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## A STUDY ON NEONATAL CARE PRACTICES IN A RURAL AREA OF BIJAPUR TALUK, BIJAPUR DISTRICT, KARNATAKA

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### ABSTRACT

**Background:** Neonatal mortality accounts for two-thirds of all infants death. Newborn care is influenced by cultural practices prevalent in an area apart from medical & economic causes. **Objective:** To document cultural practices prevalent in this area. **Methodology:** Rural community based cross – sectional study was conducted between 1<sup>st</sup> Jan 2011 to 31<sup>st</sup> March 2012. All full-term pregnant women who have delivered a live baby between 01-01-2011 to 31-12-2011 were included in the study. Information was collected in their home only after taking consent. **Results:** 220 post-natal mothers were interviewed. 79% were institutional deliveries. Of 220 mothers delivered, 83% wiped & covered the body before cutting the cord, 91% used a sterile cloth to clean the eyes, 98.64% used sterile instruments to cut the cord, 90% applied something to the stump of the cord, 88% babies were breastfed within 1 hour, 88.64% babies were given pre-lacteal feeds, 91.8 % mothers practiced applying kajal to the eyes and putting oil in the ears. **Conclusion:** Though hospital deliveries, initiating breast feeding have increased, cultural practices of giving pre-lacteal feeds, putting oil in the ears, applying kajal to the eyes, have not changed much. Behavioral changes regarding cultural practices can be brought by health education.

**KEY WORDS:** Rural area, Neonatal care, Cultural practices.



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## INTRODUCTION

The neonatal period is the most important phase in the life of a newborn for its survival and development. It is estimated that globally each year 4 million newborns die accounting to two-third of all infant deaths<sup>1</sup>. In India, of the 26 million newborns each year, 1.2 million die in the neonatal period. The problem is more acute in rural areas<sup>2</sup>. The causes of neonatal mortality are not only medical but also socio-cultural. The important medical causes are asphyxia, hypothermia, infections, Low birth weight, sepsis, tetanus & congenital malformations<sup>3</sup>, while social causes are illiteracy, ignorance & poverty. Most of these are preventable with cost effective interventions like keeping the baby warm, umbilical cord clean, practicing exclusive breast feeding, eye care, early recognition and prompt treatment of infections, immunization. The World Health Organization guidelines for Essential Newborn Care comprises initiation of breathing, thermal protection, eye care, early & exclusively breast feeding, cleanliness, immunization, management of illnesses & care of low birth weight babies<sup>4</sup>. The Government of India (GOI) introduced Essential Newborn Care under Child Survival & safe Motherhood Programme in 1992 and is a part of Reproductive and Child Health Programme since 1997. Integrated Management of Neonatal & Childhood Illnesses (IMNCI) and Facility based IMNCI (F-IMNCI) programmes were initiated to train primary health care providers so as to render quality services to rural and difficult to reach areas like hilly areas, tribal areas etc. Home-based Neonatal Care concept has been accepted in principle by GOI & trials have been going on<sup>5</sup>. As a result of these efforts, neonatal morbidity & mortality have declined but not to the expected level. This is because India has its own deep rooted cultural beliefs and practices with regard

to neonatal care which are not same all over the country. Not all customs & practices are harmful. Some of these have positive values while others, useless or positively harmful. Thus to effectively implement any programme & to bring change in the behavior of the people one must have knowledge regarding the cultural practices prevalent in that area. Hence this study was taken up to document the various practices prevalent in an rural area of this socio-economically backward district, Bijapur, North Karnataka.

### OBJECTIVES

To document the neonatal care practices in a rural area.

### MATERIALS AND METHODOLOGY

The present study was carried out in Shivanagi village of Bijapur taluk, Bijapur district. The population of the village was 9283 as per 2001 census. It was a community based cross-sectional study. Study was approved by the institutional ethical committee. It was carried out for 15 months from 1<sup>st</sup> Jan. 2011 to 31<sup>st</sup> March 2012. All mothers, who had delivered a live baby during 1<sup>st</sup> Jan. to 31<sup>st</sup> Dec 2011 & gave informed consent, were included in the study. Information was collected in a pre-tested proforma, by interview technique. Out of 242 women who had delivered a live baby during the study period, 22 mothers did not show interest in the study. Hence study was conducted on 220 mothers. Interview was conducted in their residencies only to ensure the practices followed personally. Data was analysed using SPSS v.16. Statistical tests like percentages were calculated.

