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Weaning practices prevalent amongst tribal mothers of Sabarkantha

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Abstract

The present study was conducted in Sabarkantha district of Gujarat. Two tribal taluka of Sabarkantha district viz. Khedbrahma and Poshina and five villages from each taluka were purposively selected for the study. Total 120 tribal mothers were randomly selected for the study. Data collection was done by personal interview method. It was observed from the study that tribal mothers were coming from lower socio-economic group. Long period of exclusive breast feeding and late introduction of weaning foods on regular bases than recommendation was observed. Weaning foods given by mothers were not balanced in all five food groups and lacking in nutritious foods. Though many mothers were aware and following recommended cooking, hygiene and food safety practices, yet considerable numbers of mothers were not practicing them. It was observed that all the mothers were giving ready made packaged snacks as finger foods. Such foods were found highly salted, spicy and sweetened which actually are not recommended as weaning foods.

Keywords: Tribal mother, weaning practices

Introduction

Weaning is a process of gradual introduction of semisolid foods and liquids other than breast milk to an infant to facilitate optimal growth. The term “to wean” comes from an ancient phrase that means “to accustom to”. So weaning refers to the period during which an infant becomes accustomed to food other than milk (Aggrawal *et al.*, 2008) ^[1]. The ideal age of weaning is six months. Infants and young children are at an increased risk of malnutrition from six month of age onwards, when breast milk alone is no longer sufficient to meet their entire nutritional requirement and complementary feeding should be started. Weaning too early may cause baby at higher risk of developing disorder and adverse reaction and allergy to certain foods. On the other hand, weaning too late may deprive adequate nutrition and can result in improper growth and development (Ambike *et al.*, 2017) ^[2].

The World health organization (WHO) recommends Exclusive breast feeding for the first six month of life, with the addition of complementary feeds at six month with continued breast feeds until at least the age of two (Anonymous 2001 and Anonymous 2003) ^[3, 4]. Tribal mothers are mostly illiterate, resource poor and they have very distinct dietary patterns. Hence, the present study is undertaken to assess the weaning practices of tribal mothers of Sabarkantha district of Gujarat.

Materials and Methods

The present study was conducted in Sabarkantha district of Gujarat. Two tribal taluka of Sabarkantha district viz. Khedbrahma and Poshina were purposively selected for the study. Five villages from each taluka were randomly selected and thus total ten villages were selected for the study. Twelve tribal mothers from each village were randomly selected thus total 120 tribal mothers were selected using random sampling. A personal interview schedule was prepared consisting different sections, i.e. personnel information of the tribal mothers and weaning practices followed by the tribal mothers. The section of weaning practices followed by the tribal mothers consisted three sub sections i.e. types of weaning food given, cooking practices followed and hygiene and food safety practices followed by the tribal mothers. The data were analyzed with the help of percentage and frequency.

Results and discussion

Information gathered in the present study is presented in tabular form as below.

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Table 1: Personal information of tribal mothers (n=120)

Sr. No.	Personal information	Frequency	Per cent
1	Age		
	20- 30	90	75.00
	> 30 - 40	30	25.00
2	Education		
	Illiterate	85	70.83
	Primary education (1-7 Std.)	27	22.50
	Secondary education (8-10 Std.)	08	06.67
3	Monthly income		
	> 1000	02	01.67
	1000 to 2499	22	18.33
	2500 to 4999	50	41.67
	5000 to 9999	43	35.83
	Above Rs. 10000	03	02.50
4	Type of house		
	Kachcha	80	66.67
	Pakka	40	33.33

Table 1 shows data regarding personal information of tribal mothers. Majority (75%) of tribal mothers were of age group 20-30 years. Majority of tribal mothers were illiterate (70.83%) and highest education level was upto secondary education. Monthly income of majority of tribal women was less than and they were living in kachcha house. Similar results were also found by Dave *et al.*, (2016) [5] reported

lower socio-economic condition of tribal families of Sabarkantha district. Dave and Mistry (2017) [6] who studied nutritional and health status of tribal farm women of Sabarkantha and reported about their poor socio-economic background i.e. low income, large family size, more number of children and living in kachcha houses.

