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### Depression in Older Adults and the Effect that Social Isolation May Have;

A Literature Review

by

Courtney Kondos-Merck

Bachelor of Science, Minot State University, 2003

An Independent Study

Submitted to the Nursing Faculty

of the

University of North Dakota

In partial fulfillment of the requirements

for the degree of

Master of Science

Nursing

Grand Forks, North Dakota

May

This independent study, submitted by Courtney A. Kondos-Merck in partial fulfillment of the requirements for the Degree of Master of Science in Nursing from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.

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To Dr. Eleanor Yurkovich and Dr. Rick Zoucha for helping me to understand and appreciate the importance and significance of nursing research, specifically in the mental health nursing field.

To my family and friends whose continued love and support has guided me and encouraged me throughout my graduate school experience.

#### ABSTRACT

Depression among the older adult population has been identified as a serious concern for rural older adults. The purpose of this project was threefold: 1) to explore current literature to discover factors associated with depression in older, rural adults; 2) to determine what the literature reveals about the associations between social isolation and depression; and 3) to determine how research studies reviewed impact psychiatric mental health nursing practice. A literature review was completed, based on scholarly articles which have been published within the last five years. The review also included articles considered "classic" in the psychiatric mental health field. A number of factors related to depression in older, rural adults were recognized as significant while completing the literature search. These included but are not limited to, the impact of environmental contexts, barriers to treatment, difficulty in detection of depression, possible future treatment contexts and availability of mental health services for this specific population. A number of researchers have found a positive link to social isolation and the development of depression in the older, rural adult population Delivering effective care to these individuals poses various challenges, including resistance to obtaining services, stigma in regards to mental illness, transportation problems due to physical distances (accessibility) and fewer practitioners in outlying areas (availability). This literature review suggests what mental health nurses can do in order to promote effective care in regards to treatment, prevention and promotion in the older, rural adult population. It also reviews what is currently being done in regards to prevention, causation, detection and treatment of this illness in the rural population. Recommendations for additional education for patients, families and mental health nurses and research include the determination of: 1) best treatment protocols for depression of older adults living in rural communities, 2) best means of delivering care to these individuals, 3) further understanding of each individual's value and belief system in regards to mental health, and 4) identification of the best prevention strategies and promotion of good mental health. Further research into treatment for depression in rural populations is recommended by researchers.

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#### CHAPTER I

#### DEPRESSION IN OLDER ADULTS

#### Introduction

Depression in the elderly is significant. The World Health Organization (WHO) projects that by the year 2020, depression will be second only to heart disease as a cause of disability worldwide (2004). Depression in older adults residing in rural areas is also of significance and has been the source of research in the past five years. Larsen and Davis (2007) found that rural women had depression prevalence rates of 40% as opposed to 13-20% in urban women. Approximately 2.6 million rural adults suffer from depression (McCrone, Cotton, Jones, Hawkins, Constante & Nuss, 2007). Also of note is the fact that patients living in rural areas are less likely to use certain mental health services than their urban counterparts (Li, Proctor, & Morrow-Howell, 2005). The urban older adults in Li et al.'s study were almost 3 times more likely to use outpatient mental health services than their rural counterparts. This discrepancy between these copulations may be due to several key problems including accessibility, availability, and acceptability. (Larsen & Davis, 2007).

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Alexopoulos (2005) stated that those suffering from depression may endure family disruption and disability. Also, depression may worsen the outcomes of many medical illnesses and increase mortality. Experiencing depression is a possibility for any older adult, those living in rural areas or in urban centers. Research has given us some insight into depression in older adults, and this literature review examines depression which specifically occurs in rural areas. St John, Blandford, & Strain (2006) reported that "further research into depression and depressive symptoms in rural populations is

warranted". The following literature review will examine what is currently known regarding depression in older, rural adults and what will need to be studied in the future in order to improve the diagnosis and treatment of depression in older rural adult.

This chapter will first address the problem and present the purpose statement, key definitions, and a conceptual framework. Chapter two will provide a literature review on what is being studied about depression in the older adult, most notably in rural areas. Finally, the third chapter will address implications for further research and practice.

#### Problem

Rural areas are more common than urban ones in many of the states. North Dakota is no exception to this rule. Much of the population now residing in "rural" or "frontier" areas within our state are aging and could be considered older adults (65 and older). Rural adults are noted to be at increased risk for depression. McCrone et al (2007) reported that 2.6 million rural adults suffer from depression. The US Census Bureau defines "rural" as "all territories outside of urbanized areas with fewer than 2,500 residents and open territory" (2008). It defines "frontier" as being an isolated rural area with population density of six or fewer people per square mile. More than 85% of the 1,669 federally designated mental health professional shortage areas in the United States are designated as either rural or frontier. (New Freedom Commission on Mental Health, 2004)

Access to mental healthcare, practitioners, and delivery systems and attitudes including cultural issues which influence whether people seek care, differs profoundly between rural and urban areas (New Freedom Commission on Mental Health, 2004). The

challenge of caring for rural older adults with depression is a difficult one because of these differences.

