

## Sigma's 29th International Nursing Research Congress

### Effectiveness of a Suicide Prevention Gatekeeper Training Program With First Year Nurse Anesthesia Residents

**Lavonne M. Adams, PhD, RN, CCRN**

*Harris College of Nursing & Health Sciences, Texas Christian University, Fort Worth, TX, USA*

Monica Jenschke, PhD, CRNA

*School of Nurse Anesthesia, Texas Christian University, Fort Worth, TX, USA*

Trung Nguyen, MA

*Texas Christian University, Fort Worth, TX, USA*

#### **Purpose:**

The purpose of the study was to determine if QPR (Question, Persuade, Refer) gatekeeper training for nurse anesthesia residents can improve self-reported knowledge, competency, and self-efficacy to intervene with suicidal individuals.

#### **Methods:**

In 2016, an IRB-approved research study was undertaken to gather follow up assessment data related to QPR gatekeeper training and participants' knowledge, competency, and self-efficacy toward suicide prevention. All first year (3<sup>rd</sup> semester) nurse anesthesia residents (n=64) who completed QPR gatekeeper training in August 2016 were invited to participate in the study consisting of a pre-training survey, an immediate post-training survey, and a follow up post-training survey given at six-month and nine-month intervals. All surveys were accessed through a link to an online survey via Qualtrics. The QPR Pre-training Survey and QPR Post-training Surveys were adapted with permission from similar gatekeeper evaluation studies frequently cited in the literature (Tompkins & Witt, 2010; Wyman et al., 2008). Preliminary data analysis has been completed using descriptive statistics. Data files are being merged to allow case-by-case analysis with the Friedman test through SPSS.

#### **Results:**

Of the 64 nurse anesthesia residents receiving QPR gatekeeper training in August 2016, 34 (53.1%) completed the pre-training survey, 53 (82.8%) completed the immediate post-training survey, 37 (57.8%) completed the six-month follow up survey, and 33 (51.6%) completed the nine-month follow up survey.

Improvements in mean aggregate scores of statements related to knowledge, competency, and self-efficacy toward suicide prevention occurred following QPR training. The greatest improvement occurred between the pre-training survey and the immediate post-training survey, with exception of "intervene," which had highest mean aggregate scores at nine months. Mean aggregate scores declined from the immediate post-training survey to the six-month and nine-month follow up surveys, although responses never returned to pre-training survey levels, and few responses to the follow up surveys suggested that participants strongly disagreed or disagreed that they had knowledge, competency, or self-efficacy to intervene with a suicidal person.

#### **Conclusion:**

Preliminary data analysis suggests that QPR gatekeeper training results in improvements of knowledge, competency, and self-efficacy toward suicide prevention, with a decay of the improvement over time. Our findings support educating residents in QPR gatekeeper training.

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**Title:**

Effectiveness of a Suicide Prevention Gatekeeper Training Program With First Year Nurse Anesthesia Residents

**Keywords:**

QPR Gatekeeper Training, nurse anesthesia residents and suicide prevention

**References:**

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**Abstract Summary:**

The purpose of this study was to determine if QPR gatekeeper training for nurse anesthesia residents can improve self-reported knowledge, competency, and self-efficacy to intervene with suicidal individuals.

