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

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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 an 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.

REFERENCES


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