Past Event: 2024 NCSBN Scientific Symposium - Substance Use: Nurse Anesthetists and Substance Use: Gathering Critical Information for Targeted Interventions Video Transcript

Event
2024 NCSBN Scientific Symposium

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Presenter
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- [Karen] So being an educator, at the end of this presentation, I'd like for you to know a little bit about why CRNAs, certified registered nurse anesthetists, are a high-risk group for substance use disorders. I will talk a little bit about what they do, and what has happened to them during COVID. This is technically a mixed method study, so I'm going to talk about themes that we derive from a simple content analysis from open-ended questions on an online survey.

I know there's some discussions about, "Well, is it really mixed method if you take opening items on an online survey?" And I think the question is it depends on the richness of the data, and what your analysis entails. We're also going to talk about the American Association of Nurse Anesthetists, and how they were pivotal in this study.

I had two consultants on this. As well as really they have done an amazing amount in addressing substance use. Again, this is a very high-risk subgroup of nurses. Then we're going to talk about some discrepancies, not really associations, between some of the strategies recommended by the AANA, and what the working CRNAs believe are effective of those strategies.

And then we'll kind of merge it all together, and talk about some takeaway points. I want to really acknowledge my study team. These are people who obviously I couldn't have done this study by myself. And this is kind of the first part of this study. The second part has more to do with specific risk patterns as substances used. I tend to use a very long survey when I look at the types of substances consumed and risk factors.

So that was the second piece of it. And the third had to do with student-certified nurse or registered nurse anesthetists. Ann Bostic and Linda Stone were consultants on the project, and very active in the AANA. They were instrumental in helping put the survey together, and really me getting to know the culture of CRNAs, etc.

Obviously, the study was sponsored by the National Council, and this piece of the study has been published in the "Journal of Nursing Regulation." So just as an overview, there are 61,000 CRNAs and CRNA students in the country right now.

It's a large group of advanced practice registered nurses. They're one of the four groups of APRNs. So we have clinical nurse specialists, we have midwives, we have nurse practitioners, and then the certified registered nurse anesthetists make up the fourth group. They operate, if you will, or practice their craft in various organizations, and mostly in urban, we'll talk about that.

But they can go into rural areas as locum tenens, or to service critical access hospital, rural hospitals. I'm going to reference my colleague who just presented, Dr. Trinkoff, and her wonderful study that gave us some really important data on substance use problems, and substance use disorders.

So I kind of cherry-picked what I thought was important for this audience in that overall nurses have about a 6.6% SUD. APRNs, again, if you put the CRNAs in that category, have about a 4% SUD. But if you look at the operating room, PACU, outpatient surgery, and anesthesia, you go up to 7.1% SUD.

So we're not quite sure where they fit, but I think it's interesting data nonetheless. We know that they are at high risk. Well, why are they at high risk? There are several reasons. They fancy themselves master pharmacologists. They are sometimes feeling omnipotent with this huge amount of mastery over the medications that they use in their practice.

The high stress area. And this goes much in alignment with Linda Aiken's keynote in other presentation today. There's a lot of stress in this area. It's high stakes, high stress. And it's a very lucrative area. It's one of the big moneymakers traditionally in our acute care facilities. There had been some early, early work done by Bell in 1999.

And his research revealed through a paper survey that most of the difficulties were through diversion of Propofol and other medications used in the OR suite. I find a little bit of differences in what I found in this study. We'll go into that in a minute.

Well, I guess it's on the top line. And I found a moderate risk in the second piece of the study. Alcohol was the most commonly used substance for CRNAs. That if you add the high-risk category to that, it's about 25% are at moderate or high risk for developing an alcohol use disorder.

So that's, no pun intended, sobering information to have. The American Association of Nurse Anesthetists, as I mentioned before, has covered this territory quite well on their website. They are very attuned to it. They have a very active peer assistance program that is available to folks who identify as struggling. But there are a lot of barriers too.

I went to, probably about six years ago, a talk at the Indiana Center for Nursing. And the keynote was Rigo Garcia, and he was a certified registered nurse in recovery. And he talked about his journey of diversion. He talked about getting injured in a sports event where he was prescribed opioids for his ankle.

