Impact of Prescription Drug Abuse Education in Health Professional Curriculum

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To evaluate the current level of knowledge retained by medical, pharmacy and dental students at Lake Erie College of Osteopathic Medicine (LECOM) Bradenton on the topics of pain management and prescription drug abuse prevention using the existing curriculum. Additionally, to assess the impact of a new online curriculum on the same health professional students' knowledge regarding these topics.

Background

Between 2000 and 2015, over half a million people died from an opioid overdose. Prescription drugs continue to be a driving factor in this emerging statistic.1

While it is clear that healthcare providers are not the sole culprit in this issue, it is essential that practitioners understand their role in reducing the number of people affected by this problem. By identifying areas in need of improvement in healthcare, appropriate evaluation and strategy implementation may allow for a substantial decrease in mortality and all-around better patient outcomes.

As the largest medical school in the country, Lake Erie College of Osteopathic Medicine has the opportunity to stand as a leader in this change through interdisciplinary prescription drug abuse education.

With nearly seven thousand deaths related to prescription drugs in Florida alone during 2016, LECOM-Bradenton stands in the epicenter of this crisis and holds the means to make a true impact.2

It is time that all parties in this epidemic recognize and accept their role in putting an end to the number of injuries and deaths this nation faces.

Objective

To evaluate the current level of knowledge retained by medical, pharmacy and dental students at Lake Erie College of Osteopathic Medicine (LECOM) Bradenton on the topics of pain management and prescription drug abuse prevention using the existing curriculum. Additionally, to assess the impact of a new online curriculum on the same health professional students’ knowledge regarding these topics.

Methodology

Course development utilizing information from the National Institute on Drug Abuse (NIDA), Centers for Disease Control and Prevention (CDC) and U.S. Food and Drug Administration (FDA).3

Curriculum audio was recorded using Microsoft PowerPoint and course pre-test, lecture, and post-test were compiled using the online education tool, Brainshark.

A recruitment email was sent to students in Doctor of Osteopathic Medicine (DO), Doctor of Pharmacy (PharmD) and Doctor of Dental Medicine (DMD) programs at LECOM Bradenton.

The students provided demographic information, completed a current knowledge pre-assessment, viewed a presentation, and completed a post-test assessment.

Results

14 pre- and post-tests questions were formulated using the curriculum content and competencies determined by the "CDC Guideline for Prescribing Opioids for Chronic Pain".4

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Results of the pre- and post-assessments as well as data between professional programs were compared to find trends for analysis.

Discussion

7 of 36 participants, ranging from first through fourth year of education, indicated they had received formal education on pain management and prescription drug abuse at the time of study, leaving 80% reporting no prior training.

The pre-test yielded an average score of 62.3%. The post-test, taken after the didactic presentation, yielded an average score of 83.6%. The net increase in scores was 21.3%.

Pre- and post-test remained the same for two questions which covered the definition of both opioid and non-opioid therapy options, as well as the diagnosis of pain.

Outstanding increases in performance were seen in questions conceptualizing prevalence of opioid use and establishing goals and expectations with patients.

Study limitations included a small population size, which eliminated appropriateness of a detailed statistical analysis. Additionally, inclusion criteria limited entry of participants to students of Lake Erie College of Osteopathic Medicine Bradenton campus alone.

Further research is needed to evaluate current curriculum among the three health professional programs.

Future Direction

The course is currently undergoing modification to further investigate its effects when implemented for current health professionals within Manatee and Sarasota counties. The goal is to utilize the online curriculum and assessment as educational tools for prescription drug abuse.

References


8. S. Chatterjee, PH.D. “FDA Perspective on Continuous Manufacturing.”


13. S. Chatterjee, PH.D. “FDA Perspective on Continuous Manufacturing.”


