

## BACKGROUND

Opioids are analgesic drugs used to treat pain. Since the 1990s, hundreds of thousands of people have died from opioid-related overdoses. The progression of this epidemic has been described by the "Three Waves" which includes: an increase in prescription of opioids in the 1990's, increase in heroin deaths beginning around 2010, and increase in death surrounding synthetic opioids in 2013. Currently opioid related overdoses are at an all-time high and synthetic opioids such as Fentanyl are of most concern. Recently, opioid-related deaths have been greatly exacerbated by the COVID-19 pandemic. LA county specifically has also observed a significant increase in opioid overdose deaths, mainly from heroin and fentanyl.

## OBJECTIVES

- To assess how an educational intervention affects knowledge and confidence of naloxone prescribing providers and medical staff and administration surrounding the opioid epidemic.
- To identify common themes among pharmacists to identify their role and recommendations for opioid overdose prevention.

## METHODOLOGY

- The research consisted of two components. The first component surrounds quantitative analysis of the assessment of AltaMed providers and clinic staffs' knowledge regarding naloxone education and opioid prevention. A 25-minute presentation was given virtually on 07/12/2022 to the AltaMed South Gate Clinic in which a five-question Likert survey was completed by the participants.
- The second component surrounds qualitative analysis of 13 community and clinical AltaMed pharmacists via an open-ended eight-question interview for 15 minutes.

## RESULTS

**Part 1. Pre- and Post- survey comparisons, denoted by figure "A" and "B" respectively, using a Likert scale (N=10) rating the following statements from "Strongly Disagree" to "Strongly Agree"**

- Survey group consisted of 7 physicians, a clinical administrator, RN, and Manager, all of which in leadership positions of some capacity within AltaMed
- 4/5 survey questions showed improvement in agreement with the statements
- 1/5 survey questions observed no change in confidence level

## RESULTS, Cont.

Fig 1. Q1- "I understand that the opioid epidemic is an ongoing issue"



Fig 2. Q2- "I can recognize the signs and symptoms of an opioid overdose"



Fig 3. Q3- "I am aware of several factors that can increase the risk of opioid overdose"



Fig 4. Q4 - "I am aware of when I need to prescribe or administer naloxone"



Fig 5. Q5- "I can identify the key points to discuss with patients about naloxone"



### Part 2. Pharmacists' Role in the Opioid Epidemic

Table 1. Themes from Pharmacist Interviews

Category	Questions	Theme	Quote
Opioid Epidemic (Q1,2)	1) What do you believe is the overall role of pharmacists in the opioid epidemic? 1a) Do you feel that this role would be different in a rural vs. urban setting? 2) How do you approach a patient who you notice exhibits behaviors of opioid dependence?	1. Prescription monitoring and verification 2. Interdisciplinary collaboration 3. Community resource/education	"Properly prescribing prescriptions and getting them in the right hands of people who need it" "To educate the public and offer services that may not be accessible otherwise."
Naloxone (Q3,4)	3) What type of training have you completed in order to furnish naloxone? 4) How would you counsel a patient on Naloxone? 4a) How do you identify patients who need Naloxone?	1. Naloxone administration education 2. Basic naloxone education 3. Limited formal training	"We mostly focus on administration education and storage of Naloxone" "Show them exactly how to use it step by step"
Limitations (Q5,6)	5) What are the major barriers or limitations stopping pharmacists from furnishing naloxone to patients? 6) Are there any major improvements you would like to see related to the scope of pharmacy practice with Medication-Assisted Treatment (MAT) or opioid management in the next 5 years?	1. Interdisciplinary collaboration 2. Professional Training/Education 3. Pharmacist involvement	"Making sure everyone is working together, not individual egos" "I wish I had more training honestly" "It would be really good to have more pharmacists more involved in just how pharmacist help manage patients"

## RESULTS, Cont.

- Analysis of the qualitative data occurred in three processes. First, the questions were categorized by themes that the literature review revealed.
- Second, individual qualitative analysis of notes from the pharmacist interviews occurred.
- Lastly, analysis of the sum of individual quantitative analyses occurred to highlight the most common themes from the pharmacists' responses.

## LIMITATIONS

- Small sample size and limited diversity of survey participants
- Sample size only included internal pharmacists to AltaMed
- Small sample size of pharmacists and time restrictions for pharmacist interviews

## CONCLUSION/RECOMMENDATIONS

- Medical providers and clinic staff are more confident regarding naloxone use and opioid overdose prevention after participation in an educational session
- Qualitative data analysis revealed a need for more interdisciplinary collaboration, Naloxone training, and improved workflow.
- To expand educational presentations to additional AltaMed primary care clinics and increase overall sample size of the participants
- To incorporate interprofessional education modules in staff training to improve the relationship between prescribers and pharmacists
- To provide training on company-specific systems and software to increase prescriber comfortability furnishing Naloxone
- To advocate for program expansion and appropriate coverage for pharmacists to decrease personal risks

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References  
Kelley MA, Lucas J, Stewart E, Goldman D, Doctor JN. Opioid-related deaths before and after COVID-19 stay-at-home orders in Los Angeles County. Drug Alcohol Depend. 2021 Nov 1;228:109028. doi: 10.1016/j.drugdep.2021.109028. Epub 2021 Sep 2. PMID: 34500239; PMCID: PMC8411574.  
World Health Organization. (n.d.). Opioid overdose. World Health Organization. Retrieved July 10, 2022, from <https://www.who.int/news-room/fact-sheets/detail/opioid-overdose>  
<https://www.cdc.gov/drugoverdose/epidemic/index.html>