

## 2021 NCSBN Scientific Symposium - National Study of Clinical Education in Family Nurse Practitioner Programs Video Transcript ©2021 National Council of State Boards of Nursing, Inc.

## Event

2021 NCSBN Scientific Symposium

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## Presenter

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- [Hostess] The research of Kristina Thomas Dreifuerst is at the forefront of disciplinary efforts to develop, use, and test innovative teaching methods to improve students' clinical reasoning skills and investigate how educators can best be prepared to use evidence-based methods to enhance teaching and learning. Her work has been recognized for leading initiatives to transform nursing education and influence changes internationally.

- [Dr. Dreifuerst] Hi, I'm Dr. Kristina Thomas Dreifuerst from Marquette University in Milwaukee, Wisconsin. On behalf of my colleagues Dr. Angela McNelis, from George Washington University, and Dr.

Darrell Spurlock, from Widener University, we are pleased to present our study, the national study of clinical education in family nurse practitioner programs, and, specifically today, the types, frequency, depth of direct care, experiences of family nurse practitioner students in the United States.

We gratefully acknowledge the National Council of State Boards of Nursing for their support of this work through a CRE grant, project number R100010. Family nurse practitioners care for patients across the lifespan. And rigorous educational preparation is necessary, which includes diverse clinical experiences to ensure competent safe practice in our graduates.

During these clinical experiences, learning outcomes are presumed to be met, yet data-driven research, reporting what actually happens has not been reported beyond individual program data. For that reason, our study proposed to describe the types, frequency, and depth of direct patient care experiences of family nurse practitioner students in the United States.

This is important research because students in FNP programs are expected to develop autonomy in their practice throughout their educational experiences. This autonomy includes the management of patients with previously-diagnosed and undiagnosed conditions.

And these experiences should occur during their clinical practicums. Nurse practitioners, including family nurse practitioners, must demonstrate competencies in caring for complex patients across all age groups. And these patients have a variety of healthcare conditions and they live and work in diverse settings.

Nurse practitioners, including family nurse practitioners, must also demonstrate competencies in caring for complex patients across all age groups throughout the continuum with a variety of health conditions and, again, in diverse settings. These age groups include the birth to death continuum, and this is a wide range of expectation.

Traditionally, FNP students work one on one with a preceptor to achieve these competencies throughout their minimum 500 clinical practicum hours that are required for national board certification. For the purposes of this study and to test the question, "What are the frequencies, types, and depth of these patient care experiences that FNP students experience?"

we used a cross-sectional observational complex sample survey design and we collected data from students enrolled in or affiliated with accredited FNP programs across the country. To do this, we used a 33-item investigator-developed, inventory-type survey.

This survey contained four sections. The first section was a demographic and professional information section and included questions regarding age, years of experience in nursing, clinical area of practice, and geographical information about the program they were enrolled in and where they did their clinical practicum experiences.

The second section included information about the educational program they were enrolled in, including the program type, the delivery method, for instance, was it online, hybrid, or face to face, or some combination thereof. And we also asked for information about their clinical experiences.

These were the precepted clinical experiences traditionally seen in these kinds of programs. The third section of the survey addressed the four domains of nurse practitioner practice. These are the domains that nurse practitioner students, particularly FNP students, are likely to participate in, assessment, diagnosis, treatment, and evaluation.

And finally, the survey included 84 specific tasks across these 4 domains of assessment, diagnosis, treatment, and evaluation in each of the populations pediatric, adult, and gerontological. The participants in our study are well representative of FNP students in the United States, 3,946 students completed the survey in its entirety.

And consistent with national trends, 79% reported that they were female, and 21% reported that they were male. Our participants are also representative of the age we see in FNP students and nurse practitioner students in general in the United States today.

Seventy two percent of the participants in the study reported that they were in the 25 to 34-year-old age group. The participants in this study also represent FNP programs across the regions of the United States proportional to the way the programs are available in the various urban and rural areas of this country.

