

Background

- Fosfomycin is an oral antibiotic with activity against resistant bacteria that is recommended as first line treatment for cystitis^{1,2}
- Using an oral agent for resistant cystitis may be beneficial due to decreased hospitalizations and clinic visits to manage IV therapy
- Use may be limited by cost³

Methods

- Two-site, observational, quasi-experimental study in adult patients diagnosed with cystitis caused by:
 - Extended spectrum beta-lactamase (ESBL) *E. coli*,
 - vancomycin-resistant *Enterococcus* (VRE), or
 - fluoroquinolone-resistant *Pseudomonas*



- Primary outcome: rate of fosfomycin use
- Reviewed 306 patients, 148 met eligibility criteria

Discussion

- A simple stewardship intervention lead to increased fosfomycin use for resistant cystitis
- Education for providers and pharmacists could be considered to promote optimal use

After implementing a multi-faceted stewardship intervention, including routine fosfomycin susceptibility reporting for resistant cystitis:

- Fosfomycin use significantly increased
- Rate of adverse events did not increase



Scan for disclosures and references

Results

Table 1. Baseline Characteristics

Characteristic n (%)	Pre-implementation (N=68)	Post-implementation (N=80)	p-value
Age [years, median (IQR)]	67 (50-77)	66 (52-76)	0.73
Female	56 (82)	63 (79)	0.68
Outpatient treatment	58 (85)	72 (90)	0.45
Complicated cystitis	55 (81)	66 (93)	0.83
ESBL <i>E. coli</i>	62 (91)	72 (90)	> 0.99

Figure 1. Fosfomycin Prescribed Empirically or Definitively

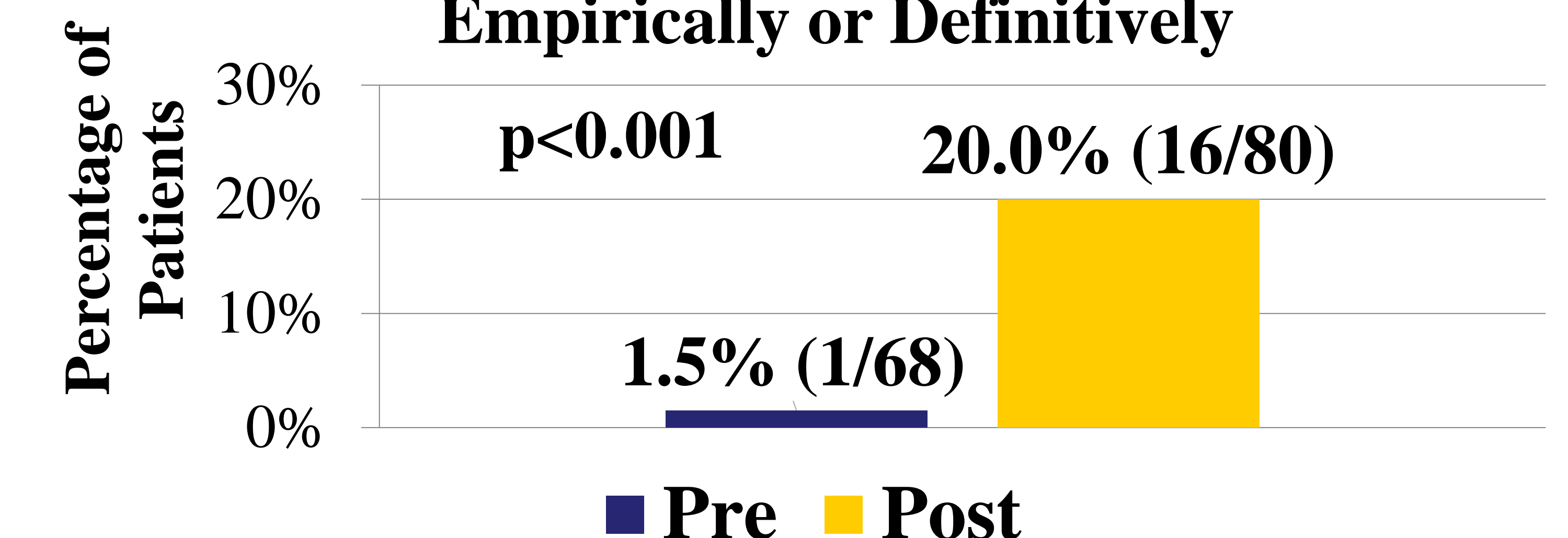


Table 2. Secondary Outcomes

Outcome n (%)	Pre-implementation (N=68)	Post-implementation (N=80)	p-value
Appropriate fosfomycin dosing	0/1 (0)	3/16 (19)	>0.99
Prescribed non-susceptible antibiotic	10 (15)	7 (9)	0.31
Adverse reaction	3 (4)	4 (5)	>0.99
Subsequent isolate resistant to initial antibiotic	1/13 (8)	2/5 (40)	0.17
Positive urine culture within 30 days	13 (19)	5 (6)	0.023
Antibiotics for cystitis within 30 days	10 (15)	3 (4)	0.037