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Patient Education: Airway Viral Infections in Danbury CT

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Patient Education: Airway Viral Infections

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Mentors: Dr. Robert Mascia MD MBA, Ms. Betsy Clark RN BSN CHC
Danbury CT
Problem Identification

- Viruses are the most common cause of respiratory tract infections, and these are the most common illnesses affecting patients [1,2]
- Patients believe antibiotics are the best way to treat respiratory infections [3]
- Antibiotics are often requested by the patient, and receiving them gives the patient peace of mind [3,4]
- Most antibiotics are prescribed at the primary care level to treat respiratory infections [3, 4, 7]
- Physicians have attempted to explain to patients that viruses don’t respond to antibiotics, but patients often do not understand their physicians’ explanation [4]
- Lack of Patient awareness increases antibiotic resistance [7]
Public Health Cost

- Inappropriate prescription of antibiotics promotes the growth of antibiotic resistant bacteria [4-6]
- More costly drugs are required to treat patients when 1\textsuperscript{st} and 2\textsuperscript{nd} line antibiotics fail [4,5]
- Antibiotic resistant bacteria are responsible for approximately 50,000 deaths per annum in America [5, 6]
- Total economic burden of antibiotic resistant bacteria estimated to be $20 billion annually with cost projected to increase proportionally to level of resistance [6]
Community perspective

- “Patients can educate [themselves] about over use of antibiotics – they are not normally prescribed to treat viral infections”

- “[Creating a Pamphlet] is an important endeavor to educate the public relating to airway viral infections”
  - Betsy Clarke RN, BSN, CHC; Clinical Science Consultant for Boehringer-Ingelheim Pharmaceuticals Inc.

- “Providers would welcome patient education materials to help reinforce their message when they speak about [viral illnesses] treatments at office visits

- “Pamphlets can highlight the message and potentially be shared with family and friends”
  - Dr. Robert Mascia M.D. MBA; Medical Director of Brookfield Family Medicine
Intervention Method: Pamphlet Cover

- From Right to Left:
  - Cover
  - End page
  - 2nd page

- Cover explains symptoms at a glance
- Back page serves as advertising for health care provider and encourages patients to see a doctor
- Second Page explains inefficacy of antibiotics for viral infections, and recommends actions for symptomatic relief. Picture illustrate preventative and symptom relieving actions.

“Antibiotics do not fight infections caused by viruses like colds, flu, most sore throats, bronchitis, and many sinus and ear infections.”
- Center for Disease Control and Prevention (CDC)

Instead, the best treatment for viral infection is symptom relief including:
- Rest
- Fluids
- Over the Counter medication

Still Concerned? Come see us!

Brookfield Family Medicine
60 Old New Milford Road
Brookfield, CT 06804
(203) 775-6365

Airway Viral infections

Runny Nose?
Sore Throat?
Headache?
Fever?
You may have a viral infection
Intervention Method: Pamphlet Content

- From Left to Right:
  - 3rd page (back of cover)
  - 4th page (back of end page)
  - 5th page (back of 2nd page)

- 3rd page informs patient of how viruses differ from bacteria, and symptoms of viral illnesses. Picture shows size discrepancy between viruses and bacteria.

- 4th page informs patients when to see their healthcare provider. Pictures give patient a reference guide for throat changes in bacterial vs viral infections.

- 5th page explains potential asthma exacerbation caused by viruses, and goes in depth at preventing infections. Picture shows proper coughing/sneezing technique.
Results and Response

- Practice was impressed by pamphlet content and layout; plans to use it in the clinic to educate their patient population

- Clinical Science coordinator from Boehringer-Ingelheim Pharmaceuticals Inc approved of design layout and writing level of patient education tool

- Recommended submission of pamphlet for accreditation by National Committee for Quality Assurance (NCQA) for wider distribution

- “This will be an effective tool [to educate patients], with broad applicability in a primary care setting”
  - Dr. Robert Mascia M.D. M.B.A, Medical Director of Brookfield Family Medicine
Efficacy and Limitations of Intervention

- Pamphlet is written at a 6th-8th grade level and manages patient expectations about receiving antibiotics
- Provides patients and physicians a common starting point in discussing treatment options for respiratory illnesses
- Increases efficiency of conveying information to patients, thus saving time for the physician
- Limitations:
  - the pamphlet is not an interactive document, so patients may not retain the information as effectively
  - Limited in scope regarding discussions of respiratory illnesses overall
Future recommendations

- Receive NCQA recognition for the pamphlet, allowing greater oversite and maintenance of content
- Distribute pamphlet in locations beyond physicians’ office such as schools, and nursing homes
- Create online version of pamphlet to reach patients who are not regularly seen by primary care physicians
- Solicit feedback from patients who are given the pamphlet to better evaluate the saliency, and helpfulness of information
- Informal Survey across primary care clinics opinions about antibiotic use for airway infections before and after introducing pamphlet


Works Cited: Pamphlet


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