

**Sigma's 30th International Nursing Research Congress
Collaboration With Chinese Nurse Educators in Developing/Implementing
Simulation in Nursing Schools and Clinical Settings**

Kaye Wilson-Anderson, DNS, MSN, BSN, RN¹

Michelle E. Collazo, MS, RN¹

Christopher G. Blackhurst, MS, RN, CNL¹

Yu Liu, PhD²

(1)School of Nursing, University of Portland, Portland, OR, USA

(2)School of Nursing, Chinese Medical University, Shenyang, China

Purpose: Nurse educators in China are slowly gaining an understanding of the use of simulation in education and are increasing their knowledge of simulation development and implementation. The primary investigator, an American nurse educator, three Chinese nurse educators, and three additional U.S. nurse educators collaborated to design two studies to evaluate their collaborative work involving the engagement of Chinese nurse educators in simulation workshops. A subsequent study will be implemented in March 2019 to explore the implementation of simulation in two Chinese baccalaureate nursing programs.

The review of literature revealed two Chinese simulation-based experience studies. Wang et al., (2013) reported positive outcomes in one Chinese school of nursing with student satisfaction significantly greater with the utilization of moderate-fidelity to high-fidelity simulation. Findings of this study also suggested that the high-fidelity simulation provided a strong means of implementing “best practice” for simulation design concepts. Zhang (2017) utilized a qualitative descriptive approach to examine Chinese nursing student’s perception of simulation and noted three themes: students found simulation to be engaging, students reported needing clearer and more concise preparatory guidelines, and students desired faculty to provide a more positive learning environment. Stayt et al., (2015) reported student satisfaction and improved clinical performance from a randomized control study of two nursing schools in England. Khalaila (2014) reported on a quantitative descriptive study regarding simulation-based education in Israel, with findings of decreased student anxiety, increased self-confidence, and enhanced ability to care.

Methods: Research Study One: Five Chinese nursing schools and four Chinese clinical settings. Research Study Two: Two Chinese nursing schools.

The goals of these two research studies were: 1) to examine the knowledge and identify the perceived barriers of Chinese nurse educators regarding development and implementation of simulation-based learning experiences, and 2) to gain an understanding of Chinese nurse educators’ and nursing students’ perceptions of simulation implementation.

The first research study was a descriptive quantitative design implemented by the primary investigator in China and consisted of a presentation, “Overview of Simulation”, given to both didactic and clinical nurse educators. Upon consent, attendees completed a demographic profile, an author approved adapted version of King (2018) pretest and post-test “Knowledge of Simulation”, and a “Barriers to Simulation” survey.

The second study, a descriptive quantitative design will be implemented in March of 2019 with two Chinese schools of nursing whose faculty were involved in a multi-day “Step by Step” simulation design workshop in Fall of 2018 by the primary investigator.

This workshop was based on INACSL Standards of Best Practice: SimulationSM (2017 & 2016a-h) and Bambini (2016). Data to be collected will focus on the perceptions of the nurse educators and nursing students involved in simulation scenarios designed during the Fall 2018 workshop.

Results: The preliminary analysis for research study one, (N=377/Pre-test, N=277/Post-test: 1 school of nursing and 3 clinical sites). Based on the Pre-test, the findings suggested that nurse educators had a strong theoretical knowledge base (all correct pretest answers > 80%) with noted areas of strengthening in simulation scenario development (all correct answers < 80% except for pre/post debriefing >87%) and debriefing goals and techniques (< 50%; < 30%, respectively). The barrier survey (N=277) indicated that nursing educators valued simulation and desired to incorporate simulation into their courses (N=234; N=239 respectively). The areas identified as needing assistance were, integration into course and increased understanding of simulation design (N=235; N=235, respectively). Research Study Two, to be implemented March 2019, will examine the perceptions of nursing faculty and students involved in simulation-based experiences designed during the Fall 2018 workshops.

Conclusions: Results of these two studies will be utilized to guide the ongoing work of this research team in development and implementation of simulation design methods, including techniques needed to successfully incorporate simulation into Chinese healthcare education. The primary investigator will be returning in the Spring of 2019 to assist Chinese research colleagues in conducting the follow-up study.

Title:

Collaboration With Chinese Nurse Educators in Developing/Implementing Simulation in Nursing Schools and Clinical Settings

Keywords:

Best Practice for Simulation in Nursing Education, Empowering Nurses and Improving Client Outcomes

References:

Bambini, D. (2016). Writing a simulation scenario: A step-by-step guide. *Advanced Critical Care*, 27 (1), 62-70.

Khalaila, R. (2014). Simulation in nursing education: An evaluation of students' outcomes at their first clinical practice combined with simulations. *Nurse Education Today*, 34, 252-258.

