Mental Health and Injuries In Older Adults –Factors Associated with Increased

Risk

UROP Assistantship Proposal

Date

Name

Sample

Faculty Name, Title, Location:

Problem Statement

Older adults with mental illness are more likely to experience injuries and to utilize more health care resources. Little is known regarding what types of mental illnesses are more likely to increase the risk of injury or if different categories of mental illness are associated with poorer outcomes following an injury.

Literature Review

Injured older adults (aged 65 years and older) are a growing population. Over 40,000 injured older adults were seen in Utah emergency departments (ED) or admitted to a hospital from 2007-2008 for an injury related to a fall (Edelman, L., Heise, B., Swinyard, L.). The most common "frequent fliers" of the ED are injured older adults with a diagnosed mental disorder (NCHS, 2013). Twenty percent of the patients were diagnosed with a mental disorder, with dementia, substance abuse, mood and anxiety disorders being the most commonly diagnosed mental disorders (Edelman, L., Heise, B., Swinyard, L.).

Mild depression also, know as sub- syndromal depression, is the most common mental disorder in older adults but will often go un-recognized. Patients who were diagnosed with a mental illness utilized more health care services than patients who were not diagnosed with a mental disorder (Edelman, L., Heise, B., Swinyard, L). The National Hospital Ambulatory Medical- Care Emergency Department (2010) found that older adults were three times more likely to receive a head CT or MRI and were four times more likely to be admitted to the hospital. As the severity of the mental disorder increases, the frequency of falls and injuries also increases. A diagnosis of a major mental illness is associated with self-harm, injury,

substance abuse, and required longer hospitalizations (Hendrie, Lindgren, Hay, Lane, Gao et al., 2013).

Injured older adults living in rural areas are more likely to be under diagnosed with a mental disorder than their urban dwelling counterparts (Edelman, L., Heise, B., Swinyard, L.). There is also a lack of adequate mental health care in rural areas (Fortney, Harman, Xu & Dong). Understanding the associations between injury and mental illness, and the impact of rurality, in older adults is an important first step in providing better mental illness care for injured older adults in rural and urban areas.

Research Activities

Research Objectives

The overall objective of the study is to describe how mental illness affects the long-term outcome of older adults who have experienced 1 or more falls that have resulted in a visit to the ED or hospitalization. A secondary objective is to compare how rural vs. urban patients are diagnosed and treated for mental illness and how accessible adequate mental health care is for patients living in rural areas. Last semester we were able to sort and determine the most common mental illness diagnoses of injured older adults in Utah. This semester the following research questions will be addressed by the study:

1: Are the rates of mental illness in injured older adults different between urban and rural areas?

2: Do rural and urban older adults with mental illness have different patterns of emergency department and hospitalizations following an injury?

Research Design

      This study is a retrospective descriptive database review of adults aged 65+ whom were treated in a Utah ED or admitted to the hospital for an injury related to a fall from 2007-2008.

Study Procedures:

1. Database management:

   The database includes information on nearly 30,000 individuals who have experienced a fall that resulted in an injury that were diagnosed with a mental disorder. These individuals were pulled from a larger database including individuals that were not diagnosed with a mental disorder. Database will be managed so that it will only contain the information relating to individuals who had a diagnosed mental disorder.

2. Rates of Mental Illness:

   Rates of mental illness in rural areas vs. rates of individuals living in urban areas will be calculated to show if there is a disparity among the two.

3. Census Collection and Map Overlay:

   Information pertaining to average income level, education level, poverty level, number of available mental health providers, and accessibility of mental health care will be compiled. Overlay maps of rural areas vs. urban areas will be generated to determine if there is a relationship between these variables and adequate mental health care.

Timeline

This is part of a larger study that includes information on over 40,000 older adults who were seen in an ED or hospitalized. This study is exempt from IRB review. The timeline for this portion of the study is as follows:

September 2015: Determine rates of mental illness of urban vs. rural areas. Determine most common mental illness diagnoses from both rural and urban areas.

October/November 2015: Census data collection and map overlay. Compile census information regarding income/poverty level, education level, number of mental health providers, and accessibility of mental health providers in both rural and urban environments.

December 2015: Generate overlay maps of rural vs. urban areas that show if any discrepancies between the two environments exist.

Faculty Mentor

(Redacted) is my faculty mentor. She has been involved in this study since the beginning and is extensively knowledgeable. (Redacted) has been mentoring me for the past 18 months exclusively in the mental health aspect of this study. (Redacted's) expertise is in geographic patterns of older adult injuries. In her larger database study she recognized that a significant proportion of injured older adults in Utah also had mental illness diagnoses at the time of injury. She discussed this finding with (Redacted) from BYU. (Redacted) is a gerontological psychiatric nurse practitioner who has extensive experience working with rural older adults. I will work with both (Redacted) and (Redacted) in this project, which will complement both my educational and research goals.

Educational Objectives and Future Goals

I am currently a third semester student at the University of Utah College of Nursing. I have always been intrigued by research and how research has the ability to change the way the medical community practices. My ultimate goal is to become a research nurse. I hope to be involved in research that will one day have an effect on increasing patient's standards of living and improve the lives of patients.

I have been a medical assistant for the last 11 years. Seven of those years I was fortunate enough to work with a physician that was continually involved in research and was consistently improving his practice to provide the most current evidence based research to his patients. It was working with him that initially ignited my interest in research and how it is continually evolving the medical community.

I am excited to continue my work with this study as I believe that individuals with a mental disorder are a very large underserved population in our country. I believe that more research is needed in order to see how mental illness may affect multiple facets of health and healing. Older adults are also an increasing group within our population. Older adults make up 24.3% (CNN, 2014) of the total U.S. population. Falls among older adults is also on the rise. I believe that it is important to understand how falls among older adults and the injuries related to them affect the overall outcome of the patient. I also believe that it is important to understand if there is any significance in how a mental disorder can affect the outcome of a patient after a fall. If a significance is present, then I believe this new aspect should be taken into account when setting up a care plan for a patient that has experienced a fall.

Participating in the Undergraduate Research Opportunities Program would increase my educational experience at the University of Utah College of Nursing. It will also help to prepare me for my future nursing career. Older adults are a large part of the community and also a large part of the healthcare community. At every point in my future career I will be assisting patients who are older adults. Having in depth knowledge on the issues that face this population will help to prepare me to be a better nurse and provide the best possible outcome for my patients.

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