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Devolpment of a Scale to Assess Home Health Care Aides' Ability to Recognize Depression in Older Adults

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DEVELOPMENT OF A SCALE TO ASSESS HOME HEALTH CARE AIDES' ABILITY TO RECOGNIZE DEPRESSION IN OLDER ADULTS

by

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ABSTRACT

DEVELOPMENT OF A SCALE TO ASSESS
HOME HEALTH CARE AIDES' ABILITY TO
RECOGNIZE DEPRESSION IN OLDER ADULTS

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Old Dominion University, 1997

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Depression afflicts 20% to 40% of people 65 and older. Depression in older adults is frequent and chronic. The challenge of a hospital stay and the knowledge of having a long term disability may increase the risk for a depressive episode. In today's health care environment older adults are being released from hospitals after a short length of stay and are frequently dependent on home health services for assistance with activities of daily living. Home health care aides are given the responsibility of providing these services to the older adult in the home environment and need to be aware of how to recognize the symptoms of depression. The purpose of the study was to create and analyze a depression recognition scale (DRS) for home health care aides. The DRS is a 32 item questionnaire which includes four subcategories: mood, cognition, socialization and somatic symptoms. The DRS is based on the Geriatric Depression Scale developed to asses older adults ability to recognize depression in themselves. Fifty three home health care aides completed the DRS and received a mean total score of 54.6%. Total scores on the DRS indicate that home health care aides in this sample were unable to achieve an acceptable

performance score of 80% correct. The research also indicates that scores on the subcategory scales were consistently low. Data were found to be unevenly distributed. Frequencies and percentages were calculated for all independent variables (age, education and length of experience), subcategories and questions. Kruskal-Wallis one-way ANOVA was used to test for significant relationships between independent variables, each subcategory, and total score. Significance was found at the .01 level between total scores and education level and mood and somatic subcategories and education level. In the best interest of the older adult, home health care aides need to be trained and tested on their ability to recognize depression.

This document is dedicated to my grandparents Mary and Albert Zewinski who have been the corner stones of my decision to pursue further education in the fields of long term care and gerontology. Without them it would have been impossible to understand the nuances of aging that only close family members can convey.

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CHAPTER 1

INTRODUCTION

Depression is the primary affective or emotional disorder of old age and chronic illness (Hooyman and Kiyak, 1993). Epidemiological surveys have found that 15% to 22% of community elderly report depressed moods; 10% to 15% of these depressions require clinical intervention (Gurland and Cross, 1982). Women tend to report more symptoms of depression in middle age and early old age, but men have more depression at age 80 and beyond (Gurland, Dean, Cross and Golden, 1980). Studies of depression in nursing homes have found rates as high as 10 times those found in the community (Parmalee, Katz and Lawton, 1989). There is a high prevalence with old age for secondary or reactive depression. A typical example is the onset of a physical illness and/or the loss of a loved one through death or relocation that triggers depressive reactions (Phifer and Murrell, 1986). Studies of elderly both in community and nursing home settings suggest that the prevalence of major depression is, for the most part, lower than rates of secondary depression (Blazer, Hughes and George, 1987).

It is necessary to realize an that older adult's inability to control changes and role loss in conjunction with the biological aging process places them at risk for these stressors to provoke depressive disorders. Providers of care to this population must be sensitive to these issues to appropriately acknowledge changes in the older adult and insure that applicable intervention is provided if symptoms are evident. It is especially important since death rates appear to be greater among the elderly with a

diagnosis of depression; in one three year follow up study, 60% of depressed older adults had died, compared with only 32% among those with no psychiatric diagnosis (Schuckit, Miller and Berman, 1980). It has also been suggested that older people with depression are more apathetic, less interested in their environments and more likely to consider suicide than younger people experiencing depression (Blazer, George and Landerman, 1986).

To further support these findings, the Center for Disease Control published a report in January 1996 which stated that the suicide rate among elderly Americans has jumped 9% since 1980 after declining during the last 40 years. The increase was greatest among people in their early 80's. The CDC report cited alcohol abuse, depression, social isolation and physical illness as being among the risk factors for suicide in older adults. These results suggest the importance of the early detection of depression as a way to reduce the risk of suicide and the need to intervene before conditions become critical.

In today's changing health care environment, it is not always the older adult or chronically ill person's family or physician who has the greatest opportunity to detect the basic symptoms of depression. Older adults are being released from hospitals after a short length of stay. In doing so, a variety of health professionals are seeing older adults who have a physical disability, are home bound and in need of assistance with activities of daily living. The experience of a lack of independence and the knowledge of having a long term disability can easily place these individuals at risk for a depressive episode. The physical changes coupled with stress from family and changing roles in a familiar environment are yet additional risk factors to the

individual's mental health. Older adults may attempt to commit "chronic" or "passive" suicide, when they lose the will to live and simply stop caring for themselves. They may discontinue medications and take increased health risks. They may even slowly stop eating and drinking until they become ill and die (Devons, 1996). As these individuals are released back into their community setting from the hospital they often have very little formal support. They receive home health care services to track and evaluate their recuperation. Medicare is a primary funding source for these services and an average of 63 visits are made to each individual, according to the National Association for Home Care (NAHC).

Based on NAHC 1996 report estimates, in data from the Bureau of Labor Statistics, there were approximately 215,000 home health care aides who provided assistance to these populations. It is important that the professionals and paraprofessionals providing visits have a knowledge and understanding of what symptoms may be displayed when an individual is depressed to assist in the early detection and intervention of this illness. It is of great importance to concentrate educational support to those individuals who are the most frequent formal care givers to the older adult and chronically ill in the home setting. It is necessary to obtain information as to what these care providers know about depression symptomology to be sure that they can recognize a patient who may be in need of help. Numerous scales and questionnaires have been created to assess depression, but none to target the paraprofessional who spends a significant amount of time with the older adult and chronically ill population as they convalesce at home.

STATEMENT OF PURPOSE

The purpose of this research is to create and analyze a scale to assess a home health care aide's ability to recognize depression and its related symptoms as these effect the older adult and chronically ill populations.

OPERATIONAL DEFINITIONS

Activities of Daily Living (ADL) - an individual's performance in personal care tasks such as bathing, dressing, using the toilet, eating, getting in and out of bed or chair, caring for bowel control devices, as well as such home management activities as managing money, shopping, light housework, meal preparation, making a phone call and taking medications (Jette and Branch, 1981; National Health Statistics, 1987).

Chronic illness - conditions that are generally incurable, progressive and long lasting (Ferrini and Ferrini, 1993).

Depression - considered the most common mental disorder by the American Psychiatric Association, which afflicts 20% of people aged 65 and older. As defined by Taber's Cyclopedic Medical Dictionary, mental depression is characterized by altered mood. There is loss of interest in all usually pleasurable outlets such as food, sex, work, friends, hobbies or entertainment. Diagnostic criteria include presence of at least four of the following every day for at least two weeks: 1) Poor appetite or significant weight loss or increased weight gain, 2) Insomnia or hypersomnia, 3) Psychomotor agitation or retardation, 4) Loss of interest or pleasure in usual activities or decreased sex drive, 5) Loss of energy or fatigue, 6) Feelings of worthlessness, self-reproach or excessive or inappropriate guilt, 7) Complaints of or evidence of

diminished ability to think or concentrate, 8) Recurrent thoughts of death, suicide ideation, wish to be dead or attempted suicide.

Home Health Care - encompasses a wide range of health and social services. These services are delivered at home to recovering, disabled, chronically or terminally ill persons in need of medical, nursing, social or therapeutic treatment and/or assistance with the essential activities of daily living (National Association for Home Care).

Home Health Care Aides - assist patients with ADL's such as getting in and out of bed, walking, bathing, toileting and dressing. Some aides have received special training and are qualified to provide more complex services under the supervision of a nursing professional (National Association for Home Care).

