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Adult Suicide Attempts In Relationship to Life Experiences and Familial Tendencies

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Masters Project:

Adult Suicide Attempts

In Relationship to

Life Experiences and Familial Tendencies

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Abstract

The purpose of this project was to describe the variables age, gender, child or adult abuse, educational level, family history of suicide, depression, economic level as factors related to adult attempted suicides. The Lazarus framework was used to examine factors contributing to adult attempted suicide. A suicide prevention community education project was developed with Lazarus's theory of cognition and unconscious processes in mind. Lazarus's theory focuses on the relationship between development of coping skills learned during childhood and how a person will respond using those skills as an adult. This project explored links between child and adult abuse, education or economic levels, age, gender or family history that may influence adult attempted suicide. Information was then presented in the form of patient resource materials that were placed in health care areas populations of individuals and families with high risk for attempted suicide.

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CHAPTER 1

INTRODUCTION

Recognizing causes of adult attempted suicides and offering possible solutions may prevent or decrease this phenomenon. Identifying variables relating to this crisis may prevent suicide rates from increasing with the aging process. Helping patients cope with stressful situations, determining how they deal with anxiety, and assisting them in identifying risk factors may prevent suicide completion. The patient with symptoms of suicide ideation should also be assessed for underlying medical conditions. "Increasing levels of stress can suppress the immune system and increase susceptibility to illness" (Samuels, 1997, p. 2). The Hamilton Depression Scale and Geriatric Depression Scale are practical tools used in measuring major depression of mid-life crisis. Co-morbid substance abuse may also increase the risk of suicide. Identifying stressors that may be acute or chronic, irreversible or reversible may give the patient a renewed sense of control. Obtaining a resource list of contact persons or organizations and providing educational information may also assist the prevention of suicide attempts.

There has been an increase in suicide attempts, which may be directly related to personal experiences and environmental factors. "Suicide was the eighth leading cause of death in the United States in 1988" (Conner, et al, 2001). According to the American Association of Suicidology, in the year 2000, Tennessee was ranked 15th in the United States in number of suicides. There were 730 reported suicides per 100,000 people in the state of Tennessee. Child neglect

and abuse, poor nutritional intake, deteriorating family units with divorce or spousal abuse, lack of education, poverty, and low-income jobs because of low educational levels may all contribute to this epidemic (Conner, et al, 2001). The recent increase of suicide attempts in the adult population may be directly related to the emotional scars of child abuse, adult abuse, age, gender, economic levels, and education levels. Adult scarring from a history of child abuse or adult abuse may contribute to a lack of coping skills, thus influencing suicide attempts. Adult suicide attempts may be decreased through the prevention and implementation of programs to address adverse childhood experiences and increase life satisfaction. Addressing these issues may also impact the reduction of health care costs.

Statement of Problem

Research indicates a possible relationship between adult attempted suicide and the variables of age, gender, child abuse, adult abuse, family history, economic level, or education level. Prevention programs or interventions may be implemented if contributing factors are identified.

Purpose of the Project

The purpose of this project is to describe factors, specifically age, gender, educational level, economic level, depression, life experiences of child or adult abuse, or family history of attempted or completed suicide that contributes to adult attempted suicide. A community educational project on suicide prevention will be designed. A model to be constructed that explains how much these variables contribute to adult attempted suicide.

Variables for the Project:

1. Adults living at low economic levels are at higher risk of attempting suicide than other adults living at high economic levels.
2. Adults with a high school education or less education attempt suicide at an increased rate as compared to adults with more education.
3. Adults who attempt suicide are more likely to have family members who attempted suicide than those without a positive history of suicide.
4. Adult suicide attempts more frequent in those who have experienced child abuse or adult abuse than in those who have not had abuse experiences.
5. Women more likely to attempt suicide than men.
6. Depression is a major contributing factor for attempted suicide.

Theoretical Framework

Stress and coping skills have been the topic of multiple research projects. Extremely stressful life styles that are now a part of everyday encounters cause more problems with coping. Richard S. Lazarus (1961) was well known for his research related to stress and its outcomes. Even though Lazarus's theory is not a nursing theory, it can be adapted to many nursing situations and resolutions. The Lazarus theory addresses the metaparadigm of stress, outcomes, and our environment. His theory is simple because of the clarity and the inclusion of his ideas about how stress affects humans. This theory has been used with empirical precision in nursing research studies.

