

DEPRESSION IN THE ELDERLY: A COMPARISON STUDY OF RECENTLY  
BEREAVED AND NONBEREAVED SAMPLES

by

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## ABSTRACT

The results of previous research dealing with bereavement and/or depression in the elderly give conflicting and ambiguous reports. The purpose of this study was to attempt to clarify some of this confusion. Depression is a normal part of grieving. Many investigators suggest that depression is also a normal part of aging. This investigator described and compared the severity of depression between a sample of elderly persons ( $N = 62$ ) who recently experienced conjugal loss and a matched group of still-married older persons ( $N = 59$ ). The two samples were utilized in order to describe the extent of depression as an outcome of grief, as well as the degree to which depression may exist among those elderly who have a spouse.

Data were taken from a larger project on bereavement and adaptation in the elderly. Data from the bereaved sample were obtained three to four weeks postconjugal loss. The Zung Self-Rating Depression Scale was the instrument used to measure depression. The three Zung subscales were analyzed for highest levels of depression. Selected demographic variables were examined for their effect on bereavement and depression.

While the bereaved showed higher levels of depression, neither group manifested clinical levels of depression. Using a Tau C measure of association, a statistically significant relationship was found

between bereavement and depression for nearly every variable and every subscale.

These preliminary findings led to speculation regarding those elderly at higher risk when a conjugal loss occurred. Implications for nursing were discussed.

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## CHAPTER I

### INTRODUCTION AND PROBLEM STATEMENT

It is estimated that each year approximately 700,000 persons over age 50 will become widowed (Jacobs & Ostfeld, 1977). As a result of the grief which follows, many undesirable behavioral, social, and emotional responses often occur. The most characteristic emotional response to grief is depression (Parkes, 1972), and it occurs as a normal part of the grief process (Busse & Pfeiffer, 1977; Glick, Weiss & Parkes, 1974; Verwoerdt, 1981).

Holmes and Rahe (1967), in their studies on the psychological impact of a variety of stresses, found that death of a spouse rated as the most stressful life event. According to Busse and Pfeiffer (1977), the death of a spouse is the most crucial loss of all for old people, and the most difficult for which to compensate. This may be because of the central position which the spouse played in the survivor's life. In the elderly, life is often centered about the home, and the patterns of one's life are determined by one's relationship with one's spouse. Therefore, with conjugal loss, it is not unusual for persons to experience some sense of loss of self, role loss, and loss of life patterns. However, depression that is part of this grief/loss syndrome is not a clear-cut phase of grief. It waxes and wanes in one context or other (Parkes, 1972).

If depression is a normal result of grief and loss, the elderly with their multiple losses, social, economic, and psychological, might have good reason to be depressed. A sense of loss seems to be compounded by loss. A loss which might not be as grief-provoking in a younger person, often becomes an irreparable loss in the elderly person, who because of age-related circumstances, may find it more difficult to invest in new contacts. Kastenbaum (1969) termed these multiple losses, "bereavement overload." He contended that when grief can't be adequately handled by the psyche, physical symptoms will emerge. Epstein (1976) contended that depression is intrinsic to old age because of the numerous changes and losses that come with aging.

In the epidemiological research on age-related associations of depression, the true prevalence rate of depression in the elderly is unknown. Estimates for depression in those persons over age 65 range from 5%-44% (Blazer & Williams, 1980; Salzman & Shrader, 1978; Solomon, 1981). Gurland (1976) suggested that the elderly are usually poorly represented in the survey samples, and that appropriate methodology for age comparisons has yet to be done. Although the surveys denote marital status, they do not differentiate the newly widowed, who, therefore, might be suffering from reaction depression, from those who have been widowed many years.

Several investigators have suggested that depression among older persons is not accurately assessed and this contributes to our lack of clarity regarding prevalence in this age cohort. Blazer (1980), for example, identified two problems: (1) inability to distinguish a depressive disorder from the normal processes of grief/bereavement

and reaction to stresses in later life; and (2) lack of a clear definition of the term "depression." Jarvik (1976) posed that there is a need to differentiate among depressive illness, sadness, and the melancholy mood which is an appropriate response to the losses of old age.

Just as there are many questions about what constitutes depression in the elderly, there is a lack of research on bereavement and adaptation to conjugal loss in this age group. Except for the early work of Stern, Williams, and Prados (1951) and the more recent investigations by Weiner, Gerber, Battin, and Arkin (1975), and Heyman and Gianturco (1973) there are no investigations which concentrate on the manifestations and responses to conjugal bereavement in persons over 60. Only Clayton, Halikas, and Maurice (1972) used control groups to try to account for normal changes in the nonbereaved. Lastly, response patterns by sex are virtually unknown because most of the bereavement investigations have been with samples of widows.

Given that there is ambiguity and uncertainty related to bereavement and depression in the elderly, the problem to be investigated was an attempt to clarify that uncertainty. This was done by describing the occurrence and degree of depression in a sample of elderly persons who had recently experienced conjugal loss and in a group of still-married older persons. A comparison of levels of depression in a bereaved and a nonbereaved sample was utilized in order to describe the extent of depression as an outcome of grief, as well as the degree to which depression may exist among those elderly who still have a spouse.

This investigation was a preliminary study of depression in the elderly. It was part of a larger, ongoing project in which bereavement and adaptation among the elderly is being researched.

### Review of the Literature

Grief is a universal reaction to the death of a spouse. It involves psychological and somatic processes that occur over varying periods of time. One of the major characteristics of the grieving process is the existence of extreme sadness, intense enough to be called depression. What might be considered pathological at other times, is considered normal for the grieving person.

In order to investigate the various parts of the problem, the following areas of the literature were reviewed:

1. Description of the psychological processes involved in reactions of grief and bereavement.
2. The nature of grief reactions in the elderly.
3. Depression in the elderly.

Theoretical approaches include those psycho-social concepts which relate to both grief and depression. These include theory of loss, helplessness, separation, and somatization. A brief synopsis of Freud's psychoanalytic theory is provided because of its historic relevance to grief theory and because some of the more current psychological theories are built on these concepts.

### Processes Involved in Reactions of Grief and Bereavement

Freud (1917) was among the first in the literature to

systematically theorize about the concept of grief. He considered mourning to be the normal reaction to the loss of a loved person. One's whole energy, the libido, becomes invested with memories of the loved one. Successful mourning results when this energy decathected from the deceased and directed to another object. The loss of self-esteem that the survivor experiences is because of identification of ego with the deceased. The ego experiences this as loss of self and remains cathected to the deceased in the form of memories. Freud distinguished between normal 'mourning' and pathological 'melancholia' by declaring that in the former, the survivor knows what (s)he's lost, while in the latter, the object-loss is withdrawn from consciousness. The numerous investigations of Parkes (1970, 1972) and Glick, Weiss, and Parkes (1974) confirm that survivors search for the deceased, talk with them, and review events leading up to the death. Freud believed that the difference between normal grief and melancholia (depression) was a matter of degree and ego strength. If melancholia developed, there was regression to the oral stage and narcissistic direction of energy which resulted in the withdrawal and egocentricity customarily associated with depression. Anorexia and weight loss are primary symptoms associated with grief and depression (Clayton et al., 1972, 1974) and reflect the oral effects that Freud mentioned.

Bowlby (1960) proposed that separation anxiety, grief and mourning, and depression are all phases of a single process. These processes are all part of the psychological effects which occur as a result of separation from the loved one, and the lack of direct expression for libidinal energy. When the object continues to be unavailable

and clearly lost, the responses are those of grief and mourning, which he considered to be a deep form of anxiety. The ensuing depression is a major response to that anxiety. Inability to concentrate, restlessness, and indecisiveness are symptoms of depression and anxiety that have been noted by Zung (1965, p. 2), Clayton et al. (1972), and Clayton, Herjanic, and Murphy (1974).

Another aspect of the relationship of separation to depression, might be the lack of substitute forms of interpersonal attachments. Clayton et al. (1972) followed 109 recently bereaved subjects. Within one month postbereavement, 35% had symptoms like patients with primary depressive illness. The depression of widowhood was usually self-limiting, lasting only several months, unless the widowed person had no substitute relationships, particularly in the form of close friends or family.

Jackson (1957) distinguished between normal and abnormal grief. In normal grief the bereaved person is objective about the external situation and their motives and emotions are conscious, while abnormal grief is the expression of "unconscious fears related to unresolved early experiences." However, he saw grief along a continuum and thought that even in normal grief, unconscious elements of hostility and guilt were present. Lindemann (1944) reported the presence of guilt and hostility in the survivors of the Coconut Grove fire. Parkes (1964) also identified these same characteristics among his bereaved psychiatric subjects ( $N = 21$ ). However, he pointed out that the bereavement response depended on the survivor's relationship to the deceased. In addition, the reaction symptoms came in waves. In contrast

to the above, Stern et al. (1951), in their research of elderly bereaved ( $N = 25$ ), and Heyman and Gianturco (1973), did not find guilt and hostility to be a factor in the bereavement process among their elderly subjects suggesting that the elderly may respond to bereavement differently than younger persons.

Various investigators have suggested the normal grief process takes place in three phases (Lindemann, 1944; Glick et al., 1974; Bowlby, 1961; Parkes, 1965; Engle, 1961). The initial phase following the death is one of bewilderment, numbness, and disbelief (Parkes, 1965, 1970). This period lasts from several days to several weeks. Associated with the numbness is difficulty in accepting the reality of the death; thus, searching behavior takes place. Phase two is one of disorganization which begins several weeks following the funeral and lasts through the first year. There is great sorrow, pining and yearning, searching for the meaning of death and sometimes the deceased (Parkes, 1965, 1970; Glick et al., 1974). It is in this phase that depression begins to some extent. Within six months functional stability returns and the survivor begins to reorganize his/her life and activities. The third phase of recovery starts at the end of the first year. The bereaved person continues to adapt to life without the spouse and develop a feeling of competency. Parkes (1965) suggested that psychopathology and/or physical health problems resulted when prolonged and more intense reactions to bereavement occurred.

Lindemann (1944) presumed that bereavement was a crisis with quick resolution, but Caplan (1974) theorized that bereavement was a period of life transition and, therefore, constituted a series of



minicrises. In a crisis, the psychosocial forces for change operate for a short time, no more than six weeks. These forces are operational over a longer period of time with bereavement, and may last several years. For most widowed persons the loss never entirely ceases. Parkes (1971) elaborated on this concept and defined psychosocial transition as a "major change in life space which is lasting in its effects and which affect large areas of one's assumptive world."

Both Lindemann (1944) and Parkes (1972) have discussed atypical or morbid grief. Delayed grief occurs when signs of grief do not manifest themselves for two weeks after the death of the spouse. This may happen when the survivor is busy with tasks and feels a need to maintain the morale of others. Often, previous unresolved grief will surface here. Prolonged grief that continues beyond two years can become chronic and thus pathological (Parkes, 1965). He suggested that absence of depression with mourning is more abnormal than its presence. Lindemann (1944) emphasized the need for the expression of emotions rather than trying to avoid the emotional distress which accompanies grief.

