OUTCOME OF PNEUMONIA ASSOCIATED WITH TRADITIONAL CHILD REARING PRACTICES IN INFANTS

ABSTRACT: AIM AND OBJECTIVE: To compare and assess the clinical features and outcome of pneumonia occurring in infants with traditional child rearing practices and in infants without traditional child rearing practices. To assess the influence of individual traditional child rearing practices with the outcome of pneumonia occurring in infants. MATERIALS AND METHODS: For this study detailed clinical history was taken. Infants with clinical and radiological evidence of pneumonia were selected as per the selection criteria. After eliciting necessary history some children were excluded using exclusion criteria. Detailed questionnaires were asked to mother / care taker which included details regarding various traditional child rearing practices. RESULTS: On comparing and analyzing the clinical parameters and outcome of pneumonia in infants between traditional child rearing practices and without traditional child rearing practice. it is found that increased morbidity pattern of pneumonia in infants associated with traditional child rearing practices is high while comparing non traditional child rearing infants. CONCLUSION: In my study increased morbidity in the infants is attributed to traditional child rearing practice, mortality was very less probably due to increased vaccination status and also due to increasing literacy rate in mothers.

Introduction

Traditional practices are rituals which are practiced from centuries which are prevalent in a community which may pertain to a wide range of activities. In India customs and tradition are followed in many families both urban and rural. Certain child rearing practices are being advocated by elders and are being followed traditionally even today. The customs and rituals which are followed have been passed on from one generation to another which are influenced by educational level and socio-economic status and values believed by the family and the society. The traditional practices are blindly believed by the people hence it is difficult to change them even if traditions are identified as wrong or useless practices.

Certain child rearing practices plays a significant role in causing pneumonia. This study was undertaken to assess the clinical profile and the outcome of pneumonia following those traditional child rearing practices in infants.

THE STUDY GROUP

Included the infants in the age group of 29 days to 1 year who showed clinical and radiological evidence of pneumonia and having history of traditional child rearing practices done

THE CONTROL GROUP

Included the infants in same age group admitted with clinical and radiological evidence of pneumonia and without history of traditional child rearing practices.

INCLUSION CRITERIA:

- All infants admitted with pneumonia in the age group 29 days to 1 year during the study period

EXCLUSION CRITERIA:

- Neonatal period
- Children with systemic disorders causing respiratory distress like pulmonary cardiac, renal, central nervous system or metabolic problems.

OUTCOME EXPECTED OUT OF THE WORK: To assess the adverse effect of traditional child rearing practices on outcome of pneumonia
METHODOLOGY

For this study detailed clinical history was taken. Infants with clinical and radiological evidence of pneumonia were selected as per the selection criteria. After eliciting necessary history some children were excluded using exclusion criteria.

Mother / care giver were given questionnaires which included details regarding various traditional child rearing practices like, Oil bath, oil instillation into nose, ear and mouth, blowing into the nose, mouth to mouth suctioning, Finger-mouth suctioning, application of irritant myrrh / saambirani fumes and giving native medications, was prepared and the accompanying person with the infant was asked.

All necessary investigations were done. X-rays were analysed during admission for evidences in the form of bronchopneumonia, patchy opacities, consolidation, pneumatoceles, and pyothorax

RESULTS AND DISCUSSION

DEMOGRAPHIC PROFILE OF INFANTS EXPOSED TO TRADITIONAL CHILD REARING PRACTISES:

Table: 1

<table>
<thead>
<tr>
<th>Age group</th>
<th>Group</th>
<th>Study(n=100)</th>
<th>Control(n=180)</th>
<th>Total(n=280)</th>
<th>Chi-square</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 4 months</td>
<td>Study</td>
<td>68(68.0)</td>
<td>54(30.0)</td>
<td>122(43.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>54(30.0)</td>
<td>68(68.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-6 months</td>
<td>Study</td>
<td>21(21.0)</td>
<td>60(33.3)</td>
<td>81(28.9)</td>
<td>40.41</td>
<td>0.0001</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>60(33.3)</td>
<td>21(21.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-12 months</td>
<td>Study</td>
<td>11(11.0)</td>
<td>66(36.7)</td>
<td>77(27.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>66(36.7)</td>
<td>11(11.0)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Study</td>
<td>100(100.0)</td>
<td>180(100.0)</td>
<td>280(100.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>180(100.0)</td>
<td>100(100.0)</td>
<td></td>
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</tr>
</tbody>
</table>

