A collaborative approach to promote appropriate antibiotics use with practical considerations for sick-child exclusion policies in Pennsylvania

Nkuchia M. M’ikanatha1, Nicole M. Hackman2, Phillip Sirinides3, Anne Dodds4, Sharon B. Meropol5

1Pennsylvania Department of Health, Harrisburg, PA; 2Department of Pediatrics, Penn State College of Medicine, Hershey, PA; 3Consortium for Policy Research in Education of Pennsylvania, Philadelphia, PA; 4Keystone STARS, South Central Regional Key, York, PA; 5The Center for Child Health and Policy at Rainforests Babies and Children’s Hosp, Care Western Reserve Univ Sch. of Med., Cleveland, OH

Introduction

- Widespread antibiotic use drives the emergence of antimicrobial resistance
- Children in childcare centers are often prescribed antibiotics for acute respiratory infections, primarily caused by viruses for example: cold, influenza, sore throat, otitis media and bronchitis
- Children in group settings experience acute respiratory illnesses due to: close proximity with others
- Interact with their environment
- The main objective of sick-child exclusion policies is prevention of communicable diseases
- However, misuse of exclusion policies contributes to overuse of antibiotics in children

Aim

- Develop practical guidance for implementing model sick-child exclusions based on a previous study (2)
- Part of antimicrobial stewardship initiatives supported by CDC Get Know When Antibiotics Work in the Community Program

Methods

Sick-child Exclusion Policy Advisory Group and Surveys

- During 2012-2014, created an advisory group
- Pediatricians, childcare directors, public health officials, representatives from the state licensing agency and Child Care Aware America
- Surveyed directors of a random sample of 904 licensed facilities regarding exclusion policies
- Sample from ~8,000 licensed facilities serving ~24,200 Pennsylvania children

Information reviewed by the Advisory Group

- Group reviewed information from various sources (Figure 2):
  - data from surveys on current practices on sick child exclusion requirements
  - American Academy of Pediatrics (AAP) Model Child Care Exclusion Policies
  - Public health guidelines, state regulations, and Vignettes on recent problems posed by childcare directors
  - Identifying fever in a child, color of nasal discharge

Review of Advisory Report

- Advisory group report reviewed by two state agencies responsible for public health and licensing of childcare facilities
- Pre-publication peer-review by member of the AAP (Timothy R Shope, MD)

Figure 1. Example of children with acute respiratory infections

Methods (cont.)

Results

Survey findings

- 25% (226) of directors responded
- While 95% (215) of facilities had written exclusion policies
- 70% (158) were based on state requirements
- 45% (102) based on model policy

Finding from Advisory Group discussion

- Most common cause of exclusions are fever, diarrhea, rhinorrhea, conjunctivitis, skin infections and scabies
- Staff and child immunization requirements not always clear
- Advisory group produced Practical Considerations in … Model Sick-child exclusion policies to clarify recommended exclusion criteria

Conclusions

- A collaborative approach including key stakeholders has the potential to:
  - Address drivers of antibiotics use in children
  - Disseminate up-to-date policies that promote vaccination and prevention control

References