

Medication

Pharmacocktail

This simulation will help you understand the struggles of taking multiple medications with common changes that happen with age. In 2020, 83 percent of Canadians over the age of 65, who make up about 18 percent of the population, took prescription medications. As well, 30 percent of older adults over the age of 65 took five or more prescription medications daily, which is called polypharmacy (21). Older adults ingest an average of 10-20 pills daily and take an average of 6-10 medications at the same time (21). It can be extremely difficult for older adults to manage their medications, especially when some medications have adverse drug interactions (1). This becomes even harder when you suffer from other health conditions. In this simulation, your task is to sort an older adult's weekly medications as efficiently as possible in a pill divider. Those older than 65 are likely to have one to three chronic diseases involving major body systems. The gloves that decrease tactile function and the impaired vision goggles that you created in the precursor station will simulate the difficulties older adults face when sorting medications (1).

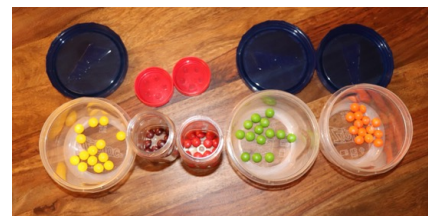
Materials

- 5 mason jars/containers/cups with a screw-on lid
- 1 ice cube tray or 14 small containers arranged in 2 rows, 7 columns
- A pack of Skittles consisting of 5 different coloured candies
- 14 of each colour candy (5 different colours). You should have 70 candies in total. Alternatively, you can use 5 different coloured sticky notes, or 5 different coloured sheets of paper crumpled up in small balls
- Vision impairment goggles (precursor station) and gloves with tape (precursor station).
- 3-minute timer

Procedure

Preparation

1. Gather all the materials necessary for this simulation.
2. Place 14 of the same-coloured candies into a container. Repeat until you have 5 containers with 14 of each coloured candy. Each colour represents a different medication.
3. Once you are done filling up the container with the candies (top figure), label which coloured candies will be medication 1, 2, 3, 4, and 5. Make sure you screw the lids back onto the containers. For example, medication 1 is yellow, medication 2 is brown, medication 3 is red, medication 4 is green, and medication 5 is orange.





4. Label each column of the ice cube tray with the days of the week (Monday, Tuesday, Wednesday, etc.). This is your medications sorter. Each day should have two different spots to represent morning and night.
Note: you do not need to write on your ice cube tray, the image below is attached for clarification.
5. Complete the precursor simulations if you have not already done so.
6. Follow the instructions for each medication below:
 - a. Medication 1 → Take one pill every morning with food.
 - b. Medication 2 → Take one pill every evening.
 - c. Medication 3 → Take two pills every other day in the morning.
 - d. Medication 4 → Take one tablet in the morning and one in the evening.
 - e. Medication 5 → Take two pills every morning.
8. Start the 3-minute timer to begin the simulation.
9. Unscrew the lid of the container with medication 1 and place the candies in the designated day of the week and time on the ice cube tray.
10. Repeat steps 1-3 for all medications.
11. Once you've sorted all the medications, reflect and answer the reflection questions.
12. Provide feedback on Facebook or Google Docs.



Reflection Questions

1. Did you manage to complete the simulation within the time limit? How did you feel during and after the simulation?
2. Do you know any older adults with multiple chronic conditions that are responsible for following a medication regimen with multiple medications? Have they expressed any difficulty performing these tasks?
3. If you had to perform these tasks under these conditions every week, how do you think you would feel? What do you think could be done to make medication sorting more manageable for older individuals?