Long term care - services that address the health, personal care and social needs of individuals who lack some capacity for self care. Services may be continuous or intermittent, but are delivered for a sustained period to individuals who have a demonstrated need, usually measured by some index of functional dependency.

Older adult - an individual who is 65 years of age or older.

Secondary or Reactive depression - arises in response to a significant life event with which an individual cannot cope (Phifer and Murrell, 1986).

CHAPTER 2

LITERATURE REVIEW

This chapter provides a review of the relevant literature. The chapter will discuss: the demographics of the aging population, the diagnosis of depression and depression in the elderly and chronically ill population. It will also review the assessment of depression in the elderly and chronically ill and relevant information and statistics on home health care in the care of the elderly and chronically ill. Finally, the chapter will review relevant research done with home health care aides and their aptitude in recognizing and dealing with depression symptoms common in older adults and the chronically ill.

DESCRIPTION OF THE AGING POPULATION

The American Association of Homes and Services for the Aging (AAHSA) offers a general demographic profile of the aging population. While reviewing this demographic information one must keep in mind that there is a prevalence of depression in older adults who experience some type of stress in their lives. This stress could be moving from location to location, loss of a loved one or pet, change in financial status or the inability to control the situation around them. The AAHSA reports that currently there are 30.9 million Americans aged 65 or older. That number will grow to approximately 55 million by the year 2020. The group of people over the age of 80 is the fastest growing age group. By the year 2000, persons 65 and older are expected to represent 13% of the population. This

percentage may climb as high as 21.8% by the year 2030. By 2030 this would mean that there will be about 66 million older persons, 2.5 times their number in 1980.

The AAHSA reports that 9.1 million older adults live alone. Nineteen point nine million are heads of households, 76% are home owners and 24% pay rent. In 1995, 21.4 million American households were headed by individuals over the age of 65. Of this 21.4 million, 1.5 million are in nursing homes, 220,000 live in non-profit continuing care retirement communities. There are also 700,000 poor elderly who need housing assistance. In addition, there are 1.5 million elderly homeowners with incomes below the poverty level.

Data on the financial status of older adults in 1989 suggest approximately 3.4 million elderly live below poverty level. The poverty level rate for persons, 65 + was 11.4%. Another 2.3 million (8%) of the elderly were classified as "near poor". Elders who live alone or with people unrelated to them had a median income of $9,422 in 1989. The median income of older persons in 1989 was $13,107 for males and $7,655 for females. Median income for families headed by persons age 65 and older was $22,806. Social Security was the major source of income (38%) for older couples and individuals in 1989, followed by asset income (25%), public and private pensions (18%), earnings (17%) and other sources (3%).

There were five times as many widows (8.3 million) as widowers (1.7 million). Older men were nearly twice as likely to be married as older women. Half of all older women are widows. About 31% (9.1 million) of all non-institutional older persons in 1990 lived alone while 44% lived with their spouses. The remaining 25% lived with other people, both relatives and non-relatives. For older people with ADL

limitations, about 33% lived alone, 32% lived with a spouse and 35% lived with other people. The proportion of older people in each living arrangement is expected to remain the same over the next 30 years. The percentage of elderly people who live alone steadily increases with age. Two point four percent of persons age 65 to 74 live alone. Among those 75 to 84, 38.2% live alone, and close to half (47%) of persons age 85 and older live alone.

Based on data from the U.S. Department of Health and Human Services, most noninstitutional older persons have at least one chronic condition and many have multiple conditions. The most frequently occurring conditions per 100 elderly in 1993 were: arthritis (49), hypertension (35), heart disease and hearing impairments (31 each), orthopedic impairments (18), cataracts and sinusitis (15 each), and diabetes, tinnitus, and visual impairments (10 each).

DEPRESSION AS A GENERAL SYMPTOM

Depression is a common and costly mental illness which effects approximately 17.6 million Americans each year (Department of Health and Human Services). Depression was ranked as the fourth world health threat in 1990 by the World Health Organization. Depression is expected to rise to the number two ranked chronic illness that poses a major threat to world health by the year 2020. The World Health Organization report of mid-September 1996 attributes the rise to the increase in the aging population. The proportion of the population over 45 years old will rise close to 200%.

Depression affects an individual's mood, thought, body and behavior. Some people experience one episode in their lifetime, others experience recurring episodes.

There are some people for whom depression is long term and defined as a chronic illness. Research by the National Institute of Mental Health has found that depression effects double the number of women than men. The highest overall age group effected is between 25 and 44. There is an increase among those born after the year 1945. Reasons for this trend are uncertain, but it may be related to psychosocial factors such as single parenting, changing roles and stress.

Depression can also be associated with life events, such as severe losses (spouses, children, jobs) or major financial difficulties. Personality factors such as undue dependency and low self-esteem may be associated with a vulnerability to depression. There is also a risk of developing depression when there is a family history of the disorder. Physical illness, abnormal hormonal functioning and certain medications are risk factors for depression. There are no documented differences in the rate of depression among ethnic or racial groups.

Depression in the Elderly and Chronically Ill

Depression in the elderly and chronically ill is prevalent. Major depression or depressive symptoms affect 20% to 40% of older Americans (over the age 60). The incidence is higher among women than men. Women have higher rates of depression than men throughout most of their life spans, but by age 55, men are beginning to catch up and may even surpass women by age 80 (Gurland, Dean, and Cross, 1980). Overall, the highest rates of depression are found among elders who are medically ill or in long term care (Valente, 1994). Depression in the elderly is often chronic. Sixty percent of patients who recover from an initial episode have at least one

subsequent one. Recurrence is a serious problem - up to 40% of depressed patients continue to experience depression chronically (Murphy, 1994).

There is evidence that most people over the age of 60 periodically have non-disabling feelings of depression, usually mild and rarely brought to the attention of a physician. Often psychiatric problems in the elderly are not treated until they become so severe that they can be no longer ignored (Busse, Barnes and Silverman, 1955). For persons past the age of 60, losses are more numerous and visible, whereas gains are fewer and less apparent (Pfeiffer and Busse, 1976). Elderly patients who are most likely to become depressed are those who have Alzheimer's or Parkinson's disease, dementia, cancer, myocardial infarction or stroke, as well as patients in pain and those undergoing renal dialysis. These elderly may also be predisposed to depressive side effects due to the medications that they may be taking. Of all the drugs taken by the elderly, antihypertensive drugs are probably the most likely to induce a secondary depression as are antiparkinsonian drugs, some hormonal preparations, certain anticancer agents and psychotropic agents. Another likely cause can be the effects of polypharmacy rather than a particular agent working alone (Ruegg, Zisook and Swerlow, 1988). This must be considered as a possibility when dealing with a population with multiple health issues.

There is also evidence in the chronically ill population that depression is prevalent. It has been found that there are various and different factors contributing to the depression that is associated with chronic illness. The most common cause is the emotional drain caused by the continuous series of stresses and strains associated with coping with a chronic illness and medical condition. Other causes may be the

many sacrifices and losses required by the continuous life adjustments that a patient with a chronic illness must make (Shapiro, 1996).

The core problem seems to be the inability of the individual to handle external losses and self-adulatory perceptions of internal and external changes (Blan and Berezin, 1975). Of particular importance are narcissistic injuries, the perception of physical deterioration and impending death, and the decreased ability to make new relationships and replace old ones (Goldstein, 1979). All are experiences and feelings that are frequently faced by the older adult and chronically ill person.

There can be great difficulty in recognizing depression in late life verses early life. Depression in late life often occurs in conjunction with a variety of chronic diseases and disabilities. The recognition of depression can be particularly difficult in geriatric medical patients because the diagnosis is often obscured by co-existing chronic illness, multiple psychosocial losses, or somatic pre-occupation (Kitchell, Barnes, Veith, Okimoto and Roskind, 1982).