King, M. (2018). Developing a high-fidelity simulation program in a nursing educational setting. *The Health Care Manager*, 37, (3), 235–249.

Stayt, L.C., Merriman, C., Ricketts, B., Morton, S. & Simpson, T. (2015). Recognizing and managing a deteriorating patient: a randomized controlled trial investigating the effectiveness of clinical simulation in improving clinical performance in undergraduate nursing students. *Journal of Advanced Nursing*, 71(11), 2563–2574.

The INACSL Standards Committee (2017). INACSL standards of best practice: SimulationSM:

Operations. *Clinical Simulation in Nursing*, 13, 681-687.

The INACSL Standards Committee (2016a). INACSL standards of best practice: SimulationSM:

Debriefing. *Clinical Simulation in Nursing*, 12, 21-25.

The INACSL Standards Committee (2016b). INACSL standards of best practice: SimulationSM:

Facilitation. *Clinical Simulation in Nursing*, 12, 16-20.

The INACSL Standards Committee (2016c). INACSL standards of best practice: SimulationSM:

Participant evaluation. *Clinical Simulation in Nursing*, 12, 26-29.

The INACSL Standards Committee (2016d). INACSL standards of best practice: SimulationSM:

Simulation design. *Clinical Simulation in Nursing*, 12, 5-12.

The INACSL Standards Committee (2016e). INACSL standards of best practice:

SimulationSM: Simulation-enhanced interprofessional education (Sim-IPE). *Clinical Simulation in Nursing*, 12, 34-38.

The INACSL Standards Committee (2016g). INACSL standards of best practice:

SimulationSM: Outcomes and objectives. *Clinical Simulation in Nursing*, 12, 13-15.

The INACSL Standards Committee (2016f). INACSL standards of best practice:

SimulationSM: Simulation glossary. *Clinical Simulation in Nursing*, 12, 39-47.

The INACSL Standards Committee (2016h). INACSL standards of best practice:

SimulationSM. *Clinical Simulation in Nursing*, 12, 48-50.

Wang, A. L., Fitzpatrick, J. J., & Petrini, M. A. (2013). Comparison of two simulation methods on Chinese BSN students' learning. *Clinical Simulation in Nursing*, 9(6), 207-212.

Zhang, J. (2017). Perceptions of simulation-assisted teaching among baccalaureate nursing students in Chinese context: Benefits, process and barriers. *Journal of Professional Nursing*, 30, 305-310.

Abstract Summary:

U.S. and Chinese nurse educators' collaborative research involving two quantitative descriptive studies. One examines knowledge and identified perceived barriers of Chinese nurse educators regarding development and implementation of simulation-based experiences, and the follow-up study focuses on gaining an understanding of Chinese nurse educators' and nursing students' perceptions of simulation implementation.

Content Outline:

I. Analysis of Research Study One Findings II. Implications of Research Study One Results III. Analysis of Research Study Two Findings IV. Implications of Research Study Two Results V. Next Steps of U.S. and Chinese Collaboration

First Primary Presenting Author

Primary Presenting Author

Kaye Wilson-Anderson, DNS, MSN, BSN, RN
University of Portland
School of Nursing
Associate Professor
Portland OR
USA

Author Summary: Dr. Kaye Wilson-Anderson, Associate Professor University of Portland has been practicing nursing for 37 years with a primary focus in women's health and international nursing relief/education. She began her career in nursing education 33 years ago and has taught both at the undergraduate and graduate level. Kaye's research has centered on vulnerable women and children both in the United States and internationally.

Second Author

Michelle E. Collazo, MS, RN
University of Portland
School of Nursing
Instructor, Manager of Content and Development for Simulated Health Center
Portland OR
USA

Author Summary: Michelle Collazo has practiced as a registered nurse for 17 years, with experience in acute care nursing and nursing education. She completed her MS in Nursing Education, and over the past 3 years has found her passion in simulation-based education. Michelle is a current member of the NLN Leadership Program for Simulation Educators. She currently serves as Manager of Content and Development for the Simulated Health Center at UP School of Nursing in Portland OR.

Third Author

Christopher G. Blackhurst, MS, RN, CNL
University of Portland
School of Nursing
Director of the Simulated Health Center
Portland OR
USA

Author Summary: Chris Blackhurst is a nurse whose prior bedside practice has focused on the care of neurodevelopmentally fragile children and is the current Director of the Simulated Health Center in the School of Nursing at the University of Portland

Fourth Author

Yu Liu, PhD
Chinese Medical University
School of Nursing
Professor
North Shenyang
Shenyang
China

Author Summary: Dr. Liu obtained her BSN from Peking University Medical Health Care Center, MSN, from Chiangmai University Faculty of Nursing and PhD from the University of Arizona College of Nursing. Currently, Dr. Liu is a nursing professor at the Chinese Medical University, Shenyang, China.