

## Original Research Article

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# Study about the knowledge and attitude of antenatal women on postnatal care and immunisation

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## ABSTRACT

**Background:** Optimum postnatal care, exclusive breast feeding and vaccination are the most essential factors for the adequate growth and development of a child. Interventions to improve these can result in reduction in infant morbidity and mortality. The study was done to assess the knowledge level and attitude of antenatal mothers on postnatal care and immunisation.

**Methods:** This is a cross-sectional descriptive study done in a private medical college in Kerala conducted during September 1 to 31<sup>st</sup> 2018. All pregnant ladies attending the medical college hospital for antenatal check-up during the study period and willing to participate were included. Data collection was done by interviewing the participants using pretested and edited questionnaire and analysed by applying proportions.

**Results:** The awareness about postnatal care and breast feeding was good among participants while lacking in a few aspects. Majority of them had the right knowledge about pre-lacteal feeds, colostrum and timing of initiation of breast feeding. But there was a gap between the knowledge they possessed and what they practised when it comes to vaccination.

**Conclusions:** There is a need to educate antenatal mothers about various aspects of vaccination and postnatal care.

**Keywords:** Exclusive breastfeeding, Postnatal care, Vaccination

## INTRODUCTION

The postnatal period is an exceptional phase in the life of a woman and her newborn. The basics of child rearing are traditionally learnt by mothers from their elders and from the community. Sometimes these traditional practices prove to be harmful. It is said that by educating a mother we educate a family, a community and the whole nation. The health personals are obliged to educate the prospective mothers. Appropriate postnatal care including maintenance of good hygiene while nursing the newborn reduces the risk of perinatal infections. This can effectively check neonatal mortality to a great extent.<sup>1</sup> Providing adequate warm care significantly prevents neonatal morbidity. Neonatal mortality rate (NMR) of

India and Kerala are 25 and 6 respectively, which is explained by the improved literacy and health care in Kerala compared to rest of India.<sup>2</sup> This is also reflected in infant mortality rate (IMR) of Kerala which is 10 and that of India being 34.<sup>2</sup> Immunisation of infants and young children against infectious diseases is one of the most successful and cost-effective interventions in preventive health care.<sup>3</sup> The triumph of these programs relies on maximum coverage which can be affected by many factors like lack of proper awareness about the benefits and minor complications of vaccines. Parents agonise about the adverse effects of these vaccines and fail to foresee the potential benefits of the same. Being part of a strict-observance religious group is another reason to deny immunisation. Low socioeconomic status which

results in situations like inability to avail transportation facility leading to hindrance in acquisition of mandatory vaccinations may be another reason.

Breastfeeding is a pivotal human activity and is vital to the infants. The WHO recommends that for the first six months of life infants should be exclusively breastfed to achieve optimal growth and development.<sup>4</sup> Thereafter, the infant should receive nutritionally adequate and safe complementary food along with breast feeding for two years. Exclusive Breast Feeding (EBF) is defined as infant feeding with human milk without the addition of any other liquids or solids. The benefits of breast-feeding to both the mother and the baby have long been recognized. Despite strong evidences in support of EBF for the first six months of life, its prevalence has remained low worldwide and it is estimated that only about one-third of infants were exclusively breastfed for the first six months.<sup>4,5</sup> In India, breastfeeding appears to be influenced by social, cultural, and economic factors. Poor practices and attitude towards exclusive breastfeeding have been reported to be one of the major reasons for impoverished health outcome among children, particularly in developing countries. Therefore, promotion and acceptance of practices such as exclusive breastfeeding is of colossal importance especially in developing countries with marked level of poverty, huge burden of diseases and less access to safe water and proper sanitation.

Adequate postnatal care, immunisation practices and breastfeeding are among the major parameters affecting the IMR. The present study was done to assess the knowledge, attitude and practice of the same among antenatal women.