Lazarus stressed the role of cognition and unconscious processes that play a role in future understanding of life circumstances. Lazarus believed strongly that one's understanding of human behavior and its relationships have a direct influence on how an individual deals with situations in life. His theory focuses on how stress and coping influence life's outcomes, both short and long term. Lazarus's theory is composed of the study of cognition, the role of the unconscious process in perception, and the concept of emotion (Hyman, C., 2002). Lazarus investigated how a person's unconscious and the conscious thought process deals with stress. Lazarus's theory was chosen to guide this study because of the way he explains how emotions, stressors, and life experiences are intermingled in one's lifetime.

Lazarus' (1961) book "*Adjustment and Personality*" states that there is a relationship between the hazards of the environment in the physical world and the lack of adaptation to the stressors of life. Lack of adaptation as well as conflicts between internal and external demands may be credited with causing of many human illnesses and could certainly include attempted suicide situations. Conflicts between internal and external demands increase stress and decrease adaption. Psychological discomfort is one of the most compelling reasons a person may fail to adjust to life circumstances. Depression, anxiety, stress, and guilt feelings may have an impact on the individual's ability to cope. Physical symptoms, such as damage to body tissues may appear as a result of psychosomatic illnesses. Psychological assistance can only be rendered effectively when the necessary

information about stressors, internal and external demands, coping and adaptation has been collected.

Healthy personalities and willingness to learn are fundamental to the development of stable coping mechanisms. A helpless child's physical, emotional, and mental wellbeing may be adversely affected during the formative years. Lazarus's theory includes a frame of reference for systematic observations of physical and psychological growth. Achievements and progression versus lack of achievement and regression is a developmental process that continues throughout the lifespan. Stressful adult situations may be affected by childhood experiences. Emotional stressors and lack of motivation may affect the central nervous system and the autonomic nervous system. Lazarus (1991) described behaviors of the upper, lower, and middle economic classes. The Lazarus theory of coping, stress, and adaptation can be utilized when assessing for inappropriate coping skills that are displayed by such behaviors as obsessive-compulsive disorder, multiple personalities, neurotic depression, psychosomatic disorders, and attempted suicide. Lazarus suggests that the necessity of taking a detailed personal history, including past and present data, along with a family history of suicide attempts is essential.

A pilot study by Rodriguez (1995) used the Lazarus' theory of stress and coping as the theoretical framework for a study assessing the coping processes of female streetwalkers. Prostitutes' coping skills may be dependent on emotional resources influenced by their childhood life experiences of violence and abuse. The study consisted of the primary, secondary situational circumstance, and two

types of coping. Problem-focused (external strategies) and emotional-focused (internal strategies) coping were studied. Rodrigues (1995) quoted Lazarus and Folkman as defining coping as "the person's constantly changing cognitive demands and behavioral efforts to manage specific internal or external demands that are taxing or exceeding" (p.1).

Taubert & Forester (2001) used the Lazarus theory to help understand cancer patients' coping with their cancer, the treatment, and the quality of their lives. The coping mechanisms included fighting back, planning for the future, and engagement of living depended on how the individual was raised. This study showed cancer patients with active coping and positive appraisal had "enhanced sense of living in the present, a perception of life as fragile and precious, new personal growth goals, and a greater appreciation for loved ones" (Taubert & Forsten, 2001, p.3).

Lazarus (1991) explored the concepts of cognition and motivation. Lazarus believed that cognition and motivation are interdependent. Functional roles of cognition with emotion are bi-directional. They influence each other. Impacts from the life-span experiences of the person can yield changes in emotional, cognitive, and motivational development (1991).

One area that the Lazarus theory emphasizes is the need for more research on the effects of stress, coping and cognitive appraisals in individuals who participated in overdosing and attempted suicides. Sensory overload, anxiety, and assaults on the human body can lead to poor choices. The Lazarus theory of dealing with stress, emotions, and life experiences is evident in research studies.

An empirical support of the Lazarus theory through the results of this research may give additional insight as to the relationships between coping and cognition.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of the following literature review is to find any literature in regards to the relationships of childhood life experiences, income, education levels, familial suicide, and child or adult abuse with adult attempted suicide. The information for this review of literature and research utilization was gathered using the Erlanger Medical Library, University of Tennessee at Chattanooga Library, and by obtaining research studies from on-line psychiatry, Journal of American Medical Association, American Journal of Epidemiology, American Journal of Psychiatry, psycARTICLES, and McNair Journal from Berkley. The reference book, Research for Nurses, was also used. The years for the studies and the articles ranged from 1981-2003. The key words used included adult suicide, adult suicide and low income, socioeconomics and suicide, child life experiences, and genetics.

