NEWBORN CARE PRACTICE IN HOSPITAL VERSUS HOME DELIVERIES

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ABSTRACT

Background: Newborn mortality is one of the most neglected health problems in the developing world. In Pakistan it also remains very high. Most of these deaths could be prevented through cost-effective interventions. A large proportion of births continue to occur at homes.

The study was undertaken to describe newborn care practices in the hospital and at homes, as an initiative to focus this alarming problem.

Material and Methods: This comparative cross-sectional study was carried out during the months of June & July 2005 in District Mardan, Pakistan. Data was collected and compared in hospital-based and community-based deliveries. Gynae labour suite in District Headquarter Hospital Mardan was chosen as hospital-based facility. Irum colony in Mardan city was taken as community-based population. Information from 30 delivery cases was gathered; half the cases were hospital-based and half at homes. Sampling method was convenient. Descriptive statistical analysis was performed.

Results: The result of this study showed that among hospital deliveries 80% were conducted by nurses, 20% by skilled dais and none by doctor. Among these cleanliness was kept in 33%, cord care 100%, thermal protection 83.3%, breast feeding initiation within an hour was noted in 66.6%, spontaneous breathing was 100%.

All of the home based deliveries were conducted by unskilled birth attendants. Among these; cleanliness 16.6%, cord care 80%, thermal protection 100%, breast feeding within an hour 14%, spontaneous breathing 100%. In both of these groups eye care was 0%, and immunization was 100%.

Conclusion: This small scale study highlighted the deficiencies in the newborn care. Both hospital practices and traditional ones neglected the basic principles of newborn cleanliness, early breast feeding, eye care and cord care. A community based essential newborn care strategy is recommended.

Key words: Newborn, Home delivery, Hospital delivery.

INTRODUCTION

The birth of a baby is one of life’s most wondrous moments. Newborn babies have amazing abilities, yet they are completely dependent on others for every aspect – feeding, warmth and comfort.

Despite the improvements in child survival over the past 25 years, there is still virtually no effective health care system for newborns in many developing countries.

There are estimated 4 million neonatal deaths worldwide each year. Moreover it is estimated to account for 40% of under-five deaths and two thirds of infant deaths. A vast majority of these deaths occur in developing countries where 43% of births are attended by traditional birth attendants, the proportion generally higher in rural areas. In Pakistan more than 80% deliveries occur at home and 80% of these home based deliveries are attended by unskilled birth attendants.

In Pakistan, data from reproductive histories collected in the Population, Labor Force Migration Survey and Pakistan Fertility Survey show similar trend and thus highlighting our national data. Neonatal mortality is higher at level of 40-60 deaths/1000 live births. According to World Health Report 2005, it is documented as 57 per one thousand live births. It is alarming because this is one of the highest in the world. Global neonatal mortality rate is 36/1000, while in developing countries, the rate is 39/1000. Pakistan contributes to approximately 7% of the global burden of neonatal deaths. Achieving UN Millennium Development Goal (MDG) to reduce child mortality by two thirds by 2015, will not
be possible unless neonatal mortality is reduced by at least one half.

Most newborns that succumb every year die at home. They die at home for several reasons. First, most are born at home in developing countries and if they have complications, care seeking may be impeded by traditions. Second, the birth attendant is likely to be unskilled in managing labor and delivery, so birth trauma and asphyxia are common. Newborns with these conditions may quickly expire. Third, traditional household delivery and newborn care may place the newborn at increased risk of disease due to infection, anemia, hypothermia and hypoglycemia.

To address this issue, essential newborn care interventions are designed. These interventions are: cleanliness, thermal protection, early & exclusive breastfeeding, initiation of breathing (resuscitation), eye care, immunization, management of newborn illness and care of preterm and/or low birth weight newborns. 6,7,8,9

The challenge of reducing neonatal mortality requires solutions through research to inform program innovation and action-oriented policies designed to improve newborn health. The essential newborn care should be based mainly in the community that may prove life-saving for newborns.10,11,12,13

The purpose of this study to explore and compare existing essential newborn care practice in hospital –based facility and at home.

