A Study of Correlates of Acute Respiratory Tract Infection (ARI) among Infants in a Selected Area of Udupi District.

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Introduction

It is a well recognized fact that Acute Respiratory tract infection (ARI) among children is one of the serious diseases, which accounts for high morbidity. It has been estimated that about 20% of the infants born in developing countries fail to celebrate their fifth birthday and one fourth to one third of the child morbidity is attributed to ARI as underlying or contributing causes.

It was found that repeated attacks of ARI may lead to severe malnutrition. Children with ARI suffer from loss of appetite or blocked nose and breathing difficulties that may lead to sucking difficulty in breastfed babies. Family members and trained specialists play an important role in preventing these by health promotion, preventive activities and development and management of effective child health programme.

Keeping these views in mind, a descriptive study on correlates of ARI among infants in a selected area of Udupi District was undertaken. Purpose of the study was to find the mother's ability in different aspects of ARI and trace the relationship between selected factors in order to find ways of preventing or reducing the occurrence of ARI among infants.

The objectives of the study were to :

* Find out the occurrence of ARI among infants in the past three months when the child was treated by a health care agent as expressed by their mothers
* determine the occurrence of ARI in a selected month during the period of the study as recorded by the mother on an assessment card
* find out the knowledge of the mother regarding ARI and determine the association between ARI and the selected factors as physical health of the infant as measured by height and weight, maturation of the infant at birth; crowding at home; smoking in the house; environmental pollution; type of fuel used for cooking; a mothers health status; knowledge of the mother regarding ARI; socio-economic status; and type of feed.

Research methodology:

The conceptual framework adopted for the study was based on "fish bone model" showing the cause and effect relation between ARI and selected variables. A descriptive survey approach was used for the study. A cohort group of 110 mothers and infants above three months were selected for the study. Samples were selected by a non-probability purposive sampling technique.

Following instruments were used to collect the data: structured interview schedule to test knowledge of mothers regarding ARI; observation checklist to find the physical health status of the infant and mother's and assessment card to find the occurrence of ARI in a selected month.

Major findings of the study

It was observed that maximum number of infants i.e., 49 out of 110 (44.54%) were in the age group between four to six months. Mothers belonging to middle class family were 42.72%. It was observed that all children had ARI at least once during the past three-month's period to well to one-month period of assessment. It was also seen that, majority of children i.e., 60.9% had ARI four to six times in the past three months. During the one-month observation, maximum number of children (43.6%) had at least suffered from ARI once.

With regard to the knowledge of mothers regarding ARI, it was found that maximum number of mothers had average knowledge.

Chi square values computed between occurrence of ARI and selected variables revealed a significant association between occurance of ARI and physical health of the infant (($x^2_{(2)} = 8.999$, $p<0.05$) and environmental pollution (x^2 (2) = 7.235, $p<0.05$). There was no significant association between occurrence of ARI and other variables under study.

Discussion:

The findings of the study showed that majority of mothers had average knowl →

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edge about ARI. Similar observation has been made by Bandhopadyaya (1972), who observed that ability of mothers to identify signs and symptoms were not adequate. A significant association was found between occurrence of ARI and malturation of infant at birth. The findings of this study supports the observation made by Bhargava (1979), who found that pre-term infants suffered higher respiratory illness. A significant association was also found between occurrence of ARI and environmental pollution. This is supported by the study done by Rustogi (1993), Cohen (1995), Etzel (1995), Dutt (1987), who inferred that environmental pollution affected respiratory health of children. But the findings don't agree with the findings of Wesley and Loeing (1996), who found no relationship between ARI and Pollution.

No association was found between occurrence of ARI and factors as physical health of the infant; crowding at home; smoking in the house; type of fuel used for cooking; mothers health status; socio-economic status. This study findings did not agree with findings of Fergusson (1980), who found that smoking in the house predisposed the infants to get ARI and Rustogi (1993), Schimitberger (1993), Cohen (1995), and Dutt (1987), who found that air pollution and fuel from kitchen affected the respiratory health of infants.

Conclusion:

ARI Continues to be one of the leading cause of child morbidity. Attention needs to be paid more on intensive planning of educational programmes for mothers of infants regarding prevention and treatment of ARI.

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