1986) reported that traditional practices such as applying cow dung, ash or mud on the cord to stop bleeding or cutting cord with unclean instruments are responsible for neonatal tetanus (*http://www.nuffic.nl/ciman/ikdm/2-1/contens html*). Similarly Skidmore (2002) reported that the risk of neonatal sepsis or tetanus is significant in some hill tribe villages, where midwives lacking proper equipment or training may cut the umbilical cord after delivery with a bamboo sliver and paint the umbilical stump with charcoal. Thus such practices should be avoided.

4.4. INDIGENOUS PRACTICES FOLLOWED BY RURAL WOMEN AT POST NATAL STAGE

4.4.1. Health

4.4.1.1. Indigenous foods served to control excessive bleeding after delivery

Table 24 indicates that nearly thirty percent (29.17%) of the respondents prescribed to drink ghee adding sugar. They believe that ghee forms a thin layer inside the uterus as well as provides strength, while 45.83 percent of the respondents preferred to give ghee with milk and this practice got first rank as majority of the rural women practice it.

Exactly 30.83 percent respondents responded to consume cooked mixture of ajwain, jaggery and almond in water thrice a day for one week. The logic presented by them was that, the mixture gives energy and provides cleansing action to body, 16.67 percent of the respondents reported that consumption of kamarkas and nagori gond boiled in milk is beneficial to control bleeding after delivery as gond checks ammnorrhoea.

Sharma (2003) while studying the traditional foods served to tribal women of Himachal Pradesh, discussed of a different preparation called "Sheera" prepared by roasting wheat extract and sugar in excess of ghee.

Table 24. Indigenous foods served to control excessive bleeding after delivery N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Ghee with sugar (as per desire)	Heat ghee and add sugar. Drink it two times a day	35 (29.17)	III	Ghee forms a thin layer inside the uterus as well as provides strength.
2	Milk and desi ghee **Ingredients** Milk-1 glass Desi ghee-2 teaspoon	Boil a glass of milk and add desi ghee Take three times a day	55 (45.83)	I	Provides energy
3	Ajwain (*Trachyspermum ammi*)-50gm Desi ghee-10gm Water-20ml Almonds (*Prunus amygdalus*)-a few Jaggery/sugar-According to taste	Heat ghee and add ajwain , jaggery and water. Cook for 2-3 minutes and then add almonds. Consume it three times a day for a week.	37 (30.83)	II	This mixture gives energy as desi ghee and dates are added while ajwain provides cleansing action to the body.
4	Milk + nagori gond +kamarkas	Soak kamarkas and gond in water overnight. Then mix it with boiled milk and consume as per desire	20 (16.67)	IV	Gond checks amnorrhoea kamarkas provides strength to body

* Frequency denotes multiples response

While a report from Punjab (Anon., 2001a) advised to avoid chuhara (*Phoenix dactylifera*) and coconut to control bleeding as they enhance uterine activity leading to excessive post delivery bleeding.

In Haryana, "jaggery halwa" prepared from wheat flour and jaggery in ghee is recommended. Among Igbo of Nigeria, soon after delivery mother is given a stimulating hot soup made with dried fish, meat, yams, plenty of pepper and special herbal seasoning called " udah" which makes the uterus contract and thus helps in expelling getting rid of blood clots (Obikeze, 1997).

4.4.1.2. Methods / practices followed in delayed expulsion of placenta after delivery

Delayed expulsion of placenta also termed as " Retained placenta" is defined as when the placenta is not delivered within 30 minutes after delivery.

Table 25. Methods /Practices followed in delayed expulsion of placenta after delivery N=120

Sr No	Practice	F (%)	Logic as per respondents
1	Give mother ghee for drinking	73(60.83)	Due to act of vomiting expulsion will take place
2	Put heat under the cot of the mother	47(39.17)	Expulsion will take place due to heat

Retained placenta-either full or partial can lead to hemorrhage or infection. There are many indigenous practices associated with removing the placenta. Some of these includes pressing hard on the fundus, pulling on the cord, hanging heavy objects on the cord which can be dangerous and lead to complications(*http://www.cedpa.org/publications/pdf/saving motherlives8.pdf*). Hence efforts were also made to find out various practices/methods followed for expulsion of retained placenta. Table 25 reveals that majority of the respondents reported to drink ghee because due to act of vomiting expulsion

will take place while near about forty percent recommended that by putting heat under the mother's cot, expulsion will take place.

4.4.1.3. Practices followed for prevention of uterus prolapse

In the present study, an attempt has been made to study practices followed by the respondents for prevention of uterus prolapse.

Scrutiny of table 26 clearly indicates that nearly forty five percent of the respondents fall in the category of those who advised 3-4 settings in the water boiled with bark of kikar (*Acacia nilotica*) and pipal (*Ficus religiosa*).

Table 26. Practices followed for prevention of uterus prolapse N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Logic as per respondents
1.	Kikar bark (*Acacia nilotica*)-200gm Pipal bark (*Ficus religiosa*)- 200gm Water-1 liter	Bark of kikar and pipal are boiled in water then sieved. Collect water in tub and 3-4 sittings are done in warm water.	52 (43.33)	Helps in prevention of prolapsed uterus.
2.	Sit on a hard ball made by rolling pieces of clothes.		30 (25.00)	To lift the uterus upward as the hard cloth provide pressure

* Frequency denotes multiples response

The logic for these sittings was that the warm heat avoids infection and helps in normal circulation of blood.

One - fourth respondents of the present study reported that mother should sit on a hard ball made by rolling pieces of cloth. This is done to lift the uterus upward as the hard cloth provides pressure.

While in Assam (Anon., 2001c) for prevention of uterus prolapse, earthworm cast is heated till it becomes deep red then water is poured into it. The vapours coming out are allowed to reach the uterus.

Practice of pushing the uterus by fingers is prevalent in Punjab and Haryana (Anon., 2001a and 2001b)

4.4.2. Nutrition

The mother experiences a completely new life when she delivers a child as a part of her body after a period of nine months. The process of delivery requires a lot of energy on the part of women. As the birth takes place, the woman feels light and a type of emptiness in the body.

In every community, special attention is given after delivery. This type of attention has its starting point immediately after delivery, as giving birth to the child is believed to be coming out from the mouth of death. At this time, it is very important to maintain a healthy diet. Not only the energy is required to look after the baby, but a healthy diet will have long term health benefits for both mother and child.

4.4.2.1. Foods served to mother after delivery

In Himachal Pradesh, different types of foods are served to the mother after delivery, which are presented in Table 27.

The scrutiny of the table reveals that according to eighty percent respondents, women were given coarsely ground mixture of ajwain, dry coconut powder, dates, almonds, crushed jaggery and ghee for 7-10 days after delivery. Ajwain was added with a belief that it avoids constipation while other ingredients provide strength.

Table 27. Indigenous foods served to the mother after delivery N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Ajwain (*Trachyspermum ammi)*-50 gm Desi ghee-2 teaspoon Dey coconut powder-50 gm Dates (*Phoenix dactylifera*)-5 Almonds (*Prunus amygdalus*)-5 Crushed jaggery-According to taste	Coarsely grind all the ingredients and give daily in the morning before tea for 7-10 days after delivery	96 (80.00)	III	Ajwain avoids constipation and other ingredients provide strength.
2	Kharani Ingredients Almonds (*Prunus amygdalus*)-5 Dates (*Phoenix dactylifera*)-5 Coconut powder-50 gm Cashewnut-25 gm Sund-25gm Desi Ghee-2 teaspoon Sugar-according to taste Milk-1/2 kg Charmagaz (*Citrullus vulgaris)*-25gm	Roast sund in ghee till it is reddish brown in colour and then add all crushed nuts. Pour milk and sugar, boil till it reduces to 250 grams. Consume twice a day i.e. in morning and evening upto 11 days.	113 (94.17)	II	Provides energy and helps to overcome stress of post delivery.
3	Sund Ingredients Suji-1/2 kg Kamarkas-50gm Mug-20 gm Meethi saunf (*Foeniculum vulgare*)-100m Karwi saunf (*Foeniculum vulgare* -50gm Gond-150gm Charmagaz (*Citrullus vulgaris* -250gm Almonds (*Prunus amygdalus*)-5 Dates (*Phoenix dactylifera*)–250 gm Coconut-250gm Cashewnut-150gm Khoya-250gm	Grind Charmagaz, meethi saunf, karwi saunf, kamarkas, mug, gond, almonds, cashewnuts, dates, coconut, aasgandh, raisin, sund, sugar, separately. Roast suji at low flame in ghee then add gond and assgandh. After that add coconut powdr and all the the left ingredients. Then add sugar. Roast for 10 minutes at low flame. Keep on stirrin. Whenthe mixtre turns reddish brown, sund is ready. Milk is used to make ladoos od sund.	115 (95.83)	I	Kamarkas checks backache Nuts and raisins provide energy Mug is used for regular menstruation cycle Meethi saunf helps in normal flow of milk and checks constipation. Karwi saunf is helpful in improving digestion. Gond checks bleeding. Aasgandh is stimulant, thermogenic thus

	Aasgandh (*Withania somnifera*)-50gm Raisins-150gm Sund (*Zinziber officinale*)-150gm Desi ghee-1kg Sugar 1½ kg Milk-250gm	Consume one ladoo three times a day			provides strength to body and also helps in tissue building.
4	Wheat flour Halwa Ingredients Wheat flour-1kg Desi ghee-1kg Sugar-1kg Black pepper (*Piper nigrum*)-10 gm Raisins-50gm Almonds (*Prunus amygdalus*)-50 gm Charmagaz (*Citrullus vulgaris*)-50gm Gum of acacia-5gm Dried ginger (*Zinziber officinale*)-50gm Grated coconut-50 gm Ajwain (*Trachyspermum ammi*)-50gm Kamarkas-50gm	Roast wheat flour in ghee until light brown and then grind all the ingredients. Mix all the ingredients except sugar. After taking the preparation off fire, add sugar.	64 (53.33)	IV	It is light, increases milk flow and decreases pain.
5	Semi liquid food e.g. dalia or moong dal soup or khichari is given along with lot of desi ghee.		54 (45.00)	V	Easily digestible and ghee provides energy
6	Methi (*Trigonella foenum graecum*)-1/2 teaspoon	Methi is crushed and is sprinkled on rice or prepared vegetable	34 (28.33)	VI	Provides strength, removes backache, stomachache and provides warmth ness.
7	Milk and ghee Ingredients Milk-1 glass Desi ghee-1 teaspoon	Boil milk and add desi ghee. Consume it 2 times a day	20 (16.67)	VII	Provides strength

* Frequency denotes multiple response

Nearly ninety five percent (94.16%) of the respondents advised that the mother should be given a special preparation called "Kharani" twice a day upto 11 days after delivery. Kharani is prepared from roasted dried ginger, milk, dry fruits and sugar. It was considered to be energy providing and helps to overcome stress of post delivery. Almost similar percentage of respondents talked of another preparation that is sund, which is given from fourth day of delivery for three months. Sund is prepared by roasting suji adding meethi saunf, karwi saunf, kamarkas, gond, dry fruits, mug and sugar powder, till the mixture turns reddish brown. Kamarkas and gond was added with a belief that they check backache, dry fruits provide energy, meethi saunf helps in normal flow of milk and checks constipation while karwi saunf is helpful in improving digestion. Mug was used for regular menstruation cycle.

Giving halwa prepared from moong dal and other ingredients like aasgandh (*Withania somnifera*), charmagaj (*Citrullus vulgaris*), gond and dry fruits was also reported by exactly sixty percent of the respondents. Another halwa of wheat flour containing roasted wheat flour with ghee, black pepper, dry fruits, gum of acacia, dry ginger, ajwain and kamarkas was also reported by 53.33 percent respondents.

Apart from these preparations, 45.00 percent respondents suggested to serve semi-liquid foods, as they are easy to digest. Near about one-fourth of the respondents reported to sprinkle crushed methi on the meal of the mother, while one fifth stated of giving asafoetida three times daily for one week after delivery. Consumption of milk adding desi ghee was recommended

by 16.67 percent of the respondents. These foods were believed to provide strength, warmthness and remove backache.

In a study on foods consumed by Gujarati mothers, it was revealed that they consumed wheat rab, containing wheat flour, ghee, jaggery, dry ginger powder for first fifteen days after delivery (Mumani *et al*., 2001) whereas in Haryana, various preparations such as "chuwwani" a mixture of jaggery, cardamon, saunf, dry ginger and methi, "Gur ki pat" prepared from roasted wheat flour, jaggery and water and "Gur Jeera" a mixture of jaggery, wheat flour and jeera were given to mother (Batra, 1995). Punia (1993) also reported of ajwain kadha, gond and kamarkas, thus it is concluded that whether it may be Himachal Pradesh or Gujarat, the preparations served to mothers after delivery possess different names but ingredients used for them are almost similar.

4.4.2.2. Drinking water treatment

It was wonderful to note that all the respondents used to consume water treated with karwi saunf, tejpatta, small cardamon, while only 25.83 percent of the respondents consume water boiled with karwi saunf only (Table 28). They believe that these ingredients are easily digestible, avoid thirstiness, reduce chances of stomachache and avoid stomach bulginess.

In Punjab, boiled and strained water of " moti elaichi" is given at regular intervals for seven days after delivery to relieve pain and clear the uterus of any blood clots (Anon., 2001a).

Table 28. Frequency distribution of respondents on the basis of treatment given to drinking water for the mother N= 120

Sr. No.	Ingredient/Material with which water is treated	Method of preparation and consumption	F (%)	Logic as per respondents
1	Water treated with Karwi saunf (*Foeniculum vulgare*) Tejpatta (*Cinnamomum tamala*) Small cardamon (*Elettaria cardamomumum*)	Boil water with all three ingredients. Consume as per desire	120 (100.00)	It is light and easily digestible, reduces chances of stomachache and avoids stomach bulginess.
2	Water treated with karwi saunf (*Foeniculum vulgare*)	Boil water with all three ingredients. Consume as per desire	31 (25.83)	Easily digestible

* Frequency denotes multiples response

4.4.3. Sanitation and hygiene

4.4.3.1. Treatment given to placenta after delivery

In the present study, information has also been gathered from respondents regarding treatment given to placenta after delivery (Table 29). Although obstetricians consider the placenta as waste product but they are highly ritualized by traditional people, as indigenous midwives say that they use the placenta as a tool to revive an infant who is not breathing (*http.//www/cedpa.org/publication/pdf/savingmotherslives.12.pdf*). Table 29 clearly revealed that 12.50 per cent of the respondents burry the placenta inside the home with a view that at home it remains secured as outside the home if any animal eats it, the mother may not have any child in future, while

19.17 percent of the respondents burry it inside near the cot of the mother, to have next child within a short span of time. Exactly 31.67 percent of the respondents had a belief that for the birth of baby girl placenta is buried outside and for baby boy it is buried inside.

Table 29. Frequency distribution of respondents on the basis of treatment given to placenta after delivery N=120

Sr No.	Treatment	F (%)	Logic as per respondents
1	Burry inside home	15 (12.50)	In home, it remains secured, as outside the home if any animal eats it, the mother may not have any child in future.
2	Burry inside near the cot of mother	23 (19.17)	To have next child within a short span of time
3	For baby girl burry outside and for baby boy burry inside the home	38 (31.67)	To have male child and avoid female birth in family.

- Frequency denotes multiples response

Punia (1993) reported that placenta is thrown away in Aak plant to have male child while Mathur (1989) reported numerous ways of disposal of the cut cord and placenta e.g. tribals of Madhya Pradesh burry the placenta in the ground whereas Rajasthani tribals burry it in the house premises and put a stone between the layers of mud so that dogs or cats may not eat the placenta.

4.4.3.2. Bathing of mother after delivery

It is clear from the table that all the respondents bathed after 5th day of delivery. Various reasons were cited by the respondents for taking bath after

fifth day as majority of them (83.33%) stated that if bath is given early, water enters into genital organs of the mother while 18.33 percent delayed bath to fifth day because of traditional boundary (Table 30).

Table 30. Bathing of mother after delivery N=120

Sr. No.	Bathing	F (%)	Logic as per respondents	F (%)
1	Within 4 days	0		
2	After 5th day	120 (100.00)	Tradition boundary	22 (18.33)
			Lack of proper knowledge	0
			If bath given early, water enters into genital organs of the mother	100 (83.33)

A study undertaken by Punia (1993) reported that mother was allowed to bath on third day whereas according to Nigerian and Vietnamese child rearing practices, the mother cannot bath instead she receives a sponge bath while abdomen and hips are given a vigorous massage with bath towels, herbs and hot water (Obikeze, 1997).

4.4.4. Practices followed during lactation

4.4.4.1. Foods avoided during lactation

Whatever the mother takes have a direct influence on the child. It is also believed that if the women do not have control over her tongue for some period after delivery then it can create health problems for the self and child.

From the table 31 it can be seen that near about sixty five percent of the respondents reported that they avoided cauliflower (65.00%), potato

(62.50%) and pumpkin (66.67%) as these vegetables were considered to be gaseous thus can cause stomachache. Similarly avoidance of pulses like mash dal was reported by 40.83 percent and rajmash by 65.00 percent respondents. Brinjal was avoided by 40.83 percent respondents, as they believe that it affects complexion of baby. A little more than half of the respondents (50.83%) reported to avoid chillies because they make the breast milk indigestible while nearly one -fourth of the respondents did not consume rice for the fear of pus formation in uterus.

Table 31. Frequency distribution of respondents on the basis of foods avoided by the mother during lactation N=120

Sr. No.	Foods	F (%)	Logic as per respondents
1	Cauliflower	78 (65.00)	Being gaseous foods, chances of stomachache are there
2	Potato	75 (62.50)	
3	Pumpkin	80 (66.67)	
4	Brinjal	49 (40.83)	Affects complexion of baby
5	Mash dal	78 (40.83)	Leads to gas formation and stomachache in the infants
6	Rajmash	86 (65.00)	
7	Chillies	61 (50.83)	Makes the breast milk indigestible
8	Rice	27 (22.50)	Leads to pus formation in uterus.

* Frequency denotes multiples response

In relation to the above findings, the study conducted by Telesara (2000) was found quite suitable. It was reported that during lactation for about 10-15 days after delivery the mother was not given chapatti/dal/vegetable as the nerves of the mother's body gets distented due to intake of chapatti and cause stomachache. The avoidance of curd, lassi, spices, fruits etc. was

reported, as these were hot foods and cause burning sensation in mother and infant's body while fruits were believed to cause stomachache to infants. Curd and lassi were believed to coagulate mother's milk.

4.4.4.2. Special foods / techniques to increase milk secretion

Efforts were also made to explore the information about special foods/techniques to increase milk secretion. Table 32 depicts that one- fourth of the respondents reported consumption of grinded root of satavar (*Asparagus racemosus*) with milk twice a day for seven days after delivery. It is believed that this plant increases milk secretion. Exactly 32.50 percent of the respondents suggested of a local preparation called " Khoru" which is prepared by adding buttermilk to heated oil, methi, jeera, salt and turmeric. The logic presented for serving khoru was that its consumption is directly related to milk production, as buttermilk is a milk product. Nearly seventy percent (68.33%) respondents suggested to drink hot cow's milk daily.

Meghraj and Choudhary (2002) in their study reported that lactating women consumed " Batissa laddoo" prepared from ghee, sugar, jaggery, gond and dry fruits and "Harisa" from ghee, sugar, jaggery, wheat flour and dry fruits on the belief that they increase milk secretion. Whereas in Assam, curries made of papaya, colocasia and garlic are given to increase milk secretion (Anon., 2001c).

In tribal areas of Himachal Pradesh, a pinch of powder of fried earthworms were given to mothers to increase milk secretion (Sharma, 2003). While in Nigeria, palm wine is given as it contains high level of yeast which is considered good for milk flow (Obikeze, 1997) and among Nilgiri Irulas, nursing mothers are given tamarind in the form of Rasam (cooked juice) to enhance milk secretion (Rajan and Sethuraman, 1992).

Exactly fifty percent of the respondents reported to take half cup decoction of stem of galoein (*Tinospora cordifolia*) in the morning and

Table 32. Frequency distribution of respondents on the basis of special foods consumed to increase milk secretion N=120

Sr. No	Foods/Techniques Ingredients and Quantity	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Satavar root (*Asparagus racemosus*)-10gm Milk- 1 glass	Grind root of satavar along with water and consume orally with a glass of milk twice a day for 7 days after delivery.	30 (25.00)	IV	Increase milk secretion
2	Khoru Ingredients Oil-1/2 teaspoon Methi (*Trigonella foenum graecum*)-1/2 teaspoon Jeera (*Cyminum cuminum*) -1/2 teaspoon Turmeric (*Curcuma longa*)-1/2 teaspoon Buttermilk-1 glass Salt –as per desire	Heat oil, add methi, jeera, salt, turmeric and then buttermilk. Immediately take the preparation out of fire.	39 (32.50)	II	Buttermilk is a milk product and its consumption is directly related to milk production.
3.	Hot cow's milk		82 (68.33)	I	Helps in increasing milk secretion.
4.	Aasganth (*Withania somnifera*). 20 gm Satavar (*Asaragus racemosus*)- 5 gm Mulathi (*Glycyrrhiza globra*) – 1"	Grind the ingredients and consume the mixture with milk in morning and evening for 15 days	14 (20.00)	V	Increase milk secretion
5.	Stem of galoein (*Tinospora cordifolia*) – 2"	Make dicoction with the stem. Take ½ in morning & Evening for 7-14 days	34 (28.33)	III	Increase milk secretion

* Frequency denotes multiples response

Evening for 7-14 days. Forty percent of the respondents also suggested to consume mixture of grinded aasgandh, satavar and mulathi with milk in morning and evening for a fortnight. These plants are considered medicinally valuable as they help in increasing milk secretion. Near about thirty percent recommended to take half cup decoction of stem of galoein to increase milk secretion.

4.5. INDIGENOUS PRACTICES FOLLOWED BY RURAL WOMEN REGARDING CHILDCARE

4.5.1. Health

4.5.1.1. Immunization of the Baby

Table 33 indicates that 74.17 percent respondents reported that they have immunized their children against various diseases. Majority of them (86.52%) stated doctor's advice as the motivating force behind immunization of the baby.

Exactly 25.84 per cent respondents never immunized their children as some of them (35.48%) lack knowledge about its uses while other (32.26%) found it troublesome. A little more than twenty percent (22.58%) respondents think that their children are safe without immunization and 9.67 per cent fear of fever.

4.5.1.2. Massage of Newly Born

A perusal of data in table 33 clearly indicates that hundred per cent of the respondents massaged their newly born baby as most (90.83%) of them believed that massage helps in strengthening muscles and bones of the baby while 9.17 per cent responded that massage helps in proper blood circulation. The reason cited by Bhave and Rao (1980) were nearly the same like it improves circulation, is a form of exercise and promotes sound sleep. None of the respondents was found who does not massage their baby.

Table 33. Frequency distribution of respondents on the basis of practices of followed for health of the child. N=120

Sr. No.	Practice	Response	F (%)	Logic as per respondents	F (%)
1	Immunization of the baby	Yes	89 (74.17)	For better health	0
				For protecting child from diseases	09 (10.11)
				Mass media emphasis	03 (3.37)
				Advice from doctor	77 (86.52)
		No	31 (25.83)	Lack of knowledge	11 (35.48)
				Troublesome	10 (32.26)
				Fear of fever	03 (9.6)
				Safe without immunization	07 (22.58)
2	Massage of newly born baby	Yes	120 (100.00)	Helps in proper blood circulation	11 (9.17)
				Strengthen muscles and bones	109 (90.83)
				Keeps the baby active	0
		No	0	Scarcity of time	0
				Inadequate knowledge of benefits	0
				Poor economic condition	0

4.5.1.3. Home remedy for common infant health problems

Efforts were also made to explore the information about home remedies for common infant health problems.

4.5.1.3.1. Diarrhoea

Scrutiny of table 34 clearly reveals that if the child suffers from diarrhoea, 95.83 per cent respondents reported that they boil small cardamon, ajwain and jaiphal in mothers milk and feed the baby. Cardamon is considered as a carminative, ajwain helps in digestion while jaiphal (*Myristica fragrans*) is constipatious in nature.

Table 34. Indigenous foods/ practices followed to cure diarrohoea in children. N=120

Sr. No	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	**Ingredients** Small Cardamon (*Ellettaria Cardamomum*)-2 Ajwain (*Trachyspermum ammi*)-1/4 tsp Jasiphal (*Myristica fragrans*)-1/4 piece	Boil all the ingredients in mother's milk and feed the baby	115 (95.83)	I	Cardamon is carminative ajwain helps in digestion and jaiphal is constipatious in nature.
2	Harad (*Terminalia chibula*) ¼ piece Jaiphal (*Myristica fragrans*) ¼ piece and Barein (*Acorus calamus*) ¼ piece Almonds (*Prunus amygdalus*)-half	Rub harad, jaiphal, barein and almand in water or and give with cold or hot water depending upon diarrhoeal cause. Serve 2-3 teaspoon twice a day	112 (93.33)	III	All are constipatious in nature.

3	Bahera (*Terminalia bellirica*)	Rub bahera in water give with cold or hot water depending upon diarrhoeal cause. Serve 2-3 tsp twice a day	114 (95.00)	III	Bahera is constipatious
4	Solution of salt, sugar and water **Ingredients** Salt-1 handful Sugar-1 handful Water 1 glass	Mix all the ingredients and feed to the baby	86(71.67)	IV	Unknown

* Frequency denotes multiples response

Near about ninety four percent (93.33%) suggested that rub jaiphal, barein, harad (*terminalia chebula*) and almond in water or milk. Serve 2-3 teaspoon twice a day with hot or cold water depending upon the diarrhoeal cause. All these ingredients were believed to be constipatious. An almost similar percentage (95.00%) of respondents reported to serve 2-3 tsp of extract of bahera (*Terminalia bellirica*) twice a day. Solution of salt, sugar and water was suggested by 71.67 percent respondents. They were not aware of the rationale behind this practice but they were using it only because of doctors and mass media emphasis.

4.5.1.3.2. Stomach ache

With regard to treatment suggested by respondents to cure stomachache, 82.50 percent reported to rub harad in water and give a spoon to the infant. Exactly 72.50 per cent respondents prescribed to boil half teaspoon of ajwain in ¼th glass of water and feed to baby. These plants are considered to control gas generated in stomach.

Table 35. Indigenous foods/ practices followed to cure stomach ache in children N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Harad (*Terminalia chebula*)	Rub harad in water and give it to the baby	99 (82.50)	I	Control gas generated in stomach
2	Ajwain (*Trachyspermum ammi*)-1/2 tsp Water-¼th glass	Boil ajwain in water and feed to baby	87 (72.50)	II	Checks gas formation
3	Ginger (*Zinziber officinale*)-25 gm fresh rhizome	Extract juice from ginger rhizome and let the child lick ½ teaspoon juice with honey	86 (71.67)	III	Clears digestive system

* Frequency denotes multiples response

A little more than seventy per cent (71.67%) of the respondents reported to extract juice from 25 g fresh ginger rhizome and give it to the child to lick ½ tsp of this juice with honey. Ginger is given with a view that it clears the digestive system and helps in reducing pain.