For instance, 50% of our participants came from the large middle sections, north and south of the country where there are larger FNP programs, as reported in the national data set.

Thirty two percent of the participants in our study came from the eastern sections of the country, both the north and the south part of the east, where there are many many programs but they are smaller in class sizes. And 18% of the participants in our study came from the rural western regions, both north and south areas of the country, where there are fewer programs and they also have smaller class sizes.

Our findings were very interesting, and our findings were broken up using the frequency of clinical task by domain and population. And what we found is when we looked at those four areas, assessment and we looked at treatment and we looked at care of patients across adults, geriatric, and pediatric populations, we found that there was quite a range between students who had never done many activities to students who had done activities greater than 10 times.

There were no students who did all of the expected activities greater than 10 times and there were no students who never did any of the required activities. The data was not a bell curve, however.

We did not see that most students had done most activities in either 3 to 6 or 7 to 10 times. In fact, what we found is that, while students had many opportunities to do activities associated with the care of adults, they had infrequent opportunities to demonstrate or even participate in the required competencies associated with the care of pediatric and geriatric populations.

So, in our sample of 3,946 students, across those populations, adult, geriatric, and pediatric, the most common task that students reported never experiencing in their clinical rotations were performing a mental health assessment, ordering diagnostic tests, performing primary care procedures, or evaluating treatment and educational outcomes related to chronic pain in adult, geriatric, and pediatric populations.

So, this is pretty important data for us, as a discipline, and for us as we think about the preparation that our students are getting in their role as an FNP. Because, although significant numbers of students reported never experiencing some clinical tasks in each domain and others reported doing some tests more than 10 times, these tests were all deemed to be important and to be a criteria upon which programs are measured.

So, having any students that had not experienced some of these items is concernful. Now, our data does have some limitations. We relied on students' recall of their clinical experiences, although we did allow them to look if they had a recording system such, as Typhon, some of them did use that data to inform how they answered the survey.

But we, potentially, have biased data, based on responses, also because there is self-selection involved in the respondents to survey solicitation. We did our recruitment in several different manners. We recruited through program administrators and directors, we did direct recruitment, and we did social media recruitment.

And so, we're aware that the people who chose to participate in the study may be different and may have had different experiences than those who chose not to participate or who were unaware of the study.

And we're aware that we, potentially, admitted recently-accredited schools and, therefore, respondents because they were not yet included on published lists.

And so, this might have narrowed our sample inadvertently, so...but we feel that, overall, our demographics reveal that our representation is very strong and our response rate quite good. So, in conclusion, what we discovered is that for many students the clinical experiences in their FNP programs did not provide the patient encounters reflecting the tasks that were deemed as essential, outlined in the ANCC FNP Role Delineation study and used for the development of the National Certification Examination.

And because of this, as demand continues to grow for primary care providers and FNP needs to continue to grow in both urban and rural areas, our graduates need to possess the skills and knowledge to practice autonomously and to assess, diagnose, evaluate, and treat across the human age range of pediatric through geriatric in accordance with their scope of practice.

And we are accountable to ensure that they're ready to do that. The gaps and inconsistencies in this requisite learning experiences for students require a critical conversation among leaders in academe, regulation, and certification. And we believe that working collaboratively, these three groups, leaders in academe, leaders in regulation, and leaders in certification must re-examine competency expectations.

And they must really consider the availability of clinical learning environments today and in the future and consider what preparation for advanced practice looks like, and should look like, and the quality indicators that we need to be sure that we are all meeting to ensure development of qualified nurse practitioners who will then provide safe, high-quality care across the lifespan.

And finally, if our data holds true, then we have to ask ourselves some other questions. For instance, if traditional clinical precepted rotations are not providing the opportunities for NP student experiences that we expect and they are not having an opportunity to participate in or experience the expected tasks and develop competency in these areas, perhaps it's time that alternative experiential approaches, such as simulation, be explored and developed further as a concurrent way to meet clinical requirements.