And when he went back to work, he left the opioids in the car, and all of a sudden started feeling like he had the flu. And so he talked about his journey, and how some things in life are very serendipitously positive. I talked with him afterwards, and he was the one that really suggested to do this study, and to look at CRNAs who had really been neglected in terms of really data collection for a long time.

So what did we do in the current study? We looked at open-ended responses to initiation of substance uses, recurrence, or what we used to call relapse, and overall perceptions. We also, again, presented them with 11 strategies that the AANA have forwarded to organizations as strategies to prevent diversion of medications.

And then we compared those with what the same respondents stated was effectiveness, or could they be effective. And then we merged them as a mixed method study into new conclusions and implications. We use the AANA's research services. And to Dr.

Aiken's point, again, you can't get email addresses from directories in terms of nurse licensure, but they did have email addresses for their members. And as I understand it from my consultants, almost every CRNA has to be a member of this organization. So we were pretty sure that we captured a lot of the CRNAs that were practicing. Again, it was right in, as Dr.

Trinkoff mentioned, the Delta wave of COVID, which did impact our response rate, which unfortunately was less than we had wanted it to be. It was about 280 responses. We did not impute missing data. We used the data that were given to us on the surveys. The sample.

Well, our sample characteristics, about 61% were female, about 85% were Caucasian, 72% were married. Most resided in urban areas, but remember, they could be doing locum tenen works in rural areas and military bases, that kind of thing. And about over three fourths were master's prepared.

And what we're seeing now too, again, the third dataset is student registered nurse anesthetist. That pressure to add the DNP on to some of the educational programs we have throughout the United States has created even more stress for some of the students. Most of them... Well, excuse me, 41% worked less than 10 years, and a total of about 72% worked less than 20 years. So what were our qualitative findings?

Remember, we asked four open-ended questions about initiation, recurrence, and general comments. So what adds to the vulnerability of using substances was the first one. What was happening at the time of substance use initiation? What could possibly have happened to trigger a recurrence? And then additional comments.

Which one of those do you think we got the most responses from? The open-ended comments were the ones that they really gave us the best...the floodgates opened with that one. They were really wanting to help us understand this phenomenon as a whole, even if they were not using substances.

So, hopefully, you can see that. The first questions at the top, "What was happening in your current environment that would lead to that vulnerability?" And the themes that we serve as events in SU for CRNAs. There was a personal vulnerability and a professional vulnerability. So it was like that perfect storm that they had these stressors in their personal life.

They worked long hours. Again, it's a high-stake, high-pressure environment. And then the pandemic was mentioned fairly frequently as well as another stressor they were facing. We had 39 responses in all. And here's a sample of the data, the qualitative data that we collected. "Near complete lack of vigilance over controlled substances has led to the destruction of several colleagues. Action from administration is retrospective at best and universally involves termination. Rather than treating the dispensing of controlled substances as an occupational hazard with prudent safeguards and monitoring, the entire burden is placed on the individual. When an individual diverts, they are treated as a criminal."

So the second question and the third question are kind of grouped together. "What was happening at the time that you first began using substances? And then what was happening to trigger a recurrence?" So a question to you. Here's an example or exemplar of the narrative that supported coping with personal and professional stressors, again, in terms of that recurrence.

And you see that in the literature, too, as far as substance use. I've finished data collection on a large qualitative study also supported by the National Council. And I'll never forget this interview that I was conducting. And the nurse said, "It wasn't the opioids that was my problem, it was the stress I was trying to treat with those opioids."

And I think, again, that really shows the stress that the nurses are under, and why substances are used to cope with that. So this person says, "Well, there's a profile. A new grad from anesthesia school, recently married, bought a new home, and a controlling mother. Started a full-time job at the hospital he trained at, and was scheduled to take night call at a level one trauma center, two months on the job alone."

So two things I want to point out with that narrative a little, or expand on us. This is a very lucrative sub-specialty of nursing. Their starting salaries are between $150,000 and $180,000. But they are also...it's very a solitary type of advanced practice nursing as well. And as I've mentioned several times, high stakes, high risk.

And then another individual said, "When I used fentanyl for the first time, I felt a bit of normalcy and relief of lifelong mental pain." And that was also in other comments, that they felt that it actually helped them feel not just good or high, or something like that, but it helped them feel at peace, normal, and other aspects to the substance.