Attention must also be paid to an individual's background, religion and cultural beliefs. Certain cultures believe that it is more acceptable to report physical symptoms than it is to report feelings or any symptoms that might be a sign of mental illness. Particular attention should be paid to the fact that most elderly suicides are not related to terminal illness, but are the result of depression. Depression is a factor in two thirds of the suicides in the elderly (Devons, 1996). A significant reason that depression is such an important topic to be able to be appropriately assessed and treated by all members of a caregiving team.

Assessment of Depression in the Elderly and Chronically Ill

There have been numerous instruments created to assess depression. This literature will discuss the more established depression scales and those that have been directly linked to assessment of depression in the older adult and chronically ill populations. In a study by Weiss, Nagel and Aronson (1986), it was found that there are specific symptoms of depression reported by the elderly. They commonly include a loss of self-esteem, feeling helpless and complaints of forgetfulness. Six reviewed depression scales were considered to be comprehensive with regard to the DSM - III criteria for depression. However the questions were not phrased to address the symptoms most commonly reported by the older adult. Many had not yet even been screened for use in the over 85 population. Study recommendations suggested the need for a sensitized scale especially targeted for these individuals.

The Beck Depression Inventory (BDI) is widely used for depression assessment. The scale was created in 1961 by researchers Beck, Ward, Mendelson, Mock and Erbaugh as a self-report measure of depression symptomology, has been frequently used with numerous populations. Until 1982, its reliability had not ever been established when used on populations over the age of 60 years. A study by Gallagher, Nies and Thompson (1982) using a patient sample and a community volunteer sample, found that the BDI had acceptable internal consistency and was an applicable measure to use for older adults. The researchers suggested that there be an effort made to improve the internal consistency for future use of the BDI with regard to older adult patients. Supplementary research was done by Gallagher, Breckenridge, Steinmetz and Thompson (1983) that assessed the BDI as an acceptable

screening tool for major and minor depressive disorders in older adult populations that were wanting to obtain mental health services on an outpatient basis. Outcomes of this research were that the BDI was still found to be an acceptable screening tool of depressed older adults.

The Geriatric Depression Scale (GDS) is a frequently used self report depression scale. The GDS was modeled after the Sandoz Clinical Assessment - Geriatric (SCAG). The SCAG had been an observer rated tool and was widely used, its drawback was the necessary training the observers had to go through. Being this detailed, the SCAG was not always a viable alternative for wide scale assessment needs. So, the GDS was formulated to fill the void, its self report format is convenient, but had been subject to scrutiny that it might be an unreliable method by which to diagnose depression. After numerous rewrites, the scale in its final form is a reliable, valid measure of depression consisting of 30 questions in a forced choice format.

Research performed by Norris, Gallagher and Wilson (1987) evaluated the validity of the BDI and the GDS when used as a screening measure of depression in the medically ill outpatient elderly population. The researchers also used an interview technique to validate the scale's findings with the sample. Findings were that both the BDI and GDS were appropriate screening tools to use in conjunction with a physician's screening when establishing whether or not a medically ill older adult patient is depressed.

In research performed by Okimoto, Barnes, Veith, Raskind, Inui and Carter (1982), the researchers evaluated the validity of both the Zung Self-Rating Depression

Scale and the Popoff Index of Depression. Results concluded that both scales successfully classified subjects as depressed. The researchers also identified six items from the scales that may be used as a short screening tool for the detection of depression in older adult medical patients. These six items included such items as, "I feel more irritable than usual" (Zung scale item 15), "I'd do better if I felt better" or "Sometimes I can't do anything right" (Popoff index item 12), "I feel that others would be better off if I were dead" (Zung scale item 19). These items are oriented to how the older adult "feels". The scales were chosen for this study because the researchers felt that the Zung scale was one of the most widely used self-report scales and the Popoff Index since its author believed it to be superior to the Zung scale in a medical setting (Popoff, 1969).

LONG TERM HOME HEALTH CARE UTILIZATION BY ELDERLY AND CHRONICALLY ILL

Four out of five elderly with long term care needs live in the community. Only one in five with such needs lives in nursing homes. By the year 2000, more than 8 million Americans aged 65 and older will need some form of long term care due to a disability or chronic illness (American Association of Homes and Services for the Aging).

The following information is from the Basic Statistics About Home Care Report 1996 produced by the National Association for Home Care. Home health care in the United States continues to be a diverse and rapidly growing service industry. More than 18,500 providers deliver services to approximately seven million individuals who require such services because of acute illness, long-term health conditions, permanent

disability or terminal illness. Annual expenditures for home health care are expected to exceed $36 billion in 1996 with an average rate of $86 per visit. These figures contrast sharply with the cost of daily hospital charges, averaging $1,810 per day per person and skilled nursing facility charges per day averaging $300 per day per person.

There are various types of agencies that provide home health care services. Medicare made home health care services, primarily skilled nursing and therapy of a curative or restorative nature, available to older adults in 1965. The fastest growth areas are hospital based and proprietary agencies. In earlier years, public health agencies dominated as providers of care. There are also non-certified home health care agencies. These are the agencies which do not provide Medicare services. The majority of these agencies are those that provide some type of companion service or home health aide service. Some hospice services and high tech services are included in this category.

National expenditures for health care totaled $1,008 billion in 1995 (Congressional Budget Office (CBO) estimates, August 1995). Both CBO and HCFA project an average annual growth of 8% from 1996 to 2000. Given these projections, national health care expenditures are expected to increase to $1,088 billion by the end of 1996. Of this estimated 1996 personal health care spending, only a small fraction will actually be spent on home health care. Two-thirds will be spent on hospital care and physician services. For home health care services, it is Medicare that is the largest single payor source. In 1992, Medicare spending accounted for more than one-third of total home health care expenditures. Other public funding sources for

home health care include Medicaid, the Older Americans Act, Title XX Social Services Block Grants, the Veteran's Administration and CHAMPUS. Private insurance comprised only a small portion of home health care payments. Much home health care service is financed throughout out-of-pocket payments.

In 1996, more than 37 million aged and disabled person will be enrolled in the Medicare program. About 3.9 million enrollees will receive home health care services, twice the number of home health care recipients in 1990. During the period 1990-1996, Medicare home health care expenditures increased from $3.9 billion to an estimated $18.1 billion. Most of the rise in spending has occurred as a result of the increase in visits, which rose from 70 million in 1990 to an estimated 279 million in 1996. Growth in Medicare home health benefits can be attributed to specific legislative expansions of the benefit and to a number of socio-demographic trends which have fostered growth in the program from the beginning and will no doubt continue to so in years in come.

A recent survey conducted by the National Center of Health Statistics (NCHS) has shown that close to 30% of home health care patients admitted to home health agencies in 1994 had conditions related to diseases of the circulatory system. Persons with heart disease, including congestive heart failure, made up 20% of this group. Stroke, diabetes and hypertension were also frequent admission diagnoses for home health care patients. Many hospital patients are also discharged to home health care services for continued rehabilitative care. Many of their diagnoses are chronic conditions which are frequently diagnosed in the older adult population.

nature. They become more like friends or extended family. The study also suggested that this more personal relationship between the two parties may be a problem to both. The worker may feel taken advantage of while the client may sense a loss of autonomy. This suggests that these aides may be the recipients of information about a client's daily feelings, both physical and psychosocial.

More research has been done about the attitudes of nursing personnel toward older adults. Outcomes of this research have been contradictory. Burnside (1981) found a lack of geriatric course work in educational programs for nurses and that a majority of nurses prefer to work with patients that were young in age. Research performed by Smith, Jepson and Perloff (1982) found that all levels of nursing personnel displayed a lack of interest in a specialty of geriatrics and often had very little knowledge about the needs of a geriatric patient. Almquist, Stein, Weiner and Linn (1981) found that educational experience had a positive effect on knowledge and attitude for those LPN's and aides tested regarding the elderly. However, research done by Chandler, et al (1986) suggested that nursing personnel in the long term care setting had a more neutral attitude toward aging and the aged persons with whom they worked, making it evident that with regard to attitudes, the more knowledge personnel may have about a particular population, the better the attitude they have about providing the care.

