

## Original Research Article

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# Parental perception of neonatal care in urban slums of Jammu city

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## ABSTRACT

**Background:** India is undergoing rapid urbanization and many rural residents relocate to urban regions in search of employment, better living conditions and access to education and health care facilities. Neonatal morbidity and mortality are attributed to misperceptions in the community about newborn care. In many parts of urban slums in India, care seeking from multiple providers and use of traditional/home remedies hampered appropriate and timely medical care seeking. Aim was to study awareness, knowledge and practice of newborn care among postnatal mothers in Urban slums of Jammu city.

**Methods:** This observational study was conducted in Urban slums of Jammu city. A total of 100 mothers of newborns residing in urban slums participated in the study after taking Informed Consent from them. A self-structured proforma was used to collect data.

**Results:** Most of the deliveries were conducted in hospital (82%) and 18% were home deliveries. Regarding newborn care practices 88% had wrapped the newborn with clean cloth immediately after birth. 58% of newborns were given first bath within 2-7 days. 39% of mothers-initiated breast feeding within 6-24 hours. Majority (68%) newborns were fed with colostrum. Regarding cord cutting procedures among home deliveries, it was observed that clean blade was used in 15 newborns while in 3 cases aseptic practice for cord cutting was not followed.

**Conclusions:** Good newborn practices like promotion of warmth, cord care, hygiene and early breastfeeding should be the main focus of community-based health workers. The present study concluded that some unhealthy neonatal care practices were still found to be prevalent which can be mitigated by increasing awareness among parents through IEC activities.

**Keywords:** Newborn, Breastfeeding, Knowledge, Practices, Mothers and antenatal care

## INTRODUCTION

New parents encounter worry, weariness, anxiety, and financial worries despite the fact that having a child is frequently a happy experience. Infants who need care in the neonatal intensive care unit (NICU) because of health issues cause parents' stress levels to increase.<sup>1</sup> Neonatal deaths and the severity of illnesses are attributed to misperceptions in the community about newborn care and poor treatment of unwell newborns. About 80% of

neonatal deaths worldwide are caused by birth asphyxia, infections, and preterm birth problems.<sup>2</sup> It is estimated that about five babies died per minute in 2019, with three-quarters of those deaths occurring within the first week. These newborn deaths account for a sizable fraction of deaths in low- and middle-income nations.<sup>3</sup>

In many parts of urban poor areas in India, care seeking from multiple providers and use of traditional/ home remedies hampered appropriate and timely medical care

seeking. Thus, there is a need to introduce community education programs for promoting care seeking from qualified health providers.<sup>4</sup>

India has experienced amazing technical advancements, rapid economic growth, and fast urbanisation, but it also has to deal with a significant issue rapidly rising urban poverty. About 100 million urban poor people live in slums and squatter camps in urban regions, where conditions include overcrowding, environmental pollution, and a lack of or insufficient access to essential services for sanitation, health, and nutrition.<sup>5,6</sup> Although urban poor areas are physically close to health facilities, only about half of pregnant women there (54.3%) receive three or more antenatal visits, more than half of births (56%) occur at home, and 87% of these home births are attended by untrained birth attendants.

Neonatal mortality rate among the urban poor is much higher (34.9 per 1,000 live births) than Neonatal Mortality Rate among the urban average (28.7 per 1,000 live births), indicating that urban poor neonates are not given the best care.<sup>7</sup> Hence, to reduce neonatal mortality, strategies must be devised to ensure safe neonatal care practices. The present study was undertaken to study awareness, knowledge and practice of newborn care among postnatal mothers in urban slums in Jammu city.

### Aims and objectives

Aim and objective of current investigation was to study awareness, knowledge and practice of newborn care among postnatal mothers in Urban slums of Jammu city.

### METHODS

This observational study was conducted in the urban slums of Rajiv Nagar and Narwal in Jammu city from 01 April 2023 to 30 September 2023. A total of 100 mothers of newborns residing in Urban slums were involved in the study after taking informed consent from them.

### Inclusion criteria

Mothers of Infants (0-1 year) and mothers residing in Urban slums were included.

### Exclusion criteria

Mothers who were not willing to participate and mothers who were speech and hearing disabled were excluded.