Description of Literature

A twenty-year longitudinal life satisfaction and suicide study was undertaken in Finland beginning in 1976 and ending in 1995. The study evaluated personal goals and achievements, the mental well being of the individual, the presence of physical health and mental diseases, and the subject's individual view of themselves. "The level of life satisfaction is a particularly effective predictor of psychiatric morbidity" (Koivumaa-Honkanen, et al, 2001, p.7). Several risk factors were linked to suicide attempts. Patients with diagnosed mental disorders showed greater risk factors than the general population. The researchers explored

life satisfaction and the risk of suicide attempts in an adult population between the ages of 18-64 over a 20-year period and found that "life dissatisfaction is much more common in psychiatric patients" (Koivumaa-Honkanen, et al 2001, p.1)

The 29,173 same-sex twin participants returning completed surveys were almost evenly divided between men and women. The study began in 1976 with follow-up inquiries sent in 1981 and 1990. During the follow-up period, which extended from May 1, 1976 to December 31, 1995, mortality data collected from the National Registry for cause of death in Finland showed that of the 2,859 deaths from this population, suicide accounted for 182. The participants for this study consisted of Finnish adult same-sex twin pairs born before 1958. The Central Population Registry was used to identify the nationwide sample. The researchers investigated psychosocial, genetic and environmental factors in an attempt to identify risk factors for attempted suicide. The questionnaire included a life satisfaction scale that used a Likert scale as the source for measurements. Greater dissatisfaction was indicated by higher scores on the scale. Subjects were classified as being satisfied (scoring 4-6) or being dissatisfied (scoring 12-20). "The score on the Beck Depression Inventory accounted for 48% of the variation in life satisfaction score" (Koivumaa-Honkanen, et al 2001).

The incidence of suicide was significantly higher among those who scored lowest in the life satisfaction category (31.87%) than others who scored higher in the life satisfaction category (18.10%). "Life dissatisfaction predicts suicide after adjusting for age, sex, baseline health status, alcohol consumption, smoking status, and physical activity" (Koivumaa-Honkanen, et al 2001, p.1). Decreased

life satisfaction was associated with heavy alcohol consumption in both genders. Men who were dissatisfied with life had a 25 percent higher risk of suicide than men who were satisfied with life. Of these men who were at higher risk of suicide, 7.7% committed suicide. “Suicide is a major public health problem in Finland; men are especially at high risk” (Koivumaa-Honkanen, et al 2001, p.6). This study reflected an association between life dissatisfaction and suicide. “Life dissatisfaction has a long-term effect on the risk of suicide” (Koivumaa-Honkanen, et al 2001, p.7).

A recent study from an HMO in San Diego, California evaluated childhood trauma and adverse life experiences, such as child abuse and the potential for these events to lead to negative health outcomes, particularly attempted suicides (Dube, et al. 2001). Risk of attempted suicide was shown to be 2-5 times more prevalent in those with one or more experiences of adverse child experiences (ACE). ACE consist of emotional abuse, physical abuse, sexual abuse, battered mother abuse, household substance abuse, mental illness in the household, parental divorce or separation, and incarcerated member of the household. Participants with seven or more ACE experiences had a 31.1% higher chance of attempting suicide. “The population—attributable risk fractions (ARF) for one or more experiences were 67% for a lifetime chance of adult suicide attempt” (Dube, et al, 2001, p.1). Prevention of these experiences may lead to progress in suicide prevention.

Dube, et al. (2001) further found that low- income women with alcohol problems and ACE were at increased risk for suicide attempt. Sexual, emotional,

and physical abuse in addition to domestic violence, divorce, and living in a household that had family experiencing mental illness contributed to their lifetime risk of suicide attempts. "Childhood trauma and adverse experiences can lead to a variety of negative health outcomes, including attempted suicide among adolescents and adults" (Dube, et al, 2001, p.1). Research data supported the correlation between adult attempted suicide and adverse child experiences. "Approximately two-thirds (67%) of suicide attempts are attributed to different types of abusive or traumatic childhood experiences" (p. 8). The study included 9,367 women and 7,970 men with a mean age of 56. This study also included 75% of the participants The participants were white and had at least some college education. In addition to ACE, other known risk factors for suicide were depressed affect, drug use, and alcoholism. Depressed affect was higher among women and suicide attempts were higher for women than men (5.4% for women vs. 1.9% for men).

