

Original Research Article

Awareness and attitude regarding postnatal care and immunization practice among antenatal mothers

Srinivasa S.¹, Avinash Agrawal^{1*}, Madhurya R. M.², Shrisha Hiremath³

¹Department of Pediatrics, ²Department of Obstetrics and Gynecology, ³Intern, Kempegowda Institute of Medical Sciences, Bangalore, Karnataka, India

Received: 16 January 2020

Revised: 30 January 2020

Accepted: 27 February 2020

*Correspondence:

Dr. Avinash Agrawal,

E-mail: dravinash019@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Under 5 mortality is a key indicator of health status of the country. Optimum care in postnatal period with immunization as per recommended schedule and exclusive breastfeeding with appropriate technology are the most essential factors for optimum growth and development of the child and to prevent under five mortality. The study was done to assess the knowledge and attitude of antenatal mothers on vaccination and postnatal care.

Methods: Total 150 pregnant women were required to answer a series of questionnaire related to demographic data, awareness and attitude towards postnatal care, breastfeeding and immunization.

Results: Total 90% of the women are aware regarding immunization at birth, 87% of them got the information from a person, who is directly related to health system. Statistically 97.3% mother were aware about importance to keep the baby covered. Every 3 out of 4 women knew that breastfeeding to be started within 1 hour of life. Only 40% were aware that prelacteal feed should never be given to newborns and 74% of the women think that jaundice in newborn requires evaluation.

Conclusions: There is a need to educate antenatal mothers about various aspects of immunization and postnatal care including breastfeeding.

Keywords: Antenatal mothers, Breastfeeding, Immunization, New-born, Post-natal care

INTRODUCTION

Developing countries like India face a lot of health challenges. As a result, status of neonatal health still lag behind those of developed world. A number of taboos and lack of knowledge and awareness in child rearing makes the newborn extremely vulnerable. This study was conducted to determine the contemporary knowledge and attitude of neonatal rearing, so as to explain and educate the mothers in future for proper postnatal care.

Postnatal period is a very crucial phase in the life of a newborn. All the basics of childcare are learnt by the mothers from their elders, healthcare professionals,

workers and community. Central and state government also run a number of programs for mother and child wellbeing. Some of the traditional practices are proven to be harmful for the babies. Appropriate knowledge and practice, while nursing the newborn decreases the risk of infections and effectively decreases morbidity and neonatal mortality.¹

Neonatal mortality of India is 30 deaths per 1000 live birth.² IMR of India is 41 per 1000 live birth.²

Vaccination of infant and young children against various diseases is highly effective and successful intervention in preventive medicine.³ India has one of the largest

vaccination program globally, but diseases like maternal and neonatal tetanus has alone led to 58000 newborn deaths in 2010.⁴ Lack of awareness and fear of minor complications are the main factors, which are preventing us to achieve the target level of immunization.

Breastfeeding is a very vital to infants. WHO recommends exclusive breastfeeding till 6 month of age to achieve optimal growth and development.⁵

According to Lancet series of 2008, breastfeeding promotion alone contributes to an 11.6% reduction in IMR.⁶

Breastfeeding advantages are not only restricted to child, its benefit to mother have long been recognized. In India, this practice appears to be affected maximum by cultural and social factors. Hence, it is very important for us in a country like India with huge burden of disease and poverty to improvise health outcomes.

METHODS

This study was conducted at Kempegowda institute of medical sciences, Bangalore from 1st November to 30th November 2019. Study included antenatal women came for antenatal checkup at obstetrics OPD. 150 women gave consent for the study. A written informed consent was taken from the subjects before their recruitment in the study and those not willing to participate were excluded from the study.

The questionnaires were distributed among them. The same questionnaire was asked, and sometime questions had to be explained, when women were unable to understand. But hints and suggestions totally avoided. The questionnaire was divided in different sections. First section was about the demographic details. The other sections were about knowledge, attitude of postnatal care including breastfeeding and jaundice.

Statistical analysis

Information gathered was entered in Microsoft excel 2010 version and analysed by percentage or frequencies and then presented as suitable tabular forms.

RESULTS

Authors interviewed 150 antenatal mothers in this study and every 4 out of 5 was less than 30 year of age and 20% were aged more than 30 years. 74.7% of them had previous delivered baby and 25.3% of mothers are going to become mother for the first time. More than 80% completed 10th standard and 30% of them were degree holders and 26% were 12th passed. 10% were educated up to 5th standard (Table 1).

Table 1: Sociodemographic characteristics of study participants.