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According to the Mental Health Report by the Surgeon General's office (2008), the prevalence of major depressive episodes in the US population is 3.8% of those who are age 55 and older. The prevalence rate in the same population for unipolar major depression is 3.7%. This type of depression may continue for an indefinite amount of time, lowering quality of life or even leading to suicide. According to the Centers for Disease Control, suicide rates among individuals living in the rural western states are 2-3 times higher than those living in metropolis settings. This could be due to lack of resources, fear, ignorance or simply not having access to the help these individuals need.

#### Purpose

There are three main purposes in regards to this non-thesis project.

- 1.) To explore current literature to discover factors associated with depression in older, rural adults.
- 2.) To determine what the literature reveals about the associations between social isolation and depression
- 3.) To determine how the research studies reviewed impact psychiatric mental health nursing practice.

#### Conceptual Framework

The conceptual framework that will be used to guide this study is McLeroy's Social-Ecological Model (1988). This approach was chosen to guide this particular study because of its all-encompassing nature and ability to look at a given situation from many different levels. It is useful in studying the dynamic interaction of behavior and

environment. It does so in a concrete way but not in a simplistic one. This model assumes that appropriate changes in the social environment will produce changes in individuals, and that the support of individuals in the population is essential for implementing environmental changes (McLeroy, Bibeau, Steckler & Glanz, 1988). The model takes into account the five levels of influence on behavior. The following is a list of the levels from McElroy's Socio-ecological model: 1) individual 2) interpersonal 3) organizational 4) community and 5) policy. This model will be helpful when exploring the correlation of depression in older adults both rural and urban to ecological components.

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Within the levels of the Socio-ecological model, you will find various components. The individual level is composed of knowledge, attitude and skills. The interpersonal level includes family, friends, and social networks. Organizations, such as schools, healthcare systems and local government constitute the organizational level. Included in the community level are relationships among organizations. Lastly, the policy level is made of national, state and local laws. The model also has several key assumptions. These include: 1) humans shape and are shaped by their environment, 2) the environment comprises multiple settings that can be viewed as a set of "nested structures" or overlapping systems, and 3) approaches to assessment and interventions should address both individual and contextual factors with a holistic approach, rather than focusing on a single level alone (<u>www.hpdp.unc.edu/wisewoman/chapter6.pdf</u>, 2008).

This model will be helpful in a variety of ways when examining what current research states regarding depression in older adults within a variety of environmental settings. This model looks particularly at the affect the environment plays on an individual, which is the essence of this literature review. The assumption of this study is

that environmental contexts correlate with depression in specific situations. This model will guide us in how to organize the information discovered and determine it's usefulness in treating older adults with depression.

#### Definitions

For purposes of this study, when the following terms are used, their meaning will be as follows.

*Depressive episode-* five or more of the following symptoms have been present during the same 2-week period and represent a change from previous functioning: 1) depressed mood most of the day, nearly every day 2) markedly diminished interest or pleasure in almost all activities 3) significant weight loss when not dieting or weight gain, or decrease in appetite 4) insomnia or hypersomnia nearly every day 5) psychomotor agitation or retardation nearly every day 6) fatigue or loss of energy nearly every day 7) feelings of worthlessness or excessive or inappropriate guilt 8) diminished ability to think or concentrate or 9) recurrent thoughts of death or suicidal ideation or attempts. Also, at least one of the symptoms is either 1) depressed mood or 2) loss of interest or pleasure. (APA, 2000, p, 168-169)

*Social isolation* is to live in an environmental context devoid of ready accessibility to social interactions and experiences, which are necessary to maintain an overall sense of well-being.

*Rural* defines all territories outside of urbanized areas with fewer than 2,500 residents and open territory. (US Census Bureau, 2008)

*Frontier area* is defined as an isolated rural area with a population density of six or fewer people per square mile. (US Census Bureau, 2008)

*Older Adult* may be referred to as a "geriatric" or "elderly" individuals. For purposes of this paper, an older adult will be classified as anyone age 65 or over.

*Community-Dwelling* refers to individuals who live independently in the community in a private home or apartment as opposed to those who reside in age-segregated congregate housing. (Grayson et al, 1995)

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#### CHAPTER II

#### EXAMINATION OF CURRENT LITERATURE

#### Introduction

The purpose of this project is threefold: 1) to explore current literature to discover factors associated with depression in older, rural adults; 2) to determine what the literature reveals about the associations between social isolation and depression; and 3) to determine how research studies reviewed impact psychiatric mental health nursing practice. This chapter will focus on an examination of current literature in regards to depression and it's significance in older adults, suicide and older adults, effects of environmental context on depression, effects of living alone on depression, influences of community or residential contexts, post-acute mental health services, and barriers to treatment.

