

Otterbein University

Digital Commons @ Otterbein

Doctor of Nursing Practice Scholarly Projects

Student Research & Creative Work

4-27-2019

Poster: Increasing Awareness of Proper Disposal Practices of Unwanted Household Medications in Muskingum County, Ohio

Joseph Shaeffer

Otterbein University, brandyjoe10@yahoo.com

Follow this and additional works at: https://digitalcommons.otterbein.edu/stu_doc



Part of the [Medicine and Health Sciences Commons](#)

Recommended Citation

Shaeffer, Joseph, "Poster: Increasing Awareness of Proper Disposal Practices of Unwanted Household Medications in Muskingum County, Ohio" (2019). *Doctor of Nursing Practice Scholarly Projects*. 37. https://digitalcommons.otterbein.edu/stu_doc/37

This Project is brought to you for free and open access by the Student Research & Creative Work at Digital Commons @ Otterbein. It has been accepted for inclusion in Doctor of Nursing Practice Scholarly Projects by an authorized administrator of Digital Commons @ Otterbein. For more information, please contact digitalcommons07@otterbein.edu.

*Joseph C. Shaeffer MSN, RN, Dr. Brian Garrett DNP, CRNA, RN, Dr. Cindy Zellefrow, DNP, MSED, RN, LSN, APHN-BC
Otterbein University, Westerville, Ohio*

- Increasing awareness and participation of proper disposal of household medications, including opioids, will not only help to decrease the opioid epidemic footprint, but potentially decreases the number of accidental overdoses in households, decrease the impact of improperly disposed medications on the environment, and decrease the amount of medication involved crime in the community.
- Orthopedic patients have been identified in this mixed method project as those who are more likely to receive an opioid prescription for bone and joint pain.
- A pre-survey of current medication disposal practices of healthcare workers in an orthopedic physicians practice provided a snap shot of current disposal practices. Following an educational event presented to the orthopedic office medical staff, one-month and three-month post surveys were completed. Additionally, medical staff influence was utilized as a catalyst to increase awareness of proper disposal practices to the orthopedic patients via an informational flyer.
- Results of the pre and post-surveys revealed positive changes in awareness as well as participation of proper household medication disposal.

