

Identifying knowledge gaps about health and nutrition among rural pregnant mothers from 2 districts of Gujarat

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Abstract

Introduction: Encouraging healthy life style and dietary practices creates an impact not only on the child's long-term health, but potentially the mother's as well.

Objectives: The study was planned to assess the Knowledge about various aspects of Maternal and Child health to plan appropriate counseling material.

Materials and Methods: After informed consent, 100 pregnant women from 4 PHCS of Vadodara rural block and fifty from 1 PHC of Anklav block of Anand District were enrolled for the study. Information on knowledge regarding various aspects of health and nutrition was elicited using pretested semi structure questionnaire.

Findings: It was found that only half of the pregnant women knew about the concept of healthy diet in both the groups. Knowledge about the correct weight gain during pregnancy was better in mothers from Anand (74%) as compared to 47% in Mothers from Vadodara. Ninety percent of pregnant women in Anand group had correct knowledge of giving colostrum to new born as compared to 71% in Vadodara group. Knowledge about anemia and contraceptive methods was also not satisfactory in both the group of pregnant mothers.

Conclusion: It can be concluded that knowledge regarding various aspects of health and nutrition requires frequent reinforcement using different strategies for sustainable development related to maternal and child health under various government programmes.

Keywords: Knowledge, Anemia, Colostrum, Pregnant mothers.

Introduction

Pregnancy is a critical time of human development, and anything that comprises the fetal environment may have important and lasting effects on the child's future health. It is important as a society to prioritize helping women understand the impact that their lifestyle and dietary choices have on their children. Maximizing the health of the pregnant mother will ensure her child the best start at life possible. Nutrition is a vital component of foetal development. Limiting exposure to damaging substances such as nicotine, caffeine, food-borne bacteria and alcohol will aid in the child's development. Helping women deal with unpleasant side effects of pregnancy as well as more serious ones should be a focus of prenatal support. Encouraging healthy lifestyle practices such as moderate physical activity and healthy dietary practices adhering to the recommended dietary allowances will create an impact not only on the child's long-term health, but potentially the mother's as well. A good start in life is important and maternal nutritional status during pregnancy has repeatedly been demonstrated to be associated with pregnancy outcomes for the infant.

Continuum of care throughout pregnancy, birth, and after delivery has become a key program strategy for improving the health of mothers and new borns. Successful program implementation to improve the continuum of care relies on a better understanding of where the gaps are in seeking care along the pathway and what factors contribute to the gaps.

In recent time, even NITI AYOUG recommends promotion of healthy home diets for which people need to have correct knowledge about the same.

Materials and Methods

The study was planned to assess the Knowledge about various aspects of Maternal and Child health like importance of nutrition during pregnancy, Knowledge on correct IYCF practices, Anemia and Family planning method, of nutritionally high risk pregnant women. Women from four Primary Health Centres of Vadodara district and one Primary Health Centre of Anand district were enrolled.

The study was approved under the Department Of Medical Ethics Committee (No.F.C.Sc/IECHR/12). The Maharaja SayajiRao University of Baroda, Vadodara.

Enrollment of the Subjects

There are total 8 blocks in Vadodara district. Out of 8 blocks, One block- Dabhoi was purposively selected. Out of 3 blocks of Anand district Anklav block was purposively selected.

Before enrolling, mother's informed consent was obtained. In all 150 mothers were enrolled. 100 mothers from Dabhoi and 50 mothers from Anklav block formed the study sample. Information was collected using Pre tested questionnaire on Knowledge and Perception about Importance of nutrition during pregnancy, Correct IYCF practices, Consequences of Anemia, and Family planning.

