

Brief Report

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Occupational and Personal Challenges During the Opioid Crisis: Understanding First Responders' Experiences and Viewpoints of Clients with Opioid Use Disorder

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Abstract

Objectives: This study provides preliminary findings on the experiences of first responders during the opioid crisis and their viewpoints regarding whether clients with opioid use disorder deserve medical rehabilitation. Understanding associations between first responder experiences and viewpoints of client deservedness can help reduce stigma, improve compassionate care, and identify training gaps.

Methods: Analyses were run with data from a nationwide survey of Emergency Medical Services-providers and law enforcement workers collected from August to November 2022 ($N = 3836$). The study used univariate statistics and ordered logistic regression to understand first responders' experiences and viewpoints on client deservedness, as well as the relationship between the two.

Results: Results show a negative correlation between responding to overdose calls and perceiving clients with opioid use disorder as deserving of medical rehabilitation. Law enforcement, males, and conservatives also had negative viewpoints. Conversely, having a friend experience addiction and believing addiction has had a direct impact on respondents' lives predicted increases in client deservedness.

Conclusions: Policy should focus on creating spaces where first responders can have positive interactions with people who use drugs or are in recovery. Better training is needed to help first responders manage on-the-job stressors and understand the complexities of addiction.

From April 2020 to April 2021, over 100,000 people in the United States died of a drug overdose, the vast majority caused by consumption of opioids.¹ Though a stigma toward people with substance use disorder exists, some policy interventions during the opioid crisis have focused on harm reduction rather than criminal justice punishment. For example, naloxone—an opioid overdose reversal drug—has become a common tool for Emergency Medical Services (EMS) providers and law enforcement workers to use to save the life of someone experiencing an overdose.² As essential points of contact between clients with opioid use disorder and the state, these first responders make decisions and act in ways that significantly affect the lives of marginalized clients who use drugs.^{2,3} Viewpoints first responders hold regarding whether clients with substance use disorder deserve medical rehabilitation or criminal justice punishment significantly influence whether these clients receive appropriate medical treatment, whether they are referred to substance use treatment, and whether they are treated with compassion.^{2,4} To complicate matters, the EMS-providers and law enforcement workers responding to overdose calls may have indirect and direct experiences with addiction themselves.

But to the authors' knowledge, little is known about how the on-the-job and personal experiences of first responders influence their viewpoints on whether clients with opioid use disorder deserve medical rehabilitation rather than punishment through the criminal justice system. The goal of this article is to present preliminary findings on this association, drawing from survey data from a broader project on the lived experiences of first responders and opinions about clients with opioid use disorder.

Methods

This study relied on original survey data collected from August 29 to November 9, 2022. Electronic surveys were sent to all county and municipal fire, EMS, and police chiefs contained in the National Public Safety Information Bureau's Safety Source sampling frame. The sampling frame included contact information for agencies in all 50 states across the United States. Each agency head was asked to take the survey and forward it to their employees. In all, the survey was

sent to 21,360 fire and EMS agencies and 13,558 law enforcement agencies, with fire agencies that did not provide EMS dropped from the analysis.

For the dependent variable—client deservedness—the survey included a question on whether respondents felt clients with opioid use disorder deserve medical rehabilitation (such as substance use treatment) rather than punishment through the criminal justice system. This variable was coded on a 5-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. To capture first responder on-the-job experiences during the opioid crisis as key independent variables, respondents were asked how many times they responded to overdose calls in the past year, as well as how many times they administered naloxone, both coded categorically with answers ranging from 0 = 0 to 5 = 41+. For personal experiences, respondents were asked two questions: one on whether they had close friends who have experienced an addiction to opioids or nonopioids, and one on whether they have family members with this experience. An additional personal experience question asked whether respondents feel addiction has had a direct impact on their lives, coded on a 5-point Likert-type scale. Control variables were operationalized by means of questions on respondents' agency type, age, gender, ideology, education, and race/ethnicity.

The survey included an informed consent form on its opening page. The consent form informed participants that they could opt not to take the survey or terminate it at any time. The research protected confidentiality at the individual and organizational levels, as survey respondents could not be paired with their responses or agencies. The project was deemed to be exempt by Florida Atlantic University's Institutional Review Board (Package # 1860822-1).

