Research collaboration is researchers working together to achieve the common goal of producing new scientific knowledge. Globalization is one of the mega-trends increasing the cross-border flow of knowledge, ideas, and learning. International research collaboration has become an important component of global health and provides opportunities for international scholars to share research ideas, methods and data. The ultimate goal of the international research collaboration is to contribute mutual benefits with a sustainable and long-lasting outcome for the discipline, community, and country. Although there is a growing body of literature produced from international research collaboration, few publications explained the collaborative process and theoretical underpinnings of these international partnerships. A systematic review that searched and synthesized seven studies on collaboration, but the process of interorganizational collaboration was poorly explored. Many publications described the experience of international collaboration in nursing education, which are assumed to be helpful in building international collaboration in nursing research. But the successful experience and best practice models for two-way collaboration were still lacking. We need to pay close attention to the collaborative process, because the possibility that harmful international research collaboration exists. Partnerships, especially research-based, where the institutions are not using an appropriate development approach may result in no benefit, or a great burden being placed upon the partnering institutions.

**Purpose**

The purpose of this study was to describes a theoretical approach that can be used to build and sustain long-term international partnerships. By presenting a real-world example of how theory guided the development of a successful international research collaboration in leadership and implementation science for pediatric pain management, this work provides an exemplar that can serve others when establishing like collaborations.

**Methods**

Researchers in the University of Ottawa (Canada) and the Shanghai Ninth People’s Hospital (China) established a working relationship in 2015. After one year, they decided to further enhance this relationship and look to establish a formal collaboration. Based on the consensus, a systematic search was conducted in 2016 to develop a theoretical framework to guide this international collaboration partnership. A theoretical framework is always made up of contexts where the theoretical framework applies, definitions of concepts, and a set of statements explaining the relationships between the variables and specific predictions. The Theoretical Framework of Developing International Partnerships which guided the collaborative work was developed based on general systems theory and recommendations derived from the systematic reviews and experiences in global health. There are seven interrelated concepts stated in the theoretical framework, including partnerships, collaborations, environment, structure,
process, outcomes, sustainability. Partnerships and collaborations are the two main concepts.

Results
Five major challenges were identified during the collaboration process, including linguistic and cultural differences, geographical distance, different daily responsibilities, unique regulations in each institution, and limited availability of funding. Sixty-six key strategies were developed to facilitate the collaboration, using the Theoretical Framework of Developing International Partnerships. These strategies included structure domain (14 strategies), process domain (36 strategies), outcome (6 strategies), environment domain (1 strategy), and the sustainability domain (9 strategies).

After the collaboration was established, researchers from both teams worked together to establish mutual goals of developing leadership and implementation science in pediatric pain management. At different stages, each specific objective and focus was addressed. Through a mutually beneficial collaboration, which included international exchanges, publications, shared funding, education programs, dissemination of research findings and evidence-based practice, our research team developed processes to enable leadership and implementation science in pediatric pain management.

Conclusions
Worldwide recognition exists of the importance of collaboration among researchers to address common healthcare issues. Through strong and positive leadership nurses play significant roles in promoting international research collaboration. To achieve the goals of global health, nurses who represent the largest health professional group in healthcare services, are educated and poised to provide contributions to international collaboration.

The experience of this study is assumed to be helpful in building international collaboration in nursing research. The collaboration presents great opportunities for the team members to establish and foster international collegial relationships, share expertise and experiences, stimulate intellectual curiosity and help both personal and organizational development.

This study operationalizes employment of the Theoretical Framework of Developing International Partnerships as a roadmap to establish and sustain collaboration in designing and implementing leadership and implementation science research in pediatric pain management. The theoretical framework and real-world example enhancements presented in this study provides a theoretical and empirical base that other research teams can use to prepare and develop a pathway for successful international collaborations in research. The collaborative partnership will be sustained and enhanced to involve more institutions and research teams who are interested in international collaborations.

Title:
Building an International Partnership to Develop a Research Program: Using a Theory-Driven Approach
Keywords:
Evidence-based practice, Global health and International partnership

References:

Abstract Summary:
By attending the session, participants will learn about the framework and experience of building an international partnership to develop leadership for implementing evidence-based pain management in infants and children.

Content Outline:
Introduction/Background
- Globalization is one of the mega-trends increasing the cross-border flow of knowledge, ideas, and learning
- Research collaboration is researchers working together to achieve the common goal of producing new scientific knowledge
- Few publications explained the collaborative process and theoretical underpinnings of international partnerships
- A systematic review on the international collaborations

Purpose
- To describes a theoretical approach that can be used to build and sustain long-term international partnerships
- To provide an exemplar

Methods
- Collaborative Partners: University of Ottawa (Canada) and the Shanghai Ninth People’s Hospital (China)
- Theoretical Framework
- Partnerships
- Collaborations
- Environment
- Structure
- Process
- Outcomes
- Sustainability

Results
- Identified Challenges
- linguistic and cultural differences
- geographical distance
- different daily responsibilities
- unique regulations in each institution
- limited availability of funding
- Specific Strategies
- structure domain (14 strategies)
- process domain (36 strategies)
- outcome (6 strategies)
- environment domain (1 strategy)
- sustainability domain (9 strategies)

Outcomes
- specific objective and focus were addressed
- Five independent researchers, three pediatric units, and three graduate students have been involved in the collaboration
- collaborative publications in peer review journals, oral presentations at national or international conferences have been submitted
- international exchanges, shared funding, education programs, dissemination of research findings and evidence-based practice

Conclusion
- The collaboration presents great opportunities for the team members to establish and foster international collegial relationships, share expertise and experiences, stimulate intellectual curiosity and helps both personal and organizational development.
- The theoretical framework and real-world example enhancements presented in the international China/Canada research program provides a theoretical and empirical base that other research teams can use to prepare and develop a pathway for successful international collaborations in research.

First Primary Presenting Author

**Primary Presenting Author**

Hong Ruan, MScN, RN

Shanghai Nursing Association
Vice President
Shanghai Nursing Association
Shanghai
China

Author Summary: Hong Ran is the Professor and Vice President of Shanghai Nursing Association, China. She used to be the Chair of the Nursing Department of a large metropolitan teaching hospital with more than 1800 beds. She is interested in building an international partnership to develop advanced practice nurses. She will present today on the framework and experience of conducting international research collaboration.