A self-structured proforma was used to collect the following details: antenatal history, place of delivery, socio demographic profile of mothers, and newborn care practices. The data was collected with the help of interview method from the participants in their understandable language at their respective residence.

### Statistical analysis

The data was collected and recorded into a Microsoft excel sheet. The data was analysed with the help of SPSS version 22.

## RESULTS

Table 1 depicted that the majority (71%) of the study subjects were in the age group of 20-29 years followed by 30-39 years (24%), 15-19 years (3) and >39 years (2%).

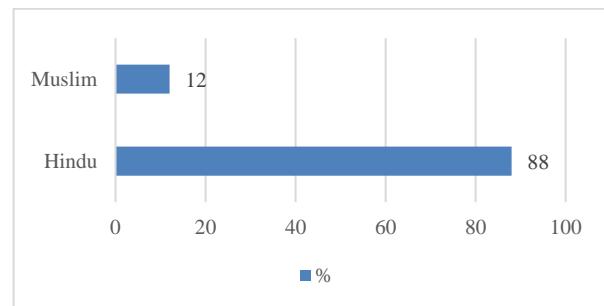
**Table 1: Age distribution.**

Age (years)	N	%
15-19	3	3
20-29	71	71
30-39	24	24
>39	2	2

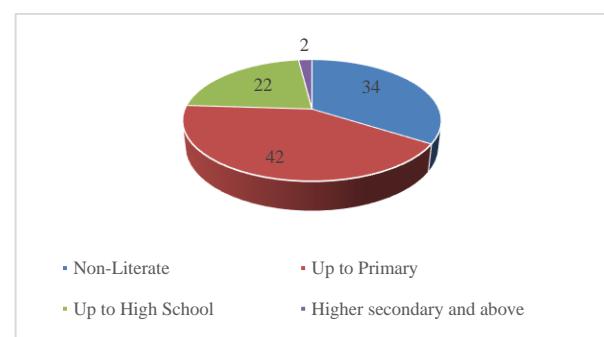
**Table 2: Occupation.**

Occupation	N	%
Homemaker	48	48
Daily wage earner	32	32
Part time worker	20	20

Figure 1 shows that majority of the study subjects were Hindu (88%) followed by Muslims (12%). It was observed that 42% of the study subjects received primary education, 22% studied upto high school and only 2 % studied higher secondary and above, whereas 34% of the subjects were illiterate as shown in Figure 2.

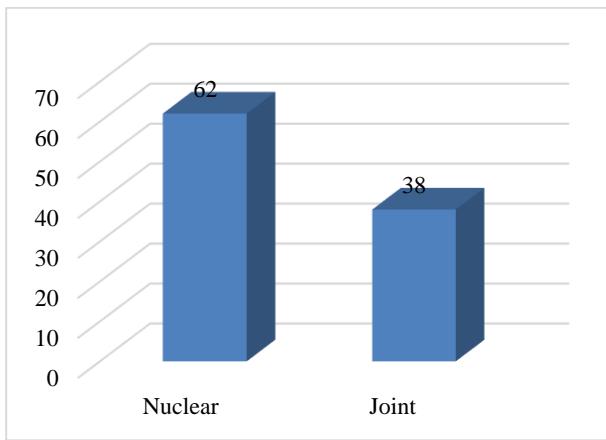


**Figure 1: Religion.**

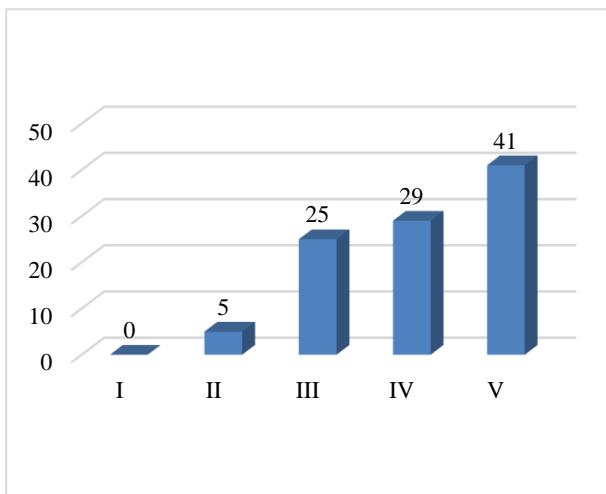


**Figure 2: Education.**

In our study the majority (62%) of the study subjects were from nuclear family whereas 38% lived in a joint family as presented in (Figure 3). Figure 4, showed that majority of the study subjects were from Class V socioeconomic status (41%) followed by Class IV (29%), Class III (25%) and Class II (5%).