To analyze the data, descriptive statistics were first examined, before using ordinal logistic regression to understand the relationship between the explanatory variables and the ordinal variable client deservingness. For ease of interpretation, the analysis treated ordinal explanatory variables (eg, overdose calls and direct addiction) as continuous if their categories were roughly evenly spaced. Odds ratios, confidence intervals, *P*-values, and statistical significance were reported. Statistical analyses were performed in Stata 18.

Results

Of those who responded to questions on all variables of interest, 2722 were EMS-providers and 1114 were law enforcement, totaling 3836 first responders for the final analysis. Results for descriptive statistics are contained in Table 1. Variables treated as continuous display means and standard deviations, whereas those treated as categorical have percentages. Most respondents (63.56%) either somewhat agreed or strongly agreed that clients who use opioids deserve medical rehabilitation rather than punishment through the criminal justice system. The mean for overdose calls was 1.928, and for naloxone administration, it was 1.436, both falling between the 1 = 1–10 times and 2 = 11–20 times categories. With regard to having family members or close friends who have experienced an addiction to opioid or nonopioid drugs, 53.7% of respondents had a family member with addiction experience and 42.49% had a friend who had experienced an addiction. The mean of 3.616 for direct addiction indicates that respondents were more likely to agree that addiction has had a direct impact on their lives than to disagree with this statement. Most respondents were EMS-providers (70.96%), male (84.93%), had some college experience

Table 1. Summary Statistics (*N* = 3,836)

Variable	Percentage/Mean	SD	Min	Max
Dependent Variable				
<i>Deservedness</i> (agreement/disagreement that clients with opioid use disorder deserve medical rehabilitation rather than punishment through the criminal justice system)				
Strongly disagree	2.76			
Somewhat disagree	10.45			
Neutral	23.23			
Somewhat agree	28.86			
Strongly agree	34.70			
Key Independent Variables				
On-the-job experiences				
<i>Overdose calls in the past year</i> (0 = 0, 1 = 1–10, 2 = 11–20, 3 = 21–30, 4 = 31–40, 5 = 41+ times)				
	1.928	1.527	0	5
<i>Naloxone administration in the past year</i> (0 = 0, 1 = 1–10, 2 = 11–20, 3 = 21–30, 4 = 31–40, 5 = 41+ times)				
	1.436	1.442	0	5
Personal experiences with addiction				
<i>Family member who has had a problem with drug addiction</i>				
No	46.30			
Yes, opioids	25.99			
Yes, nonopioids	27.71			
<i>Close friend who has had a problem with drug addiction</i>				
No	57.51			
Yes, opioids	21.06			
Yes, nonopioids	21.43			
<i>Direct addiction</i> (agreement/disagreement that addiction has had a direct impact on respondents' lives; coded on a 5-point Likert-type scale from 1 = strongly disagree to 5 = strongly agree)				
	3.616	1.306	1	5
Control Variables				
<i>Agency Type</i>				
EMS-provider	70.96			
Police	29.04			
<i>Age</i> (coded from 1 = Under 18 to 8 = 75+)				
	4.372	1.22	1	8
<i>Gender</i>				
Male	84.93			
Female	15.07			
<i>Ideology</i>				
Conservative	48.15			
Moderate	40.48			
Liberal	11.37			
<i>Education</i>				
High school or less	6.70			
Some college	50.81			
4-year degree or more	42.49			
<i>Race/ethnicity</i>				
Non-Hispanic White	86.55			
Minoritized	13.45			

(50.81%), or were non-Hispanic white (86.55%), while a plurality was conservative (48.15%). The mean age of 4.372 fell between the 35 and 44 years old and 45 and 54 years old categories.

