Past Event: 2026 NCSBN Scientific Symposium - Middle-Level Nurse Managers: Substance Use and Intention to Leave Video Transcript

Event
2026 NCSBN Scientific Symposium

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- [Dr. Foli] My name is Karen Foli. I'm professor and the Louise Harrington Endowed Chair for Mental Health Nursing at Baylor University. I'll be joined by my colleague, Dr. Wang, later, as we have the last 10 minutes of this session for open and live Q&A.

I'm going to be talking today about our study, the "Mid-Level Nurse Managers: Substance Use and Intention to Leave." My learning objectives for today are to describe what we mean by middle-level nurse managers in the United States, including their titles, roles, and responsibilities. I'm going to present an overview of both the hypothesized and the final model, structural equation model that we derived from our predicted direct determinants and our two outcomes of substance use and intent to leave.

Along this objective, I'm going to review our study methods and procedures. I'm going to outline what our results were, including qualitative data, and which hypotheses were located in our final structural equation model. And then again, the last 10 minutes or so will be devoted to a live Q&A, upon which my colleague, Dr.

Wang, will join me. The study was funded from the National Council of State Boards of Nursing Center for Regulatory Excellence. We're so grateful for this sponsorship. In addition to myself and Dr. Wang, we had three other co-investigators on this study, Drs. Hass, Adams, and Li from Purdue University. Very grateful for their participation.

So what do we mean by nurse managers, mid-level nurse managers? Well, as we know, nursing is the largest healthcare profession in the world. And across studies, Smiley and colleagues have found that about 7.3% of RNs, registered nurses, identify as nurse managers. But there's inconsistency in the titles for this role.

You hear terms such as frontline nurse managers, first-line nurse managers, head nurses, nursing managers, and so forth. We've decided in this study, however, that we will use the term middle-level nurse managers for this role. A bit about this role then.

The American Organization for Nursing Leadership, or AONL, has a definition that we adopted that includes 24/7 accountability as leaders for direct care units. This is widely used in research. So we adopted this description of the AONL's definition for middle-level nurse managers. Their role and responsibilities are sometimes overwhelming.

They bridge organizational strategy with operational implementation. They oversee resource management, care coordination, and so forth. So I really want you to remember this role description and this definition as we go through our findings because they were very much influential, especially as the mid-level nurse managers described their lived experiences in this role.

We want to emphasize also mid-level nurse managers importance and, just briefly, the gaps in the literature that we were trying to fill. Again, they play a critical role in translating that organizational vision into actionable initiatives. They're sandwiched between higher-level chief nursing officers and upper administration with the direct-line providers.

So they're really sandwiched, and they have pressures from multiple social actors in the healthcare organization, if you will. Their well-being, including substance use disorders and turnover intention, we know significantly impact nurse retention, patient safety, and overall care quality. So this study was really important in many ways.

But even though we know middle-level nurse managers are key healthcare professionals in an organization, there's been minimal research when we compare it to the research that's been done for bedside nurses. So what was our purpose to our study? What we aimed to do was to explore how psychological trauma, work-related challenges, resiliency, and perceived organizational support predicted intentions to leave both the positions that they were in as well as the nursing profession and mid-level nurse managers' use of substances.

So our two outcome variables were substance use and intent to leave. This was our hypothesized model. On the far left, you have our observed variables in boxes. And those included resilience, childhood trauma measured by the ACE-2 tool, nurse-specific trauma, role overload, role conflict, and organizational support.

You see the arrows then going into the ovals next to the observed variables. What we created then in the ovals were latent variables. So, for example, work-related stressors, that latent variable in the oval was based on the observed variables of role overload and role conflict.

Now I draw your attention to that as something that will become more important later on as a very important latent variable. We then looked and hypothesized that these latent variables in the ovals would be direct determinants of our two outcome variables, which I've mentioned before: turnover intention and substance use.

They too had observed variables that fed into these latent variables. So again, we looked at the intent to leave not only their organization, but the profession. And we looked at two forms of substance use, if you will: alcohol and drugs. I'll talk a little bit about the tools that we used for those outcome variables later on in the presentation. You also see arrows, five arrows with Hs in front of those.