4.5.1.3.3. Cold and cough

Table 36 represents that 71.67 percent of the respondents grind a 2 cm piece of barein and after adding mustard oil apply on chest, as they feel that it is hot in nature thus can cure cold and cough.

Table 36. Indigenous foods/ practices followed to cure cold and cough in children N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respon-dents
1	Barein (*Acorus calamus*) 2 cm Mustard oil-½ teaspoon	Grind barein, add in mustard oil and apply on chest	86 (71.67)	I	Hot in nature thus believed best for curing cold and fever
2	Dried ginger (*Zinziber officinale*), Black pepper (*Piper nigrum*),mulathi (*Glycyrrhiza glabra*)	Grind all the ingredients and mix in equal quantities.Feed ¼th to ½ teaspoon two times a day with honey or milk.	60 (50.00)	II	Preventive and curative remedy for cold
3	Treatment with leaves of galgal	Heat the leaves of galgal on fire and wrap around the chest of the baby.	56 (46.67)	III	Provides warmth
4	Cardamon (*Ellettaria Cardamomum*) -2 to 3 seeds	Heat seed and water in a spoon and fed	41 (34.17)	IV	Cardamon is stimulant
5	Jaiphal (*Myristica fragrans*) Mug Supari Coconut	Grind all the ingredients and give one drop to the baby	24 (20.00)	VI	Not known
6	Barein (*Acorus calamus*)- ¼th piece Clove (*Sygygium aromaticum*) – half Milk- 3 to 4 tea spoons	Rub barein, and clove in mother's milk. Feed the baby	25 (21.67)	V	Not known

7	Barein (*Acorus calamus*)-1 “ Bark of fig (*Ficus carica*) –1 " Bark of pine (*Pinus roxburghii*) – 1 "	Burn an inch of all these ingredients, wrap the ash in a cloth and place on the chest of the baby	13 (10.83)	VII	Hot in nature
8	Puthkanda roots (*Acyranthes aspera*) – 2 to 3 roots Shelled maize cob (*Zea mays*) – 4 seeds Banyan bark (*Ficus benghalensis*)- 2 "	Burn all these ingredients then add a piece of mug and grind. Let the child lick a pinch of this mixture along with honey	07 (5.83)	VIII	Not known

* Frequency denotes multiples response

Half of the respondents recommended to mix ground dried ginger, black pepper and mulathi in equal quantities and feed one-fourth to half teaspoon two times a day with honey or milk as preventive and curative remedy for cough and cold. Near about similar percentage of respondents (46.67%) mildly heat the leaves of galgal on fire and wrap around the chest of baby as these leaves provide warmth. A little less than thirty five per cent (34.17%) respondents considered cardamon as stimulant thus heat 2-3 seeds and water in a spoon and feed to the baby.

Exactly 20.00 per cent respondents rub jaiphal in mother’s milk and feed, while 21.67 per cent respondents reported to rub barein, and clove in mother’s milk and feed the baby, 10.83 per cent respondents reported to burn an inch of barein, bark of fig (*Ficus carica*), and pine (*Pinus roxburghii*.). Wrap the ash in a cloth bag and tie around the chest of baby.

Few of the respondents (5.83%) reported of the use of a medicinal plant named puthkanda (*Acyranthus aspera*). They reported to burn 2-3 roots of puthkanda (plate no. 8), shelled maize (*Zea mays*) cob and 2 inch banyan (*Ficus benghalensis*) bark. Then add a piece of mug and grind, give a pinch of this mixture to the infant to lick with honey.

In coastal Region of South India the flower of *Leucas aspera* are given as cough medicine for infants (*http://www.rosneath.com.au/ipc6/ch02/brooks2 html)*

4.5.1.3.4. Eye infection

Table 37 depicts that majority of the respondents (80.00%) used to put 1-2 drops of mother's milk in case of eye infection while nearly one-fourth of respondents (30.83%) suggested to put 2-3 drops of amla juice thrice a day for three days. Some of the respondents (14.17%) also suggested placing bandage of kavarein (*Aloe barbadensis*) (Plate no. 6)after peeling off the skin. It is repeated for 3 days. The respondents were of the view that these plants relieve irritation of eyes. Punia (1993) while studying the infant health problems reported use of honey for eye infection.

Table 37. Indigenous foods/ practices followed to cure eye infection in children N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Mother's milk-1 to 2 drops	Put 1-2 drops of mother's milk in the eye	96 (80.00)	I	Not known
2	Amla fruit (*Emblica officinales*) 50 gms	Grind amla and put 2-3 drops of juice thrice a day for three days.	37 (30.83)	II	Relieves of irritation in eyes
3	Kavarein (*Aloe barbadensis*)- a leaf	Put off the skin of leaf and place the pulpy portion on eyes, bandage them and keep overnight. Repeat for 3 days.	17 (14.17)	III	Relieves of irritation in eyes

* Frequency denotes multiples response

4.5.1.3.5. Ear Infection

For treatment of ear infection, 95.83 per cent respondents suggested to heat mustard oil and add a piece of garlic and put 1-2 drops in ear. Near about similar percentage of respondents (93.33%) reported to heat juice of grinded onion and after cooling, put a drop in the ear 75.83 percent were of the view that if mother's milk is dropped in ear it can cure the infection (Table 38).

Table 38. Indigenous foods/ practices followed to cure ear infection in children N=120

Sr. No.	Indigenous foods/ practices (Ingredients and quantity)	Method of preparation and consumption	F (%)	Rank	Logic as per respondents
1	Mustard oil-1/2 tsp Garlic clove (*Allium sativum*)-1	Heat mustard oil and add a piece of garlic and put 1-2 drops in ear	115 (95.83)	I	Prevents infections
2	Onion (*Allium cepa*)- 1	Grind onion and heat its juice, after cooling put a drop in the ear	112 (93.33)	II	Relives of pain
3.	Mother's milk – 2 to 3 drop	Put 2-3 drops of mother's milk	91 (75.83)	III	Unknown
4	Kavarein (*Aloe barbadensis*)- 2 leaves	Grind leaves and extract juice. Put two drops every day in the ear.	52 (43.33)	IV	Unknown

* Frequency denotes multiples response

Nearly one-third (43.33%) of them reported to grind leaves of kavarein plant and put two drops of the extract in the ear everyday.

4.5.1.3.6. Measles

More than forty five per cent of the respondents (47.50%) reported that the baby suffering from measles should be given fumes of fried amaranthus seeds (*Amaranthus gangeticus*) after frying, 17.50 per cent of the respondents suggested to fry intestine of porcupine and a handful of amaranthus seeds and give fumes to the infected child.

Table 39. Indigenous foods/ practices followed to cure measles in children

N=120

Sr. No.	**Indigenous foods/ practices** (Ingredients and quantity)	**Method of preparation and consumption**	**F (%)**	**Rank**	**Logic as per respondents**
1	Treatment with amaranthus seeds **Ingredients** Amaranthus seeds (*Amaranthus gangeticus*) –a handful	Fry the seeds and give its fumes to the child	57 (47.50)	I	Uncertain
2	Treatment with amaranthus seeds and intestine of porcupine **Ingredients** Amaranthus seeds- a handful Intestine of porcupine- a handful	Fry intestine and seeds. Give fumes to the baby	21 (17.50)	II	Uncertain

* Frequency denotes multiples response

A survey conducted by LSPSS concluded that for treating measles a decoction of nimba (*Melia azadirachta*), dhaanyaka (*Coriandrum sativum*), guduchi (*Tinospora cordifolia*) and patola (*Trichosanthus dioica*) should be given (*http://www.healthlibrary.com/reading/mother/apendix2.html).*

4.5.2. Nutrition

Feeding practices are so intervened with the culture and value system, that changes in one area are bound to influenced or occasioned by changes in the other.

4.5.2.1. Pre lacteal feeds

Administration of a variety of pre lacteal feeds to the infant after birth can be observed throughout the country. In the present study majority of the rural women (69.17%) used honey as pre lacteal feed immediately after the child's birth which they believe provides warmthness and could satisfy it's hunger. Few of the respondents used mixture of sugar and water, as it is believed that this mixture would clean the stomach. Only 1.67 per cent respondents feed jaggery and water so that the child does not forget sucking.

A study on child rearing practices revealed that tribal people used neem oil and castor oil as pre lacteal feeds because it is believed that both the oils would remove toxic substances accumulated in the infant's gastro-intestinal system of the past nine months and cleans (Kusuma, 1997).

4.5.2.2. Colostrum feeding:

The tradition of discarding colostrum is rooted since ages and therefore many mothers still avoid the practice of colostrum feeding (Hadimani, *et. al*., 1990; Shariff and Farsana, 1990).

Table 40 reveals that 74.17 percent of the respondents do not feed colostrum to their infants. Out of these, 70.78 percent reported that colostrum is harmful to infants because it is considered to be blocked milk for nine months and remaining 29.22 percent believed that it is difficult to digest.

Hence, they are of the opinion that it should not be given to infants. Thus there is a need to increase awareness among mothers about the importance of colostrum and improve the health of the infants.

Out of the total respondents who feed colostrum, a little less than two third of them (64.52%) feed colostrum to their infants on the advice of doctors, so it can be concluded that medical staff and other health personnel play a very important role in promoting colostrum feeding practices.

4.5.2.3. Duration of breast feeding:

Breast-feeding is the natural way of feeding the human infants and is the crucial determinant of growth and survival in the exterogestate phase.

Among the rural women of Himachal Pradesh in India some sanctity is attached to the breast milk. They believe that when milk is available with the mother, it is a sin to use the milk of a cow or a buffalo. This is also reported by Sugalis of Andhra Pradesh (Kusuma, 1997).

It was found in the present study that nearly fifteen percent (14.17%) of the mothers breastfed upto one and a half year as by this age the teeth of the child has emerged and is painful for the mother to feed the baby. It was further found that 85.83 percent of the respondents fed their own milk to the infant upto 2½ years. Nearly seventy percent (72.81) of them were continuing breastfeeding upto this age because they consider it as a sin to give other milk instead of mother's milk. Exactly 18.45 percent reported that doctor have suggested them that breast milk is good for child and easily digested so they have continued breastfeeding.

Table 40. Indigenous practices related to pre-lacteal feeds, colostrum and breast feeding. N=120

Sr. No.	Practice	F (%)	Logic as per respondents	F (%)
1	**Pre-lacteal foods given to the infant after birth**			
	Honey	83 (69.17)	Provides warmthness and satisfy hunger	50 (67.56)
	Sugar and water	4 (3.33)	Cleans the stomach	4 (100)
	Jaggery and water	2 (1.67)	So that child does not forget sucking	2 (100)
	Jaggery	0		
2	**Colostrum feeding**			
	Feed colostrum to the infant			
	Yes	31 (25.83)	Creates immunity against disease	0
			Doctors advise	20 (64.52)
	No	89 (74.17)	Not good as it is blocked milk for many months	63 (70.78)
			Difficult to digest	26 (29.22)
			Lack of knowledge	0
3	**Breast feeding**			
	Duration of breast feeding			
	1½ years	17 (14.17)	Painful for the mother as child's teeth has emerged	14 (82.35)
			Can not digest mother milk -Mother as unable to feed	0 3 (17.65)
	2½ years	103 (85.83)	Good for child and easily digested	19 (18.45)
			Delays subsequent pregnancy -Only Good available	7 (6.80) 2 (1.94)
			Can not digest any other food	-
			Sin to use mother milk	75 (72.81)
	Posture at the time of breast feeding			
	Sitting	96 (80.00)	Child's breathing can be blocked	67 (69.79)
			Ear infection can be caused in lying position	29 (30.21)
	Lying	24 (20.00)	Comfortable for the mother	24 (100)

It is alarming to learn that doctors have advised the mothers about the importance of breast milk but not about the duration of breast-feeding. This indicates the need to educate the mothers about this aspect.

4.5.2.4. Supplementary feeding

The age of introduction of supplementary feeding in the children of rural women of Himachal Pradesh varied from six months to eighteen months.

Regarding introduction of liquid foods only 18.33 percent of the mother started giving top milk to their children at the age of 4-5 months and reason reported by majority of them being inadequate quantity of breast milk. Nearly eighty percent of the respondents (81.67%) introduced top milk at the age of 9-12 months as majority of them believed that breast milk is enough and few of them fear of stomach disorder (Table 41).

As far as the introduction of semi-solid foods is concerned, it was noticed that 88.33 percent of the mothers started giving semi-solid foods like dalia, khichari to their children between 6-8 months of age while 11.67 percent of the respondents introduced their children to these foods at 12 months of age.

For the introduction of solid foods, exactly eighty percent of mothers fed solid foods to their children at the age of 8-9 months while remaining eighty percent fed after 12 months of age.

Table 41. Distribution of respondents on the basis of introduction of supplementary foods

N=120

Sr. No.	Food	F (%)	Logic as per respondents	F (%)
1	Liquid food (top milk)			
	4-5 months	22 (18.33)	Proper knowledge	05 (22.73)
			Inadequate quantity of breast milk	12(54.54)
			For better health and digestion of child	05 (22.73)
	9-12 months	98 (81.67)	Inadequate knowledge	02 (2.04)
			Breast milk is enough	80 (81.63)
			Fear of stomach disorder	16 (16.33)
2	Semi-soild foods (Dalia, Khichari)			
	6-8 months	106 (88.33)	Baby does not demand repeatedly	80 (75.47)
			Need of balanced diet	03 (2.83)
			Mass media emphasis	-
	At 12 months	14 (11.67)	Elders advise	23 (21.70)
			Child will not be able to eat any cereal	02 (14.29)
			Fear of stomach disorder	12 (85.71)
			Inadequate knowledge	0
3	Soild-foods			
	At 8-9 months	96 (80.00)	-	-
	After 12 months	24(20.00)	-	-

4.5.3. Sanitation and hygiene

The perusal of the data in table 42 presents information about post-natal sanitation and hygiene of the child. It was reported by majority of the respondents (70.00%) that they daily give bath to their child, as 73.81 percent of them believed that the child sleeps well after bath while remaining 26.19 were particular about hygiene.

Table 42. Indigenous practices related to sanitation and hygiene of the child. N=120

Sr. no.	Practice	F(%)	Logic as per respondents	F(%)
1	Bath given to the child			
	Daily	84(70.00)	Child sleeps well after bath	62(73.81)
			Particular about hygiene	22(26.19)
	Not fixed	36(30.00)	Fear of cold and cough	34(94.44)
			Poor knowledge	02(5.56)
2	Change of the clothes after each bladder movement			
	Yes	39(32.50)	Otherwise skin infection occur	39(100)
	No	81(67.50)	Clothes get dry by itself	49(60.49)

Pandit (1993) revealed that all the mothers bathed their infants twice a day. In the present study one third of the respondents did not have any fixed schedule for bathing their infants. When asked about, changing clothes after each bladder movement only 32.50 percent of the respondents fear of skin infection but 67.50 percent responded negatively as majority of them (60.49) believe that clothes get dry by themselves thus considered no need to change clothes after each bladder movement.

4.5.4. Toilet training

An effort was made to determine the mother's views regarding toilet training. Table 43 depicts that the respondents (80.00%) used to toilet train their children as they believe in developing good habits in them while 20.00 percent respondents did not train their children.

Table 43. Indigenous practices related to toilet training of children. N=120

Sr. No.	Practice	F (%)	Logic as per respondents	F (%)
1	Provide toilet training			
	Yes	96(80.00)	Better to develop good habits	83 (86.46)
	No	24(20.00)	Child learns by himself	24 (100.00)
2	Age of starting toilet training			
	3-4 months	12(12.50)		-
	5-6 months	15(15.63)	-	-
	9-10 months	29(30.20)	-	-
	after 10 months	40(41.67)	-	-
3	Use punishment for toilet training		-	
	Yes	30(31.25)		18 (60.00)
	No	66(68.75)	Otherwise child will develop bad habit	49 (74.24)
4	Type of punishment used during toilet training			
	Corporal	18(60.00)	Child learn by himself	-
	Verbal	12(40.00)		-
			-	
			-	

Singh (1992) in his study cited different reasons for not training their children. Respondents think that the children will learn it by themselves as they grow up.

It was further revealed in the present study that 41.67 percent toilet train their children after 10 months of age followed by 9-10 months (30.20%), 5-6 months (15.63%) and 3-4 months (12.50%) of age.

Regarding punishment for toilet training, majority of the mothers (68.75%) did not use punishment, as they believe that child learns by himself while 31.25 percent punish their children otherwise child may develop bad habits. Corporal punishment was used by majority of the respondents (60.00%).

In relation to above findings, the study conducted by Punia (1993) was found quite suitable. It was reported in the study that majority of the infants were toilet trained by the age of 2 years. Corporal punishment was used by majority of the respondents.

4.5.5. Discipline and habit formation

Table 44 revealed that discipline and habit formation was started as soon as the child starts moving and understands instructions as reported by 38.33 percent respondents. While 36.66 and 15.83 percent started this act at the age of 9 months and 24 months respectively.

It was further revealed that the infants were praised/appreciated for their good acts or behaviour so that they can know that they have performed right act and shall repeat in future.

Table 44. Indigenous practices related to discipline and habit formation

N=120

Sr. No.	Practice	F(%)	Logic	F(%)
1	Age of starting discipline			
	9 months	44(36.67)		
	12 months	57 (47.50)	The child should be controlled as soon as the child starts moving and understands instructions	46(38.33)
	24 months	19 (15.83)	-	-

2	Appreciate child for good behaviour	120 (100.00)	So that the child can know that he has performed right act and will repeat in future.	42(35.00)
3	Child is punished for wrong behaviour	59(49.17)	Otherwise he/she will be spoiled and to make him realize about his mistake.	

Exactly 49.17 percent respondents reported that along with appreciation, the child is punished for wrong behaviour otherwise he/she will be spoiled.

4.6. SCIENTIFIC RATIONALE OF INDIGENOUS PRACTICES FOLLOWED BY RURAL WOMEN REGARDING MATERNAL AND CHILDCARE

4.6.1. Scientific rationale of indigenous practices followed at pre natal stage

4.6.1.1. Health

The data on utilization of maternal care services at pre natal stage reveals that the near about sixty per cent of the pregnant women visit the clinic while remaining do not visit. Thus it was suggested by experts that the pregnant women should regularly go to clinics for check ups to determine proper growth of the foetus and complications, if any. It is interesting to note that rural people are not only competent enough in diagnosis and care during pregnancy but are equally good in the management of diseases and conditions during pregnancy. Treatment of various discomforts have been given earlier and an effort has been made to determine the scientific logic behind them

4.6.1.1.1. Foods to cure morning sickness

Experts reported that crushed onion and mint juice with water and salt helps in digestion while darmashtik increases appetite. Regarding churan, experts opinion maintained consonance with the rationale of respondents that saunf and mishri are cool in nature, increases appetite and ajwain helps in digestion.

Amla powder is beneficial for curing morning sickness as is cool and reduces acidity. The scientific rationale behind consumption of orange and lemon is that these fruits are good sources of vitamin C, so may or may not cure morning sickness but will not harm at all.

4.6.1.1.2. Constipation

For constipation, the respondents were not able to present any logical reason. The experts reported that harad, bahera and amla are purgatives thus facilitates evacuation of bowels. As regards decoction of ajwain, gurlakdi and meethi saunf, scientific rationale for using these ingredients is that gurlakdi is a mild laxative, thus loosen the bowels, whereas meethi saunf is antidotal and ajwain is carminative.

Sanai leaves cure constipation as they help in liver stimulation and pushing down the excreta. According to experts, isabgol possesses certain properties due to which it is considered to be a best remedy for constipation. It is emollient, demulcent and laxative thus provides soothing, softening and calm effect besides facilitating evacuation of bowels. Saag of spinach and dudali (plate no. 10) helps in digestion, pushes down the excreta, stimulates the liver and intestine.

Respondents also recommended of a churan for that experts were of the opinion that various ingredients of the churan like dalchini is aromatic and carminative, while saunf is antidotal. As regards fruits, they should be consumed as they provide bulk of roughage due to high cellulose contents, which prevents constipation.

4.6.1.1.3. Abdominal pain

For curing abdominal pain, experts agreed to the logic given by respondents that ajwain water helps in proper digestion, whereas for decoction of bhabhri, mint leaves and ajwain experts responded that bhabhri is antiflatulent that is controls gas generated in the stomach and relieves of pain and mint is carminative and stomachic. Ajwain is considered to be stomachic and eupeptic.

Experts as well as literature revealed that kakarsinghi, a local plant is considered to be beneficial for curing stomach pain because it possesses carminative properties. Regarding decoction of kasturi, experts commented that kasturi is stimulant so helps in stimulating body metabolism, while other ingredients like black pepper is digestive and stomachic, jaggery is energizer and laxative whereas ginger is carminative.

Jeera with water is recommended as it helps in digestion, removes the gas thus helps in reducing stomachache and pateesh is an alkaloid, thus induces sleep and provides rest to the body.

4.6.1.1.4. Swelling of limbs

Respondents of the present study opined that decoction of small cardamon, cloves and sugar will help to cure swelling on limbs as these ingredients are hot in nature but experts were uncertain of their rationale as

according to them no such properties are there in them to prevent swelling, whereas sathavar can control oedema as it is a diuretic.

Experts did not agree to the respondents opinion of avoiding potato, rice, radish etc. whereas massage with leaves of different plants was recommended as agasbel acts as haemostatic, astringent, rubefacient and eucalyptus besides possessing similar properties also has antiseptic and stimulating properties. Castor leaf acts as diaphoretic thus treatment with this leaf was recommended by the experts and literature.

According to experts it was rightly suggested by respondents to consume low salt foods and less quantity of water but the rationale was not known to the respondents. Thus experts reported that because of sodium content, high intake of sodium leads to swelling of body, thus low salt foods are beneficial.

4.6.1.1.5. Cold and cough

For the treatment of cold and cough respondents suggested various decoctions. Experts reported that cardamon used in the decoction acts as stimulant and black pepper is an alexeteric thus prevents infection of respiratory tract, while tej patta also stimulates the nervous system. Whereas they were uncertain about bengal gram soup that it can cure cold and cough.

For another decoction, experts opined that cardamon is stimulant and carminative and banafshah is diaphoretic, emetic and anti pyretic thus counteracts fever if it occurs. Mulathi is an expectorant hence helps to discharge mucus and being a demulcent, it soothes the throat.

4.6.1.1.6. Backache

With regard to treatment for backache, experts agreed to the rationale provided by respondents for using sonth that is it provides strength, whereas methi milk reduces pain and stimulate nervous system.

Being an alterative, aak leaves strengthen and stimulates immune system, and is a sedative so may induce sleep and provide rest and relief from backache.

4.6.1.1.7. Blemishes on face

For blemishes respondents recommended application of various pastes. They did not have any logic with them for these practices but experts reported that bittergourd leaves are antiseptic, almonds provide nourishment because of iron and milk clears the skin. Turmeric possesses alexeteric properties thus controls skin diseases and infection. Garlic can also be recommended as it has antibacterial, antifungal properties. For papita, experts did not agree but pine oil can be used as it has local irritant action.

Thus it can be concluded that all the conditions (barring a few) are managed by the respondents with locally available drugs. While most of their practices are healthy and should be encouraged, some are irrational and risky thus should be discouraged.

4.6.1.2. Nutrition

The information regarding increase in usual diet intake depicts that majority of the respondents did not have any increase in their diet but experts suggested that it is a wrong belief that consumption of extra diet leads to large sized baby thus causing difficulty in delivery. Instead, the pregnant woman

should eat well because it gives baby the best start in life by supplying the entire goodness baby needs to grow.

Regarding extra diet intake experts recommended fruits and vegetables, as they are rich in sugars and vitamins and also helps in building and maintaining health of both mother and child while pulse intake should be increased as they contain proteins. Green leafy vegetables are rich in iron thus avoids aneamia and also helps the baby's brain to develop properly while extra milk should be consumed because it meets additional energy requirement to nurture the baby in foetus. Future mother needs to absorb proteins, calcium, iron and mineral salts, which make it possible for the skeleton and muscular tissue of the embryo to form. These contents are contained in the foodstuffs recommended.

Table 45 reveals that ghee should not be avoided as it is nutritious, promotes digestion and provides strength while citrus fruits are good source of vitamin C and banana contains large quantities of iron. Experts disagreed for avoidance of curd as it has good digestive property and hence should be given as much as desired. For 'til' and jaggery, it was suggested that normal intake of these foods is good but excess quantity may be harmful. Walnuts can be avoided to some extent, as they are hot in nature. Meat can be consumed but very little as it engenders toxins in the organism. Fish can be consumed because it is rich in minerals.

Regarding specific food/non food items intake during pregnancy, experts denied the rationale presented by respondents for consuming orange, milk and other foods. The rationale for consumption of orange is that it is a good source of vitamin C, while extra milk does not make the child's

complexion fair but it contains calcium and protein. Regarding consumption of multanni mitti the experts responded that it is a sign of calcium deficiency. Thus if woman consumes mitti at this stage, calcium rich supplements must be recommended.

As regards consumption of raw coconut seed and methi seed to have a male child, experts were of the view that this practice is wrong as these seeds can not change the sex of the child because the sex of unborn child is determined at the time of conception.

Regarding foods served during last trimester of pregnancy, according to experts, wheat flour halwa can be given because wheat is rich in protein, ghee added to it is a good source of energy and sugar acts as a sweetening agent to increase palatability and provides energy.

Regarding the decoction, which is given in ninth month, experts were of the same opinion as that of respondents i.e. karwi saunf is digestive, stimulant, purgative and laxative while meethi saunf is an antidotal and appetizer. Desi ghee provides energy. In another decoction, experts disagreed to the logic of respondents that if something sticks to the body of feotus, karwi saunf helps in removing it instead they reported that karwi saunf is digestive, stimulant, laxative and purgative, dates are rich source of calcium and milk contains calcium and proteins. Jaggery help in providing energy.

The decoction of til seeds was also recommended by experts because til seeds are demulcent, tonic and laxative, methi seeds are used as tonic and carminative and desi ghee was added to provide energy. Experts reported that decoction of cloves, tej patta, cardamon is also useful as cloves help in removing gas, act as lubricant and induces pains. Cardamon removes cough and tej patta stimulates uterus, reduces the feeling of vomiting.

4.6.1.3 Sanitation and hygiene

As regards sanitation and hygiene, the experts were of the view that personal cleanliness leads to healthy body and mind and prevents any type of infection thus the pregnant lady should daily take bath, brush the teeth and comb hair.