This literature search was conducted using a variety of search engines including Pubmed, Cinahl, and PsycINFO Plus Text. Key words used in the searches included "older adult", "elderly", "depression", "isolation", and "rural". Specifically, when searching Pubmed, the search "older adult+depression" returned 40,833 results. When the keywords "depression+social isolation" were entered, 1,498 results were returned. "Rural+depression" returned 1,145 results when searched. I put several limits on my search in order to further reduce the number of articles, including only reviewing those articles from the past 5 years and also those articles in which the full text version was available. After limiting the search to full text, older adult+depression returned 24,536 articles. The terms depression+social isolation returned 879 articles. Rural+depression returned 794 articles after limiting it to full text articles only.

Depression and its Significance in the Older Adult Population

Depression is significant in the older adult population .It causes significant problems specifically amongst this group of individuals, such as deterioration in social functioning, redirection in a person's quality of life and is related to an increase in diseases (Conn and Stengart, 1997; Freid et al. 1998). Alexopoulos (2005) reported that depression causes suffering, family disruption, disability, worsening of the outcomes of many medical illnesses, and increases mortality. There has also been a firm recognition in research that establishes an association between depression and increased risk of death. (Penninx et al, 1999; Blazer et al 2001; Cuijpers & Smit, 2002)

While it may seem that depression could be treated and ultimately resolved, research says that it may have long-standing consequences. Older adults with major depression will have acute difficulties with concentration, speed of mental processing and executive function. What is more disconcerting is the fact that even though these deficits improve after treatment, they do not ever completely resolve in the case of late-life depression. (Alexopoulos, 2005)

Recognition and early detection of depression in this population has been somewhat of a problem. It has been suggested that the way symptoms are experienced or even expressed may be different in the older adult population. Lack of early detection may be due to a variety of reasons including inadequate practitioner training in assessment and diagnosis, unwillingness to admit symptoms on the part of the patient or even lack of typical depressive symptomology.

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Culture may also play a large role in whether or not depression is effectively assessed. Lindesay (1998) implies that emotional expression in different cultures can be

influenced by several overlapping concepts: the context of disclosure, available vocabulary and language of emotional expression, selective expression of emotions and definition of self. It is also noted that depressed mood and feelings of sadness are prevalent in some cultures while somatic symptoms and pain is present in others. (Lindesay, 1998)

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Another aspect to consider when discussing depression in the elderly is the fact that if undetected it may lead to suicide. Suicide prevalence rates in older adults have been climbing in the recent years. Elderly suicide comprises one fifth of all suicides (Waern, 2003) and suicide is predicted to become the tenth most common cause of death of older people in the world by the year 2020 (Koponen, et al, 2007). Because of these statistics, it is important to consider possible causation and preventative measures in regards to this. Suicide and it's correlation with depression in older adults will be further examined in the next section.

Suicide, Older Adults, and its Correlation with Depression

Suicide is often times thought to be most significant in the adolescent and young adult population. Research has proven that it is significant in the population of adults 65 and older. In a study regarding rates and previous disease history in old age suicide, the researchers came to several conclusions (Koponen, et al, 2007). One finding is that there is a correlation between multiple physical illnesses and depression. Secondly, the suicide victims had a high prevalence of previous hospital-treated depressive episodes and hospital treated physical illness. Lastly, the elderly showed lower suicide rates, and they decreased during the study period suggesting that active preventative measures against suicide is also feasible in the elderly (Koponen, et al, 2007).

is that living situations may have an impact not only on whether a given individual may suffer from depression but also whether or not that same person will get the necessary treatment for their illness.

Sociopsychological factors have been studied in relation to the prevention of suicide (Sakamoto, Tanaka, Neichi, Sato & Ono, 2006). Researchers stated that in order to further enrich the effectiveness of suicide prevention measures, sociopsychological variables must also be considered (Sakamoto, et al, 2006). Some of these factors included people's coping behavior, thoughts about depression, and their attitudes toward suicide and psychiatric treatment. Also examined in the study were differences in gender and generation. The researchers of this particular study felt it important to know and understand what residents thought about their own suicidal ideation and depression in order to plan appropriate suicide prevention measures.

Also, Sakamoto et al (2006) addressed the difficulty rural people have living in these areas in accessing adequate mental health services. These researchers identified the importance of people knowing where to go in order to consult about depression or suicidal ideation, and the importance of early detection in these cases.

Approximately 2.6 million rural adults suffer from depression, according to McCrone et al (2007). McCrone et al's study had a goal of determining the prevalence of depression in a rural free primary care clinic and identifying predictive factors of depression. A study which was cited in McCrone et al's report determined that rural residents face many health challenges, such as a greater likelihood of physical inactivity, heavy alcohol consumption and increased poverty (Probst, Laditka, Moore, Harun, Powell, & Baxley, 2006).

Also, lower educational levels and unemployment were identified as significant factors for the persistence of depression. Unemployment was found to be the strongest of these as a predictor of depression.