And those were our hypothesized relationships between the latent variables themselves. And I'll talk about those later as well. We had inclusion and exclusion criteria for this survey-based study. Our inclusion criteria was an RN holding the title of nurse manager with 24-hour accountability for at least 1 patient care unit.

That's a lot, right? That's a lot of responsibility. And the ability to read and speak English. Those participants, well, they weren't participants, but those individuals who were not directly supervising staff nurses were not included in our study. A little bit about our methods and procedures. We did use an online survey within the Qualtrics platform to collect our data.

And because of what we thought was the level of income of these nurse managers, we wanted to give them a pretty good-sized incentive to get them to participate in our study. And we gave them a $49 Amazon gift card code once the survey was completed. Recruitment is always a challenge, right?

I found it a very common challenge in any of the studies that I've conducted. And this was no exception. We did use a multifaceted approach, which led to our success in getting the sample size we were targeting. And we used the AONL research services. Many organizations have such services. And the majority of our sample came from the AONL research services.

They allowed us to post twice on their webpage. They put it in newsletters. And we paid a fee for them to do that. In addition to this survey service that we utilized through this organization, we also used the Purdue University alumni system, social media, and then snowball sampling. We encouraged others who knew about the survey and had other colleagues that fit our inclusion criteria to encourage them to participate as well.

So who were in our findings, if you will? Our quantitative response, we had 234 surveys that we could utilize in our analyses. About half of the mid-level nurse managers were aged between 35 and 44 years. The majority were female, married, Caucasian, and they had direct care experience. What was their direct care contact?

In other words, okay, they had direct care experience, but what did that mean in terms of their responsibilities in their leadership role? Well, we found out that about 34.48% had several times a month direct care duties. That's quite a bit when you consider everything else that these individuals are juggling and interpreting the organizational vision and mission, etc., etc.

And then you can see the breakdown. I would also add that right now this manuscript, this study, is in the final steps of copy editing, and we hope it will be published soon in the "Journal of Nursing Regulation." You can see the educational levels of our sample as well. And about 58.54% had an advanced degree, which, again, isn't surprising.

But we did see a spread as far as education in our sample. Income levels, as you would expect, it was about third were earning over $100,000 annually. But that being said, there were 77% of other folks not earning that much. So it was more of a spread than we originally thought, kind of went with the education as well.

Some had advanced degrees, but you saw associate degree nurses also fulfilling this role. We had folks from various specialties, which was good to get heterogeneity in some of the responses as we talked about this role. We had 27% in med-surgical units.

We had 22% in critical care or intensive care units, 6.4% in pediatrics, 9.8% in obstetrical care, and almost 7.7% in the emergency room and trauma areas. So how about their experience as a mid-level nurse manager?

We had about 46% with 1 to 5 years experience, and we had 36% with 6 to 10 years experience. So let's talk a little bit about one of those really important outcome measures that we used and hypothesized about. One was the turnover intention.

And this is really important for organizations to take note of. For the organizational intent to leave, we used a 6-item scale that was adapted from the original 15-item turnover intention scale. We had a decent Cronbach's alpha of 0.76, 0.77, if you will. But here's something of note.

We had 37% of our sample that screened positive for their intent to leave the organization. It's over a third of our sample had an intention to leave. Now, that doesn't necessarily equate that they are going to put their resignations in, but still something that was really informative and, I think, important as far as study findings.

How about their intention to leave the profession? We used a single-item measure, leaving the profession, their intent to leave the entire nursing profession. So 19% of middle-level nurse managers expressed a desire to leave. Again, something really unexpected, very much higher than what we anticipated and something, I think, for organizations to really strongly consider.

Our second outcome variable, again, was substance use. We divided this latent variable into the observed variables of our alcohol use disorders identification test, commonly called AUDIT-C, and our drug abuse screening test, commonly called the DAST-10.

What you see as far as the alcohol use disorders test, we saw that 13% of the middle-level nurse managers screened positive for this on this screening tool for unhealthy alcohol use. Thirty-one of the middle-level nurse managers reported this unhealthy alcohol use. So that's something really, again, to be cognizant of in terms of drug use.

We found a lesser number of those who screened for substantial to severe drug use of 7%. This is sort of in alignment with Trinkoff's work in 2022, where she used screening tools for substance use disorder and found in her sample 6.6% screened positive for substance use disorder.

