2021 NCSBN Scientific Symposium - Pre-Licensure Nursing Program Database Video Transcript

Event
2021 NCSBN Scientific Symposium

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Presenter
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- [Moderator] Nancy Spector is the Director of Regulatory Innovations at NCSBN. She has worked on a number of initiatives in regulation and education, including social media violations, trends in nursing education, nursing program approval, distance education, and outcomes and metrics of nursing education programs. Dr.

Spector presents and publishes nationally and internationally on regulatory issues in nursing education.

- [Dr. Spector] Good morning, everyone. It's such a pleasure to be talking to all of you about this very important initiative that we've been working on it NCSBN. Of course, I'd much rather talk to all of you in person. But, the beauty of doing it this way is that more of you can attend. As you know, there are always players behind the scenes in big projects and that's the case in this one.

So, I especially want to call out Joe Silvestri, Kiana Mackintosh, Greg Mannix, and Brendan Martin, for all their work and expertise. But, there are many others as well including Maryanne Alexander, and of course, this never could have been done without the support from our board of directors. Here are the objectives for this presentation.

I'll start by setting the stage. What is the background of this evidence-based core database that we've developed? Then I'll go question by question to show you the annual report core questions that were supported by the evidence. Lastly, I'll talk about next steps and the future of this first-ever nursing education database. Many of you are aware of the two-year mixed-methods study of nursing education that was published in the July supplement of JNR.

This study consisted of three national studies and an integrative literature review. First, we conducted the literature review, leveling the evidence based on the Johns Hopkins levels of evidence. Then, we conducted a national Delphi of 295 experts in nursing education regulation and nurses who work with new graduates.

Next, we conducted a quantitative study of five years of boards of nursing annual reports where 43 boards participated. Lastly, we conducted a qualitative study of five years of boards of nursing site visit reports where 31 boards of nursing provided data. Now, we didn't think we'd have that high of a response rate for the site visit study, because not all of the boards conduct site visits.

So, we were very pleased with the response of the boards of nursing for both the site visit study and the annual report study. While the annual reports provide quantitative data, like numbers of faculty, clinical hours, etc. the site visit documents provide rich qualitative data, as they are really the stories of the nursing programs. In order to be included in the core education database, the questions had to be supported by at least two of the four areas of the evidence, the three studies, and the integrative literature review.

Additionally, we brought in an expert panel, remember those days when we could all gather, that reviewed all the evidence. They consisted of experts in nursing education, the American Association of Colleges of Nursing, NLN, ODN

[SP] were all part of this, as well as research, regulation, and law. The experts not only brought credibility to the findings but also helped to delineate some issues. For example, the attorneys brought a fresh perspective to the work, and we did make changes on their advice. From this research and the regulatory guide, we then developed the core nursing education database.

For boards of nursing that participate, we now have about 20, we create their annual report based on the core database, and they send the link from Qualtrics to their programs. This way, the annual reports will be collected with consistent data among all the boards of nursing. When we analyze the annual report quantitative study that I mentioned previously, a limitation was inconsistency of data across boards.

There was missing data and the data were collected in different ways with different timelines. This database will have the same data being collected in the same way. This is really a win-win situation for the boards of nursing because we decrease their work by collecting their annual reports, cleaning the data, for example, one board had 2.5 males in the program, another average age of students was 1.

So, we had to verify those answers and we answer all faculty questions, and then send the boards a descriptive report of their programs. Yet, the boards of nursing can also add their own questions. We found that some boards of nursing don't add any questions while some have added some pretty complicated questions.

Here is a snapshot of some of the data that are being collected. And, remember, this is all evidence based. For example, national accreditation was found to be significant by three of the four studies. The program approval status was our dependent variable and certainly an important piece of data. Geographic location will help us to distinguish if there are any differences in outcomes based on location.

Year founded, three of our four studies found that the longer-standing programs had better outcomes. Therefore, on the regulatory guidelines, we call programs younger than seven years high risk. We ask about satellite sites and program type, as these are more demographic questions. Our annual report study

includes both PN and RN programs. There is a question about how much online, hybrid, or in-person education the students has, and, of course, this is pre-pandemic.

As the literature and quantitative study found generally that hybrid programs had better outcomes. Interestingly, the literature and quantitative study found that semesters had better outcomes. So, that's another question. Formal orientation of students was supported by the literature and qualitative study and interestingly, we are finding that almost all the programs do that.