Table 2 displays results for the ordered logistic regression model with client deservedness as the dependent variable. Results show

Table 2. Ordered Logistic Regression Results ($N = 3,836$)

	Client Deservedness		
	Odds Ratio	<i>p</i>	95% CIs
On-the-job experiences			
<i>Overdose calls</i>	.932*	.038	(0.873, 0.996)
<i>Naloxone administration</i>	.983	.64	(0.913, 1.058)
Personal experiences			
<i>Family member addiction</i> (Reference: No)			
Yes, opioid problem	.988	.877	(0.845, 1.155)
Yes, nonopioid problem	.998	.983	(0.862, 1.157)
<i>Close friend addiction</i> (Reference: No)			
Yes, opioid problem	1.25**	.007	(1.063, 1.469)
Yes, nonopioid problem	1.304**	.001	(1.116, 1.523)
<i>Direct addiction</i>	1.084**	.001	(1.032, 1.138)
Control variables			
<i>Agency type</i> (Reference: EMS-provider)			
Police	.52***	.000	(0.452, 0.599)
<i>Age</i>	1.009	.715	(0.960, 1.061)
<i>Gender</i> (Reference: Male)			
Female	1.494***	.000	(1.255, 1.780)
<i>Ideology</i> (Reference: Conservative)			
Moderate	1.659***	.000	(1.464, 1.881)
Liberal	5.183***	.000	(4.138, 6.491)
<i>Education</i> (Reference: High school or less)			
Some college	1.05	.691	(0.824, 1.339)
4-year degree or more	1.18	.189	(0.922, 1.509)
<i>Race/ethnicity</i> (Reference: Minoritized)			
Non-Hispanic White	1.073	.432	(0.901, 1.277)
Pseudo <i>r</i> -squared		.046	
Prob > χ^2		.000	

*** $p < .001$, ** $p < .01$, * $p < .05$.

that of the on-the-job experiences, only the overdose calls variable was significant, displaying a negative effect on client deservedness (odds ratio [OR] = .932; 95% confidence interval [CI]: .873-.996). With regard to personal experiences, relative to respondents who did not have a close friend with addiction experience, those who had a friend with an opioid problem had 25% greater odds of rating clients with opioid use disorder as deserving of medical rehabilitation (95% CI: 1.063-1.469), and those who had a friend with a nonopioid problem had 30.4% higher odds (95% CI: 1.116-1.523). Those who agreed addiction has had a direct impact on their lives had more positive views of clients (OR = 1.084; 95% CI: 1.032-1.138).

Results for associations between the control variables and client deservedness illustrate more positive views of clients among females relative to males (OR = 1.494; 95% CI: 1.255-1.780), moderates relative to conservatives (OR = 1.659; 95% CI: 1.464-1.881), and liberals relative to conservatives (OR = 5.183; 95% CI: 4.138-6.491). Conversely, law enforcement respondents had lower odds of rating clients with opioid use disorder as deserving relative to EMS-provider respondents (OR = .52; 95% CI: .452-.599).

Limitations

Limitations of the current study include an overrepresentation of white non-Hispanic first responders in the sample, something future studies can address with more representative samples. In addition, those who took the survey may have different views on people with opioid use disorder relative to those who did not. These limitations were addressed by reducing non-response error through multiple contacts with potential survey respondents and pilot testing to improve survey accessibility. Further studies can use observational rather than self-report data, in addition to collecting data on the organizational characteristics of first responder agencies to see which departmental-level factors have an influence.

Discussion

Despite these limitations, the strengths of the current study include the use of the survey instrument to obtain a wide range of viewpoints from first responders across the United States, with a large sample size and much variation in responses. With this method, the analysis provides a better understanding of how first responders' on-the-job and personal life experiences influence their perceptions of clients who use opioids, as well as exploring the salience of demographic characteristics. Given that these public servants play such a crucial role during the opioid crisis, the survey's focus on client deservedness can help to enhance overdose response, services offered to clients, client outcomes, community relations, and working conditions for first responders.

The opioid crisis has had a massive impact on first responders. They have been tasked with responding to overdose calls and reviving people from overdose while simultaneously coping with addiction-related issues indirectly and directly in their personal lives. Regarding personal experiences, the current study demonstrates that having close friends who have had a problem with either opioid or nonopioid drugs has a positive effect on viewpoints first responders hold regarding clients with opioid use disorder, as does believing addiction has had a direct impact on respondents' lives. Hence, creating spaces where these public servants can interact with people in recovery, or with people who use drugs, can help to foster positive relationships and reduce negative feelings first responders may have. In this way, positive community relations can be promoted, as can compassionate care—1 of the goals of some EMS-provider and law enforcement agencies.^{5,6} In Vancouver, Canada, discussions on substance use include members of the community who use drugs or who have previously used drugs, resulting in the representation of a population normally excluded from decision-making.⁷ EMS-provider and law enforcement agencies in the United States could consider a similar model to foster a shared understanding between public servants and this marginalized population.

