

Identifying the Impacts of Opioids on Florida Nursery, Growers and Landscapers

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ABSTRACT

The rising instances of opioid misuse and their aftermath have been termed a public health crisis in the U.S. (e.g., Center for Disease Control and Prevention (CDC), 2017a; Hodge, Wetter, & Noe, 2017). An unfortunate result of high levels of opioid abuse are the number of associated deaths. The majority of drug overdose deaths in the U.S. in 2015, approximately 63%, were associated with opioid use, accounting for over 33,000 deaths (CDC, 2017a). According to the Center for Disease Control and Prevention, the number of deaths associated with opioid use more than tripled from 2000-2015 (Rudd, Seth, David, & Scholl, 2016). In the state of Florida alone there was a nearly 23% increase in opioid related deaths just from 2014 to 2015 (CDC, 2017b). Non-fatal overdoses are also worrisome. Opioid overdose led to 92,000 emergency room visits, and caused 53,000 hospitalizations in 2014 (CDC, 2017a). There is also evidence that ability to work, as well as the quality of work is significantly impacted by opioid abuse (Perlmutter, et al., 2017; Sansone, Leun, & Wiederman, 2012; Van Hasselt, Keyes, Bray, & Miller, 2015). Further, there are additional, significant societal costs associated with opioid abuse, such as trauma to children and families, fiscal costs related to accidents, wage loss

and absenteeism, burden on the medical and penal systems, and costs for drug treatment (Birnbaum, et al., 2011; Meyer, Patel, Rattana, Quock, & Mody, 2014). Estimates place costs in the billions (Birnbaum, et al., 2011; Inocencio, Carroll, Read, & Holdford, 2013).

In August, 2017, leaders from the Florida Nursery, Growers and Landscape Association (FNGLA) identified opioid misuse as a problem within their industries, and contacted the Southeastern Coastal Center for Agricultural Health and Safety (SCCAHS) to gain assistance with addressing the issue of opioid misuse. SCCAHS created a resource section dedicated to opioids in order to help support FNGLA. However, it was unclear the extent to which opioids are a problem for FNGLA, what the economic impact might be, how individuals and families are affected, and what resources or programs might be useful for these industries. This project sought to document the impact that opioid abuse has had on Florida’s nursery, grower and landscaper industries, as well as their families, and determine how best to help them.

OBJECTIVES AND METHODS

1. Determine the extent of use of opioids among Florida’s nursery and landscape industries, and how this compares with other industries
2. Document the impact of opioid use on Florida nursery and landscape businesses, workers and families
3. Determine whether there are ways that the FNGLA can support its constituents in dealing with the