## RESULTS

**Table 1**  
**General information on delivery**

S No	General Information	Hospital Delivery	Home Delivery	Total
1	Place of delivery	174(79%)	46(21%)	220 (100%)
2	Delivery conducted by			
	• Doctor / Trained staff	174(100%)	41(89.13%)	215(97.73%)
	• Untrained personnel	----	05 (10.87%)	05 (2.27%)
3	Baby cried immediately			
	• Yes	167 (95.98%)	42 (91.30%)	209 (95.0%)
	• No	07 (4.02%)	04 (8.70%)	11 (5.0%)

**Table 2**  
**Table showing Neonatal care practices immediately after birth.**

S No	Neonatal care practices	Hospital Delivery	Home Delivery	Total
1	Cleaning of air passage done	07	04	11 (5.0%)
2	Methods employed for cleaning air passage			
	a) Suction	07	--	
	b) Cotton Cloth	--	04	
3	Cleaning of Eyes done	100%	100%	100%
4	Methods employed for cleaning eyes			
	a) Sterile cloth/ cotton swab	165	37	202 (91.8%)
	b) Wet cotton swab	--	05	} 9 (4.1%)
	c) Unsterile cloth	--	04	
	d) Don't know	09	--	9 (4.1%)
5	Body wiped and covered with clean cloth			
	a) Before cutting cord	174	09	183 (83.18%)
	b) After cutting cord	--	37	37 (16.12%)
6	Instrument used for cutting cord			
	a) Sterile surgical blade	174	--	} 217 (98.64%)
	b) New blade	--	43	
	c) Unsterile instrument	--	03	03 (1.36%)
7	Application to cord			
	a) Nothing	15	7	22 (10%)
	b) Something (Turmeric paste, Cow dung ash, GV lotion, Betadine powder)	159	39	198 (90%)

**Table 3**  
**Neonatal care practices after half (1/2) hour.**

S No	Neonatal care practices	Hospital Delivery	Home Delivery	Total
1	Initiation of Breastfeeding			
	a) Within 1 hour	157	37	194 (88.18%)
	b) 1hour - 4 hour	017	05	22 (10.0%)
	c) 4hour - 8 hour	-	04	04 (1.82%)
2	Pre lacteal feeds given			
	a) Yes	156	39	195 (88.64%)
	b) No	018	07	25 (11.36%)
3	Practices related to bathing			
	a) < 1 hour	-	37	37 (16.82%)
	b) 1 to 4 hours	037	09	46 (20.91%)
	c) > 4 hours	137	-	137 (62.27%)
4	Applying kajal to eyes			
	a) Yes	159	43	202 (91.82%)
	b) No	15	03	18 (8.18%)
5	Putting oil in the ear			
	a) Yes	159	43	202 (91.82%)
	b) No	15	03	18 (8.18%)
6	Bath			
	a) Daily	-	-	207 (94.09%)
	b) Alternate days	-	-	13 (5.91%)

## DISCUSSION

Of the 220 deliveries during the study period, 174 (79%) deliveries were conducted in the hospital. Results are less compared to a study conducted in Pondicherry (95.7%)<sup>6</sup> but more than the study done at Adilabad (74.1%)<sup>7</sup>. 11(5.0%) babies (7 born in hospital & 4 in home) required air way cleaning. Eyes of 202 (91.80%) babies were cleaned using sterile material which is more than the study conducted at Delhi (30.4%)<sup>8</sup>. Steps to prevent hypothermia by wiping & covering the body by cloth was done in 183(83.18%) babies before cutting the cord. The results are much higher compared to study done at Lahore(23.5%)<sup>9</sup>. Sterile instruments were used to cut the cord in 217(98.64%) babies, which is more than Delhi study(78.3%)<sup>8</sup>. 198 (90%) mothers applied either cow dung ash, turmeric paste, GV lotion or Betadine powder to the umbilical cord stump. This is very high compared to the study done at Delhi(13.9%)<sup>8</sup> and Bengaluru(33.0%)<sup>10</sup>. In our study, 194 (88.18%) mothers initiated breast feeding within 1 hour, which is much higher than studies conducted in Uttar Pradesh (36.6% & 37.5%)<sup>11&12</sup> and Hyderabad, Andhra Pradesh (55%)<sup>13</sup>. 195(88.64%) babies were given pre-

lacteal feeds which is more than the studies done in South India (71.8%)<sup>14</sup> a UP (68%)<sup>12</sup>. Only 37 (16.16%) babies were given first bath within 1 hour which is less compared to study done at Chandigarh (22.9%)<sup>15</sup>, rural area of South India (69.6%)<sup>14</sup>. Traditional practices which are harmful like putting oil in to the ears to clean the ears, applying kajal to the eyes to ward off evil eyes are highly prevalent (91.38%). 169(76.82%) newborns have received BCG % Oral Polio immunization. It is unfortunate to note that none of the mothers received any health education regarding newborn care either during pregnancy or during discharge from hospitals.

## SUMMARY AND CONCLUSION

It is encouraging to note that

- 1) Institutional deliveries have increased;
- 2) Management of air way problems by using a suction pump is being practiced in the primary Health centers;
- 3) Almost all newborns born in hospitals have received BCG & Oral Poliovaccines.

Some of the harmful practices like -----  
a) applying something to the stump of the umbilical cord; b) putting oil in the ears;

c)applying kajal to the eyes; d)giving bath daily which may lead to hypothermia are practiced widely in home delivered babies as well as hospital delivered babies after they return to their homes. Health education by all those concerned directly or indirectly to improve Maternal and child health should be given to all women in reproductive age group & more so during pregnancy and at the time of discharge

from hospitals, to elders and decision makers in the home, peer groups, leaders whenever they come in contact. The components of health education should include the advantages of institutional deliveries and there by achieving 100% institutional deliveries; prevention of cultural practices that are harmful to neonates so as to bring a change in behavior.

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