## METHODS

This cross sectional descriptive study was conducted at MES Medical College, Kerala from 1<sup>st</sup> September to 31<sup>st</sup> September 2018. The study participants were antenatal women who came for antenatal check-up at MES medical college obstetric OPD. Among the 173 expecting women 150 consented for the study. During their waiting period at the hospital, the subjects were contacted and briefed about the study and motivated to participate in the study. Those women who consented were given a pretested and validated semi structured questionnaire in Malayalam. The questionnaire was divided into 4 sections. First section was about the demographic details of the subjects. The other sections were about the knowledge, attitude and practice of vaccination, postnatal care and breastfeeding respectively.

### Statistical analysis

After collection of data, information gathered was entered into Microsoft excel 2007 version and analysed by using percentage/proportions and presented in suitable tabular and graphical forms.

## RESULTS

A total of 150 antenatal mothers were interviewed during the study period and majority of them were below the age of 30 years. 74% of them had previously delivered a baby. 26% have become pregnant for the first time (Table 1). On looking at the education status all of them completed 10th standard, 32.7% were degree holders and 21.3% were PG holders indicating relatively high literacy rate among the population.

**Table 1: Socio-demographic characteristics of participants.**

Parameters		Frequency	Percentage
Age	Less than 20	32	21.3
	20-30	93	62.0
	More than 30	25	16.7
Parity	Primipara	39	26.0
	Multipara	111	74.0
Education	10 <sup>th</sup> pass	69	46.0
	Degree	49	32.7
	Post-graduate	32	21.3
Occupation	Student	11	7.3
	House wife	111	74.0
	Govt sector	28	18.7
Socio economic status	Lower class	29	19.3
	Middle class	121	80.7

If we look at the awareness of vaccination (Table 2), 147 mothers (98%) were aware about vaccination of newborn at the time of birth. In relation to the parity 36 primipara women (92%) and 100% of multipara women were aware about it. Only 8% of primipara women were ignorant. 129 women (86%) were willing to vaccinate their children. Among the remaining 21 women (14%), 18 (12%) were not willing since their family was against it and rest 2% were apprehensive about the side effects.

**Table 2: Vaccination and source of information.**

Question		Frequency
Awareness of vaccination at birth	Mothers who were aware	Primipara 36
		Multipara 111
	Mothers who were not aware	Primipara 3
		Multipara 0
Willingness to vaccinate the child	Yes	129
	No	21

About the source of information, only 18% got the awareness from doctors. 54% got awareness from the health workers. 16% from family members and 12 % from mass media (Table 3).

**Table 3: Source of information about vaccination.**

	Frequency	Percentage
Doctors	27	18.0
Health workers	81	54.0
Family	24	16.0
Mass media	18	12.0

Table 4 shows that 82.5% of mothers who are multipara were willing to vaccinate their next child. Of the remaining 17.5, 2.5 % were not willing as they were ignorant about the need of vaccinating their children. The rest 15 % thought it was harmful to the baby.

**Table 4: Immunisation of elder child and reasoning.**

	Frequency	Percent
Yes	99	82.5
No (due to ignorance)	3	2.5
No (due to side effects)	18	15.0

Most of the women were aware about the need for warm care and the importance to keep the baby covered. But 83% believed that the objective of this was to prevent air borne diseases and 82% of primipara women and 83% are multipara women are under the impression that the purpose of covering the baby was to protect the baby against airborne diseases.

18% of primipara women think that it was for weight gain and only 17% of the multipara knew the true purpose of this.

**Table 5: Warm care.**

Questions		Frequency	Percentage
Need for keeping the baby covered	Yes	124	82.7
	No	26	17.3
Purpose to keep the baby covered	Against airborne disease	Primipara	31
		Multipara	92
	Weight gain	Primipara	8
		Multipara	0
	Warm care	Primipara	0
		Multipara	19

This indicates the better knowledge among multiparous women regarding the purpose of warm care than primiparous women. This may be due to the proper education during previous pregnancy and also due to the experience they acquired. Most of them were aware about keeping their babies very close to the mother for adequate warmth (Table 5).

**Table 6: Umbilical cord care.**

Question		Frequency	Percentage
Umbilical cord care	Nothing	132	88.0
	Antibiotic cream	18	12.0
Perumbilical erythema as a danger sign		150	100

Most of the women (132) were aware that nothing needs to be done for umbilical cord care.