Regarding rest and work, experts feel that in normal condition doing routine work is good as it keeps the muscles flexible, which helps in easy delivery. Whereas for heavy work it was suggested that heavy work should be avoided if mother has any complications.

With respect to miscellaneous practices followed at pre-natal stage, the experts were of the view that, it is better for a pregnant woman not to see dead body or visit to place where someone had died but the rationale given by them was different from respondents. They responded that by seeing any dead body the foetus does not squeezes but any mental shock can occur to the pregnant mother which might be harmful whereas they agreed to the logic given by respondents for avoiding high heels. Application of mehendi does not leave marks on the body of the baby instead the mother may feed cold in winter season.

4.6.2. Scientific rationale of indigenous practices followed at perinatal stage

4.6.2.1 Health

As regards posture of mother at the time of delivery the experts recommended lying position as in squatting posture, child's breeding may be blocked.

4.6.2.2 Nutrition

Experts agreed to the various decoctions suggested by respondents. The various ingredients used in these decoctions induce pains and ease in delivery as in one of the decoctions cloves were used, which are oily in nature and act as lubricant. They induce and increase pain as well as remove gas while cardamon and jeera remove gas and stimulates uterus. Dried ginger was also used which provides strength to face labour pains and cold nature balances hot effect of other ingredients. Mulathi provides immunity and til seeds are hot in nature whereas dates provide strength, removes gas and induce pain. Ghee was added as it acts as lubricant for easy passage of child.

The other decoction consists of somewhat similar ingredients i.e. dried ginger, big cardamon, dates, ajwain and sugar. Ajwain contains thymole thus acts as carminative, tonic, stimulant and pain inducing.

Decoction of tej patta, dates, small cardamon, jaggery and desi ghee was also recommended by experts as according to them tej patta stimulates uterus, dates and jaggery provide strength, cardamon is carminative and relieves flatulence and desi ghee acts as lubricant thus form a slippery path for the baby.

A medicinal plant i.e. gurlakdi is used for easy delivery as it has abortifacient properties and is anti-inflammatory. Jaggery helps in producing energy.

4.6.2.3. Sanitation and hygiene

While enquiring about the material used for cutting the umbilical cord it was reported by majority of the respondents that sterilized blades were used thus experts also agreed to the practice of using sterilized blades as these

help in avoiding infection and prevent spread of diseases. As regards material applied on naval of child, experts were of the same opinion that heated paste of turmeric and mustard oil help in healing of naval and making it dry as turmeric acts as an antiseptic while mustard oil forms a thin layer on naval which avoids contact of water with a wound.

4.6.3. Scientific rationale of indigenous practices followed at postnatal stage

4.6.3.1 Health

For controlling excessive bleeding, mixture of roasted ajwain in ghee with jaggery and almonds can also be consumed because according to experts ajwain contains thymole, which acts as analgesic thus helps in relieving pain and clearing the uterus of any blood clots. Milk and desi ghee may not help in controlling bleeding but provide strength. Consumption of soaked kamarkas and nagori gond mixed with boiled milk was recommended because gond helps in preventing bleeding.

In case of delayed expulsion of placenta respondents reported to serve ghee for drinking. For this practice experts were not sure but stated that excess of ghee may lead to vomiting and this pressure help in expulsion of placenta.

Another recommendation of respondents was to put heat under the cot of mother but experts were of the view that providing indirect heat to the mother does not help but any other method which creates pressure on uterus will help in expulsion of placenta.

For prevention of uterus prolapse respondents reported sittings in water boiled with bark of kikar and pipal. The scientific rationale behind using these plants is that their bark has antiseptic and anti-inflammatory properties. The water exerts upward buoyant force thus helps in lifting of uterus. Experts were uncertain of the practice of sitting on hard boll made by rolling pieces of clothes.

4.6.3.2. Nutrition

Among post delivery foods various food preparations were reported by the respondents. Experts agreed to the logic given by the respondents that for providing strength and avoiding constipation, mixture of ajwain, dry coconut, dates, almonds, jaggery and ghee is useful. Scientifically, ajwain decreases blood loss, involutions of uterus after delivery, avoids constipation, increases appetite, helps in blood purification and getting relief from backache while other ingredients provide strength and energy.

Kharani, prepared by boiling milk after adding roasted soanth, desi ghee, almonds, dates, coconut, cashew nut, is a very nutritious recipe as almonds provide strength and checks amenorrhea, soanth is stomachic and appetizer thus improves appetite and digestion. It also brings uterus to its normal position. Coconut provides strength and increases milk secretion and dates provides strength, removes gas, increases milk secretion and removes pain.

Sund/soanth laddoo are also served to new mothers. Various ingredients used to prepare these laddoos possess one or the other medicinal property. Gond helps in resuming menstrual cycle and after-effects of delivery. It is lactogenic, increases BMR, and improves liver functions hence

increases appetite thus indirectly improves lactation. Coconut is a rich source of calcium and protein and increases milk production, almonds check amenorrhea while dates provide strength, increase milk secretion and remove dryness, raisins are strength providing and saunf increases appetite and its cold nature balances the hot effect of other ingredients.

Wheat flour and halwa is also one of the important post delivery foods as its various ingredients like wheat flour and ghee contain carbohydrate and fat which provide energy, almonds and raisins provide strength and energy, gum acts as a binder to give strength to body, dried ginger also provides strength and black pepper seeds are added to provide nutrition and act as tonic.

According to respondents, semi-liquid foods are easily digestible should be given after delivery. Experts agreed to their logic that after delivery digestive system weakens and solid food could not be digested properly so liquid food full of energy are required. Methi is hot in nature, increases milk secretion, reduces pains and chances of getting obese, helps in proper functioning of nervous system. Milk and desi ghee should also be given to regain the lost strength.

Regarding drinking water , experts agreed to the ingredients to be added with water for the mother. They reported that karwi saunf is digestive, stomachic and laxative thus clears the digestive system while cardamon is stimulant and digestive tonic.

4.6.3.3. Sanitation and hygiene

Placenta should not be thrown anywhere in the open as it may lead to environment pollution. The best way to dispose off the placenta is to dump it

in a trench. They considered it as a wrong belief to have male or female child by burying the placenta outside or inside the home.

Regarding bath of mother experts disapproved the practice of bathing on fifth day after delivery. They considered it a wrong belief as it may lead to infection in uterus.

4.6.3.4. Scientific rationale of practices followed during lactation period

During lactation period mothers are advised to avoid certain foods as they may cause harm indirectly to the baby. Experts also supported the logic presented by respondents for avoidance of certain foods like cauliflower, potato, pumpkin and brinjal are gas producing thus cause stomachache. Mash and rajmash are heavy to digest so may act as flatulent and may cause gas formation which may be transmitted from mother to baby.

Regarding avoidance of rice medical doctors suggest no such restriction but Aayurvedic doctors suggest that consumption of rice does not directly lead to pus formation but it is a good base for the growth of bacteria and later on lead to leucorrhoea in women.

As regards foods served to increase milk secretion, experts opined that satavar root is galactoagogue while consumption of khoru is beneficial as milk and its products increase milk secretion and other ingredients like methi and jeera are also galactogogues. Hot cow's milk is recommended because milk is richest source of calcium. Since there is considerable drain of calcium during pregnancy and lactation, thus adequate supply of mineral is required during these conditions. Mixture of assgandh, satavar and mulathi is also useful because these are galoctogogues and galoein also increase milk secretion.

4.6.4. Scientific rationale of indigenous practices related to child care

4.6.4.1. Health

Regarding immunization of child, it was advised by doctors that immunization of child is important to develop immunity against different diseases even if the child is growing normal.

With regard to massage of newborn baby respondents and experts were of the same view that it helps in making the bones strong. For treatment of diarrhoea decoction of small cardamon, ajwain and jaiphal is recommended because cardamon is carminative, ajwain contains thymole thus acts as carminative and tonic, stomachic and antispasmodic. Jaiphal is stimulant and carminative.

Regarding consumption of harad, almonds, jaiphal and baren experts were uncertain of the properties of baren to cure diarrhoea while jaiphal is astringent, tonic and harad and almonds are constipating thus helps in treating diarrhoea. Extract of bahera can be consumed, as it is astringent, carminative and purgative. Sugar and salt solution was recommended because this solution helps to retain water inside the body thus help to check dehydration and diarrhoea.

Harad is prescribed for treating stomach pain as it is purgative, stomachic and releases flatulence. Ajwain water is a good remedy as ajwain is tonic, stomachic, carminative and stimulant. Experts opined that ginger juice could cure stomach pain as it is digestive, laxative, appetizer, stomachic and flatulent

As regards cure for cold and cough, experts commented that it was rightly suggested by respondents to apply mustard oil containing barein on chest, as barein (plate no 7) is expectorant, helps to vomit out the mucous and is thermogenic thus generates heat and increases the body temperature. Consumption of dried ginger, black pepper and mulathi was also recommended because ginger acts as thermogenic, expectorant, stimulant and emollient while mulathi is expectorant, tonic and being an alexeteric it helps in toning up the nerves and its alterant property protects against infection.

Cardamon water is beneficial for cold and cough as cardamon is stimulant, expectorant, alexeteric thus prevents infection and proves strength to the body whereas jaiphal is stimulant thus can be used for treating cold and cough. Feeding barein and clove after rubbing is also useful as alike barein clove is also an expectorant and its emollient properties soothes the throat and is a good tonic. Regarding the practice of placing burnt baren, fig bark on chest of baby after wrapping in a cloth, the experts were uncertain about the practice whereas it was reported by them that puthkanda being an expectorant and febrifuge can cure cold and cough but they were not aware of any of the property of maize or banyan bark to cure this disorder.

For eye infection experts consider it a wrong practice to put mother's milk in eye, but amla is good remedy as it is astringent so provides coolness in the eyes, being anti-inflammatory it reduces inflammation in the eyes and ophthalmic property helps in reducing irritation and swelling in the eyes. Kavarein possesses alexeteric (prevents infection), ophthalmic and cooling properties.

In case of ear infection, garlic heated with mustard oil is also recommended by experts because garlic is anodyne and possesses antibacterial and antifungal properties thus prevents and controls infection. It is thermogenic so generates heat to discharge pus. Onion juice also possesses similar properties to cure ear infection. But for using mothers milk experts denied. While practice of using kavarein leaf juice was encouraged, as it is an alexeteric thus prevents infection.

For treating measles none of the practice was recommended by experts.

4.6.4.2. Nutrition

All the pre-lacteal foods are recommended, as these are rich source of energy and help in cleaning the stomach of newborn. Only honey should be avoided according to experts as it is heavy to digest.

Respondents did not prefer to feed colostrum but experts advised that colostrum should be fed to the newborn as it is nutritious food and contains antibodies to develop immunity in the infants.

Regarding feeding of milk experts suggested that mother's milk is hygienic, nutritive for the child. It should be continued for 4-6 months. After this the mother's milk is not sufficient to meet the demands of growing child.

Majority of the respondents preferred to feed the baby in lying position but doctors /experts recommend that mothers should breast feed in sitting position as in lying position there may be obstacles in infant's breathing and milk may enter in the ear of infant and cause ear infection.

Regarding introduction of supplementary foods liquid foods should be supplemented at the age of 4-5 months and semi- solid foods by 6-8 months

of age as baby's iron stores start to run out. Baby needs iron for strong blood thus by this age, the baby should start to eat some foods. Experts commented that upto 6 months after delivery, there is generally a steady rise in the output of milk, and subsequently the milk output diminishes. If the baby is to maintain the expected rate of growth, healthy and well nourished, supplementary feeding has to be restored to at about six month of life.

4.6.4.3. Sanitation and hygiene

Regarding bathing the child experts reported that the bath should be given daily as irregularities may lead to infection and diseases especially related to skin, while napkins should be changed after each bladder movement otherwise skin infections such as rashes may occur.

4.6.4.4. Toilet training

Regarding starting age of toilet training experts were of the view that there is no fixed age for learning the control as individual differences are there. The child learn to control bladder, bowel movement when he is physically mature.

It was further suggested that punishment should not be used in toilet training process as it may lead to behavioural problems. As regards type of punishment, use of verbal method is good for teaching good toilet habits to children.

4.6.4.5. Discipline and habit formation

With regard to age of starting discipline the experts reported that right age for starting the discipline is after two years when he/she can understand and judge his/her own behaviour. They further added that appreciation for good behaviour is a must so that child can differentiate between approved and disapproved ways of behaviour. It will also help the child in developing good behaviour.

Table No. 45 Scientific rationale of indigenous maternal and child care practices followed by respondents

N= 50

Sr. No.	Indigenous Practice	Perceived scientific rationale
I	**PRE NATAL STAGE**	
A	Health	
1	Visit to pre natal clinic/local dai	The pregnant women should to go to clinic for regular checks ups to determine proper growth of foetus and complications if any.
2	**Indigenous foods/practices followed to cure morning sick ness**	
a.	Crushed onion and mint juice with water and salt	Helps in digestion and increases appetite
b.	Darmashtik	Increases appetite
c.	Churan of roasted and crushed saunf and ajwain along with kooja ki mishri	Saunf and mishri are cold in nature, increases appetite. Ajwain helps in digestion
d.	Amla powder in milk	Amla is cool and reduces acidity
e.	Orange	Good source of vitamin C
f.	Lemon water	Good source of vitamin C
3	**Indigenous foods/practices followed to cure constipation**	
a.	Decoction of harad bahera and amla	Harad, bahera and amla are purgatives thus facilitates evacuation of the bowels
b.	Decoction of ajwain, gurlakdi meethi saunf	Gurlakdi is a mild laxative Ajwain is carminative and antispasmodic. Meethi saunf is antidotal
c.	Chewing 3-4 leaves of sanai	Helps in liver stimulation and in pushing down the excreta
d.	Isabgol and water	Isabgol is emollient, demulcent, laxative Helps in facilitating evacuation of the bowels
e.	Saag of spinach and dudali	Helps in digestion, pushes down the excreta, stimulates the liver and intestines
f.	Churan of dalchini, small cardamom and saunf	Dalchini is aromatic and carminative Saunf is antidotal
g.	Fruits	Fruits provide bulk of roughage due to high cellulose contents which prevents constipation

4	**Indigenous foods/practices followed to cure abdominal pain**	
a.	Boiled ajwain water	Helps in proper digestion
b.	Kadha of bhabri,mint leaves and ajwain	Bhabri is antiflatulent Mint is carminative and stomachic Ajwain is stomachic and eupeptic
c.	Kadha of kakarsinghi and water	Kakarsinghi has febrifuge and carminative properties
d.	Kadha of Kasturi, jaggery, black pepper and ginger	Kasturi is stimulant Black pepper is digestive and stomachic Jaggery is an energizer and laxative Ginger is carminative
e.	Jeera with water	Helps in digestion, removes the gas thus helps in reducing stomachache
f.	Pateesh	It is an alkaloid thus induces sleep and provides rest to the body
5	**Indigenous foods/practices followed to cure swelling on limbs**	
A	***Foods Given:***	
a.	Kadha of cardamom, cloves with sugar	No such properties are there in these ingredients to prevent swelling
b.	Juice of satavar	Satavar is a diuretic and controls oedema
B	*Foods Avoided:*	
a.	Potato, rice, radish are avoided	Experts do not agree to rationale given by the respondents
C	*Massage of:*	
a.	Gandala leaves boiled in water	Uncertainty is there
b.	Agas bel boiled in water	Agasbel acts as haemostatic, astringent and rubefacient
c.	Eucalyptus leaves and agas bel boiled in water	Eucalyptus acts as haemostatic, astringent , antiseptic, stimulating and rubefacient
D	*Miscellaneous:*	
a.	Treatment with heated castor oil	Castor leaf acts as diaphoretic
b.	Consume low salt foods	Because of sodium content, high intake of sodium leads to swelling to body
c.	Take less quantity of water	Increased urination leads to decrease in oedema
6	**Indigenous foods/practices followed to cure cold and cough**	

a.	Mild kadha of cardamom, black pepper, bay leaves, salt, sugar and milk.	Cardamom is stimulating Tej patta stimulates the nervous system Black pepper is an alexeteric
b.	Bengal gram soup	Uncertainity is there
c.	Decoction of cardamom, banafshah and mulathi	Cardamom is stimulant and carminative Banafshah is diaphoretic and emetic, antipyretic and has cooling effect
7	**Indigenous foods/practices followed to cure backache**	
a.	Roasted saunth with ghee and sugar	Provides strength
b.	Methi milk	Reduces pains and stimulates nervous system
c.	Treatment with aak leaves	Aak is alterative, antiperiodic, sedative so may induce sleep and provides rest.
8	**Indigenous foods/practices followed to cure blemishes on face**	
a.	Application of paste of bitter gourd leaves	Bitter gourd leaves are antiseptic
b.	Consumption of almonds with milk.	Almonds provide nourishment because of presence of iron. Milk clears the skin.
c.	Application of paste of turmeric and gram flour	Turmeric possesses antibacterial and antiseptic properties thus controls skin diseases and infection.
d.	Application of papaya paste	Experts do not agree.
e.	Rub crushed bark of pine	Pine has local irritant action.
f.	Application of paste of garlic cloves	Garlic has antibacterial, antifungal properties.
B.	Nutrition	
9	Increase in usual diet intake	It is a wrong belief that consumption of extra diet leads to large sized baby thus causing difficulty in delivery. Instead the pregnant woman should eat well because it gives baby the best start in life by supplying the entire goodness baby needs to grow.
10	**Extra diet Intake**	
a.	Fruits and vegetables	Rich in sugars and vitamins. Also helps in building and maintaining health of both mother and child.
b.	Ghee	Provides strength and energy

c.	Pulses	Pulses contain protein.
d.	Green leafy vegetables	Rich in iron thus avoids aneamia and also helps the baby's brain to develop properly.
e.	Extra milk	Meets additional energy requirement to nurture the baby in foetus.
11	**Foods avoided during pregnancy**	
a.	Ghee and banana	It is nutritious, promotes digestion and gives strength while banana contains large quantities of iron
b.	Papaya	
c.	Citrus fruit	These are good source of vitamin C
d.	Eggs	Eggs help the baby to grow and give baby strong blood.
e.	Brinjal	Do not agree
f.	Til, Jaggery	Normal intake of these food is good but excess quantity may not be good and lead to complication
g.	Meat, fish	Meat can be consumed but very little as it engenders toxins in the organism. Fish can be consumed because it is rich in minerals.
h.	Coconut	Uncertainty is there
i.	Walnuts	Hot in nature
j.	Curd	It has good digestive property and hence should be given as much as desired
12	**Food/non-food items intake during pregnancy**	
a.	Orange	Good source of vitamin. C
b.	Extra milk	Milk contains calcium and protein
c.	Multanni mitti	Taking of mulatani mitti is a sign of Calcium deficiency. Thus if woman consume mitti, Calcium rich supplements must be recommended
d.	Tamarind	Unknown
13	**Special foods consumed to have male Child**	
a.	Raw coconut seed and methi seeds	This practice is wrong as sex of unborn child is determined at the time of conception and is base on the combination of X and Y chromosome
14	**Indigenous pre delivery foods**	
A	**For last trimester*:***	
a.	Wheat flour halwa	Wheat is rich in proteins. Ghee provides energy

B	**Foods given in ninth month of pregnancy:**	
a.	Kadha of desi ghee, karwi saunf,meethi saunf, sugar powder	Ghee is source of energy Sugar is sweetening agent to increase palatability and provides energy Karwi saunf is digestive, stimulant, purgative and laxative Meethi saunf is antidotal
b.	Kadha of karwi saunf,jaggery, dates and milk	Karwi saunf is digestive, stimulant, purgative and laxative Dates are rich source of calcium Milk contains Calcium and proteins
c.	Kadha of til, methi ,desi ghee, dates, milk, water	Dates are nutritious, demulcent, tonic and laxative Til seeds are demulcent, tonic and nourishing Methi seeds are used as tonic and carminative, Desi ghee provides energy
d.	Kadha of cloves, cardamom, bay leaves and water	Cloves remove gas, act as lubricant and induces pains Cardamom removes cough Bay leaf stimulates uterus, reduces the feeling of vomiting
C	Sanitation and hygiene	
15	**Frequency of taking bath, brushing of teeth, cleaning, combing and massage of hair, cutting of nails**	The pregnant women should take care of personal cleanliness as healthy and clean body leads to healthy mind
16	**Stress and strain**	
a.	Majority of the respondents did not avoid heavy work and traveling	In normal condition doing routine work is good as it keeps the muscles flexible, which helps in easy delivery. Heavy work should be avoided if mother has any complications. Traveling should be avoided especially in 3rd trimester because it may be harmful to feotus as well as mother
17	**Miscellaneous**	
a.	Avoid looking at solar or lunar eclipse	Uncertainty is there
b.	Not to see dead body	Any mental shock can occur to the pregnant mother which may be harmful
c.	Avoid high heel shoes/chapplas	High heeled shoes/ chappals may cause imbalance leading to abortion or some mishappening

d.	Avoid application of mehendi on hands	Experts disagreed to the logic of respondents
II	**PERI NATAL STAGE**	
A	Health	
18	Posture of mother at the time of delivery	Posture at the time of delivery should be in lying position as in squatting position the breathing of child may be blocked
B	Nutrition	
19	**Foods served on onset of labour pains**	
a.	Kadha of cloves, small cardamom, jeera, dried ginger, mullathi powder, til seeds, dates, ghee and jaggery	Strong smell of cloves avoids infection, oily nature acts as lubricant. Induces and increases pains and removes gas which hinders delivery Cardamom removes gas causing delayed delivery Jeera removes gas and stimulates uterus Dried ginger provides strength to face labour pain and cold nature balances hot effect of other ingredients Mulathi provides immunity Til seeds are energy providing Dates provide strength, removes gas, induces and increases pains Ghee acts as lubricant for easy passage of child
b.	Kadha of dried ginger powder, big cardamom, ajwain, dates and sugar	Dried ginger provides strength Cardamom removes gas Ajwain contains thymole thus acts as carminative, tonic, stimulant and induces pains
c.	Kadha of Tej patta, dates, small cardamom, jaggery and desi ghee	Tej patta stimulate uterus Dates and jaggery provide strength Cardamom is carminative and relieves flatulence Desi ghee acts as lubricant thus forms a slippery path for the child
d.	Boil seed pods and spongy part of gurlakdi in water. Add jaggery when half of water is left	Gurlakdi has abortifacient properties and is anti inflammatory Jaggery provides energy
C	Sanitation and hygiene	
20	**Material used to cut umbilical cord**	

a. b. c. d.	Sterilized blades Unsterilized blades Scissors Sickle	Sterilized blades should be used as they help in avoiding infection and prevents spread of disease.
21	**Material applied on navel**	
a.	Heated paste of turmeric and mustard oil	Heated paste of turmeric and mustard help in heeling of naval and making it dry as turmeric acts as an antiseptic while mustard oil forms a thin layer on naval which avoids contact of water with a wound.
III	**POST- NATAL STAGE**	
A	Health	
22	**Foods served to control excessive bleeding after delivery**	
a.	Consume Desi ghee with sugar	Uncertainty is there
b.	Take a glass of milk with desi ghee	Experts agree to rationale of respondents
c.	Consume ajwain roasted in ghee along with jaggery and almonds	Ajwain contains thymole which acts as an analgesic thus helps in relieving pain and clearing the uterus of any blood clots
d.	Consume soaked kamarkas and nagori gond mixed with boiled milk.	Gond prevents bleeding
23	**Practices followed in delayed expulsion of placenta after delivery**	
a.	Give ghee to mother for drinking	Excess of ghee lead to vomiting and this pressure may help in expulsion of placenta
b.	Put heat under the cot of mother	Providing indirect heat to the mother does not help but any method which creates pressure on uterus will help in expulsion of placenta
24	**Practices followed for prevention of uterus prolapse**	

a.	Sittings in boiled water with bark of kikar and papal	Barks of these plants have antiseptic and anti-inflammatory properties. The water exerts upward buoyant force thus helps in lifting of uterus
B	Nutrition	
25	**Post delivery foods**	
a.	Powder of ajwain, dry coconut powder, dates, almonds crushed jaggery with ghee	Ajwain decreases blood loss, cleaning and involutions of uterus after delivery, avoid constipation, increase appetite, helps in blood purification and getting relief from backache Jaggery, dates and almonds provide strength and energy
b.	Kharani (Prepared by roasting soanth in desi ghee and pour milk and sugar after adding almonds, dates, coconut, cashew nut. Boil and consume)	Almonds provide strength and checks amnorrhoea Dry fruits are nutritious Soanth is stomachic and appetizer thus improves appetite and digestion. Brings uterus to its normal position Coconut provides strength and increases milk secretion Dates provide strength, removes gas, increases milk secretion and removes pain
c.	Sund Ke ladoo(Method: Roast semolina/soozi add charmagaz,gond and aasgandh. Then add dry fruits, coconut powder and sugar. Roast and then prepare ladoos adding milk to this mix.)	Gond helps in resuming menstrual cycle and after effects of delivery and is lactogenic. Increases BMR, improves liver functions hence increases appetite then indirectly improves lactation Coconut is a rich source of calcium and protein, Increases milk production Almonds check amnorrhoea Dates provide strength, increase milk secretion, remove dryness Raisins are strength providing Saunf increases appetite and cold nature balances the hot effect of other ingredients
d.	Wheat Flour halwa (Prepared by roasting wheat flour in ghee and then add black pepper, sugar, raisins, almonds, charmagaz, gum of acacia, dried ginger)	Wheat flour and ghee contain carbohydrates and fat which provide energy Almond and raisins provide strength and energy Gum acts as binder to give strength to body, contains tannic and gallic acid. Dried ginger provides strength Black pepper seeds provide nutrition and act as tonic
e.	Semi liquid food e.g. dalia, moong dal soup or khichari with desi ghee	After delivery digestive system weakens, and solid food could not be digested properly so liquid food full of energy is required

f.	Methi	Methi increases milk secretion, reduces pains and chances of getting obese, helps in proper functioning of nervous system
g.	Milk and desi ghee	To regain the lost strength
26	**Drinking water treatment given to lactating mother**	
a.	Water treated with karwi saunf, tejpatta and small cardamom	karwi saunf is digestive, stomachic and laxative thus clears the digestive system while cardamom is stimulant and digestive tonic.
C	Sanitation and hygiene	
27	**Treatment given to placenta after delivery**	
a.	Burry inside/outside home	The placenta should be disposed off in such a way so that it may not lead to environment pollution. If possible, dump it in a trench.
b.	Burry inside near the cot of mother	
28	**Bathing of mother**	
a.	After 5 days	It is a wrong practice as it may lead to infection in uterus
	LACTATION	
29	**Foods avoided during lactation**	
a.	Cauliflower, Potato Pumpkin, Brinjal	Gas producing thus causes stomachache.
b.	Mash dal , Rajmash	These are heavy to digest and thus may act as flatulent and may cause gas formation which may be transmitted from mother to baby
c.	Chillies	Harmful for mother and child
d.	Rice	Medical doctors suggest no such restrictions but ayurvedic doctors suggest that consumption of rice does not directly lea to pus formation but it is a good base for growth for bacteria and later on lead to leucorrhoea in women
30	**Special foods consumed to increase milk secretion**	
a.	Grinded root of satavar is consumed with glass of milk	Root is galactogogue thus increases milk secretion
b.	Consume Khoru (Method: Heat oil, add salt, methi, jeera, turmeric and buttermilk	Milk and its products increase milk secretion. Methi and jeera are also galactogogues

c.	Consume hot cow's milk	Milk is richest source of calcium. Since there is considerable drain of calcium during pregnancy and lactation, thus adequate supply of minerals is required during these conditions hence milk is therefore recommended
d.	Consumption of grinded mixture of aasgandh, satavar, mulathi with milk	Aasgandh, satavar, mulathi are galactogogues
e.	Decoction of stem of galoein	Galoein increases milk secertion
31	**CHILD CARE**	
A	Health	
a.	Immunization of the child	Immunization of child is important to develop immunity against different diseases even if the child is growing normal
b.	Massage	Massage is essential as it makes bones strong, and increases blood circulation
32	**Indigenous foods/practices followed to cure diarrhoea**	
a.	Boil small cardamom, ajwain and jaiphal and feed	Cardamom is carminative Ajwain contains thymole thus acts as carminative, tonic, stomachic and antispasmodic Jaiphal is stimulant and carminative
b.	Extract of harad, almond, piece of jaiphal and baren	Jaiphal is astringent, tonic Harad and almonds are constipatious
c.	Use of bahera	Bahera is astringent, carminative and purgative.
d.	Solution of sugar, salt and water	This solution helps to retain water inside the body thus checks dehydration and diarrhoea
33	**Indigenous foods/practices followed to cure stomach pain**	
a.	Rub harad in water and give to baby	Harad is purgative, stomachic and releases flatulence.
b.	Boiled ajwain in water	Ajwain is tonic, stomachic, carminative, and stimulant.
c.	Feed ginger extract	Ginger is digestive, laxative, appetizer, stomachic and flatulent
34	**Indigenous foods/practices followed to cure cold and cough**	
a.	Apply paste of powdered baren and mustard oil	Baren helps to vomit out the mucous, expectorant, thermogenic i.e. generates heat and increases the body temperature

b.	Rub jaiphal feed the baby after adding milk	Ginger acts as thermogenic, expectorant, stimulant and emollient. Mulathi is expectorant, alterant, tonic and being an alexeteric it helps in toning up the nerves.
c.	Heat galgal leaves on fire and wrap around the chest of the baby	Uncertainty is there
d.	Feed heated seeds of cardamom in water	Cardamom is stimulant, expectorant, alexeteric thus prevents infection and provides strength to body
e.	Feed grinded jaiphal, supari, coconut to the baby	Jaiphal is a stimulant
f.	Rub baren, rarah, clove and feed the baby after adding milk	Baren helps to vomit out the mucous, expectorant, thermogenic i.e. generates heat and increases the body temperature Clove is expectorant thus helps to bring out mucous, its emollient properties sooths the throat and is a good tonic
g.	Burn baren, bark of fig, and pine, wrap in cloth and place on chest of the baby.	Experts were uncertain is there
h.	Burn puthkanda roots, shelled maize cob and banyan bark, then add a piece of mug and grind. Let the child lick the mix with honey	Puthkanda is expectorant and febrifuge
35	**Indigenous foods/practices followed to cure eye Infection**	
a.	Put 1-2 drops of mother's milk in eye	It is a wrong practice
b.	Put drops of amla juice in eyes	Amla is astringent, ophthalmic and anti-inflammatory.
c.	Bandage of pulpy portion of kavarein leaf	Kavarein possesses alexeteric, ophthalmic and cooling properties.