According to research conducted by St. John, Blanchford, & Strain (2006), the potential negative effects of rural life on depression include long distances to social activities and services that could reduce the ability to access social interaction and engagement. Additionally, it was suggested that regional economic decline may create an environment with fewer services and amenities. The particular objectives of St. John et al's study were two-fold: 1) to determine if there are differences in depressive symptoms between older residents of urban areas, small town zones and predominately rural regions and 2) to determine factors associated with depressive symptoms among these three groups. Of the three co-hort groups- "urban area residents", "small town zones" and "rural regions", it was found that the small town group had the largest prevalence of depression at 14% of the population.

Also of significance was that among the predominantly rural residents, the factors of being younger, living alone, perceiving one's income as inadequate and having functional limitations were associated with depressive symptoms (St. John, et al, 2006). So what is significant was depressive symptoms experienced by older adults living in small town/rural areas are associated with causative factors different from their urbandwelling counterparts. Those factors may vary for reasons both known and unknown. One reason which is studied in this review is environmental context. Living alone and being socially isolated has been found to be pertinent in regards to rural older adults and will be further examined in the following section.

#### Effects of Living Alone on Depression

It has been well documented in the USA as well as in the United Kingdom that the number of elderly living alone had increased substantially in the period between 1971 and 1991 (Glaser, 1997; Kramarow, 1995; Krivo & Mutchler, 1989). Of serious concern is the fact that older adults living alone have more depression (Dean, Kolody, Wood & Matt, 1992; Chou & Chi, 2000), use mental health services more frequently, and have a higher risk of suicide than their counterparts (Florio et al, 1997; Mindel & Wright, 1982). Because of living alone, their health is at risk and their overall sense of well-being is decreased. According to Soo You and Lee (2006), older people who live alone are more likely to feel a sense of isolation, to lose their self-esteem, and to slip into depression, which adversely affects their mental and physical health.

In a study completed by Chou, Ho, and Chi in 2006, living alone and depression in Chinese older adults was examined. The results found were significant and may have implications for treatment in the future for older adults who are known to be living alone. The study found that older women who were living alone were more likely to report depressive symptoms than those living with others (31.9% versus 21.2%). Other information gained from this particular study relayed that those living alone and reporting depressive symptoms were more likely to be older in age, be unmarried, and have financial strain. In addition, these same individuals were less likely to; 1) report functional limitation, 2) receive family support, and 3) receive emotional care from the family. More specifically, 32% of the population studied (who were living alone) were found to have depression. This is significant since only 21% of the population who lived with someone else had depression.

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Ko's research (1996) found that elders who are living with relatives scored significantly higher on several physical and mental health parameters than elders living alone. This may be due to the fact that the emotional health of older people is closely linked to the well-being arising from relationships with family members and from social activities (Ko, 1996). This same study reported that older people living with relatives outperformed those living alone in every aspect of physical performance. These findings are significant since it demonstrates that physical and mental health are intertwined, especially in older adults when considering their physical decline, and the impact it may have on their mental health and vice versa.

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#### Influences of Community or Residential Contexts

There has been much debate surrounding the issue of whether it's more beneficial for older adults to stay in their homes or move into residential placement. Both have problems and benefits. Staying at home allows the resident to maintain a sense of more independence and stay in a familiar environment. It may also mean more risk for falls and other serious health concerns which may go undetected longer. Being moved to residential care has benefits as well. There is staff present at all times. This means health problems, including depression may be detected and treated much faster. There are also readily available socialization activities to participate in. However, a drawback of placement into this type of environment often times represents a loss of independence and worsening of quality of life for many older adults. Grayson, Lubin, & Whitlock (1995) cite that the most autonomous living arrangement for older adults is living in the community and not a facility such as a nursing home or assisted living facility. Several studies reviewed for this project also looked at similar concerns.

Chahine, Bijlsma, Hospers, & Chemali (2006) conducted a study which focused on dementia and depression among nursing home residents in Lebanon. The researchers sampled 102 nursing home residents from 3 different facilities. The aim of this study was to determine the prevalence rate of dementia and depression in nursing home residents. Significant data which was derived from the study was the fact that over 50% of these nursing home residents had either dementia or depression or both. This indicates that more than likely, nursing home residents are being under-diagnosed in regards to these two types of mental illness. The authors of the study concluded that screening nursing home residents for dementia and depression on admission and at regular intervals is necessary for the resident's maintenance of their well-being. This idea could be translated into practice while caring for not only those in nursing homes but also those living at home, in adult foster care, and assisted living facilities.