Collaboration in this study (Dube, 2001) included the Center for Disease Control and Prevention, Emory University (Atlanta, GA), and Kaiser Permanente's Health Appraisal Center for the Adverse Childhood Experiences Study. Participants were sent letters with a questionnaire that assured them that the strictest confidentiality would be maintained and that it was voluntary. No evidence was noted that participants were biased toward their health problems related to ACE. The sample included 95% of the respondents after exclusions. Conflict tactic scales were used to evaluate questions in the ACE survey. Categories included: emotional abuse, physical abuse, sexual abuse, battered

mothers, mental illnesses in household, substance abuse, divorce, or incarcerated household members. There was a positive correlation between a higher ACE score and attempted suicide. Attributable risk fractions (ARF) were calculated from logistic regression models. There was a substantial increase in the risk for attempted suicides for participants reporting at least one adverse childhood experience.

Significant relationships were noted between the scores of ACE and attempted suicide. Consideration of the impact of multiple abuse experiences is important when correlating ACE and attempted suicide since weakness of the study accurately recalling childhood events, childhood exposures to suicidal behaviors in the household make it impossible to separate familial tendencies versus environmental factors, so these were excluded.

A national co-morbidity survey stated 27% of women were three times more likely to attempt suicide after being sexually abused. This study concluded that dramatically increased risk of suicide attempts throughout a lifespan was common when paired with adverse childhood experiences. Multiple steps to prevent these occurrences may lead to substantial suicide prevention. "Adverse childhood experiences dramatically increase the risk of adult attempting suicides" (Dube, et al, 2001, pg 9).

In 1989, Goldberg, et al, (2001) compiled research in a large French company with 20, 093 participants in a study of personal health factors. "The goal of this study was to evaluate social, demographic, occupational, and health factors within this large French company" (Goldberg, et al, 2001, p. 2). The researchers

found a negative association relating to several of the study concepts, including alcohol consumption. Cultural factors and lifestyle behaviors were important determinants of participation. The employee target population for this study consisted of men aged 40-50 and women aged 35-50. The study targeted 44,922 persons with only 103 being excluded because of missing data. The International Classification of Diseases, Ninth Revisions, coded causes of death for the employed subjects. Mortality data for participants were consolidated into five categories: cancer, circulatory disorders, alcoholism, accidents and suicide. "The differences in between the participation rates at the baseline in 1989 were compared by the chi square test according to the social demographic and occupational variables" (Goldberg, et al, 1989, p.3). Due to the small number of deaths among women, this analysis was limited to the male participants. Education level was a significant factor between skilled workers and managers in regard to suicide attempts. Higher participation was among male managers, married individuals, and Caucasians, which can be viewed as a limitation. "The analysis of mortality also confirms the importance of alcohol and tobacco consumption on men's participation …directly related to drinking, cancer, accidents, suicide, and circulatory disorders" (Goldberg, et al, 1989, p. 4).

Qin, Agerabo and Mortensen (2003) examined all suicides in Denmark. They gathered data regarding demographics, mental illness, socioeconomics, gender, family structure, and history of family suicides. The 21,169 persons who committed suicide were used as a nested case control sample. The highest suicide risk factors were found to be single, unemployed males who were substance

abusers, living in a lower socioeconomic class with physical and psychiatric disorders.

The study sample consisted of homosexual couples, heterosexual couples, and family structures including parenthood. Annual gross incomes were divided into four quartiles. Data was collected from the Danish psychiatric center on hospitalization histories. First-degree relatives were identified in the study subjects. A record of family suicide history was also matched. The most prominent risk factor was a psychiatric disorder leading to hospitalization followed by recent release from a hospital, a family suicide history, and a family psychiatric history. Urbanization was not a risk factor. Other risk factors included those in the lowest income quartile and unemployment. Psychiatric history and family suicide history presented as a higher risk for females than for males. Being in the middle-income bracket markedly reduce suicide risk in females. Suicide risk declined for males but not for females living in urbanized areas.

Strengths of the study included systematic uniform data from Danish registers and information on psychiatric illnesses with hospitalizations. The basis of the research study was a five percent sample of successful suicides. The five percent random sample matched age, gender, and calendar time of the suicide. The data in this study showed an elevated suicide risk for homosexuals, although this may be underestimated because data were available only on those officially choosing to register as partners after 1994. “Familial clustering of suicide and psychiatric disorders has been demonstrated in studies of both adolescent and adult victims and attempters” (Qin, et al, 2003, p. 6). Clinical implications suggest

that mental illnesses should be the focus of preventative interventions. Reducing unemployment, improving social cohesion, and earlier diagnoses and treatment of mental disorders may have a positive affect on the reduction of suicide rates. "Mental illness should be a focus for preventive interventions and assessment of these interventions" (Qin, et al, 2003, p. 6).

