

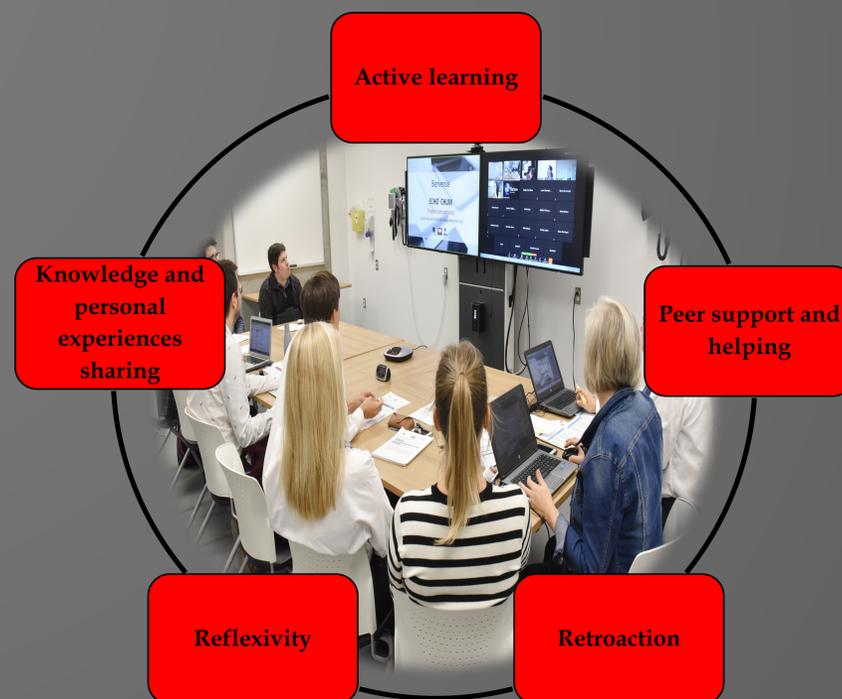
# Impacts of a Tele-Education Program in Dual Diagnosis on Nursing Competency Development: A Mixed-Methods Study

## INTRODUCTION

- The term **dual diagnosis or co-occurring disorders** describes the coexistence of one or more mental illnesses, substance use disorders and other psychosocial-related problems (American Psychiatric Association, 2013).
- Mental illnesses and substance use disorders affect **1 in 5 people in North America**, and this rate is further elevated among marginalized and disadvantaged groups (Khan, 2017; SAMSHA, 2014);
- In general settings, most nurses felt **ill-equipped** to manage dual diagnosis patients (Priester et al., 2016; Wener et Woodgate, 2017);
- Empirical evidence also shows that most of nurses maintain **negatives attitudes** toward dual diagnosis patients (Adams, 2008; Cleary, Hunt, Maheson et Walter, 2009; Padwa, Guerrero, Braslow et Fenwick, 2015);
- Nurses' lack of **comfort and confidence in managing complex or severe** co-occurring disorders is exacerbated in **rural settings** where there is a dearth of psychiatric human resources (Fleury et al., 2012).
- In Canada, core content related to dual diagnosis is lacking in **undergraduate and continuing nursing education** (Canadian Association of Schools of Nursing, 2015).

## STUDY AIM

This study aim is to **measure and understand** the extent to which an **ECHO program** on dual diagnosis in Canada has an impact on nurses' **competency development** over a 12 months periods.



## THE EDUCATIONAL PROGRAM: PROJECT EXTENSION FOR HEALTH COMMUNITY OUTCOMES (PROJECT ECHO)

### Origins and description:

- Developed in 2003 by a research team in New-Mexico (USA);
- Model of knowledge sharing and capacity building designed for continuing professional development;
- Uses videoconferencing technology to train clinicians on the management of complex and chronic diseases;
- Links an interprofessional specialist team at a centralized academic centre with clinicians across the participating state to provide tele-mentoring and ongoing education.

### Objectives:

- 1) Reinforcing clinicians' perception of their own capacity in caring for dual diagnosis patients;
- 2) Enhancing clinicians' competencies in caring for complex and chronic diseases in general settings;
- 3) Reducing clinicians' feeling of isolation;
- 4) Improving patient outcomes;
- 5) Reducing disparities in the management of chronic diseases between urban centres and rural communities.

