

# Understanding Substance Misuse in Agriculture: Reducing Stigma

## SUMMARY KEYWORDS

people, opioids, agricultural industries, issue, florida, misuse, medications, mental health, substance use disorder, nursery, overdose, big, problem, prescribed, treatment, agricultural, disorders, rural areas, impacted, research

## SPEAKERS

Heidi Radunovich, Michaela Kandzer, Ricky Telg

### **Ricky Telg** 00:04

This is Science by the Slice, a podcast from the University of Florida's Institute of Food and Agricultural Sciences Center for Public Issues Education. In this podcast, experts discuss the science of issues affecting our daily lives revealed the motivations behind the decisions people make, and ultimately provide insight to solutions for our lives.

### **Michaela Kandzer** 00:44

Welcome back to part two of our series on Science by the Slice focused on substance misuse in the agricultural industry. I'm Michaela Kandzer, communication specialist at the PIE Center and your host for this series. Our guest for this episode is Dr. Heidi Radunovich. Dr. Radunovich is an associate professor in the Department of Family, Youth and Community Sciences at the University of Florida and a licensed psychologist. Her research interests include families, stress disasters, rural populations and mental health. And this episode, Dr. Radunovich and I discuss substance misuse disorders and how it relates to mental health and the agriculture industry. Keep listening to hear what Dr. Radunovich has to share about this topic.

### **Heidi Radunovich** 01:31

I've been at the University of Florida for it's 22 years now I came here to do my clinical internship for one year. And yeah, here I am, 22 years later, I've never left. So I've had a lot of great opportunities here at the University of Florida. And I have really enjoyed my time here. So my background, obviously, is mental health. And I worked prior to this position here at UF in the National Rural Behavioral Health Center. So rural mental health has really been a big part of my career looking at this issue, and that is what I really focus on. And there are a lot of different areas within rural mental health that are important one area that came up for me, I am a part of the Southeastern Coastal Center for Ag Health and Safety. And the center was approached by the Florida Nursery Growers and Landscapers a few years ago, they were very much concerned about opioid use and its misuse among people out in the nursery and landscape industry. And you know, they were having difficulties with getting personnel to work for them. A lot of them are high, there were overdoses happening, and they really needed some help. And

so one of the things that I sought to do was to kind of get a sense for what is actually going on with this issue. And so that was sort of the inspiration for my work on opioids within this population.

**Michaela Kandzer 03:04**

Thank you, Dr. Radunovich for giving some context to this topic into how you got started studying this topic and the importance of it in the agricultural industry. And so today, we're really going to be talking about substance use disorders and how it relates to mental health and what this topic really looks like within the agricultural industry. So can you kind of just start us off by telling us a little bit more about substance use disorders and what they look like and kind of how you research them.

**Heidi Radunovich 03:31**

So substance use disorders per se, are not a huge part of my own research. I'm more general mental health, but substance use disorders and this is sort of a new way of talking about it. We used to refer to it as abuse or addiction. And we've really kind of stepped away from that, because there is more of a recognition that our language matters. And in a lot of cases, especially when it comes to things like opioids, it is very much physical in nature. And really kind of putting blame it feels kind of blaming when you say things like you're an addict, or here you're abusing, it has a really negative connotation. So you're right, we are now using substance use disorders when we talk about opioid misuse. And really, there are several types of opioids that are of concern and there are multiple kinds, right? So we have things like fentanyl, which is synthetic, and it is it is used, it can be prescribed but it's rare. It's very intense. A lot of times maybe it'll be used in surgeries or for people who are in really incredible pain. We have things like oxycodone, Oxycontin, those types of opioids that I think a lot of people think about related to opioid addiction. Then we have stuff like heroin, which is illegal and always has been for a very long time. And that's something else that maybe people don't necessarily start with. And sometimes they do. But oftentimes, that's a drug that people will transition to when the other drugs that they are using, do not work. And then there are also things like methadone that are maybe there's, they're still in the opioid family, but maybe they're a bit safer. And a lot of our treatment has sort of focused on getting people onto more safe opioids, and in order to get off of the medication that they are using that has become problematic. So there are a couple of avenues that people go down to kind of get to this, a big one that has been of concern is pain. And that seems to be a big pathway, especially for people who are in agricultural areas. And you know, people start out they have an injury, and they start taking actual prescribed medication that a doctor gives them. But what can happen is, very quickly, people will develop a tolerance, and they need more and more and more. And at a certain point, it's, it's too much. And it also can be very dangerous, because if you your tolerance increases, you might accidentally overdose by taking too much or especially if you're you're off it for a period of time, and you start back up again, and you go back to the level that you were at before that is another place where you can overdose. And overdose is sort of the big concern when it comes to opioid use and misuse. We are very much concerned about people dying. And there have been a lot of people dying in this country from opioid overdose. But in addition to that, it causes a lot of other problems too, right? It causes problems where people are not able to function in their lives shouldn't be driving, they could cause accidents, they could harm other people, they could abuse their children or neglect their children. So there are a lot of really negative things that can come about from using this. And this was something that we were seeing in the nursery and landscape industry was people were not capable of

working or they'd come to work high. And it was dangerous for them to use heavy equipment. And you know, people couldn't pass drug tests, it has been very problematic.