The literature and qualitative study found that programs have better outcomes when they have resources for students with English as a second language, and learning disabilities, as well as services for those to help students who can't afford books or resources. Some of the low socio-economic students in the poor performing programs in the qualitative study actually had no books or resources because they couldn't afford them, which was really incredible to us.

The question about remediation goes to, do the programs actually remediate students who are having trouble? The progression exams ATI, HESI, for example, are meant for remediation and not simply as cut scores for students.

This question was supported by the qualitative study and the literature. Next, what about remediating for errors and near misses in clinical settings and simulation? This was supported by the literature in the Delphi. Do the programs keep track of errors and near misses? Do they use root cause analyses so they can identify the problem? Sometimes, student errors are the result of system errors or maybe even a lack of nursing education.

We have a great study going on errors and near misses. The safe student reports study and faculty have networked because of the study, learning a lot about best practices for teaching drug calculations, using root cause analyses, developing fair policies, etc..

Is the program involved in something like that? What about changes in the program? And, this was supported by the qualitative study and literature review, like administrator changes, cuts in faculty, FTEs, etc. They are predictive of programs falling below standards. We have seen a lot of these in the annual reports we've reviewed so far. Simulation, as long as it doesn't go above 50% in each course, and of course, this is during normal times, is supported by the literature and Delphi and we defined it from the AHRQ Healthcare Simulation Dictionary.

In fact, many terms throughout the core questions are defined so faculty can know what they're answering. Simulation faculty being certified and sim centers being accredited, is asked about. This is a goal programs can reach for. It was supported by the literature and qualitative study. Quality clinical experiences with actual patients came out loud and clear on the literature, Delphi, and qualitative study.

We did not have consistent data on quality clinical experiences from the annual report study but we will now as we collect these core data. How many hours do students spend on direct care? And, of course, this is in normal times. Unfortunately, in [inaudible] surveys and simulation in 2010, and then repeated in 2017, we've seen a decrease in numbers of our students spent on direct patient care.

Indeed, in a scoping review of clinical experiences across countries, Hungerford et al found that the U.S. lags behind the UK, Australia, New Zealand in numbers of clinical hours that pre-licensure student nurses must have. As we collect these annual report data, we may find some answers for the minimum number of hours that pre-licensure programs should require.

Similarly, we ask about simulation and skills hours. And, of course, this is in pre-pandemic times. These are both very important teaching strategies, again, supported by the Delphi and the literature. We found from the literature and quantitative study that the director of an RN program should have a doctoral degree and a graduate degree for a PN program.

And, there was also support for the program director being a nurse. So, we ask those questions on the core annual report survey. An interesting finding was that if the director is also in charge of the Allied program, there needs to be an assistant or an associate director to take care of those day-to-day activities in the nursing programs.

Similarly, there needs to be dedicated administrative help. This was supported by the qualitative study in the literature. Our studies confirmed what we already know, faculty are the bedrock of nursing education, so there are lots of questions on that. We ask about the percentage of full-time faculty with a denominator including all part-time, adjunct, and full-time faculty.

Our studies found that fewer than 35% full-time faculty predict poorer outcomes. This was supported by all four studies. Now, you might think 35% is a little low. I certainly do. We'll find out as we collect more consistent data among the boards. Yet, we have found from the annual reports we have collected so far, that some schools have a lot of adjunct faculty and very few full-time faculty.

So, we'll see in the aggregate analysis that is collected this summer what that average is and if a higher percent of full-time faculty does predict better outcomes. We also ask about faculty credentials as our studies found better outcomes when faculty in RN programs hold graduate degrees and in PN programs BSN degrees.

The faculty ratio in clinical and didactic courses does not have a lot of evidence but this is a question that comes up a lot to boards of nursing, so we need more data. Interestingly, Odom-Maryon in 2018, found higher NCLEX pass rates linked to higher student-faculty didactic ratios, which is a bit counterintuitive so we'll see what we find.

Our qualitative and Delphi studies and literature support orientation of adjunct faculty, as oftentimes they are clinicians who have no idea of the curriculum or even what the students are learning in their companion clinical course. While in the previous slide, we talked about the importance of orientation of adjunct faculty, orientation of all faculty came out loud and clear in our studies, and is included in the core data annual report.

