

THE IMPACT OF PATIENT SAFETY REPORT AND SENTINEL EVENTS ON INFECTIOUS DISEASE PRESCRIBING PRACTICES

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BACKGROUND

- Antimicrobials have various side effects that range from mild to severe to serious outcomes
- Antimicrobial adverse events can cause distress or harm to patients or lead to prescriber anxiety
- Basic tenets of antimicrobial prescribing include the following:
 - Knowledge of the epidemiology, pathogenesis, and clinical aspects of the disease,
 - Pharmacokinetics and pharmacodynamics of different classes of antimicrobials
 - Effectiveness of the therapy
- Inappropriate prescribing are associated with increased healthcare costs and can lead to unnecessary distress or emergence of resistance
- There is a paucity of published data on how inpatient sentinel events or patient safety reports affect physician prescribing habits

OBJECTIVES

- We carried out this study to ascertain whether patient safety reports and sentinel events influence physician antimicrobial prescribing practices

CASE DEFINITION

- Sentinel event: A sentinel event was defined as any unanticipated event in healthcare setting resulting in death or serious physical or psychological injury to a patient or patients, not related to the natural course of the patient's illness.

METHODS

- During 2018, we invited Infectious Disease physicians at the University of Florida to participate in a survey that included perception of risks and prescribing habits after a sentinel event.
- Interviews carried out with a standardized questionnaire were recorded
- Data were analyzed using Epi Info (CDC, Atlanta, GA) statistical software
- Thematic analyses were performed on the open-ended interview questions

RESULTS

- 17 faculty and fellows participated in the survey
- Experience practicing infectious disease
 - 5 (29.4%): 1-3 years
 - 3 (17.6%): 4-6 years
 - 2 (11.7%): 7-9 years
 - 7 (41.0%): > 9 years
- Patient safety report: 2 (11.7%) had a complaint filed against them
- Sentinel event: all experienced at least one involving an antimicrobial agent
- Practice changes
 - 16 (94%) changed practice after sentinel event
 - 8 (47%) increased the frequency of ordering laboratory tests
 - 7 (41%) changed to more expensive antimicrobials albeit with better safety profiles
 - 8 (47%) endorsed hypervigilance through closer follow ups for patients prescribed antimicrobials

DISCUSSION

- Although infectious disease physicians often focus on one class of antimicrobial agent, experiences with that agent may vary and range from a rash to renal dysfunction requiring dialysis or onset of *Clostridioides difficile*.
- Serious adverse events can have a lasting impact on patients but can also alter how physicians perceive the risk of the antibiotic. Our discussion with faculty and fellows highlights this issue
- Some physicians will avoid prescribing certain antimicrobials with preference for alternative agents they feel have a better safety profile, albeit more expensive for the patient

CONCLUSION

- Sentinel events affect physicians' prescribing practices and monitoring of antimicrobial therapy
- After-effects include closer follow-up of patients while requesting more laboratory tests
- Participants often avoided certain antimicrobial agents while choosing more expensive therapies with ostensibly better safety profiles
- Although physicians use evidence-based medicine to alter their prescribing habits, serious adverse events can have a significant impact on the way they practice