Results and Discussion

Knowledge about selected aspects of maternal and child health

Data on knowledge and perception about Importance of nutrition during pregnancy, Correct IYCF practices, Consequences of Anemia, Family planning methods presented in Table 1

Table 1: Importance of nutrition during pregnancy

Particulars		Dabhoi N=100		Anklav N=50	
		n	%	n	%
Concept of healthy diet	Correct answer	52	52%	32	64%
	Partially Correct answer	41	41%	18	36%
	Don't know	7	7%	0	0%
Kind of food consumed during pregnancy	All 5 food groups	42	42%	15	30%
	Only Avoiding Jaggery	38	38%	22	44%
	Only Avoiding Ghee	2	2%	3	6%
	Only Avoiding Milk	3	3%	0	0%
	Avoiding both Milk and Jaggery	15	15%	10	20%
Pregnant women should eat more	Yes	92	92%	49	98%
	No	8	8%	1	2%
If yes, how many times	One and half times	31	31%	14	28%
	Whenever one feels hungry	61	61%	15	30%
	Any other	0	0%	20	40%
	Not applicable	8	8%	1	2%
Reason for eating more during pregnancy	For normal healthy child	19	19%	14	28%
	mother and child weight will increase	45	45%	3	6%
	For normal delivery	5	5%	2	4%
	For normal healthy child and normal delivery of mother	2	2%	0	0%
	Any other	23	23%	29	58%
	Don't know	6	6%	2	4%
Normal weight of new born	2.5 kg	31	31%	28	56%
	Any other (<2.5kg, 3 kg)	43	43%	21	42%
	Don't know	26	26%	1	2%
Weight gain during pregnancy	10-12 kg	47	47%	36	72%
	Any other	22	22%	4	8%
	Don't know	31	31%	10	20%

Data shown in table 1.1 revealed that only half of the pregnant women knew the concept of healthy diet in both the groups. Nearly 40% of the pregnant women in both the group opined about Jaggery to be avoided during pregnancy. The women's who told to avoiding certain items were due to misconception of having miscarriage or abortion (*Garampade*)(*balakpadijaaye*).Majority of the women knew about eating more during pregnancy. With regard to reason to eat more during pregnancy 45% of pregnant women in Dabhoi group could answer correctly so as only 6% of women in Anklav group.

Knowledge about the ideal weight of new born was said correct by 31% in Dabhoi group as compared to 56% in Anklav group (Fig.1) Knowledge about the weight gain during pregnancy among women was better and correct (10-12kg) in Anklav group (74%) and 47% in Dabhoi group.

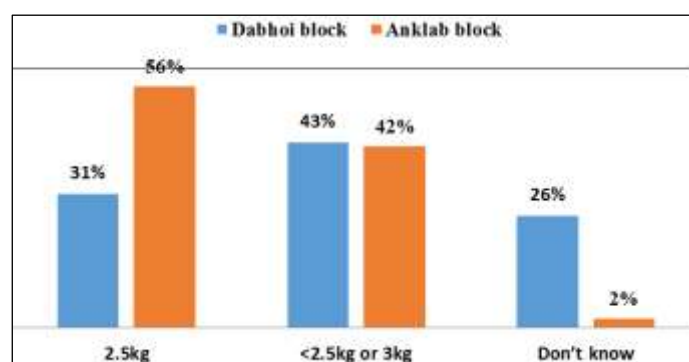


Fig. 1: Knowledge about normal weight of new born.

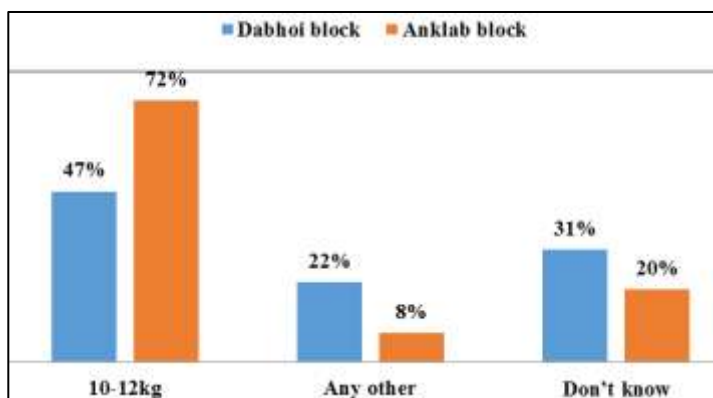


Fig. 2 Knowledge about weight gain during pregnancy

Knowledge about correct IYCF Practices were obtained which is presented in Table 2 and Fig. 3