Parameter	Frequency	Percentage	
Age	Less than 20 years	07	4.7
	20-30 years	114	76
	More than 30 years	29	19.3
Parity	Primigravida	38	25.3
	Multigravida	112	74.7
Education	5 th pass	15	10
	8 th pass	08	5.33
	10 th pass	43	28.66
	12 th pass	39	26
	Graduate	45	30

If doctors look for knowledge and attitude towards vaccination, 90% of the mother were aware about vaccination of the baby at the time of birth. Among them, 30 out of 38 (79%) of primigravida and 105 out of 132 (93.75%) multigravida women were aware about it. 141 out of 150 (94%) women were willing for vaccination and remaining 6% were not interested either because of family was against it or they was afraid for vaccination related side effects (Table 2).

If authors look at about the source of information, majority (87.3%) got awareness from health personnel, 65 women (43.3%) got awareness from doctors, 66 women (44%) from health workers. 10 women (6.7%) from their family members and media played role in making them aware in 2%. 6 women (4%) had not heard about vaccination (Table 3).

Table 2: Attitude regarding vaccination.

Questions	Frequency	Percent		
Awareness of vaccination of birth	Mother with awareness	Primigravida	30	20
		Multigravida	105	70
	Mothers without awareness	Primigravida	08	5.33
		Multigravida	07	4.67
Willingness to vaccinate the child	Yes	141	94	
	No	09	06	

Table 3: Source of information about vaccination.

	Frequency	Percentage
Doctors	65	43.3
Health workers	66	44
Family	10	6.7
Social or mass media	03	2
No source / not aware	06	4

Good knowledge among mother regarding warm care of the baby. 146 (97.3%) mother were aware about importance to keep the baby covered. Most of them even

aware that they should keep their baby close to them to provide proper warm care. 34 out of 38 primigravida and 101 out of 132 women think that purpose to cover the baby is to provide warm care to the baby. Knowledge is equally good between primigravida and multigravida. 90% of the women knew the true purpose. 4 women (10.5%) among primigravida think that it give protection against air borne disease. 5 women (3.33%) among multigravida are under impression that purpose to cover the baby is for their appropriate weight gain. 10.5% among primigravida and 5.36% among multigravida women think that covering the baby actually protect the baby against airway diseases (Table 4).

Table 4: Warm care.

Questions		Frequency	Percentage	
Need for keeping the baby covered	Yes	146	97.3	
	No	04	2.7	
Purpose to keep the baby covered	Against airborne disease	Primigravida	04	10.5
		Multigravida	06	5.36
	Weight gain	Primigravida	00	00
		Multigravida	05	4.46
	Warm care	Primigravida	34	89.5
		Multigravida	101	90.18

Table 5: Knowledge about breastfeeding.

Question		Frequency	Percentage
Initiation of breastfeeding	Within 1 hour of birth	115	76.66
	1 st day of life	33	22
	Later	02	1.33
Colostrum	Nutritious milk	61	40.66
	Just like normal breast milk	73	48.66
	Don't know	16	10.66
Pre lacteal feed	Yes	90	60
	No	60	40
Frequency of breastfeeding	Every 2 nd hourly	97	64.66
	When baby is awake	53	35.34

The 115 out of 150 (76.66%) women knew that breastfeeding to be started within 1 hour of life and 33 women (22%) thought that breastfeed can be initiated any time on 1st day of life. 40% of them had true knowledge regarding colostrum and approximately half (48.66%) of them thought it is just like normal breast milk only. 10.66% were unaware about colostrum. 64.66% of women were aware to feed the baby every 2nd hourly with good knowledge about hygienic steps. 35% of women thought that they should fed the baby only when the baby is awake. Only 40% were aware that prelacteal feed should never be given to newborns. 68% of the women were knew the requirement of the burping after each feed (Table 5).

The 111 out of 150 (74%) women think that jaundice in newborn requires evaluation. 1.3% had no idea regarding jaundice in newborns. Remaining 37 women thought that it is normal and does not require any kind of evaluation. (Table 6).

Table 6: Jaundice in new-born.

	Frequency	Percentage
Normal and not require evaluation	37	24.7
Require evaluation	111	74
They don't know	02	1.3

Knowledge and importance of maternal nutrition in antepartum and puerperal period, institutional delivery and family planning was provided to 114 (76%) women and 24 % women did not have appropriate and desired knowledge about antenatal care (Table 7).

Table 7: Knowledge regarding maternal health.