Westman, et al. (1993) studied the influence of birth, immigration, and socioeconomic status among people living in Sweden who attempted suicide. This present study used national follow-up data on approximately 4.5 million Swedish persons, that number included 600,000 foreign born people. The researchers found that several risk factors including unemployment, living alone, being female, and being of low socioeconomic status increased the risk for attempted suicides. It was found that Finnish refugees and migrant laborers have an increased risk for psychological distress, which has already been established as a risk factor for attempted suicide. As might be expected there was "increased risk of attempted suicide among the refugees and immigrant laborers in relation to native-born persons" (Westman, et al. 2003, p 1). The relationship between immigration and attempted suicide was analyzed and immigration was found to have an increased risk factor for suicide also. The World Health Organization International Classifications of Diseases 9th and 10th revisions logged in the cases of attempted suicide as deliberate self-harm and undetermined self-harm. All first time hospital admissions for attempted suicide during a five-year were included in the data collection. Age adjusted rates were calculated and men and women were

analyzed separately and adjusted in a model that included explanation of the variables. The study consisted of 2,200,562 women and 2,268,845 men.

Westman,et. al. (1993) showed in this study "that women from Iran, Finland, Poland and Latin America had the highest age-standardized ratio of attempted suicide, roughly double the risk for Swedish women" (Westman, et al, 1993, p. 3). Men who immigrated from Finland and Poland had the highest age adjusted ratios for suicide attempts, which were double the risk of Swedish born men. A very significant finding showed that as income increased, men's risk of suicide decreased, but as women's income increased, their risk of suicide also increased. "The risk of attempted suicide increases for men and women ages 35-44 and then after that the risk decreases with age" (Westman, et al, 1993, p. 4). Finnish migrant workers had the highest risk of attempted suicide as compared with other ethnic groups. Birthplace was associated with attempted suicide while low socioeconomic status was only partially associated. "Age, martial status, and SES [SocioEconomic Status] might be confounded variable associations between place of birth and attempted suicide (Westman, et al, 1993, p. 5).

In the United States approximately 30,000 people commit suicide each year (Dwivedi, et al, 2003). Suicide is frequently connected with major psychiatric diseases. The postmortem study analyzed the data of molecular mechanisms associated with suicide behavior. Altered gene expression in the brain was a quantitative study that was performed on 48 subjects and reported in August 2003. "These studies were performed in the prefrontal cortex in Brodmann Area 9 (right hemisphere of the brain) and Hippocampus" (Dwivedi, et

al, 2003). There were 17 men and 4 women in the control group and 19 men and 8 women in the suicide group. Dwivedi, et al (2003) reported their study of twenty-seven suicides and twenty-one control subjects. They found that the brain-derived neurotrophic factor (BDNF) and receptor tyrosine-kinase B were significantly reduced in the pre-frontal cortex and hippocampus of suicide subjects. Stress has been established as a risk factor in suicide; however, a high rate of affective disorders also has been noted among those who commit suicide. The size of cortical neurons, the reduction of cortical neurons, and reduced hippocampal volume were discovered in patients that had affective disorders. Because defects in neural maintenance and regeneration were experienced there was a reduced neural plasticity causing an impaired ability to adapt to crisis. This may help explain the familial aspect of adult attempted suicide because it may link cause and effect.

Dwivedi, et. al. (2003) found messenger RNA level of tyrosine-kinase B was significantly lower in suicide subjects as compared to the control subjects. "No significant differences in messenger RNA levels of neuron-specific enolase between suicide subjects and control subjects were observed in either prefrontal cortex or hippocampus" (Dwivedi, et al, 2003, p 5). Postmortem brain samples in suicide subjects found significantly lower levels in messenger RNA and protein expression of BDNF and trkB. This study suggests that suicide behavior could be associated with these abnormalities. Authors of other studies done on rats and nonhuman primates have already provided evidence that BDNF could be involved in depressive behaviors. This study also showed no significant effects of

antidepressants on these levels of BDNF and trkB. According to the study, stress abnormalities can also lead to significantly reduced amounts of BDNF in suicide subjects.

