Knowledge and practices about massage and hygienic practices of mothers regarding infant care in Lucknow

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ABSTRACT

Background: Children are our future and our most precious resources. Health of the future children’s depends on the nurturing practice adopted by the family. The first four weeks of life constitute the “neonatal period”. The ideal basic needs for any new born includes breathing, warmth, cleanliness, and feeding mothers milk. The objective was to study knowledge and practices about massage and hygienic practices of mothers regarding infant care in Lucknow.

Methods: The present study was carried out amongst infants in urban areas of Lucknow city. Study unit was infant. An infant in present study was defined as a child aged less than 1 year of age. The present study was a Hospital-based cross-sectional study conducted for 6 months from July 2016 to December 2016. A total of 262 Infants were included in the study. Interview was taken from mothers of infants child attending OPD at a tertiary care Hospital in Lucknow city.

Results: A total of 262 infants were included in the study. There were 139 (53%) male children and 123 (47%) female children. In the present study majority (92.7%) of mothers cleaned their baby with water after it passed stools and washed their hands with soap and water (72.5%) after cleaning stools. Majority (81.6%) of the mothers were of the opinion that bones of the baby become strong after massage. Body massage was practiced in 92.4% of neonates Mustard oil was used by 60.4% mothers for massage of the neonates about 1/3rd of the mothers (37.2%) used Dabur red oil for massaging the neonates.

Conclusions: In present study majority of the mothers had correct knowledge and practices regarding massage and its benefit and about hygienic practices regarding handling of faeces and hand washing after cleaning of stool.

Keywords: Massage, Hygiene, Knowledge, Practices, Mothers

INTRODUCTION

Children are our future and our most precious resources. Health of the future children’s depends on the nurturing practice adopted by the family.¹ The first four weeks of life constitute the “neonatal period”. The ideal basic needs for any new born includes breathing, warmth, cleanliness, and feeding mothers milk. Then all new born babies’ requires essential new born care to minimize the illness and maximize their growth and development.

Clearly, essential care of new born will help to prevent many newborn emergencies, example umbilical cord may be the most common source of neonatal sepsis and also of tetanus infection, and good cord care could dramatically reduce the risks of these serious conditions.²

Nearly 50% of all infant deaths occur during the neonatal period. Half of this death occurs in the first seven days due to pre-maturity, neonatal tetanus, birth asphyxia and infections, which can be prevented by proper and timely
care of the new born (CSSM -1992 and family welfare-1992).³

WHO in its studies stated that 1/3 neonatal deaths occur due to the improper care or due to infections e.g. Pneumonia, tetanus, neonatal diarrhea etc., most new born deaths can be avoided by both preventive measures (such as clean delivery) and by effective management of complications (management of infection) and other daily care also have important preventive effects (breast feeding eye care etc.).³

In India infant mortality rates are still high compared to developed countries, one million new born infants die every year because of infection which often entered body via the umbilicus, fifty percent of the infant deaths occur during the first four week. Umbilical cord infections are a major cause of neonatal deaths and it occurs due to poor aseptic practices.³

Promoting health at home and within the wider community plays an essential part in the reduction of children’s morbidity and mortality rate. WHO’S report states that integrated approach, good feeding practice, immunization, improved hygiene and the healthy development of children will help to reduce the child mortality rates.⁶

Throughout history and in many cultures massage has been an important care giving practice. In India, Africa and Asia infants routinely receive massage from parents and other family members for several months after birth.

Objectives

To study knowledge and practices about massage and hygienic practices of mothers regarding infant care in Lucknow.

METHODS

Study population

The present study was carried out amongst infants in urban areas of Lucknow city. Study unit was infant. An infant in present study was defined as a child aged less than 1 year of age.

Study design

The present study was a Hospital-based cross-sectional study.

Study period: 6 months, July 2016 to December 2016.

Sample size

A total of 262 Infants were included in the study. Interview was taken from mothers of infants child attending OPD at a tertiary care Hospital in Lucknow city.

Tools of data collection

Data was collected using a pre-designed and pre-tested interview schedule, which recorded information on background particulars and specific individual information.

Data analysis and interpretation of data

The data was tabulated on Microsoft Excel sheet and analyzed using the software SPSS 17.0 for Windows.

RESULTS

A total of 262 infants were included in the study.

About one third of the children belonged to age group of 9-11 months. There were 28.6 percent children belonging to 7-9 months and 20.2 percent belonged to 4-6 months. There were 139 (53%) male children and 123 (47%) female children. The distribution of age of male and female children was almost similar. There were 29.0 percent children whose birth order was one and 27.0 percent had birth order two. However, 23.3 percent had birth order of 3 and 20.6 percent had 4 & + (Table 1).

In the present study majority (92.7%) of mothers cleaned their baby with water after it passed stools and washed their hands with soap and water (72.5%) after cleaning stools. Infants were bathed every day by the majority of the women mothers (80.9%) (Table 2).

| Age/birth order | Male (n=139) | Female (n=123) | Total (n=262) |
|-----------------|-------------|---------------|---------------|
|                 | No. | Percentage (%) | No. | Percentage (%) | No. | Percentage (%) |
| **Age (months)**|     |               |     |               |     |               |
| 1-3             | 27  | 19.4          | 23  | 18.6          | 50  | 19.1          |
| 4-6             | 25  | 18.0          | 28  | 22.7          | 53  | 20.2          |
| 7-9             | 41  | 29.5          | 34  | 27.6          | 75  | 28.6          |
| 9-11            | 46  | 33.1          | 38  | 30.9          | 84  | 32.1          |
| **Birth order** |     |               |     |               |     |               |
| 1               | 36  | 25.8          | 40  | 32.5          | 76  | 29.0          |
| 2               | 38  | 27.3          | 33  | 26.8          | 71  | 27.0          |
| 3               | 37  | 26.6          | 24  | 19.5          | 61  | 23.3          |
| 4 & +           | 28  | 20.1          | 27  | 21.9          | 54  | 20.6          |
Majority (81.6%) of the mothers were of the opinion that bones of the baby become strong after massage. Infants were bathed everyday by the majority of the mothers (80.9%). In the present study majority of the mothers knew that by oil massaging the baby bones might become strong (Table 3).

