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A Retrospective Analysis of an Opiate Education and Naloxone Distribution Program

The opioid epidemic is a problem that has crossed all ethnic, racial, and socioeconomic classes throughout the United States. More than 22 million Americans are using illicit drugs yearly and approximately 91% of those individuals have a substance use disorder related to alcohol and/or drugs. Millions of Americans have an opioid use disorder involving either illegal or prescription drugs. There has been a national increase in the nonmedical use of prescription drugs and evidence suggests that nonmedical opioid use progresses to heroin use (St. Marie et al., 2018). Heroin, illicit fentanyl, and other equivalents are readily available and less expensive (Skolnick & Volkow, 2016). Therefore, local substance use disorder clinics need to have a policy and protocol in place to address the potential of an overdose, particularly at the initiation of treatment (Fairbairn, Coffin, & Walley, 2017).

Educating clients and caregivers about naloxone (Narcan) administration may prevent opiate-related deaths. Evidence has shown that educating practitioners, first responders, and laypeople on overdose prevention using naloxone (Narcan) can decrease opiate-related death outcomes (Lambdin, Zibbell, Wheeler & Kral, 2018). With more substance use disorder clinics offering Opiate Education and Naloxone Distribution (OEND), more naloxone education opportunities are available to those most closely affected.

Literature Review

Understanding the concepts, administration guidelines, practices, and policies related to substance use disorders is essential. Continued opiate use changes the neurologic pathways within the brain leading to the drug seeking, cravings, and vulnerability of relapse attributed to opioid dependence (Tahsili-Fahadan & Aston-Jones, 2010). Substance use disorder (SUD) is a spectrum disorder, meaning that it ranges from mild to severe (MO-HOPE project, 2016). SUD

is a completely preventable brain disease that can be diagnosed and treated, and from which people recover. Some pharmaceutical companies believe that resources, both human and monetary, are better utilized in areas (Skolnick & Volkow, 2016).

By gaining an understanding of the presentation and treatment of opiate use disorder, health professionals are better able to develop a plan to address the needs of an individual during the treatment process (Beauchamp, Winstanley, Ryan & Lyons, 2014). Hallmark signs of addiction include continuously violating established limits or continued substance abuse regardless of negative consequences (MO-HOPE Project, 2016). The MO-HOPE Project (2016) defines tolerance as requiring more and more of “something” to achieve the same feeling and withdrawal as experiencing negative symptoms when a drug is suddenly stopped (e.g., flu-like symptoms-nausea and vomiting diarrhea, chills, increased heart rate lethargy, fatigue, etc.). When tolerance is low, even a small amount of an opioid can lead to an overdose. Most people seek treatment inpatient and outpatient clinics or hospitals.

There are a variety of medications available for SUD. Determining the proper treatment is individualized and should be developed in collaboration with a practitioner to increase compliance. The setting in which an individual is being treated, inpatient or outpatient, should also be considered. OEND programs are becoming a mainstay in the prevention of opiate-related deaths (Fairbairn, Coffin, & Walley, 2017). These programs can be implemented within the community to help educate and prepare citizens to help reduce the number of opiate-related deaths.

Project Methods

The evaluation of naloxone distribution at a Midwestern substance use disorder clinic involved the retrospective analysis of data regarding the delivery and administration of naloxone.

The project focused on N = 48 individuals in the initial treatment phase for opiate use disorder with methadone who received naloxone from April to January of 2017. The phases are centered on when the client comes to the clinic to receive methadone. Clients are required to attend groups and individual counseling sessions. The counselors at the clinic evaluated potential clients during personal counseling sessions to determine clients who were appropriate candidates for naloxone education and distribution.

The participants who received naloxone were chosen and educated by the clinics counseling staff based on the OEND protocol established by the Missouri Opioid Heroin Prevention and Education (MO-HOPE) project. The trained counselors followed the MO-HOPE project protocol to discuss the acute risks factors of opiate overdose, explained the signs of overdose, appropriate rescue response, proper administration of naloxone, and tips to prevent an opiate-related overdose.

The goal was to evaluate clients who had access to naloxone and document how many would use the naloxone in the event of an opiate-related overdose because this can increase compliance with methadone treatment. Data was collected focused on information that determined the client's phase throughout the project timeline, if clients transitioned, if they regressed to a previous phase, or if they were terminated from treatment. Additional data collection included the amount of naloxone dispensed and the number of clients who used naloxone during data analysis. Demographic information including gender, ethnicity, age, and employment status was collected to gain a better understanding of the studied client population.

The Southern Illinois University at Edwardsville Institutional Review Board (SIUE IRB) approved this project. The MO-HOPE project provided the intranasal naloxone to the substance use disorder clinic for distribution to clients.

Evaluation

With a limited supply of naloxone, the counseling staff determined that N = 48 clients warranted prompt education on naloxone administration and received naloxone during the counseling session. There were 77% Caucasians (n = 37), 19% African Americans (n = 9), and 4% Hispanics (n = 2) who received naloxone. Most clients who received naloxone were between the ages of 31 and 50 (62.5%). Most clients, 62.5% (n = 30) were unemployed who received naloxone. Approximately 23% (n = 11) brought a caregiver to the education. Of these 48 clients, 15% (n = 7) required replacement naloxone. Two clients requested naloxone replacements due to extenuating circumstances (e.g., extreme cold temperature for naloxone storage and naloxone left in an impounded vehicle). Five administered the naloxone for an opiate-related overdose. There were 27.08% (n = 13) men and 72.916% (n = 35) women who received naloxone.

Impact on Practice

The responsibility to educate and inform the community rests on the interdisciplinary team of healthcare providers within the communities to provide this valued resource to this patient population. The substance use disorder clinic viewed the clients' use of the naloxone as a positive outcome. The clients' use of the naloxone became a counseling point for these clients. Additionally, the clinic found a permanent naloxone supply. Funds from the Substance Abuse and Mental Health Services Administration (SAMHSA) opioid State Targeted Response (STR) grants, will allow the clinic to have a sustainable naloxone supply with these funds. The clinic currently has 105 eligible clients.

Conclusions

Studies have shown that community OEND programs can have a positive impact on the communities serviced. Equally as important is that people are aware such resources are available.

Programs like OEND are needed within areas with high incidence of opiate-related deaths (Lambdin et al., 2018; Jones, Roux, Stancliff, Matthews, & Comer, 2014). With the implementation of more substance use disorder clinics offering OEND, more people will have access to both the knowledge of naloxone, how to administer the medication, and can better address the underlying causes for opiate use disorder during treatment. More information is needed on why perspectives of the clients towards naloxone and its use. Moreover, the clinic may consider another way to track naloxone distribution, if or when utilized, and in what manner was naloxone used. OEND has a positive impact on communities. With education and access to naloxone, the potential to save more and prevent opiate-related deaths is there.

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