**Content Outline:****Background:**

Suicide is the second leading cause of death among persons aged 15-34 years (CDC, 2013). Health care professionals experience an increased risk for suicide, and several studies have reported increased incidence of suicidal ideation in anesthesia providers and nursing students (Aradilla-Herrero, Tomas-Sabado, & Gomez-Benito, 2014; Chipas, Cordrey, Floyd, Grubbs, Miller, & Tyre, 2012; deOliveira, Chang, Fitzgerald, Almeida, Santana Castro-Alves, Ahmad, & McCarthy, 2013), with stress, substance abuse, and depression suggested as potential contributing factors. QPR (Question, Persuade, Refer) gatekeeper training has been identified as a strategy to promote suicide prevention (Quinnet, 2013) by enabling those in personal or professional relationships to identify persons who may be at risk for suicide and refer them to professional services. The purpose of QPR gatekeeper training is to intervene with a potentially suicidal person by asking if he/she is suicidal, persuading the individual to seek assistance, and referring to healthcare professionals prior to the occurrence of an adverse event (Quinnet, 2013). Studies related to gatekeeper training suggest improvements in skills, attitudes, and knowledge of people occur following completion of training (Harrod, Goss, Stallones, & DiGiuseppi, 2014; Mitchell, Kader, Darrow, Haggerty, & Keating, 2013). Over the past several years, our university has expanded its suicide prevention and awareness efforts, and has made QPR gatekeeper training available to students, faculty, and staff. In concert with this campus-wide effort, the School of Nurse Anesthesia has educated residents in QPR gatekeeper training due to concern for their well-being as intensive care registered nurses, residents enrolled in a fast-paced, rigorous doctoral program, and future certified registered nurse anesthetist—fields all at high risk for suicidal ideation. The training, conducted by a faculty member in the School of Nurse Anesthesia provides the residents the knowledge and skills of Question, Persuade, and Refer.

### **Purpose:**

The purpose of the study is to determine if QPR gatekeeper training can improve self-reported knowledge, competency, and self-efficacy to intervene with suicidal individuals.

### **Methods:**

University's Institutional Review Board (IRB) approved study

Quantitative study begun in August 2016; All first year (3<sup>rd</sup> semester) nurse anesthesia residents (n=64) who completed QPR gatekeeper training in August 2016 were invited to participate in the study

Survey methodology addressing

- Demographic data
- Pre-training knowledge, beliefs, and perceived self-efficacy of participants
- Post-training knowledge, beliefs, and perceived self-efficacy of participants

Online access to survey via Qualtrics

### *Survey Instruments*

- QPR FYE Pre-training Survey
- QPR FYE Post-training Surveys
  - Immediate post-training survey
  - Follow up post-training surveys given at intervals (3-6 month and 6-12 months)
- Adapted from similar gatekeeper evaluation studies and incorporates University's previous Post-QPR Survey
  - Tompkins & Witt, 2010 and personal communication, 2016; Wyman et al., 2008 and personal communication, 2015, University of Arizona, personal communication, 2013

### *Analysis*

Preliminary data analysis has been completed using descriptive statistics. Data files will be merged to allow analysis with descriptive and inferential statistics (Friedman test) through the use of SPSS.

## **Results:**

### *Response Rate*

- Survey link sent to all first year (3<sup>rd</sup> semester) nurse anesthesia residents (n=64) who completed QPR gatekeeper training in August 2016
- Pre-training survey
  - 53.1% n=34
- Immediate post-training survey
  - 82.8% n=53
- Post-training survey (6 month--February)
  - 57.8% n=37
- Post-training survey (9 month—June/July)
  - 51.6 n=33

### *Participant Characteristics*

- Age
- Gender
- Ethnic/racial background

### *Previous Training & Experience*

- Personal experience with suicide
- Previous training about suicide prevention
- Previous QPR training

### *Referral and Resources at University*

### *Beliefs about suicide*

### *Survey Results Related to Level of Knowledge, Self-Efficacy, Competency, and Use of Information*

- Level of Knowledge
  - Facts about suicide prevention
  - Suicide Warning Signs
  - How to ask someone about suicide
  - Persuading someone to get help
  - How to get help for someone who may be suicidal
  - Information about local resources for help with suicide
  - General level of understanding about suicide and suicide prevention
- Self-efficacy and Competency
  - If someone I knew was showing signs of suicide, I would directly raise the question of suicide with them
  - If a person's words and/or behavior suggest the possibility of suicide, I would ask the person directly if he/she is thinking about suicide
  - If someone told me they were thinking of suicide, I would intervene
  - I feel confident in my ability to help a suicidal person

- I don't think I can prevent someone from suicide
- I don't feel competent to help a person at risk of suicide
- I can recognize warning signs of suicide
- I can intervene to help prevent suicide