Very concerning statistics when you consider everything. So let me talk about the final model for you and which hypotheses were the supported and which were not. I'll draw your attention to the red lines between the latent variables on the left with the two outcome variables on the right.

A couple of things are important. First of all, workplace stressors was the most influential latent variable with direct determinants on turnover intention and alcohol use. Our usable variability for the drug screening test was minimal, and that was not included in our final model. So henceforward, I will only talk about alcohol use when I refer to substance use in our final model. Perceived organizational support had a negative relationship or determination only on turnover intention.

But importantly and lastly, our hypothesis was supported between our two outcome variables. Between turnover intention and alcohol use, we found a significant determination. So this slide basically talks in text form of what I just went over in our final model. Our first hypothesis related to resilience was not supported.

We did not find any significant relationships between resilience and our two outcome variables. Similarly, we did not find any significant determinations between trauma load, specifically secondary trauma, and those two outcome variables. Our third hypothesis was supported in that workplace stressors was both positively associated with both of our outcome variables, turnover intention and alcohol use.

And our fourth hypothesis, again, was partially supported in that we saw organizational support negatively impacting our turnover intention. No effect on alcohol use, however, with our P greater than 0.05. Our turnover intention was significantly and positively correlated with alcohol use. So something again, perhaps in future studies that we could tease out a little bit.

But again, going back to the emotional labor and the overall stress that mid-level nurse managers endure due to their job descriptions and definitions, it is something that makes sense, if you will. We also have a qualitative data set, which we also analyzed using descriptive content analysis.

These were posed open-ended items in our survey that we had a good response to, and they paralleled what we were looking for in the structural equation model. However, we wanted a different data source to either support or refute what we were finding quantitatively. The four questions are somewhat mirror of each other.

The first two here presented in this slide have to do with contributing factors that they felt influenced nurse managers to leave their organization or profession. And then the reverse to that, if you will, or nurse managers, what did they describe for us in terms of that would lessen the organization intent to leave or their professional intent to leave.

And we saw some global themes. Again, this study is being drafted for publication that goes into much more detail and presents actually our data findings in narrative form. But our global themes for the first item on the left was too much responsibility, workload, and too few resources.

Clearly in alignment with the hypothesized latent variable of organizational role and stressors. They looked at demanding workflow. They were constantly on call. They carried... They were always being contacted, even on their time off, with that 24/7 responsibilities, limited opportunities for growth.

They also mentioned compensation quite a bit, as well, and ineffective communication and team dynamics. The flip side is just what to do about those things, right? So addressing what makes them more likely to leave the organization or profession. So mental health was talked about a lot and how to support nurses in their mental health needs.

But they also talked about development, adequate compensation, and empowerment in decision-making, which I think is really, really important when you consider that mid-level nurse managers, again, are sandwiched between those direct care providers and those bedside nurses and upper administration. Some nurses did also, I want to point out, adequately and eloquently described how nursing was a passion for them and how they enjoyed their positions very much.

The second set of qualitative or open-ended responses, which we analyzed, were about our second outcome variable of substance use. So the first question asked what would have the greatest impact on them using substances to cope. And the global theme was intrinsic versus extrinsic causes that lead to substance use.

And these may overlap with why they would leave as well. So again, it supports that fifth hypothesis being supported as far as the relationship between intent to leave and alcohol use anyway.

They were struggling with mental health issues primarily due to their job. Bedside nursing is tough enough. When you think about these folks, as far as switching roles back and forth, we looked at 97% of our sample did have direct care responsibilities. So they're in the throes of a lot, right? Ready access to substances with inadequate policies.

A lot of them asked for more education, how to understand substance use as managers and at the bedside, and addressing gaps in mental health support. The second open-ended question, again, mirrored the first. What would you recommend we do about that substance use or the susceptibility to use substances to cope? And again, it was the inverse.

So strengthen system-level factors that may reduce the risk for substance use. So organizations were talked about, organization initiative, educational policies. So it went beyond. I think the mid-level nursing managers have this insight about not only direct patient care, but about the organization as well.

So these are very fruitful individuals that can give us a lot of perspective and insight, both at the individual and at the system level, which I think is really, really important. So they identified that some of the solutions should come from organization and system-level initiatives. We had study limitations, just as any other study might have limitations.

