

Antibiotics and pediatric acute respiratory infections in rural india,health care providers' knowledge, practical competence, and reported practice.

Dr.R.Lingeswaran ravi*, Dr.P.Parthiban**, Dr.R.Murali***

*Department of Community medicine,CHRI

**Department of Community medicine,CHRI

Abstract- Problem statement: Acute respiratory infections (ARIs) are among the leading causes of morbidity and mortality among children in low and middle-income countries. In India, ARI symptoms are the most common reason for seeking health care for children.

Objectives: To assess knowledge, practical competence, and reported practices among health care providers about antibiotics to treat acute respiratory infections in children under 5 in rural India.

Design: This is a descriptive cross-sectional study conducted November to December 2013 in Kanchipuram district, India. Inclusion criteria were all health care providers (HCP) who prescribe or dispense drugs for treatment of children under 5 in the district, excluding traditional healers.

Setting: The study setting was Pooncheri, Kanchipuram dist. The district covers many number of villages.

Study population: HCPs who provided neither health services nor western drugs for children under 5 were excluded from the study. To check the completeness of the list, communal health staff and surveyors travelled around the commune to double-check. In all, of the 400 health care providers on the list, 36 were ineligible due to incorrect address, not treating children, or using only herbal medicines for treatment.

Results: Of the total 364 respondents, 45% accept that the prescription of antibiotic leads to antibiotic resistance, which is ultimate treatment failure for both patients and community. However antibiotic prescription is common because of patients satisfaction. 25% stated antibiotics should be used if the child had cough and runny nose without fever, and 75% in cases where fever is included. In all, 19% of HCP had correct knowledge about the use antibiotics for treatment of ARI among children under 5. The use rate of antibiotics in common colds (89%), It was also (86%) in pneumonia, however, it was significantly lower among those who had correct knowledge. According to reported practice, children in the latest encounters were mild ARI 64%, then severe ARI 18%, and others 18%; of those, the antibiotic use for treatment was 94%, 86%, and 80%, respectively. Beta-lactams were most likely antibacterials used regardless of the severity of the diseases.

Conclusion: Antibiotics are commonly dispensed or prescribed unnecessarily for common colds. Continuous training

in respiratory syndrome approach and supervision are needed. Furthermore, changes to the motivations and expectations surrounding physician-patient interaction are recommended to improve antibiotic use.

Index Terms- Antibiotics, Paediatric, Health care provider's knowledge.

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AUTHORS

First Author – Dr.R.Lingeswaran, Post-graduate M.D, Community medicine, CHRI.

Email (dringeswarancommunityhealth@gmail.com)

Second Author – Dr.P.Parthiban, Post-graduate M.D, Community medicine, CHRI.

Email (pharty77@gmail.com)

Third Author – Dr.Murali, Professor and head of the department, Community medicine, CHRI.

Email (drsmurali50@gmail.com)

Correspondence Author – Dr.R.Lingeswaran, Post-graduate M.D, Community medicine, CHRI.

Email (dringeswarancommunityhealth@gmail.com)