A study completed by Conner, et al (2001) focused on the relationship between aggression and suicide. The sample for this study was obtained from the National Mortality Follow-Back Survey (1993). Participants consisted of 1,363 suicide victims with a retrospective case-control design was employed for the study. "Suicide, with a base rate of 11.4 per 100,000 per year in the United States warrants such a design" (Conner, et al, 2001). Of the suicide attempts, 69% were men, 87% were white, and 21% had less than 12 years of education. The focus of this study was personality traits and psychiatric diagnosis. Conner, et al (2001) suggested that suicide is conceptualized as an inherently aggressive act, and that alcohol misuse enhanced the potential for ferocity in the way suicide was attempted. "Traits related to aggression are associated with attempted suicide and completed suicide among individuals with alcohol disorders" (Conner et al, 2001, p. 2).

The six-year collaborative project was with the National Center for Health Statistics. Several federal, state, and local governments, colleges, and private organizations participated. The 1993 National Mortality Follow Back Survey obtained a sample of death certificates of individuals of age 15 or older. Sampling certain causes of death allowed for a more robust analysis of predictors from violent causes. "Results indicate that violence in the last year of life is more frequent among suicide victims than accident victims" (Conner, et al, 2001, p.3).

The families of the completed suicide participants in the study rated violent behavior in the last year of life in a four-point Likert scale. History of alcohol misuse was also coded as positive on the questionnaire. Violence, alcohol misuse, gender, and age may be used in predicting suicide. Suicide risk was also associated with the white race. Roy's study (1993), found a two times higher risk of suicide in a population of alcoholics as there was in the general population. Alcoholics were identified from hospital admissions within the United States of America. "Twenty percent of such suicide victims are alcoholic" (Roy, 1993, p 1). The suicide risk among alcoholics is at least twice that among the general population, and is 60 to 120 times higher than that of the non-psychiatrically ill in the general population (Roy, 2003, p.1). Caucasian males who were alcoholic were found to have a higher incident of suicide than Caucasian women. One hundred thirty four alcoholic suicide victims were studied in five different areas. Long term alcoholism of 25 years or greater appeared to increase the incidence of suicide. Seventy-eight percent of the general population are married as compared to only 58% of the alcoholic suicides. "Co-morbidity—the co-occurrence of a mental disorder with alcoholism—plays an important role in suicide" (Roy, 2003, p. 4). Out of 111 alcoholic suicides, 63 had a co-morbid depressive disorder as part of their history. Specific life events such as a loss of a close personal relative or friend were found to have a relationship to suicide as well as recent heavy drinking, living alone, unemployment, and poor social support. There were all found to be significant risk factors for alcohol-related suicide. Alcoholics were found to be at increased risk for completion of suicide when they were discharged

from an alcohol treatment facility. These findings lead to speculation that social isolation and finding themselves alone may lead to suicide. “One third of all alcoholic suicide victims had tried to commit suicide in the past. Almost one in five had attempted suicide out of 298 alcoholic patients” (Roy, 1993, p 6).

Post mortem study of brains from alcoholics suicide victims found decreased levels of serotonin (a brain chemical involved in the regulation of moods) in the brain. The reduced levels of serotonin metabolite 5-hydroxy-indoleacetic acid (5-HIAAA) among alcoholics was found in patients who had made violent suicide attempts. “The alcoholic suicide victim tends to be male, white, middle age, unmarried, with a long drinking history. The risk factors are current heavy drinking, major depression, poor or no social support, unemployment, living alone and suicide thoughts or communication” (Roy, 1993, p. 5).

A four-year descriptive study was conducted by Fawcett, et al (1987) monitoring 929 patients to evaluate clinical predictors of suicide in patients with major affective disorders. This was a controlled prospective study reporting uniform clinical data that identified 25 of the 929 patients who had committed suicide. “Eight (32%) of the suicides occurred within 6 months and 52% within one year of entry into the study” (Fawcett, et al, 1987, p.1). The study was conducted at five different academic medical centers involving 599 patients having unipolar depression; and the rest were divided into clinical groups according to their mental disorders. Lengthy diagnostic interviews and follow up interviews at six months for four years were completed to obtain the statistical