Engel (1961) proposed that grief should be viewed as a disease. Even uncomplicated grief is a stress that results in a deviation in health and well-being. Readjustment includes the activation of reparative mechanisms in order to restore the individual to a state of equilibrium, the same process which occurs with any disease state. Indeed, grief does manifest itself in a variety of physiological and psychological symptoms--the same symptoms of overt depression. These include fatigue, anorexia, weight loss, decrease or loss of energy,

sleep disturbance, decreased or lost desire for sex, feelings of helplessness and hopelessness (Clayton et al., 1972, 1974). Lindemann (1974), the first to describe grief symptoms, included tightness in the abdomen or throat, shortness of breath, decreased muscular power, sighing, guilt, hostility, restlessness, agitation, and lack of motivation. These somatic episodes which he described lasted 20 to 60 minutes.

Data from epidemiological research regarding the concept of health problems occurring following bereavement indicate increased vulnerability for morbidity and mortality. Several studies showed an increase in mortality for men. Kraus and Lilienfeld (1959), reviewing thousands of death certificates, found increased mortality for all the nonmarried in their study, but particularly for widowers between 20 to 34 years old. In a retrospective control investigation using death certificates, Young et al. (1963) showed a 40% higher mortality rate in the first six months of bereavement for men than for married controls. In McNeil's (1973) prospective work with widowed persons in Connecticut, there was an increase in suicide, heart disease, and accidents for men under 60 during the first six months of bereavement. Women under 60 were at highest mortality risk two years postbereavement.

In six year controlled research, Rees and Lutkins (1967) found a sevenfold increase in mortality between bereaved and nonbereaved controls in the first year. During the first year, 19.6% of the widowers versus 8.5% of the widows, died with 13.7% of the deaths occurring in the first six months. For all widowed persons ( $N = 321$ ),

the risk of morbidity was 10 times greater than for other bereaved family members who comprised the control group.

MacMahon and Pugh (1965) investigated two groups of widows ( $N = 320/\text{group}$ ) who died within five years of their spouse. In one group, deaths were by suicide as opposed to death due to other causes in the second group. In the suicide groups, death clustered in the first four years, in particular the first year. Most of the concentration of suicide during that first year was by widowers over age 60. The relative risk of suicide was 2.5 times higher during the first year of bereavement and 1.5 in years two to four postbereavement.

In conclusion, widowers appear to be at higher risk for morbidity, particularly in the first six months postbereavement. The peak risk time for women is during the second year, as shown by data from retrospective studies. Besides depression, suicide and heart disease figure prominently in the disease and death etiology of bereaved spouses. A major drawback to interpretation of the aforementioned research has been an absence of inclusion of very young or very old cohorts of subjects in most studies.

Many researchers that have examined bereavement in young and middle age widowed persons (20-65). In a controlled study which compared young widows in Boston and Sydney (Australia), Maddison and Viola (1968) tried to identify those widows more likely to suffer psychological or physical consequences of conjugal bereavement. As part of the same project, Maddison and Walker (1967) investigated how the widow's perception of her social environment affected her outcome. These women completed a questionnaire at 3 months and 13 months

postbereavement. Items in the questionnaire contained basic demographic and social data and ratings of subjective state of health. For the 20 poor outcome and 20 good outcome widows, a further interview was conducted to learn more about the social environment of the subjects. The summary of the results show: (1) one out of three widows had increased use of alcohol and drugs with a sevenfold increase in sedatives; (2) younger widows had more health problems including chest pain, palpitations, headaches, and dyspnea; (3) poor outcome widows expressed more unmet needs, unhelpful environment, and a greater need to review the past. Two drawbacks of this research were: (1) none of the widows was over 65; (2) a recall method was used to collect information about social interaction at three months when interviewed at one year. Reliability of recall raises questions about the validity of the study.

Parkes (1970) examined the frequency of visits to the physician following bereavement. Widows ( $N = 22$ ) saw their physician 4.7 times more during the first six months than during the two years prior to bereavement. Twenty-seven percent ( $N = 6$ ) reported worse health at 13 months postbereavement. There was a high correlation between subjective state of health and ratings by the interviewers regarding anger and irritability as they perceived these in the widows. Parkes and Brown (1972) examined the number of physician visits in bereaved and nonbereaved samples. In the bereaved group, there was an increase in depressive symptoms, use of alcohol and a trend towards more hospitalizations. Visits to the physician and self-rated health assessments were not significantly different between the two groups. In one of his

earlier investigations of widows Parkes (1964, p. 2) examined admissions to a psychiatric hospital following bereavement. It appeared that 2.9% ( $N = 92$ ) of the widows did develop mental illness, following their husbands' death. Since there was a long lag time between bereavement, onset of illness and admission to the hospital, the validity of the research is questionable. Other researchers have thought intervening variables, beyond bereavement might have accounted for admissions to the hospital for mental illness.

Glick et al. (1974) compared a sample of young widows ( $N = 49$ ) under age 45 and married controls for bereavement outcomes. Data were collected at 3 weeks, 8 weeks, and 13 months postbereavement, but only outcomes about the widowed group were reported. Forty percent of women visited physicians because of menstrual irregularities, dizziness, headaches, sleep disturbance, and anorexia. The group also displayed early symptoms of depression symptoms of lethargy, fatigue, sadness, crying, and anger (at self, spouse, and physician). Other results included: (1) deep grief lasting several weeks to months; (2) health problems for those with poor adaptation at one year; (3) the recovery period was marked with peaks and valleys, especially for depression; (4) loneliness was still strongly felt at the end of the data collection period; and (5) most widows had established new networks of friends by the end of the first year.

Stein and Susser (1969) studied first time admissions to psychiatric care for widowed persons and controls, some of whom were not married. The widows ( $N = 1,945$ , ages 15-60+) had more diagnoses in the categories of depressive illness while the widowers showed higher

rates of alcoholism. The younger widows showed more emotional effects than those over age 60. One drawback to this investigation was that it did not take into consideration the length of time of widowhood in relationship to the onset of care.

Clayton and associates (1972) (Bornstein, Clayton, Halikas & Maurice, 1974) focused their research on widowhood and depression. All of the data were drawn from a sample of bereaved ( $N = 109$ ,  $\bar{X}$  age = 61) and matched nonbereaved controls. The subjects were interviewed three times in 13 months starting at one month postbereavement. Depression was operationally defined by dysphoria plus five of these eight symptoms: anorexia or weight loss, sleep disturbance, loss of energy, loss of interest, decreased libido, poor concentration, self-reproach or guilt, restlessness and suicidal ideation. Those bereaved with depression at one month (35%) were also more likely to be depressed at 13 months following bereavement. Although the depressed viewed their health as poorer than the nondepressed, they did not see their physicians more often. There was no significant correlation between depression, age, or sex. The depressed subjects did not use more sedatives or tranquilizers than the nondepressed. Despite the length of time (13 months), the depressed widows continued to view their depression as "normal" for their situation. The main factor that seemed to differentiate the depressed from the nondepressed was the close geographic proximity of their children for the nondepressed.

#### Summary

The focus in most of the research has been on widows, in

particular young ones, under age 45 and definitely under 60. There is evidence that morbidity and mortality rates are greater for widowers than for widows. In most of the studies reviewed, there was little examination of intervening variables that may affect the resolution of bereavement in any depth. Most of the researchers used control samples, but there was little consistency in the criteria used for selection of controls. Only the more recent work has been longitudinal. More information is needed on the effects of the intervening social variables, such as social networks, socioeconomic status, sudden versus anticipated deaths and previous coping mechanisms. There is evidence that depression is a manifest part of the grief process, although mainly, it seems to go untreated. How the newly bereaved compare in the external and nature of their psychopathology with patients who have primary affective disorders was not explored in these investigations.

#### Grief in the Elderly

What is known about the process of bereavement among older persons who have lost a spouse? There is a paucity in the bereavement literature that systematically addresses the bereavement phenomenon and outcomes for the elderly.

The earliest research (Stern et al., 1951) had a small sample ( $N = 25$ ) of patients on a geropsychiatry unit, all of whom were first-time admissions following the death of a spouse or close relative. They were indigent and their ages ranged from 53 to 70. The striking features of the group outcomes were: (1) obvious lack of overt depressive symptoms; (2) paucity of conscious guilt feelings; (3) a

preponderance of somatic complaints precipitated or exaggerated by the bereavement; (4) an unreal idealization of the deceased; (5) self-isolation; (6) hostility towards another person, usually the same sex as the deceased. Stern and associates concluded that somatic complaints had replaced the emotional grief reaction in these patients.

While Parkes (1964, p. 2) did not specifically examine elderly widows in his investigation of physical and mental health of widows ( $N = 44$  with age range of 38-81), he found that there was an 87% rise in psychiatric symptoms in widows under age 65. There was a nonsignificant rise in mental health symptoms for the older widows. However, the older group had a greater but still nonsignificant increase of physical health symptoms and more visits to the physician following bereavement. This was retrospective research using medical records two years prior to and 18 months following the death of a spouse.

Heyman and Gianturco (1973), in a longitudinal pilot study of 41 bereaved community volunteers past age 60, found favorable adaptation as an outcome of bereavement. Comparable data were collected for subjects pre- and postbereavement. The mean time interval between bereavement and the next evaluation was 21 months. Data collected were on attitudes, activities, physical health, and mental health including affect, anxiety, and hypochondriasis. Only four women ( $N = 27$ ) became depressed, three of whom were depressed prior to the death of their spouses. No men became depressed. Physical health did not show a significant decline. They concluded that satisfactory adjustment might be attributed to: (1) prior emotional stability; (2) stable social network; (3) few life changes following the death, and (4)



subjects experienced only age-related health problems. One wonders if the length of time lapse between bereavement and follow-up interview did not influence the report of good outcomes, in that the lag time allowed more time for adjustment to widowhood to take place. The sample was too small to be conclusive.

A group of bereaved older persons who attended a hospital-based family health center were studied for psychological mood states and physical health effects including visits to the physician, psychiatric referrals, accidents, hospitalizations, and death (Weiner, Gerber, Battin & Arkin, 1975). The subjects were divided into treatment and non-treatment group with a nonbereaved control sample drawn from clinic patients and matched for sociocultural characteristics. While the outcomes were preliminary and, therefore, inconclusive, they did show that the bereaved had more physician visits for major illnesses and an increase in psychiatric treatment during the first six months following bereavement. The significant findings also suggested that: (1) doctor visits increased more the second six months; (2) those with poor health prior to bereavement became sicker; (3) five to eight months postbereavement there was an increase in the use of tranquilizers and antidepressants; (4) more subjective assessment of poor health among the bereaved; and (5) Jewish women over 60 had the greatest health morbidity.

Drawing from this same elderly population ( $N = 228$ ;  $\bar{X}$  age = 67), Gerber et al. (1975) conducted an intervention investigation to note the effects of psychotherapy on those bereaved who manifested more severe psychopathology, particularly depression and decline in physical

health. There was a reduction in mental and physical health morbidity after three months of therapy for about 68% of the ( $N = 169$ ) who were in therapy. Of the entire sample, 2.4% ( $N = 4$ ) died within 15 months postbereavement. Within two to five months of therapy, there was a marked decrease in the use of antidepressive medication.