JUSTIFICATION OF THE STUDY

This study is important to long term care since depression is a prevalent disorder in the older adult population. The ability to recognize symptoms of depression for

those who provide the largest percentage of care to this population can mean the difference, in many cases, between life and death.

The National Center for Health Statistics conducted a survey which recognizes that home health care is one of the fastest growing segments of the United States healthcare industry and that older adults are its leading consumer. The move to home health care is much less expensive than hospital or nursing home care and many people would prefer to remain in the comfort of their own homes. According to reported statistics approximately 77.5% of the older adult population receives some type of personal care or companion/homemaker services within their home. The home health care aides who are providing these services must have the capacity to, at the very least, recognize the symptoms of depression so that they can report their findings to the Home Care Administrator or Nursing Supervisor to pursue the concern with the patients family.

The results of this scale will have relevance to the home health care agencies and their staff. There will also be great worth to the agency to utilize this special training as a value added service to their clients and their families. An agencys ability to say that their staff has had special in-service training in the symptoms of depression and how it affects older adults and the chronically ill can only strengthen its reputation for well trained staff members. Findings will also have relevance as the industry moves into the 21st century. We know that older adults have the risk of depression and with approximately 70.1 million adults estimated to be accessing the system by the year 2030, there is a significant need to recognize the symptoms of depression. By the 21st century there will also be other confounding factors that may affect the number

of patients that could be susceptible to depression even further. As medicine is keeping individuals with chronic illnesses alive much longer, there will certainly be new and different types of stressors that may bring about depressive episodes.

RESEARCH QUESTIONS

In reporting the results of this study, it is the researcher's intention to investigate:

1) Is there a relationship between age and knowledge of depression?
2) Is there a relationship between years of experience and knowledge of depression?
3) Is there a relationship between educational level and knowledge of depression?
4) Is there a relationship between the total scores and knowledge of depression?
5) Is there a relationship between individual category scores and knowledge of depression?

The researcher also feels that it is necessary to look at the mean age of the sample population, breaking down the gender attribute and the mean length of experience of the sample population. All are issues that the researcher believes would be of worth to generalize results. All results should be calculated to the .05 level of significance. The research results will also be made available to research participants upon completion.

SUMMARY

It is obvious that depression is a problem for the older adult population. Instruments exist to assess depression, but are not targeted to the care providers of older adults. Since home health care aides are left to care for older adults, it is necessary to bring the two together. The research suggests the rising older adult and chronically ill populations will require health care professionals to be prepared to

handle the multifaceted needs of this heterogeneous group. Upon completion of this literature review it was evident that there are many questions that need to be answered with regard to the home health care aide population and the older adults/chronically ill for whom they provide services. There is also clear evidence for the need of a scale such as the DRS to assure that home health care aides will be aware of the symptoms that may affect the population for whom they provide care.

CHAPTER 3

METHODS AND INSTRUMENTATION

POPULATION AND SAMPLE

The population consisted of home health care aides who provide home health care services to the older adult and chronically ill populations. The individuals who have participated in this study were home health care aides in the geographic areas of Hampton, Newport News, Norfolk, Poquoson, Virginia Beach, York County and James City County, all in the Commonwealth of Virginia.

It is the researcher's goal to generalize study implications, not actual results, to the entire home health care aide population to accentuate the need to educate this paraprofessional group about depression in the older adult and chronically ill populations. The sample for the research will be one of convenience from a licensed home health care agency that provides custodial care services in the Hampton, Newport News, Norfolk, Poquoson, Virginia Beach, York County and James City County service areas.

To eliminate procedural bias, it is necessary to address specific issues. For this research there were not any historical event effects, as the study was done quickly and there were no personnel changes or interference from non-participants. It is unlikely that there would be an opportunity for instrument decay. None of the home health care aides was asked to answer the questions for a second time. There was no actual equipment used in the administration of the scale to create this effect. There should also be no effect of statistical regression as no selections were by virtue of extreme.

Any study does risk the loss of subjects when dealing with people. The researcher did not foresee there being a risk in losing subjects that would effect the initial testing of the DRS but did recognize the risk involved. Investigator bias is a concern as it may be perceived that the researcher may shade results to the hypothesis. It was the researcher's intention to attempt to eliminate this threat by creating a very clear cover sheet for the scale that fully explains that there are no rewards or punishments given for participation in this research. (Appendix B)

INSTRUMENTATION

The purpose of this scale is to measure a home health care aide's ability to recognize the symptoms of depression as manifested in the older adult and chronically ill populations. The scale is modeled after the Geriatric Depression Scale (GDS) created by Jerome A. Yesavage, Michael Adey and Paul D. Werner. Dr. Yesavage was contacted regarding permission to use his scale as a model. The researcher was informed that the scale was part of public domain and that no written permission was needed. The researcher was granted verbal permission to use the scale as a model for the Depression Recognition Scale.

The GDS scale was created to assess depression in older adults through a self-report format. This scale was modeled after a previously existing Sandoz Clinical Assessment - Geriatric (SCAG). The SCAG had been observer rated and had been widely used for about eight years to measure symptoms. The SCAG used four major areas for evaluation: mood, cognitive function, physical complaints and self care. The drawback of the SCAG was that only trained observers could perform the ratings based on a very extensive observational format. This type of procedure did not make

the SCAG a viable alternative for wide-scale use to assess and screen the population. Consideration was given to the use of a self-report format. Researchers established that a major drawback to the use of the self-report format might be the unreliability of responses. Unreliable responses would weaken the tool, both for research purposes and as a method to establish characteristics of an individual patient. Research by Carrol, Fielding and Blashki (1973) established that research on other subsets of patients indicated that self-report methods are valuable even in populations that may first appear to be unreliable. The careful wording of scale items and attention to the conditions under which the scale is administered could lessen the problem. Yesavage et al also established that the scale would not be relevant to those who were severely demented because they would be unable to complete the questionnaire.

The Self-Assessment Scale - Geriatric (SASG) is the end result of numerous trials to reword the SCAG into a self-report tool. The final objective was to have a single self-report item for each rating of the SCAG. Some of the rewordings were very literal while others were not. Pilot studies led to new questions being formulated as replacements for questions that might not be able to be self-reported by an older adult. In its final form the scale is a reliable, valid measure of depression that consists of 30 questions that are in a forced choice format.

The actual 30 question Geriatric Depression Scale has been further condensed to a short form that consists of 15 questions. The questions that are used in the short form are taken from the original 1 through 4, 7 through 10, 12, 14, 15, 17 and 21 through 23. As the questions are scored, one point is given for the correct answer to the question. The answer may be yes or no depending on the actual question. The

short form is considered a more time efficient and equally reliable method to screen older adults for depression.

The scale that has been designed for this research was created by rewording the questions after those utilized by the Geriatric Depression Scale (GDS). To focus on the home health care aide, the researcher chose to preface each question with, "Would you consider your client to be depressed if he or she...". This adaptation allows the home health care aide to make a direct reference to "their" client. This format was to make it easier for the home health care aide to understand what was being asked. This also allowed the researcher to see whether or not the home health care aide was able to distinguish symptoms of depression as they relate to his or her client. The home health care aides chose between a yes or no response. The aides were awarded one point for each correct answer. The researcher also established four subset categories of depression symptoms for analysis. These subsets were similar to the subsets that existed in the SCAG that the GDS was modeled after. The DRS subsets are cognition, somatic symptoms, mood and socialization.