- During the study period, the total numbers of infants came as out patient census was 1,07,53
- Out of this, 280 infants had clinical symptoms and signs and with radiological signs of pneumonia.
- Out of 280, 100 infants had history of traditional CRP
- On analyzing all infants with pneumonia, 68% infants of <3 months had pneumonia when compared to the age group of 4-6 months (21%) and 7-12 months (11%) and is statistically significant.
- Also traditional CRP is done in 68% of <3 months old infants when compared with other age groups and is statistically significant.
- This may be due to family members visiting the mother and baby after delivery and the new mother is afraid of doing those child rearing practices. Also, noisy breathing in early infancy is attributed to colds and in order to relieve this symptom, various CRP are done.

According to the study done by Sudha Basnet et al in a case study of 264 the most common age group was between 2-36 months of age which correlates with the present study.

According to the study done by Garcia-Elorriaga et al in Mexico the most common age group was below 2 years of age which correlates with the present study.

<table>
<thead>
<tr>
<th>Locality</th>
<th>Group</th>
<th>Total</th>
<th>Chi-square</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>Study</td>
<td>72(72.0)</td>
<td>130(67.7)</td>
<td>210(75.0)</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>71(32.7)</td>
<td>107(72.0)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100(100.0)</td>
<td>100(100.0)</td>
<td></td>
</tr>
</tbody>
</table>

The study done showed that traditional beliefs were more prevalent in rural areas with 72% compared to urban area with 28%. Traditional beliefs are more common in rural due to lack of exposure and lack of education. The urban population is comparatively less due to education and exposure. According to the study done by Joseph L Mathew, 43 in India children in rural areas are more affected when compared to children in urban areas which is similar to the present study.

<table>
<thead>
<tr>
<th>Type of Family</th>
<th>Group</th>
<th>Total</th>
<th>Chi-square</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear</td>
<td>Study</td>
<td>25(25.0)</td>
<td>96(53.0)</td>
<td>121(43.2)</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>96(53.0)</td>
<td>25(25.0)</td>
<td></td>
</tr>
<tr>
<td>Combine d</td>
<td>Study</td>
<td>45(45.0)</td>
<td>67(37.2)</td>
<td>112(40.0)</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>67(37.2)</td>
<td>45(45.0)</td>
<td></td>
</tr>
<tr>
<td>Joint</td>
<td>Study</td>
<td>30(30.0)</td>
<td>17(9.8)</td>
<td>47(16.8)</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>17(9.8)</td>
<td>30(30.0)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Study</td>
<td>100(100.0)</td>
<td>100(100.0)</td>
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</tr>
<tr>
<td></td>
<td>Control</td>
<td>100(100.0)</td>
<td>100(100.0)</td>
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</tr>
</tbody>
</table>

In this present study, pneumonia associated with traditional CRP is more commonly seen in combined families (45%) when compared with nuclear family (25%) and joint family (30%) and is statistically significant.

This might be due to traditional practices followed by the elders and the mother in the family. According to the study done by Manju Salaria42 pneumonia is more common in the family with overcrowding which correlates with the present study.

<table>
<thead>
<tr>
<th>Age of the mother(yrs)</th>
<th>Group</th>
<th>Total</th>
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<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>Study</td>
<td>69(69.0)</td>
<td>127(70.5)</td>
<td>196(76.0)</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>127(70.5)</td>
<td>69(69.0)</td>
<td></td>
</tr>
<tr>
<td>20-30</td>
<td>Study</td>
<td>14(14.0)</td>
<td>49(27.3)</td>
<td>63(22.5)</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>49(27.3)</td>
<td>14(14.0)</td>
<td></td>
</tr>
<tr>
<td>&gt;30</td>
<td>Study</td>
<td>17(17.0)</td>
<td>4(2.2)</td>
<td>21(7.5)</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>4(2.2)</td>
<td>17(17.0)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Study</td>
<td>100(100.0)</td>
<td>100(100.0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>100(100.0)</td>
<td>100(100.0)</td>
<td></td>
</tr>
</tbody>
</table>
In this study the incidence of traditional CRP is more with the mothers less than 20(69%) followed by >30yrs(17%) and 20-30 yrs (14%) which shows the significant difference with p value of 0.0001.