So for questions three, there were several individuals who had tried to stop on their own without success. "I stopped using opioids on my own, but never recognized that I had an addiction. I substituted the opioids for THC capsules to help me sleep at night. I white knuckled it for three to four weeks, but went back to the opioids, and kept using THC at night. I was afraid to seek any sort of help because I was afraid of losing my license, and my only source of income."

And so the fourth question, which we had the most responses, the first theme was penalties for seeking help. Vulnerabilities of being a CRNA, which we saw reflected in all four questions. Red flags, and identifying those with substance use disorders. So when Rigo was giving his testimony, if you will, at Indiana Center for Nursing that day, he shared with us that he received the employee plaque of the month the day before he was confronted for diverting.

And so you really can't necessarily look at their ability to perform their job, or those that are using substances, the ability to be successful in their job. Sometimes it doesn't correlate at all. And then drugs of choice, alcohol, diversion of anesthesia suite substances, and cannabis. So here's a representative narrative from that last question where we, again, had 41 responses.

And it's the penalties for seeking help. "I've known people that want help but are afraid to obtain help because it must then be reported to all boards, associations, certification, credentialing. Getting help cannot be anonymous, unlike other non-health care professionals. Eventually, all licensed healthcare workers are labeled and/or denied employment if they want help/know that they need help."

So again, we're talking about an advanced practice nurse who is exposed, and has a whole myriad of substances at their disposal, if you will. So qualitative summary. There's a susceptibility to SUDs

compounded by work environment, weak leadership, system-level breakdowns, as well as personal stressors.

The triggers to reoccurrence are similar to those that contribute to the substance use initiation, personal and professional stress with an inability to cope. And we see that in the general substance use literature. Self-initiated efforts at recovery, if you will, are not sustainable, or ineffective. And that they perceive the barriers from regulatory, organizational, and peers to be really dominate the responses.

There was a tone of anger and frustration, and just this almost learned helplessness that there's nothing that's going to change or that they can do about it. So quantitative findings also supplement the qualitative findings. And again, it had to do... And again, I apologize for this small font.

These 11 strategies forwarded by the AANA to prevent diversion. And I've outlined in the ovals the four items that had the largest perceived effectiveness. And so the first column, were they implemented in their facility?

And you can see on a scale of 1 to 5 that there were some that were quite low in terms of their mean. The second one, labeled effective, is did they perceive these, if they were implemented, to be effective?

In other words, if you did do these things, would you think they were effective? And for every test we did, you could see that there were significant differences between those two. In other words, do you do it? Would it be helpful? And you can see the very bottom, and I circled the ones that had the highest mean for effectiveness.

And you can see that last one, "Create a safe environment for prompt reporting to discourage drug diversion." That was the one that they thought would be the most effective. But you can see the mean in terms of implementation was 2.33. So I think it's pretty clear that there is a disconnect between low scores for what is actually being implemented by the AANA in terms of diversion prevention strategies.

But it seems like the CRNAs are endorsing those as they could be helpful. So we merged these findings to make even more sense of the two different data sets, if you will. So there's regulatory and organizational implications. The CRNAs' desire change on many levels.

They're not happy with how substance use is treated, if you will. They want change internally in terms of implementing those strategies, it seems to me. Improved working conditions, which again, that goes back to Linda Aiken's talk this morning. An external, how can we report?

And it was not just reporting to the state boards of nursing, it was reporting to their contractual agreements, and their credentialing associations. It was lots of different people that they would then be identified with this mark against their record. Internal organizational environments include professional stress, workload, negative behaviors in the workplace, and exposure to substances that, if you will, ease such stressors.

External to the organization, barriers to reporting SUD are formidable. The last AANA strategy, as I mentioned, "Create that safe environment," had the highest rate for what they believe would be effective to reporting. So I guess the next question becomes is what do they mean by safe environment? What would have to change for them to feel safe?

And then the stark contrast between the respondents' ratings of the strategy implementation and effectiveness provides evidence that organizational changes to discourage SU diversion would be supported by CRNAs. In other words, if they implemented those strategies, aside from the last item, I think the CRNAs would feel, I think, it's like a safety net.