As a part of this research, a group of healthcare professionals reviewed the scale for readability. They were asked to comment on the structure of the questions, the actual scale and its terms, if they felt that the format was acceptable and other observations that would be helpful in creating the final draft of the scale. A pilot test for validity was done once the readability results are obtained and the text changed as needed. The researcher is confident that since the questions were so closely modeled after the GDS that the questions share validity on the topic of depression.

METHODOLOGY

Readability Test

While creating the Depression Recognition Scale (DRS), the researcher conducted a readability test done with the assistance of professionals in the fields of long term care, mental health and gerontology. Ten health care professionals were contacted by phone and asked if they would participate in this research by reviewing the DRS and giving any suggestions where applicable. After they indicated their willingness to participate they were sent/given a packet (Appendix A), and asked to comment on the content, format and ease of understanding of the demographic form and actual DRS scale. They were also asked to comment on their opinion regarding the use of a forced choice response format versus a multiple choice format. The professionals were also asked if they felt that the questions were relevant to the recognition of depression.

For the purpose of the research, the health professionals participating in the DRS review were two geriatric care managers, two public health nursing supervisors (both registered nurses), one home health care nurse (also a registered nurse), one retired registered nurse with a mental health concentration, one currently active certified nurse aide in the Commonwealth of Virginia, one active home health care aide and two community health faculty members from Old Dominion University. Each was given a packet along with a stamped self-addressed envelope for return mail. The professionals were asked to respond on sheets enclosed inside the packet. Some of the completed packets were filled out and delivered by hand. Others were returned by mail. This format was designed to the convenience of the individual professional.

The following comments were made with regard to the scales and the previously mentioned issues of readability. With regard to content all ten participants felt that the questions were relevant and were testing for the appropriate information. Forced choice was felt to be the best format for the scale. Responses with regard to a "don't know" option were that some aides might just choose it rather than think about the question that was asked of them. Also that it may just confuse them. All felt that a forced choice format was easier to read and would not be intimidating to the aides, therefore they would complete the scale and not just throw it away. All parties felt that the actual read through of the scale was good. The vocabulary was understandable. The researcher did receive a response that the vocabulary was almost too simple, but after discussing with the participant the educational level of the DRS respondents they were in agreement with the vocabulary that was used.

There were changes generated by the researcher due to basic suggestions of certain phrases that seemed to express a plural rather than a singular form. These changes were made in the actual format by adding he/she in certain questions to make them easier to understand. The researcher felt that these comments were of great assistance to the final product of the scale that was utilized in the study.

PILOT STUDY

The researcher conducted a field study with a convenience sample of ten home health care aides. The scales were completed within the researcher's business office on a Friday, which was pay day. The first ten home health care aides that came in to the office to pick up their checks were asked to complete the scale and make any comments on the scale that they deemed necessary to change or that concerned them

about the scale and its format. The pilot study participants were asked upon entering the office if they would be able to assist in filling out a questionnaire. Each person agreed to filling out the questionnaire. They were given the option of completing the scale at the office or taking it home and mailing it back to the researcher. All participants chose to complete the scale at the office. They were individually brought into a room separate from the researcher's office to complete the scale. This insured that they felt no time constraints or any pressure from the researcher. On average each aide took about 10 minutes to complete the scale. There were no comments made about any changes they felt necessary. When returning the DRS to the researcher, verbal responses were made that it did not take too long to complete the DRS and that was good. Also that the DRS was easy to understand and that made the respondents more at ease with completing the DRS.

DATA ANALYSIS

For the purpose of analyzing results the researcher utilized the measures of central tendency to learn about the variability of the sample. The Kruskal-Wallis one way ANOVA was used to test relationships between the independent variables and the total scale scores.

DATA COLLECTION PROCEDURES

The researcher conducted the actual data collection using a convenience sample of home health care aides employed by a custodial home health care agency located in Hampton, Virginia. Home health care aides who participated in the pilot study were excluded from this phase of data collection. All other aides were asked to participate. As the aides came to the researcher's office to pick up their paychecks they were

asked to participate in filling out a questionnaire. Attached to the packet was a letter (Appendix B) which explained that participation in the research would in no way affect their employment with the home health care agency. They were given the option of completing the DRS at the office location or at home. Stamped self-addressed envelopes were made available for those who chose this option. Most of the participants chose to complete the scale at home and mail it back. The researcher had numbered the DRS packets so that a tracking system could be in place to follow-up with aides that had not responded. Packets were also mailed to aides who had their checks mailed to their homes on a weekly basis. A two week follow-up was done by mail to those who had not yet responded. Follow-up mailing yielded very few additional respondents. Of the 72 possible respondents employed by the agency, the researcher received responses from 53.

CHAPTER 4

RESULTS

AGE AND GENDER

A potential sample size of 72 home health care aides employed at a home health care agency in Southeastern Virginia were asked to participate in this study. There were 70 females and 2 males in the total population. The researcher received responses from 52 females and 1 male, which was a response rate of 71.2%. Gender was removed as an independent variable due to only one male respondent. Very similar gender statistics were found the national study by USA TODAY, finding that a small percentage (10.6%) nationally of males are home health care aides. Ten of the total sample of 72 participated in the field trial leaving nine home health care aides who did not complete the survey. Of this sample, 24.5% were between the ages of 18 and 30 years, 11.3% were between the ages of 31 and 40 years, 28.3% were between the ages of 41 and 50 years and 35.8% of respondents were over 50 years of age. When Kruskal-Wallis one-way ANOVA was run, there was found to be no significance in the relationships of the individual subcategories or the total score and the age level of the respondents.

EXPERIENCE

The respondents length of employment in the field of home health care was as follows: 13.2% of the sample had 0 to 6 months experience, 7.5% had 7 to 11 months experience, 11.3% had 1 to 2 years experience, 26.4% had 2 to 5 years experience. A total of 22.6% had been aides from 5 to 10 years and 18.9% of

respondents had over 10 years experience. When the Kruskal-Wallis one-way ANOVA was run, there was found to be no significance in the relationships between subcategories and total score with the respondents experience level.

EDUCATION LEVEL

The respondents education level was as follows: 3.8% had 2 years or less of high school education, 17% had at least 3 years of high school education, 79.2% completed four years of high school. Respondents post high school education level was as follows: 50.9% had no college education, 22.6% had one year of college, 11.3% had two years of college, 3.8% had three years of college and 11.3% had four years of college education. When the Kruskal-Wallis one-way ANOVA was run, there was not a significant relationship between education level and the subcategories of cognition (.07) and socialization (.28). There were, however significant relationships between total score and education level (.01), somatic items and education level (.01) and mood items and education level (.01). All levels of significance were with a D.F. of 2.

DRS RESULTS

For the purpose of this research the SPSS computer program was used to complete the statistical analysis. Table 1 displays the frequencies of total scores achieved by each of the 53 respondents. The researcher found it necessary to establish a percent correct on the DRS to distinguish those respondents with an acceptable level of knowledge of the symptoms of depression. A performance standard level (PSL) of 80% was established by this researcher. The PSL of 80% is the minimum standard performance criterion used with home health care aides at this

agency. The PSL was established because of the need to maintain quality standards for home health care aides with the lack of immediately available clinical support.

The researcher considered that since 1995 the National Committee for Quality Assurance has utilized a criterion of 85% and above when accrediting national managed care organizations. At a local level an 80% criterion would be sufficient because the DRS would not actually accredit an agency, but evaluate individual performance. In the academic environment, a letter grade of "B" is more than a passing score with 80% being the cut off point for that letter grade. Eighty percent exceeds the average performance standard of a "C" grade (70% - 79%). A minimum passing grade lower than 80% in the health care environment would not be acceptable for quality assurance. Therefore, the criteria considered for acceptable performance on the DRS scale was at the 80% level. Anything less than 80% was not considered to be performance at an acceptable level.

