# *Past Event: 2024 NCSBN Scientific Symposium* - Simulation: Exploratory Survey of Simulation Use in Middle East and North African Prelicensure Nursing Programs Video Transcript



**Event**
2024 NCSBN Scientific Symposium

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**Presenter**
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- [Brenda] Well, thank you for being here this afternoon and I'd like to also thank NCSBN for funding this research. So, the Middle East, depending upon who you ask, is made up of 20 questions or 21 countries. The research I did was using the countries that are most commonly considered the Middle East when we think of it.

So, places like Jordan, Palestine, Israel, Iraq, Iran, Syria, Lebanon, the ones that you tend to think of when you think of the Middle East countries. I tried to extend the research out to include the Sudan and Morocco, but it was quite difficult. There were very few nursing programs to find in Morocco and when I contacted programs in Sudan, I had no response whatsoever.

So I consolidated it to the areas that are most likely to get a response. So, this is my team. You can see, Fadwa Alhalaiqa from Jordan, Ahlam Al-Zahrani from the Kingdom of Saudi Arabia and Hoda Sayed from Egypt. All of us are nursing educators and these individuals were, I met them individually, both on Zoom and in person.

And they were all very committed to collecting this data. And without this network and without this collaboration, I don't think the data would have been collected at the level that it was. So, as you know, simulation is a nursing education strategy that mimics hospital environments. It allows the students to have a safe environment, both for themselves and for their patients.

And of course, it allows us to use simulation in place of clinical experience. And this is very important in the Middle East because female nurses care for female patients. And male nurses care for male patients. On a hospital unit, you would have a one side of the unit would be all female rooms and the other side would be all male rooms.

And so, female nurses then take care of the female patients and you may ask, "Well, certainly there aren't enough male nurses to care for those male patients." What happens is that you have family members in these rooms all the time. So, all the care that happens, happens with the family members present, both for male and female nurses.

Now, it does not make a difference the gender of the doctor, only the nurse. And obviously, one of the other benefits of simulation, not only for opposite gender care but for contagious situations that our students wouldn't be allowed to participate in, things like active tuberculosis or COVID, even leprosy, which is not common here but it is in other places. So, my experience with simulation and the Middle East comes from a couple of times.

I was a Filbert scholar in Jordan and I was there for six months. I lectured and I conducted research and I was also part of their stimulation. The first time they asked me to come to the simulation suite and show me their simulation, it was all demonstration and return demonstration and it was on a 4G simulator with a computer attached.

And that's what they did. And as soon as it was over, that clinical faculty pulled me to the side and said, "How did I do? What can I do better?" And I didn't know what to say because they didn't do any simulation, right? It was all demonstration and return demonstration.

And so, I said, you know, "Let's talk about how the students can get a little more involved and they can do more." And then, I had a meeting with the dean of the College of Nursing and I said, "We need to do something." So, I ran a couple of workshops before I left Jordan and that's also what then I went on to do in Egypt was run simulation workshops, helping the faculty understand the difference between demonstration, return demonstration and actually simulation.

In Egypt, my focus was on low resource simulation, because they don't have the 3 and 4G manikins. One thing I found in Jordan that was a little bit disappointing was that vendors come in and they are funded to place 3 and 4G simulators with the computers in the nursing simulation labs.

After about three days of training, they leave. And in about two months, nobody remembers how to use these high-end manikins. They don't remember how to use the computers. When they showed me, we had to make an appointment with the IT helpdesk so they could come in and run the computers.

So, it's really disappointing. This whole idea of high-end simulation is difficult for these programs to support it long term. So, why is simulation happening in the Middle East? It's very similar to our own issues. Modernization, faculty shortages, of course, accreditation expectations and they have limited clinical spaces.

Publications in the Middle East about simulation comes from mostly three locations: Saudi Arabia, Oman and Jordan. In the Kingdom of Saudi Arabia, they are expanding their medical education. One problem they have that is significant is clinical space. I was just in Saudi Arabia about three months ago helping to build a medical school and a hospital.

And they have hospitals, I was in Dammam, Saudi Arabia, which is southeast, and they have huge hospitals that can accommodate 500 patients. And they have 150 patients. So, not only is the clinical space a problem, but the actual patient population is a problem. Getting their medical students and nursing students into this environment is very tricky because the patients aren't there.