That there are those things being implemented in their organizations that would help them, or discourage them from that initiation of substance use. The limitations of the study are that these are self-reported on a sensitive topic. So this is substance use, so you can never really be 100% assured that those responses are accurate.

However, that being said, I found online surveys are a good way to do that, that they have anonymity, and that they can answer those in as candid a way as they feel comfortable. The low response rate was probably due to COVID, and also that they were greatly impacted. How many elective surgeries were being done in COVID?

They may have been redeployed to areas like ICU or other areas, but we don't know. And their income could have taken a big hit. So my conclusions are that the qualitative findings provide evidence for personal, professional, and environmental stressors facing CRNAs.

There are significant differences that we've talked about between implemented and perceived effectiveness of the same strategies. And that the merging of the two data sets resulted in significant barriers being reported from myriad ways and sources to reporting substance use.

And one of the things we can do is that employer emphasis on alternative-to-discipline programs to promote a safe environment for reporting substance use, and an examination of a reduction from penalties for reporting substance use are called for. There was an article about two years ago that really spoke to the fact that a lot of nurses are unaware of alternative-to-discipline programs.

They are unaware of them. They don't quite know what that means to them if they were to step forward in their states, as far as avoiding some of the things that go along with reporting or self-reporting usage. So I think that there could be a real, I guess, dissemination of information starting in nursing schools.

I think organizations, if they had onboarding information to share with nurses. The 41 individuals I recently interviewed said, "I never thought it would happen to me, but this information would have been helpful." So that's all I have for today. I think we have about five minutes, if anybody has any questions.

- [Brett] I just want to thank you for this. My name's Brett Morgan. I'm the senior director of practice for the AANA. And I oversee the wellness in peer assistance programs. So this was extremely interesting to me. But also, it's great to see...this is something we as a profession have really put our hearts and souls towards for many years.

And it's great to see nursing starting to embrace this challenge with us. And it certainly validated a lot of the work that we're doing, and gave me lots of great ideas. So I'd love to spend some time talking to you about moving our peer assistance program forward. So thank you.

- Thank you.

- [Female] I have a question. Was the assumption of this that CRNAs are developing a substance use disorder once they're licensed in profession? Or was there a component looked at, did they have a previous substance use issue that just was exacerbated?

- I'm not sure from the data that we received from the student registered nurse anesthetists, what they...well, a select few. So the majority do not use substances, of the students. The vast majority did not. But those who did, the pressure of the doctoral work added to the master's, or becoming a CRNA. So they used performance-enhancing substances, like stimulants.

So I don't know if they transitioned. I don't know. I do a lot of work in psychological trauma, and we know that nurses coming into undergraduate programs have higher ACE scores, Adverse Childhood Experience scores, which I think leaves them open and more susceptible to using or starting to self-medicate, if you will, or cope with stress through substance use.

I lectured to a group of leadership students some time ago. And one of the students said, "I've got a big bottle of caffeine pills in my purse." Our frontal lobes aren't done cooking until we're about 26. So they don't understand necessarily the risks that they're taking, that they have a license to protect. So I'm not sure.

I don't think I can really answer your question. I can speculate with what I've shared with you.

- I just wanted to thank you for your presentation. Just a couple of anecdotal comments. I just recently finished teaching a cohort of graduating CRNA students in an ethics course. And a couple of things of real concern, and some of the reflections, the tremendous stress that they're under, the fact that a lot of them were working in the high-acuity ICUs during COVID.

And then we talked about the AANA code of ethics, and the responsibility to report peers who they thought were either coming into practice impaired, or had a substance use disorder. A pretty low percentage of them stated that they would even consider doing that because of the penalties, and the risk of losing all of the work and effort that they put into getting their degrees.

So it's tough time.

- Yeah. And I think people think COVID's over. I don't think for nurses it's over. I mean, I've talked to so many graduate students who worked the front lines during COVID, who have...I'm not an advanced practitioner, so I cannot diagnose, but boy, it seems like they have PTSD symptoms.

Difficulty sleeping, hypervigilant, intrusive thoughts, all of those types of things. And I don't think it's like, "Oh, we're done. COVID's over." But I think there's a lot left, a lot of residual left in terms of what we're carrying, and what those folks who lived through that on the front lines have really yet to process.

Thank you so much for coming.