The respondents received a mean total score of 54% which was 26% below the established PSL of 80%. The total scale scores had a standard deviation of 30%. Of respondents, 53% (N= 28) were at or below the standard deviation and there were 47% (N= 25) who were above the standard deviation. Total scores were not evenly distributed. The percent of respondents getting 80% or above correct was 24.5%. If the PSL score was decreased to 70% there would be an additional 7.6% of respondents achieving a satisfactory score.

Table 1

Frequencies of Total Scores Achieved by Respondents

Percent Correct Value	n	Percent of Sample
.00	1	.019
.03	2	.038
.09	1	.019
.13	3	.057
.16	3	.057
.19	2	.038
.22	2	.038
.34	2	.038
.38	1	.019
.41	1	.019
.44	2	.038
.47	2	.038
.50	1	.019
.56	5	.094
.63	2	.038

Table 1 Continued

Percent Correct Value	n	Percent of Sample
.00	1	.019
.66	2	.038
.69	3	.057
.72	1	.019
.75	3	.057
.78	1	.019
.81	2	.038
.84	1	.019
.88	2	.038
.91	4	.075
.97	1	.019
1.00	3	.057
Mean score (SD) = .54 (.30)		

Note. All scores represent percentages.

SUBCATEGORY RESULTS

For the purposes of this research the 32 DRS questions were divided into four subcategories for analysis. The 80% correct rule was utilized also for the evaluation of the subcategory scores.

MOOD SCORES

The mean score for the 17 mood questions (Appendix B) was 59.7% correct which was 20.3% less than the PSL of 80%. The questions had a standard deviation of 35%. Forty seven percent (N=25) of the respondents were at or below the mean and 53% (N=28) were above the mean score. The percent over 80% correct was 39.6% of DRS respondents (Table 2). The mood scores had a significant relationship (.01) with the independent variable of education level when analyzed by the Kruskal-Wallis one-way ANOVA. There was no significant relationship found between the mood scores and age or length of experience.

SOCIALIZATION SCORES

The mean score for the 3 socialization questions (Appendix B) was 43.4% correct which was 36.6% below the PSL of 80%. The questions had a standard deviation of 36%. There were 58% (N=31) respondents who were at or below the mean and there were 42% (N= 22) respondents who were above the mean score. The percent over 80% correct was 17% of the DRS respondents. The socialization scores had no significant relationship with any of the independent variables when analyzed by the Kruskal-Wallis one-way ANOVA.

Table 2

Percent of Correct Responses for Mood Questions

Mood Items	n	Percent Correct
Q02	34	.64
Q03	37	.70
Q04	42	.79
Q05	31	.59
Q06	35	.66
Q07	27	.51
Q09	35	.66
Q10	33	.62
Q11	27	.51
Q15	32	.60
Q16	27	.51
Q17	31	.59
Q19	32	.60
Q20	26	.49
Q24	30	.57

Table 2 Continued

Mood Items	n	Percent Correct
Q02	34	.64
Q31	34	.64
Q32	25	.47
Mean Score (SD) = .597 (.35)		

Note. All scores represent percentages.

Table 3

Percent of Correct Responses for Socialization Questions

Socialization Items	n	Percent Correct
Q12	27	.51
Q21	28	.51
Q27	14	.26
Mean Score (SD) = .434 (.36)		

Note. All scores represent percentages.

COGNITION SCORES

The mean score for the 8 cognition questions (Appendix B) was 48.1% correct which was 31.9% below the PSL of 80%. The questions had a standard deviation of 28%. There were 43% (N=23) respondents at or below the mean score and there were 57% (N=30) respondents above the mean score. The percent with 80% or higher correct was 15.1% of the DRS respondents.

Table 4

Percent of Correct Responses for Cognition Questions

Cognition Items	n	Percent Correct
Q01	36	.68
Q18	12	.23
Q22	19	.36
Q23	24	.45
Q25	16	.30
Q26	39	.74
Q28	28	.53
Q30	30	.57
Mean Score (SD) = .481 (.28)		

Note. All scores represent percentages.

There was no significant relationship between the cognition scores and the independent variables when analyzed by the Kruskal-Wallis one-way ANOVA.

SOMATIC SCORES

The mean score for the four somatic questions (Appendix B) was 49.1% correct which was 30.9% below the PSL of 80%. The questions had a standard deviation of 35%. There were 62% (N=33) respondents at or below the mean score and there were 38% (N=20) respondents above the mean score. The percent with 80% or higher correct was 17% of the DRS respondents.

Table 5

Percent of Correct Responses for Somatic Questions

Somatic Items	n	Percent Correct
Q08	23	.68
Q13	25	.47
Q14	29	.55
Q29	27	.51
Mean Score (SD) = .491 (.35)		

Note. All scores represent percentages.

The somatic scores had a significant relationship (.01) with the independent variable of education level when analyzed by the Kruskal-Wallis one-way ANOVA. No

significant relationship was found between the independent variables of age and length of experience.

LIMITATIONS

Under the heading of education, the GED was not offered as a choice. This method of obtaining a high school diploma could potentially be a response by this group of respondents. The researcher should have actually been looking at a measurement of completed years, not asking highest educational level completed. Only home health care aides in the Tidewater area were used and only one agency in the service area participated in the survey. These issues need to be considered for further research with the DRS when discussing or considering the generalizability of results.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

DISCUSSION

The researcher found that total scores on the DRS indicate home health care aides in this sample were unable to achieve an acceptable performance score on a test designed to recognize depression symptoms in older adults. The results also indicated that scores on the subcategory scales were consistent with DRS total scores.

TOTAL SCORES

Total scores on the DRS reflect that home health care aides within this sample had difficulty in achieving the established PSL of 80%. The mean score on the total scale was 54% which is 26% below the PSL. This inability to obtain the desired score could be an indicator that the home health care aides were simply unable to distinguish symptoms of depression or that they unable to understand the DRS questions. Although subjective responses in the pilot study did not show that there was a difficulty in understanding the DRS questions. In reviewing the individual question frequencies, the PSL was nearly met on three DRS questions. Question 3, a mood item (hopefulness about the future) at a 70% correct response , question 4 , a mood item, (feeling full of energy) at a 79% correct response and question 26, a cognition item (the ease of making decisions)at a 74% correct response level. The questions that were furthest from the PSL were question 18, a cognition item (afraid that something bad is going to happen) at a level of 23% correct, question 25, a cognition item (has trouble concentrating) at a level of 30% correct and question 27,

TABLE 6

Percent of Correct Responses for all DRS Questions

Items	n	Percent Correct
Q01	36	.68
Q02	34	.64
Q03	37	.70
Q04	42	.79
Q05	31	.59
Q06	35	.66
Q07	27	.51
Q08	23	.43
Q09	35	.66
Q10	33	.62
Q11	27	.51
Q12	27	.51
Q13	25	.47
Q14	29	.55
Q15	32	.60

Table 6 Continued

Items	n	Percent Correct
Q01	36	.68
Q16	27	.51
Q17	31	.59
Q18	12	.23
Q19	32	.60
Q20	26	.49
Q21	28	.53
Q22	19	.36
Q23	24	.45
Q24	30	.57
Q25	16	.30
Q26	39	.74
Q27	14	.26
Q28	28	.53
Q29	27	.51
Q30	30	.57

Table 6 Continued

Items	n	Percent Correct
Q01	36	.68
Q31	34	.64
Q32	25	.47
Mean score (SD) = .54 (.30)		

Note. All scores represent percentages.

a socialization item (often gets bored) at a level of 26% correct. In both the high and low comparisons to the PSL there is no continuity as to which subcategory scales were most sensitive to a correct or incorrect response. Nor were there any actual question characteristics that distinguished high and low responses to the PSL. Total scores varied considerably. Fifty percent of respondents had scores between 30% and 75% correct. Eighty seven percent of respondents has scores between 9% and 95% correct. The total scores had a significant relationship (.01) with the independent variable of education level when analyzed by the Kruskal-Wallis one-way ANOVA. These results gave strength to the confidence of the relationship between education and the total DRS score. No significant relationship was found between the variables of age and experience level and the total score. Reinforcing that although scores were not to the PSL there was a relationship with the more education the respondent had, the better they performed on the total scale. Results strongly relate to those of Almquist et al. (1981), Burnside (1981) and Smith et al (1982) which found a direct

relationship between knowledge and attitude toward geriatric patients and the field of geriatrics.