The patients, instead, are in clinics and they go home. They don't stay as inpatients. Or they're treated at home. So, that's one thing, that's one reason that Saudi Arabia is using simulation. Oman has now moved from an on-the-fly simulation to the NLN designs. So, that's how they're using simulation and they're incorporating it into more areas.

And in Jordan, it's widely being used, both for the doctors and for the nurses to help them with skill acquisition and comfort in the clinical area. So, the survey. We started with the survey in 2019 and as you all know what happened in 2020, COVID, the pandemic, really limited our responses.

Faculty, this survey was sent electronically to faculty administrators They had gone home and they didn't necessarily work from home online. They were simply working at home. They didn't necessarily have computers that went home with them. So, there was a big disconnect between this survey arriving to these individuals and then having an opportunity to fill it out.

So I did a couple of different things. I used snail mail. I got one of those back and that was handed to me when I went to Egypt well after the data had been collected. And I sent a bunch via snail mail to the Sudan and I heard nothing back. What did help was that team, the team of researchers. I contacted them, Some I already knew.

Because I was, you know, in the Middle East, I did have some contacts and networks and found collaborators. I reached out to people and they made recommendations. I met via Zoom. And these teammembers literally took that survey and told me, "I'm going to have tea with that dean tomorrow and they're going to fill it out while I sit there with them."

And they did. They hand-delivered these surveys to people and they filled them out. And then, there's this wide mistrust of online surveys in the Middle East and perhaps other places. There's the belief that the results from this survey will not only go to the person that sent it, but instead, to their boss, to administrators, to the government, to other people.

So, it's not safe. This online survey, like, monkey surveys, are not safe. So, then I sent them a Word document and/or a PDF of the survey. I asked them to fill it out, scan it and email it back to me. So, that worked.

That worked. So, those were the three ways we collected data. So, these are the countries that replied. So, I sent surveys to 93 programs. Thirty-nine programs participated and these programs were in 10 different countries. And I have to say that other faculty in the Middle East said not to bother with Syria because there was civil unrest and disagreement between these countries.

So, as with many of us researchers, the minute someone tells you, "Oh, don't do that," we do it. And so, I was really moved because I sent the survey to a nursing program in Syria and I heard back within days. And that dean also sent me pictures of the equipment in their simulation lab. They have places to learn to suture, stop bleeding, put in emergency trachs and they had no simulators, no 3G, 4G, because of the civil unrest in Syria.

Although their simulation is focused on war-related trauma. And they had time to answer my survey, right? You know, it really touched me that they took time to do it and send me pictures. So, what do we find? So, first clinical hours.

For programs it ranged from 160 program clinical hours to over 1,000. Med-surg was the most common. Of course, we find that as well, as well as advanced med-surg being ICU. And then, capstone, you know, that final program. That was also highly significant. So, some respondents was 100% substitution for their simulation.

Most common courses, yeah, was med-surg, women's health and then PD. So obviously, women's health is part of that cross-gender care. This is where male students are going to learn about labor and delivery. They are not going to be part of the labor and delivery process in the hospital.

They're not going to be there. So this is where they learn it. Some program simulation, you know, like I said, was all clinical hours. And the vast majority of the simulation space was open to students to come in and practice at any time. So, we also asked what their thoughts and opinions were, like, their ideas.

So, 45% of the faculty felt that we had enough simulation. Another 45% thought we needed more and 6% thought we had too much simulation. The reason, so their ideas about what doesn't belong in simulation. So, only in clinical, they felt that is where therapeutic communication belonged.

That is where patient education belonged as well as empathy, caring and compassion and interestingly, problem-solving and critical thinking. Now, I think in my own experience, critical thinking is a big part of simulation, but they felt that belonged in the clinical setting and not in simulation. So, what is needed to increase simulation and these themes are interesting.

Training to facilitate simulation, writing scenarios, conducting debriefings, staff to run simulation centers, and oversee students and time to write scenarios. Very common, right? We have the same complaints. Except in the Middle East, the faculty that do clinical are the MSN faculty.

They're the ones that need to do all of this. Write the scenarios, make time, equipment. The PhD or didactic faculty are not involved with the clinical world. They do not go to the hospital.

So, their idea of simulation is all these MSN faculty making this work. We're going to send your students and in the lab, you're going to do simulation with them. You are going to train them on these skills. You're going to do this with them. The PhD and didactic faculty are not involved. So, there's really, like, a layering of faculty here.