In conclusion, it appears that the bereavement process may differ for the elderly. There is no agreement about whether depression may manifest as physical illness or not, but with the increased incidence of poorer health, particularly in the absence of psychological symptoms, one might be inclined to consider depression a factor in this cohort. The higher rate of admission to the hospital might be accounted for by the lack of someone at home to care for them. The suggested higher rate of health deterioration (Weiner et al., 1975) could also have resulted from the fact that the survivor's health was neglected while caring for the sick spouse or that it was the deceased spouse who monitored the survivor's health, and now this was not being done. Only one researcher examined effects of treatment on health. More research needs to be done on the bereaved elderly if we are to adequately assess the grief process and its concomitant adaptation in this population.

#### Depression in the Elderly

Loss is the linkage between depression and grief. Freud (1917) said melancholia resulted from loss or perceived loss of a love object. According to Busse (1965), it is the alteration in the state of possession of something or someone who was valued. The ill effects of

loss are determined by the amount of disruption in one's life and the degree of change that the loss demands upon the survivor's lifestyle.

Levin (1963) posited three external factors which increase the stress of loss because they keep the self from regaining equilibrium. First, there is attack, any external force which produces pain, discomfort, or injury. Second is retreating, any external force which restricts actions necessary for one's basic drives. Last is threat, any event real or perceived, which warns of future loss, attack, or restraint. The degree of threat is determined by external reality and one's own perception of that reality.

In our culture the elderly are subjected to many factors which can contribute to loss, attack, restraint, and perceived threat. As these occur, there is more likely to be disintegration of the self, resulting in lowered self-esteem. As loss compounds loss, there is a lessening of need gratification and feelings of helplessness may ensue.

According to Solomon (1981), helplessness is the keystone for development of depression. It is both an affect and a behavior. As a behavior, the individual does not feel any control over the outcomes. No response attempted gives a positive outcome; therefore, the person gives up and takes whatever consequences occur. Seligman (1975) called this process learned helplessness. There are parallels between depression and helplessness such as passivity, loss of energy and interest, decrease in motivation, decreased ability to concentrate. In both depression and helplessness, the person has a belief in an external locus of control and sees obstacles to meeting goals as complete failure. In both, there is failure to see that certain responses may bring the

desired outcome. Therefore, there is a lack of aggression and assertiveness in attempting to meet one's needs. While depression is usually self-limiting, learned helplessness may become irreversible with time (Seligman, 1975). Seligman (1975) theorized that learned helplessness characterizes those depressions in which the individual is slow to initiate action, believes himself to be powerless, sees the future as bleak and hopeless. All of these responses, he considered to be a reaction to having lost control over gratification and the environment. It is not the loss of reinforcers, but the belief in the loss of control over the reinforcers that causes depression. This theory seems applicable to many older people. Feelings of helplessness are commonly reported in literature about the elderly (Busse & Pfeiffer, 1977; Salzman & Shrader, 1978; Solomon, 1981).

Many investigators have suggested that depression in the elderly is endemic. Verwoerd (1981) said it presents as vague, non-specific complaints and needs no precipitating event. Kastenbaum (1969) and Goldfarb (1974) suggested that depression in older persons is likely to manifest as somatic complaints which are often left untreated or passed off as "old age." Elkowitz and Virginia (1980) proposed that depression in the elderly manifests as preoccupation with bodily functions that are associated with somatic complaints. They suggested that somatic complaints in fact be used as a measure of depressive illness for this cohort.

In our society, industry and independence are valued. Even with bereavement, we tolerate the sadness of grief for only a short time. The sick role, therefore, is a societally sanctioned reprieve

from social responsibilities. Rather than the withdrawal that accompanies depression, somatization allows the person to remain involved with people. In fact, it may be prophylactic in that it keeps the person from more incapacitating mental illness (Butler & Lewis, 1977). At the same time the use of somatic complaints serve as a means of self-punishment and atonement for hostile feelings such as occur in an ambivalent marriage, much as guilt and remorse do in depression (Busse & Pfeiffer, 1977). Goldstein (1979) also suggested that it is an attempt of the patient to combat feelings of helplessness.

The most frequent psychological defense used by elderly persons for coping with their losses and troubles is denial (Busse & Pfeiffer, 1977; Butler & Lewis, 1977; Goldfarb, 1974). Denial, coupled with the fact that physical illness is more acceptable and even expected for older persons, may account for the somatization of depression in this cohort.

The overlap between physical and emotional illness makes accurate assessment and prevalence of depression in the elderly difficult. In the review of relevant literature, studies focus on the prevalence ratio of both the physical and psychiatric aspects of depression in community elderly will be discussed.

Elkowitz and Virginia (1980) used two approaches in examining the physical and psychiatric affects of widowhood in a small sample ( $N = 18$ ) of community widowed, ages 69 to 74. They explored at differences in types of complaints as a function of depression; secondly, they examined the differences between men and women in terms of these complaints. There was a positive but not significant correlation

between patterns of complaints and levels of depression. There was a positive correlation between mild depression and psychological complaints, but with more severe depression, there was a negative correlation between the emotional state and expression of psychological complaints. Widows visited their physicians more often and scored higher on the Zung Self-Rating Depression Scale. No conclusions could be drawn concerning the relationship between depression and widowhood because all persons in the study had been widowed at least four years. Although they were all being treated for mental illness, there was no information about how the mental illness might have related to their widowed state, nor when it began.

Busse, Dovenmuhle, and Brown (1960) conducted several studies on mental health in the elderly. Busse has proposed that hypochondriasis and depression are the two most frequent psychopathologies in the elderly. In an effort to learn more about defense mechanisms in the elderly, he selected 222 reasonably well-adjusted community volunteers. According to their symptomatology, they were divided into five groups. Thirty-three were clarified as hypochondriacal, 89 as normal, and 56 as psychoneurotic. In the latter group, there was more evidence of depression and hypochondriasis. The hypochondriacal groups did not feel neglected or persecuted as did the hospitalized control group subjects. The depressed had more psychopathology but not more physical disability than normal; rather, they did not display excessive physical symptoms. No mention was made of the kinds of symptomatology the depressed persons showed. However, the depressed subjects expressed more feelings of helplessness and

discouragement.

In an earlier study, Busse, Barnes, Silverman, Sky, and Thalyer (1954) investigated factors that influenced the process of aging, using retirement as a major variable. The sample ( $N = 180$ ) was composed of three community groups and one hospitalized group of elderly. The mean age of the groups ranged from 70.9 to 76.6 years. Although 25% of the community subjects were widowed, the relationship between depression and widowhood was not explored. Depression was related to loss of self-esteem and feelings of inferiority. Guilt was not reported as a factor in the etiology of depression. When these subjects found new achievements that reduced inferiority feelings, self-esteem increased and depression decreased.

One investigation which contradicts the hypothesis of a strong somatic relationship between depression and the elderly was done by Steuer, Bank, Olsen, and Jarvik (1980). Using Blumenthal's somatic subscale (SS) of Zung's Self-Rating Depression Scale (SDS), they proposed that there would be no relationship between physical health and depression. Blumenthal's subscale uses only two of the eight somatic items in the SDS: (1) My heart beats faster than usual, and (2) I get tired for no reason. The subjects ( $N = 70$ ) were depressed community patients who had participated in research of the efficacy of antidepressant medication. Seventy-five percent were over 60 and, for the most part, were married and well-educated. The investigators believed that healthy older people would respond to the Zung scale like a healthy group of younger persons, which they did. They also did not think that the physician ratings of depression would correlate

positively to the total SDS score but would for the SS (subscale). Both of those hypotheses were supported. There was also significant association reported between the SS and depression, especially for fatigue. They concluded that the regular Zung scale might give a biased and, in fact, false positive for depression because of all the somatic items. They also concluded that somatic symptoms contributed less to depression than lack of hope, decreased activity, feelings of uselessness, and difficulty with decision making. The data still do not begin to answer the questions about somatization and depression in the elderly. More investigation of the biological changes in the elderly that produce alterations in physical function, which are normal changes and not psychic pathology, is needed. The investigators suggested that additional factor analytic work on the SS with larger samples be done. This would better assess some possible response bias that was observed due to the positioning of positively and negatively worded items.

In a large project to evaluate prevalence of depression in all age groups, Schwab, Holzer, and Warheit (1973) interviewed 1,645 randomly selected subjects, of whom 311 were over age 60. A number of questions, included in the interviews, were those commonly found in depression scales and had five dimensions: (1) an affective disturbance with symptoms related to lowered mood; (2) physical distress and somatic symptoms; (3) altered states of psychobiological function; (4) a negative self-evaluation including self-esteem, guilt, remorse, suicidal ideation; and (5) an existential dimension with outlook for the future. The older subjects reported more symptoms pertaining to



psychobiological disturbances and more feelings of personal despair, such as powerlessness, feeling hopeless and helpless, feeling alone, and a gloomy outlook for the future. In this study, there was more depression among the older subjects when controlled for age and socioeconomic status. Sixty and nine-tenths percent of all the subjects were married but the percent of married compared to widowed in the older age group was not known.

Abrahams and Patterson (1978-1979) in a small sized ( $N = 445$ ) study of a blue-collar neighborhood found that depression was the most frequently self-reported psychological problems. There was less chronic illness but more limitations due to the chronic illness than that reported by a national health survey. Among those who reported chronic illness, there was more depression and hypochondriasis reported by those who felt overwhelmed with their limitations than by those who positively adapted to those limits. Those with a previous history of mental illness showed three times more psychopathology. It was interesting that there was little use of any mental health service. In fact, 46% of those with psychopathology did not know about available services. The depressed group did not visit the physician more frequently than those without mental illness. The lower socioeconomic group and those with less education were more affected by chronic illness and also reported more somatic symptomatology and more depression than those in the higher SES group. No mention was made of marital status as it related to depression.

In a prevalence study of depression, Blazer and Williams (1980) established the presence of dysphoria and symptoms of major

depressive disorder among community elderly over 65 years of age ( $N = 997$ ). Fifteen percent showed substantial depressive symptomatology. Seven percent of the depressed group had medically related depressive symptoms associated with physical health impairment. Only 37 (3.7%) of the depressed met the criteria for major depressive disorder as stated in the DSM-III, while 4.5% (45) were simply reported as being dysphoric. Dysphoria is a loss of interest in almost all activities and is characterized by sadness, depression, the blues, hopelessness, low down in the dumps, and worry (Blazer & Williams, 1980). Comparing the depressed with a nondepressed control group ( $N = 950$ ) there were few significant differences between the groups according to demographic variables. However, these particular demographic factors became more significant when the depressed group was subdivided and the variables were controlled. Overall, the greatest depression was in widowed white females. The trend for those with health-related depression to be widowed, was secondary to their greater tendency to be over 75. Those with depression had decreased activities of daily living, more social deficits, and were in the lower SES groups. The depressed, excluding those with secondary depression, used more pain medication and more tranquilizers than the nondepressed. There was a low report of previous history of depression and only 1% used mental health services. It was suggested that depression in the elderly may be less cyclic than in other age groups and thus more chronic. Blazer and Williams further proposed that what is termed "depression" in the elderly, might really represent decreased life satisfaction and periodic episodes of saddened mood as a result of the physical, economic, and social difficulties

which they encounter.