SUBCATEGORY SCORES

Mood Scores

Of all subcategories the mood items were the largest in number with 17 questions. This was also the area where the researcher saw respondents achieving the highest percent over 80% (39.6%) respondents. The mood items produced the highest mean score (59.7%) of all the subcategories, but was still 20.3% below the PSL. In this category the lowest percent correct was 47% on question 32 (often appears anxious). Most of the items ranged between 50% and 79% correct. The mood questions were a very important component of the scale as they were behaviors that aides would more frequently be apt to observe. These observations would be of behavior Q17 (is in good spirits most of the time) or conveyed in discussion through the vocabulary that a client was to use Q02 (feels that life is empty). Twenty six percent of respondents obtained scores between 25% and 75% correct. Seventy two percent of respondents obtained scores between 9% and 95% correct. The mood scores had a significant relationship (.01) with the independent variable of education level when analyzed by the Kruskal-Wallis one-way ANOVA. Reinforcing that although scores were not at the PSL, there was the strength of confidence in the relationship with the more education the respondent had, the better they did on the subcategory of mood items.

Socialization Scores

The subcategory of socialization items was the smallest subscale within the DRS. There were only 3 questions. They were as follows: Q12 (has lost interest in other

people and has little or no feeling for them), Q21 (would prefer to stay at home rather than go out and do new things) , Q27 (often gets bored). Of these three Q27 was the lowest percent correct response (26%). The mean score for this subcategory (43.4%) was the lowest of all subcategory scales. The mean was 36.6% below the PSL. The percent getting 80% correct was 17% of respondents. Twenty eight percent of respondents got none of the socialization items correct. Fifty five percent got between 33% and 67% correct. It may be considered understandable that Q27 would be a lower scoring item as it may be considered more subjective than most. Older adults often are bored. This question may be one that the researcher needs to consider if it should continue to be utilized in the scale. The socialization scores had no significant relationship with any of the independent variables when analyzed by the Kruskal-Wallis one-way ANOVA.

Cognition Scores

The cognition section of the DRS was the second largest grouping of questions. It was in this sequence that the question with the lowest percent (23%) correct Q18 (is afraid that something bad is going to happen) was found. This question may not be applicable to the home health care aides interaction with the client. Perhaps the client would feel that they were showing weakness by admitting that they were "afraid" about something. It must also be considered that a home health care client may feel vulnerable being in a one to one caregiving relationship with a stranger and may not feel that this is something that should be discussed with a person who is providing them with a service. There was however, a relatively high mean score (48.1%) for the category, but there were only 15.1% meeting the PSL criteria, this being the

lowest subcategory at the PSL level. Within this sequence there was also Q25 (has trouble concentrating) which was at a 30% correct level with only 16 respondents getting the answer correct. There were also relatively low percentages correct for Q22 (36%) (frequently worries about the future) and Q23 (45%) (seems to have problems with remembering). Sixty eight percent of respondents got between 25% and 75% correct. Eighty seven percent of respondents got between 10% and 90% correct. The cognition scores had no significant relationship with any of the independent variables when analyzed by the Kruskal-Wallis one-way ANOVA.

Somatic Scores

The somatic symptoms of the DRS were intentionally small due to the frequency of older adults to report physical symptoms on a regular basis. This section was composed of four questions. The mean score was 49.1% which was 30.9% below the PSL. The mean was however the second highest in the subcategory scales. Of the questions, Q08 (43% correct), Q13 (47% correct), Q14 (55% correct) and Q29 (51% correct) there were no exceptionally low performers. There were only 17% of respondents who performed to the PSL criteria. Sixty two percent of respondents scored between 25% and 75% correct. Perhaps contradictory to the assumption that the home health care aides would be too familiar with the physical symptoms related to depression in older adults. The somatic scores have a significant relationship (.01) with the independent variable of education level when analyzed by the Kruskal -Wallis one-way ANOVA. Reinforcing that although scores were below the PSL, there was the strength of confidence in the relationship with the more education a respondent had and the better they performed on the somatic items.

IMPLICATIONS

Implications To The Older Adult

In the best interest of the older adult it would be beneficial that a home health care aide would be able to recognize the symptoms of depression. This research found at a strong confidence level that there is a very significant relationship with a home health care aideš education level and their performance on the DRS. If the results from the sample are generalizable, they indicate that there is a need to educate home health care aides about the symptoms of depression in older adults and to educate them to report symptoms to their supervisors. If symptoms go unrecognized or are not reported, there is a risk of suicide, lack of medicine compliance, and isolation. The home health care aide can be a link to the detection and treatment of depression in older adults.

Implications To The Home Health Care Agency

Agencies may not realize that home health care aides do not recognize symptoms of depression. For the best interest of older adults, the researcher suggests that home health care agencies provide additional training to their personnel upon hire. The most logical first step would be through educational programs and inservices. This would allow agency personnel to receive information that would be beneficial in their one to one patient care scenarios. This would also be an important quality assurance movement for an agency to utilize as a community service to clientš family members and perhaps even to the general public.

A home health care agency should also consider the feasibility of a more frequent home visit schedule that would supplement regular documentation by the home health

care aides to monitor both the client's physical and psychosocial needs. Education on appropriate documentation would also be an important part of this initiative. This would insure that a licensed clinician would be following up on all information that the home health care aides were documenting as well as facing as they went through their daily routine with their patients. This would also be the support necessary for the home health care aides to continue to provide quality service for their client and for their employer.

In summary, the researcher believes that any agency providing home health care services must consider the incidence of depression as an extenuating issue of patient care provision and make extensive arrangements to appropriately train staff with regard to this multifaceted need of the older adult. Those at risk of depression may be diverse from area to area and even from home to home, but by creating and following a policy to train home health care aides about the symptoms of depression a home health care agency would increase their reputation for quality, customer oriented patient care. It is the researcher's belief that there would be the additional benefit of training home health care aides to the quality outcomes results of agencies that were able to instill comprehensive training as part of their total quality initiative. The strength of these results is an indication of the necessity for continued development of training models for depression to assure that appropriate tools are given to those who have an instrumental role in care provision.

RECOMMENDATIONS FOR FURTHER RESEARCH

The researcher recommends that in future research: A more evenly distributed sample of respondents be tested with the DRS. Aides working with an agency

offering geropsychiatric services be tested and their total scores be compared to the original sample. A pre-test post test design should be completed with the intervention of educational materials to see if there would be any change in the total test scores.

CONCLUSIONS

The purpose of this research was to create and analyze a scale to assess a home health care aides ability to recognize depression and its related symptoms as they effect the older adult and chronically ill population. It was the researcher's intention to investigate the relationships of the independent variables (age, education level, and length of experience) to respondent's score on the DRS. Participants in this research were home health care aides employed by a home health care agency in Southeastern Virginia. There were fifty three respondents which was a response rate of 71.2%. The data were compiled using the SPSS computer program at Old Dominion University. Frequencies and distributions were first calculated for each independent variable, subcategory, individual question and total scores. The nonparametric Kruskal-Wallis one way ANOVA was used to test the relationships between the independent variables, subcategories and total scale scores. The researcher concluded that home health care aides from this sample were unable to achieve an acceptable performance score on the DRS. In the best interest of older adults, there is a need to train and test home health care aides about the symptoms of depression.