Body massage was practiced in 92.4% of neonates. Mustard oil was used by 60.4% mothers for massage of the neonates about 1/3rd of the mothers (37.2%) used Dabur red oil for massaging the neonates. More than half (65.2%) of the mothers massaged the neonates once a day. However, 22.7 percent of the mothers massaged the neonates twice a day (Table 4).

**DISCUSSION**

In the present study majority of mothers cleaned their baby with water after it passed stools and washed their hands with soap and water (72.7%) after cleaning stools. Neonates were bathed every day by the majority of the women mothers (80.9%).

In the present study majority of the mothers knew that by oil massaging the baby bones might become strong. Body massage was practiced in 92.4% of neonates and most common material uses for massage was mustard oil in 55 percent case, more than half of the mothers massaged the baby once a day.

Fernandez et al, studied in India that topical therapy with corn oil improved-thermoregulation of 5-7 week old infants in the community.4

Darmstadt et al, studied that oil massage of neonate is a nearly universal practice in South Asia.5

Darmstadt et al, in their study found that the typical timing of massage (from the first days of life), frequency (typically 1-3 times daily), pattern (total body) and duration (throughout infancy and childhood) of use suggest that the practice is an important event in daily child care, that significant time and resources are devoted to it, and that exposure of infant's skin to oil is significant. The most commonly used oil for infant massage is mustard oil.6

Ahmed et al, in their study in Bangladesh suggested that emollient therapy of preterm infants <33 weeks gestational age 3-times daily with sunflower-seed oil or Aquaphor reduced the odds of neonatal mortality.7

Singh et al, in a study in rural area of Ghaziabad also observed that 98 percent of mothers are giving massage to their babies and all the mothers said that massage makes the bones healthy and strong and majority (55%) of mothers were using mustard oil for massage.8

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**Table 2: Practices relating to handling of infant faeces (N=262).**

| Practices                                      | Number | Percentage (%) |
|-----------------------------------------------|--------|----------------|
| Washing material for cleaning of baby (after passing stool) |        |                |
| With water                                    | 243    | 92.7           |
| With soap and water                           | 06     | 2.3            |
| With ash/mud and water                        | 13     | 4.9            |
| Washing hands by mothers after ablution       |        |                |
| With only water                               | 58     | 22.1           |
| With soap and water                           | 190    | 72.5           |
| With ash/mud and water                        | 14     | 5.3            |

**Table 3: Knowledge about benefits of oil massage and bathing of baby (N=262).**

| Knowledge                                      | Number | Percentage (%) |
|-----------------------------------------------|--------|----------------|
| Strengthens the bone of the baby              | 214    | 81.6           |
| Baby achieves the milestones faster           | 48     | 18.3           |
| Bathing the baby                              |        |                |
| Everyday                                      | 212    | 80.9           |
| Others                                        | 50     | 19.1           |

**Table 4: Practice of massage.**

| Practice                                      | Number | Percentage (%) |
|-----------------------------------------------|--------|----------------|
| Massaged baby (n=262)                         |        |                |
| No                                            | 20     | 7.6            |
| Yes                                           | 242    | 92.4           |
| Materials used to massage (n=242)             |        |                |
| Mustard oil                                   | 133    | 55.0           |
| Ghee                                          | 13     | 5.4            |
| Dabur red oil                                 | 90     | 37.2           |
| Others                                        | 06     | 2.5            |
| Frequency of massage (n=242)                  |        |                |
| 3 to 4 times in a day                         | 30     | 12.2           |
CONCLUSION

In present study majority of the mothers had correct knowledge and practices regarding massage and its benefit and about hygienic practices regarding handling of feces and hand washing after cleaning of stool. Keeping infant hygiene clean is one of the cornerstones to prevent infant illness.

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REFERENCES

1. Achar ST. Paediatrics. Ist edition. Madras (India); orient Longman; 1977.
2. AIIMS New Delhi. Essential Newborn care. Module VII, Nightingale Nursing Times. Nurses J of India. 2007;3(5):66-7.
3. Park K. Text book of Preventive and Social Medicine. 18th edition. Bhanot publication; 2005.
4. Fernandez A, Patkar S, Chawla C, Taskar T, Prabhu S. Oil application in preterm babies, a source of warmth and nutrition. Indian Paediatr. 1987;24:1111-7.
5. Darmstadt GL, Saha SK. Traditional practices of oil massage of neonates in Bangladesh. J Health Population Nutr. 2002;20:184-8.
6. Darmstadt GL, Mao-Qiang M, Chi E, Saha SK, Ziboh VA, Black RE, et al. Impact of topical oils on the skin barrier; possible implications for neonatal health in developing countries. Acta Paediatr. 2002;91(5):546-54.
7. Ahmed A, Saha S, Chowdhury M, Law P, Ahmed S, Damistadt G. Topical skin barrier therapy and infection control measures improve survival of hospitalized very low birth weight neonates. 10th Asian Conference on Diarrhoeal Disease Nutrition, 2003.
8. Singh D. A study of the Knowledge, Attitude and practices regarding care of the neonate in rural community: Thesis submitted to the Faculty of Medical Sciences, University of Delhi; 2002.

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