This study shows mothers education plays a very important role in traditional beliefs. The incidence of traditional CRP is more in mothers who have not attended school with 52% followed by primary school with 28%, followed by mothers who attended school up to +2 with 20%, with no cases with mothers who are graduates. The above study showed that traditional beliefs are blindly followed by the mother who are very less or not education. Due to lack of exposure they believe the traditional beliefs followed by their elders. This may be attributed to the knowledge of bad child rearing practices and consequences of it are known to the mother as they get experienced with aging and with more education.

According to Ritu Gupta study5 the graduate mothers despite educational status are still influenced by elders, associated with religious people and quacks which is similar to the present study.

This present study shows the incidence of pneumonia in infants associated with traditional CRP done or suggested by Grandmothers (53%) followed by elders nearby (36%),Great grandmothers (6%), Mother (5%) and the significant p value 0.0001.

The mothers who are not equipped with sufficient knowledge about newborn care and using traditional child care methods may sometimes cause harm to their newborn and even cause handicaps in them. In our community women receive information from family members, elders and traditional birth attendants. Hence these groups, expectant mothers and mothers of newborns should be targeted with educational messages. Newborn care, similar to other human behaviour, is influenced by cultural beliefs. Hence exploration of cultural belief and practices of newborn care is essential.12

**SUMMARY AND CONCLUSION**

The traditional beliefs and practices still forms a major constituent of the therapeutic modalities employed as primary healing practices and seem to be very common in our country practised by both educated and uneducated people.

Among the acute respiratory infections pneumonia is the most commonly attributed to childhood mortality. For infants with pneumonia following traditional CRP having increased morbidity especially prolonged monitoring and treatment in ICU setting care, increases the expenditure for the Government towards these infants.

The influence on mother's optimal age at marriage, better awareness about child birth, government schemes on institutional deliveries and better educational status may reduce traditional child rearing practices in our country.

Most common traditional child rearing practices influencing outcome pneumonia in infants are blowing into the nose, finger mouth suctioning and sambirani fumes. These traditional the major traditional practices influencing outcome of pneumonia in infants.

Child-rearing customs and beliefs are not the same for all Indians. India is composed of a diverse population with assorted...
religious, political and cultural views on child-rearing practices. With so many differences among Indians, it is impossible to ascribe a unified set of customs and beliefs about child-rearing to the entire country. Influential factors on child-rearing practices such as socioeconomic status, education and individual experience vary from family to family. The traditional Indian parenting is shaped by the cultural and religious values of the land, generational wisdom, and life experiences.

The goal of parenting is comprehensive development of children and it integrates the cognitive, emotional, and spiritual components of an individual’s growth. It includes both the personal and social dimensions of human growth and development.

In India approximately 75 million children did not have adequate nutrition and shows the social differences related to discrepancies in lifestyle, including health, access to education and attitudes toward child-rearing practices.

In India mothers spend a lot of time in close physical contact with their young children. As babies, Indian children might receive a daily massage and sharing a parent’s bed is quite common. For the first six months, around 90 percent of mothers in India breastfeed. Some continue to do so for up to two years Among Kurubas and Soliga Tribes from South India,” reveals that showing affection can greatly benefit a child’s personality development.

Childhood clinical pneumonia is more common in India among the developing countries. The most common risk factors are low birth weight, malnourishment, lack of measles vaccination and traditional child rearing practices. Pneumonia can be prevented by administering Hib and pneumococcal vaccines.

Team approach concepts are needed and more social workers and paramedical staff should be in attendance at the out patient department to educate the mothers on various child rearing practices.

BIBLIOGRAPHY


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34. Eric A. F. Simoes et al, Acute Respiratory Infections in Children, Disease Control Priorities in Developing Countries, pg 483-497.