Postacute Mental Health Services and Their Significance

Data from the 2000 National Hospital Discharge Summary showed that nearly 1.5 million patients were discharged from a non-federal short-stay hospital for severe mental disorders and 9.2% of those patients were older adults (Hall & Owings, 2000). Geriatric patients of psychiatrists are twice as likely as younger patients to be treated in hospital settings but also have shorter lengths of stay for geropsychiatric hospitalization (Proctor, Morrow-Howell, Jin Lee, Gledhill, & Blinne, 2006). This implies that the time period post-discharge is significant, due to these individuals having more symptoms upon discharge and a high risk for additional hospitalization. It is imperative that these individuals get appropriate care after hospitalization. Ensuring a holistic continuum of care post-hospitalization creates the best possible mental health outcome.

Proctor et al (2006), further studied quality of care for depressed older adults being discharged to home after psychiatric hospitalization for their depression. It prospectively measured needs for care at discharge and then assessed services received in relation to those needs. Quality was conceptualized and assessed in terms of services received in four domains: psychiatric, medical care, functional assistance, and psychosocial. These researchers believed that patients with multiple needs may not achieve desired outcomes if their services only address some needs and leaves others out. The results found that almost three fourths of patients had their needs for follow-up appointments with a psychiatrist met. Needs for ECT (electroconvulsive therapy), psychotropic medication monitoring, and supervision for cognitive impairment was met by more than 80% of patients. Care was poor for those needing psychotherapy (50% of needs met) and socialization services with 27% of needs met (Procter et al, 2006). This indicates a need to look especially at how socialization services could be more efficiently organized and delivered in order to accomplish more positive outcomes.

Also notable was the finding that healthier patients (with less co-morbid illness) and those residing in urban areas were more likely to have their needs for psychiatric care met post-hospitalization. This is most likely due to better access to and availability of care than in rural living environments.

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Similarly, a study done of Li, Proctor & Morrow-Howell (2005) indicates that patients living in rural areas are less likely to use certain mental health services than their urban counterparts. The afore-mentioned study reported that 81% of elderly patients discharged from psychiatric hospitalization utilized mental health services at 6 weeks post-discharge. This left almost one fifth of the patients who were discharged utilizing no

services. Examples of barriers to obtaining treatment included: believing they could fix the problem on their own, not being aware of possible services, and co-morbid chronic health conditions (Li et al, 2005). Treatment barriers will be further discussed in the next section. Related to barriers of treatment, are factors which support depression in older, rural adults. Below is a table which shows various factors supported by research.

Factor	Author	Year
Social Isolation	Larsen & Davis	2006
	McCrone, et al	2007
	Sakamoto, et al	2006
	St John, et al	2006
Medication-induced depression	Alexopoulos	2005
Psychiatric needs unmet upon	Proctor, et al	2006
discharge from hospitalization for	Li, et al	2005
depression		
Transition from community dwelling	Grayson, et al	1995
to residential setting	Chahine, et al	2007
Living alone/loneliness	Chou, Ho & Chi	2006
	Alpass & Neville	2003
	Soo You & Lee	2006
Deficits in primary care regarding	Shah, A.	2007
diagnosis and treatment of depression	Salib & El-Nimr	2003

Table 1. Factors which support depression in rural older adults

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#### Barriers to Treatment

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There are many possible barriers for older adults receiving appropriate psychiatric care for depression. These may range from internal causes, such as the patient not understanding what is available for services and/or not recognizing that they have a treatable illness, to external causation, such as a shortage of practitioners in certain areas.

Cost may also be of significant concern for some older adults. Lack of parity between medical care and mental health services in the governmental health insurance programs and third party insurance reimbursements causes barriers for individuals who may not be able to afford care. Medicare reimburses 50% of outpatient mental health services, whereas the reimbursement rate for medically necessary services is 80% (Sivis, McCrae & Demir, 2004). Sivis, et al (2004), reported that 'limited financial resources' was the most frequently cited barrier to the provision of mental health services for older adults in both the US and Turkey.

Individuals living in rural areas are much less likely to get help for their mental illness (Li et al, 2005). Three key barriers were identified by the Annapolis Coalition (2006) in regards to individuals in rural areas getting appropriate mental health services. These were *accessibility* (knowing where and how to get services), *availability* (presence or absence of providers and services) and *acceptability* (willingness to seek services and participate in treatment).

In regards to *accessibility*, Larsen & Davis (2007) state that it is limited due to decreased access to health insurance and lower wages associated with small businesses common to rural communities. Transportation is one of the most common barriers due to there being very few public transportation options.

*Availability* is limited for individuals in rural areas because of the limited number of treatment programs. The National Advisory Committee on Rural Health (1993) noted that there are no practicing psychiatrists, psychologists or social workers in 55% of the United State's 3,075 counties. Also of note is the fact that rural practitioners are often required to see many people over a large geographical area which creates experience with weather problems and other difficult environmental issues. These things all contribute to burnout of the provider (Larsen & Davis, 2007).