36	**Indigenous foods/practices followed to cure ear Infection**	
a.	Heat mustard oil and add a piece of garlic. Put in ear	Garlic is anodyne, thermogenic thus generates heat to discharge pus, antibacterial and antifungal properties prevent and control infection
b.	Put a drop of onion juice in the ear	Onion is thermogenic, antibacterial, anodyne and emollient so soften the skin
c.	Put 2-3 drops of mother's milk in ear.	Unknown
d.	Put drops of leaf juice of kavarein.	Kavarein is an alexeteric thus prevents infection.
37	**Indigenous foods/practices followed to cure measles**	
a.	Fumigation of fried amaranthus seeds	Uncertainty is there
b.	Fumigation of fried intestine of porcupine and amaranthus seeds	Uncertainty is there
B	Nutrition	
38	**Pre lacteal foods given to infant after birth**	
a.	Honey	Pure honey is heavy to digest so should not be given
b. c. d.	Sugar and water Jaggery and water Jaggery	These pre lacteal foods are recommended as these are rich source of energy and help in cleaning the stomach of new born baby
39	**Colostrum feeding**	
a.	Do not feed colostrum	Colostrum should be fed to the new born as it is a nutritive food and contains antibodies to develop immunity in the infants
40	**Duration of breast feeding**	
a. b.	$1^{1}/2$ years $2^{1}/2$ years	Breast feeding can be continued for 4-6 months. After this the mothers milk is not sufficient to meet the demands of growing child.

41	**Posture at the time of breast feeding**	
a.	Lying/sitting	Mother should breast fed in sitting position as in lying position there may be obstacles in infants breathing and milk may enter into the ear of infant and cause ear infectio
42	**Introduction of Supplementary foods**	
a.	Liquid food	Liquid foods should be supplemented at the age of 4-5 months
b.	Semi solid food	Semi solid foods should be started by the age of 6-8 months as baby's iron stores start to run out. Baby needs iron for strong blood thus by this age, the baby should start to eat some foods.
c.	Solid food	Up to 6 months after delivery there is generally a steady rise in the output of milk, subsequently the milk output diminishes. If the baby is to maintain the expected rate of growth, and healthy and well nourished, supplementary feeding has to be resorted to at about six months of life.
C	Sanitation and hygiene	
43 a.	Bath given to the child	Bath should be given daily, irregularities may lead to infection and diseases especially related to skin

b.	Change of cloth after each bladder movement	Napkins should be changed after each bladder movement otherwise skin infections such as rashes may occur
44	Toilet training	
a.	Age of starting toilet training	There is no fixed age for learning the control as individual differences are there. The child will learn to control bladder, bowel movement when he is physically mature.
b.	Use of punishment for toilet training	Punishment should not be used in toilet training process as it may lead to behavioral problems.
c.	Type of punishment for toilet training	Use of verbal method is good for teaching good toilet habits to children.
45	**Discipline and habit formation**	
a.	Age of starting discipline	Right age for starting the discipline is after two years when he/she can understand and judge his/her own behaviour.
b.	Appreciation for good behaviour	Appreciation for good behaviour is a must so that child can differentiate between approved and disapproved ways of behaviour. It will also help the child in developing good behaviour.
c.	Punishment for wrong behaviour.	Child should be punished for wrong behaviour to make him realize about his mistake. But never use corporal punishment. Methods used for punishment should be verbal. Infant should be explained about the act.

While child should be punished for wrong behaviour to make him realize about his mistake. But corporal punishment should never be used and infant should be explained about the act.

4.7 SCIENTIFIC VALIDATION OF IDENTIFIED INDIGENOUS PRACTICES FOLLOWED BY RURAL WOMEN REGARDING MATERNAL AND CHILD CARE

4.7.1 Scientific validation of identified indigenous practices followed at prenatal stage

4.7.1.1 Health

Opinion of the experts on various identified indigenous health practices followed at prenatal stage was sought in terms of frequency and percentage and the results are given in Table 46. In all there were 43 identified indigenous practices practiced by rural women at prenatal stage.

Out of 43 indigenous practices sixteen practices (1, 2(i) a, 2(i)c, 2(ii)a, 2(ii)b, 2(ii)d, 2 (ii)g, 2(iii)a, 2(iii)b, 2(iii)e, 2 (iii)f, 2 (iv)Db, 2(iv)Dc, 2(v)a, 2(v)c, 2(vi)a, 2(vi)b) were stated as highly valid by 76.00 to 100.00 per cent experts. Above mentioned practices used by the rural women have high scientific validation so these practices become a base for inclusion in package of practices for home science by conducting cross sectional studies taking a large sample size.

Twelve practices (2(i)b, 2(ii)c, 2(ii)e, 2(iii)f, 2(iv)Aa, 2(iv)Ab, 2(iv)Ba, 2(iv)Bb, 2(iv)Bc, 2(iv)Ca, 2(vi)c, 2(vii)e) were perceived to be somewhat valid by more than seventy five per cent of the experts. Only three practices (2(ii)f, 2(iii)d, 2(iv)Cb) were considered valid by more than fifty per cent of the experts. All the fifteen observations are in tune with the findings of Sharma (2003).

Table 46: Scientific validation of identified indigenous health practices practiced by rural women at prenatal stage.

N=50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
I.	**Health**	**Highly valid**	**Valid**	**Somewhat valid**
1	Visit to pre natal clinic/local dai	100	-	-
2	**Indigenous practices followed to cure common ailments**			
(i)	**Morning sick ness**			
a.	Crushed onion and mint juice with water and salt	88.00	12.00	-
b.	Darmashtik	12.00	10.00	78.0
c.	Churan of roasted and crushed saunf and ajwain along with kooja ki mishri	82.00	18.00	-
d.	Amla powder in milk	6.00	40.00	54.00
e.	Orange	4.00	22.00	74.00
f.	Lemon water	4.00	22.00	70.00
(ii)	**Constipation**			
a.	Decoction of harad bahera and amla	78.00	18.00	4.00
b.	Decoction of ajwain, gurlakdi meethi saunf	86.00	10.00	4.00
c.	Chewing 3-4 leaves of sanai	12.00	2.00	86.00
d.	Isabgol and water	88.00	12.00	-
e.	Saag of spinach and dudali	12.00	2.00	86.00
f.	Churan of dalchini, small cardamom and saunf	24.00	64.00	12.00
g.	Seasonal fruits	100.00	-	-

(iii)	**Abdominal pain**			
a.	Boiled ajwain water	80.00	20.00	-
b.	Kadha of bhabri,mint leaves and ajwain	78.00	22.00	-
c.	Kadha of kakarsinghi and water	52.00	32.0	16.00
d.	Kadha of Kasturi, jaggery, black pepper and ginger	24.00	62.00	14.00
e.	Jeera with water	76.00	24.00	-
f.	Pateesh	-	20.00	80.00
(iv)	**Swelling on limbs**			
A	**Foods Given:**			
a.	Kadha of cardamom, cloves with sugar	-	12.00	88.00
b.	Juice of satavar	8.00	2.00	90.00
B	**Foods Avoided:**			
a.	Potato	-	2.00	98.00
b.	Rice	-	2.00	98.00
c.	Radish	-	2.00	98.00
C	**Massage of:**			
a.	Gandala leaves boiled in water	20.00	4.00	76.00
b.	Agas bel boiled in water	4.00	54.00	42.00
c.	Eucalyptus leaves and agas bel boiled in water	4.00	24.00	72.00
D	**Miscellaneous:**			
a.	Treatment with heated castor oil	4.00	22.00	74.00
b.	Consume low salt foods	88.00	12.00	-
c.	Take plenty of water	98.00	2.00	-

(v)	**Cold and cough**			
a.	Mild kadha of cardamom, black pepper, tej patta, salt, sugar and milk.	76.00	24.00	-
b.	Bengal gram soup	2.00	46.00	52.00
c.	Decoction of cardamom, banafshah and mulathi	78.00	22.00	-
(vi)	**Backache**			
a.	Roasted saunth with ghee and sugar	78.00	22.00	-
b.	Soaked methi with boiled milk	76.00	24.00	-
c.	Treatment with aak leaves	-	20.00	80.00
(vii)	**Blemishes on face**			
a.	Application of paste of bitter gourd leaves	56.00	16.00	28.00
b.	Consumption of almonds with milk.	58.00	6.00	36.00
c.	Application of paste of turmeric and gram flour	64.00	10.00	26.00
d.	Application of papaya paste	24.00	6.00	70.00
e.	Rub crushed bark of pine	12.00	10.00	78.00
f.	Application of paste of garlic cloves	4.00	24.00	72.00

Remaining 12 practices have secured less than 50.00 percent of the census so these 12practices should be discontinued by they rural women because they have no scientific validation. Continuity of these 12 practices may have harmful effect on the health status of the recipients.

4.7.1.2 Nutrition

Perusal of Table 47 with regard to nutrition indicates that there were 28 practices which were identified as indigenous. Six practices (3a, 3b, 3d, 3f, 5c, 6a) were perceived as somewhat valid by all the experts. Beside these six, eleven other practices symbolized as (1, 2a, 2b, 2c, 2d, 2e, 4a, 4b, 7a, 8a, 8d) were considered as highly valid by 64.00-100.00 per cent of the experts. There is a need to standardize these eleven practices. All the eleven sub practices are in line with the findings of Batra (1995).

Two practices (8b, 8c) were perceived as valid by 62.00 and 40.00 percent experts respectively and the rest of nine practices (3c, 3e, 3g, 3h, 3i, 3j, 3k, 3l, 5d) were rated as valid by 2.00-24.00 per cent experts.

4.7.1.3 Sanitation – hygiene and other miscellaneous practices

Regarding sanitation, hygiene and other miscellaneous practices, 11 indigenous practices were identified (Table 48). Out of these, eight practices (1a, 1b, 1c, 1d, 1e, 2a, 2b and 3c) were perceived as highly valid while the perception of the scientist for practices 3b and 3a varies from 46.00 to 50.00 percent in the somewhat valid category. Whereas application of mehendi on hand (3d) perceived as somewhat valid by all the experts.

Table 47: Scientific validation of identified indigenous nutritional practices practiced by rural women at prenatal stage.

N=50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
	Nutrition	**Highly valid**	**Valid**	**Somewhat valid**
1.	Increase intake of usual diet	100.00	**-**	**-**
2.	**Extra Intake of diet**			
a.	Seasonal fruits and vegetables	100.00	-	-
b.	Ghee	100.00	-	-
c.	Pulses	100.00	-	-
d.	Green leafy vegetables	100.00	-	-
e.	Extra milk	100.00	-	-
3.	**Foods avoided during pregnancy**			
a.	Ghee	-	-	100.00
b.	Banana	-	-	100.00
c.	Papaya	-	26.00	74.00
d.	Citrus fruits	-	-	100.00
e.	Eggs	-	4.00	96.00
f.	Brinjal	-	-	100.00
g.	Til, Jaggery	-	24.00	76.00
h.	Meat	-	20.00	80.00
i	Fish	-	20.00	80.00
j.	Coconut	-	2.00	98.00

k.	Walnuts	20.00	4.00	76.00
l.	Curd	-	2.00	98.00
4.	**Food intake during pregnancy**			
a.	Orange	100.00	-	-
b.	Extra milk	100.00	-	-
5.	**Non-food items**			
c.	Multanni mitti	-	-	100.00
d.	Tamarind	8.00	90.00	2.00
6.	**Special foods consumed to have male Child**			
a.	Raw coconut seed and methi seeds	-	-	100.00
7.	**Indigenous pre delivery foods intake**			
a.	Wheat flour halwa	68.00	4.00	28.00
8.	**Foods given on the onset of ninth month of pregnancy:**			
a.	Kadha of desi ghee, karwi saunf,meethi saunf, sugar powder	70.00	24.00	6.00
b.	Kadha of karwi saunf,jaggery, dates and milk	36.00	62.00	2.00
c.	Kadha of til, methi ,desi ghee, dates, milk, water	58.00	40.00	2.00
d.	Kadha of cloves, cardamom, bay leaves and water	64.00	36.00	-

Table 48: Scientific validation of identified indigenous sanitation-hygiene and other miscellaneous practices practiced by rural women at prenatal stage.

N=50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
	Sanitation and hygiene	**Highly valid**	**Valid**	**Somewhat valid**
a.	Frequency of taking bath	100.00	-	-
b.	Brushing of teeth	100.00	-	-
c.	Cleaning of hair	100.00	-	-
d.	Combing and massage of hair	100.00	-	-
e.	Cutting of nails	100.00	-	-
2.	Stress and strain			
a.	Avoid heavy work in last trimester	98.00	2.00	-
b.	Avoid traveling in last trimester	98.00	2.00	-
3.	**Miscellaneous**			
a.	Avoid looking at solar eclipse	-	-	100.00
b.	Avoid to see dead body	-	-	100.00
c.	Avoid high heel shoes/chappals	100.00	-	-
d.	Avoid application of mehendi on hands	-	-	100.00

4.7.2 Scientific validation of identified indigenous practices followed at perinatal stage.

4.7.2.1 Health

In total 7 identified practices related to perinatal stage were presented to experts for their validation (Table 49). Under health component, the practice of delivering the baby in lying position was perceived to be highly valid by all experts. The finding of the present study is in tune with the finding of Batra (1995).

4.7.2.2 Nutrition

In nutritional component only four practices were identified as indigenous practices. Out of which two were [2(a), 2(b)] considered to be highly valid by more than 75.00 per cent experts. More than 50.00 per cent experts perceived the practices of serving decoction of gurlakdi on the onset of labour pains as somewhat valid while 46.00 per cent experts rated this practice as valid. So the identified practice of serving gurlakdi on the onset of labour pains needs further exploration by taking large sample size of women and experts

4.7.2.3 Sanitation and hygiene

With regard to sanitation and hygiene (Table 49) both the practices (b,a) were perceived to be highly valid by 98.00-100.00 per cent of the experts, respectively. Similar findings were observed in the study conduced by Punia (1993). Thus can be recommended for inclusion in package of practices of Home Science.

Table 49: Scientific validation of identified indigenous health, nutrition, sanitation hygienic practices practiced by rural women at perinatal stage.

N= 50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
A	**Health**	**Highly valid**	**Valid**	**Somewhat valid**
1.	Baby should be delivered in lying posture	100.00	-	-
B.	**Nutrition**			
2.	**Foods served on onset of labour pains**			
a.	Kadha of cloves, small cardamom, jeera, dried ginger, mullathi powder, til seeds, dates, ghee and jaggery	76.00	24.00	-
b.	Kadha of dried ginger powder, big cardamom, ajwain, dates and sugar	76.00	24.00	-
c.	Kadha of tej patta, dates, small cardamom, jaggery and desi ghee	64.00	16.00	20.00
d.	Boil seed pods and spongy part of gurlakdi in water. Add jaggery when half of water is left	2.00	46.00	52.00
C	**Sanitation and hygiene**			
a.	Sterilized blades are used to cut umbilical cord	100.00	-	-
b.	Heated paste of turmeric powder and mustard oil is applied on navel	98.00	2.00	-

4.7.3 Scientific validation of identified indigenous practices followed at postnatal stage

4.7.3.1 Health (Mother)

Response of the experts was ascertained on 8 identified indigenous practices pertaining to health component of mother at postnatal stage and the results so obtained are discussed in this section.

Table 50 depicts that only two practices symbolized in parenthesis (1c, 3a) were perceived to be highly valid by 76.00 per cent of the experts. There is a need to standardize these practices. It was observed that 62.00 to 80.00 percent of experts rated three practices symbolized in parenthesis (1a, 1b, 1d) under the category of valid. Similar number of practices i.e. three practices (2a, 2b, 3b) were considered in somewhat valid category by 78.00 to 100.00 percent of the experts. Practices rated under the categories of valid and somewhat valid needs further explorations by cross sectional study.

4.7.3.2 Nutrition (Mother)

As regards nutrition (Table 51) nine practices symbolized in parenthesis (1a, 1b, 1c, 1d, 1e, 1g, 2a, 4b, 4c) were considered to be highly valid by more than 75.00 percent of the experts. There is a need to standardize these practices for recommendation in the package of practices of Home Science.

Further perusal of the table regarding foods avoided during lactation depicts that only one practice (3f) was considered highly valid by 68.00 per cent experts and indigenous practices pertaining to increase in milk

Table 50: Scientific validation of identified indigenous health practices pertaining to mother at postnatal stage.

N=50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
I.	**Health**	**Highly valid**	**Valid**	**Somewhat valid**
1.	**Practices to control excessive bleeding after delivery**			
a.	Consume Desi ghee with sugar	16.00	62.00	22.00
b.	Take a glass of milk with desi ghee	24.00	64.00	12.00
c.	Consume ajwain roasted in ghee alongwith jaggery and almonds	76.00	20.00	4.00
d.	Consume soaked kamarkas and nagori gond mixed with boiled milk.	4.00	80.00	16.00
2.	**Practices followed in delayed expulsion of placenta after delivery**			
a.	Give ghee to mother for drinking	-	22.00	78.00
b.	Put heat under the cot of mother	12.00	2.00	86.00
3.	**Practices followed for prevention of uterus prolapse**			
a.	Sittings in boiled water with bark of kikar and pipal	76.00	24.00	-
b.	Sit on hard ball of clothes	-	-	100.00

Table 51: Scientific validation of identified indigenous nutritional practices pertaining to mother at postnatal stage.

N=50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
	Nutrition	**Highly valid**	**Valid**	**Somewhat valid**
1.	**Post delivery foods**			
a.	Powder of ajwain, dry coconut powder, dates, almonds crushed jaggery with deshi ghee	78.00	22.00	-
b.	Kharani (Prepared by roasting soanth in desi ghee and pour milk and sugar after adding almonds, dates, coconut, cashew nut. Boil and consume)	86.00	14.00	-
c.	Sund Ke ladoo(Method: Roast semolina/soozi add charmagaz,gond and aasgandh. Then add dry fruits, coconut powder and sugar. Roast and then prepare ladoos adding milk to this mixture)	88.00	12.00	-
d.	Wheat Flour halwa (Prepared by roasting wheat flour in ghee and then add black pepper, sugar, raisins, almonds, charmagaz, gum of acacia, dried ginger)	92.00	8.00	-
e.	Semi liquid food e.g. dalia, moong dal soup or khichari with desi ghee	98.00	2.00	-
f.	Soaked methi in boiled milk	16.00	52.00	32.00
g.	Milk with desi ghee	100.00	-	-
2.	**Foods avoided during lactation**			
a.	Cauliflower	-	2.00	98.00
b.	Potato	-	2.00	98.00
c.	Pumpkin	-	2.00	98.00

d.	Brinjal	-	2.00	98.00
e.	Mash dal , Rajmash	-	2.00	98.00
f.	Chillies	68.00	4.00	28.00
g.	Rice	-	-	100.00
3.	**Special foods consumed to increase milk secretion**			
a.	Grinded root of satavar is consumed with glass of milk	52.00	10.00	38.00
b.	Consume Khoru (Method: Heat oil, add salt, methi, jeera, turmeric and buttermilk	76.00	24.00	-
c.	Consume hot milk of cow/buffalo	100.00	-	-
d.	Consumption of grinded mixture of aasgandh, satavar, mulathi with milk	48.00	32.00	20.00
e.	Decoction of stem of galoein	34.00	48.00	18.00
4.	**Treatment of drinking water given to lactating mother**			
a.	Water treated with karwi saunf, tejpatta and small cardamom	100.00	-	-

secretion two practices (4b and 4c) were perceived as highly valid by more than 75.00 per cent of experts and six practices (3a, 3b, 3c, 3d, 3e, 3g) were perceived to be somewhat valid by 98.00-100.00 percent of experts. Similar findings were observed in the work conducted by Punia (1993). Four practices were considered somewhat valid by 18.00-38.00 percent experts. Thus there is a need to educate rural women for avoiding these practices because scientists are not sure about their scientific validation.

4.7.3.3 Sanitation and hygiene (Mother)

Regarding this component three practices were identified as indigenous practices depicted in Table 52, the experts considered all of them (1a, 1b, 2) to be somewhat valid. There is a need to educate the rural women not to use above mentioned practices because the scientists have ambiguity about these practices. There is a need to do further study on this by taking a large sample size of both rural women and scientists.

4.7.3.4 Health (Child)

Scrutiny of Table 53 clearly indicates that out of 26 identified indigenous practices related to health component of child care, 18 practices [1,2,3(i)a, 3(i)b, 3(i)c, 3(i)d, 3(ii)a, 3(ii)b, 3(ii)c, 3(iii)a, 3(iii)b, 3(iii)d, 3(iii)f, 3(iv)b, 3(iv)c, 3(v)a, 3(v)b, 3(v)d] were perceived to be highly valid by 76.00 to 100.00 per cent experts. There is a need to standardize these practices for recommendation in package of practices of Home Science. Six practices viz. 3(iii)g, 3(iii)h, 3(iv)a, 3(v)c, 3(vi)a, 3vi (b) were rated as somewhat valid by 74.00-100.00 percent experts. There is a need to conduct further investigation on these practices by taking large sample of experts. Two practices (3(iii)c and 3(iii)e) were rated as valid by 82.00 and 88.00 percent experts respectively.

Table 52: Scientific validation of identified indigenous sanitation and hygienic practices pertaining to mother at postnatal stage.

N=50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
	Sanitation and hygiene	**Highly valid**	**Valid**	**Somewhat valid**
1.	**Treatment given to placenta after delivery**			
a.	Burry outside home	-	-	100.00
b.	Burry inside the house near the cot of mother	-	-	100.00
2.	**Mother takes bath after five days of delivery**	-	-	100.00

Table 53: Scientific validation of identified indigenous health practices pertaining to child care.