Table 2: Knowledge about Correct IYCF practices

Particulars		Dabhoi N=100		Anklav N=50	
		n	%	n	%
Early initiation of Breast-feeding	Immediately after birth	52	52%	11	22%
	<30 mins after birth	30	30%	24	48%
	Same day	2	2%	2	4%
	Don't know	16	16%	13	26%
First fed to Child After birth	Mothers milk	83	83%	49	98%
	Water	4	4%	1	2%
	Jaggery/water	2	2%	0	0%
	Don't know	11	11%	0	0%
Colostrum feeding	Yes	71	71%	45	90%
	No	8	8%	4	8%
	Don't know	21	21%	1	2%
If yes, Why	Improving child's immunity	32	32%	6	12%
	Makes child's healthy	29	29%	33	66%
	Both	5	5%	0	0%
	Both and any other	2	2%	1	2%
	Don't know	6	6%	5	10%
	Not applicable	26	26%	5	10%
Reason for feeding mothers Milk only	Makes child healthy	46	46%	34	68%
	Gives Nutrition	12	12%	10	20%
	Proper Growth and Development	10	10%	0	0%
	For child's Health and Nutrition	10	10%	0	0%
	For child's Health, Growth & Development	1	1%	0	0%
	Don't know	21	21%	6	12%
Period for exclusive breast Feeding	Till 6 months	71	71%	49	98%
	4-5 months	6	6%	0	0%
	Any other	8	8%	1	2%
	Don't Know	15	15%	0	0%
Should water be given to The child	Yes	21	21%	17	34%
	No	68	68%	26	52%
	Don't know	11	11%	7	14%
If yes, Why	Child gets thirsty	14	14%	2	4%
	Don't know	10	10%	15	30%
	Not applicable	76	76%	33	66%
If no, Why	Mothers milk is enough	41	41%	23	46%
	Doctor said	1	1%	0	0%

	Infection	2	2%	0	0%
	Don't know	29	29%	3	6%
	Not applicable	27	27%	24	48%
Meaning of complementary food	After the completion of 6 months when the child is started giving food prepared at home or at AWC	57	57%	47	94%
	Any other	19	19%	1	2%
	Don't know	24	24%	2	4%
Age for Giving complementary food to the child	After completion of 6 months	79	79%	48	96%
	Any other	3	3%	2	4%
	Don't know	18	18%	0	0%

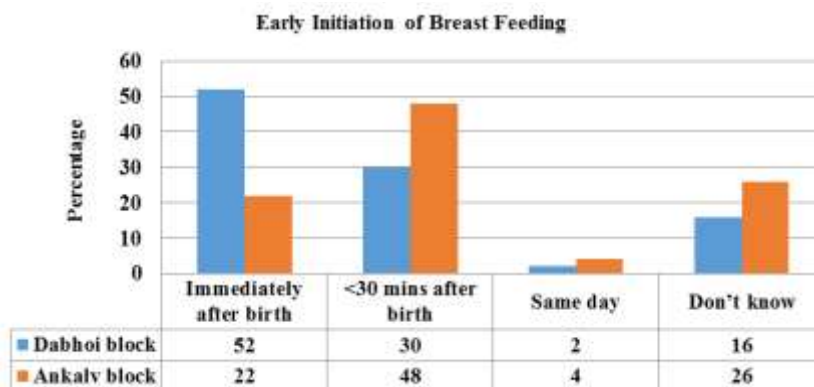
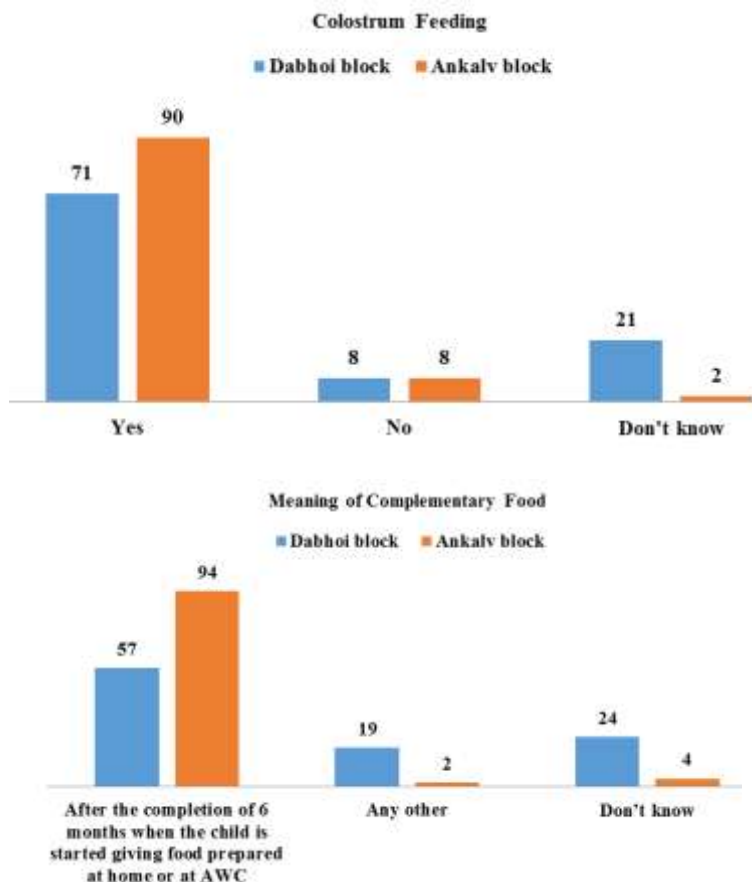