**Michaela Kandzer 07:30**

Yeah, that's it's difficult to hear, because I know that it can be. These are people's real lives that we're talking about that are being disrupted, and people that are being hurt by these by this use and misuse. And so this is a really big issue that needs to be recognized and needs to be researched. And it needs to be addressed. So how are you working to address and research this issue? Or how have you worked in the past?

**Heidi Radunovich 07:54**

So in response to hearing from the nursery and landscape industry, I really started to think is it just nursery and landscape? Or are there other people who are having this issue as well in the agricultural industries, we do know that rural areas are much more prone to having issues. It's a place where there's less regulation, there's less enforcement available, it's easier for people to kind of sneak around here in Florida, there has been a history of not really regulating the pain medication that well. So there were a lot of what they would call pill mills that developed where you just go in there and you just get a prescription for pain medication. Everyone knows that's what you just pay them a certain amount of money and they they give you medication. They're trying to crack down on this in Florida. They tried to get some new legislation to have tighter controls which are good, but also there's some negative for people who are genuinely in pain and need to be on these pain medications long term it can be troublesome for them. I will say that. I was really interested. Is it just nursing and landscape? Is it is it all of people in the agricultural industries, right around the same time, something came out from Farm Bureau, they had done a study where they were finding that a very high percentage of people in rural areas were affected by opioid use that was around 54%. And when they looked specifically at people working in agriculture, it was 74% were reporting that they were being impacted. So we knew there was something going on out there. I wanted to know specifically what was going on here in Florida. So I did a survey of people in agricultural industries. So we recruited through FNGLA as well as Farm Bureau and other industries and through Extension and what we found is that it is very prevalent it is having an impact. We noticed in our data, that nursery and landscape was getting hit harder, at least from our respondents, we were hearing that they were getting hit harder than people in other agricultural industries. But these agricultural industries were also having problems as well. We were finding also that pain was a big driver for involvement, which we've kind of expected. This seems to be a big gateway, especially for people in agricultural industries, because it's tough work, you get hurt, it's very easy to work yourself too hard or hurt muscles or have other sorts of injuries. And then you really do need that pain medication. And sometimes these injuries heal and they get better, and you don't need pain medication anymore. But for some people, their injuries are such that they may need to be managing their pain for the rest of their lives. And that's, that's really hard. Our pain management strategies that we have are not the best. What happened was a number of years ago, when they started coming out with prescription opioids, we all thought this was going to be great, and it's wonderful. And the pharmaceutical industries were like, you can't get addicted, you know, they really kind of sold it as as being really great stuff. And I think they did probably know relatively early on that this was not the case. And yet they continue to push it and provide misleading information to physicians who are then eager to write these prescriptions and help their patients. So this is how it started to

become a bit of a problem. The pharmaceutical company kind of turned a blind eye to the fact that there were weirdly large amounts being prescribed, especially in particular areas, they just sort of ignored that. And so that's why right now you're seeing a lot in the news about the pharmaceutical companies being held to account for what they have done. So we are definitely seeing this impact here in Florida, among agricultural populations. And not only does it affect your ability to hire people, and we know that just in general, right now, there's hiring shortages since COVID, there's that has really impacted a lot of industries. But this was already in play, even prior due to the use of opioids. And for some people, they go kind of directly, they don't necessarily have an injury, they just get involved with drugs, that that could be due to emotional pain, or the climate where they live and what people are doing. This might just be the thing there. But we do definitely see, especially in agricultural industries, that a lot of it is related to physical injury. And for a while their physicians were not being very careful about prescribing. So we noticed that this was having an economic impact. That is what our research was showing that there was economic impact, that they weren't able to function as well and get things done. People were seeing a lot of overdoses, just at their particular business. So not just like, Oh, I've heard of an overdose. It's like we've had several here. And we were hearing that from a lot of the people who responded to our survey.