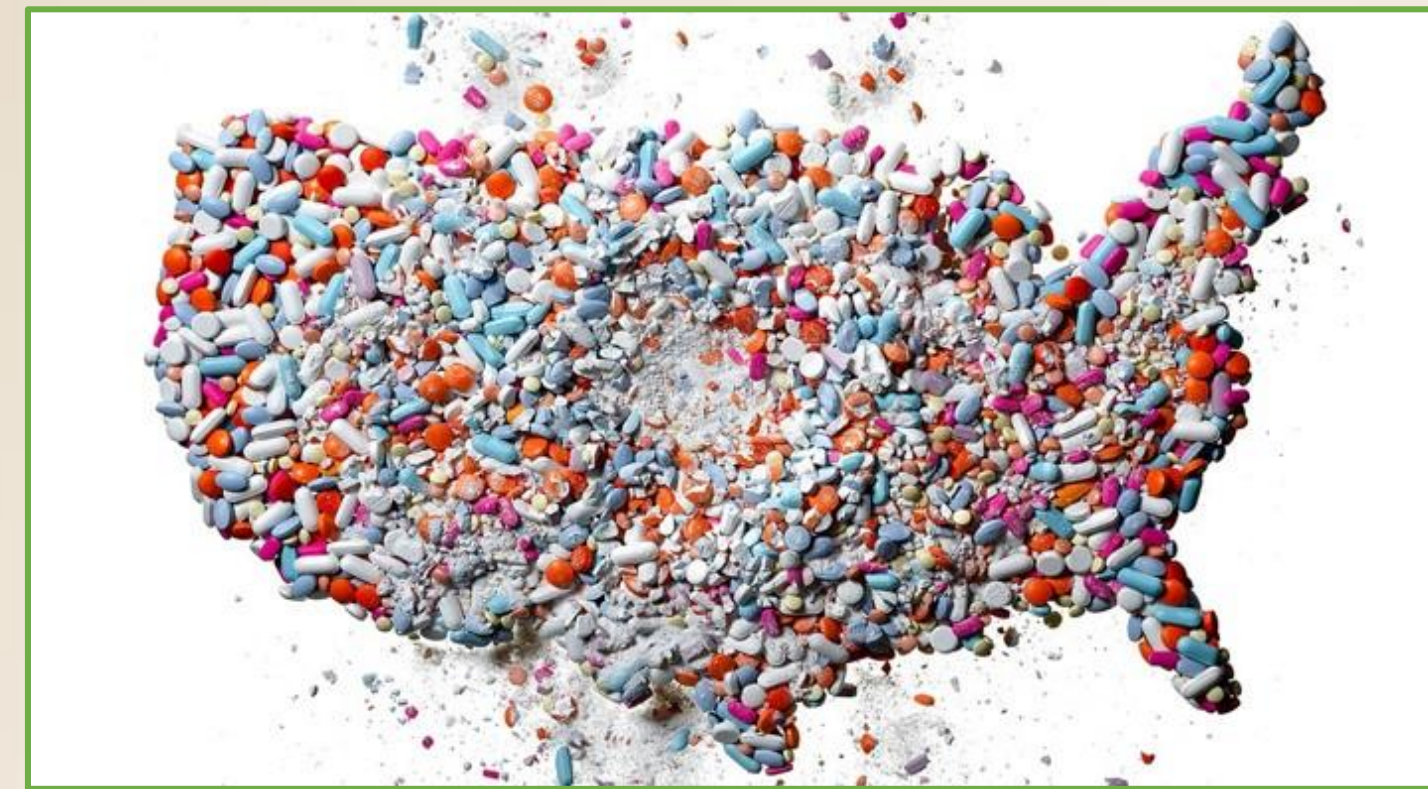


- Dispose of Drugs
Be Responsible
Be Safe, Participate!*



- Stationary household medications are potential enablers of an opioid epidemic that is present throughout America. On an average day in the United States, 91 people die from an opioid related overdose (CDC, 2016). The CDC further designated that poisoning is the leading cause of injury death in the U.S. (2016). Proper disposal of unused, unneeded, and/or expired medications is an essential part of preventing these unintentional deaths. (Fleming et al., 2016).
- Increasing the knowledge of proper medication disposal methods and opportunities available to Muskingum County residents can potentially decrease the footprint of the opioid epidemic. Consequently, by increasing public awareness of proper medication disposal practices, a decrease in potential negative effects of other concerns such as accidental poisonings, crime rates, and environmental fears can occur. According to Athern, Linnebur, and Fabisiak, (2016) many people surveyed are willing to change their old improper medication disposal habits when they learn that storing unwanted medications can lead to medication diversion, accidental poisonings, and/or adverse environmental effects.
- In Muskingum County, “What is the effect of medication takeback opportunities on decreasing unwanted household medications compared with not utilizing proper medication disposal methods,” constituted the PICO question for this project.

Levels of Evidence Synthesis Table Template																				
X (copy symbol as needed)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Level I: Systematic review or meta-analysis																				
Level II: Randomized controlled trial																				
Level III: Controlled trial without randomization																				
Level IV: Case-control or cohort study								x												
Level V: Systematic review of qualitative or descriptive studies												x								
Level VI: Qualitative or descriptive study, CPG, Lit Review, QI or EBP project	x	x	x	x	x	x	x		x	x	x		x		x		x	x		x
Level VII: Expert opinion														x		x			x	



- Literature suggests orthopedic patients are more likely to receive an opioid prescription related to bone and joint pain.
- The project utilized a mixed method design approach.
- A cross-sectional pre-survey was deployed to an orthopedic office medical staff at the beginning of an educational event to identify current medication disposal practices, as well as to identify a baseline knowledge level regarding proper medication disposal opportunities offered in the community.
- Utilizing Nola Pender's Health Promotions Model, medical staff influence was used as a catalyst to spread the proper household medication disposal information to orthopedic patients via an informational flyer.
- A one-month and three-month post education survey were completed by the medical staff to establish potential changes in household medication disposal practices.