**Figure 3: Types of family.**



**Figure 4: Socio-economic status.**

Table 2, depicted that majority of the study subjects were homemaker (48%) followed by daily wage earner (32%) and part time worker (20%). In the present study the most of the study subjects had  $\geq 3$  antenatal care visit (58%) followed by 2 visit (34%) and single visit & no ANC visit (4%) as presented in (Table 3). The (Figure 5), shows that in majority of cases the place of delivery was hospital (82%) followed by home (18%).

Table 4 shows the immediate newborn care practices. It was found that 88% had wrapped the newborn with clean cloth immediately after birth, and 12% had not wrapped the newborn with clean cloth. Most of the (58%) newborns were given first bath within 2-7 days followed by  $\leq 1$  day (22%) and  $>$  days (20%).

**Table 3: ANC visit.**

ANC visit	N	%
Single visit	4	4
2 visits	34	34
$\geq 3$ visits	58	58
No ANC visit	4	4

In majority of the study subjects breast feeding was initiated within 6-24 hours (39 %) followed by 1-6 hours (30%),  $\leq 1$  hour (22%) and  $>24$  hours (9%). Mostly (68%) newborns were fed with colostrum and pre lacteal feed was given to 44% newborns.

**Table 4: Immediate newborn care practices.**

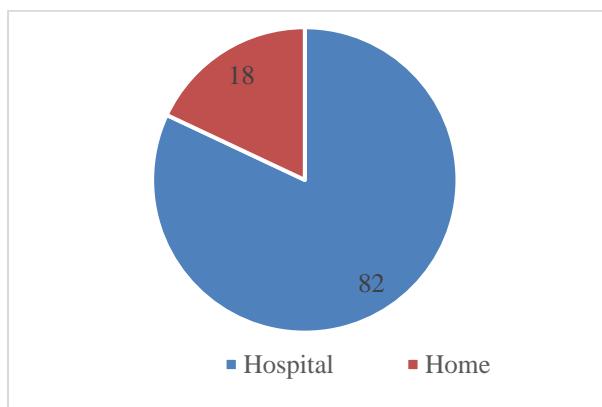
Steps	N	%
<b>Wrapping of newborn with clean cloth immediately after birth</b>		
Yes	88	88
No	12	12
<b>Time of first bath (days)</b>		
$\leq 1$	22	22
2-7	58	58
$>7$	20	20
<b>Time of initiation of breastfeeding (hours)</b>		
$\leq 1$	22	22
1-6	30	30
6-24	39	39
$>24$	9	9
<b>Feeding of colostrum</b>		
Yes	68	68
No	32	32
<b>Pre lacteal feed</b>		
Not given	56	56
Given	44	44

**Table 5: Immediate newborn care practices (home delivery).**

Steps	N	%
<b>Material used for cord-cutting</b>		
Clean blade	15	15
Old blade/knife/scissor, etc.	3	3
<b>Cord care</b>		
Use of antiseptic	8	8
Use of mustard oil	2	2
Use of ash, vermillion, turmeric, talcum powder, etc.	3	3
None	5	5

Regarding cord cutting procedures, it was observed that clean blade was used in 15 newborns while in 3 cases aseptic practice for cord cutting was not followed. Among 18 home delivery cases, it was found that an antiseptic was used to care the cord in 8 newborns, followed by use of ash, vermillion, turmeric, talcum

powder, etc. in 3 newborns, while mustard oil was applied to 2 newborns whereas in 5 newborns nothing was applied to the cord (Table 5).



