Published in final edited form as:

J Nurs Scholarsh. 2019 January ; 51(1): 3. doi:10.1111/jnu.12458.

Promoting State-of-the-Art Biobehavioral Approaches in Symptom Science Research Through Inter- and Intra-Professional Collaborations

Patricia A. Grady, RN, PhD, FAAN [Director] and

National Institute of Nursing Research, National Institutes of Health, Bethesda, MD
info@ninr.nih.gov

Demetrius Porche, DNS, PhD, FACHE, FAANP, FAAN [Professor and Dean]

Louisiana State University Health, New Orleans School of Nursing President, Southern Nursing Research Society, New Orleans, LA

The 2018 National Nursing Research Roundtable (NNRR), co-sponsored by the Southern Nursing Research Society (SNRS) and the National Institute of Nursing Research (NINR), addressed the topic of promoting state-of-the-art biobehavioral approaches in symptom science research through inter- and intra-professional collaborations. Each year the Roundtable meeting provides an opportunity for leaders of nursing organizations and societies that have a strong research mission, to discuss and disseminate research findings to improve health outcomes, as well as discuss priorities in science, practice, and policy.

In in the series of articles in this issue, invited NNRR speakers elaborate on their Roundtable presentations and perspectives. The 2018 speakers included Dr. Elizabeth Corwin; Dr. Leorey Saligan, and Dr. Angela Starkweather.

Dr. Elizabeth Corwin discusses the evolution of her venture into team science, describing her partnering with colleagues to build an interdisciplinary team that included experts in infectious disease, obstetrics and gynecology, public health, and chronic stress. The expertise of the interdisciplinary research team changed the course of the study, expanding from the initial project investigating the microbiota and associated pre-term birth, to include wider omics investigations as a multi-investigator project. Based on the rewards and challenges of conducting team science, Dr. Corwin concludes that any challenges faced in the interdisciplinary approach pale in comparison to the potential of team science to accelerate scientific discoveries and provide solutions to societal problems.

In investigating the molecular mechanisms underlying symptoms and symptom clusters, Dr. Leorey Saligan notes how NINR and other NIH scientists establish collaborations through linkages and long-term commitments to address specific research questions. He and his colleagues collaborate in a team-science approach using primarily shared resources, which provide the flexibility and agility to adapt to the dynamic nature of symptoms biology. Dr. Saligan also discusses the NIH Symptom Science Model, developed by investigators at NINR as a guide for biobehavioral research in symptom science, in describing his research studies investigating the trajectory of fatigue symptoms related to cancer therapy.

Also appreciating the utility of the NIH Symptom Science Model in providing a framework for knowledge generation and clinical practice, Dr. Angela Starkweather notes the current need for team-based approaches to navigate the integration of omics in symptom science. She elaborates on strategies that nursing associations and organizations can pursue to facilitate collaborations for advancing biobehavioral symptom science research, education, and practice. She emphasizes that nursing organizations should promote professional collaboration to encourage wider data-sharing and dissemination across research, education, and clinical practice teams. Dr. Starkweather describes her research investigating pain sensitivity and persistent low back pain as an example of building collaborations in biobehavioral symptom science research.

The discussion portion of the Roundtable concentrated on examining: (a) the practice, education, and policy implications of employing state-of-the-art biobehavioral approaches in symptom science research through inter- and intra-professional collaborations; and (b) strategies that NNRR organizations could use to highlight the importance of such collaborations to promote state-of-the-art biobehavioral approaches in symptom science research. The dialogue noted that omics research opens new pathways of knowledge and preparation for the next generation of nurses to help personalize health care and to develop precision nursing interventions. Also, in addition to NINR's numerous training opportunities, interdisciplinary collaborations help students learn the importance of biological mechanisms in symptom science. Finally, guidance from professional organizations, such as annual lists of research priorities, connect nurse scientists with patient populations. The Roundtable concluded by stressing that nurse scientists are in pivotal positions in the transformation of health care science and are essential to the success of translating research advances into practice.