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Acceptability is a large concern when dealing with rural areas. Individuals in rural areas often promote the values of independence, religion and distrust of 'outsiders', which all create barriers for those persons searching for or needing mental health treatment. Also, because of the tight knit communities where everyone knows everyone, it is very difficult to maintain confidentiality (Larsen & Davis, 2007). In addition to this, in rural areas the care provider may be a relative, acquaintance, or neighbor.

#### Summary

When examining current literature and research in regards to depression in older adults, both urban and rural, a variety of factors must be taken into account. These include environmental contexts, individual attitudes towards depression, the potential of depression leading to suicide, and existing barriers to getting assistance. Rural dwellers may seek mental health care from general practitioners since accessibility, availability, and acceptability of mental health care providers is lacking in rural/frontier areas. A holistic approach including promotion and prevention strategies must be taken, in order to ensure that proper care is given and the prevalence of depression decreases in the older adult population.

#### CHAPTER III

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#### FUTURE CARE OF DEPRESSION IN OLDER ADULTS

#### Introduction

The purpose of this project was threefold: 1) to explore current literature to discover factors associated with depression in older, rural adults, 2) to determine what the literature reveals about the associations between social isolation and depression, and 3) to determine how the research studies reviewed impact psychiatric mental health nursing practice. This paper has examined what current published research literature has found in regards to depression in the older adult population and the relevance it has on psychiatric nursing practice today. This chapter will summarize the implications research may have on future practice. It will include literature in regards to the role of primary care in detection of depression, clinical presentation in older adults, the role of technology, and affects of social isolation including lack of services, on depressed older adults.

#### The Role of Primary Care and Detection

According to Karlsson, Lehtinen and Joukamaa (2007), 24% of frequent users of primary care meet the criteria for a depressive mood disorder (2007). Several articles reviewed discussed the importance of detection by primary care physicians. Many older adults are not willing to seek assistance from a therapist or psychiatrist according to Salib & El-Nimr (2003). Suicidal older adults are more likely to seek help from a general practitioner than from mental health providers. This means that the central person needing to detect depression in this population is the primary practitioner. Furthermore in rural areas, a family practice doctor may be the only accessible and acceptable resource available to older adults. A study done by Salib & El-nimr in 2003 found that intensive training in psychiatric care is necessary for primary practitioners to reduce the rate of elderly suicide. The study reviewed the records of coroner's inquests of all unexpected deaths of persons over 60 years of age. They conceded that of those individuals who committed suicide only 15% of those individuals were under psychiatric care at the time of their deaths and over 80% had not even received a psychiatric referral. This number may have been drastically reduced had the primary physician been able to detect the need for treatment of depression or the need for referral to a mental health provider.

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Advanced practice nurses have a special role in the detection of depression in the elderly and it is especially important for nurses educated in psychiatric mental health nursing to be educated on the presentation of depression in the elderly. Often times, general practitioners don't have ample amounts of time to thoroughly assess the patients, and because of this, psychiatric concerns are often overlooked. Also of concern, Barraclough (1971) states, older people do not readily express their feelings of depression or suicidal thoughts because of values and belief systems which may make it harder to detect depressive symptoms or suicidal thoughts in older adults by their HCP's.

It is also of importance to point out that due to the complexity of their health status, depression may in fact be due to a general medical condition. Alexopoulos (2005) lists a variety of conditions which may cause older adults to develop a depressive disorder including viral infection, endocrinopathy, malignant disease, cerebrovascular disease, myocardial infarction and diabetes. They may also experience a substanceinduced depression due to the use of benzodiazepines, steroids, anti-parkinsonian drugs, beta blockers and many others. Being able to relate the depressive symptoms to a general

medical condition may make treatment much easier and more successful. Assessment for depression should always start with a review of medications or general medical conditions that may predispose the individual to depression.

It is imperative that thorough physical assessment and review of current medications is done if depression is suspected. This is necessary in order to accurately diagnose and rule out depression which may be induced by medication or a medical condition. This will allow the HCP to alter medications or treat physical illness if the depression is not due to psychiatric reasons. If no medical basis is found and depressive symptoms exist, then treatment by various means, such as use of anti-depressants and/or psychotherapy can be initiated for the clinical depression.

#### Prevention and Promotion

As mental health nurses, a large part of our role in the care of older, rural adults with depression should be preventing mental illness and promoting an over-all sense of well-being. When working towards preventing mental illness (specifically depression), I feel it is important that we keep in mind the context of the living environment and ways which we can assess it and determine what services are necessary in regards to each situation. As mentioned in a previous section, Koponen et al's (2007) study revealed that older adults respond positively to active preventative measures against suicide, which is often times the end result of a battle with depression. We also know from research that rural adults are at a greater risk for depression than the urban-dwelling counterparts, with approximately 2.6 million rural adults suffering from depression (McCrone, et al, 2007). Because of this, it is necessary for nurses to be able to determine not only whether or not an older adult is living alone or with others, but also whether or not they are living in an

area which could be considered socially isolated and without an abundance of social opportunities and mental health services. McCrone et al (2007) suggest that routine screening, including sensitivity to predictive factors, may provide an avenue for early identification of depressed patients in rural primary care settings (p.292). This should be a part of both initial assessment and subsequent follow-up appointments which mental health nurses are involved in.