Table 2: Types of weaning foods given to the children by the tribal mothers (n=120)

Sr. No.	Weaning Practices	Frequency	Percent
1	Exclusive breast feeding		
	Upto six months	87	72.50
	6 to 9 months	24	20.00
	Untill mother can feed	09	07.50
2	Introduction of weaning		
	4 to 6 months	03	02.50
	After 6 months	67	55.83
	After 7 months	50	41.67
3	First weaning food introduced		
	Animal milk	120	100.00
	Sugar / jaggery / honey syrup	00	00.00
	Fruit juice	00	00.00
	Other	00	00.00
4	Commonly given liquid weaning food		
	Animal milk	77	64.17
	Animal milk, Fruit juice	34	28.33
	Animal milk, Vegetable juice	02	01.67
	Dal/rice water, Fruit juice, Vegetable juice	03	02.50
	Dal/rice water, Fruit juice, Other liquid porridge (Rab)	04	03.33
5	Weaning food prepared from cereals		
	Rice / Khichdi + Roti / Rotla	97	80.83
	Rice / Khichdi + Roti / Rotla + Rice / sago kheer + other (Ghensh / biscuit / ready to eat packaged snacks)	23	19.17
6	Fruits given in weaning food		
	Weekly	74	61.67
	2 to 3 times a week	29	24.17
	Daily	05	04.17
	Never	12	10.00
7	Cooked / mashed vegetable /soup given in weaning food		
	Weekly	39	32.50
	2 to 3 times a week	09	07.50
	Daily	01	00.83
	Never	71	59.17
10	Readymade baby food / powder / market formula given in weaning food		
	Weekly	00	00.00
	2 to 3 times a week	00	00.00
	Daily	00	00.00
	Never	120	100.00
11	Ready made packaged snacks (biscuits, extruded foods, potato chips, ganthiya, chewda etc.)		

	Weekly	00	00.00
	2 to 3 times a week	12	10.00
	Daily	108	90.00
	Never	00	00

Table 2 presents some interesting facts about the types of weaning foods given to the children by the tribal mothers. It was observed that majority (72.50%) of mothers exclusively breast fed babies upto six months. Little more than a half mothers (55.83%) were introducing weaning foods to their children after completion of six months but considerable numbers of mothers (41.67%) were giving weaning foods on regular bases after completion of seven months or even later. Ambike *et al.*, (2017) [2] also noted in their study that total unawareness regarding weaning was the reason for not starting complimentary feeding at 6-months in 64 respondents (21.1%). Vyas *et al.*, (2014) [7] reported that it has been shown in many studies that mothers in India are not able to start complementary feeding at the right time. Further they found in their study that respondents were totally unaware of the weaning practices and the exact time to start feeding which was quite disturbing. Aggrawal *et al.*, (2008) [1] also found similar results and noted that only 54.0 per cent of mothers had correct knowledge about the recommended time for starting complementary feeds and only 35.0 per cent had practiced it properly. He found that 77.0 per cent had delayed complementary feeding and 5.5 per cent started complementary feeding early. Chaudhary and Humayun

(2014) [8] stated that initiating complementary feeds too early or too late can lead to malnutrition.

The very first liquid weaning food was always animal (cow / buffalo/ goat) milk. Nutritious foods i.e. dal or rice water, vegetable juice and porridge like preparation were not incorporated in weaning. Majority of mothers (80.83%) were giving semisolid weaning food consisted of milk+khichadi or ghensh and solid homemade weaning foods from cereals were mainly roti made of maize or wheat. Apart from it, all the mothers were giving ready made packaged snacks i.e. biscuits, extruded foods, potato chips, ganthiya, chewda etc. as finger foods. Such foods were found highly salted, spicy and sweetened which actually are not recommended as weaning foods.

Large numbers of mothers (61.67%) were giving fruits to their children on weekly bases. But on the other hand majority of mothers (59.17%) never gave cooked or mashed vegetables (roots, tubers, green leafy vegetables etc.). It is interesting to note that none of the mothers were giving any ready made formula feed or weaning mixtures to their babies. Home based weaning food was preferred more over the market formulas was also observed in the study carried out by Ambike *et al.*, (2017) [2].