information. Patients who were diagnosed with depression were found to have higher rates of suicide than with any other psychiatric disorder. “Suicide and serious attempts were strongly related to negative life events occurring within one year after a hospital discharge” (Fawcett, et al, 1987, p 2). Hopelessness was found to be significantly associated with suicide attempts and completed suicides. Hopelessness, loss of pleasure, interest, and loss of reactivity were tested and found to be significantly different between control groups and in those who completed suicide. Diminished concentration, social withdrawal, indecisiveness, alcoholic abuse, and depressed appearance were other issues found in the suicide group. There was a minimal trend of higher suicide rates in the never married group. It was found that clinicians treating patients with depression should be especially alert to an increased risk of completed suicide during the first year after discharge from hospital. Intensive follow up and support systems need to be available for those patients. “Trends toward greater dissatisfaction with life, social withdrawal, alcoholic abuse, drug abuse, and loss of work role function were all clinically consistent but not strongly significant correlates in this sample” (Fawcett, et al, 1987).

A research study conducted by Beck, et al (1985) involved patients that were followed for two to five years at the University of Pennsylvania, Center of Cognitive Therapy. They found that those who successfully completed suicide were found to have a high hopelessness scale score, even though the high-risk group constituted only 13% of depressed outpatients. “Hopelessness is a core characteristic of depression and serves as the link between depression and

suicide" (Beck et al, 1985, p 1). Those who eventually completed suicide scored 10 or more on the hopelessness scale (with score range 0- 20). Intervening when the study found a sudden rise in the hopelessness scale score during follow-ups or treatments showed to be significant, thus preventing increased suicide risk.

> Twenty-two (13.8%) of the suicidal ideators reported that a family member had committed suicide. A history of familial suicide was not significantly related to future completion within this sample of attempters. Histories of alcohol abuse were described by 44.1% of the overall sample. Suicide attempters who eventually die by suicide had higher mean +/-SD hopelessness scores than did the rest of the cohort. The mean score of the completers was significantly higher than that of the non-completers (Beck, et al, 1985, p 5).

Therapeutic interventions with cognitive therapy lower hopelessness faster than pharmacotherapy. "High hopelessness during any one episode may be predictive of high hopelessness during a later episode, and thus may lead to eventual suicide" (Beck, et al, 1985, p. 4). However, both cognitive and pharmacotherapy may be warranted if high suicidal risk is found. "Patients receiving scores of 10 or more on the Hopelessness Scale correctly identified 91% of the eventual suicides" (Beck et al, 1985, p 1).

Dr. Beck had stated "as soon as the patients in this high risk group have been identified, they can receive special attention during the immediate treatment period and during subsequent follow-up periods. A sudden rise in the Hopelessness Scale score during treatment or follow-up may alert the mental

health professional to the problem of increased suicidal risk and prompt appropriate intervention" (Beck, et al, 1985, p. 7). This was a rebuttal to Case's letter (1986) to the editor of The American Journal of Psychiatry, which stated "the therapist [is] faced with a patient with suicidal threats, a more appropriate conclusion would be that the finding of a high score on the Hopelessness Scale is of little predictive value, since 88.4% of those who scored ten or more on this scale did not commit suicide" (1986, 559). "When people become [hopelessly] depressed, they experience higher levels of suicidal intent than do other depressed patients" (Beck, et al, 1985, p. 7). There have been cases in which different physician viewpoints are discussed in regard to this. In response to this letter, Dr. Beck is stated "as soon as the patients in this high risk group have been identified, they can receive special attention during the immediate treatment period and during subsequent follow-up periods.

Variations in suicide and homicide rates by latitude and longitude in the United States, Canada, and Australia have shown similarities and higher suicide rates in the west and north. The suicide rates in the United States were consistent with Canada. "The Australian Bureau of Statistics showed that suicide rates were higher in the north while there was no significant east-west variation"(Lester, 1985, p 1). Canadian Vital Statistics in 1976, showed suicide rates higher in the north and west. Variations in suicide may be the result of cultural factors in latitude and longitude regions. Data were obtained from the Australian Bureau in 1973.

"Hopelessness associated with other psychiatric disorders also predisposes to suicide behavior" (Beck, et al, 1985, p. 1). Among patients hospitalized for depression, it was found, "that hopelessness, rather than depression per se, was a determinant of suicide intent" (Beck, et al, 1985, p. 2). A case study explored the life of a 55-year-old male who had attempted suicide. The patient had midlife crisis issues and experienced alcohol abuse, anxiety and depression. "Major depression in midlife is common, with a prevalence of approximately 2.2%. The quality of life with depression has been found to be comparable to or worse than that of living with eight chronic medical diseases" (Samuels, 1997, p 3). Any patient presenting with symptoms of depression should be assessed for potential risk of adult attempted suicide. "Coexistence of depression and alcohol abuse is common" (Samuels, 1997, p. 3). Use of a questionnaire to determine alcohol abuse was conducted. The CAGE, which stands for cut down, annoyed, guilty, eye-opener, was used to detect for alcohol abuse. The patients were assessed for their life experiences, whether or not influences of alcohol intake may be chronic, irreversible or reversible stressors.