MATERIAL AND METHODS

This comparative, cross sectional study was conducted to learn about the essential newborn care practices in hospital versus home based deliveries. The study was based on sample size of 30; among these half were hospital-based (Group-1) and another half were community-based care (Group-2), selected on convenient sampling basis. Group-1 samples were taken from the Labour room of DHQ Hospital Mardan and Group-2 from the Irum Colony Mardan, during the period from first June 2005 to 31st July 2005.

A questionnaire was constructed on the basis of the study objectives. Questionnaire was pre-tested in similar settings and amendments made where required. Data was collected on this observation-based questionnaire. A list of variables consisted of globally agreed essential newborn care interventions.

Female investigators of the study conducted interviews from mothers visiting labour room of hospital and homes of newborn. The interviews obtained detailed information about immediate newborn care practices.

RESULTS

Mothers ages ranged 15-35 years. Eighty-two percent women were illiterate with minor criteria of being able to read and write.

The result of survey showed that in hospital based facility, 80% deliveries were conducted by nurses, 20% by skilled dais and none by doctors. Among these cleanliness was observed in 33.3% cases in immediate neonatal care, cord care was 100%, thermal protection 83.3%, breastfeeding within 30 min was 66.6% and within 1 day 33.5%.

All home based deliveries were conducted by unskilled birth attendants. Among these; regarding neonatal care, cleanliness was 16.6%, cord care was 80%, thermal protection was 100%, breastfeeding was initiated after a day in 86% and within a day 14%.

Spontaneous breathing and routine EPI immunization was 100% in both the groups. Eye care in both groups was 0%. (Table-1, Figure-1)

Table-1: Comparison of essential newborn care practice in Hospital versus Home deliveries.

<table>
<thead>
<tr>
<th>Essential newborn care</th>
<th>Hospital Delivery</th>
<th>Home Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleanliness</td>
<td>33%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Cord Care</td>
<td>100%</td>
<td>80%</td>
</tr>
<tr>
<td>Thermal Protection</td>
<td>83.3%</td>
<td>100%</td>
</tr>
<tr>
<td>Breast Feeding</td>
<td>66.6%</td>
<td>14%</td>
</tr>
<tr>
<td>Spontaneous Breathing</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Immunization</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Eye Care</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Fig-1: Comparison of essential newborn care practice in Hospital versus Home deliveries.
This study explored many interesting facts about the care practiced in the particular area under study. Newborns were placed onto the floor or other unhygienic surfaces. About 20% of the newborn babies had their cords cut with unhygienic tools, including old blades, knives and had potentially harmful substances applied to their umbilicus after cord cutting e.g. ash.

During this study, it was observed that health facilities had insufficient staff, drugs, equipment and supplies for deliveries and managing newborn problems. Even instruments in hospital facility were not properly sterilized. The community under investigation had poor utilization of nearest health facility mostly due to financial problems of the parents. Pregnant women and new mothers were mostly unaware of the danger signs before, during and after delivery and in newborn care.

**DISCUSSION**

This study revealed that newborn care is relatively neglected to date. Hospital based observations were painful evidence of poor care, regarding cleanliness, eye care, breast feeding initiation and thermal protection. Policy makers should think about strengthening of hospital care by evolving strategies that include concerned staff quality training, equipment /drugs supply and monitoring the services provided.

Traditional care providers at home, having very poor performance, cannot be ignored while trying to achieve better neonatal care in developing countries, like Pakistan, because most deliveries occur at home and health services may not be available. Even babies delivered in hospital may be affected by traditional practices after discharge.

Exhaustive search revealed no such study available or at least traceable for comparison in our country.

Limitation of our study is confines to urban population and observations on a small sample size. This study should be taken as initiative to identify and understand newborn care behaviors in the hospital and at homes. It is proposed that a large scale country level study should be undertaken to explore this situation in depth.

**CONCLUSION**

This study highlights the deficiencies in newborn care. Both hospital practice and traditional home care neglected the basic principles of newborn cleanliness, early initiation of breast feeding, eye and cord care.

Identification of these practices will help to adopt standard guidelines to the local situation.

**REFERENCES**


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