Table 3: Cooking practices followed by the tribal mothers while preparing weaning foods (n=120)

Sr. No	Cooking practices	Frequency	Percent
1	Number of weaning food per day		
	1 to 2 times	04	03.33
	3-4 times	104	86.67
	5-6 times	12	10.00
	8-10 times	00	00.00
2	Cooking along with other food / special cooking		
	Cook separately	55	45.83
	Cook along with other foods	66	55.00
3	Homemade mixture / powder		
	Sometimes	06	05.00
	Always	27	22.50
	Never	87	72.50
4	Boiling of animal milk		
	Sometimes	23	19.17
	Always	92	76.67
	Never	05	04.17

Cooking practices followed by the tribal mothers while preparing weaning foods is mentioned in Table 3. Most (86.67%) mothers were giving weaning foods 3-4 times a day as per recommendation. Majority (55%) mothers said they used to cook weaning food along with regular foods and on the other words, they provide the same food to the child what elderly eat. While many of them (45.83%) said they cook weaning separately for the child. Homemade nutritious mixtures and malted pulse / cereal powders are nutritious weaning which should be given to child but majority of mothers (72.50%) never prepared any such preparation while few of them (22.50%) said they always give such foods to their child. Most mothers (76.67%) were boiling animal milk

before giving to the child and few were (19.17%) not doing it on regular bases. Taneja *et al.*, (2003) [9] also reported the same findings and noted that only 20% rural mothers knew about correct age of weaning. They said that knowledge and practice scores of urban mothers were better than that of rural ones. The average knowledge score of urban mother in breast feeding and weaning was 61.6% and 64.0% respectively as compared to 45% and 44% respectively of rural mother. Kavitha *et al.*, (2014) [10] wrote that the findings of her study indicated that majority of the cases (62%) were not up to the mark in proper use of weaning practices. Residence area and education level of mother were significantly related with the use of proper weaning practices.

Table 4: Hygiene and food safety practices followed by the tribal mothers while preparing weaning foods (n=120)

Sr. No.	Hygiene and food safety practices	Frequency	Percent
1	Hand washing before cooking		
	No	15	12.50
	Sometimes, with water	36	30.00
	Always, with water	55	45.83
	Always, with soap	14	11.67
2	How long weaning food being kept		
	Given fresh	52	43.33
	2 to 3 hours	47	39.17
	4 to 5 hours	17	14.17
	Day long	04	03.33
4	Weaning food is covered after cooking		
	Sometimes	24	20.00
	Always	83	69.17
	Never	13	10.83
5	Child's Hand washing before giving finger food		
	Sometimes	25	20.83
	Always	38	31.67
	Never	57	47.50
6	Changes in weaning food during child sickness		
	Weaning food kept continue	108	90.00
	Weaning food is stopped	07	05.83
	Quantity weaning food reduces	01	00.83
	Quantity of weaning food increases	04	03.33

Hygiene and food safety practices followed by the tribal mothers while preparing weaning foods are presented in Table 4. More than half of the mothers said that before cooking, they always wash their hands with water (45.83%) and soap (11.67%) but it is also notable that many of them sometimes wash their hands (30%) while other said they never (12.50%) wash their hands before cooking weaning foods. All tribal mothers were involved in farming and animal husbandry work and in this regards, not following hand washing guidelines might have higher chances of poor hygiene and food safety of the weanings served to the child. Always freshly prepared foods should be offered to a child but it was observed that less than a half (43.33%) mothers were feeding fresh weaning foods to their child while all others were used to keep the prepared foods for hours together. It was interesting to record that majority (69.17%) of mothers used to cover prepared foods but it is also noted that many (30.83%) does not follow any such practices on regular bases. When child is introduced to finger food, in most cases (47.50%) mothers never wash child's hand and some of them (20.83%) sometimes wash their child's hands. There were some (31.67%) mothers who said that they always wash their child's hands before giving any food in its hands. During child sickness, most (90%) mothers used to continue the same weaning food.

Conclusion

It can be concluded from the study that majority of tribal mothers were coming from lower socioeconomic group and low literacy rate was observed. Their monthly income was less and they were living in kachcha house. Long period of exclusive breast feeding and late introduction of weaning foods on regular bases than recommendation was observed. Weaning foods given by mothers were not balanced in all five food groups. Nutritious foods i.e. dal or rice water, vegetable juice and porridge like preparation were not incorporated in weaning. Though many mothers were aware and following recommended cooking, hygiene and food safety practices, yet considerable numbers of mothers were not practicing them. It was observed that all the mothers were giving ready made

packaged snacks i.e. biscuits, extruded foods, potato chips, ganthiya, chewda etc. as finger foods. Such foods were found highly salted, spicy and sweetened which actually are not recommended as weaning foods.

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