**Michaela Kandzer** 13:28

So you've kind of talked about already how the how this issue has affected the ag industry as far as hiring and economically. But how else has it really impacted the ag industry as a whole?

**Heidi Radunovich** 13:40

I you know, those are those are some of the big ones it can be tough to have. The hiring is a huge one. I think emotionally, it's hard. When people are using these medications, it can be hard to run your business. If you're the one who is using opioids, it can be hard to have enough people to work there. And there's also and you haven't asked this yet. But there is also a big overlap with other mental health issues, especially things like depression. And we know that this is bidirectional. So people who are depressed are more likely to take opioids. And if you take opioids, it's more likely to make you depressed. So we know that it kind of goes both ways. So it can kind of mess with other mental health issues. And we know that there are a lot of mental health issues among the agricultural population in general, higher rates of suicide than many other jobs. So you know, this is this is an industry that could really use some help but I think mental health in general and substance use there's a lot of stigma, and people are not necessarily wanting to admit that there are issues. I was really impressed with the nursery and landscape industry for being willing to come forward and say, Hey, we're having some issues, at least here in Florida. It's, it's really hard to deal with emotionally. And it's, it's upsetting when you lose workers because they died of overdoses, or have had to be hospitalized and you know, can affect your insurance, there's so many ways that this can really affect people. And a lot of our agriculture centers around rural areas, and within rural areas, it's a lot harder, and there's a lot less resources for treatment for prevention. There's more stigma, so and you know, even if you can find somewhere to go, it might be very far away, it might be very expensive. So this is really a tough issue to treat. It's tough to solve this problem. And this is why you see that this problem is still around, even though we started recognizing it for quite a number of years now.

**Michaela Kandzer** 16:04

Yeah, I appreciate that you made the connection between substance use disorders and mental health, because that's where I was going next. But like what can be what can be done? So we see the issue, we recognize the issue, but what can we what can we start being done to make a positive impact and make and gain ground on this issue?

**Heidi Radunovich 16:21**

Well, it's a pretty complicated issue, there are a lot of things that come into play to make the problem. So it's not so simple is like, Oh, we just do X, Y and Z, and it'll all be solved, or we would have done it already. Right. So it's it's a very multifaceted problem. There's obviously the role of the pharmaceutical industries, there's how rural areas are, which is an issue there stigma. There are also drug cartels that are making a lot of money, particularly groups from Mexico, I'm aware that bring opioids to the United States, we saw that there was a bit of a decline around between 2017 and 2018. But then after that, it went back up. And initially when COVID started, it went down. But very quickly, it went back up again. And I think just the change in people's habits, as far as going out less, people were staying at home. And so the ability to bring drugs and get them to people, it took a while for them to figure out how to do this, but they figured it out. And then usage went up quite a bit. I think as people were experiencing so much stress, and upset, that increased the use and misuse of these drugs during that time period. So right now we're seeing that it's big. So there are a lot of things that we can try to do to help this situation. But there's no one easy fix, right? There's no one easy fix. And I don't know that this is something that is going to be a problem that is easy to solve. So obviously, we want to do things like prevent people from having injury, that helps because then we don't have to prescribe these sorts of medications that people can easily find themselves unable to stop using, we can also come up with new types of pain management. And I know that there's a lot of research that is going on right now to try and try to find alternatives. And they have made some improvements to existing medications to make them less likely to be misused. But I think there are also things like Kratom. I know there's some research going on here at the University of Florida, as well as other places to try to see where that whether that is an option. There's the use of medical marijuana. So there's a lot of research that's going on on new mechanisms for managing pain, which is very important. That's an important piece of this. There's increasing education to physicians, and making sure that they're aware and that they're not over prescribing medications that can be easily misused. And then we also have education of people in the population themselves to make sure they're aware that this is dangerous, because traditionally, there has been less of this that has been done. So it's important to make sure that people in the general population are aware. It's important for people who are in the agricultural industry to be aware that this is going on, and we need good legislation available and they have been working on this trying to find ways to make this better prevention programming, especially for youth because we got to start earlier right because sometimes by the time they reach adulthood, it's maybe too late. So prevention type programming among youth is good and more treatment meant for people who need it, making it more easily available and cheaper. There are some things that we know, are helpful in work, for example, things like methadone or medication assisted treatment, and making that more available, I think are all important things that we need to be doing to work on this issue.

**Michaela Kandzer 20:21**

Yeah, and I think too, it can, it can even start at home, right, you can start with everyone listening to this podcast, you can start with me start with you. And um working to, you know, even something as simple

as just reducing the stigma by kind of how we started our conversation about thinking about the language that we use. And you know, thinking about thinking about it in this in the lens of being a disorder, a substance use disorder, and not being something that is necessarily at the fault of the person who is experiencing use or misuse.

