Study examines adverse effects of obesity medications

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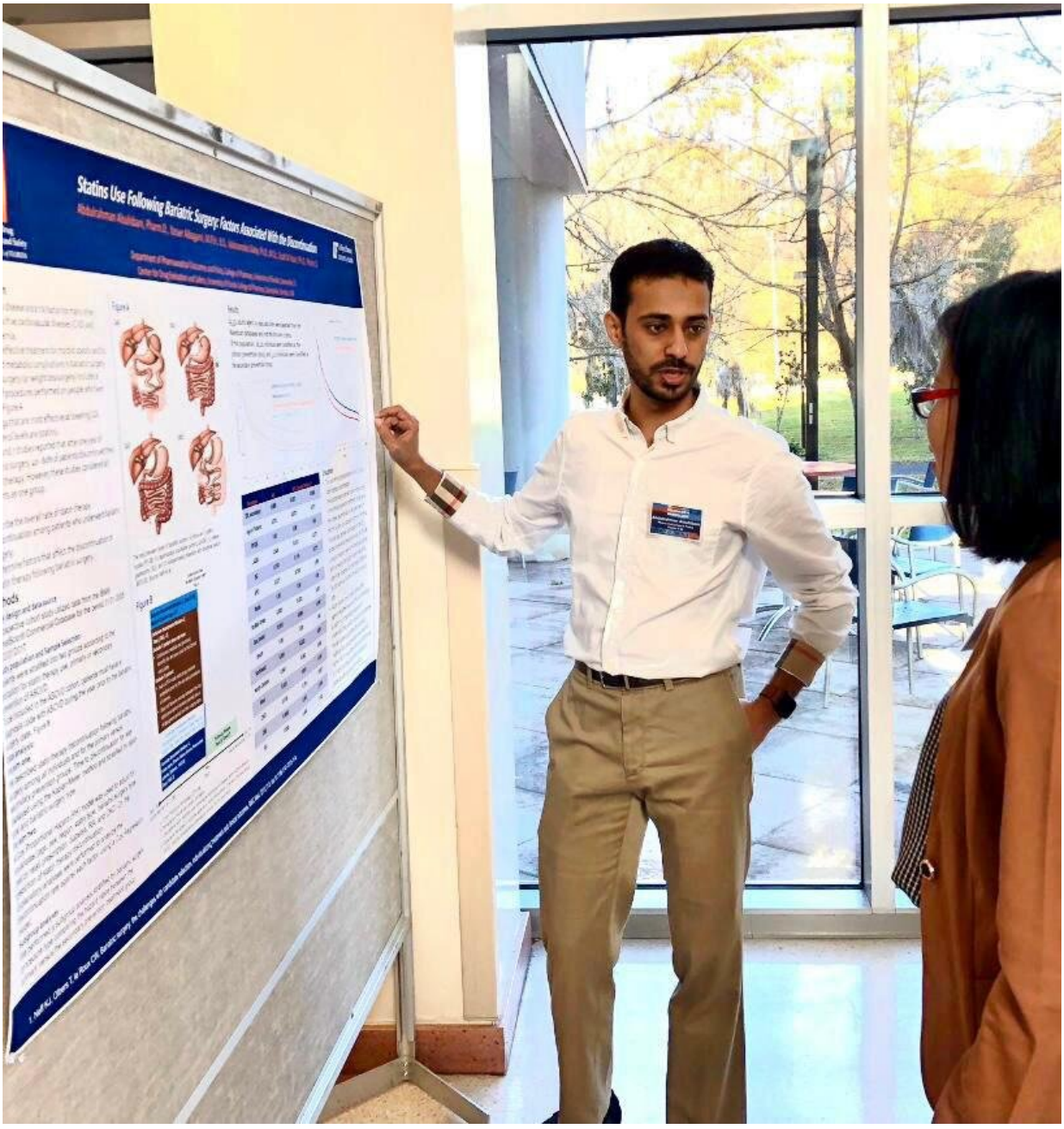

Abdulrahman Alsuhibani presents his research. Credit: Abdulrahman Alsuhibani

An essential part of obesity care is making sure treatments are safe for patients.

Abdulrahman Alsuhibani, a doctoral student in the University of Cincinnati's James L. Winkle College of Pharmacy, and his colleagues in the UC division of health outcomes recently published a study in the *International Journal of Clinical Pharmacy* analyzing the adverse events attributed to the use of anti-obesity medications.

The research team reviewed data from the Food and Drug Administration's Adverse Event Reporting System database from 2013-20. Patients, physicians and other health care workers submit any suspected side effect from an anti-obesity medication to the system.

In the seven years analyzed, more than 18,000 unique adverse events were reported from more than 15,000 patients taking various anti-obesity medications. The study reported that 4.9% of the reported adverse events were deaths of patients, with 7.6% listed as life-threatening events, 35% requiring hospitalization and 5.9% described as disability cases.

Alsuhibani noted that while the overall fatality rate of 4.9% is considered high, this study does not show causality but rather informs where additional research and monitoring may be needed.

"It is necessary to continue and systematically monitor the safety of anti-obesity medications to optimize patient anti-obesity therapy," he said.

"Observational studies do not show causality; however, it shows the hypothesis of using real-world data to try to show some connections and association."

Alsuhibani said a unique finding of the study is that deaths represented 4% of all adverse events attributed to orlistat, an over-the-counter anti-obesity medication. Since orlistat is the only anti-obesity drug available to the public without a prescription, he said there needs to be further investigation of the fatal cases potentially associated with using this medication.

The most common adverse events reported among users of anti-obesity medications were nausea, vomiting, dizziness and headache. There were also 1,765 reports of cardiovascular disease, 1,327 reports of kidney complications and 194 reports of cancer.

The study began in light of the fact that several anti-obesity medications have been pulled from the market due to documented adverse events, including the withdrawal in February 2020 of the drug lorcaserin following reports that it may cause cancer.

Regarding lorcaserin, Alsuhibani said the study that led to its removal from the market had been questioned in the field due to many concerns, with the researchers not fully disclosing the information around the lorcaserin/cancers potential risk association. Alsuhibani's study found that 16% of all reported adverse events attributed to lorcaserin use were reports of cancer.

More information: Abdulrahman Alsuhibani et al, Descriptive analysis of reported adverse events associated with anti-obesity medications using FDA Adverse Event Reporting System (FAERS) databases 2013–2020, *International Journal of Clinical Pharmacy* (2021). DOI: 10.1007/s11096-021-01330-2