What You Don't Know Might Hurt You: An Analysis of Patients' Knowledge of Over-the-Counter Medications

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INTRODUCTION: Non-steroidal anti-inflammatory drugs (NSAIDs) and acetaminophen are some of the most used medications. These medications are available over the counter (OTC) and are accessible without physician oversight. A striking number of hospitalizations and deaths occur due to complications of OTC medications. We hypothesized that patients seeking treatment for orthopedic-related issues have poor knowledge regarding risks of these medications.

METHODS: We created a novel twenty-question test (with true/false responses) to assess patients' knowledge of OTC medications commonly used to treat pain and arthritic symptoms. The test included questions regarding which medications have anti-inflammatory properties, what are the main active ingredients, which medications increase bleeding risk, which medications are contraindicated while taking a blood thinner, whether the OTC pain medications are safe to take at the same time, and what OTC medications can be found in commonly prescribed narcotic medication. The test was given to all new patients at our clinic who presented for a consult for knee or hip pain. To validate the test, it was also administered to six orthopedic attending surgeons, four orthopedic fellows, seven nurses, and five medical assistants.

RESULTS: A total of 128 tests were administered to patients. Twenty-two patients failed to complete the test, resulting in 106 complete tests included in the analysis. The average score among patients was 61%. The six orthopedic attendings all scored 100%. The average score for the fellows and registered nurses was 97% each. Among the medical assistants, the average score was 80%.

DISCUSSION AND CONCLUSION: Our study demonstrated that orthopedic patients have a poor knowledge of OTC medications, their risks, and side effects. This lack of knowledge could lead to serious risks for patients using these drugs. We recommend health care providers, institutions, and manufacturers create better ways to educate patients on the risks of OTC medications.