This information is relevant for today's health care system and will become increasingly more important not only as an older adult's social needs change, but as their medical needs change. The present health care system entrusts paraprofessionals with the burden of care for individuals when the needs of the individual may exceed

their training. More evidence needs to be obtained to prove that this liability is worthwhile for the consumer of care and their family, the company with whom the aide works and the managed care company that possibly reimburses for this service. Significance must be placed on utilizing tools such as the DRS to assure paraprofessionals will have a working knowledge of the symptoms of the common illnesses that may effect the population for whom they provide care.

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APPENDIX A

Dear Colleague,

Please find attached the cover letter and two drafts of my Depression Recognition Scale for home care aides. I would appreciate your input on its readability, format and presentation. I have enclosed a sheet for comments at the very end.

Thank you in advance for your feedback. I feel that this research will benefit both the home care aide and their clients.

Sincerely,

Tina Nerney

Dear Home Care Aide,

Please provide the following information about yourself. (Circle what applies to you.)

1. I am female/male

   18-24 years of age

   25-31 years of age

   32 years of age or older

2. I have been a home care aide for

   0-6 months

   7-11 months

   1-2 years

   over 2 years

Please note: Taking or not taking this test will in no way effect your employment with this company. Results of this questionnaire are being used for a Master's Thesis.

Thank you in advance for your consideration.

Please circle the best answer to the following questions as they relate to patient care in the home care setting.

Would you consider your client to be depressed if he or she ...

1. Seems basically satisfied with life?

   Yes No

2. Feels that life is empty?

   Yes No

3. Is hopeful about the future?

   Yes No

4. Is full of energy?

   Yes No

5. Frequently cries?

   Yes No

6. Feels the situation is hopeless?

   Yes No

7. Gets upset about little things?

   Yes No

8. Has experienced significant weight loss (5-10 lbs.) in the last 6 months that is Not related to a specific illness?

   Yes No

9. Enjoys getting up in the morning?

   Yes No

10. Feels they would be better off dead?

    Yes No

11. Gets easily annoyed or irritated?

    Yes No

12. Has lost interest in other people and has little or no feeling for them?

    Yes No

13. Feels that they are looking old and unattractive?

    Yes No

14. Has little or no interest in the enjoyment of food, not related to a specific illness?

    Yes No

15. Acts pessimistic or discouraged about the future?

    Yes No

16. Feels that when looking back on life they have accomplished very little that is worthwhile or than means anything?

    Yes No

17. Is in good spirits most of the time?

    Yes No

18. Is afraid that something bad is going to happen?

    Yes No

19. Seems to feel happy most of the time?

    Yes No

20. Often feels helpless?

    Yes No

21. Would prefer to stay at home rather than go out and do new things?

    Yes No

22. Frequently worries about the future?

    Yes No

23. Seems to have problems with remembering?

    Yes No

24. Thinks that it is wonderful to be alive now?

    Yes No

25. Has trouble concentrating?

    Yes No

26. Finds it easy to make decisions?

    Yes No

27. Often gets bored?

    Yes No

28. Is bothered by thoughts they cannot get out of their head?

    Yes No

29. Is concerned about aches, pains, upset stomach, constipation or other unpleasant feelings in the body?

    Yes No

30. Thinks that most other persons are better off than they are?

    Yes No

31. Feels worthless the way they are now?

    Yes No

32. Often appears anxious?

Yes No

APPENDIX B

Dear Home Care Aide,

I am in the process of completing my master's degree in gerontology at Old Dominion University. The focus of my study is home health care. I need your help in gathering information for my thesis.

I would appreciate it if you would answer the attached questions that I have provided. If you are unable to answer these questions immediately, please complete the questionnaire at your leisure and return it to the office in the envelope included. Please note that completing this questionnaire or not completing it will in no way effect your employment with this company. The information is being used for educational purposes only.

Thank you in advance for your assistance.

Sincerely,

Tina M. Nerney

Please provide the following information about yourself. (Circle what applies to you.)

1. I am female/male

   18-24 years of age

   25-30 years of age

   31-40 years of age

   41-50 years of age

   over 50 years of age

2. I have been a home care aide for

   0-6 months

   7-11 months

   1-2 years

   2-5 years

   5-10 years

   greater than 10 years

3. How many years of high school did you complete?

   0 1 2 3 4 (Circle your choice)

4. How many years of college did you complete?

   0 1 2 3 4 (Circle your choice)

Please circle the best answer to the following questions as they relate to patient care in the home care setting.

Would you consider your client to be depressed if he or she ...

1. Seems basically satisfied with life?

   Yes No

2. Feels that life is empty?

   Yes No

3. Is hopeful about the future?

   Yes No

4. Is full of energy?

   Yes No

5. Frequently cries?

   Yes No

6. Feels the situation is hopeless?

   Yes No

7. Gets upset about little things?

   Yes No

8. Has experienced significant weight loss (5-10 lbs.) in the last 6 months that is Not related to a specific illness?

   Yes No

9. Enjoys getting up in the morning?

   Yes No

10. Feels they would be better off dead?

    Yes No

11. Gets easily annoyed or irritated?

    Yes No

12. Has lost interest in other people and has little or no feeling for them?

    Yes No

13. Feels that they are looking old and unattractive?

    Yes No

14. Has little or no interest in the enjoyment of food, not related to a specific illness?

    Yes No

15. Acts pessimistic or discouraged about the future?

    Yes No

16. Feels that when looking back on life they have accomplished very little that is worthwhile or than means anything?

    Yes No

17. Is in good spirits most of the time?

    Yes No

18. Is afraid that something bad is going to happen?

    Yes No

19. Seems to feel happy most of the time?

    Yes No

20. Often feels helpless?

    Yes No

21. Would prefer to stay at home rather than go out and do new things?

    Yes No

22. Frequently worries about the future?

    Yes No

23. Seems to have problems with remembering?

    Yes No

24. Thinks that it is wonderful to be alive now?

    Yes No

25. Has trouble concentrating?

    Yes No

26. Finds it easy to make decisions?

    Yes No

27. Often gets bored?

    Yes No

28. Is bothered by thoughts they cannot get out of their head?

    Yes No

29. Is concerned about aches, pains, upset stomach, constipation or other unpleasant feelings in the body?

    Yes No

30. Thinks that most other persons are better off than they are?

    Yes No

31. Feels worthless the way they are now?

    Yes No

32. Often appears anxious?

Yes No

APPENDIX C

ANSWER KEY

Please circle the best answer to the following questions as they relate to patient care in the home care setting.

Would you consider your client to be depressed if he or she ...

1. Seems basically satisfied with life?

   No

2. Feels that life is empty?

   Yes

3. Is hopeful about the future?

   No

4. Is full of energy?

   No

5. Frequently cries?

   Yes

6. Feels the situation is hopeless?

   Yes

7. Gets upset about little things?

   Yes

8. Has experienced significant weight loss (5-10 lbs.) in the last 6 months that is Not related to a specific illness?

   Yes

9. Enjoys getting up in the morning?

   No

10. Feels they would be better off dead?

    Yes

11. Gets easily annoyed or irritated?

    Yes

12. Has lost interest in other people and has little or no feeling for them?

    Yes

13. Feels that they are looking old and unattractive?

    Yes

14. Has little or no interest in the enjoyment of food, not related to a specific illness?

    Yes

15. Acts pessimistic or discouraged about the future?

    Yes

16. Feels that when looking back on life they have accomplished very little that is worthwhile or than means anything?

    Yes

17. Is in good spirits most of the time?

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    Yes

24. Thinks that it is wonderful to be alive now?

    No

25. Has trouble concentrating?

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26. Finds it easy to make decisions?

    No

27. Often gets bored?

    Yes

28. Is bothered by thoughts they cannot get out of their head?

    Yes

29. Is concerned about aches, pains, upset stomach, constipation or other unpleasant feelings in the body?

    Yes

30. Thinks that most other persons are better off than they are?

    Yes

31. Feels worthless the way they are now?

    Yes

32. Often appears anxious?

    Yes

VITA

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