A recent simulation was hosted by Students for Interprofessional Education (SIPE) in February 2016. This event focused on polypharmacy and how teamwork and communication can prevent adverse drug events and improve patient outcomes. Following the event, opportunities for activity improvement were identified and student members began to collect ideas for future educational purposes.

Educational Objectives

- Understand the basic implications of polypharmacy
- Emphasize the role of effective communication between multiple providers who are involved with the care of the same patient
- Highlight key drug interactions and clinical pearls for students to learn in preparation for clinical practice
- Facilitate learning between different health professional students in a simulated environment

Methods

Students in attendance were contacted via email to identify interest in moving forward with the simulation. A team of nine students and a pharmacy faculty member worked together to improve the clinical accuracy of the scenarios. Patient cases emphasizing appropriate pharmacotherapy and clinical pearls associated with polypharmacy were developed by pairs of students. High-yield drug interactions and polypharmacy events were incorporated into six different patient cases. Dr. Jeffrey Reist served as the clinical educator to confirm the accuracy and reality of the scenarios.

Patient Case Example

A 60-year-old male recently began taking atorvastatin 40mg daily for hyperlipidemia. Recently, he has noticed new and worsening muscle aches for which he seeks treatment.

Round 1:
Patient visits urgent care for muscle aches. An NSAID is given for pain relief and the patient later develops an upper GI bleed which is then treated with omeprazole.

Round 2:
Patient visits urgent care for muscle aches and a medication list is obtained. The provider decreases the dose of atorvastatin and the patient’s muscle aches resolve.

Future Directions

- Host simulation again in Fall 2016 with opportunity for discussion and an educational presentation highlighting clinical pearls of polypharmacy
- Add additional roles for other healthcare professionals to make the simulation more interprofessional (e.g., nurse, dentist, dietician, social worker, physical therapist)
- Create cases considering other complications such as insurance, formulary management, and allergies to explore common issues in transitions of care which may also lead to polypharmacy

Acknowledgements

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