**Heidi Radunovich 20:53**

I would also say one thing that has happened, and I don't know if you've ever had the situation where a doctor has prescribed medication for you, and you don't really wind up using it, or you use a little and then you stop, and they've given you like three weeks worth, and you only need one or two pills. And so it sits around in your medicine closet. And what can happen is, the longer it sits there, the higher the likelihood that it could be taken by somebody else, if you have guests over in your home, and they happen to go into your bathroom or in your house. Or sometimes people will rob homes to get their opioids for people who are addicted because they can get money for it. So you know, the more that you have laying around, the worse it is. So that is something that people can do is to try to get rid of those medications. If you've got teens in the house, you ever have guests in your home, even your spouse could potentially use it. And people don't notice because they they're not using it. So it just sits there in the back. And if people take some or take it all together, you may not even notice. A lot of pharmacies right now are offering for free drug disposal bags, where you can put it in there and then people can't get to it. And it's you can give it back to the pharmacy or you can throw it out, but it's in a bag where people can't access it. So proper disposal of what's out there is another thing that we can think about that, you know, we can actually do. I think also having compassion for people who wind up in this situation. And I think a lot of times we like to blame people that you know, maybe it's their fault that they got into this situation, but you have to consider that this is something that cuts across all kinds of populations. And we know that there's very much a physical component at play. So, you know, trying not to take a stance of blame, or you know, telling people, if they were stronger, you could just get off of it. It's not true. Once you reach a point where it's a substance use disorder, you really need some professional help, and so encouraging people to get that help if they need it. And you know, that's something that you can do, it's not easy. So if you could be there for the long haul to help them to access treatment, advocating for better treatment is something else that we can all be working on.

**Michaela Kandzer 23:16**

And so what can listeners do, if they specifically know someone that struggles with dependence on opioids,

**Heidi Radunovich 23:23**

I think the first thing would be for that person to become aware that they have an issue because sometimes people don't even realize that is it is an issue for them. And people can be feeling very sensitive about criticism, I don't know, if you have ever experienced that. People don't necessarily like to hear you have a problem. What What can be more effective is to talk about some things that you have seen or noticed that are a little more objective. Like, I noticed that you fall asleep a lot or I noticed that you're not able to go to work, you don't seem to be able to get as much done. And you know, talk about it from a perspective of these are things that I'm seeing rather than judgment or blame or telling people that they have a problem, and maybe suggesting that do you think it is from this stuff that you

are taking, letting them know that this is an issue that is not uncommon these days, that there is good treatment out there for it and that you're there for them to help them get whatever help that they need?

**Michaela Kandzer 24:34**

Yeah, I think that's I think that's great advice and something that we can all you know, take home and think about as we run into experiences potentially like this with family members or with friends or with employee employees or with co workers. And so just really being able to recognize the signs of someone going through something like this and then being able to reach out to them and have an open conversation that is from a place of love and not from a place of judgment. So I think that's all the questions I had for you today Dr. Radunovich. Do you have any final thoughts that you would just like to share with our listeners today?

**Heidi Radunovich 25:07**

Well, as we think about agricultural businesses, I know that this has become a big issue, we're already dealing with COVID. Right? I think in the past, people may have taken more of a stance of if you are using these medications, if you are using opioids is kind of your problem. And I don't want to have to deal with it. I'll just hire somebody else. I think now, a lot of industries are really feeling the pinch of having adequate workforce like, like everywhere, but especially in agricultural type industries. We're seeing a lot of this. And so thinking about for your actual business, what is your strategy going to be? Do you have coverage, if you have a medical plan for your employees and some places are small, and they just they can't offer that. But if you happen to offer medical coverage, you'll want to make sure that this is something that that treatment is offered, and try to work with people to get the help that they need, rather than just kind of saying goodbye. You know, not everyone can afford to do this, right. But if you can, I think it would be good to sort of try to look out for the people you work with and make sure that they're getting the help and the treatment that they need. For some more information. I know the Southeastern Coastal Center for Ag Health and Safety does have a place on their website where there are some good resources related to opioids and mental health as well.

**Michaela Kandzer 26:46**

We want to thank Dr. Heidi Radunovich for being with us today. The website that Dr. Radunovich mentioned for additional resources related to this topic is the Southeastern Coastal Center for Agricultural Health and Safety website. You can find these resources at [scaahs.org](http://scaahs.org) And then look under the resources tab. We will additionally link these resources in the show notes.

**Ricky Telg 27:26**

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