We found that many times faculty come from clinical positions such as DNPs and just aren't prepared to teach for full-time faculty. The study supported a year of mentorship with a seasoned faculty member. So, this is another question. Additionally, our studies found that faculty should have some professional development in the areas of adult learning and curriculum development and this will be asked on future surveys.

In the left column are some of the questions related to demographics. It is important on surveys like this to be very specific when asking questions so that we can collect consistent data. We asked about the enrollment data in the beginning of the 2021 academic year. And even though that is pretty specific, we still got questions from faculty who wanted to be sure they were answering accurately.

We asked about maximum enrollment, and then the average age of the students. Attrition questions were harder to develop. We went to the U.S. Department of Education as well as other places, but finally ended up specifically asking about the last graduating cohort, the number who started, the number who graduated, and the number who are still pursuing coursework.

We realize this is a snapshot in time about attrition but it seemed to be the most reliable way to ask the question, and we'll see what we find in the analysis. Depending on that, we could change how those questions are asked. There was a lot in the literature about attrition, though it did not come up in any of our studies. We still thought it needed to be asked because many boards of nursing and the accreditors consider this to be an important outcome.

Especially in the literature and the site visit study, we learned about minority students not having enough support, so this is an important question. The sex of students is really more demographic. These were the core questions and as you can see, they are evidence based. There are only 52 core questions which many programs liked, as they were used to a lot more questions.

Since ours is a core data survey, every question had to have a reason for asking it and the respondents couldn't go forward until they answered every question. Then, however, the boards of nursing can add as many additional questions as they like, as I've said. We also took this opportunity to ask about the impact of COVID-19 on nursing programs.

We have 16 questions on that. To date, it is almost unanimous that the pandemic had a major disruption on nursing programs. We've been able to create a National Nursing Database because of the consistency of data being collected which is all based on the evidence.

This will allow our research team to do more sophisticated statistical analyses on the aggregate data. NRBs will be able to compare data across jurisdictions and the programs will be able to benchmark their data as well. This could be helpful for administration getting funds for accreditation, resources, more faculty, etc. For this first year of rolling this out we have about 20 boards of nursing who are participating.

That is excellent but, of course, our goal is for all boards of nursing to participate. We'll be hosting a webinar in this spring to recruit more boards of nursing. So far, we've had a positive feedback from all of the boards of nursing who have participated. In the summer, then, Dr.

Martin and his research team will analyze all the aggregate data for the core questions and we'll update the regulatory guidelines as necessary based on any new data. For example, right now we have found that 35% of full-time faculty are a quality indicator. Will this percentage change when we have more data? Additionally, there is no evidence to support a minimum number of clinical hours required for pre-licensure students.

Will this change with more consistent data? Then, we'll also analyze COVID-19 questions this summer to determine the impact on nursing education. From what we've seen so far there's been quite an impact as I've said. While many programs have said that their learning outcomes have been about the same fair number has said that their outcomes have been worse.

And, of course, we'll publish our aggregated results of the COVID-19 questions. We are really excited about our first-ever nursing education database. Both the NRBs and the nursing education programs will be able to use the benchmarks we have developed. Right now, many boards of nursing are using these benchmarks when approving nursing education programs.

We know it has been a very hard year for making any big changes, so a big thank you to all of the boards of nursing that are participating in this annual report project now. And, we hope as this year gets better and it will, more will be able to participate next year. Some of our associate NRBs have expressed interest in participating in this project.

Once we have more of a system developed we would definitely like to include international regulatory bodies in this project and start a global nursing education database. Currently, we have been very busy establishing a process that works for all the boards of nursing in the U.S.

So, we probably need to get that process established first, but it is exciting thinking about extending this project internationally. Of course, we will publish the aggregate findings and update our regulatory guidelines as appropriate. I always like to end with a quote and I love this quote from Florence Nightingale and some of you've probably heard it before from me, "Were there none who are discontented with what they have, the world would never reach anything better."

Isn't that true? The nursing regulatory bodies wanted more evidence for program approval and from that work, we've been able to develop the first-ever evidence-based core nursing education database. Thanks so much for your attention. Now, we'll have a live Q&A.

You can enter your questions into the Q&A box.