Hare and Shaw (1965) surveyed 2,000 persons in a London suburb. Interviewers judged physical as opposed to psychiatric symptoms using two measures, one subjective and one objective. By both measures, those above 55 years showed fewer psychiatric abnormalities, although the age differential was sharper for the objective tool. Symptoms of depression were rated twice as high by lay interviewers than by those with professional psychiatric backgrounds. However, depression was more prevalent among those over 65 years (11%) as compared to those in younger age groups. The validity of this study is questionable because of the training and skill level of interviewing the lay assistants.

Lastly, Gaitz and Scott (1972) conducted a household study of 1,441 Houston residents. They stratified the sample by age, sex, ethnic group, and occupational level. The older group had, in addition to increased psychiatric problems, more problems with sleep, memory, anorexia, and palpitations. This cohort also showed themselves more self-satisfied and satisfied with the world than the youngest cohort (20-39).

#### Summary

These researchers generally reported a high correlation between depression and increased somatic complaints among the elderly. In prevalence studies, there was greater depression in those over 65, but it was unclear to what degree psychopathology could be considered to be present. In the research that was not focused specifically on persons over age 65, the elderly were underrepresented in the

population ratio of the entire sample. Previous histories of mental illness were often missing in these prevalence studies. Perhaps the biggest problem in all the research has been the lack of cohesiveness in defining what actually constitutes depression. What was deemed pathology by one author might not have been considered that in another. Instrumentation was used which had not been altered for appropriate age-related changes. Therefore, it is difficult to draw overall conclusions where researchers reported that there is a correlation between old age, depression, and increased health symptoms. Low self-esteem did appear to be a factor which is more prevalent among depressed elderly, while the occurrence of guilt was not a significant finding. In most investigations there was a greater degree of depression reported in the elderly than had been anticipated. However, for the most part, little was done to try to account for factors which might contribute to the increase in depression in those older people.

In summary, the following conclusions can be drawn:

1. While depression appears to be more prevalent in the elderly, probably due to multiple losses, its actual incidence is unknown.
2. The losses may result in sufficient stress which, in turn, may result in emotional and physical illness.
3. The loss of a spouse is a most serious stressor and probably more serious among the elderly.
4. Little is known about bereavement, the grieving process and adaptation to bereavement in the elderly as compared with the same process in younger persons.

5. Depression is a normal part of grief.
6. The elderly may manifest their grief and depressions more in physical illness.

#### Rationale and Significance of the Study

Little is known about the grieving process in elderly persons which might differ from the response that occurs in younger populations. In addition, there is ambiguity and confusion as to what exactly constitutes depression in older persons. This investigation was based on the need to clarify this ambiguity regarding depression by accurately assessing the variable of depression in a bereaved population. A non-bereaved control group was used in an attempt to compare what might be considered usual levels of depression for the elderly as opposed to those levels found as a result of conjugal loss. Describing and comparing the levels of depression between recently bereaved and still-married elderly was the objective of this work.

It was anticipated that the results would contribute to the knowledge base which is needed for understanding the bereavement process and the extent of depression among elder persons. Determination of a significant relationship between depression levels and conjugal bereavement adds to our understanding of the extent to which depression is a component of the bereavement process in the elderly, by comparing the depression levels for those who are bereaved with a matched control group, who are not, some estimate can be made regarding differences in levels of depression which exist between the two groups.

Nurses, as well as other health care providers, need to be

aware of the potential impact that loss can have among the elderly. Recognition of the health correlates of depression should alert nurses to developing plans for intervention.

This project was part of a prospective study of bereavement and adaptation among the elderly. It was a preliminary investigation in which depression as a factor in conjugal loss in the elderly, exclusively, was examined. It is the first study to compare the extent of depression between married and conjugally bereaved elderly in an attempt to determine how much depression is usual for older persons and to what extent depression at three weeks postbereavement will be an outcome of grief due to loss of a spouse. Some baselines for both groups are suggested.

#### Research Questions

As a result of the identified purpose of this work, as well as the problem to be investigated, that of examining the occurrence and levels of depression between bereaved and nonbereaved elderly persons, the following research questions were posed:

1. Are there differences in levels of depression between elderly persons who have recently lost spouses and a group who are still married?
2. Are there differences in levels of depression on the Zung depression subscales between the bereaved and nonbereaved groups? (The subscales include pervasive affect, physiological, and psychological.)
3. Is there a difference in the subjective health

rating scores between the bereaved and nonbereaved group?

4. What demographic variables distinguish levels of depression between and among the bereaved and nonbereaved groups?

#### Assumptions

While there has been considerable interest in the grief process and the prevalence of depression in the population in general, few studies have specifically focused attention on depression and bereavement in older subjects, exclusively. It was the intention of this investigator to begin to fill the knowledge gap which exists. It was assumed that:

1. The participants answered honestly and to the best of their ability.
2. The nonbereaved subjects answered the questionnaire without consulting with their spouses.

## CHAPTER II

### DESIGN

The present research is part of a larger, ongoing perspective project, "Bereavement in the Elderly: Factors in Adaptation," ROI AG 02 193-02, being conducted at the College of Nursing. The project was funded by the National Institute on Aging. This investigation was a descriptive survey that examined the degree of depression of recently bereaved and nonbereaved elderly living in the community. Selected demographic variables were examined for their possible influence on depression, and the relationship of these variables to depression was compared between the two groups. This investigator was a research assistant on the bereavement project, and was working on the project at the time this study was done.

#### Setting

The setting for data collection was Salt Lake County which has a population of 500,000. The racial structure is predominantly Caucasian (97.4%), with small percentages of Blacks, Chicanos, and Native Americans (1970 Census). Approximately 62% of the county residents are members of the Church of Jesus Christ of Latter-day Saints (1980 U.S. Census Bureau Statistics). The elderly are scattered throughout the county, although there are concentrations in the several high-rise, low-cost senior housing facilities in Salt Lake City.



### The Sample

The random sample of bereaved ( $N = 62$ ) and the matched non-bereaved ( $N = 59$ ) subjects were aged 60 or older and selected from the larger project sample which consisted of three groups--bereaved interviews (Group I,  $N = 104$ ); bereaved controls (Group II,  $N = 88$ ); nonbereaved controls (Group III,  $N = 104$ ). The present sample was selected from Groups I and III based on age--60 years old or greater and completion of every item on the Zung Self-Rating Depression Scale (SDS). These subjects lived in Salt Lake County and were not institutionalized.

### Sampling Procedure--Bereaved Subjects

The sampling frame was determined from the obituary columns of the two major Salt Lake City newspapers. One listing was made up of surviving male spouses 55 years or older, and another listing was compiled of female surviving spouses 55 years or older. All survivors had to be able to communicate in English, were capable of understanding informed consent and able to respond to interview questions. They had to sign a consent form agreeing to be in the sample prior to the start of data collection.

Using a random start, the subjects in the large project were alternately assigned to the interview group (Group I) or control group (Group II). Approximately three weeks after the death of their spouse, the bereaved persons were sent an introductory letter (Appendix A) explaining the purpose and procedures of the study, and telling him/her that a research assistant would be calling them in a few days. Three

days following mailing of the letter, a trained research assistant phoned the survivor to invite him/her to join the sample and to arrange a time for an interview. No pressure tactics were used, so as not to add to the stress already incurred by bereavement.

#### Sample Procedure--Nonbereaved Subjects

The sample referred to as Group III was obtained by using the Voter Register (public information) and was composed of married, non-bereaved persons who were matched to Group I subjects for age, sex, and place of residence. Voting district and census tract constituted an approximation of socioeconomic status. This comparison sample was considered essential in order to distinguish between depression levels associated with bereavement from depression levels more likely to be associated with the aging process.

At least four prospective matched subjects were chosen from Voter Register information. To assure place of residence, the names and addresses were checked in the 1980-1981 Salt Lake Telephone Directory. A letter (Appendix A) was sent to two of the four prospective subjects, and this was followed by a phone call within three days by a trained research assistant who invited him/her to join the group. If an affirmative answer was not obtained from one of the first two selected persons, the letters were sent to the other two prospective subjects, and the above procedure was repeated. Rate of refusal for the bereaved (Group I) was 61.8% versus a 51.7% rate of refusal for the nonbereaved controls (Group III).

### Method of Data Collection

In the larger project, there are six (6) planned data collection periods over a two-year period: 3 weeks, 2 months, 6 months, 12 months, 18 months, and 2 years after the spouse's death. This timing is planned to coincide with the previously established stages of grief (Glick et al., 1974) as well as to be frequent enough to capture delayed or prolonged grief which might be characteristic of grief responses for the elderly (Gerber et al., 1975). For the purpose of the present study, the data used for Group I were obtained at three to four weeks postbereavement.

For Group I, the data were obtained in a personal interview conducted in the subject's home. The data were taken from the structured portion of the interview which were obtained after the unstructured part. The unstructured interview consisted of open-ended questions which allowed the subject the opportunity to express his/her feelings about the spouse's death. The specific data used for this study included demographic data, i.e., sex, age, educational level, employment status, religion, number of years married, a subjective rating of health status, and the Zung Self-Rating Depression Scale (SDS). The research assistant filled in all the answers to these questions which were given by the subject.

The Group III subjects will receive six questionnaires over a two-year period, corresponding in time to the interview schedule of the bereaved subjects with whom they are matched. Data from time one collection were used for this group which included the aforementioned specific items. The questionnaire was hand-delivered and

the subject was given a preaddressed stamped envelope in which to return it. Difficult parts of the questionnaire were clarified by the research assistant at the time it was delivered.

In order to maintain anonymity, each subject was assigned an identification number. The confidentiality of participants in the study was strenuously maintained. All data were coded, and subjects were referred to only by their identification number.

Because of the highly sensitive nature of the interview content, nine research assistants were carefully selected. Preference was given to graduate students and/or college graduates who had experience dealing with elderly persons.

A training session which focused on communication skills and interviewing techniques was provided. Throughout the course of the project, ongoing research assistant meetings offered the opportunity to critique tapes, debrief, and share concerns. In addition, a pilot interview was done with an elderly widowed person prior to the start of data collection.

### Operational Definitions

The three variables in the problem statement were: depression, bereaved, and nonbereaved. The operational definition of each is as follows:

Depression was defined by the raw score received on the 20-item Zung SDS.

Based on the frequency distributions of scores for the entire sample, three levels of depression were categorized (high, moderate,

and low). This resulted in three nearly equal groups. The teams, "high," "moderate," and "low" are, therefore, relative to this study. High depression was 40+; moderate was 32 to 40; low was 20 to 31. These categories are much lower than the raw depression scores determined by Zung in SDS studies (Zung, 1965, 1967, p. 2). Zung's raw score levels were: (1) normal to low depression < 50; (2) mild to moderate 50 to 59; (3) moderate to severe 60 to 69; (4) severe > 70. Further discussion of Zung's scores and findings will appear in the section on instrumentation.