N=50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
I.	**Health**	**Highly valid**	**Valid**	**Somewhat valid**
1.	Immunization of the child	100.00	-	-
2.	Massage	100.00	-	-
3.	**Practices followed to cure common diseases**			
(i)	**Diarrhoea**			
a.	Boil small cardamom, ajwain and jaiphal and feed	78.00	22.00	-
b.	Extract of harad, almond, piece of jaiphal and baren	80.00	-	20.00
c.	Use of bahera	80.00	20.00	-
d.	Solution of sugar, salt and water	100.00	-	-
(ii).	**Stomach pain**			
a.	Rub harad in water and give to baby	84.00	16.00	-
b.	Boiled ajwain in water	88.00	12.00	-
c.	Feed ginger extract	76.00	24.00	-
(iii)	**Cold and cough**			
a.	Apply paste of powdered baren and mustard oil	88.00	12.00	-
b.	Feed the grinded mixture of dried ginger, black pepper and mulathi with honey or milk	78.00	22.00	-

c.	Heat galgal leaves on fire and wrap around the chest of the baby	-	88.00	12.00
d.	Feed heated seeds of cardamom in water	78.00	22.00	-
e.	Feed grinded jaiphal, supari, coconut to the baby	14.00	82.00	4.00
f.	Rub baren, rarah, clove and feed the baby after adding milk	76.00	24.00	-
g.	Burn baren, bark of fig, and pine, wrap in cloth and place on chest of the baby.	-	6.00	94.00
h.	Burn puthkanda roots, shelled maize cob and banyan bark, then add a piece of mug and grind. Let the child lick the mix with honey	-	6.00	94.00
(iv).	**Eye Infection**			
a.	Put 1-2 drops of mother's milk in eye	4.00	22.00	74.00
b.	Put drops of amla juice in eyes	82.00	18.00	-
c.	Bandage of pulpy portion of kavarein leaf	76.00	12.00	12.00
(v)	**Ear Infection**			
a.	Heat mustard oil and add a piece of garlic. Put in ear	92.00	8.00	-
b.	Put a drop of onion juice in the ear	86.00	14.00	-
c.	Put 2-3 drops of mother's milk in ear.	-	22.00	78.00
d.	Put drops of leaf juice of kavarein.	76.00	24.00	-
(vi)	**Measles**			
a.	Fumigation of fried amaranthus seeds	-	-	100.00
b.	Fumigation of fried intestine of porcupine and amaranthus seeds	-	-	100.00

4.7.3.5 Nutrition (Child)

It is evident from the percentage figures (Table 54) that out of 7 selected nutrition and other related indigenous practices 2, 4, 5a, 5b and 5c were the five practices perceived as highly valid by 100.00 per cent experts while the practice of feeding honey as a pre lacteal feed to neonate was perceived as highly valid and somewhat valid by similar percentage of experts i.e. 50.00 percent each. The findings are supported by the work done by Batra (1995). There is a need that extension agencies put emphasis on the further utilization of these five practices and discontinuation of two practices stated as somewhat valid by experts. There is a need to conduct further research on the practice viz., honey as a first food for neonatal stated as highly valued and somewhat valid by 50.00 per cent experts mentioned above.

4.7.3.6 Sanitation–hygiene and other miscellaneous practices (Child)

Regarding sanitation, hygiene and other miscellaneous selected indigenous practices depicted in Table 55 there were five practices related to this component. It was observed three practices (1, 2, 4a) were considered to be highly valid by 76.00 - 100.00 per cent of experts while two practices (3a, 3b) were perceived to be somewhat valid by all of them. The findings are in accordance with the findings of Punia (1993). There is a need to standardize the three practices stated as highly valid (76.00-100.00% experts) and need to conduct further investigation on two practices (3a, 3b) perceived as somewhat valid by taking large sample size of experts.

Table 54: Scientific validation of identified indigenous nutritional practices pertaining to child care.

N=50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
	Nutrition	**Highly valid**	**Valid**	**Somewhat valid**
1.	Honey is given to neonatal as a first feed	50.00	-	50.00
2.	Colostrum is fed to new born baby as a first feed	100.00	-	-
3.	Duration of exclusive breast feeding is upto 1 year	-	-	100.00
4.	Mother should feed the baby in sitting posture	100.00	-	-
5.	**Introduction of Supplementary foods**			
a.	Liquid food at the age of 4-5 months	100.00	-	-
b.	Semi solid food at the age of 6-8 months	100.00	-	-
c.	Solid food at the age of 8-9 months	100.00	-	-

Table 55: Scientific validation of identified indigenous sanitation-hygienic and other miscellaneous practices pertaining to child care.

N=50

Sr. No.	Identified Indigenous Practices	FREQUENCY (PERCENTAGE)		
	Sanitation and hygiene	**Highly valid**	**Valid**	**Somewhat valid**
1.	Regular bath to baby daily	100.00	-	-
2.	Changing of napkins after each bladder movement	100.00	-	-
3.	Toilet training			
a.	Use of punishment for toilet training	-	-	100.00
b.	Corporal punishment is used for toilet training	-	-	100.00
4.	**Discipline and habit formation**			
a.	Punishment for wrong behaviour.	76.00	12.00	12.00

4.8 MEAN SCORE AND COEFFICIENT OF VARIATION OF IDENTIFIED INDIGENOUS PRACTICES PRACTICED BY RURAL WOMEN REGARDING MATERNAL AND CHILD CARE

4.8.1 Mean score and coefficient of variation of identified indigenous practices followed at prenatal stage

4.8.1.1 Health

For all the indigenous health practices related to prenatal stage, mean score and coefficient of variation was calculated. Thus the practices with the coefficient of variation less than 20 per cent and mean score of 3.0 were selected for inclusion in media. The results are shown in Table 56.

Analysis of mean score and coefficient of variation of identified indigenous practices related to health component clearly indicated almost unanimity on response of the practice of visiting prenatal clinic with 3 mean score and 0.0 percent coefficient of variation.

Common ailments of pregnancy

The mean score and coefficient of variation of practices followed to cure common ailments of pregnancy are presented in this sub-section.

Morning sickness: The practices for which low coefficient of variation was observed included practice of consuming crushed onion and mint juice with water and salt (12%); churan of roasted and crushed saunf and ajwain alongwith kooja ki mishri (14%). There is a need to standardized the above mentioned two practices (a and c). To avoid the ambiguidity in the responses of the scientist there is a need to conduct further exploration by taking a large

Table 56: Mean and coefficient of variation of identified indigenous health practiced by rural women at prenatal stage.

N=50

Sr. No.	Identified Indigenous Practices	Mean	Coefficient of variation
	Health		
1	Visit to pre natal clinic/local dai	3	0
2	**Indigenous practices followed to cure common ailments**		
(i)	**Morning sick ness**		
a.	Crushed onion and mint juice with water and salt	2.9	12
b.	Darmashtik	1.3	51
c.	Churan of roasted and crushed saunf and ajwain along with kooja ki mishri	2.8	14
d.	Amla powder in milk	1.5	40
e.	Orange	1.3	42
f.	Lemon water	1.3	42
(ii)	**Constipation**		
a.	Decoction of harad bahera and amla	2.7	19
b.	Decoction of ajwain, gurlakdi meethi saunf	2.8	17
c.	Chewing 3-4 leaves of sanai	1.3	50
d.	Isabgol and water	2.9	10
e.	Saag of spinach and dudali	1.3	50
f.	Churan of dalchini, small cardamom and saunf	2.1	28
g.	Seasonal fruits	3.0	0

(iii)	**Abdominal pain**		
a.	Boiled ajwain water	2.8	14
b.	Kadha of bhabri,mint leaves and ajwain	2.8	15
c.	Kadha of kakarsinghi and water	2.4	32
d.	Kadha of Kasturi, jaggery, black pepper and ginger	2.1	29
e.	Jeera with water	2.8	16
f.	Pateesh	1.2	34
(iv)	**Swelling on limbs**		
A	**Foods Given:**		
a.	Kadha of cardamom, cloves with sugar	1.1	29
b.	Juice of satavar	1.2	47
B	**Foods Avoided:**		
a.	Potato	1.0	14
b.	Rice	1.0	14
c.	Radish	1.0	14
C	**Massage of:**		
a.	Gandala leaves boiled in water	1.4	56
b.	Agas bel boiled in water	1.6	35
c.	Eucalyptus leaves and agas bel boiled in water	1.3	42

D	**Miscellaneous:**		
a.	Treatment with heated castor oil	1.3	42
b.	Consume low salt foods	2.9	10
c.	Take plenty of water	3.0	9.6
(v)	**Cold and cough**		
a.	Mild kadha of cardamom, black pepper, tej patta, salt, sugar and milk.	2.8	16
b.	Bengal gram soup	1.6	35
c.	Decoction of cardamom, banafshah and mulathi	2.8	15
(vi)	**Backache**		
a.	Roasted saunth with ghee and sugar	2.8	15
b.	Soaked methi with boiled milk	2.8	16
c.	Treatment with aak leaves	1.2	34
(vii)	**Blemishes on face**		
a.	Application of paste of bitter gourd leaves	2.3	39
b.	Consumption of almonds with milk.	2.2	43
c.	Application of paste of turmeric and gram flour	2.6	58
d.	Application of papaya paste	1.5	56
e.	Rub crushed bark of pine	1.3	51
f.	Application of paste of garlic cloves	1.3	42

sample size. Rest of the four practices symbolized as b,d,e and f variations in the scientist response ranges from 40 to 51 per cent.

Constipation: For constipation, the practices for which the experts showed unanimity in their response were consumption of seasonal fruits (0%), consuming isabgol and water (10%); decoction of ajwain, gurlakdi, meethi saunf (17%) and decoction of harad, bahera and amla (19%). On rest of the 3 sub practices 2(ii)f, 2(ii)c, 2(ii)e, need to do further investigation by taking large sample size.

Abdominal pain: For curing abdominal pain, the experts had greater degree of agreement on the practice of consuming boiled ajwain water (14%); kadha of bhabri, mint leaves and ajwain (15%); consuming jeera with water (16%). On the remaining three practices 3(iii)d, 3(iii)c, 3(iii)f, variation of the scientist ranges from 29-34%. To avoid ambiguidity in the response categories, it is must to conduct cross sectional study by taking a large sample size.

Swelling on limbs: Regarding foods given to cure swelling on limbs the coefficient of variation was 29 per cent for kadha of cardamom, cloves with sugar and 47 per cent for juice of satavar which indicates variation in the response of experts towards these practices. On the above two stated practices, there is a need to conduct advance investigation by the other scholars crossectionally.

With regard to the food avoided, although there is less variation in the response of experts as the coefficient of variation is low (14% for each identified practices) but keeping in view the mean value (1% for each practice), these practices cannot be percolated to the women however there is a need to conduct research by taking large sample size.

For curing swelling on limbs, the practice of massaging with gandala leaves boiled in water had greater disagreement of opinion among the experts as the coefficient of variation being 56 per cent followed by the practice of massaging with eucalyptus leaves and agas bel boiled in water (42%) and massaging with only agas bel boiled in water (35%). To avoid variation in experts opinion, it is advised that scholars should conduct further research on the above stated practices by taking large sample size.

Regarding miscellaneous practices the practices for which low coefficient of variation was observed were consuming plenty of water (9.6%) and consumption of low salt (10%). Out of 11 identified practices by scholars only two practices with coefficient of variation as 9.6 and 10 per cent can be recommended for package of practices of Home Science.

Cold and cough: The practice of consuming decoction of cardamom, banafshah and mulathi with coefficient of variation as 15 per cent followed by the practice of consuming mild kadha of cardamom, black pepper, tej patta, salt, sugar and milk having coefficient of variation as 16 per cent. But the mean value in both the above stated practices is 2.8. Thus the above mentioned two sub practices have identical means the distribution with the smallest deviation with most representative mean.

Backache: For the practices pertaining to backache, the experts had unanimity in their response towards the practice of consuming roasted saunth with ghee and sugar (15%) and the practice of taking methi milk (16%), respectively. It is surprising to note that mean value in both selected practices is 2.8 like old and cough.

Blemishes on face: Among the practices followed by rural women to remove blemishes on face, the practice of application of paste of turmeric and gram flour has 58 per cent coefficient of variation indicating maximum disagreement of opinion among the expert's opinion followed by the practice of applying papaya paste (56%), rubbing crushed bark of pine (51%), consuming almonds with milk (43%), application of paste of garlic cloves (42%) and application of paste of bitter gourd leaves. Keeping in view large variation among scientist, it is suggested to conduct further researches on all the identified practices.

4.8.1.2 Nutrition

With regard to indigenous practices related to nutritional aspect (Table 57) for the practice of increasing intake of usual diet, extra intake of fruits and vegetables, ghee, pulses, green leafy vegetables and extra milk the experts had unanimity in their response as the mean score is 3.0 and coefficient of variation is zero for all the identified nutritional practices. So above stated practices can be incorporated in package of practices pertaining to food and nutrition department. Regarding avoidance of coconut, curd, citrus fruits and eggs were having low values of coefficient of variation (14%, 14%, 19%, 19%), respectively. Although the value of coefficient of variation is low means variation is there but complete consensus among scientist is lacking. These practices can be continued by rural women. The practices of avoiding walnuts got the highest coefficient of variation i.e. 56 percent. With regard to food intake of orange and extra milk mean score is 3.0 and zero percent coefficient of variation respectively, so these two practices can be included in the package of practices of Home Science while with regard to non food items intake, practice of consuming multanni mitti during pregnancy had 47 percent

Table 57: Mean and coefficient of variation of identified indigenous nutritional practices practiced by rural women at prenatal stage

Sr. No.	Identified Indigenous Practices	Mean	Coefficient of variation
	Nutrition		
1.	Increase intake of usual diet	3.0	0
2.	**Extra Intake of diet**		
a.	Seasonal fruits and vegetables	3.0	0
b.	Ghee	3.0	0
c.	Pulses	3.0	0
d.	Green leafy vegetables	3.0	0
e.	Extra milk	3.0	0
3.	**Foods avoided during pregnancy**		
a.	Ghee	1.0	0
b.	Banana	3.0	0
c.	Papaya	1.3	35
d.	Citrus fruits	1.0	19
e.	Eggs	1.0	19
f.	Brinjal	1.0	0
g.	Til, Jaggery	1.2	35
h.	Meat	1.2	34
i	Fish	1.2	34

j.	Coconut	1.0	14
k.	Walnuts	1.4	56
l.	Curd	1.0	14
4.	**Food intake during pregnancy**		
a.	Orange	3.0	0
b.	Extra milk	3.0	0
5.	**Non-food items**		
c.	Multanni mitti	1.2	47
d.	Tamarind	2.0	0
6.	**Special foods consumed to have male Child**		
a.	Raw coconut seed and methi seeds	1.0	0
7.	**Indigenous pre delivery foods intake**		
a.	Wheat flour halwa	2.4	38
8.	**Foods given on the onset of ninth month of pregnancy:**		
a.	Kadha of desi ghee, karwi saunf,meethi saunf, sugar powder	2.6	23
b.	Kadha of karwi saunf,jaggery, dates and milk	2.3	22
c.	Kadha of til, methi ,desi ghee, dates, milk, water	2.6	21
d.	Kadha of cloves, cardamom, bay leaves and water	2.6	18

coefficient of variation indicating greater degree of variation among the viewpoint of the experts. So there is need to conduct research by taking large sample size.

With respect to tamarind intake, it was observed that mean and coefficient variation is 2.0 and zero respectively. But 2 mean score indicate the moderate approval but zero coefficient of variation indicate unanimity among the scientists. This practice require further investigation. The practice of consuming raw coconut seed and methi seeds had zero per cent coefficient of variation indicating no variation in experts' response but the mean score is only 1.0 which indicates least approval of experts thus there is a need to conduct research by taking large sample size.

Among the indigenous pre-delivery foods intake of wheat flour halwa had maximum degree of disagreement among the opinion of experts being the coefficient of variation is 38 per cent. Regarding the foods given on the onset of ninth month of pregnancy depict that consumption of kadha of desi ghee, karwi, saunf, meethi saunf, sugar powder (23%); kadha of karwi saunf, jaggery, dates and milk (22%); consumption of kadha of til, methi, desi ghee, dates, milk and water (21%). The practice of consuming kadha of cloves, cardamom, bay leaves and water had 18 per cent coefficient of variation with 2.6 mean score indicating approval of experts.

4.8.1.3 Sanitation and hygiene

For the indigenous practices pertaining to sanitation and hygiene (Table 58), the experts had unanimity in their response as the coefficient of variation is zero for frequency of taking bath while other practices with low coefficient of variation were brushing of teeth (9.6%),

Table 58: Mean and coefficient of variation of identified indigenous sanitation-hygiene and other miscellaneous practices practiced by rural women at prenatal stage

Sr. No.	Identified Indigenous Practices	Mean	Coefficient of variation
1	**Sanitation and hygiene**		
a.	Frequency of taking bath	3.0	0
b.	Brushing of teeth	3.0	9.6
c.	Cleaning of hair	3.0	9.6
d.	Combing and massage of hair	3.0	9.6
e.	Cutting of nails	3.0	9.6
2.	**Stress and strain**		
a.	Avoid heavy work in last trimester	3.0	9.6
b.	Avoid traveling in last trimester	3.0	9.6
3.	**Miscellaneous**		
a.	Avoid looking at solar eclipse	1.0	0
b.	Avoid to see dead body	2.0	0
c.	Avoid high heel shoes/chappals	3.0	0
d.	Avoid application of mehendi on hands	2.0	0

cleaning of hair (9.6%), combing and massage of hair (9.6%) and cutting of nails (9.6%). Among other practices, the practices of avoiding heavy work and travelling in last trimester scored a highest mean score 3.0 with low value of coefficient of variation 9.6 percent for both of the identified practices. The coefficient of variation in all the sub-practices listed under miscellaneous category depict that there is unanimity among the expert's response for al the subpractices namely avoiding looking at solar eclipse, to see dead body, wearing of high heel chappals and applying mehendi on hands.

4.8.2 Mean score and coefficient of variation of identified indigenous practices followed at perinatal stage

4.8.2.1 Health

Table 59 clearly depicts mean score and coefficient of variation for various indigenous practices followed at perinatal stage.

As regards health, the practice of delivering the baby in lying posture scored a highest mean score i.e.3.0 with zero percent coefficient of variation indicating that this practice had approval of all the experts with no variation among their observations.

4.8.2.2 Nutrition

Under nutritional aspect two practices i.e. serving kadha of cloves, small cardamom, jeera, dried ginger, mulathi powder, til seeds, dates, ghee and jaggery and kadha of dried ginger powder, big cardamom, ajwain, dates and sugar secured similar value of coefficient of variation i.e. 16 percent indicated almost unanimity on response of the practices as the maximum value of coefficient of variation observed was 36 percent with mean score of

Table 59: Mean and coefficient of variation of identified indigenous practices practiced by rural women at perinatal stage.

N= 50

Sr. No.	Identified Indigenous Practices	Mean	Coefficient of variation
A	**Health**		
1.	Baby should be delivered in lying posture	3.0	0
B.	**Nutrition**		
2.	**Foods served on onset of labour pains**		
a.	Kadha of cloves, small cardamom, jeera, dried ginger, mullathi powder, til seeds, dates, ghee and jaggery	2.8	16
b.	Kadha of dried ginger powder, big cardamom, ajwain, dates and sugar	2.8	16
c.	Kadha of tej patta, dates, small cardamom, jaggery and desi ghee	2.4	33
d.	Boil seed pods and spongy part of gurlakdi in water. Add jaggery when half of water is left	1.5	36
C	**Sanitation and hygiene**		
a.	Sterilized blades are used to cut umbilical cord	3.0	0
b.	Heated paste of turmeric powder and mustard oil is applied on navel	3.0	9.6

1.50 for the practice of consuming boiled seed pods and spongy part of gurlakdi in water after adding jaggery when half of water is left (Table 59).

4.8.2.3 Sanitation and hygiene

The coefficient of variation of the identified indigenous practices related to sanitation and hygiene i.e. practice of using sterilized blades to cut umbilical cord and applying heated paste of turmeric powder and mustard oil secured very low value of coefficient of variation i.e. 9.6 percent indicating unanimity in rating among experts (Table 59).

4.8.3 Mean score and coefficient of variation of identified indigenous practices followed at postnatal stage

4.8.3.1 Health (Mother)

With regard to health of the mother, Three main practices were identified. The result pertaining to these selected practices are depicted in table 60.

Control of excessive bleeding after delivery

The practice of serving ajwain roasted in ghee alongwith jaggery and almonds to control excessive bleeding after delivery had approval of experts with minimum variation as it secured highest mean score of 2.7 with 20 percent coefficient of variation. The practice of consuming soaked kamarkas and nagori gond mixed with boiled milk had 23 percent coefficient of variation followed by intake of glass of milk and desi ghee with 28 percent coefficient of variation followed by consuming desi ghee and sugar with coefficient of variation being 32 percent indicating greater variation in expert's opinion.

Delayed expulsion of placenta

Similarly the practice of giving ghee to mother in case of delayed expulsion of placenta after delivery had 34 percent coefficient of variation followed by the practice of putting heat under the cot of mother had 50 percent coefficient of variation which concludes that there is a greater degree of variation among the viewpoints of experts regarding these practices (Table 60). Low value of coefficient of variation was observed for the practice of sittings in boiled water with bark of kikar and papal (16%).

Prevention of uterus prolapse

The practice of sitting on hard ball of clothes had zero coefficient of variation but mean is only 1.00 indicating least approval of the experts followed by the practice of sittings in boiled water with bark of kikkar and pipal.

4.8.3.2 Nutrition (Mother)

Identified nutritional practices of mother are depicted in Table 61.The table reveals the practice of consuming milk with desi ghee had zero coefficient of variation with 3.0 mean score followed by the practice of consuming semi-liquid food with same mean score of 3 but coefficient of variation is 4.7 percent. Practice of serving wheat flour halwa, Kharani, sund ke ladoo and powder of ajwain, dry coconut powder, dates, almonds with ghee scored 2.9, 2.9, 2.9, 2.8 mean score respectively with coefficient of variation of 9.4, 12, 12, 15 percent respectively. Analysis of mean score and co-efficient of variation indicate that these practices received approval of the experts and can be recommended for inclusion in the media.

Table 60: Mean and coefficient of variation of identified indigenous health practices practiced by rural women at postnatal stage.

N=50

Sr. No.	Identified Indigenous Practices	Mean	Coefficient of variation
	Health		
1.	**Practices to control excessive bleeding after delivery**		
a.	Consume Desi ghee with sugar	1.9	32
b.	Take a glass of milk with desi ghee	2.1	28
c.	Consume ajwain roasted in ghee alongwith jaggery and almonds	2.7	20
d.	Consume soaked kamarkas and nagori gond mixed with boiled milk.	1.9	23
2.	**Practices followed in delayed expulsion of placenta after delivery**		
a.	Give ghee to mother for drinking	1.2	34
b.	Put heat under the cot of mother	1.3	50
3.	**Practices followed for prevention of uterus prolapse**		
a.	Sittings in boiled water with bark of kikar and pipal	2.8	16
b.	Sit on hard ball of clothes	1.0	0

Table 61: Mean and coefficient of variation of identified indigenous nutritional practices pertaining to mother at postnatal stage

Sr. No.	Identified Indigenous Practices Nutrition	Mean	Coefficient of variation
1.	**Post delivery foods**		
a.	Powder of ajwain, dry coconut powder, dates, almonds crushed jaggery with deshi ghee	2.8	15
b.	Kharani (Prepared by roasting soanth in desi ghee and pour milk and sugar after adding almonds, dates, coconut, cashew nut. Boil and consume)	2.9	12
c.	Sund Ke ladoo(Method: Roast semolina/soozi add charmagaz,gond and aasgandh. Then add dry fruits, coconut powder and sugar. Roast and then prepare ladoos adding milk to this mixture)	2.9	12
d.	Wheat Flour halwa (Prepared by roasting wheat flour in ghee and then add black pepper, sugar, raisins, almonds, charmagaz, gum of acacia, dried ginger)	2.9	9.4
e.	Semi liquid food e.g. dalia, moong dal soup or khichari with desi ghee	3	4.7
f.	Soaked methi in boiled milk	1.6	46
g.	Milk with desi ghee	3.0	0
2.	**Foods avoided during lactation**		
a.	Cauliflower	1.0	0
b.	Potato	1.0	0

c.	Pumpkin	1.0	0
d.	Brinjal	1.0	0
e.	Mash dal , Rajmash	2.4	33
f.	Chillies	2.4	38
g.	Rice	1.0	0
3.	**Special foods consumed to increase milk secretion**		
a.	Grinded root of satavar is consumed with glass of milk	2.1	33
b.	Consume Khoru (Method: Heat oil, add salt, methi, jeera, turmeric and buttermilk	2.8	16
c.	Consume hot milk of cow/buffalo	3	0
d.	Consumption of grinded mixture of aasgandh, satavar, mulathi with milk	2.3	34
e.	Decoction of stem of galoein	2.2	33
4.	**Treatment of drinking water given to lactating mother**		
a.	Water treated with karwi saunf, tejpatta and small cardamom	3.0	0

Foods avoided during lactation

Regarding foods avoided during lactation, the practices of avoiding cauliflower, potato, pumpkin, brinjal had mean score 1.0 which concludes least approval of scientists but coefficient of variation is 14 revealed that unanimity in the response of experts is there.

Special foods consumed to enhance milk secretion

Among the special foods consumed to increase milk secretion, the practice of consuming hot milk of cow/buffalo had no variation as the coefficient of variation is zero. Contrarily, the practice of consuming khoru had greater variation with 38 percent coefficient of variation among the scientist.

Drinking water treatment

Water given to lactating woman is treated with Karwi saunf, tejpatta and small cardamom. There is 100 percent acceptance of this practice by scientist as coefficient of variation is zero for this stated practice.

4.8.3.3 Sanitation and hygiene

The mean practices related to sanitation and hygiene is 1.0 which means that the practices of burying placenta outside home and inside home near the cot of mother and bathing of mother after five days can be considered for disapproval and proper extension efforts may be made to curtail the use of such practices by the rural people (Table 62).

4.8.3.4 Health (Child care)

As regard health practices related to child the practices of immunization and massage of child received zero percent coefficient of variation with highest mean score indicate the highest approval from scientists point of view (Table 63). Thus the above stated two practices need incorporation in the practices of home science pertaining to health of child in the newly released package of practice.

Table 62: Mean and coefficient of variation of identified indigenous sanitation and hygienic practices pertaining to mother at postnatal stage.

Sr. No.	Identified Indigenous Practices Sanitation and hygiene	Mean	Coefficient of variation
1.	**Treatment given to placenta after delivery**		
a.	Burry outside home	1.0	0
b.	Burry inside the house near the cot of mother	1.0	0
2.	**Mother takes bath after five days of delivery**	1.0	-

Table 63: Mean and coefficient of variation of identified indigenous health practices pertaining to child care

Sr. No.	Identified Indigenous Practices	Mean	Coefficient of variation
I.	**Health**		
1.	Immunization of the child	3.0	0
2.	Massage	3.0	0
3.	**Practices followed to cure common diseases**		
(i)	**Diarrhoea**		
a.	Boil small cardamom, ajwain and jaiphal and feed	2.8	15
b.	Extract of harad, almond, piece of jaiphal and baren	2.6	16
c.	Use of bahera	2.8	14
d.	Solution of sugar, salt and water	3.0	0
(ii).	**Stomach pain**		
a.	Rub harad in water and give to baby	2.8	13
b.	Boiled ajwain in water	2.9	11
c.	Feed ginger extract	2.8	16
(iii)	**Cold and cough**		
a.	Apply paste of powdered baren and mustard oil	2.9	11
b.	Feed the grinded mixture of dried ginger, black pepper and mulathi with honey or milk	2.8	15
c.	Heat galgal leaves on fire and wrap around the chest of the baby	1.2	34
d.	Feed heated seeds of cardamom in water	2.8	15

e.	Feed grinded jaiphal, supari, coconut to the baby	2.4	22
f.	Rub baren, rarah, clove and feed the baby after adding milk	2.8	16
g.	Burn baren, bark of fig, and pine, wrap in cloth and place on chest of the baby.	1.1	23
h.	Burn puthkanda roots, shelled maize cob and banyan bark, then add a piece of mug and grind. Let the child lick the mix with honey	1.1	23
(iv).	**Eye Infection**		
a.	Put 1-2 drops of mother's milk in eye	1.3	42
b.	Put drops of amla juice in eyes	2.8	14
c.	Bandage of pulpy portion of kavarein leaf	2.7	20
(v)	**Ear Infection**		
a.	Heat mustard oil and add a piece of garlic. Put in ear	2.9	11
b.	Put a drop of onion juice in the ear	2.8	13
c.	Put 2-3 drops of mother's milk in ear.	1.2	34
d.	Put drops of leaf juice of kavarein.	2.6	16
(vi)	**Measles**		
a.	Fumigation of fried amaranthus seeds	1.0	0
b.	Fumigation of fried intestine of porcupine and amaranthus seeds	1.0	0

To cure common ailments of children

Diarrhoea: With regard to various identified practices followed to cure diarrhoea among children, no much variation among the viewpoint of experts was observed and depicted in table 63. The practice of giving solution of sugar, salt and water secured highest mean score and coefficient of variation are 3 and zero respectively rated as first followed by the practice of giving bahera (14%), practice of feeding boiled small cardamcm, ajwain, jaiphal (15%) and practice of giving extract of harad, almond, piece of jaiphal and baren with mean score of 2.6 and coefficient of variation of 16 percent.