		Frequency	Percentage
Knowledge regarding maternal nutrition, institutional delivery and family planning	Yes	114	76
	No	36	24

DISCUSSION

Immunization is a timely step for prevention of disease in under 5 age group.⁷ In this study, 90% of the women were aware about requirement of vaccination at birth, but maximum among them were not knowing the disease name against which vaccines are indicated. Almost all of them have heard and knew about polio vaccination. It shows the importance of vaccination campaign program and need of spread of knowledge about other vaccine preventable diseases. It can be included in school syllabus to further strengthen the vaccination awareness. Though, doctors have leading place among vaccine producer countries, harbors one out of every third unimmunized child in the world.⁸ Universal immunization have not been achieved in its true sense and further work up is require to make the people understand and remove their dilemma regarding minor side effects of vaccination. Teaching mother alone does not help and doctors should provide comprehensive knowledge to the close family members also. A study has shown that pregnant women staying in joint family has a positive influence on vaccination of the child.⁹

With ongoing various maternal and child health schemes and programs, a very good number of expectant mothers had knowledge regarding vaccination, but to achieve 100% target level, social and mass media can play vital role.

Because of traditional practices. 97% of the women knew the need to cover the baby, though all of them are not know the actual reason. It shows the auto spread of knowledge and teaching one mother will help not only to her, but also to other mothers and future generations also.

Exclusive breastfeeding till 6 months of age is the most important practice for a newborn.⁵ Breastmilk has immunological, nutritional, economical and behavioral advantages and it promotes mother baby bonding.¹⁰ Breastfed children have decreased rate of allergies, asthma, gastrointestinal illnesses and infections which can cause brain damage or hearing loss.¹¹ Only 2 out of 5 mother were not willing for prelacteal feed. There is still the negative approach and attitude and special attention and gradual sensitization of mothers and their family members is the need of the hour. A study in Davangere,

Karnataka showed that 23% mothers had stopped breastfeeding because of minor illnesses like breast engorgement or inflammation or sore nipples.¹² Baby friendly hospital initiatives is a very good initiative, but to encourage the society further, breastfeeding awareness seminars or lectures can be conducted. Doctors can also take help from panchayath system with support from social and mass media to provide health education.

Yellowish discoloration of newborn is very known between mothers, but 26% mothers do not think that it requires evaluation and possible complications.

CONCLUSION

This study shows that awareness regarding postnatal care is satisfactory, but so many areas are there to look for. Sensitization of attenders, initiation of breastfeeding as soon as possible, frequency of breastfeeding, prelacteal feed, jaundice in new-borns and importance of family planning are the areas, where doctors can improve a lot and make the health status of the country better.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Yadav S, Saund M, Thakur J, Yadav P, Yadav S, Shah G. Knowledge, attitude and practices on the care of the newborn in postnatal mothers delivering at a tertiary care centre in Nepal. Sri Lanka J Child Health. 2016 Sep 5;45(3):189-92.
2. NFHS. National Family Health Survey-4 2015-16. Available at: <http://rchiips.org/nfhs/nfhs4.shtml>. Accessed 5 December 2019.
3. Bensen RM, Al-Zahmi FR, Al-Ali NA, Hamoudi RO, Ali NA, Schneider J, et al. Knowledge, attitude and practice towards immunizations among mothers in a traditional city in the United Arab Emirates. J Med Sci. 2011 Jan 9;4(3):114-21.
4. Elimination of Maternal and Neonatal Tetanus: UNICEF; 2014 July. Available at: http://www.unicef.org/health/index_43509.html. Accessed 5 December 2019.
5. The WHO Global Data Bank on Infant and Young Child Feeding. WHO Nutrition for Health and Development, 2009. Available at: <http://www.who.int> Accessed 5 December 2019.
6. The lancet series on maternal and child undernutrition executive summary. Available at: <http://www.imagine.in/Sem6-ExeSum.pdf>. Accessed 5 December 2019.
7. Hamid S, Andrabi SAH, Fazli A, Jabeen R. Immunization of children in a rural area of North Kashmir A KAP STUDY. Online J Health Allied Sci. 2012;11(1):10.

8. Vashishtha VM, Kumar P. 50 years of immunization in India: progress and future. *Ind Pediatr.* 2013 Jan 1;50(1):111-8.
9. Patra N. Universal Immunization Programme in India: The Determinants of Childhood Immunization. Available at: SSRN: <http://ssrn.com/abstract=881224>. Accessed 5 December 2019.
10. Shaili V, Parul S, Kandpal SD, Jayanti S, Anurag S, Vipul N. A community based study on breastfeeding practices in a rural area of Uttarakhand. *Nati J Commu Med.* 2012 Apr;3(2):283-87.
11. Beral V, Fear NT, Alexander P. Breastfeeding and childhood cancer. *Brit J Cancer.* 2000;82(5):1073-102.
12. Mallikarjuna HB, Banapurmath CR, Banapurmath S, Kesaree N. Breastfeeding problems in first six months of life in rural Karnataka. *Ind Pediatr.* 2002 Sep 9;39(9):861-5.

Cite this article as: Srinivasa S, Agrawal A, Madhurya RM, Hiremath S. Awareness and attitude regarding postnatal care and immunization practice among antenatal mothers. *Int J Contemp Pediatr* 2020;7:848-52.