The Zung SDS is divided into three subscales which Zung defined as diagnostic criteria for depression (Zung, 1965). The subscales include: (1) pervasive affect, described as mood; (2) physiological equivalents having to do with somatic complaints; and (3) psychological equivalents which refer to psychomotor activity and ideational equivalents. The frequency distribution on all 20 items for the two study samples appear in the Appendices.

Bereaved refers to those persons 60 years of age or older (range 60 to 93) whose spouse died three to four weeks prior to time of data collection.

Nonbereaved was defined as the comparison group subjects who were married, aged 60 or more (range 60 to 85), and who were matched to the bereaved sample for age, sex, and place of residence.

### Instrument

The Zung Self-Rating Depression Scale (SDS) is a quantitative 20-item scale. It was the selected instrument for measuring depression in the larger bereavement project. Ten of the items are worded so that positive responses show the presence of symptomatology. Symptom negative items are scored inversely, and all items are summed to form a total raw score ranging from 20 to 80 points. (See Appendix C for the point scoring procedure.) The reverse scoring procedure was designed to reduce response set. The response category of "never" was added for purposes of this study, but was not used by Zung. Zung (1965) designed an SDS conversion table which converted raw scores to standard scores, but reliability for this measure is not reported.

Originally, the instrument was developed as a screening measure for persons with a primary diagnosis of a depressive disorder. The scale has been administered to persons of all ages and in a variety of situations, and has been shown to discriminate depression from anxiety reactions, from personality disorders, from transient situational adjustment reactions, and from normal controls (Zung, Richards & Short, 1965).

The Zung SDS has shown validity in a variety of studies. In Zung's original testing (1965) on 56 psychiatric patients, the patients with depressive disorders scored higher (mean SDS indices = .73, raw score = 58) than either patients with other psychiatric disorders (mean SDS index = .53, raw score = 42), or normal control subjects (mean SDS index = .33, raw score = 26).

Crosby (1969) reported that 80% of the spinal cord-injured patients whom he tested scored above 43 (the top of the normal range in Zung's original study). The results were considered valid because depression is common among persons with spinal cord injuries. Jacobs, Fogelson, and Charles (1968) found higher SDS scores in 50 patients labeled "crocks" than in a corresponding group of patients without that label. This is significant because depression may manifest itself in somatic complaints without prominent evidence of depressed affect.

Evidence about construct validity of the scale is available. Zung (1967, p. 1) found the SDS to correlate with the Minnesota Multiphasic Personality Inventory Depression Scale ( $r = .59$ ); with the Hamilton Depression Scale ( $r = .56$ ) and with the Beck Scale ( $r = .76$ ). Additionally, there is a high correlation rating ( $r = .81$ ) with observer ratings on the same instruments.

Zung (1967, p. 2) tested his instrument with two groups of community elderly over age 65. The first group ( $N = 100$ ) were residents of a retirement home and independent in activities of daily living. The second group ( $N = 69$ ) were members of a community club for senior citizens. The combined mean SDS index was 48.3 (raw score = 28) as compared to previously tested normal subjects under age 65 (SDS index .33, raw score 26). The elderly showed factor saturations on items that dealt with personal devaluation, emptiness, indecisiveness, dissatisfaction, hopelessness, and psychomotor retardation. These results corroborated other clinical observations that major causes of depression in the elderly are related to feelings

of inferiority, apathy, disinterest, and low self-esteem.

Finally, Morris et al. (1975) assessed the themes of depression and morale using the Zung SDS, the Philadelphia Geriatric Center Morale Scale (PCG), and the Gardner-Hetznecher Sign and Symptom Checklist (G-H). Using canonical correlation procedures and factor analysis methods, high correlations were found in construct validity for these items which showed clinical depression (G-H and PCG  $r = .72$ ; G-H and Zung  $r = .75$ ; Zung and PCG  $r = .80$ ) of the seven sets of items produced from the three scales, five focused on aspects of depression and morale associated with psychic distress. These were determined to be similar, mathematically, and the entire construct was labeled clinical depression.

In the literature there is evidence of some problems with the Zung. Validity of Zung's findings with the elderly have been questioned because none of the participants were screened for psychiatric problems (Blumenthal, 1975; Steuer et al., 1980).

Blazer (1980) and Blumenthal (1975) addressed the issue regarding the high number of physiological items in the scale ( $N = 8$ ) which might make the elderly person appear more depressed when in fact, (s)he has physical illness that does not relate to his/her emotional state.

The same might be said of Item No. 12, "I find it easy to do the things I used to do." The fact that an elderly person gives a response which yields a positive score may have nothing to do with an emotional state, but rather, reflect the slowing down process that comes with age.



Blumenthal (1975) questioned how older people interpret the meaning of some of the items. The statements might have different meaning for different age groups. For example, "I feel hopeful about the future" may mean one thing to an older person who has come to terms with life and something else to a recent college graduate who has aspirations for the future. There is no evidence in the literature that item interpretation was sorted out by age groups when Zung norms were established.

This investigator saw a limitation in the item, "I still enjoy sex." For most bereaved people, especially elderly, there is no available sexual partner following the death of a spouse, not even after the passage of time. The item might better read, "I still desire sex," in order to avoid possible false positive bias.

### Limitations

Possible limitations of the study include the following threats to internal and external validity:

1. The pool of prospective participants was limited because the obituary was a paid announcement. Therefore, the involuntary exclusion of some lower SES survivors may produce an unknown bias.
2. The results need to be interpreted cautiously because of the unique characteristics of the urban sample utilized of which a large percentage of the population are of the Mormon religion.
3. The lack of inclusion of mental health history

might lead to an inaccurate assessment of depression. Without this information there is uncertainty as to whether or not the results are due to bereavement, age changes, or a chronic depressive disorder.

## CHAPTER III

### DATA ANALYSIS AND DISCUSSION OF FINDINGS

The data analyses involved a description of depression between and among the two samples. The primary data analysis consisted of joint frequency distributions and measurement of association using a Tau C statistic. All significance was shown at  $< .01$  level.

Tau C is a nonparametric measure of association that measures the strength and direction of two ordinal level variables. It is used to describe the degree to which the values of one variable predict or vary with those of another. It is an appropriate statistic to use when data are presented in rectangular tables (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975).

The data analysis was divided into three sections to correspond to the research questions. In section one the severity of depression between the two groups was examined. In the second section, the subscales of the Zung SDS were analyzed. A discussion about the scores on the subjective health rating scale occurs in the third section. The fourth section deals with selected demographic variables and their relationship to depression between and among the two populations.

The characteristics of both groups were discussed (Table 1) in order to determine any systematic differences which may influence

Table 1  
 Summary of Descriptive Characteristics of the Two  
 Study Samples (N = 121)

Characteristic	Study Group							
	Bereaved ( <u>N</u> = 62)				Nonbereaved ( <u>N</u> = 59)			
	%	<u>N</u>	Range	Mean	%	<u>N</u>	Range	Mean
Sex: Female	76.0	47	.	.	69.0	41	.	.
Male	24.0	15	.	.	31.0	18	.	.
Race: Caucasian	95.0	58	.	.	98.0	58	.	.
Other	5.0	4	.	.	2.0	1	.	.
Age:	.	.	60-93	69.7	.	.	60-85	69.1
60-69	58.0	11	.	.	59.0	34	.	.
70-79	33.0	21	.	.	33.0	20	.	.
80+	9.0	5	.	.	8.0	5	.	.
Year Married	.	.	6-62	41.4	.	.	6-64	39.5
Employment:								
Employed	81.0	50	.	.	79.0	46	.	.
Part time	16.0	10	.	.	9.0	5	.	.
Full time	3.0	2	.	.	12.0	7	.	.
Religion: Mormon	74.0	42	.	.	75.0	43	.	.
Non-Mormon	26.0	20	.	.	25.0	16	.	.
Education:								
High school or less	58.0	36	.	.	54.0	31	.	.
Above high school	42.0	26	.	.	46.0	26	.	.

interpretation of the results. The total sample was comprised of 121 persons with 62 bereaved and 59 nonbereaved. Seventy-six percent of the bereaved sample were females and 69% were females in the nonbereaved sample. The samples show little differences in racial and religious characteristics. The mean age for each group was slightly above 69 years of age.

#### Research Question One

Research question one asks, "Are there differences in levels of depression between elderly persons who have recently lost spouses and a group who are still married? Table 2 shows the severity of level of depression between the two groups. The score levels on depression were based on the frequency distribution for the entire bereavement project sample ( $N = 296$ ) and then divided into nearly even thirds. As a result, the levels were divided: (1) Low, 20 to 31; (2) moderate, 32 to 40; (3) high, 40+. More than half of the bereaved subjects (52%) showed high levels of depression with more than 51% of that sample falling in the upper categories of depression. However, only 20% of the nonbereaved ranked in the highest level. Surprisingly, there was a greater number of nonbereaved than bereaved who ranked in the moderate level of depression. Considering only the high level of depression, the bereaved ranked more than two and one-half times greater in depression. The Tau C of .37 ( $p = .001$ ) indicated that depression was greater among the bereaved participants.

If mean raw scores are considered, the bereaved group had a mean score of 40.6 compared with 33.8 for the nonbereaved; also,

Table 2  
 Comparison of the Degree of Depression Between  
 the Bereaved and Nonbereaved Groups

Degree of Depression		Study Group	
		Bereaved	Nonbereaved
Low	$\frac{N}{\%}$	10 16.1	23 39.0
Moderate	$\frac{N}{\%}$	20 32.3	24 40.7
High	$\frac{N}{\%}$	32 51.6	12 20.3
Total	$\frac{N}{\%}$	62 100.0	59 100.0

Tau C = .37;  $df = 2$ ;  $p < .001$

Low Dep = 20-31, Med Dep = 32-40, High Dep = 40+

these scores are much lower than the mean raw score that Zung obtained when he tested the SDS on older people ( $\bar{X} = 38$ ).

Some conjectures might be drawn from these results. The bereaved group showed significantly more depression than the nonbereaved, although both groups were low when compared with Zung's standards, the results were significant in the expected direction. Perhaps the bereaved, who for the most part, had been involved with caretaking of the dead spouse and later with the details of funeral, finances, and insurances, were not in tune with nor aware of their own feeling state. At only three weeks postbereavement, they might have still been in the shock/disbelief stage of bereavement. It is also possible that the bereaved persons who agreed to be in the study were managing their loss better than those persons who refused, and were also less depressed.

While the nonbereaved showed primarily low to moderate depression, there was a trend toward the moderate level of depression. Overall, it appears that the presence of a spouse might offset severity of depression in an older population.

