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Nicole Kaminski-Ozturk, PhD, and Brendan Martin, PhD

Background: I he ea age f he COVID-19 a de ic, a ci ica ie e ici ee i e e ed, ed ca i g a eadi g ice ed ac ica e/ ice ed ca i a e (LPN/LVN) deg ee i c ea i g e ied i ta i ai - ba ed e ie ce ide c i ica ai i g hei t de . H e e, ca e ide ce e i ega di g he e f hi cha ge a d he ai daiie e ed b LPN/LVN g a ac he U i ed S a e . **Purpose:** We gh 2.8 T 0.037 T 0 -1.5

Background

Simulation-based education (SBE) is broadly defined as an experiential-based education or training method during which students practice and acquire specific skills in real-life situations and enhance their transition to practice (Morse et al., 2019). It allows students to hone their skills in terms of both frequent and rare events in spaces that resemble or simulate clinical practice environments (Lavoie & Clarke, 2017). It may involve the use of high-fidelity manikins, low-fidelity manikins, standardized patients, or virtual environments (Bryant et al., 2020). The adoption of SBE has steadily increased (Smiley, 2019) since Hayden et al.'s (2014) landmark study that compared student learning outcomes conducted within in-person simulated and traditional clinical environments among prelicensure registered nursing students and since the subsequent release of NCSBN's simulation guidelines for prelicensure nursing programs (Alexander et al., 2015). The study and guidelines together suggest that high-fidelity simulated clinical experiences may be substituted for up to half of traditional clinical hours while maintaining end-of-program education outcomes and students' readiness to practice.

In parallel to the growth of SBE, virtual clinical simulation has experienced a less pronounced but similuaeds pidotruini6 3b si (n)25. 7.3 (e)15.4Text<Fax t3aine stTw 101d a 8li (m)15z729n5 (i)26.9 (c)4

Results
Descriptive Summary
As depicted l7.n4 (n T)59.6 (a)4 (b)27.4 (l)23.1 (e 1)57.2 (, n)14.2 (e)-5.7 (a)-7.2 (r)20.1 (l)30.8 (y a)-7.6 (l)-0.8 (l r)5.9 (e)2.6 (s)14.3 (p)-3

utilized videos, including online videos, to support VCS, and a smaller proportion (33.0%, *n*

they used a variety of methods under the umbrella term *virtual simulation*. These include videos, virtual or augmented reality, online software packages, etc. To date, none of these approaches have been evaluated in the same rigorous manner as high-fidelity SBE (Hayden et al., 2014). Taken together with related studies on the topic (Kaminski-Ozturk & Martin, 2023; Martin et al., 2023), it is clear that there are inconsistent definitions and implementa-

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A1. Survey Invitation

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Clinical Course Curriculum

The follo ing i em foc~ on he e cen age of clinical ho ~ offe ed h o gh~im la ion.

5. With regard to your clinical courses, what percentage of clinical hours were completed in simulation during the fall 2019 term and what percentage of clinical hours in simulation are anticipated during the fall 2020 term.

During the fall 2019 term, the percentage of clinical hours in simulation was:

0 10 20 30 40 50 60 70 80 90 100

During the fall 2020 term, the percentage of clinical hours in simulation are anticipated as:

0 10 20 30 40 50 60 70 80 90 100
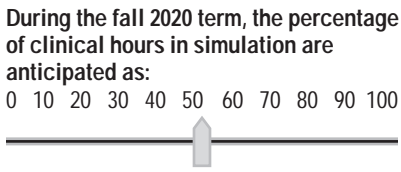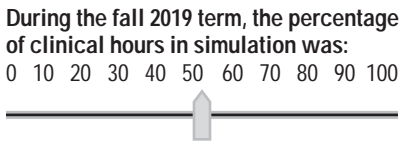
6. With regard to your clinical courses, do you plan to offer high fidelity virtual simulation instruction (e.g. computer-based simulation, virtual reality, virtual simulation, virtual reality simulation, augmented reality, etc...) during the fall 2020 term?
○ Yes
○ No

6a. [If 6. = Yes] With regard to your clinical courses, what percentage of clinical hours were completed in virtual simulation during the fall 2019 term and what percentage of clinical hours in virtual simulation are anticipated during the fall 2020 term.
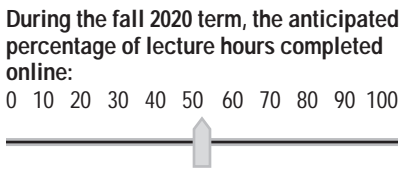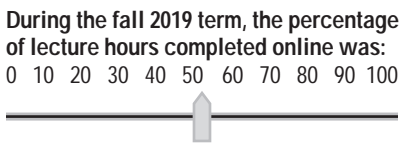
During the fall 2019 term, the percentage of clinical hours in virtual simulation was:

0 10 20 30 40 50 60 70 80 90 100

During the fall 2020 term, the percentage of clinical hours in virtual simulation are anticipated as:

0 10 20 30 40 50 60 70 80 90 100
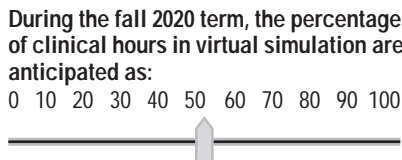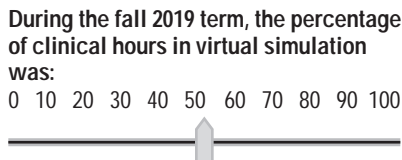
6b. [If 6. = Yes] With regard to completing clinicals in virtual simulation, which (if any) of the following formats have your faculty utilized?
lea e elec all ha a l)
○ Watching videos
○ Perform simulations with instructions from students who view them from a screen in another location
○ Augmented reality, with technology like Google Glasses
○ Augmented reality, with multidimensional computer screens
○ Online software packages, such as web-based branching narratives, where students make decisions
○ Other (please explain) _____
_____
_____
_____

○ None of these

Didactic course curriculum

The ne   ~e ion a e ela ed o he e cen age of online in   c ion a~ ocia ed i h o didac ic co ~ e c ic l m.

7. With regard to your didactic (lecture-style) courses, what percentage of the didactic curriculum was completed online prior during the fall 2019 term, and what percentage is anticipated to be completed online during the fall 2020 term.

During the fall 2019 term, the percentage of lecture hours completed online was:

0 10 20 30 40 50 60 70 80 90 100

During the fall 2020 term, the anticipated percentage of lecture hours completed online:

0 10 20 30 40 50 60 70 80 90 100

8. Have you received additional funding or resources to enact curricular changes during the fall 2020 term?
lea e elec all ha a l)
○ Yes, we received additional funding.
○ Yes, we received additional resources (e.g., formal training, new and/or updated software or equipment)
○ No we have not received any additional funding or resources.
○ No we have not enacted any pandemic-related changes for the fall 2020 term.
○ Other (please specify) _____
_____
_____
_____

9. Do you have any comments or concerns you would like to add?
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_____
_____
_____
_____

Survey Completion

Tha   t f t i e e i he t d .Y t feedbac i c i ica t de a di g he i ac f he COVID-19 a de ic   t i g ed-