Muskingum County Unwanted Medication Disposal

Drop off **ALL** unwanted medications into the Collection Container at these Muskingum County locations:

- **Muskingum County Jail** 28 N. 4th Street, Zanesville.
(open 24hrs a day, 7 days a week)
- **Northside Pharmacy** 2899 Bell Street, Zanesville.
halfway med-safe container, (available during normal business hours)
- **New Concord Police Department** 2 West Main Street, Zanesville, lobby container, (open 24hrs a day, 7 days a week)
- **Zanesville Police Department** 332 South Street, Zanesville, lobby container, (open 24hrs a day, 7 days a week)

Safe Medication Disposal Alternatives:

- **Muskingum Valley Health Clinic** medication disposal **Events** (ask for them at the front desk)
- **Wal-Mart and Sam's Club** Pharmacies, (ask for the Disposal Rx packets)



Free

Properly Dispose of Your Unwanted, Leftover, or Expired Medications to:

Increase Safety

Decrease Crime

Decrease Pollution

Drop Off Key Points:

- No illegal drugs allowed. For example: cocaine, marijuana, heroin, LSD, etc....
- Leave medications in original packaging/containers when possible. You may remove label or cross out name.
- No liquid containers.
- No sharp containers, needles, syringes, batteries, aerosol spray cans, trash, medical devices, chemicals, or other hazardous materials.

Don't throw away or flush your unwanted meds!

© 2014 Healthy Kids Ohio
Division of Learning Practices/Community Outreach Services
10-2114



- Data synthesis was completed using the most recent statistical package for the social sciences (SPSS) system.
- The project surveys identified “Zero” project participants lock up their household medications.
- A common disposal practice included flushing or throwing away unwanted medications in trash receptacles.
- The practice of hoarding medications for “What-If” scenarios was evident among the medical staff in their own households.
- Post-surveys revealed seventy-five percent of contributors indicated that their medication disposal habits have changed as a result of this project.
- The medical staff appeared to positively influence the Muskingum County community by spreading the projects’ message to the orthopedic patients, family, and friends.

Medication Disposal Over Time in %			
	Pre-Survey (n=9)	1-Month Survey (n=9)	3-Month Survey (n=6)
Giving them to my doctor/pharmacy for disposal	0	11.1	0
Flushing down the toilet	22.2	0	0
Throwing in the trash	22.2	11.1	0
I do not routinely dispose of my medications	22.2	33.3	22.2
I do not dispose of my medications because I may need them later	44.4	44.4	50
Other	0	11.1	11.1

Impact of Training in %		
	1-Month Survey (n=9)	3 Month Survey (n=6)
Have your household medication disposal practices changed as a result of the educational event provided by the investigator?	75.0	83.3
Have you received positive feedback from the orthopedic patient's regarding the handout flyer?		
A. the patient learned something new	87.5	44.4
B. the flyer was easy to understand	57.1	44.4
C. the patient (or his/her family) will be using the drop-offs	50.0	22.2
Have you shared any information obtained during the educational event with any of the following since the event occurred?		
A. Family	88.9	66.7
B. Friends	44.4	22.2
C. Community Members	11.1	33.3
D. Other Healthcare Professionals	44.4	50.0

- The project had a positive change in medication disposal practices for participants.
- This project revealed the need to further increase in awareness and participation of proper household medication disposal practices in Muskingum County, as well as throughout the United States.
- The footprint breath of one DNP's positive impact on his community was revealed throughout the creation and completion of this project. One person can truly change practices in their community if they only try!
- Additional research is needed into the effects of improper medication disposal related to the influence of the opioid epidemic.

- Please see reference sheet provided below.



For more information, please email shaeffer@muskingum.edu