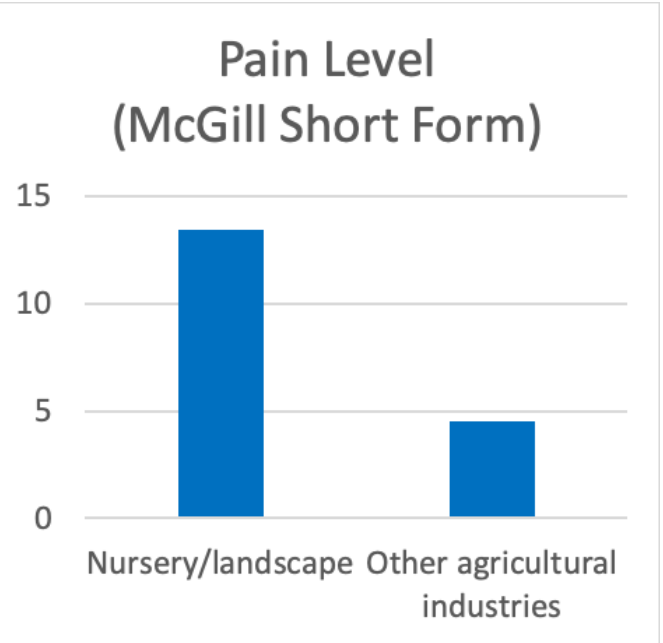
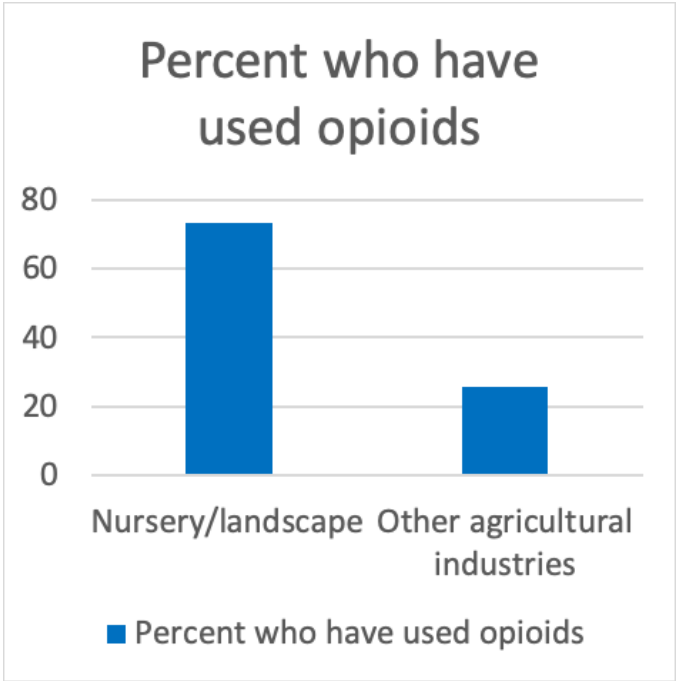
The first step involved the development and administration of a quantitative survey that assessed opioid usage in the Florida nursery, grower and landscaper industries, economic impact of opioid usage for these industries in Florida, personal and family impact, and needs for assistance.

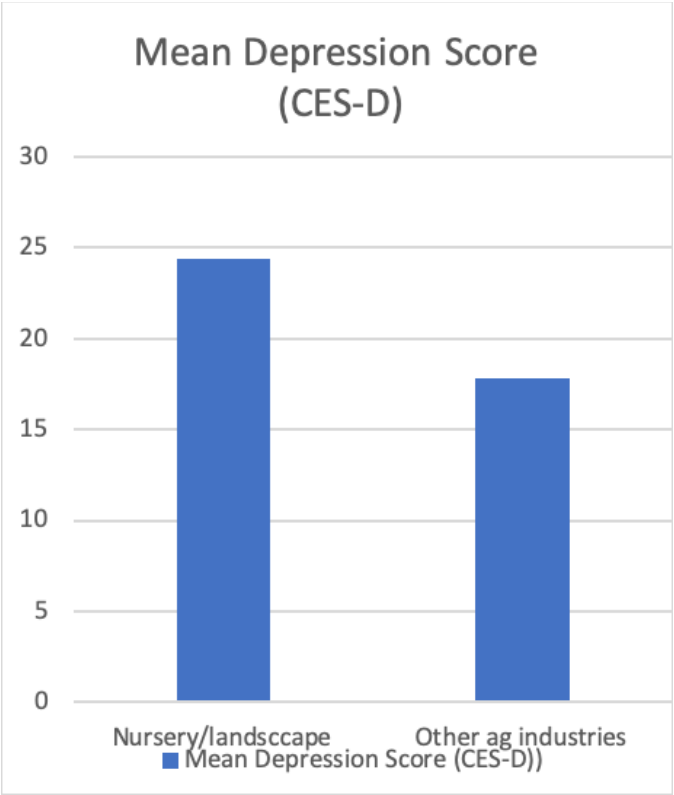
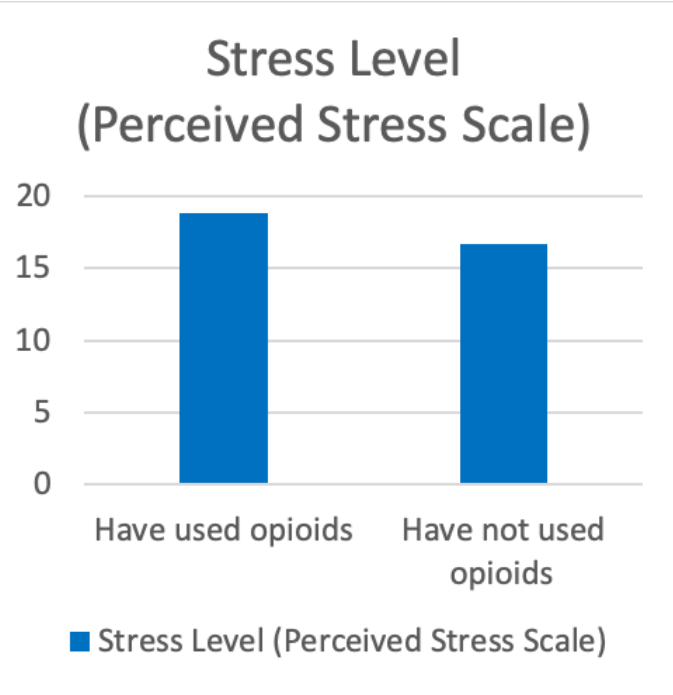
This survey was developed in the survey platform Qualtrics, which is available at no cost to faculty at the University of Florida. The survey was administered online, and took approximately 10 minutes to complete. Participants were recruited through FNGLA and the Southeastern Coastal Center for Agricultural Health and Safety, and both owners and workers were recruited to participate in this online survey. A total of 80 participants from nursery and landscape industries completed the survey, and comparisons have been made with other agricultural industries, which comprised 52 participants. Measures used included information on industry and owner / worker; opioid-related questions; the Center for Epidemiological Studies Depression Scale, Revised; Perceived Stress Scale; and the Short Form McGill Pain Questionnaire. Gift cards in the amount of \$10 were offered to participants in the quantitative study.