#### Research Question Two

This question asks, "Are there differences in levels of depression on the Zung depression subscale between the bereaved and nonbereaved groups? The Zung subscales (pervasive affect, physiological, and psychological) and the corresponding levels of depression found in each were analyzed (Tables 3 to 5). A Tau C statistic was used to measure the relationship between bereavement and each of the three depression subscales. The same scoring procedure (percentile

Table 3  
 Comparison of the Pervasive Affect Subscale  
 Between the Bereaved and  
 Nonbereaved Groups

Pervasive Affect		Study Group	
		Bereaved	Nonbereaved
Low	$\frac{N}{\%}$	20 32.3	39 66.1
Moderate	$\frac{N}{\%}$	13 21.0	14 23.7
High	$\frac{N}{\%}$	29 46.7	6 10.2
Total	$\frac{N}{\%}$	62 100.0	59 100.0

Tau C = .43;  $df = 2$ ;  $p < .0001$



Table 4  
 Comparison of the Physiologic Subscale Between  
 the Bereaved and Nonbereaved Groups

Physiological Equivalent		Study Group	
		Bereaved	Nonbereaved
Low	$\frac{N}{\%}$	12 19.4	29 49.2
Moderate	$\frac{N}{\%}$	24 38.7	12 20.3
High	$\frac{N}{\%}$	26 41.9	18 30.5
Total	$\frac{N}{\%}$	62 100.0	59 100.0

Tau C = .27;  $df = 2$ ;  $p < .01$

Table 5  
 Comparison of the Psychological Subscale Between  
 the Bereaved and Nonbereaved Group

Psychological Equivalent		Study Group	
		Bereaved	Nonbereaved
Low	$\frac{N}{\%}$	11 17.7	22 37.3
Moderate	$\frac{N}{\%}$	24 38.7	26 44.1
High	$\frac{N}{\%}$	27 43.6	11 18.6
Total	$\frac{N}{\%}$	62 100.0	59 100.0

Tau C = .32; df = 2; P < .001

splits) were used again to distinguish between the levels of depression for each subscale.

In Table 3, the pervasive affective subscale, the bereaved subjects were found to have a higher level of pervasive affect with a Tau C value of .43. Forty-seven percent of the bereaved versus only 10.2% of the nonbereaved were in the highest category of depression. In other words, four and one-half times as many bereaved persons showed high levels of pervasive affective as nonbereaved, indicating that even as early as three weeks postbereavement the effects of conjugal loss are manifesting themselves among the elderly.

The results concerning the second Zung subscale that dealt with the physiological equivalents of depression are seen in Table 4. Examination of moderate and high levels of depression on this subscale showed that nearly 81% of the bereaved who were depressed had moderate to high levels in physical health effects, with 42% of that figure in the highest group. In contrast, only 30% of the nonbereaved were in the highest category on this subscale. The relationship between bereavement and the physiological effects was found to be low as indicated by the Tau C of .27 ( $p < .01$ ). There was a substantial increase in the physiological equivalents of depression vs. pervasive effects in both samples if moderate and high levels are considered together. However, among the nonbereaved sample, while only 10% of the sample ranked in the high level of depression in pervasive effects, 30% or a threefold increase was seen in the high level on physiological effects. These two findings seem to support previous research which suggests that there is a relationship between depression

and physical symptoms.

In examining Table 5, the psychological subscale, 43.6% of the bereaved were in the high range compared to 18.6% for the non-bereaved. Overall, the relationship between bereavement and nonbereavement was significant with a Tau C = .32 ( $p < .001$ ). While the high level percentage score on this subscale is less than on the previous scale for the nonbereaved (18.6% versus 30.5%), there is a greater increase in the moderate level of depression (44.1% vs. 20.3%) making the moderate-high score range on the psychological subscale for the nonbereaved 63%. This is a definite increase percentage-wise, compared to the numbers of nonbereaved subjects found in these categories in the other subscales.

In summary, there was a significant relationship between bereavement and each of the three Zung subscales of depression. Across the board, the number of bereaved persons in the highest categories were approximately the same, but the highest Tau C value was on the pervasive affect scale, while the lowest was on the physiological subscale.

It appears that initially, the elderly bereaved show some change in mood, but that conjugal loss has less effect on this group in the areas of physiological and psychological effects. This suggests that it may take longer to manifest changes in the latter two areas following a conjugal loss.

Although overall depression was at lower levels for the non-bereaved as well as on the subscales, the higher frequency of scores in the high to moderate range in the physiological area might

indicate a more chronic depression that was mostly denied affectively but manifest physically and to some extent psychologically.

### Research Question Three

This question posits, "Is there a difference in the subjective health rating scores between the bereaved and nonbereaved groups?" This question was posed because the literature has suggested that there is a positive relationship between physical health and depression among the elderly and that women have more depression. The literature further suggests that elderly bereaved persons seem to manifest the emotional aspects of grief in somatic complaints. The self-health ratings of the two groups dichotomized by gender is seen in Table 6.

In both groups the majority of subjects rated themselves 5 or greater on the 7-point scale (with 1 being poor and 7 being excellent). In the bereaved group, 60% of the men and 67% of the women scored themselves above average while in the nonbereaved group, 83% of the men and 73% of the women ranked themselves between 5 and 7. This may somewhat explain the fact that 49% of the nonbereaved ranked low on the physiological subscale. However, 30% of the nonbereaved ranked in the high level of depression on the physiological subscale. This was a much higher percentage for high depression than the nonbereaved on the other two subscales. This result raises two questions. Does a better perception of one's physical health contribute to a better sense of well-being that in turn accounts for lower levels of depression? Or, does the converse occur, wherein those who are

Table 6  
 Comparison of the Subjective Rating of Health Between  
 the Bereaved and Nonbereaved by Sex

Score Number on Health Scale	Study Group							
	Bereaved				Nonbereaved			
	Males		Females		Males		Females	
	<u>N</u>	%	<u>N</u>	%	<u>N</u>	%	<u>N</u>	%
1. (Poor)	0	0.0	2	4.3	1	5.6	0	0.0
2.	0	0.0	0	0.0	0	0.0	0	0.0
3.	3	20.0	2	4.3	1	5.6	5	12.2
4.	3	20.0	12	25.5	1	5.6	6	14.6
5.	4	26.7	10	21.3	8	44.4	13	31.7
6.	4	26.7	13	27.6	4	22.2	13	31.7
7. (Excellent)	1	6.6	8	17.0	3	16.6	4	9.8
Total	15	100.0	47	100.0	18	100.0	41	100.0

more depressed also rate themselves as being less healthy. The overall higher ratings by both groups may account for the fact that even those who rated higher in depression were not clinically depressed.

#### Research Question Four

The fourth research question asked about the demographic variables which distinguished levels of depression in the bereaved and nonbereaved groups. A Tau C nonparametric statistic was used to show the direction and strength of the relationship between variables, rather than draw firm conclusions.

Table 7 illustrates the relationship between bereavement and depression while controlling for age. Age was dichotomized into two groups, young old (60-69) and old old (70-93). The Zung scores were split at the mean to form the two groups. While there was significant relationship between bereavement and depression by age, the Tau C value was greater among the young old than the old old (.43 versus .33). It might be expected that the bereaved old old who had presumably incurred more losses due to the aging process would show a higher level of depression, but this was not so. When the table is further examined, the lowest level of depression is among the young old, nonbereaved. However, there was a higher percentage of high depression in that age group once bereavement was introduced. One might conjecture that the old old learned to cope better, over time, with the many losses that occurred, or perhaps they use denial more successfully.

Table 7  
 Comparison of the Degree of Depression Between  
 the Bereaved and Nonbereaved Groups  
 Controlling for Age

Degree of Depression		Age			
		*Young Old (60-69)		**Old Old (70-93)	
		Bereaved	Nonbereaved	Bereaved	Nonbereaved
Low	$\frac{N}{\%}$	6 16.7	16 47.1	4 15.4	7 28.0
Moderate	$\frac{N}{\%}$	14 38.9	13 38.2	6 23.1	11 44.0
High	$\frac{N}{\%}$	16 44.4	5 14.7	16 61.5	7 28.0
Total	$\frac{N}{\%}$	36 100.0	34 100.0	26 100.0	25 100.0

\*Tau C = .42;  $df = 2$ ;  $p < .001$

\*\*Tau C = .33;  $df = 2$ ;  $p < .01$



In comparing gender and bereavement (Table 8), both bereaved males and females showed significantly high percentages for depression than nonbereaved, but males scored far more depression than females. Tau C = .58 versus Tau C = .30. What is of particular interest with this variable is the low incidence of depression for nonbereaved males (11%) in comparison to 60% for bereaved males, or a sixfold increase in high level of depression. Among bereaved versus nonbereaved females, there was only a twofold increase in the high level of depression. Fifty percent of the nonbereaved male sample also showed a moderate level of depression.

While the smaller sample size of males is partly responsible for the more significant outcome, it might be suppositioned that women, despite higher initial levels of depression, can better handle the emotional trauma of bereavement, at least in the early stage. They also might be so involved in the tasks that coincide with the death of a spouse that the emotional impact of grief and the ensuing depression could have latent onset. In addition, the woman usually is the caretaker and nurturer in the home in this age group. When the wife dies, the impact on the surviving husband appears to be greater. Depression, as part of grief process for the older male, appears to start sooner than for the older female.

Another variable for which significant results were found was that of education (Table 9). Education was dichotomized into two groups: (1) high school or less, (2) beyond high school. There was a more positive relationship between depression and education among those with less education (Tau C = .41 versus .33). Among the

Table 8  
 Comparison of the Degree of Depression Between  
 the Bereaved and Nonbereaved Groups  
 Controlling for Sex

Degree of Depression		Sex			
		*Male		**Female	
		Bereaved	Nonbereaved	Bereaved	Nonbereaved
Low	$\frac{N}{\%}$	1 6.7	7 38.9	9 19.2	16 39.0
Medium	$\frac{N}{\%}$	5 33.3	9 50.0	15 31.9	15 36.6
High	$\frac{N}{\%}$	9 60.0	2 11.1	23 48.9	10 24.4
Total	$\frac{N}{\%}$	15 100.0	18 100.0	47 100.0	41 100.0

\*Tau C = .58;  $df = 2$ ;  $p < .001$

\*\*Tau C = .30;  $df = 2$ ;  $p < .01$

Table 9  
 Comparison of the Degree of Depression Between  
 the Bereaved and Nonbereaved Groups  
 Controlling for Education

Degree of Depression		Education			
		*High School or Less		**Above High School	
		Bereaved	Nonbereaved	Bereaved	Nonbereaved
Low	$\frac{N}{\%}$	6 16.7	13 41.9	4 15.4	10 38.5
Medium	$\frac{N}{\%}$	12 33.3	13 41.9	8 30.8	9 34.6
High	$\frac{N}{\%}$	18 50.0	5 16.2	14 53.8	7 26.9
Total	$\frac{N}{\%}$	36 100.0	31 100.0	26 100.0	26 100.0

\*Tau C = .41;  $df = 2$ ;  $p < .001$

\*\*Tau C = .33;  $df = 2$ ;  $p < .01$

nonbereaved it is interesting to note that those with less education had less depression. When comparing the bereaved and nonbereaved groups, there was a marked rise in the percentage of those persons in the high depression category for the bereaved with less education (50% versus 16%). This increase in more depression more than tripled among the bereaved with less education but only doubled for those in the higher education group. The difference between the two groups might be due to the tools and philosophies that better educated people have that helps them to cope with crises. While the categorization of sex and age is not shown for the education variable, these might have influenced the outcome of these findings.