Stomach pain: The coefficient of variation for the three identified practices namely boiled ajwain with water, feeding rubbed harad in water, and feeding ginger extract are 11, 13 and 16 percent, respectively indicating greater degree of agreement among the viewpoints of experts and aforesaid practices can be incorporated in package of practices of Home Science.

Cold and cough: In case of cold and cough, the practice of applying paste of baren and mustard oil received highest mean score of 2.9 and 11 percent coefficient of variation. The other practices with low values of coefficient of variation were feeding grinded mixture of dried ginger, black pepper and mulathi with honey or milk (15 per cent); feeding heated seeds of cardamom in water (15 per cent) and feeding mixture of rubbed baren and clove to baby (16 per cent) with common mean score of 2.8 for above mentioned practices (Table 62). In this practice the researcher has three sub practices pertaining to cold and cough with identical means (2.8). it means that it is the distribution with the smallest standard deviation that has the most representative mean.

Eye infection: For curing eye infection the practice of putting amla juice in eyes and bandage of kavarein leaf had 14 and 20 per cent coefficient of variation while dropping mother's milk in eye with mean score values as 1.3 indicating that this practice received the least approval of the experts and proper extension efforts need to be made to curtail the use of such practices by the rural women.

Ear infection: For the treatment of ear infection, the practices of dropping heated mustard oil in the ear, after adding piece of garlic, dropping onion juice and dropping leaf juice of kavarein had the variation as their coefficient of variation are 11, 13, 16 per cent, respectively.

Measels: In case of indigenous practices followed to cure measles none of the expert was in the favour of giving fumigation of fried amaranthus seeds and fumigation of fried intestine of porcupine and amaranthus seeds. There is high degree of uniformity as well as homogeneity in the sub practices. These two practices have the identical mean score (1.0) which means the distribution is with the smallest standard deviation that has the most representative mean.

4.8.3.5. Nutrition (Child)

As regard nutrition of the child (Table 64) the practice of feeding honey as a first feed received 51 percent coefficient of variation indicating greater degree of variation among the opinion of experts.

The practice of feeding colostrum, breast feeding in sitting posture and starting liquid food at the age 4-5 months, semi-liquid food at 6-8

Table 64: Mean and coefficient of variation of identified indigenous nutritional practices pertaining to child care

Sr. No.	Identified Indigenous Practices	Mean	Coefficient of variation
	Nutrition		
1.	Honey is given to neonatal as a first feed		
2.	Colostrum is fed to new born baby as a first feed	1.0	51
3.	Duration of exclusive breast feeding is upto 1 year	1.0	0
4.	Mother should feed the baby in sitting posture	1.0	0
5.	**Introduction of Supplementary foods**		
a.	Liquid food at the age of 4-5 months	3.0	0
b.	Semi solid food at the age of 6-8 months	3.0	0
c.	Solid food at the age of 8-9 months	3.0	0

months and solid food at the age of 8-9 months received highest value of mean score (3.0) with zero coefficient of variation for each sub practices highlighting the approval and agreement among the view points of experts for these sub practices. The sub practices have the identical mean score (3.0) which mean the distribution is with the smallest standard deviation that has the most representative mean. In case of duration of breast feeding upto 1 year the mean score value is 1.0 and coefficient of variation is zero indicating need to conduct further research by taking large sample size of experts.

4.8.3.6. Sanitation and hygiene (Child)

Regarding the practices pertaining to sanitation and hygiene of the child (Table 65) the practice of regularly bathing the child and changing his/her napkins got highest approval of experts. However the practices related to use and type of punishment for toilet training achieved 1.0 mean score and zero coefficient of variation indicating the disapproval by the experts. By seeing the value of mean, it is depicted that disapproval is there. It is very surprising to get such result. So there is need to conduct further research on this aspect to avoid ambiguidity between the value of mean score and coefficient of variation. The practice of using punishment for wrong behaviour secured the mean score of 2.6 with 19 per cent coefficient of variation indicating minimum variation in the responses of experts.

4.9 RECOMMENDATION STATUS OF VARIOUS IDENTIFIED INDIGENOUS PRACTICES PRACTICED BY RURAL WOMEN REGARDING MATERNAL AND CHILD CARE

In this section, criteria for categorization of recommendation of various identified indigenous practices have been given (Grover, *et al*., 2005).

Table 65: Mean and coefficient of variation of identified indigenous sanitation-hygienic and other miscellaneous practices pertaining to child care

Sr. No.	Identified Indigenous Practices	Mean	Coefficient of variation
	Sanitation and hygiene		
1.	Regular bath to baby daily	3.0	0
2.	Changing of napkins after each bladder movement	3.0	0
3.	**Toilet training**		
a.	Use of punishment for toilet training	1.0	0
b.	Corporal punishment is used for toilet training	1.0	0
4.	**Discipline and habit formation**		
a.	Punishment for wrong behaviour.	2.6	19

All the indigenous practices were finally grouped under the following categories of recommendation on the basis of percentage response level of the experts.

A. Indigenous practices to which more than 75 per cent of the experts rated highly valid were put under this category and recommended for inclusion in the media.

B. Practices rated highly valid by 50-75 per cent of the experts were recommended for further research.

C. The indigenous practices to which 25-50 per cent of the experts rated highly valid were recommended for reconsideration of the experts for their response.

D. Indigenous practices to which only upto 25 per cent experts rated highly valid were recommended for discontinuation which means rural women must stop them to use because they have adverse effect on the physique of user. Categorization of various identified indigenous practices as per recommendations of the experts.

The results of analysis are given in Table 66. The table reveals that on overall 85 indigenous practices were recommended for inclusion in media, 11 for further research 06 for reconsideration of experts and 56 practices were recommended for discontinuation.

Out of total 85 practices recommended for inclusion in media, 44 (53.66%) practices were related to prenatal stage, 5 (71.42%) were related to perinatal stage and 36 (52.17%) were related to postnatal stage. Among the practices recommended for further research, majority (7.32%) fall in the category of pre-natal stage, while a single practice was recommended from

Table 66: Categorization of various identified indigenous practices as per scientific validation by experts

Sr. No.	Particulars	Indigenous Practices			
		Prenatal stage	**Prenatal stage**	**Postnatal stage**	**All Identified indigenous practices**
1.	Indigenous practices recommended for inclusion in media (Consensus range > 75%)	44 (51.76) |53.66|	5 (5.88) |71.42|	36 (42.36) |52.17|	85 (100.00) |53.80|
2.	Indigenous practices recommended for further research (Consensus range 50-<75%)	6 (54.56) |7.32|	1 (9.08) |14.29|	4 (36.36) |5.80|	11 (100.00) |6.96|
3.	Indigenous practices recommended for reconsideration of the expert for their response (Consensus range 25-<50%)	4 (66.67) |4.88|	-	2 (33.33) |2.90|	6 (100.00) |3.79|
4.	Indigenous practices recommended for discontinuation in the field (Consensus range <25%)	28 (50.00) |34.14|	1 (1.79) |14.29|	27 (48.21) |39.13|	56 (100.00) |35.45|
	Total	**82 (100.00)**	**7 (100.00)**	**69 (100.00)**	**158 (100.00)**

Figures in parentheses are percentages of respective row totals
Figures in slashes are percentages of respective column totals

peri-natal stage. Four practices (4.88%) from per natal stage, 2 practices (2.90%) from post natal stage and none of the practice from perinatal stage were recommended for reconsideration of the experts for this response.

Regarding the identified indigenous practices recommended for discontinuation there were 28 (34.14%) practices from prenatal stage, 1 (14.29%) from perinatal stage and 27 (39.13%) practices from postnatal stage.

The results emphasized that many of the practice survived through the word of mouth and being adopted at the gross root, are scientifically valid.

4.10 ACCEPTABILITY OF SCIENTIFICALLY VALIDATED INDIGENOUS MATERNAL AND CHILD CARE PRACTICES

Acceptability has been operationalised as the sum total of knowledge gain, attitudinal change and symbolic adoption. It was measured and quantified by summing the individual index of each component (knowledge gain, attitudinal change and symbolic adoption) as acceptability index of every individual member.

4.10.1 Gain in knowledge, attitudinal change and symbolic adoption regarding scientifically validated indigenous maternal and child care practices

The knowledge gain, attitudinal change and symbolic adoption were measured individually. The findings have been furnished in table 67. In this section, percentage distribution of respondents according to their knowledge gain, attitudinal change and symbolic adoption have been incorporated individually.

The data in the table depicts that 63.33 percent and 36.67 percent of the respondents were having moderately high and moderately low gain in knowledge respectively.

Regarding attitudinal change, majority of the respondents that is 67.50 percent showed more favourable change in attitude towards scientifically validated indigenous maternal and child care practices, while 32.50 percent showed less favourable change in attitude towards scientifically validated indigenous maternal and child care practices.

Table 67. Distribution of respondents on the basis of gain in knowledge, attitudinal change and symbolic adoption regarding scientifically validated indigenous maternal and child care practices. N=120

Sr. No.	Variable	Scientifically recommended health care practices	
		Frequency	Percentage
1	**Gain in knowledge**		
	Moderately low (< median)	44	36.67
	Moderately high (> median)	76	63.33
2	**Attitudinal change**		
	Less favourable (< median)	39	32.50
	More favourable (> median)	81	67.50
3	**Symbolic adoption**		
	Moderately low (< median)	30	25.00
	Moderately high (> median)	90	75.00

In case of symbolic adoption, regarding scientifically validated indigenous maternal and child care practices, exactly 75.00 percent of respondents were having moderately high symbolic adoption and remaining 25.00 percent showed moderately low symbolic adoption. Gain in knowledge, favourable attitude and symbolic adoption by majority of the respondents

regarding scientifically validated indigenous maternal and child care practices indicates that rural women were interested in getting the scientific know how of indigenous practices and are mentally ready to adopt the same. Hence it can be concluded that action programme has resulted in the desired change i.e. knowledge gain, developing favourable attitude leading to the adoption of the improved practices/innovation as people tend to either approve or disapprove the improved practices/innovation on the basis of possessing favourable or unfavourable attitude towards the improved practices/ innovation.

4.10.2 Component-wise acceptability of scientifically validated indigenous maternal and child care practices

Individual indices regarding knowledge gain, attitudinal change and symbolic adoption were computed and furnished in the following tables.

4.10.2.1 Knowledge gain index regarding scientifically validated indigenous maternal and child care practices

Knowledge gain index was computed for each respondent on the basis of knowledge potentiality scores and knowledge extent scores. The obtained knowledge gain index is furnished in table 68.

Table 68. Frequency distribution of respondents on the basis of knowledge gain index with regard to scientifically validated indigenous maternal and child care practices N=120

Sr. No.	Knowledge gain index	Frequency	Percentage
1	Low (34-47)	21	17.50
2	Medium (48-62)	69	57.50
3	High (63-76)	30	25.00

It is evident from the table that majority of the respondents (57.50%) had acquired medium level of knowledge, whereas 17.50 percent and 25.00 percent fall in the category of low and high level of knowledge gain index.

The acquisition of knowledge by majority of the respondents regarding scientifically validated indigenous maternal and child care practices implies that action programme has resulted in the desired change, as they add to clarify and safeguard recipient of information from confusion. Several researchers, Lega (1989), Sharma (1999) also emphasized that action programmes are helpful in gain in knowledge among the rural clientele.

4.10.2.2. Attitudinal change index regarding scientifically validated indigenous maternal and child care practices

The data in table clearly depicts that 45.83 percent respondents were having most favourable attitude towards scientifically validated indigenous maternal and child care practices.

Table 69. Frequency distribution of respondents on the basis of attitudinal change index with regard to scientifically validated indigenous maternal and child care practices. N=120

Sr. No.	Attitudinal change index	Frequency	Percentage
1	Less favourable (32-45)	17	14.17
2	Moderately favourable (46-60)	48	40.00
3	More favourable (61-75)	55	45.83

One third of the respondents fall in the category of those who had moderately favourable attitude while slightly les than fifteen percent (14.17%) respondents had less favourable attitude after the action programme, it implies that information supplied through print media in the form of booklet plays an important role in developing favourable attitude of rural women towards the scientific practices.

4.10.2.3. Symbolic adoption index regarding scientifically validated indigenous maternal and child care practices

Alike knowledge gain and attitudinal change, symbolic adoption index has been calculated on the basis of potentiality and extent scores. Regarding symbolic adoption index majority of the respondents (60.83%) had medium level of symbolic adoption index whereas 24.17 and 15.00 percent had high and low level of symbolic adoption index regarding scientifically validated indigenous maternal and child care practices.

Table 70. Frequency distribution of respondents on the basis of symbolic adoption index with regard to scientifically validated indigenous maternal and child care practices N=120

Sr. No.	Symbolic adoption index	Frequency	Percentage
1	Low (50-66)	18	15.00
2	Medium (67-83)	73	60.83
3	High (84-100)	29	24.17

4.10.2.4. Acceptability index regarding scientifically validated indigenous maternal and child care practices

On the basis of knowledge gain index, attitudinal change index and symbolic adoption index for scientifically validated indigenous maternal and child care practices acceptability index was computed. The results have been furnished in Table-71.

It is evident from the table that slightly more than one-third of the respondents (40.83%) perceived the scientifically validated indigenous maternal and child care practices as moderately acceptable while exactly 35.00 percent found them highly acceptable followed by 24.17 percent of the respondents who showed inclination towards least acceptability.

Table 71. Frequency distribution of respondents on the basis of acceptability index with regard to scientifically validated indigenous maternal and child care practices N=120

Sr. No.	Acceptability index	Frequency	Percentage
1	Least acceptable (119-162)	29	24.17
2	Moderately acceptable (163-206)	49	40.83
3	Highly acceptable (207-250)	42	35.00

Thus it can be concluded that action programme has resulted in the desired acceptance of scientifically validated indigenous maternal and child care practices which goes to confirm that if adequate knowledge is acquired, the individual sees the pros an cons of the innovation and develop favourable attitude and as a result of this change makes mental deliberations before final acceptance of the idea.

CHAPTER-V

SUMMARY AND CONCLUSION

Motherhood is the crowning act of the woman's feminine role in life. It provides the closest bond that can exist between two human beings. Maternal care in the narrow sense, consists of the care of the pregnant women, safe delivery, post natal care of the newly born infant and maintenance during lactation. Since independence, considerable progress has been made in the various branches of medical science in our country and the government is also making serious efforts for improving the overall health conditions of the pregnant and lactating mothers and children through health care programmes. The benefit of these developments has made an indent in to our countryside, but has not yet touched the rural areas. Especially, the rural women of our country are not able to avail this opportunity as in Himachal Pradesh they remain busy from dawn to dusk, are left with minimum time to take care of self and of children properly. Secondly in a state like Himachal Pradesh, the difficult topography make villages inaccessible and provision of basic health amenities more expensive and difficult. Thus the indigenous system of maternal and child care, with age-old procedure and beliefs is still in vogue among them.

"Indigenous" means occurring or living naturally in a specific area, generated by their own and their ancestor's experience and including knowledge originating from elsewhere which has been internalized by local people.

Documentation of indigenous knowledge is more a necessity now than ever before because this orally transmitted wisdom may be lost in mad race of modernization like many of our valuable genetic resources.

Along with documentation it must be kept in mind that many of these indigenous practices may be damaging to mother and child because of adherence to old traditions, customs, beliefs and superstitions. Yet, it is being felt that scientific component must be strengthened.

It is high time to think about and preserve the indigenous knowledge scientifically through proper research work, institutionally and promote the values of their traditional knowledge about the human beings in general and women in particular. Therefore, now time has come when people and scientists should know and realize the importance of indigenous knowledge, as work done in this direction is scanty. The present study, aimed at the following objectives:

1. To study the existing indigenous maternal and child care practices followed by rural women.
2. To conduct scientific validation of indigenous maternal and child care practices followed by rural women.
3. To study the acceptability of scientifically validated maternal and child care practices.

5.1. Methodology

The present study was conducted in Kangra district of Himachal Pradesh. Villages Samloti and Ustehar from block Nagrota Bagwan and villages Saliana and Deogram from Panchrukhi blocks were selected randomly. Thirty rural women from each village were selected randomly making a total sample of one hundred and twenty respondents.

Existing indigenous maternal and child care practices and acceptability of scientifically validated maternal and child care practices were taken as dependent variables while independent variables were age, caste, respondent's education, family size, family type, family income, change proneness, localiteness-cosmopoliteness and mass media exposure.

To study existing indigenous maternal and child care practices, rural women were interviewed in order to investigate practices pertaining to health, nutrition and sanitation and hygiene at pre natal ,peri natal and post natal stage. The collected indigenous maternal and childcare practices were then supplied to the experts for scientific relevance and the practices, which were scientifically relevant, were documented in the form of a booklet. To study acceptability, pre exposure knowledge, attitude and symbolic adoption scores were collected and then the respondents were exposed to the scientifically validated maternal and child care practices through lecture and booklet. The post exposure knowledge, attitude and symbolic adoption scores were calculated after twenty days of exposure. Thus the knowledge gain , attitudinal change and symbolic adoption were calculated by subtracting pre scores from post scores.

The investigation was conducted through pre tested structured interview schedule. The statistical techniques include ranking and simple percentages.

5.2 Major findings

5.2.1 Profile of the respondents

Majority of the respondents were of middle age group, educated upto primary having joint type and medium sized families with medium level of educational status. Most of them were of high caste with low level of mass media exposure and medium level of localiteness-cosmopoliteness.

5.2.2 Indigenous practices followed at pre-natal stages

5.2.2.1 Health

With respect to indigenous practices practiced by respondents at pre-natal stage, the study reflects women's reluctance towards utilization of health care services at pre-natal stage, as a little more than fifty per cent respondents went to pre-natal clinic for check up, whereas the experts were of view that regular check up of mother at clinic is must to determine growth of foetus.

Regarding various pregnancy discomforts like morning sickness, the respondents followed the practices of consuming onion and mint juice, darmashtik, churan of roasted and crushed saunf and ajwain alongwith kooja ki mishri; amla powder in milk; orange and lemon water. Out of these foods the experts perceived consumption of onion and mint juice, churan of roasted and crushed saunf and ajwain as highly valid thus these two practices can be recommended for inclusion in the package of practices.

To get relief from constipation respondents stated decoction of harad, bahera and amla; chewing of sanai leaves; decoction of ajwain, gurlakdi, meethi saunf; consumption of isabgol with water; saag of spinach and dudali; churan of dalchini, small cardamom and saunf; fruits.

The practice of consuming sanai leaves; saag of spinach and dudali, churan of dalchini, small cardamom and saunf were recommended for discontinuation by the experts. Whereas all the other practices were considered effective by them as these ingredients are purgatives, laxatives thus facilitiates evacuation of the bowels.

Regarding food/practices followed to cure abdominal pain the respondents reported of consumption of boiled ajwain water; decoction of bhabhri, mint and ajwain; decoction of kakarsinghi and water; decoction of kasturi, jaggery, black pepper and ginger; jeera with water and consumption of pateesh.

The experts considered the practice of consuming boiled ajwain water; decoction of bhabri, mint and ajwain, and jeera with water to be highly valid while the remaining practices need to be explored by taking larger sample size.

As far as swelling of limbs is concerned the respondents referred kadha of small cardmom, cloves with sugar and they also suggested to consume juice of satavar. For relief from swelling they avoided consumption of potato, rice and radish. Massage of gandala leaves; agas bel; eucalyptus leaves and agas bel were reported. The general advice for curing this discomfort is to place a heated leaf of castor on swollen feet and to

consume low salt and good quantity of water. The experts recommended last two practices and other practices were recommended for discontinuation.

In case of cold and cough, respondents reported decoction of small cardamom, black pepper, tejpatta, salt, sugar and milk. Bengal gram soup was also reported. The respondents talked of another decoction of cardmom, banafsha and mulathi. Thus the expert recommended both the decoctions but the practice of giving bengal gram soup was rejected.

Consumption of crushed soanth with ghee and sugar and methi milk was recommended by the respondents and experts to get relief from backache. For removing blemishes on face application of pastes of bittergourd leaves, almond milk, turmeric and gram flour, papita and garlic cloves was reported by the respondents. All these practices need to be further explored as the scientist themselves were ambiguous about their scientific validation.

5.2.2.2 Nutrition

As regards nutrition, majority of the respondents had almost a normal diet instead of increase in usual diet intake but experts advised that the pregnant women should eat balanced diet for the strong foundation of the baby. The study revealed that the pregnant women avoided certain foods like ghee, banana, meat, citrus fruits etc. This points out the ignorance of rural women regarding importance of these foodstuffs. The experts commented that these foods should not be avoided because they provide one or the other nutrient to the body. Regarding the intake of orange and extra milk the experts consider them highly valid.

Experts rejected the practice of consuming raw coconut seed or methi seed to have a male child as according to them sex of the unborn child is determined at the time of conception and cannot be changed. At the onset of ninth month, the pregnant women are given wheat flour halwa; kadha of karwi saunf, jaggery, dates and milk; kadha of til, methi, desi ghee, dates, milk and water; kadha of cloves, cardamom, bay leaves and water. None of the practice was perceived as highly valid thus there is a need to conduct further research by taking large sample size.

5.2.2.3 Sanitation and hygiene

Regarding sanitation and hygiene the experts suggested to daily take bath, brush teeth, clean, comb and massage hair as it prevents any type of infection.

For stress and strain the scientists advised that in normal condition doing routine work is good but heavy work should be avoided.

5.2.3 Indigenous practices followed at perinatal stage

5.2.3.1 Health

Regarding the posture while delivering the baby, the experts recommended the lying posture as in squatting posture child's breathing may be blocked.

5.2.3.2 Nutrition

Among the various kadhas suggested by the respondents at the onset of labour pains the experts recommended the kadha of cloves, small cardamom, jeera, dried ginger, mulathi, til, dates, ghee and jagery. According to them, these ingredients induce pains and ease in delivery. The other

recommended decoction was prepared from dried ginger powder, big cardamom, ajwain, dates and sugar.

The other two practices need further exploration, as the scientists are ambiguous about their scientific validation.

5.2.3.3 Sanitation and hygiene

The experts rejected the practice of cutting the umbilical cord with scissors, sickle or unsterilized blade. They recommended using sterilized blade to prevent any infection.

As regards material to be applied on navel of baby the experts and respondents were of the same opinion that heated paste of turmeric and mustard oil helps in quick healing.

5.2.4 Indigenous practice followed at postnatal stage

To control excessive bleeding after delivery the experts recommended the consumption of ajwain roasted in ghee with jaggery and almonds but they considered consumption of desi ghee with sugar; consumption of milk with desi ghee and consumption of soaked kamarkas and nagori gond with boiled milk to be somewhat valid. As regards drinking ghee or putting heat under the cot of mother in case of delayed expulsion of placenta, the experts were ambiguous about their scientific validation.

With regard to the practices followed by the rural women for prevention of uterus prolapse, the experts perceived the practice of sitting in boiled water with bark of kikar and pipal as highly valid and sitting on hard ball of clothes was recommended for discontinuation.

5.2.4.2 Nutrition

Among various food preparations served after delivery, the experts considered powder of ajwain, dry coconut powder, dates, almonds, crushed jaggery with desi ghee; kharani and sund ke ladoo as nutritious and effective recepies. The practice of consuming wheat flour halwa, semi-liquid foods and methi with milk also got recommendation of the experts as wheat flour provide strength and energy while semi/liquid foods aid in digestion. Water treated with karwi-saunf, tejpatta and small cardamom was found to be effective by the experts.

Regarding foods avoided during lactation all the practices need to be further explored by taking a large sample size. As far as foods consumed to increase milk secretion only khoru was recommended by the experts.

5.2.4.3 Sanitation and hygiene

Regarding the disposal of placenta, the experts were completely against the practice of burying it inside or outside the house instead they suggested to dispose off it inside a trench.

The experts also disagreed with the practice of bathing mother on or after fifty days of delivery as it can lead to infection in uterus.

5.2.5 Practices related to child care

5.2.5.1 Health

All the experts recommended to immunize and massage the baby. As regards common infant health problems, for treatment of diarrhoea

the experts recommended to consume mixture of cardamom, ajwain and jaiphal; extract of harad, baren, jaiphal and baren; use of bahera and solution of sugar, salt and water.

In case of stomach pain, the experts agreed to feed harad, ajwain water and ginger extract, as these are digestive, laxatives, carminatives and stomachic. Cold and cough can be cured by applying paste of mustard oil and baren on chest; consuming grinded mixture of ginger, black pepper and mulathi with honey or by taking cardamom water. Mixture of baren and clove was also recommended.

The practice of feeding grinded jaiphal, supari, coconut; practice of placing wrapped baren, bark of fig, and pine need further exploration.

To cure eye infection amla and kavarein were considered effective as they possess anti-inflammatory and ophthalmic properties. In case of ear infection, practice of dropping mustard oil with garlic, onion juice and kavarein juice was recommended but the practice of dropping mother's milk in the ear was rejected. For treating measles none of the indigenous practice got scientific recommendation.

5.2.5.2 Nutrition

As regards pre-lacteal foods majority of the experts suggested avoiding honey, sugar and water etc. According to them colostrum should be the first food. There is a need to increase awareness about its importance, as a little less than fifty per cent of the respondents did not feed colostrum to their infants and remaining feed on the advice of doctor.

As regarding duration of breast feeding it should be upto 6 months and the baby should be breast fed in sitting position. All the experts recommended starting liquid food at the age of 4-5 months, semi-solid foods by the age of 6-8 months and solid foods by 9 months.

5.2.5.3 Sanitation and hygiene

As regards bath of the baby the experts advised to daily give bath to baby as irregularities may lead to infection. To avoid any skin infection it was suggested that the napkins should be changed after each bladder movement.