Use of information provided in QPR training

### Discussion and Preliminary Analysis

- Improvements in mean aggregate scores of statements related to knowledge, competency, and self-efficacy toward suicide prevention occurred following QPR training.
- The greatest improvement occurred between the pre-training survey and the immediate post-training survey, with exception of "intervene," which had highest mean aggregate scores at nine months.
- Mean aggregate scores declined from the immediate post-training survey to the six-month and nine-month follow up surveys
  - responses never returned to pre-training survey levels
  - few responses to the follow up surveys suggested that participants strongly disagreed or disagreed that they had knowledge, competency, or self-efficacy to intervene with a suicidal person.

### Implications, Recommendations, and Conclusions:

Although data analysis is ongoing, preliminary analysis suggests that QPR gatekeeper training results in improvements of knowledge, competency, and self-efficacy toward suicide prevention, with a decay of the improvement over time. Preliminary findings support educating residents in QPR gatekeeper training, thus our current recommendation would be to continue these plans.

First Primary Presenting Author

**Primary Presenting Author**

Lavonne M. Adams, PhD, RN, CCRN  
 Texas Christian University  
 Harris College of Nursing & Health Sciences  
 Associate Professor  
 Fort Worth TX  
 USA

**Professional Experience:** Currently an Associate Professor at Texas Christian University Harris College of Nursing & Health Sciences (2010-present), with over 25 years experience as an academic educator. 2006 - present: Active faculty partner for First Year Experience (FYE) activities Multiple publications and presentations on leadership and management, disaster preparedness, surge capacity for disasters. Has begun a research trajectory including suicide prevention. Completed QPR gatekeeper training. Professional background includes critical care and emergency nursing.

**Author Summary:** In addition to having more than 25 years experience as an academic educator, Dr. Adams is an active faculty participant in First Year Experience activities including Frog Camp, Common Reading, and Orientation. She has published and presented on leadership and management, disaster preparedness and surge capacity, and more recently, suicide prevention. Her background includes experience in critical care and emergency nursing disaster preparedness, management, and response; and interprofessional education and collaboration.

Second Author

Monica Jenschke, PhD, CRNA  
 Texas Christian University  
 School of Nurse Anesthesia

Assistant Professor  
Fort Worth TX  
USA

**Professional Experience:** Monica Jenschke earned a PhD in biomedical science and maintains clinical practice as a certified registered nurse (CRNA). She has been involved in nurse anesthesia education in the clinical and university setting for over 20 years. Since 1992, 9 colleagues (CRNAs and surgeons) have died by suicide. Educating healthcare professionals about suicide prevention is imperative. Dr. Jenschke completed QPR Gatekeeper instructor training in 2015. Since then she has presented QPR Gatekeeper training to over 950 graduate and undergraduate university students, high school students, healthcare professionals, and community members.

**Author Summary:** Dr. Jenschke has been involved in nurse anesthesia education in the clinical and university setting for over 20 years. Since 1992, 9 colleagues (CRNAs and surgeons) have died by suicide. Educating healthcare professionals about suicide prevention is imperative, so she completed QPR Gatekeeper instructor training in 2015. Since then she has presented QPR Gatekeeper training to over 950 graduate and undergraduate university students, high school students, healthcare professionals, and community members.

Third Author  
Trung Nguyen, MA  
Texas Christian University  
Director, First Year Experience  
Fort Worth TX  
USA

**Professional Experience:** 2015- present, Director of First Year Experience (FYE), Texas Christian University Maintains overall responsibility for all FYE activities including Frog Camp, Frogs First, Orientation, and Connections 2012-2015, Assistant Director of First Year Experience, TCU Specific responsibility included Frog Camp Responsible for Fro

**Author Summary:** Currently Director of First Year Experience at TCU, Mr. Nguyen has overall responsibility for all FYE activities. Program assessment of QPR training for FYE student leaders has led to research collaboration about effectiveness of the training.