There's them and us. And the expectation from these administrators is them. They need to fix this. So, it's a really different view of how this works in that environment. So, regulation and training. Thirty-nine percent have updated in the last few years and these were related to the NCSBN guidelines. Training, 68% have received running simulation training, 45% conducting debriefings and 33% programming the manikins.

And 21% of the respondents have had no training. So, our discussion around this. So, definitely simulation is being used in the MENA region and that's because of the same problems we have, limited clinical space, faculty availability, training in complex care situations and opposite gender care.

It is used for all clinical courses and can substitute 50% to 100% in those responding programs. The challenges, space, cost, trained faculty. And we have similar challenges in the U.S., being limited clinical space, time, faculty availability and then complex care situations.

So, there was some limitations to our data collection. There was civil unrest in many of the countries. That kind of waxed and waned depending upon where you had information from. I was surprised at the limited responses from Israel. At that time, there was not any civil unrest in Israel, yet I got very little information back from them. I was surprised at the responses from Palestine.

Programs in Palestine are very eager to make improvements and I heard back from a significant number of those. And as you may know now, Palestine and Israel are very close together. There was anxiety about sharing data, of course. They don't know me but they knew my collaborators.

But they don't know me so there's some anxiety about that. Lack of time and incentive. There was a lot of problems during the pandemic, lots of anxiety, so that was a limiting factor. COVID, right? We separated from campus. People weren't even thinking about simulation when they went home to return six months or a year later. And again, lack of that personal relationship.

So, in conclusion, nursing simulation is actively being used as a teaching strategy and it's very welcome. They need support just like we do in training and regulation. So, hopefully going forward, I'll do more research in this area and in addition to collaborating with the individuals.

Questions? Yes?

- [Woman 1] These faculty of deans that you interviewed or got information from, are they using sims, both of pre-licensure and master's?

- So, the question is are they using simulation in both pre-licensure and the master's programs? Yes. So, they are using simulation in both. However, the pre-licensure undergraduate programs is where there's more simulation than in the graduate programs. Most of the programs, especially in Jordan, are not focused on the healthcare provider programs, like nurse practitioners, because they have an abundance of medical doctors.

Yeah. They put out lots of medical doctors very year and there are many medical doctors. There's not that lack of the healthcare provider role. So, it's mostly in undergraduate. That's a good question. Other questions? Yes?

- [Woman 2] Thank you for your presentation. One question I had was around the percentage of clinical with their replacing simulation. Whenever I think about a percentage, I think about what is the total that they're starting with. Was there a range in the number of required clinical hours across the countries?

- It isn't really across the country but program-specific, like one program had 1,000 clinical hours in their program. Another program had about 200 in the entire program. Yeah. So, not really a country-wide result. And I intentionally did not compare one country to the next.

You know, one reason is there wasn't equal data between one country and the next. And there's nothing to be gained from comparing one Middle Eastern country to another. Yeah. You're not going to get anywhere with that, so definitely did not do that. Yeah.

Yes?

- [Woman 3] [inaudible 00:18:43.650] educator. While I don't do sims yet, I'm very interested in those and this may be too broad of a question. But my question is what am I looking for, as an educator, what am I looking for in a good simulation program?

- Good. That's a good question. So, what are we looking for in a good simulation program? Faculty that are trained. Faculty that have the INACSL, the abbreviation behind our name. There's a healthcare simulation educator. HCSE is the abbreviation behind people's names that are certified in healthcare simulation education.

And that's through INACSL. I-N-A...somebody help me.

- C-S-L.

- There we go. Yeah.

- I-N-A-C-S-L.

- And once you get on their mailing list, they will never stop. And you will always have all the information you could possibly want. Yes? Go ahead. I'm sorry. I was just curious, were these English-speaking universities or were they in the native language?

- That's a great question. So, when I went to Jordan and I went to my first med-surg course that I was going to observe and then later teach, they had our book, Elsevier Med-Surg. And that was widespread. So, always in English.

The master's and doctoral programs were exclusively taught and then, like, papers came back in English only. In the undergraduate program, what I saw was that it would be presented in English and then the professor, who was Arabic-speaking, would add in when there was clearly confusion, but in Arabic.

So yeah, so a combination but all of the surveys were English exclusively. Other questions? Well, good. Thank you very much. If you have any other questions, I'll see you at break.