INTRODUCTION

• Since the entry of direct oral anticoagulants (DOACs) into the drug market, namely dabigatran (Pradaxa®), rivaroxaban (Xarelto®) and apixaban (Eliquis®), the use of this class has risen due to their ease-of-dosing and convenience factors especially in regards to monitoring therapy.

• However, unintentional misuse of DOACs may cause serious medication errors, putting patients at risk of unnecessary harm; and in severe cases, life-threatening conditions.

OBJECTIVE(S)

• To recognize and understand the unique properties of DOACs and how they contribute to medication incidents.

• To identify contributing factors and recommendations and help prevent medication incidents related to the DOACs.

METHOD(S)

Search of ISMP Canada Community Pharmacy Incident Reporting (CPhIR) Database for medication incidents from January 2010 to April 2015 involving direct oral anticoagulants using the search strategy:

• Eligible OR Pradaxa OR Prada® OR Prada* OR Prada OR Prada® OR Prada* OR Prada OR Prada® OR Eliquis OR Apixaban OR Apixa OR Apixa® OR Apixa* OR Apixa OR Apixa® OR Xarelto OR Xarelto® OR Xarelto* OR Xarelto OR Xarelto® OR Xarelto* OR Xarelto OR Xarelto® OR DOAC

Selected incidents for final analysis:

• Incidents irrelevant to the topic of direct oral anticoagulants and inadequate descriptions for analysis were excluded

• 109 incidents met inclusion criteria and were included in this qualitative, multi incident analysis

• Analyzed and categorized incidents into main themes and further divided into subthemes

• Identified potential contributing factors.

• Provided recommendations to fill in patient-safety gaps

RESULT(S)

Subtheme: Drug-Dose Interaction

• Example: Physician wrote Pradaxa® 75 once daily, but should have been Flapix® 75 once daily, confirmed drug with patient before leaving the pharmacy.

• Contributing Factor 1: Communication

• Safety Recommendation: Fill in information and check the patient's record on request in order to prevent these mistakes.

• Contributing Factor 2: Communication

• Safety Recommendation: Ensure that the pharmacist verifies the dose before preparing the pharmacist's kit.

Subtheme: Drug-Dosage due to Patient Specific Factors

• Example: A patient on Pradaxa® 150 mg requested his physician to reduce his dose after reading that patients above 80 years old should only be on 110 mg twice daily. His physician said no, but later agreed after referring the physician to his pharmacists.

• Contributing Factor 2: Communication

• Safety Recommendation: Ensure that the pharmacist verifies the dose before preparing the pharmacist's kit.

Subtheme: Drug-Dosage due to Patient Specific Factors

• Example: A patient on Xarelto® had a history of dyspepsia and was started on Pradaxa®. The pharmacy failed to inform the patient and thus her blister packs were prepared with both medications. The pharmacist caught the error and resolved the issue.

• Contributing Factor 2: Communication

• Safety Recommendation: Ensure that the pharmacist verifies the dose before preparing the pharmacist's kit.

Subtheme: Drug-Dosage due to Patient Specific Factors

• Example: A patient, currently on warfarin and compliance packaging, was started on Pradaxa® 2 weeks after his discharge. The pharmacy failed to inform the patient and thus her blister packs were prepared with both medications. The pharmacist caught the error and resolved the issue.

• Contributing Factor 2: Communication

• Safety Recommendation: Ensure that the pharmacist verifies the dose before preparing the pharmacist's kit.

Subtheme: Drug-Dosage due to Patient Specific Factors

• Example: A patient, currently on warfarin and compliance packaging, was started on Pradaxa®. The pharmacy failed to inform the patient and thus her blister packs were prepared with both medications. The pharmacist caught the error and resolved the issue.

• Contributing Factor 2: Communication

• Safety Recommendation: Ensure that the pharmacist verifies the dose before preparing the pharmacist's kit.

CONCLUSION(S)

• DOACs are a relatively new class of anticoagulants that provide exceptional benefits to patients when used appropriately.

• Open communication and dialogue between patients and healthcare professionals should always be encouraged.

• Continuous professional development for prescribers and pharmacists on new approaches to medication therapy management and the practice of Best Possible Medication History at the transition points of care are critical for patient-centered care.

• A blame-free patient safety culture together with regular reporting and analysis of medication incidents will help address systematic vulnerabilities and further improve the safe use of DOACs in all healthcare settings.

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REFERENCES


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