**Figure 5: Place of delivery.**

## DISCUSSION

The data was analysed and discussed with previously available literature. In the present study the majority (71%) of the study subjects were in the age group of 20-29 years and mostly were Hindu (88%). This correlated with the study performed by Aggarwal et al who found that most of the study subjects were Hindu (97.8%). In our study, majority (42%) of the study subjects had primary education, but in the study done by Aggarwal et al a large group (67.9%) was illiterate.<sup>8</sup> In another similar study conducted by Gupta reported that the majority of the study subjects were Hindu (70.6%), most of the study subjects were illiterate (59.5%) and were from Class V socioeconomic status (67%), whereas in our study 41% were from Class V socioeconomic status and 34 % were illiterate.<sup>9</sup> The current study reported that most of the study subjects had  $\geq 3$  antenatal care visit (58%) and in majority of cases the place of delivery was hospital (82%). These results are comparable with the study performed by Nimbalkar found that most of the subjects had antenatal care visit (79.9%) and in majority of cases the place of delivery was hospital (82.46%).<sup>10</sup>

The immediate newborn care practices shows that 88% had wrapped the newborn with clean cloth immediately after birth, and 12% had not wrapped the newborn. Most of the (58%) newborns were given first bath within the 2-7 days followed by  $\leq 1$  day (22%) and  $> 7$  days (20%). In majority of the study subjects breast feeding was initiated within 6-24 hours (39%) followed by 1-6 hours (30%),  $\leq 1$  hour (22%) and  $> 24$  hours (9%). 68% newborns were fed with colostrum. Pre lacteal feed was given to 44% newborns. In a study carried out by Aggarwal et al, who reported that clean cord care and thermal care was done for 22% and 52.3% of slum home births respectively. In his study, 54.5% of mothers practiced initiation of breastfeeding within 1 hour of birth. 61.9% mothers avoided giving any prelacteal feeds, whereas 44.6% of mothers adopted exclusive breastfeeding throughout the

neonatal period.<sup>8</sup> In another study performed by Nimbalkar found that 85.7% newborns were dried immediately and in most of the cases (58.4%) breast feeding was done in 1 to 2 hours.<sup>10</sup>

In one study in Bangladesh, many parents followed the traditional practice of applying mustard oil on the umbilicus of the neonate for healing purpose. They also preferred to bathe the babies immediately after birth and shaving of hair for proper cleaning. Many mothers discarded the colostrum before breastfeeding the babies. It was also a common practice to feed honey to the babies instead of providing milk.<sup>11</sup> In our study, as mentioned earlier, among home deliveries (18 cases), it was found that antiseptic was applied to the cord in 8 newborns followed by use of ash, vermillion, turmeric, talcum powder, etc.in 3 newborns, use of mustard oil in 2 newborns and nothing was applied in 5 cases. Good newborn care practices were not followed by some parents due to wrong social beliefs, poor educational status and lack of awareness about the benefits of safe and hygienic neonatal practices. For instance, some of the mothers avoided giving colostrum thinking that it is harmful for the baby without being aware of the benefits of colostrum. The purpose of the study was also to impart knowledge and awareness regarding healthy and safe newborn care among slum dwellers.

### Limitations

A few limitations are bound to occur in a study like this which involves recalling of past practices and behaviours as this study is based on reported newborn care practices. A one-year recall period was taken to minimize recall bias.

### CONCLUSION

Clean, safe and hygienic newborn care practices have a positive impact on neonatal morbidity and mortality. Rather than costly technology it is skilled care which is more important in preventing neonatal mortality. Neonatal health can be improved, for instance, by simple low-cost practices, such as clean delivery conditions and promotion of early and exclusive breastfeeding. In mid and low-income countries like India, a simple low-cost package of essential newborn care delivered through a culturally sensitive community mobilization and behaviour change motivational programmes by community-based health workers improved key newborn care practices. These practices include promotion of warmth, cord care and hygiene, early and exclusive breastfeeding, and avoiding harmful practices like early bathing, colostrum discarding, pre-lacteals and cord applications. The present study concluded that even though a majority of study subjects were aware about newborn care practices, some unhealthy neonatal care practices were still found to be prevalent. The obvious recommendations from our study were that these unhealthy practices can be mitigated by increasing

awareness among the parents through IEC activities about the benefits of clean and safe neonatal practices for the wellbeing of neonate in the later life. Also, efforts should be made by healthcare authorities to ensure maximum hospital deliveries so that modern health care is made accessible to all including urban poor residing in slums.

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

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