Perhaps the most surprising outcome is revealed in Table 10 which illustrates the SES variable. The only nonsignificant Tau C value in the entire study was between bereavement and depression in the lower SES group. Conversely, the highest Tau C (.53) in this study is for the relationship between bereavement and depression in the higher SES group. Because 25% of the low SES nonbereaved expressed high levels of depression compared to 17.1% of the high SES, it would be expected that among the bereaved, lower SES, there would also be higher levels of depression. However, in this sample, 64% of the high SES bereaved had high levels of depression compared to only 35% of the lower SES bereaved.

There is more depression found among lower SES populations and this was the result among this sample of nonbereaved elderly persons. People in the lower SES group usually have more life stresses to deal with than those in higher groups. The lower SES group is

Table 10  
 Comparison of the Degree of Depression Between the  
 Bereaved and Nonbereaved Groups Controlling  
 for Socioeconomic Status

Degree of Depression		SES			
		*Low		**High	
		Bereaved	Nonbereaved	Bereaved	Nonbereaved
Low	$\frac{N}{\%}$	6 23.1	8 33.3	4 11.1	15 42.9
Moderate	$\frac{N}{\%}$	11 42.3	10 41.7	9 25.0	14 40.0
High	$\frac{N}{\%}$	9 34.6	6 25.0	23 63.9	6 17.1
Total	$\frac{N}{\%}$	26 100.0	24 100.0	36 100.0	35 100.0

\*Tau C = .14; df = 2; N.S.

\*\*Tau C = .53; df = 2; p < .0001

already more depressed. It appears that bereavement adds only a slight increase in depression. Loss of a spouse may be perceived as still another hardship with which they have to deal. For those in the higher SES group, loss of a spouse might have meant more disruption in their entire lifestyle which, in turn, contributed to more depression.

Another supposition for this outcome might lie in support systems. Among the higher SES who traditionally have more cohesive support systems, friends and relatives might be helping with necessary postbereavement tasks, thereby allowing the survivor more time to dwell on the conjugal loss, while in the lower SES, the surviving spouse might be attending to the tasks, thereby negating time to think or feel the full impact of that loss.

Lastly, in Table 11, the variable of religion is analyzed. This variable was selected because of the disproportionate number of Mormons in the study. There was a significant difference on this variable ( $p = .001$ ) with bereavement having a greater effect on non-Mormons (Tau C = .44) than on Mormons (Tau C = .36). The lower depression for the Mormons was due in part to the sample size which was three times greater. The Mormon belief in life after death and eternal marriage may have also influenced the outcome. The Mormon church structure also provides a strong support group for many persons of the religious denomination. In both bereaved groups, however, 50% of the sample ranked in the high depression level. It is noted that more nonbereaved Mormons had higher levels of depression (23% versus 14%), but with bereavement, there was nearly a fourfold

Table 11  
 Comparison of the Degree of Depression Between the  
 Bereaved and Nonbereaved Groups  
 Controlling for Religion

Degree of Depression		Religion			
		*Mormon		**Non-Mormon	
		Bereaved	Nonbereaved	Bereaved	Nonbereaved
Low	$\frac{N}{\%}$	7 16.7	19 44.2	1 7.1	4 28.6
Moderate	$\frac{N}{\%}$	14 33.3	14 32.6	6 42.9	8 57.1
High	$\frac{N}{\%}$	21 50.0	10 23.2	7 50.0	2 14.3
Total	$\frac{N}{\%}$	42 100.0	43 100.0	14 100.0	14 100.0

\*Tau C = .36;  $df = 2$ ;  $p < .001$

\*\*Tau C = .44;  $df = 2$ ;  $p < .01$

increase in the high level of depression for the non-Mormons as opposed to only doubling for the Mormon group.

### Summary

There were four research questions posed in this investigation which described and compared depression between and among groups of bereaved and nonbereaved elderly persons over age 60. A Tau C statistic was used for the statistical analysis. All findings, with one exception, that of depression among lower socio-economic bereaved elderly, were found to be significant.

The bereaved group showed higher levels of depression as indicated by scores on the Zung SDS. Using the three Zung subscales, the greatest significant results were on the pervasive affects scale, suggesting mood changes are the first manifestation of depression following conjugal loss. Both groups rated their perceived state of physical health as better than average.

Selected demographic variables were examined to compare their possible effects on bereavement and depression. The most significant finding for high levels of depression was for bereaved persons in the high SES group. Widowed men also had high significant effects, followed by non-Mormons, young old, and those with less education.



## CHAPTER IV

### SUMMARY AND IMPLICATIONS FOR NURSING

A random sample of recently bereaved elderly persons and a matched group of nonbereaved control subjects were selected from a large research project investigating bereavement and adaptation among elderly persons. The data were collected from the bereaved sample three to four weeks following death of the spouse. The purpose of this study was to note levels of depression between the two groups and to examine the severity of depression by comparing the Zung SDS subscale results and outcomes of selected variables.

The results were analyzed as direction and descriptive using a Tau C statistic. Research question one asked if there was a difference in the levels of depression between the bereaved and nonbereaved groups. The results were significant with considerably more of the bereaved group showing higher levels of depression. The levels of depression were determined by overall scores of the entire population of the larger bereavement project which were then divided into thirds. What was important was the fact that the score categories were much lower than those categories determined by Zung for levels of depression. The elderly, who were considered to be depressed, were not as depressed as other people in the general population. In fact, they did not have real psychopathology. An explanation

for this among the bereaved might be attributed to the grief process itself. Perhaps among the elderly it takes longer for the impact of the conjugal loss to come into full awareness. If the first stage of bereavement, that of shock and bewilderment, lasts several weeks, then the resultant grief and all its ramifications would not yet be manifest at three weeks. It might further be conjectured that the bereaved persons who agreed to be part of the research sample were better able to manage their conjugal loss and less depressed than bereaved persons who refused to participate in this investigation. This question might better be answered by comparing future data collections outcomes with the present data.

The lower levels and scores among the nonbereaved might relate to the uncertainty about the prevalence of depression among the elderly. The lack of an adequate nosology leads to unanswered questions about what connotes depression in this age group. It also suggests that the elderly are not as homogeneously depressed as has been proposed. Considering that only 20% of the nonbereaved group had high levels of depression suggests that the presence of a spouse might serve as a stabilizing factor that mediates against depression.

The second research question explored differences between the two groups on the three Zung subscales. The bereaved showed significant differences in higher level scores on all subscales. Across the board, the bereaved showed approximately the same percentages at the high level of depression. The greatest difference between the two groups was on the pervasive affect with the bereaved rating themselves four and one-half times higher. This suggests that at least

initially, a saddened mood may be the first manifestation of grief and depression among newly bereaved elderly persons.

The nonbereaved scored proportionately highest on the physiological subscale, but this subscale resulted in the lowest Tau C correlation for relationship of depression between the two groups. This leaves much unconcluded about depression and physiological effects in the newly bereaved elderly.

The overall mean score on the Zung SDS was much lower for both groups (bereaved  $\bar{X} = 40.6$ ; nonbereaved  $\bar{X} = 33.8$ ) than the mean raw score ( $\bar{X} = 48.3$ ) for older persons that Zung established. There have been many conflicting results about the relationship of health and bereavement. Because past research suggests that the elderly, both bereaved and nonbereaved, may manifest their depression as poor physical health, subjective health rating was examined. The third research question asked if there was a difference in perceived health rating between the two groups. In both samples, the majority rated their physical health above average. If good health can be considered a measure of well-being, it may be one factor in the overall lower Zung scores. In other words, despite losses, conjugal plus other psychosocial and biological losses experienced by the elderly, depression may be less when one views one's health as good. For the bereaved group, this positive view of health despite higher overall levels of depression, might have been due to lack of full awareness about the conjugal loss as well as less time to tune into their own health needs amid the disruption that illness and death of a spouse brings.

The fourth research question asked which variables distinguished between levels of depression for the two groups. The selected variables included age, sex, education, SES, and religion. Considering the age variable, the relationship between depression and bereavement was significant for both age groups, but slightly stronger for the young old, suggesting that the old old may have learned to cope better with losses over time. Using sex as a variable, there was a significant relationship between bereavement and depression for both sexes, but more so for males than females. It appears that the loss of a female spouse has a greater emotional effect on men than women, at least early in the grief process. There was also significance in the education variable with depression having a greater effect on the bereaved group with less education. It might be posited that additional education supplies one with additional tools for coping with loss and crisis. More information about the composition of the groups would have made the interpretation of this outcome easier.

The variable which showed the most surprising outcome was SES. There was no significance between bereavement and depression for those in the lower SES, but the relationship between depression and bereavement was greater for those in the higher SES group. One can only conjecture that this result might be attributed to the previous coping skills or perceived effects of lifestyle disruption of the two groups. Those in the lower SES group were more depressed without bereavement as a factor. Once it was introduced, its effects might have been less noticed. Social support and the role of significant others could also affect this outcome.

Lastly, the influence of religion as a variable was examined. There was slightly more significance between depression and bereavement for the non-Mormon group. The most likely outcome for this was the difference in sample sizes, with the Mormon sample being three times larger in both groups. However, the Mormon belief in eternal marriage may have also contributed to this result.

With the exception of the outcome for the lower SES group, all variables seemed to affect the relationship between depression and bereavement, especially at the high level of depression. The greatest change for high level of depression comparing bereaved and nonbereaved samples were among males, higher SES, lower education, young old, and Mormons.

This investigation has been a starting point to explore depression in the elderly and to compare levels of depression between recently bereaved and still married older persons. While most findings were significant, the results are inconclusive. Further investigation must be done over time in order to compare the changes over time. This ongoing research would more accurately answer the questions which were proposed.

If depression commences at three weeks postbereavement, at what point in the grief process will it be full blown? How long will it last? Will its effects continue to be rather evenly distributed in the three areas of depression or will it be concentrated more in one? The process of grief and depression requires longitudinal monitoring so that the effects and outcomes can be measured over time. In this way, bereavement, grief, and depression could more accurately

be compared among young and old widowed persons and proper interventions might be planned.

In viewing depression among the elderly more generally, there are still many questions to be answered. First and foremost, exactly what is depression in this population? Is it really as pervasive in this cohort as has been suggested? Does it present differently and is its course different among those past 60 years of age than among younger persons? Is the mild depression noted among the sample presented in this study typical of the elderly? For how long a time can widowhood be considered an influencing variable? Although the Zung SDS has been validated for use with elderly persons, is it really the best instrument to use with this age group? An instrument that has been refined for age-related changes and losses might give more accurate results. To date, there is no such tool.

There are implications for nursing in the areas of research, practice, and education. The nurse researcher might be involved with developing an instrument that allows for age-related changes to more accurately measure depression in the elderly. (S)he might also work with clinicians in the mental health and aging fields to clearly define depression and then define it with relevance to the elderly. The larger bereavement project is longitudinal, which is necessary if accurate conclusions are to be drawn about bereavement, grief, and depression over time. By investigating both populations, the bereaved and nonbereaved, the nurse researchers on the project will be able to examine many more variables than were used in this investigation and compare their relationships to depression. The findings on

depression in this project can serve as a baseline for the larger longitudinal investigation.