Improving recognition and subsequently treating depression earlier in the disease process is also something which is important when considering the role of the mental health nurse. This may be difficult at times, due to differences in the unique experience of depression in older adults of a different nationality or those from a different cultural background. Symptoms may be under-expressed or may be expressed in ways which are not typically thought to be depressive symptoms. Lindesay (1998) states that depressed mood and feelings of sadness are prevalent in some cultures and somatic symptoms and pain in others (p 278). Shah's (2007) article states that "ascertainment of the types and nature of signs and symptoms of mental illness in population-based epidemiological studies in the community will allow development of public health and education policies designed to facilitate early recognition of signs and symptoms of mental illness by targeting ethnic minority elders, ethnic minority voluntary sector organizations, and general practitioners" (p.280). The researcher feels that general practitioners and other clinicians working with these individuals should receive formal training to improve their knowledge and change their attitude towards cultural issues, and develop their skills pertinent to cultural sensitivity and appropriateness. If mental health nurses are better

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able to communicate with these minority elders, we may not only be able to recognize and treat depression sooner, but may also be able to prevent it completely.

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Promotion of an over-all sense of well-being and positive mental health is also an important aspect of what mental health nurses are responsible for when treating older, rural adults with depression. When considering how mental health nurses can best promote positive outcomes, McLeroy's Socio-Ecological Model (1988) is useful. When studying the various levels, there are ways in which action can be taken in order to provide the most optimal outcomes for older adults with mental illness (most notably, depression).

At the public policy level, nurses can work to educate national, state and local law officers on research which has been completed in the area of mental health of older, rural adults. If these individuals are educated, it increases the chance that more government money will be allotted for programs which aim to educate community members on mental illness and to fund socialization programs which may help to promote an over-all sense of well-being in individuals considered at high risk for depression. At the community and organizational levels, it is important that mental health practitioners and organizations are working together to provide comprehensive services, such as community centers, recreational activities, and mental health awareness support and education groups to rural communities in need. It is also important that opportunities for physical activity are provided, because physical activity has been positively linked with positive mental health (Ko, 1996). With McLeroy's interpersonal and individual levels, it is necessary to provide direct support, education and on-going assessment to those considered at risk for depression. This would include educating older, rural adults in

regards to their knowledge and attitudes surrounding their mental health, and decreasing stigma which surrounds mental health specifically in rural populations. It would also be necessary to educate those family, friends and social networks directly involved in the care of these individuals. Mental health promotion which integrates all of McLeroy's socio-ecological levels gives the best chance for optimal outcomes for older, rural adults at risk for depression.

#### The Role of Technology

An article in regards to telehealth for elders and their caregivers in rural communities summarized technology-based delivery methods of healthcare, specifically those used in rural communities in Iowa (Buckwalter, Davis, Wakefield, Kienzle, & Murray, 2002). The article found that even in those individuals with family or caregivers, many of the caregivers do not receive assistance in caring for their clients or loved ones because they find existing services too geographically distant to be helpful. The article stated that "issues of limited service access and reimbursement that create care barriers for elders also complicate delivery of assistance programs for their informal caregivers" (Buckwalter, et al, p. 32). This is especially disconcerting and means that even healthy, able adults attempting to assist older adults are finding it difficult to get the needed services for the individuals they are caring for.

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Home care visits can often do multiple things such as supporting elders in their own environment so that they do not have to travel, and reducing feelings of isolation. However, often times it is not feasible to get the needed services due to the timeconsuming nature (in regards to HCP's travel time) and poor reimbursement policies, amongst other problems (Buckwalter et al, 2002). Buckwalter et al (2002) stated that the

answer to this problem is to use telehealth. The study that was conducted was of a telehome care program delivering nursing-based case management interventions. 46 patients receiving care at a Veterans Affairs Medical Center were contacted an average of 4 times a week and those individuals received a wide variety of interventions. They reported that technical problems were rare and that overall patient satisfaction was high, with 35 of 46 patients expressing a positive response to the system. The researchers (Buckwalter, et al, 2002) concluded that remote technology enhances communication opportunities for patients. They also believe that it has the potential to reduce isolation as well as to improve access to professional services for patients and caregivers. This technology-based approach may improve access by establishing video appointments for assessment and management of care.

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Also, Buckwalter et al (2002) discussed the fact that Iowa has been using an inhome video approach since January of 1998 to manage the care of chronically ill patients. At the time the article was written, 60 participants had been enrolled in the program. They have ranged in age from 29 to 92 and with educational levels ranging from 4<sup>th</sup> grade to college. What has been determined since using this approach is that in-patient and outpatient visits have been reduced by 21%, at an average cost savings of \$9,000 per patient. Lower costs may facilitate individuals accessing needed assistance which supports maintenance of an optimal level of well-being.