We know that our interdisciplinary colleagues in other health care professions have moved in this direction for this reason. And it will take collaboration between academe, regulation, and certification leaders to push this agenda forward.

We recognize that this is one study and that this is one set of participants, but we believe that this data is a call to action. And we encourage additional research and additional data collection to ensure that we all understand what are the expectations of FNP students and how and when are those expectations being met and how and when are they not being met in current educational environments.

And then we've provided some selected references. We can be contacted if you would like additional references or additional data. Thank you so much for your time today. Hi everyone.

Welcome and thank you for attending this session. I am available now to answer any questions that you might have or comments about the study.

And so, if you'd put any questions or comments into the Q&A section, I will be able to see them there. And I do see one from Jackie. And Jackie asks, "Did your study capture whether or not students had to pay for preceptor experiences?" We did not specifically ask that question.

However, we did ask whether students had to get their own preceptor or whether preceptors were provided by the program. And we do have a paper in preparation that looks at the difference, because there was a significant difference between the experiences students had when they had to get their own preceptor versus when preceptors were hired and/or contracted by programs directly.

I see another question from Shannon. Shannon asks, "Another big question is, 'Do we need so many FNPs?' But maybe, rather than trying to create alternative experiences, we should increase students' entry into...so, the AGPC, CNP or the peds? So, maybe the lack of sites is reflected of the healthcare arena, our peds..."

Oh, so, you're asking if other preparation programs have the same challenges. Our study was solely about FNP education. And so, we only surveyed students who were in FNP programs, so I don't have data about the other programs.

However, anecdotally, we know that many of our FNPs do share preceptors. So, our FNPs often, in programs, will have the same preceptors that, if the program has pediatric nurse practitioner students or gyro nurse practitioner students, concurrently, we know that there's a lot of the preceptors doing work with students in different programs.

But we did not collect that data specifically. As far as the number of FNPs and whether or not we...we did not collect any data about that, but certainly there is data in the literature to support the increasing need for primary care providers and the increasing role that FNPs are serving in that role across the United States, particularly in rural and urban areas.

So, let's see... "Was there a difference based on modality, online versus hybrid versus face to face?" Again, this study is particularly about the clinical experiences, the precepted clinical experiences. And so, everyone did those precepted clinical experiences in the presence of their preceptor in a direct clinical environment.

That was the data that we collected for this study. And let's see, Mary asks, "Why are FNPs spending the same clinical precepted hours in their programs to do across the lifespan? I find that they're trying to apply for jobs in pediatrics with their credentials. As a pediatric nurse practitioner, private practice, I'm called upon all the time to do 80 clinical hours for pediatrics from FNPs, and they come with little or no knowledge or skills with children, minimal faculty contact with many students. Did your study look at that?"

So, again, we used the criteria set by both the [inaudible] and the CCNE around the 500 hours that is required for advanced practice, clinical education. We did not look at...we gathered the data around programs who had more than the 500 hours, no one had less because you need 500 hours as a minimum.

But there was nothing statistically significant that stood out about those extra hours and these particular areas of deficit. So, we don't have data that was specifically asking that question, nor was it able to be

teased out. So, let me see here...I can see that there are more questions, give me just a moment to refresh this.

So, Catherine asked, "Was there any indication of barriers..." I'm sorry, I lost it again, just give me...I apologize.

Suddenly, I have lost the questions. Yeah, we didn't have data that could tease out that level of specificity at this point. Again, when we designed this study, the purpose and the intention of designing the study was to address this huge gap in the literature.

We thought that when we went down this pathway that we would find a great deal of literature around FNP clinical education, around what the preceptor experience was designed to do, around outcomes from precepted clinical experiences. And quite frankly, none of that exists in the literature.

So, this was an opportunity to get started by building the literature in this area, but there is clearly a lot more work to be done. I have just a tiny bit more time left. If there's any other questions...

If not, thank you so much for your time and attention and I appreciate all the questions. And I encourage you, if this is an area of interest, that you consider adding to this body of literature.