### Key learning strategies:

- Focus on knowledge that is useful and relevant to practice;
- Provide opportunities for practice and feedback in authentic settings;
- Tailoring of recommendations to clinicians' needs and community resources.

### Learning activities:

- Group discussion of an anonymized patient case for management guidance;
- Brief didactic on a disease-related topic (ex. pharmacology for anxiety disorders, schizophrenia and other psychotic disorders, cognitive behavioral therapy, alcohol withdrawal, cannabis legalization, etc.).

### Structure:

- Schedule: 20 sessions over 10 months (September to June);
- Frequency: Every 2 weeks;
- Duration: 1 hour and 30 minutes.

(Arora et al., 2011)

How can we support nurses in acquiring high level of competencies in caring for dual diagnosis patients ?

## CONCEPTUAL FRAMEWORK

Assessing continuing education programs through desired outcomes: The 7 Levels



A complex ability to act; supported by the mobilization and the efficient combination of a variety of resources within a specific situation. (Poumay, Tardif & Georges, 2017)

Note. Adapted from Moore, Green and Gallis, 2009

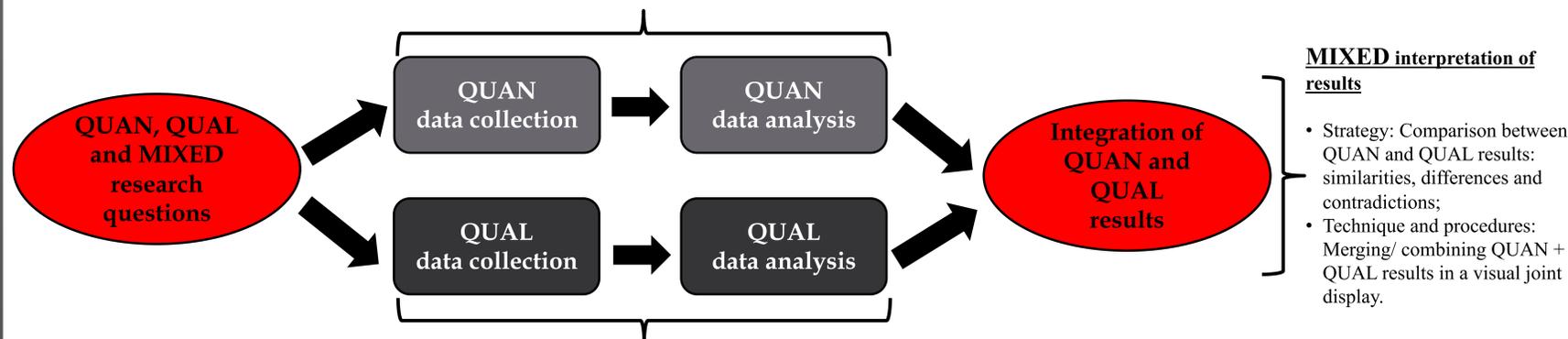
## IMPLICATIONS FOR RESEARCH, PRACTICE AND EDUCATION

- QUAN and QUAL components will track nurses' progress across their 1-year participation within the ECHO Program;
- Rich descriptions of how nurses integrated their knew knowledge into their practice;
- Better understanding of the barriers and facilitators to competency development;
- Further guidance for researchers, clinicians and educators in developing and evaluating educational approaches aiming to support nurses in acquiring high level of competencies in caring for dual diagnosis patients.

## METHODS: A MIXED-METHODS CONVERGENT DESIGN

### QUANtitative component: Observational prospective cohort study

- Population: All registered nurses who participated in the dual diagnosis ECHO program between 2018-2020 (N anticipated = 50);
- Primary outcome: self-efficacy in caring for dual diagnosis patients;
- Secondary outcomes: Participation, satisfaction, attitudes, knowledge, perception of the program impacts on clinical performance and patients health;
- Data collection: Surveys with 3 times measurement (0, 6 and 12 months);
- Data analysis: Descriptive statistics and t-tests procedures.



### QUALitative component: Descriptive and interpretative study

- Semi-structured interviews, (N anticipated = 10 to 12 nurses);
- Themes to explore: 1) the competencies that nurses developed and integrated into their practice, 2) the progression of development of those competencies, and 3) the conditions that facilitated or restrained their competencies development;
- Thematic analysis.

(Creswell et Plano Clark, 2018; Fetters, 2015; Johnson et al., 2019; O' Cathain, 2010; Paillé & Mucchielli, 2016; Thorne, 2008; 2016)