Futuristically, technology could be very helpful to use in order to provide more efficient services to older rural adults with depression. Because of success already measured in the use of technology, it may become an approach that is more often utilized. For individuals in rural areas, it is often difficult for clients to attend follow-up and get

necessary care because of time, distance to travel, mid-western weather conditions, financial constraints and availability of transportation. The most successful treatment of depression takes time, ongoing management, and follow-up with the client's mental health provider or primary practitioner. Technology (use of videoconference, telephone, etc) may be the way to break down some of the barriers to treatment for rural individuals with mental illness. Mental healthcare practitioners need to be educated and assisted with skill development in the use of technology so quality care can be provided.

#### Affects of Social Isolation and Services

As mentioned in an article by St. John et al (2006), the negative effects of rural life that support depression include long distances to social activities and services which limit opportunities for social interaction/engagement, and the out migration of younger people. Also, this article cites that regional economic decline may create an environment with fewer services, less dollars to spend on social activities, and availability of amenities. Policy decisions made in large urban centers may also lessen a rural community's sense of control (St. John, et al, 2006). Alpass and Neville (2003) concluded that even though it is often suggested that depression is a response to declining health and functional impairment in the older adult, social isolation may be a more salient influence on the experience of depressive symptomatology in this rural age group. These factors all need to be taken into account when planning future services for older adults suffering from depression. Mental health nurses, while planning and implementing care for this population, should be well versed in assessing living contexts in relation to depression. Also, there is a need for mental health nurses to be knowledgeable in regards

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to what is available for socialization services and how to instruct adults on the ways of accessing them.

In the future, support programs aimed at caring for older adults with depression and other mental illness will continue to be vital. Soo You and Lee (2006) stated that older adults who are living with others scored significantly higher on several physical and mental health parameters than those who were living alone. They go on to say that older adults who live alone suffer from lowered self-esteem due to their reduced roles and sense of isolation. These things may often times lead to increases in the rates of depression.

The afore-mentioned article cites that a positive family-like environment eases stress and therefore reduces the possibility of mental illness. This may be due to the fact that the emotional health of older people is closely linked to the well-being arising from relationships with family members, roles within these families which give them a sense of purpose, and also from engagement in social activities (Ko, S., 1996).

For those reasons, I think that more government-funded support programs need to be developed which target creating a community-like environment in various locations such as local senior centers and other community gathering places. It may be necessary to plan in-home care programs for times when weather makes it difficult to travel or if patients are ill or lacking transportation to social activities. I believe it will take local government and legislation to pass public policies which advocate for services that will target these problems. Social interaction and relationship-building has the potential to promote an over-all sense of well-being and therefore reduce the chances of mental illness, particularly depression. Findings such as those discussed in this document, must

be passed along to government agencies in order to educate those individuals in regards to the need and benefits of socialization in this particular population.

#### **RESEARCHABLE ISSUES**

More research needs to be conducted regarding not only mental health and it's correlation with social isolation, but also specifically focused on depressive disorders in older adults. In the older adult populations, many continue to reside in rural areas where they are considered socially isolated. St. John et al (2006) agrees stating that "further research into depression and depressive symptoms in rural populations is warranted" (p.1179). They also cite that recognizing the effect of specific community characteristics on depression in the older adult, such as culture, economic status and social factors merits further attention.

Another important aspect of depression in older adults which needs further research is studies the need to understand factors that are associated with the physical, mental and emotional health of older adults living alone versus those living with relatives or significant others (Soo You & Lee, 2006). If we are able to determine why individuals living with others are more emotionally healthy, programs implementing those successful characteristics could to be developed for those living alone.

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Specific research questions still need to be asked in regards to older rural adults and depression. One specific question which should be considered is "What is the best treatment of depression for individuals residing in rural communities?" Another question which relates to the previous one is "How is mental healthcare best delivered to these individuals?" In regards to prevention and promotion strategies, I feel that we need to question as researchers what is most effective in terms of preventing depression among

this population and what is most appropriate for promoting an overall-sense of wellbeing and positive mental health. Lastly, we need to ask questions of individuals to understand each person's value and belief system in regards to mental health and the treatment of it (qualitative research designs), in order to provide the most effective care.

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#### CONCLUSION

Depression is a debilitating illness which affects much of our country's older adult population. The key to treating this illness in both rural and urban dwelling populations is effective diagnosis and holistic, on-going treatment of the person within their environmental context. Different approaches may need to be implemented with different populations due to living situations or other barriers to care. It's important that care is individualized and holistic in order to promote the best outcome. In the future, new means of delivering care may be necessary in order to improve the treatment of depression and other mental illness in this rural older adult population. Further research, extensive education and ongoing vigilance is needed by practitioners and care providers in order to develop, provide, and evaluate the most effective means of treatment in rural areas

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