In addition to the positive effects of personal experience, results reveal that responding to overdose calls predicts negative opinions about the clients experiencing these overdoses. That is, the more first responders respond to overdose calls, the less likely they are to view clients with opioid use disorder as deserving of medical rehabilitation rather than punishment through the criminal justice system. A possible reason for this is the "compassion fatigue" and burnout which may occur alongside frequent overdose call response; this is especially likely to happen if these calls repeatedly involve the same individual.⁸ To reduce the chances of being overwhelmed by the emotional weight of reviving clients from overdose, and to cope with emotional exhaustion, first responders

may reduce their compassion over time and lessen their capacity for empathy.²

To combat such fatigue, burnout, and negative viewpoints about clients who use opioids, first responder training and education can incorporate lessons on wellness, stress regulation, and emotional wellbeing.^{3,8} In addition, better funding for substance use treatment programs and other harm reduction services which can reduce rates of overdose could benefit clients and first responders, as can anti-stigma trainings which educate public servants on topics related to drug addiction.^{2,8} For example, the National Institute of Environmental Health Sciences (NIEHS) developed an Opioids and the Workplace Training Tool for workers in high-risk occupations who are affected by the opioid crisis—eg, emergency responders, law enforcement, and health-care workers.⁹ This training includes lessons on opioid use and misuse in the workplace, understanding opioid use disorder, and stigma related to addiction.⁹ Research has shown that these lessons have helped to empower workers, reduce stigma, and drive organizational change.¹⁰ Instructors have addressed stigma by educating trainees on opioid use disorder, incorporating the audience's personal experiences with opioids, substance use, and addiction.¹⁰

As demonstrated herein with the positive effects of the direct addiction variable, training could focus on making first responders aware of the impact addiction has had or can have on their lives. The NIEHS's training tool could also help to this end by using the direct experiences of those in the audience to make first responders aware of the impact of addiction.⁹ In addition, such training is useful for substance use issues in the workplace, an important consideration in first responder organizations, where pressure from crises and burnout leads to problematic substance use.¹¹ The negative viewpoints of law enforcement, male, and conservative respondents in the current research indicate that these populations may be good targets for trainings related to the opioid crisis and substance use.

It is important to be aware of the occupational challenges first responders face. These public servants regularly experience anxiety, posttraumatic stress, depression, and burnout as a product of frequently responding to distressing and chaotic situations.¹² Overdose response does not happen in a vacuum; those responding are often coping with multiple hazards and stressors simultaneously. For example, increased stress can occur when the law enforcement and EMS providers responding to overdose calls fear that they may overdose from touching fentanyl, a fear driven by miscommunication and misinformation.¹³ Regulating emotions and displaying compassion for clients who use drugs while managing such complex situations is a challenging task. Training and education programs should take this complexity into account and aim to improve problems related to substance use disorder for those using substances and those responding to substance use-related calls. Improving first responder viewpoints regarding the deservedness of clients with opioid use disorder could help public servants to better understand client medical needs and administer naloxone in a timely and effective manner, as well as to be more willing to refer clients to substance use treatment programs.²⁻⁴

Conclusions

Findings from the current study illustrate that first responders who respond to more overdose calls are less likely to agree that clients with opioid use disorder deserve medical rehabilitation relative to those responding to fewer calls. However, indirect and

direct personal experiences with addiction positively influence first responders' opinions. This calls attention to the need to provide better education and training to these public servants with the goal of helping them to understand the complexities of addiction and to manage their emotions surrounding on-the-job experiences with addiction-related issues. In addition, spaces should be created where first responders can have positive interactions with people who use drugs or who are in recovery, thus improving community relations and enhancing compassion for oft-marginalized clients.

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