In clinical practice, nurses who work with the elderly need to realize that the quality and intensity of depression may be different for older people. It may be secondarily related to physical illness or life events. When related to life events such as conjugal loss, it might not present with the impact that reactive depression does in younger populations, at least initially. The challenge for nurses who work with older patients is to be aware of trends, such as lowered mood, self-depreciation, and to listen well. The elderly might not admit to depression but might express decreased self-worth or symptoms that suggest anxiety as well as somatic complaints. Too often the manifestations of depression are left untreated because they are deemed part of "old age" and "nothing can be done about that." Treated, depression in the elderly leads to favorable prognosis; untreated, it can lead to health morbidity and mortality. Based on the outcome of this study, nurses need to pay particular attention to persons in the higher SES groups and to men who suffer conjugal loss because they appear to be at higher risk for depression. There is also the possibility that depression is a latent outcome of grief among elderly persons who are adapting to bereavement.

Nursing has a great role in preventative health care. By identifying those elderly widowed persons, as well as nonbereaved elderly, who are at high risk for physical and mental illness, nursing plays a part in public health prevention of morbidity and mortality. With some basis for direction, which this study attempted to

provide, nurses can make appropriate referrals, develop effective care plans, or provide the necessary nursing intervention to assist those bereaved/depressed elderly in their need for care and counseling. Nurses who have increased knowledge about the effects of conjugal bereavement and losses due to the aging process can better assist the elderly and their families in dealing with depression, as well as to helping them adapt to these losses.

Nurse educators have a responsibility to teach students factual information about geriatric nursing. By keeping abreast of current research, they can help students differentiate between organic and functional illness as well as factors in illness that interface in both areas. This is particularly true in caring for the geriatric patient. They can assist students to learn to go slowly with older people and not to automatically take presented complaints at face value with this population. The nursing student who learns to take a complete health history, go slowly, and to listen well will be the practitioner who is more likely to assess depression in the elderly correctly.

This research has been a preliminary investigation in describing depression in a sample of bereaved elderly persons, and comparing depression between that group and a sample of still-married persons. It attempted to clarify some of the ambiguity about depression and bereavement in that age cohort. While the data obtained was significant in its outcomes, further longitudinal search in this area is necessary so that the changes which occur with the process of grief and bereavement can be measured. Further study of the bereaved



population will provide nurses and other health professionals with needed information about the role of depression as it mediates the grieving process following conjugal loss in older people.

APPENDIX A

LETTER OF INVITATION TO THE PARTICIPANT  
IN THE BEREAVEMENT STUDY

Letter to Bereaved Sample

We are writing to invite you to participate in an important scientific study that we are conducting at the College of Nursing at the University of Utah. The purpose of our research is to learn more about the difficulties and needs of people who have recently experienced the death of their husband or wife. We know that this may be a stressful and difficult time for you and we do not want to add further to your difficulties. Our desire is to learn more about what others can do to provide assistance and support to people in your situation. We feel that the best way to do this is to ask you and many others to tell us about your experiences and feelings.

If you decide to participate in this project, we will interview you at your home on six different occasions over a two year period of time. Each interview will last approximately 90 minutes to two hours. The interviewers will ask you a series of questions about your attitudes, feelings, social activities and health. All the information that you give us will be held strictly confidential and your name will never be identified with your answers. You are certainly under no obligation to participate but we feel that it can be a worthwhile and rewarding experience for you. It will give you an opportunity to express your feelings and to know that you are a part of a national and local effort to help others in the future who are in a similar situation. We will be interviewing 200 people in the Salt Lake area.

One of our eight interviewers will be contacting you within the next several days to answer any questions that you might have, and with your permission, to set up an appointment for an interview. These interviewers are young professionals pursuing various careers in the health field. They have been thoroughly trained for this project and we feel confident that you will enjoy meeting with them. If you have any questions that you would like answered immediately please feel free to contact either person named below. We encourage you to discuss your participation in this project with friends or family members.

We recognize that you may have some reservation about participating but hope that you will also see the value and importance of this study. We sincerely hope that you will decide to participate. We wish you the best for the future and look forward to meeting with you.

Sincerely,

Dr. Margaret F. Dimond  
Phone: 581-5073

Dr. Dale A. Lund  
Phone: 581-5073

### Letter to Comparison Sample

We are writing to invite you to participate in an important scientific study that we are conducting at the College of Nursing at the University of Utah. The purpose of our research is to learn more about the needs and difficulties of people who have recently experienced the death of their husband or wife, so that we might learn how we can provide assistance and support to them. Our research will focus on their attitudes, feelings, social activities, and health. However, in order to fully understand how these people feel and what they do, it is necessary for us to compare their answers with those from a group of people who are married but have not lost their spouse. We are therefore asking you to help us by being in this comparison group.

Our research began in January 1981 and we have already interviewed many people. We will be studying approximately 200 people in Salt Lake County who are over the age of 50 and have recently experienced the death of their spouse. For each one of these people, we are using voter registry information to select another person living in the same area, of the same sex and age. Therefore, you were selected to be in this project because you live in the same area, are the same age and sex of someone who recently lost their spouse. You will be one of the 200 currently married people in this research.

If you decide to participate in this project, we will deliver a questionnaire to your home on six different occasions over a two year period of time. Each questionnaire will take about 30 minutes to complete and you will be asked to mail it back to us at the University of Utah. All postage will be paid by us. The questionnaires will ask a series of questions about your attitudes, feelings, social activities and health. All the information that you give us will be held strictly confidential and your name will never be identified with your answers. You are certainly under no obligation to participate but we feel that it can be a worthwhile and rewarding experience for you to know that you are a part of a national and local effort to help other people.

One of our eight research assistants will be contacting you within the next several days to answer any questions that you might have, and to deliver the first questionnaire. These assistants are young professionals pursuing various careers in the health field. They have been thoroughly trained for this project and will be able to further explain our research to you. However, if you have any questions that you would like answered immediately please feel free to contact either person named below. We encourage you to discuss your participation in this project with friends or family members.

We recognize that you may have some reservations about participating but hope that you will also see the value and importance of this study. We sincerely hope that you will decide to

complete our research questionnaires. We appreciate your help and wish you the best for the future.

Sincerely,

Dr. Margaret F. Dimond  
Phone: 581-5073

Dr. Dale A. Lund  
Phone: 581-5073

APPENDIX B

FREQUENCY DISTRIBUTIONS

Table 12

## Frequency Distribution for Depressed Items: Bereaved Sample

Item	Never or a little of the time		Some of the time		Good part of the time		Most of the time	
	<u>N</u>	%	<u>N</u>	%	<u>N</u>	%	<u>N</u>	%
1. I feel down-hearted and blue	27	44	26	42	6	10	3	5
2. Morning is when I feel best	23	37	6	10	8	13	25	40
3. I have crying spells or feel like it	28	45	26	42	5	8	3	5
4. I have trouble sleeping at night	21	34	18	29	12	19	11	18
5. I eat as much as I used to	29	47	13	21	5	8	15	24
6. I still enjoy sex	60	97	1	2	0	0	1	2
7. I notice that I am losing weight	43	69	12	19	3	5	4	6
8. I have trouble with constipation	48	77	8	13	3	5	3	5
9. My heart beats faster than usual	50	81	8	13	3	5	1	2
10. I get tired for no reason	36	58	11	18	10	16	5	8
11. My mind is as clear as it used to be	11	18	14	23	10	16	27	44
12. I find it easy to do the things I used to do	23	37	15	24	12	19	12	19
13. I am restless and can't keep still	36	58	8	13	11	18	7	11
14. I am hopeful about the future	7	11	11	18	18	29	26	42
15. I am more irritable than usual	49	79	10	16	2	3	1	2
16. I find it easy to make decisions	11	18	20	32	13	21	18	29
17. I feel that I am useful and needed	15	24	11	18	9	15	27	44
18. My life is pretty full	8	13	13	21	14	23	27	44
19. I feel others would be better off if I were dead	59	95	0	0	3	5	0	0
20. I still enjoy the things I used to do	9	15	14	23	13	19	27	44

$$\bar{X} = 40.6$$

Table 13

## Frequency Distribution for Depression Items: Nonbereaved Sample

Item	Never or a little of the time		Some of the time		Good part of the time		Most of the time	
	<u>N</u>	%	<u>N</u>	%	<u>N</u>	%	<u>N</u>	%
1. I feel down-hearted and blue	39	66	18	31	2	3	0	0
2. Morning is when I feel best	12	20	13	22	12	20	22	37
3. I have crying spells or feel like it	53	90	5	8	0	0	1	2
4. I have trouble sleeping at night	33	56	15	25	7	12	4	7
5. I eat as much as I used to	22	37	8	14	11	19	18	31
6. I still enjoy sex	27	46	13	22	4	7	15	25
7. I notice that I am losing weight	53	90	4	7	2	3	0	0
8. I have trouble with constipation	49	83	4	7	5	8	1	2
9. My heart beats faster than usual	50	85	8	14	5	8	1	2
10. I get tired for no reason	26	44	24	41	4	7	5	8
11. My mind is as clear as it used to be	2	3	11	19	17	29	29	49
12. I find it easy to do the things I used to do	9	15	23	39	21	36	6	10
13. I am restless and can't keep still	39	66	10	17	7	12	3	5
14. I am hopeful about the future	2	3	5	8	15	25	37	63
15. I am more irritable than usual	42	71	14	24	1	2	2	3
16. I find it easy to make decisions	4	7	9	15	18	31	28	47
17. I feel useful and needed	3	5	7	12	9	15	40	68
18. My life is pretty full	1	2	3	5	17	29	38	64
19. I feel others would be better off if I were dead	53	90	5	8	0	0	1	2
20. I still enjoy the things I used to do	4	7	9	15	14	24	32	54

 $\bar{X} = 33.8$



APPENDIX C

SELF-RATING DEPRESSION SCALE

POINT SCORING METHOD

Table 14

## Self-Rating Depression Scale Point Scoring Method

Item	Never or a little of the time	Some of the time	Good Part of the time	Most of the time
1. I feel down-hearted and blue	1	2	3	4
2. Morning is when I feel best	4	3	2	1
3. I have crying spells or feel like it	1	2	3	4
4. I have trouble sleeping at night	1	2	3	4
5. I eat as much as I used to	4	3	2	1
6. I still enjoy sex	4	3	2	1
7. I notice that I am losing weight	1	2	3	4
8. I have trouble with constipation	1	2	3	4
9. My heart beats faster than usual	1	2	3	4
10. I get tired for no reason	1	2	3	4
11. My mind is as clear as it used to be	4	3	2	1
12. I find it easy to do the things I used to do	4	3	2	1
13. I am restless and can't keep still	1	2	3	4
14. I am hopeful about the future	4	3	2	1
15. I am more irritable than usual	1	2	3	4
16. I find it easy to make decisions	4	3	2	1
17. I feel useful and needed	4	3	2	1
18. My life is pretty full	4	3	2	1
19. I feel others would be better off if I were dead	1	2	3	4
20. I still enjoy the things I used to do	4	3	2	1

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