After the quantitative interview was conducted, the questions for a qualitative interview protocol were developed, and have been approved by the Institutional Review Board. It is anticipated that the qualitative interviews will take place this Fall and Spring via phone or in person interviews. Gift cards in the amount of \$25 will be offered to participants who complete the interview, which should take approximately 20-30 minutes. Interviews will be recorded and transcribed, and then qualitative analysis will take place.

RESULTS

For this sample, opioid use was found to be quite high, particularly among participants in the nursery and landscape industry. Over 70% of those who identified themselves as working in the nursery or landscape industries reported having used opioids, and over 70% of those people reported that they had received a diagnosis of addiction from a health professional. In other agricultural industries, about 25% reported using opioids, and of those, fewer than 30% reported diagnosis of addiction. Opioid use was highly associated with reports of pain and depression, and about 75% of those who used opioids reported that they used them due to a work injury. Those in the nursery and landscape industries reported higher levels of depression, higher amounts of pain, and slightly higher levels of stress than those in other agricultural industries. There has also been a lot impact on the workforce: over 91% of owners said that opioids have impacted their workforce, and 85% knew of at least 1 employee who had overdosed on opioids. There were also high reports of difficulty doing daily tasks while taking opioids (62.5%), getting injuries at work while using opioids (67%), getting fired or quitting due to opioid use (46%), and needing to miss work due to opioid use (54%). Owners also reported high levels of workplace absences related to employees getting drug treatment, opioids leading to less workplace productivity, and high rates of worker turnover.





CONCLUSIONS

While the study has not yet completed, survey information to date suggests that the Florida nursery and landscape industry has been significantly affected by the opioid crisis, and the impact is much higher than for other agricultural industries in Florida. Opioid use was high in the nursery and landscape industries and was associated with high levels of pain and depression. It is clear that the Florida nursery and landscape workplace has been significantly impacted in many respects, with reductions in the available workforce, increased safety hazards at the worksite, increased worker turnover, and increased health issues for workers and their families. This information can be useful to educate legislators, inform policy, guide community action, and encourage the development of new resources and programming to support FNGLA businesses. It is recommended that FNGLA provide resources to educate members about the addictive nature of prescription opioid medications and encourage efforts to prevent workplace injuries. Encouraging members to seek treatment for depression may also be beneficial; however, it is notable that there is a bi-directional relationship between depression and opioids.

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