Fig. 3: Knowledge about early initiation of Breast feeding, colostrum and complementary food



Majority of the women were aware about giving the mother's milk as a first fed to the child. Reasons for giving colostrum was either for improving child's immunity or making child healthy in experimental group 61% and 78% in control group. With respect to reasons for giving mothers breast milk only 46% of the women opined that it is good for child's health in experimental group as compared to 68% in control group. Most of the women had knowledge of exclusive breast feeding in both the group. Sixty eight percent of pregnant women had a correct knowledge for not giving water to the new born in experimental group as compared to 52% in control group. Women opined that the child gets thirsty in experimental group (14%) and in control group (4%). With reference to correct IYCF practices, as seen in Fig. 3 82% of pregnant women from Dabhoi had correct knowledge about early initiation of breast feeding which is immediately after the birth as compared to 70% in Ankla group. Ninety percent of pregnant women in Ankla group had correct knowledge of giving colostrum to new born as compared to 71% in Dabhoi group. It was found that 94% of pregnant women had correct knowledge about the meaning of complementary feeding in control group against 57% in experimental group. Ninety six percent of women in Ankla group could answer correct age of introducing complementary food as compared to 79% in Dabhoi group. As shown in table 3 Knowledge about Anemia

Table 3: Knowledge about Anemia

Particulars		Dabhoi N=100		Ankav N =50	
		n	%	n	%
Heard the term anemia	Yes	33	33%	36	72%
	No	67	67%	14	28%
If yes, what	Pale Blood	6	6%	17	34%
	Low Hb	20	20%	19	38%
	Pale Blood, Low Hb	3	3%	0	0%
	Any other	1	1%	0	0%
	Don't know	3	3%	0	0%
	Not applicable	67	67%	14	28%
Signs of anemia	Pale eyes, nails, tongue	6	6%	0	0%
	Pale body	8	8%	10	20%
	Breathlessness	6	6%	2	4%
	No energy to do work	14	14%	3	6%
	Pale eyes, nails, tongue & No energy to do work	7	7%	0	0%
	Pale body & Breathlessness	4	4%	0	0%
	Breathlessness, No energy to work	0	0%	27	54%
	Don't know	55	55%	8	16%
Consequences of anemia	Low birth weight baby	17	17%	36	72%
	Miscarriages/Abortions	7	7%	0	0%
	Growth retardation	4	4%	1	2%
	Difficult labor	1	1%	1	2%
	Death of mother or child	7	7%	0	0%
	LBW, Miscarriage /Abortions	2	2%	0	0%
	LBW & Growth retardation	4	4%	0	0%
	Any other	8	8%	0	0%
	Don't know	50	50%	12	24%
Prevention of Anemia	Glv's	18	18%	1	2%
	Citrus fruits	17	17%	3	6%
	IFA tablets	5	5%	1	2%
	Glv's& Fruits	9	9%	30	60%
	Any other	3	3%	7	14%
	Don't know	48	48%	8	16%