5.2.6 Toilet training

For starting age of toilet training, experts were of the view that there is no fixed age for learning to control bladder movement and punishment should be avoided in this process.

5.2.7 Discipline and habit formation

Discipline should be started after 2 years but for wrong behaviour punishment can be used.

Thus on overall 85 practices were recommended for inclusion in media, 11 practices for further research, 6 for reconsideration of the expert and 56 for discontinuation.

5.2.8 Acceptability of scientifically validated indigenous maternal and child care practices.

It was found in present study that majority of the respondents had medium level of knowledge gain and symbolic indices with most favourable attitude towards scientifically validated maternal and child care practices.

While studying the acceptability index, it was observed that most of the respondents perceived the scientifically validated maternal and child care practices as moderately acceptable followed by those who found them highly acceptable and least acceptable respectively.

Thus it can be concluded that action programmme has resulted in the desired acceptance of scientifically validated maternal and child care practices which goes to confirm that if adequate knowledge is acquired, the individual sees the pros and cons of the innovation and develop favourable attitude and thus makes mental deliberation before final acceptance of the idea.

Implications

The major findings suggest some serious implications for planners, policy makers, administrators and extension workers. These implications are as under:

1. The findings revealed that for material and child care, the indigenous practices are the still in vogue but the rural women are not aware of the scientific relevance of the practices therefore, training programmes should be developed for women regarding scientifically relevant maternal and child care practices.
2. the study also underlined that some of the indigenous practices were found to be scientifically proven. These practices should be popularized among common masses. This calls for strong need of education and training for rural as will as urban masses about the

uses and methodologies of these effective practices so that they can utilize locally available resources.

3. It has been observed that traditional birth attendants are culturally accessible, affordable and appreciated by the women whom they serve. Thus we need to build effective bridge between indigenous and modern health care system.
4. The results exhibited that the respondents were unaware of the properties and action of few plants which they are using for various discomforts/food preparations. It is need of the hour that common people must be introduced about the medicinal properties of these plants.
5. While interacting with the rural women, it was felt that they do possess vast reservoir of knowledge in indigenous maternal and child care. Thus, efforts should be made to bring to limelight the hidden know how used by local people. Where there are pitfalls they can be removed and scientifically verified and modified practices should be taken to the people with scientific reasoning.
6. The results highlighted that some of the indigenous practices were found to be scientifically relevant, some were non relevant and few of the practices were not known to the scientists even. Thus there is a need to educate rural people about the uses of these effective practices and avoid the non-relevant practices. The scientific relevance of unknown practices need to be further explored.

Usually extension contact and mass media exposure have a positive relationship with knowledge and adoption. Hence extension agencies should establish more contacts with the villages especially rural women.

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Appendix-I

CCS HARYANA AGRICULTURAL UNIVERSITY HISAR

From : Dr (Mrs.) Asha Batra
Associate Professor
Department of Extension Education
College of Home Science

Dear Sir/Madam,

I am enclosing herewith attitude statements related to our study on "**Acceptability of scientifically validated indigenous maternal and child care practices**", which has been undertaken by Mrs. Neetu Sharma, Ph.D. student of this department as a part of her research project.

Considering your long and rich experience in the field, I am approaching you to act as a judge to examine whether the statements given are favourable, neutral or unfavourable. It is submitted that while you are acting as a judge and a professional expert your attitude has not to be projected. However, if you feel to add more statements the same be added and evaluated.

You are requested to kindly determine the relevancy of each statement with respect to the scope of definition given by Beal and Sibely, 1967 which is as under:

Attitude: based on the value system man develops attitude the relatively enduring sets of positive or negative evaluation, emotion feeling and prose and cons, tendencies to act towards physical or social object.

I am confident that you will devotes your valuable time to this work.

Thanking you for your co-operation. Please return this at the earliest.

Yours sincerely
(Dr. Asha Batra)

Attitude statements

Sr. No.	Statements	Favourable	Neutral	Unfavou-rable
1	Indigenous medicines/practices being locally available help in saving the life of both mother and child			
2	There is a no need to go to civil hospital/PHC for check up during pregnancy			
3	Pregnancy is a normal phenomenon and does not require extra care			
4	Indigenous method of treating the pregnancy discomforts are more reliable			
5	Scientifically validated Indigenous practices improve the nutritional status of mother and child			
6	I will only practice, scientifically recommended health care practices when others have practiced them successfully			
7	No matter what the taboos, custom, and religious practices are , I would go for scientifically recommended health care practices			
8	A pregnant woman should follow 'Desi Nuskha' or home remedies during prenatal period			
9	It is not necessary to go to Center during pregnancy unless emergency situation arises			
10	A pregnant woman should follow scientifically validated practices			
11	I have full a faith in recommendation of dai bout health care			
12	Indigenous health care practices are our customary and socially acceptable practices, therefore, we follow them			
13	Child can be delivered at home safely by the old lady of the family			
14	Child should be delivered at the health center or a hospital so that during emergency appropriate medical aid is available			
15	Guidance of doctor is necessary during labour complications			

16	Scientifically recommended health care practices ease the delivery of a woman			
17	Pregnant woman should follow scientifically recommended practices as these are scientifically factual			
18	Availability of maternity care at the village health center has saved the life of many women			
19	I follow Indigenous maternal and child care practices as these are socially acceptable			
20	Rural women have more faith in Indigenous maternal and child care practices as these are easy and simple to perform			
21	Home made medicines have no side effects on newly born baby and the mother			
22	Health of a child is God given and hence there is no use of giving medicine to a sick child			
23	Neither we nor our parents were immunized than why we should bother about our children			
24	Immunization of children should be must for protecting them from diseases			
25	Scientifically recommended health practices are really boon for the mother and the child			
26	Since long children are being treated with home made remedies, then why to consult doctor now			
27	Consumption of extra diet during pregnancy causes pregnancy discomforts			
28	Intake of extra diet during pregnancy leads to over growth of fetus and thus complicates delivery			
29	Nutritious diet is essential during pregnancy			
30	Indigenous method of treating the common ailments of children is more reliable than the recommended practices.			
31	Pre lacteal foods are rich source of energy and help in cleaning the stomach of new born			

32	Supplementary feeding causes diarrhoea among infants so one should avoid its use			
33	Personal sanitation can solve the health problems to a grater extant			
34	Adopting sanitation and hygiene measure is a time consume exercise			
35	Application of turmeric powder helps in healing of wound at naval of the child			

Appendix-II

Rating scores of judges in percentages for 35 statements of attitude pertaining to maternal and child health care practices

Statement number	Favourable	Neutral	Unfavourable
1	80*	08	12
2	84*	08	08
3	36	32	32
4	80*	04	08
5	92*	04	04
6	88*	08	04
7	100*	00	00
8	40	16	44
9	92*	04	04
10	88*	04	08
11	08	12	80*
12	84*	10	06
13	92*	08	00
14	100*	00	00
15	96*	04	00
16	64	12	24
17	80*	04	16
18	92*	08	00
19	48	40	12
20	88*	12	00
21	72	12	16
22	80*	04	16
23	96*	00	04
24	100*	00	00
25	84*	08	12
26	60	20	20
27	100*	00	00
28	80*	12	08
29	88*	04	08
30	32	32	36
31	08	08	84*
32	80*	16	04
33	96*	00	04
34	10	06	84*
35	84*	04	08

*Statements with 80 percent and above agreement were selected

Appendix-III

't' values for selected statements of attitude for maternal and child care practices

Sr. No.	X_H	X_L	$X_H - X_L$	$\sum(X_H - X_H)^2$	$\sum (X_L - X_L)^2$	't' value
1 (1)	2.4	1.4	1.0	3.2	3.2	1.78*
2 (2)	3.2	2.2	1.0	4.8	0.8	1.92*
3 (4)	3.0	2.0	1.0	2.0	6.0	1.58
4 (5)	4.4	3.8	0.6	0.8	1.2	1.93*
5(6)	4.2	3.6	0.6	0.8	1.2	1.96*
6(7)	3.6	2.0	1.6	3.2	0.0	4.00*
7(9)	4.8	4.2	0.6	0.8	0.8	2.14*
8(10)	4.6	3.6	1.0	1.2	0.8	3.16*
9(11)	4.0	2.6	1.4	4.0	7.2	1.89*
10(12)	5.0	4.2	0.8	0.0	2.8	2.13*
11(13)	4.8	3.8	1.0	0.8	2.8	2.38*
12(14)	4.2	3.8	0.4	2.8	0.8	0.94
13(15)	4.8	2.6	2.2	2.8	11.2	2.65*
14(17)	4.6	3.2	1.4	3.2	6.8	2.80*
15(18)	4.6	3.4	1.2	1.2	5.2	2.14*
16(20)	4.0	2.6	1.4	4.0	7.2	1.89*
17(22)	1.8	1.6	1.2	2.8	1.6	2.72*
18(23)	4.8	4.0	0.8	0.8	0.0	4.00*
19(24)	4.4	3.0	1.4	1.2	0.8	2.80*
20(25)	4.0	3.0	1.0	4.0	4.0	2.50*
21(27)	4.0	2.4	1.6	4.0	3.2	2.67*
22(28)	4.6	3.8	0.8	1.2	0.8	1.75*
23(29)	3.2	2.2	1.0	4.8	0.8	1.92*
24(31)	3.8	3.8	0.0	0.8	0.8	0.00
25(32)	4.4	3.4	1.0	1.2	1.2	2.94*
26(33)	4.0	2.4	1.6	4.0	3.2	2.67*
27(34)	4.8	4.4	0.4	0.8	3.2	0.90
28(35)	4.8	4.2	0.6	0.8	0.8	2.14*

Figure in parenthesis show statement number

Statements having 't' value less than 1.75 were rejected

Appendix-IV

Individual acceptability, knowledge gain, attitudinal change and symbolic adoption indices regarding maternal and child care health practices

Respondent No.	KGI	ACI	SAI	AI
1	34.29	39.29	50.00	123.58
2	42.96	53.36	50.00	146.22
3	51.43	75.00	66.67	193.10
4	37.14	35.71	50.00	122.85
5	57.14	60.71	66.67	184.52
6	45.71	53.57	50.00	149.28
7	60.00	35.71	50.00	145.71
8	42.86	46.43	66.67	155.96
9	54.29	46.43	66.67	167.39
10	54.29	57.14	50.00	161.43
11	62.85	50.00	50.00	162.85
12	65.71	57.14	50.00	172.85
13	74.28	57.14	100	231.42
14	65.71	71.43	100	237.14
15	37.14	46.43	66.67	150.24
16	60.00	42.86	50.00	152.86
17	60.00	50.00	83.33	193.33
18	57.14	46.43	83.33	186.90
19	54.29	60.71	83.33	198.33
20	62.85	60.71	100	223.56
21	65.71	67.85	83.33	216.89
22	60.00	64.28	66.67	190.95
23	74.28	67.85	66.67	283.09
24	42.86	32.14	50.00	125.00
25	60.00	50.00	66.67	176.67
26	51.43	60.71	83.33	195.47
27	42.86	35.71	50.00	128.57
28	71.43	71.42	66.67	209.52
29	45.71	46.43	50.00	142.14
30	60.00	57.14	50.00	167.14
31	45.71	42.86	50.00	138.57
32	74.28	71.42	50.00	195.70
33	34.28	50.00	83.33	185.47
34	37.14	60.71	100	197.85
35	48.57	39.29	50.00	137.86

36	37.14	46.43	50.00	133.57
37	54.29	64.28	66.67	185.24
38	65.71	75.00	100	240.71
39	65.71	71.42	100	237.13
40	54.29	53.57	83.33	191.19
41	51.43	50.00	66.67	168.10
42	62.85	64.28	66.67	193.80
43	42.86	39.28	50.00	132.14
44	62.85	60.71	83.33	206.89
45	57.14	67.86	83.33	208.33
46	48.57	35.71	66.67	150.95
47	48.57	50.00	66.67	165.24
48	54.29	46.43	83.33	184.05
49	62.85	64.28	83.33	210.46
50	67.14	57.14	66.67	180.95
51	71.43	67.85	66.67	205.95
52	48.57	50.00	50.00	148.57
53	57.14	53.57	66.67	177.38
54	34.14	42.86	50.00	127.00
55	51.43	57.14	100	208.57
56	45.71	32.14	50.00	127.85
57	65.71	50.00	83.33	199.04
58	65.71	71.42	83.33	220.46
59	54.29	50.00	66.67	170.96
60	74.28	71.42	66.67	212.37
61	51.43	57.14	83.33	191.90
62	37.14	32.14	50.00	119.28
63	60.00	67.86	83.33	221.19
64	62.85	57.14	66.67	186.66
65	48.57	60.71	100	209.28
66	54.29	64.28	66.67	185.24
67	57.14	50.00	66.67	173.81
68	74.28	75.00	100	249.28
69	48.57	46.43	50.00	145.00
70	54.29	57.14	66.67	178.10
71	51.43	46.43	50.00	147.86
72	48.57	64.28	66.67	179.52
73	65.71	46.43	100	212.14
74	74.28	67.86	66.67	208.81
75	60.00	64.28	83.33	207.61
76	62.85	67.86	83.33	214.04
77	74.28	60.71	83.33	218.32
78	65.71	50.00	100	215.71
79	60.00	60.71	100	220.71
80	60.00	60.71	83.33	204.04
81	60.00	60.71	100	220.71

82	54.29	53.57	100	207.86
83	48.57	46.43	66.67	161.67
84	62.85	71.42	100	234.27
85	51.43	57.14	50.00	158.57
86	60.00	60.71	66.67	187.38
87	57.14	67.85	83.33	208.32
88	60.00	57.14	83.33	200.47
89	42.86	50.00	66.67	159.53
90	57.14	50.00	66.67	173.81
91	57.14	57.14	66.67	180.95
92	74.28	71.42	83.33	229.03
93	65.71	50.00	66.67	182.38
94	45.71	75.00	66.67	187.38
95	57.14	60.71	66.67	184.52
96	57.14	46.43	83.33	186.90
97	60.00	64.28	83.33	207.61
98	60.00	64.28	83.33	207.61
99	48.57	60.71	100	209.28
100	57.14	42.86	50.00	150.00
101	57.14	53.57	66.67	177.38
102	60.00	64.28	83.33	207.61
103	65.71	60.71	50.00	176.42
104	51.43	46.43	66.67	164.53
105	45.71	71.42	100	217.13
106	60.00	71.42	100	231.42
107	42.86	53.57	66.67	163.10
108	57.14	60.71	66.67	184.52
109	60.00	57.14	100	217.14
110	57.14	67.86	83.33	208.33
111	51.43	71.42	83.33	206.33
112	57.14	60.71	66.67	184.52
113	60.00	64.28	83.33	207.61
114	37.14	35.71	50.00	122.85
115	60.00	64.28	83.83	207.61
116	48.57	50.00	66.67	165.24
117	48.57	75.00	83.33	206.90
118	51.43	42.86	83.33	177.62
119	54.29	32.14	50.00	136.43
120	74.28	67.86	66.67	208.81

Appendix- V
Interview schedule

Respondent no. Date of Interview
Village
Name of the respondent
Husband's /Father's name

A. Socio-economic and Personal variables

1. Age of the respondent

i)18-35 years ii) 36-50 yrs. iii) Above 50 years

2. Caste

i)Low ii)Medium iii) High

3. Family structure

a) Family Type i) Nuclear ii) joint

b) Family size Small (305 members)

Medium (6-8members)

Large (9 & above)

4. Education of the respondent

Educational Categories	**Scores**
Illiterate	0
Can read only	1
Can read and write only	2
Primary	3
Middle	4
High school & above	5

5. Family income (per month)

Less than Rs. 1000

Rs.1000-2000

Rs.2000-3000

More than 3000

B. Psychological Variables

Sr. No.	Variable	Most liked	Neutral	Least liked
1	**Change Proneness**			
a.	(i) I feel restless, till I try out new maternal and child care practices I have heard about.(+)			
	(ii)Many new maternal and childcare practices are being talked about these days but who know if they are better than the old ones. (-)			
b.	(i) From time to time I have heard of several recommended maternal and child care practices, and I have tried out most of them as in the last few years. (+)			
	(ii) I usually wait to see what results my neighbours obtain before I try out recommended maternal and child care practices			
c.	(i) I am cautious about trying the			

	recommended maternal and child care practices (+) (ii) After all our forefathers were wise in adopting maternal and child care practices and I do not see any reason for changing indigenous practices (-)			

Categories were quantified in the following manner:

	Agree	Neutral	Disagree
For positive items	3	2	1
For negative items	1	2	3

Sr. No.	Variable	Yes	No
2.	Localite- cosmopoliteness a. One who has seen something working practically in her village need not worry about taking any additional information about sources outside her village (-) b. We can learn many things about maternal and child care practices from happenings and experience of village only (-) c. One can satisfy all her requirements out of local resources available to her (-) d. In these days, when transport and other communication facilities are developing, one should know more about things happening outside her village (+)		

	e. To get more useful information about the recommended maternal and child care practices, one should have frequent contacts with different sources of interest even outside her village (+) f. A rural women must know about happenings occurring outside her village and such happenings may be of great advantage to her (+)		

C. Communication variable

1. Mass media exposure

i) Do you have a radio/transistor? Y (1)

N(0)

a) If no, does anyone in your neighbour have a radio/transistor Y (1)

N(0)

ii) Do you listen to radio/transistor? Y (1)

N(0)

a) If yes, how frequently Daily Once a week Once in a month

(3) (2) (1)

iii) Do you read any daily newspaper? Y (1) N(0)

PRE NATAL STAGE

I HEALTH:

1. Did you visit local dai for check up? Y/N

2. Did you attend pre-natal clinic? Y/N

a. If yes, why?

- Realize the need of it.
- Economically could afford.
- Due to pregnancy complication.
- No restriction of elderly people.
- Clinic is located at approachable site
- Got awareness from mass media
- Health workers approached for the same
- Any other

b. If no, why?

- Did not consider need of it
- Clinic is located at far off place
- Restriction of elderly people
- Lack of awareness regarding these clinics
- Any other

3. What are the various indigenous practices followed during pregnancy to cure following complications?

Sr. No.	Complications	What (Indigenous food/ practice) (Quantity and Ingredients)	How (Method of preparation and consumption)	Why (Reason/Logic)
1	Morning sickness			
2	Constipation			
3	Abdominal pain			
4	Swelling on limbs			
5	Cold and Cough			
6	Backache			
7	Blemishes on face			

II NUTRITION:

1. Do you think extra diet is necessary during pregnancy? Y/N

A. If yes, why:

- Consumption of extra diet leads to normal delivery
- Avoids loss of health status of both mother and child
- No restriction of elderly women

a. What extra diet did you have during pregnancy ?

Type of diet

i. Fruit and vegetable

ii. Ghee

iii. Pulses

iv. Extra milk

v. Any other

vi. Green leafy vegetable

B. If no, why:

- Consumption of extra diet leads to large size of baby causing difficulty in delivery.
- Poor economic condition.
- Mother feels uneasy
- Extra diet creates cramps during pregnancy
- Control of food distribution is in hands of mother-in-law

3. What special foods/non food items were avoided during pregnancy?

Foods avoided	Reason
▪ Ghee and banana	
▪ Papaya	
▪ Citrus fruits	
▪ Egg, meat and fish	
▪ Brinjal	

- Til and jaggery
- Coconut
- Walnuts
- Curd, lassi

4. Do you take some specific food/non food items intake during pregnancy?

Foods intake	Reason
▪ Orange	
▪ Extra milk and coconut	
▪ Multani mitti	
▪ Tamarind	

5. What special foods are consumed to have a male child during 1st trimester of pregnancy?

Foods consumed	Reason
i. Methi seed	
ii. Turmeric with milk and saunf	
iii. Raw coconut seed	
iv. Sona bhasam	
v. Any other	

6. Do you give certain special foods to the pregnant woman during last trimester of pregnancy ?

Sr. No.	What (Indigenous food/practice) (Quantity and Ingredients)	How (Method of preparation and consumption)	Why (Reason/Logic)

III SANITATION AND HYGIENE

1. Which of the practices followed by you daily, alternately and weekly?

PRACTICE	FREQUENCY		
	DAILY	ALTERNATELY	WEEKLY
Bathing			
Brushing of teeth			
Cleaning of hair			
Combing of hair			
Massage of hair			
Cutting of nails			

IV. OTHERS

A. Physical rest and work

1. Do you take rest in pregnancy? Y/N
2. Do you avoid heavy work in pregnancy? Y/N

B. Stress and strain

1. Do you avoid lifting of heavy weight? Always/Never
   - If always, why?
     a. Chances of abortion are more
     b. Body does not allow
   - If never, why?

a. Keeps the body fit

b. Helps in easy delivery

c. Any other

2. Do you avoid traveling? Always/Never

If always, why?

a. Jerks may lead to abortion

b. Movement may be harmful to foetus

c. Helps in easy delivery

C. Any other practices followed during pre natal stage.

Practice	Reason

- Not to see dead body/visit the place where someone has died
- Avoid high heel shoes
- Any other

B. PERI - NATAL STAGE

I HEALTH

1. What is the posture of expectant mother at the time of delivery? Squatting/ Lying

II.NUTRITION

1. What are the foods given in labour pain? Mention the various indigenous food preparations given to the woman when labour pains starts.

Sr. No.	What (Indigenous food/practice) (Quantity and Ingredients)	How (Method of preparation and consumption)	Why (Reason/Logic)

III. SANITATION AND HYGIENE

1.What material is used to cut the umbilical cord?

- Sterlised blade
- Unsterlised blade
- Scissors
- Sickle

2. What material do you apply on naval of child?

Material Reason

- Ghee
- Heated paste of turmeric and mustard oil
- Cures automatically

C. POST NATAL STAGE

I. HEALTH (Mother)

1. Do you give any indigenous food preparation to control of excessive bleeding after delivery?

Sr. No.	What (Indigenous food/practice) (Quantity and Ingredients)	How (Method of preparation and consumption)	Why (Reason/Logic)

2.What methods you adopt in delayed expulsion of placenta after delivery?

Sr. No.	Method	Reason /Logic

3. What practices/techniques do you follow for prevention of uterus prolapse?

Sr. No.	Technique/Practice	Procedure	(Reason/Logic)

II. NUTRITION

1. What are the various indigenous food preparations given to the mother after delivery?

Sr. No.	What (Indigenous food/practice) (Quantity and Ingredients)	How (Method of preparation and consumption)	Why (Reason/Logic)

2. Specify the ingredient/ material with which drinking water is treated?

Sr. No.	What (Indigenous food/practice) (Quantity and Ingredients)	How (Method of preparation and consumption)	Why (Reason/Logic)

III. SANITATION AND HYGIENE

1. What treatment is given to placenta after delivery

- Burry inside home
- Burry outside home
- Any other

2. When do you give bath to the mother after delivery

- Within 4 days
- After 5th day

If bath taken within 4 days, state reason

- Adequate knowledge
- Particular about hygiene
- To keep body clean

If bath taken after 5 days, state reason

- Traditional boundary
- Lack of proper knowledge
- If bath given early, water enters into genital organs of the mother
- Any other

IV. LACTATION

1. Do you avoid any food during lactation period?

If yes, mention them

Foods	Reason

- Cauliflower
- Potato
- Pumpkin
- Brinjal

- Mash dal
- Rajmash
- Lady finger
- Cabbage
- Chillies
- Rice

2. Do you follow any special dietary practice to increase milk secretion? Yes/No

If yes,specify

Sr. No.	What (Indigenous food/practice) (Quantity and Ingredients)	Why (Reason/Logic)

V. HEALTH (Child)

1. Do you properly immunize your baby Y/N

If yes, why?

- For better health of child
- For protecting the child from diseases

- Mass media emphasis
- Advice from doctor
- Any other

a. If no, why?

- Lack of knowledge
- Troublesome
- Fear of fever
- Safe without immunization
- Adulterated vaccine
- Any other

2. Do you prefer massage of newly born baby?

a. If yes

- Helps in proper blood circulation
- Strengthen muscles and bones etc.
- Keeps the baby active
- Any other

b. If no, why?

- Scarcity of time
- Inadequate knowledge of benefits
- Poor economic conditions
- Any other

3. What are the various indigenous practices followed to cure common infant health problems?

Sr. No.	Disease	What (Indigenous food/ practice) (Quantity and Ingredients)	How (Method of preparation and consumption)	Why (Reason/Logic)

1	Diarrhoea			
2	Stomach ache			
3	Cold and cough			
4	Eye infection			
5	Ear infection			
6	Measles			

VI. NUTRITION

1. What pre lacteal feed you give to new born baby?

- Honey
- Sugar and water
- Jaggery and water
- Jaggery
- None

2. Do you feed colostrum to the newborn baby? Y/N

a. If yes, why?

- Creates immunity against diseases
- Doctor's advice
- Any other

b. If no, why?

- Not good as it is blocked for many months
- Difficult to digest
- Lack of knowledge
- Any other

3. How long breast-feeding is practiced and why?

- 1 $^{1/2}$ years
- 2 ^{½} years
- Any other

5. When do you introduce supplementary foods

i. Liquid foods (top milk)

- 4-5 months
- 9-12 months

If at 4-5 months, why?

- Proper knowledge
- Inadequate quantity of breast milk
- For better health and development of child

If at 9-12months, why?

- Inadequate knowledge
- Breast milk is enough
- Fear of stomach disorder
- Any other

ii. Semi-solid foods (Dalia, Khichari)

- 6-8months
- 12 months

- If at 6-8months, why?
  - Baby does not deman repeatedly
  - Need of balanced diet
  - Mass media emphasis
  - Any other

If at 12 months, why?

- elders advice
- Child milk not be able to eat any cereal
- Fear of stomach disorder
- Inadequate knowledge
- Any other

iii. Solid foods (Biscuits, Roti)

- 8-9 months
- 12 months

VII SANITATION AND HYGEINE

1. Do you give bath to your baby daily? Y/N

a. If yes, why?

- Child sleeps well after bath
- Particular about hygiene
- Any other

b. If no, why?

- Fear of cold and cough due to bath
- Poor knowledge
- Any other

2. Do you change the clothes of the baby after each bladder movement? Yes/No

Give reason for your answer

Toilet training

a. Do you provide toilet training to your children? Y/N

b. At what age you start teaching urination?