All women knew that they should be cautious when redness around umbilical cord is noticed (Table 6).

**Table 7: Breast feeding.**

Question		Frequency	Percentage
Initiation of breast feeding	Within 1 hour of normal labour	131	87.3
	1 <sup>st</sup> day	19	12.7
Colostrum	Yes	150	100
Pre lacteal feeds	No	150	100
	Every 2 hours	117	78.0
Frequency of breast feeding	When child is awake	33	22.0

Most of the women knew that breast feeding is to be initiated within 1 hour of birth. All of them knew the importance of colostrum. Most of the participating women were conscious of the need to feed the baby every 2 hours and about the hygienic steps to be followed before, during and after breastfeeding. All of them were

aware that Prelacteal feed should never be administered to newborns (Table 7).

**Table 8: Jaundice in newborn.**

Jaundice in newborn	Frequency		Percentage
	Normal and require no evaluation	Require evaluation	
Normal and require no evaluation	36	24.0	
Require evaluation	114	76.0	

Most of the subjects (76%) think that even though jaundice is commonly seen in newborn it requires evaluation (Table 8).

## DISCUSSION

Among the women included in the study, almost all of them were aware about the fact that newborns have to be vaccinated. But most of the women were unaware of the types of vaccines given at birth or against what diseases they were indicated for. This shows that although all of them completed tenth standard, most of mothers were unaware about the basics of common vaccine names like BCG, HEPATITIS B and OPV. This indicates the need to include basics about vaccination in school syllabus.

Although most of the women were willing to vaccinate their children, some stayed behind, because of lack of approval from their family and the false belief that vaccination can harm their children. A good percentage of the mothers got knowledge about vaccination from mass media and other family members. Only 18% got their awareness from doctors. So, it is the responsibility of doctors especially obstetricians and paediatricians to clear all the misconceptions about vaccination. Among the multiparous women who had already vaccinated their children, most were ready to vaccinate their next child. The reasons for not vaccinating were due to the minor complications like fever, local swelling and febrile seizures that had occurred in other siblings. This could have been avoided by giving proper guidance regarding the same before vaccination.

Women in the study group were aware of the importance of warm care in newborns. Many were not aware about the purpose of keeping the babies covered. Most of the women believed that it was for preventing airborne diseases rather than for warm care. Multiparous women are better compared to primiparous women in practising warm care.

Majority of the mothers knew that nothing particular was needed for umbilical cord care. All women knew that they had to be cautious when redness around umbilicus is noticed and most of them were aware that umbilical cord usually falls off within 10 days. In present study, all respondents were aware that prelacteal feeds should not be given to the babies in contrast to study done by Girish

HO et al, in their study only 59.6% were aware.<sup>6</sup> Ekambaram M et al and Kulkarni J reported even level of awareness. In present study 100% knew about the importance of giving colostrum to the baby.<sup>7,8</sup> While a study in Nepal 26% were unaware of it.<sup>9</sup> 87.3% of present study participants opined that breast milk should be given within 1 hour after vaginal delivery which was better compared to a study done by Mohapatra I et al.<sup>10</sup> To improve this practice further, breast feeding awareness programmes can be implemented at the antenatal clinics in the form of lectures, seminars, discussions or by giving personalised classes to expecting women. This can also be done at the panchayath levels in the form of health education classes, with the support of social and mass media.

In this study majority of the participants were aware about the requirement of initiating breastfeeding within 1 hour of birth and the need to breastfeed every 2 hours. Majority knew that yellowish discolouration of skin may be seen in newborn and it requires evaluation. This is better compared to a study done by Eman Mohamed Ibraheim Moawad et al.<sup>11</sup>

## CONCLUSION

In present study it was found that the awareness among antenatal women about postnatal care and breastfeeding is satisfactory. This good level of awareness might be because of the high female literacy of Kerala. A huge gap exists between the knowledge and the practice of vaccination. It is necessary to create awareness among antenatal women about the timing of breast feeding. Counselling methods should be used to reinforce specific priority messages by health facility staff to the pregnant women and their family.

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