There might be sampling bias due to our recruitment methods. We, again, relied heavily on the research services of the AONL. And so if you weren't a member of that, they may not have been as included in our study as others that were not members. When you're collecting data, sensitive data, such as what I've described in intent to leave and substance use, more importantly, there's going to be a social desirability bias.

In other words, they may be hesitant to disclose the sensitive information to us, even on the conditions of confidentiality that we assure them of. And there may be a lack of representation for additional subgroups of nurse managers. Maternal health, for example, was missing as a subspecialty area, but I think we had a good stratification among specialty areas overall.

There's also regulatory implications that I want to highlight briefly for you, and they're both institutional-level and national-level. There's three major areas to focus on. One is substance use policies and education, alternative to discipline programs, mental health support, and then safe staffing implications, as well as the workplace violence and safety and burnout implications from these findings.

So just to have some key takeaway points, three real quick ones. The first study to examine the turnover intention and substance use together for middle-level nurse managers. We highlighted the link between substance use and career decisions, and it shifts the focus from individual to more workplace and organizational improvements that can be made that would affect some of these vulnerable points.

That's the end of the recorded presentation. And so I'll be joined now with Dr. Wang as we entertain your live Q&A questions. Thank you.

- [Jen] Hi, Karen and Yitong. Thank you for joining us after lunch.

I hope you had a wonderful break. And, you know, thank you for this presentation. I did want to ask you, what makes mid-level nurses a unique group to study, you know, compared with frontline nurses or senior nurse leadership?

- [Dr. Wang] Thank you so much, Jen. This is a great questions. I think middle-level nurse managers, they are unique because they serves as a bridge between senior leaderships and the frontline care nurses. So they are accountable for staffing, quality, safety, personnel, and also union operations. But very sad, they often have limited authorities over the resource needed to meet those expectations.

So their role is distinct because they remain close to the clinical practice, while also carrying substantial organizational responsibilities.

- So then, based on your findings, what aspects of this role put them at a particular risk for stress, burnout, or substance use risk?

- I think that they have this double barrel, if you will, of emotional labor. They're hearing pressures from above, as Dr. Wang just described, in terms of budget and resources and staffing. And then at the same time, they're also receiving feedback from the bedside nurses about the pressures they're experiencing, the difficulties there.

So they really have it coming at them in both ways. As we described in the recording, they also...some of the novel implications or novel findings that give us some implications or insight into these areas is the fact that it's just a 24/7 responsibility. There's no relief.

They're constantly on. That intense responsibility is just unrelenting. They mentioned that they really wanted mental health services nearby. They would take advantage of those. They wanted better benefits, better pay, better compensation at the level of their responsibility. And then in terms of substance use, they also wanted more education in that area, so that they could perhaps identify nurses who might be struggling sooner, or even down the path, that they could identify nurses who were struggling with coping with some of the stresses that they were having.

So it was really... They were clear about what they wanted. And in all of the studies I've done through the years, nurses are very clear about what they want and will hand you the implications, if you will, if you ask the right questions.

- So one final question to lead off of that. What organizational supports may be most important for helping mid-level nurses manage the work and the stress before it contributes to turnover, intention to leave, or unhealthy coping?

- Do you want to take that, Dr. Wang, or would you like me to?

- I can take it, but if there's any add-ons, Dr. Foli, you can. Yeah, so thank you so much for these questions. I think the organizations, from my point of view, should reduce the excessive workload, improve staffing and also the administrative support, give managers some meaningful decision-making authorities, and also provide those confidential mental health and substance use resources.

I think that's the key point. And also, the resilience programs should be supported, but not replace the system-level improvements. What do you think, Dr. Foli?

- I agree with all that. I think you did a great job of summarizing and highlighting those important points. The only minor thing I would add is that they're direct supervisors, understand the pressure that they're under. You know, there's a saying, "You don't quit your job, you quit your supervisor." And I think that that's kind of true for many, many roles, but I think that's especially true with this one.

And so that their supervisors understand that dual responsibility, that sandwiching that they experience day in and day out, I think that that would go a long way as far as retention and their ability to cope.

- So thank you both for your insightful findings, your words of wisdom, and for your research. That does conclude the Q&A session for today. Please make your way back to the lobby and then choose your next session to join.