As depicted in Table 3, pregnant women who had heard the term anemia was 72% in Ankla group and 33% in Dabhoi group. Knowledge regarding low Hb was 38% in Ankla group against 20% in Dabhoi group. Knowledge about signs and symptoms of anemia was poor in both the groups however 72% in both the groups could answer low birth weight babies as one of the consequences of Anemia. Again knowledge about preventive measure about anemia was poor in Dabhoi group as compared to Ankla group as shown in Fig. 4

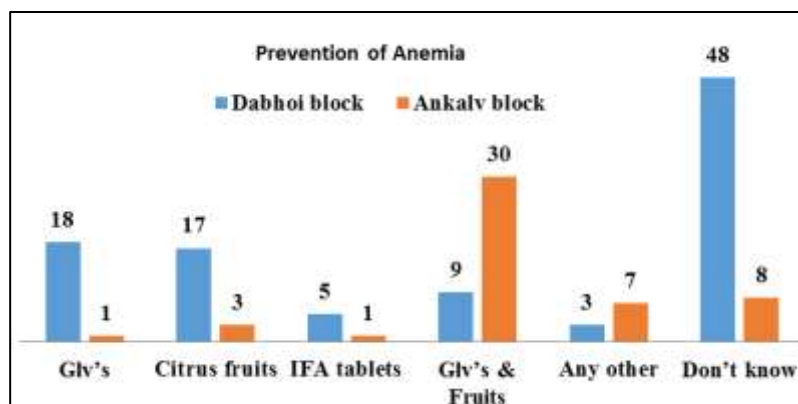


Fig. 4 Knowledge about prevention of anemia

Family Planning Method

Information was also elicited on spacing between two children and family planning methods which is presented in Table 1.4. Nearly 30% of pregnant women in both the groups had knowledge about the family planning method used for women like Pills, Copper T and sterilization. The knowledge about the contraceptives method used for man was better among women in Ankav group as compared to Dabhoi group. It was revealed that majority of the women in both the group had correct knowledge about the gap between two children (Fig. 6)

Table 4: Knowledge about family planning method

Particulars		Dabhoi N=100		Ankav N=50	
		n	%	n	%
Gap between 2 children	3 Years	70	70%	42	84%
	Any other	12	12%	4	8%
	Don't know	18	18%	4	8%
Family planning method for women	Pills, Copper T, Sterilization	22	22%	17	34%
	Pills, Copper T	35	35%	4	8%
	Pills	0	0%	13	26%
	Copper T	0	0%	5	10%
	Don't know	43	43%	11	22%
Family planning method for men	Condom	26	26%	21	42%
	Sterilization	0	0%	13	26%
	Condom, Sterilization	18	18%	7	14%
	Don't know	56	56%	9	18%

In the present study, knowledge of pregnant women in the area of basic nutrition, health, anemia and IYCN practices requires improvement to achieve targets of Rashtriya Poshan Abhiyan. In line of current findings, Mohiteet et. al³ in 2012 concluded that knowledge of breast feeding among primigravida mothers attending ANC clinic was of fair in quality.

Gyampoh, et.al (2013)¹ recommended that although most mothers were knowledgeable about recommendations, feeding practices were suboptimal, especially complementary feeding. Growth Monitoring Promotion exposure was associated with feeding knowledge only among mothers with children less than 6 months. Strengthening of feeding counselling focused on children above 6 months is recommended.

Henry Wamani et.al in² (2005) concluded that, Attention should focus on socio-economic empowerment especially education of the girl child, discouraging use of pre-lacteals, promoting use of oil to increase energy content

of complementary food and the timeliness of complementary feeding so as to optimise the benefits of breastfeeding and complementary feeding also, Sima Roy, Aparajita Dasgupta, and Bobby Pal (2009)⁴ concluded that Infant feeding practices in the community are strongly influenced by what people know, think, and believe about these issues. They are also strongly affected by social circumstances, economic factors, and other forces beyond an individual's intention and ideas. Effective communication for behavioural change should therefore be the prime objective for ensuring optimal infant feeding.

Conclusion

It can be concluded that knowledge about various aspects of health and nutrition aspects needs improvement and should be reinforced on village health and sanitation days to antenatal mothers and women of reproductive age group.

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Conflict of Interest: None.

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