

Maryland Poison Center – “Surviving the Shift”

Collaborating to Create an Interprofessional Learning Module to Promote Toxicology Awareness in Health Care Students

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Background

Poisoning is a leading cause of morbidity and mortality in the United States. US poison centers reported over two million total exposures and 600,000 exposures treated in a healthcare facility each year. Most of these were treated with either a specific antidote or focused supportive care and most cases (>99%) were primarily handled by Specialists in Poison Information (SPI). These include pharmacists and nurses with focused training on poisoning management. The North American Pharmacy Licensure Exam (NAPLEX) includes toxicology and overdose as important components of competency, and in nursing, approximately 16% of the National Council Licensure Examination for Registered Nurses (NCLEX-RN) consists of pharmacological and parenteral therapies, including poisonings and toxicology.



About the Module

The purpose of this interprofessional education collaboration was to create an asynchronous, interactive, safe learning activity to promote toxicology and poisoning awareness in both nursing and pharmacy students. The activity will be distributed to these students during their didactic courses allowing both nursing and pharmacy students to experience (through an interactive module) how to assess, plan, educate, set priorities, and perform follow-up during a simulated “shift” as a Specialist in Poison Information (SPI) at the Maryland Poison Center.

This learning activity utilizes the concepts of *unfolding case studies*, *escape rooms* and *choose your own adventure stories* to promote illness and poisoning recognition, decision making, and prioritization of toxicology care. This activity will encourage the student to make appropriate care decisions to promote health in a safe learning environment.

About the Shift

Good Morning. It is 0530 on March 14th, 2032. Your alarm has just gone off and you wake up. Wait, wait, wait... 2032?? The time flies by faster than you think, doesn't it? Weren't you just in school? You graduated and passed your boards long ago, and you have been practicing in healthcare for years now. It goes by in a blink!

Your poison and antidote knowledge and skills are strong after spending more than a decade working with a busy Level 1 Emergency Department. You've collaborated with the Maryland Poison Center often over the years on various cases, but now you are part of that team.

For months you've been training alongside the nurses and pharmacists that operate the Maryland Poison Center as Certified Specialists in Poison Information (SPIs); learning from them, teaching to them, listening in on their calls and contributing to their care decisions, but today is different. Today will be your first official solo shift as part of the team at the Maryland Poison Center. HOW COOL! I bet all of your former professors would be tickled that you took a chance on this unique opportunity. #NeverStopLearning

During your shift today your knowledge will be put to the test at the Maryland Poison Center. Can you safely make it through your first solo shift by appropriately assessing incoming calls and directing treatment plans? Let's find out!

Terrific work! You are ready to start your shift.



It looks like all your training and working side-by-side with this interprofessional team here at the Maryland Poison Center has paid off! You know your antidotes and you are ready.

Please click below to officially start your first solo shift for the Maryland Poison Center.

[I am ready to Survive The Shift!](#)

Your first call of your first solo shift is a follow-up from the night shift.



Situation: Last night the Maryland Poison Center received a home call from a worried father after he walked in on his 3-year-old twins in the bathroom, both eating from a bottle of melatonin gummies.

It was clear that they had each eaten at least “several” of the supplements per the father, based on the coloring around their mouths.

There were a total of 17 gummies remaining from the bottle (60 - 17 = 43 gummies unaccounted for), unfortunately the family could not remember when it was purchased so it was unclear how many gummies (and how many milligrams of melatonin) either child had ingested.

Absolutely!

Melatonin has not been shown to be toxic, even at excessive doses (although this can always depend on the individuals age, pre-existing conditions, etc.).

According to Poison Control, here are some actual cases involving melatonin ingestions:

Case 1: A 2-year-old boy swallowed up to 138 milligrams (mg) of melatonin over an hour. He slept for a couple of hours and was then fine.

Case 2: A 4-year-old girl swallowed an estimated 39 mg of liquid melatonin. She didn't develop drowsiness or any other symptoms.



Fantastic work.



While every case is unique, you definitely have the ability to differentiate between cases, particularly in recognizing potentially severe or life-threatening cases.

Your line is ringing, let's take your first incoming call by

[CLICKING HERE.](#)

References

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