Age
3-4 months
5-6 months
9-10 months
after 10 months

c. Do you use punishment during toilet training process Y/N

If yes, of which type

- Corporal
- Verbal

Discipline and habit formation

a. At what age you start teaching discipline? Y/N
9 months
12 months
24 months

b. Do you appreciate child's good behaviour? Y/N

c. Do you punish the child for his wrong behaviour? Y/N

Knowledge statements

Sr. No.	Statements	Pre		Post	
		Yes	No	Yes	No
1.	Attending prenatal clinic is beneficial for the pregnant women				
2.	To cure morning sickness, churan of roated and crushed, saunf and ajwain alongwith kooja ki mishri can be given				
3.	Consumption of crushed onion and mint juice with water and salt do not cure morning sickness				
4.	For curing constipation during pregnancy, various deoctions of harad, bahera, amla or ajwain, gurlakdi and meethi saunf are beneficial				
5.	Isabgol with water or seasonal fruits are not a good remedy for curing constipation				
6.	To cure abdominal pain, boiled ajwain water or jeera with water can be consumed				
7.	Kadha of bhabri, mint leaves and ajwain do not cure abdominal pain				
8.	To treat swelling on limbs, pregnant women should consume low salt and plenty of water				
9.	Decoction of cardmom, banafashah and mulathi is not helpful in curing cold and cough during pregnancy				
10.	Consumption of soaked methi with boiled milk and roasted saunth with ghee and sugar does not cure backache.				
11.	Raw coconut seeds are consumed to have a male child				
12.	Consumption of extra diet during pregnancy will lead to difficult delivery				
13.	The pregnant woman should take care of personal cleanliness to avoid any infection				
14.	Heavy work and traveling by pregnant women should be avoided as chances of abortion are more.				
15.	Avoid high heel shoes as they may cause imbalance and lead to some unhappening				
16.	Baby should be delivered in sitting posture				
17.	During labour pains, kadha of cloves, cardamom, jeera, dried ginger, mulathi powder, til seeds, dates, ghee, jaggery is beneficial				
18.	Kadha of dried ginger powder, cardamom, ajwain, dates, sugar do not induce labour pains.				
19.	For cutting umbilical cord, knife or sickle can be used without boiling.				

20.	Application of mustard oil and turmeric paste on naval helps in quick healing				
21.	To control excessive bleeding after delivery consume ajwain roasted in ghee alongwith jaggery and almonds.				
22.	For prevention of uterus prolapse, mother should sit in water boiled with bark of kikar and pipal				
23.	Powder of ajwain, dry coconut powder, dates, almonds, crushed jaggery with desi ghee is a nutritious post delivery food				
24.	Kharani, sund ke ladoo and wheat flour halwa provide strength to body after delivery				
25.	Semi liquid foods or milk with desi ghee can be served to mother after delivery				
26.	Consumption of milk and milk products do not increase milk secretion				
27.	Mother should be given simple water after delivery				
28.	Mother should not be given bath till five post days after delivery				
29.	To develop immunity against different diseases immunization is beneficial				
30.	Child should be massaged before bathing to make his bones stronger				
31.	To cure diarrhea among children, feed boiled small cardamom, ajwain and jaiphal				
32.	Bahera or solution of sugar, salt and water do not cure diarrhea among children				
33.	Stomach pain to children can be cured by feeding harad or boiled ajwain in water or ginger extract				
34.	To cure cold and cough in children, feed heated seeds of cardamom in water				
35.	Dropping of amla juice or bandage of pulp of kavarein does not cure eye infection				
36.	To cure ear infection, put heated mustard oil with garlic in ear (+)				
37.	Colostrum should not be given to child as it is a blocked milk for nine months				
38.	Mother should feed the baby in lying position				
39.	Children should be given liquid and solid foods after six months of age				
40.	There is no need to change the napkins frequently				

Attitude statements

Sr. No.	Statements	Pre			Post		
		Favourable (2)	Neutral (1)	Un favouable (0)	Favour-able (2)	Neutral (1)	Un favour-able (0)
1	Indigenous medicines/ practices being locally available help in saving the life of both mother and child (-)						
2	There is a no need to go to civil hospital/PHC for check up during pregnancy (-)						
3	Indigenous method of treating the pregnancy discomforts are more reliable (-)						
4	Scientifically validated Indigenous practices improve the nutritional status of mother and child (+)						
5	I will only practice, scientifically recommended health care practices when others have practiced them successfully (-)						
6	No matter what the taboos, custom, and religious practices are , I would go for scientifically recommended health care practices (+)						
7	It is not necessary to go to Center during pregnancy unless emergency situation arises (-)						
8	A pregnant woman should follow scientifically validated practices (+)						
9	I have full a faith in recommendation of dai bout health care (-)						
10	Indigenous health care practices are our customary and socially acceptable practices, therefore, we follow them (-)						
11	Child can be delivered at home safely by the old lady of family (-)						
12	Child should be delivered at the health center or a hospital so that during emergency appropriate medical aid is available (+)						
13	Guidance of doctor is necessary during labour complications (+)						
14	Pregnant woman should follow scientifically recommended practices as these are scientifically factual (+)						

15	Availability of maternity care at the village health center has saved the life of many women (+)						
16	Rural women have more faith in Indigenous maternal and child care practices as these are easy and simple to perform (-)						
17	Health of a child is God given and hence there is no use of giving medicine to a sick child (-)						
18	Neither we nor our parents were immunized than why we should bother about our children (-)						
19	Immunization of children should be must for protecting them from diseases (+)						
20	Scientifically recommended health practices are really boon for the mother and the child (+)						
21	Consumption of extra diet during pregnancy causes pregnancy discomforts (-)						
22	Intake of extra diet during pregnancy leads to over growth of fetus and thus complicates delivery (-)						
23	Nutritious diet is essential during pregnancy (+)						
24	Pre lacteal foods are rich source of energy and help in cleaning the stomach of new born (+)						
25	Supplementary feeding causes diarrhoea among infants so one should avoid its use (-)						
26	Personal sanitation can solve the health problems to a grater extent (+)						
27	Adopting sanitation and hygiene measure is a time consume exercise (-)						
28	Application of turmeric powder helps in healing of wound at naval of the child (+)						

Symbolic Adoption

Sr. No.	Statements	Yes (1)	No (0)
1	After receiving knowledge on scientifically validated indigenous maternal and child care practices one can adopt them without hesitation.		
2	I feel more confident in accepting the scientifically validated indigenous maternal and child care practices as they are scientifically factual.		
3	Scientifically validated indigenous maternal and child care practices hold no social inhibition for their acceptance in village.		
4	Use of scientifically validated indigenous maternal and child care practices can greatly improve the nutritional status of both mother and child.		
5	Having received enough knowledge on scientifically validated indigenous maternal and child care practices, it is easy to rationalize selection on the pros and cons of the practices.		
6	As I am fully convinced about the importance of scientifically validated indigenous maternal and child care practices no- one can stop me to accept these.		

ABSTRACT

Title of thesis	:	**Acceptability of scientifically validated indigenous maternal and child care practices**
Full name of degree holder	:	NEETU SHARMA
Admission no.	:	**99HS129D**
Title of degree	:	Doctor of Philosophy in Home Science Extension Education
Name and address of major advisor	:	**Dr. (Mrs.) Asha Batra** Associate Professor Deptt. of Home Science Extension Edu. I.C.College of Home Science CCSHAU, Hisar-125004.
Degree awarding University	:	CCS Haryana Agricultural University, Hisar-125004
Year of award of degree	:	2004
Major subject	:	Home Science Extension Education
Total no. of pages in the thesis	:	219 + xii
No. of words in the abstract	:	300 (Approx.)

Key Words : Acceptability, Scientific validation, Indigenous practices, Prenatal stage, Perinatal stage and Postnatal stage

The study was conducted in four villages of Kangra district of Himachal Pradesh. The data was collected from two categories of respondent i.e. one hundred and twenty rural women were selected randomly to investigate about

existing indigenous maternal and child care practices while 50 experts/scientists were selected for exploring the scientific relevance of these indigenous practices.

Socio personal, economic, psychological and communication characteristics were taken as independent variables while existing indigenous maternal and child care practices were dependent variables.

As regards prenatal stage, the rural women were found to be reluctant to utilize maternal care services but to cure the pregnancy discomforts various decoctions were suggested by them. At peri-natal stage, the experts rejected the practice of delivering the baby in squatting position while in nutrition aspect the respondents reported of decoctions to which the experts also agreed.

The respondents presented various food preparations which are served to mother after deliver. They are kharani, sund, wheat flour halwa etc. The experts also supported the respondents to use these foods.

In the present study, rural women were found to be using certain local plants like, kavarein, galoein, barein, isabgol, gurlakdi, banafshah, datura, agas bel, dudali etc. They were not aware of the medicinal properties of all the plants used. However, experts presented scientific relevance of some of them but still few needs to be explored. Some of the indigenous practices, which were found to be scientifically relevant, were documented in a booklet form so that rural women can easily use them at house hold level. Thus on overall 85 practices were recommended for inclusion in media, 11 practices for further research, 6 for reconsideration of the expert and 56 for discontinuation.

Regarding acceptability of scientifically validated indigenous maternal and child care practices the respondents found them moderately acceptable.

MAJOR ADVISOR SIGNATURE OF STUDENT

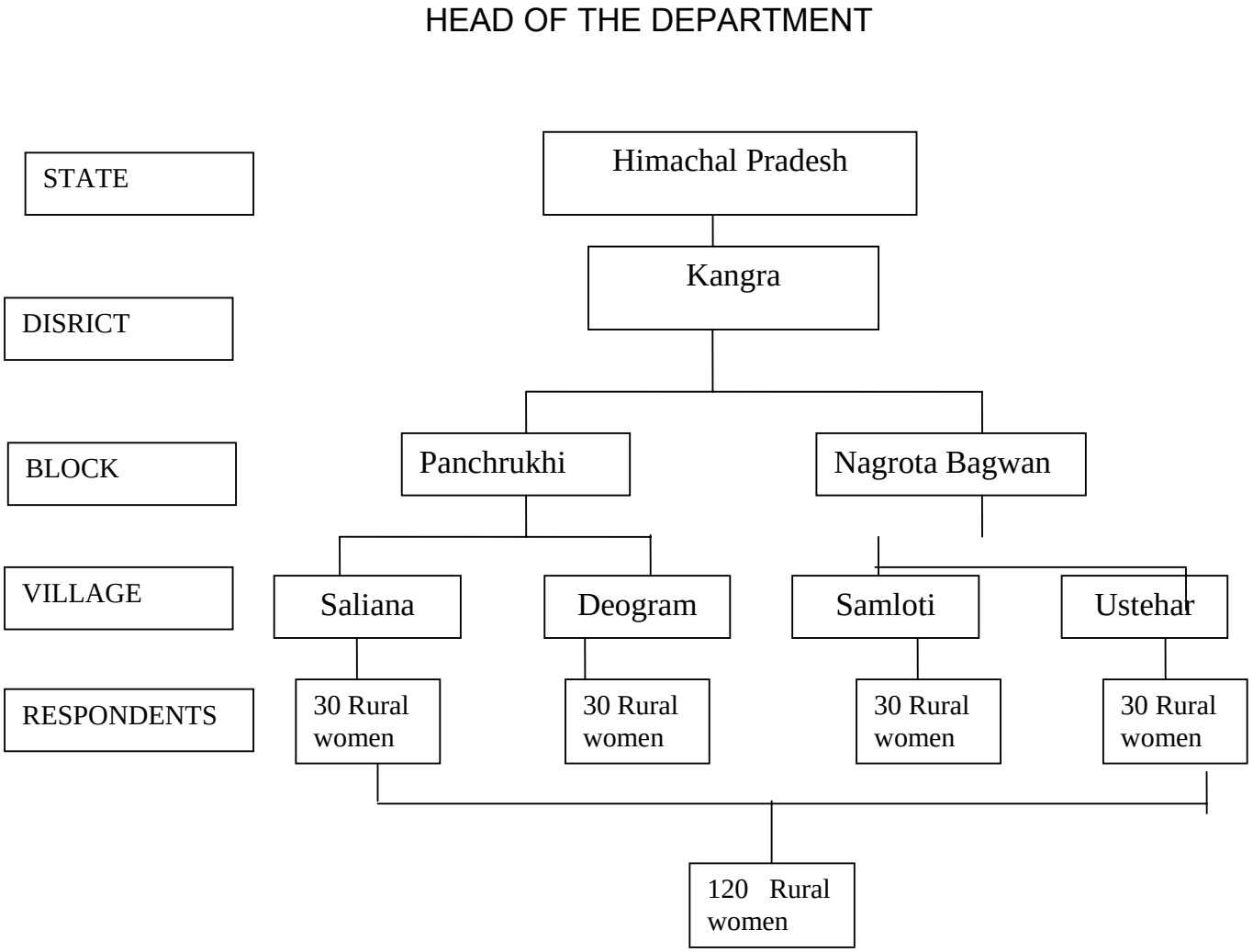


Fig:1 SAMPLING PROCEDURE

Fig. 2: Recommendation status of various identified indigenous practices practised by rural women at prenatal stage

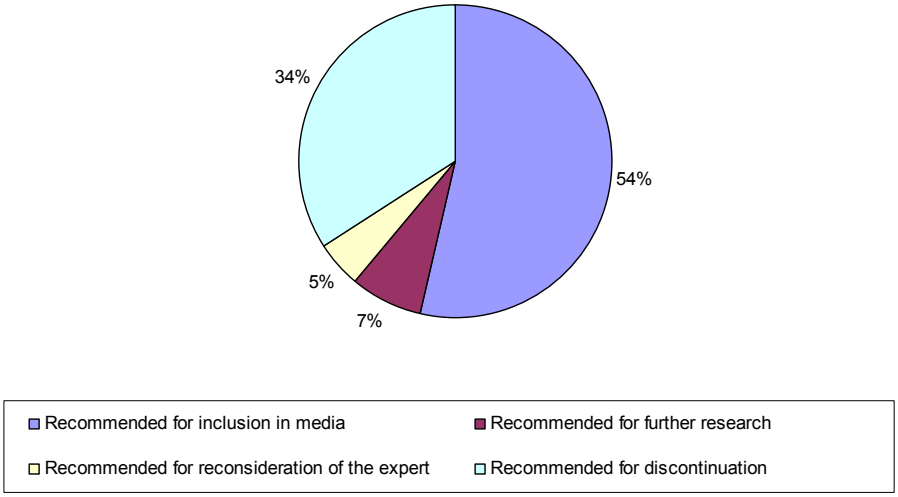


Fig. 3: Recommendation status of various identified indigenous practices practised by rural women at perinatal stage

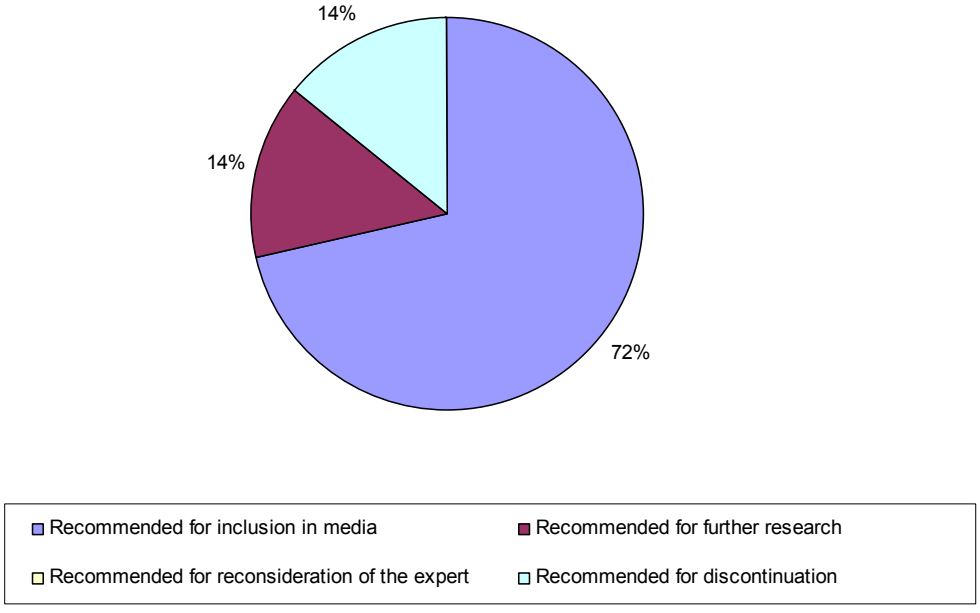
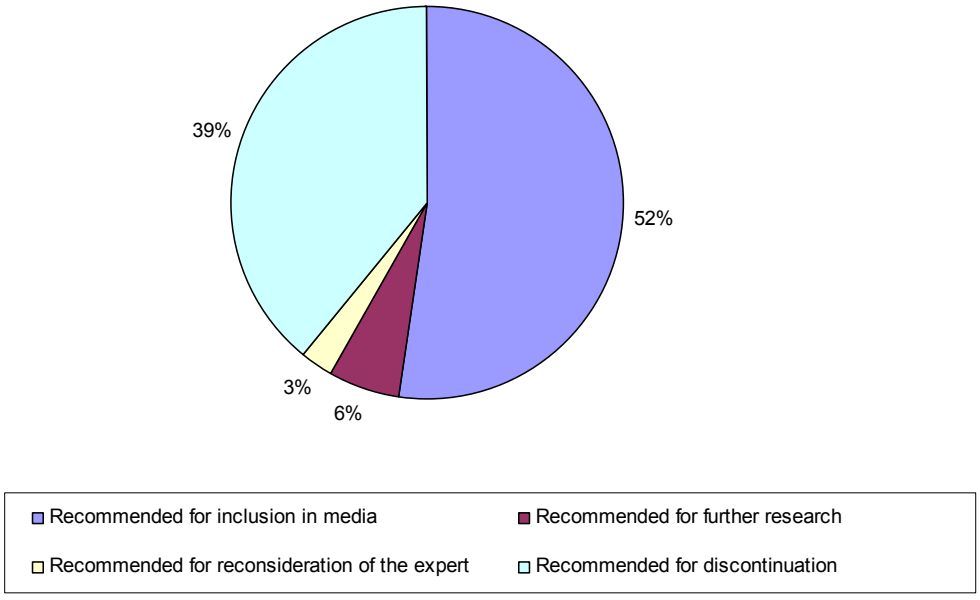


Fig. 4: Recommendation status of various identified indigenous practices practised by rural women at postnatal stage



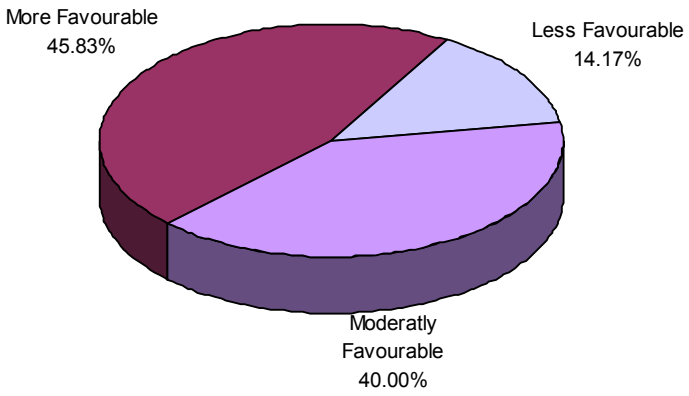


Fig. 5: Distribution of respondents on the basis of knowledge gain index

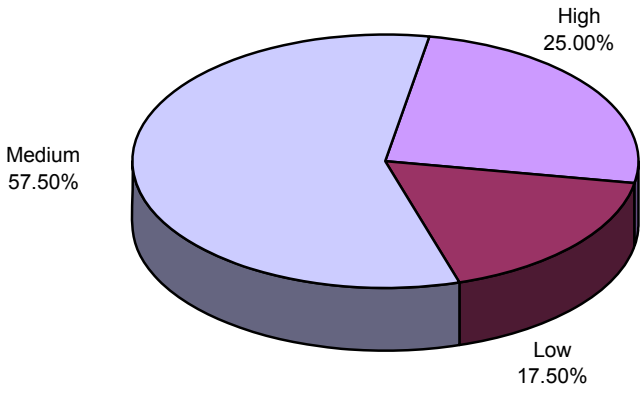


Fig. 6: Distribution of respondents on the basis of attitudinal change index

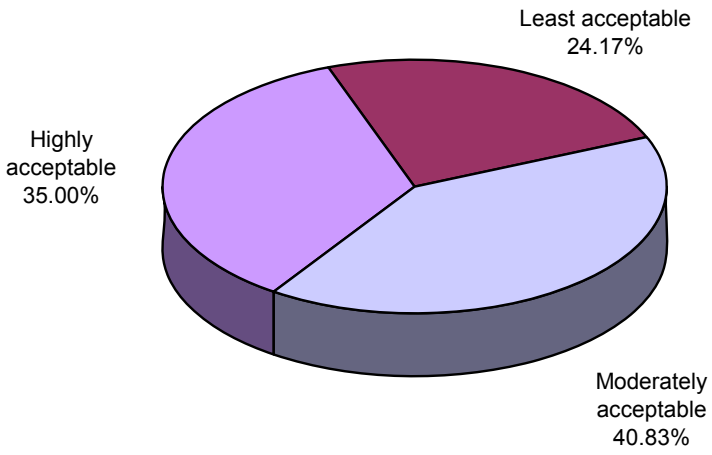


Fig. 7: Distribution of respondents on the basis of symbolic adoption index

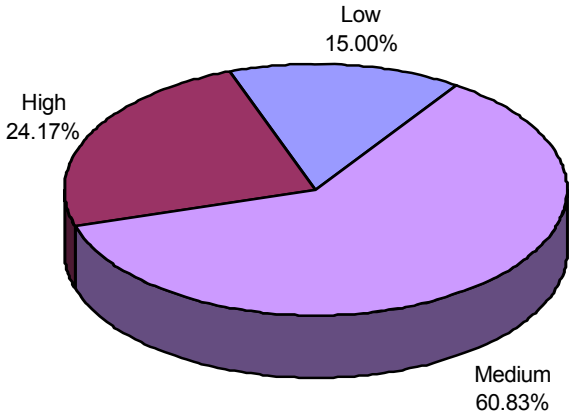


Fig. 8: Distribution of respondents on the basis of acceptability index

Plate 1. Banafshah (*Viola serpens)*

Plate 2. Isabgol (*Plantago ovata)*

Plate 3. Banna (*Vitex negundo*)

Plate 4. Kakkarsinghi (*Pistacia khinjuk)*

Plate 5. Datura (*Datura stramonium*)

Plate 6. Kavarein (*Aloe barbadensis)*

Plate 7. Barein (*Acorus calamus)*

Plate 8. Puthkanda (*Acyranthes aspera)*

Plate 9. Agas bel (*Cuscuta reflexa)*

Plate 10. Dudali (*Cryptolepis buchnami)*

Plate 11. Gurlakdi (*Cassia fistula)*

Plate 12. Karri Patta (*Murraya koenigii*)

Definitions

Anodyne	relieves pain
Anti bacterial	prevents bacterial infection
Anti-inflammatory	reduces inflammation
Alexeteric	prevents infection
Antiseptic	prevents infection/kill or controls pathogenic microbes
Astringent	provides coolness
Refrigerant	controls fever
Diaphoretic	induces perspiration
Thermogenic	provides strength to the body
Stimulant	stimulates body metabolism
Nutritious	provides nutrient nutrition to the body
Rejuvenating	regeneration the body cells
Debilitative	reduces general weakness
Tonic	helps in tissue building
Sedative	induces sleep
Emetic	causes vomiting
Demulcent	soothes their skin
Antifungal	prevents fungal infection
Emollient	soften the skin
Stomachic	reduces stomach pain
Flatulent	controls gas generated in stomach
Laxative	clears digestive system/loosen the bomb
Digestive	improves digestion
Anthelmintic	destroys and expels intestinal worms
Purgative	purifies stomach
Carminative	relieving flatulence
Antispasmodic	relaxes muscles/ relieves of sudden involuntary muscular contraction
Emollient	that softens/soothes the skin
Antidotal	anything counteracting something unpleased

Eupeptic	anything that promotes digestion
Anti-pyretic	venting or reducing fever
Analgesic	which relieves of pain

List of important medicinal plants

Local/English Name	Scientific Name
Aak	*Calotropis gigantea*
Aasgandh	*Withania somnifera*
Agas bel	*Cuscuta reflexa*
Ajwain	*Trachyspermum*
Almonds	*Prunus amygdalus*
Amaranthus	*Amaranthus gangeticus*
Amla	*Emblica officinales*
Bahera	*Terminalia bellirica*
Banafshah	*Viola serpens*
Banyan	*Ficus benghalensis*
Baren	*Acorus calamus*
Bhabri	*Ocimum basillium*
Big cardamon	*Amomum subulatum*
Bittergourd	*Momordica charantia*
Black pepper	*Piper nigrum*
Castor leaf	*Ricinus communis*
Charmagaz	*Citrullus vulgaris*
Clove	*Sygygium aromaticum*
Dates	*Phoenix dactylifera*
Dried ginger	*Zingiber officinale*
Eucalyptus	*Eucalyptus citriodora*
Fig	*Ficus carica*
Gandala	*Murraya koenigii*
Garlic	*Allium sativum*
Ginger	*Zinziber officinale*
Galoein	*Tinospora cordifolia*
Harad	*Terminalia chebula*
Isabgol	*Plantago ovata*
Jaiphal	*Myristica fragrans*
Jeera	*Cuminum cyminum*

Kakarsinghi	*Pistacia khinjuk*
Karwi saunf	*Foeniculum vulgare*
Kasturi	*Moschus moschiferus*
Kavarein	*Aloe barbadensis*
Kikar	*Acacia nilotica*
Lemon	*Citrus limon*
Maize	*Zea mays*
Meethi saunf	*Foeniculum vulgare*
Methi	*Trigonella foenum graecum*
Mint	*Mentha longifolia*
Mulathi	*Glycyrrhiza glabra*
Onion	*Allium cepa*
Orange	*Citrus aurantium*
Papita	*Papaya carica*
Pateesh	*Aconitum heterophyllum*
Pipal	*Ficus religiosa*
Puthkanda	*Acyranthes aspera*
Rarda	*Rondia dumetorum*
Sanai	*Cassia angustifolia*
Satavar	*Asparagus racemosus*
Small cardamom	*Ellataria cardamomum*
Spinach	*Spinacia oleracea*
Tejpatta	*Cinnamomum tamala*
Til	*Sesamum indicum*
Turmeric	*Curcuma longa*
Pine	*Pinus roxburghii*

VARIABLES AND THEIR MEASUREMENTS

INDEPENDENT VARIABLES

Variables	Measurement
Socio economic and personal variables	
Age	Chronological Age
Caste	Modified scale of Trivedi (1963)
Education of Respondent	Modified scale of Trivedi (1963)
Family type	Modified scale of Trivedi (1963)
Family size	Modified scale of Kulshreshta (1980)
Family income	Schedule developed
Psychological variables	
Change Proneness	Modified scale of Moulik (1965)
Localiteness cosmopoliteness	Modified scale of Achanta (1983)
Communication variables	
Mass media exposure	Scale of Bhatti (1985)

DEPENDENT VARIABLES

Existing indigenous maternal and child care practices	Schedule developed
Acceptability of scientifically validated maternal and child care practices	Schedule developed