A large urban university, which was affiliated with a general medicine practice of adult primary care patients, was the site for a study by Olfson et al (2002). They were studied by investigating psychotic symptoms in low-income patient populations. "A questionnaire that probed demographic characteristics, health status, and mental health treatment was used (Olfson, et al, 2002, p 1). Those with major depression, general anxiety disorder, alcohol use and low income, were more likely to report current suicidal ideation or attempts. A

limitation of this study was that the patients were predominantly low-income immigrants from Puerto Rico and the Dominican Republic, unmarried, middle-aged immigrants, and did not speak English. The study families' incomes in 1998 were less than $12,000, and most of them had not completed high school. This study found that one in five adults that live in an urban general medicine practice area experience one or more psychotic symptoms and is "highly impaired in self reported work, social, and family functioning" (Olfson, et al, 2002, pg 6).

Rourke (1987) identifies nonverbal learning disorder (NLD) syndrome as a predisposing adult risk factor for depression and suicide. "NLD syndrome is a concomitant white matter disease in which damage to the long myelonated neurons results in inefficient interregional transmission. Since interregional transmission is utilized extensively by the right hemisphere, NLD most often shows up as a right hemisphere weakness" (Rourke, 1987, p.219). Even though people do not commit suicide because of the way their brains are constructed, they commit suicide from poor coping skills as the consequence of their own dysfunction.

Major depression disorder was ranked the fourth cause of disability and premature death in the United States (Stafford, et al, 2001, p232). Medication treatments play a major role in the management of depression. A research study was done with 3500 participating physicians, beginning in 1987 through the third quarter of 2001. Use of the selective serotonin reuptake inhibitors (SSRI) has increased from 70% in 1987 to 89% in 2001(Stafford, et al, 2001, p.233). In an

attempt to prevent suicide secondary to major depression disorder, research needs to be continued, focusing in on medication and cognitive treatments.

Treatment-resistant depression, pharmocoeconomic studies have been completed to evaluate overall treatment costs and risk for suicide. A sample of 4,186 participants was assigned a treatment pattern algorithm. Women are twice as likely to have depression. "$7.5 billion was associated with depression-related suicide" (Greenberg, 1990). Persons over the age of 65 and under the age of 17 were excluded from the study resulting in a sampling of 125,242. The researchers included a contrast group of ten percent random sample.

Summary of Review of Literature

Suicide attempts are associated with depression and are more often prevalent than with other mental disorders. “Co-morbidity adds to severity, suicidality, and the burden of social phobia” (Lecrubier, 1997). There is considerable overlapping between depression, anxiety disorders and risk of adult suicide. “Depression, one of the most common disorders in the primary care setting, is a serious mental illness with an estimated lifetime prevalence rate of 17%” (Ferguson, 2000, pg 173). Therapy should be a combination of cognitive, behavior and interpersonal treatments. The primary care physician or adult nurse practioner “can perform a counseling role by providing the patient with support and insight, offering alternative explanations, and making recommendations” (Ferguson, 2000, p.174). “The ultimate goal of therapy is to obtain remission (i.e., complete recovery and removal of all symptoms) rather than merely a response to therapy” (Ferguson, 2000, p.174).

Age, gender, child abuse, adult abuse, education, alcoholism, depression, and economics are contributing factors to the rise in suicides. All variables have to be evaluated to determine whether there is any correlation between them and adult attempted suicide. Research studies have made definite connections between low ecomonical levels, gender, and alcohol.

CHAPTER 3

METHODS AND PROCEDURES

Definitions of Relevant Terms and Concepts

The life experiences show a correlation between what had happened in a life span to contribute with the inability to make good choices. This may be responsible for an increase in the adult attempted suicide rise that is seen in the recent years. History of familial tendencies, age, gender, alcohol, and depression may offer some insight into the causes of adult attempted suicides. The fact that life experiences, in any personal experience of adverse or harmful nature, may influence coping skills and lead to suicide attempts remains to be proven.

Description of the Project Design

There has been a tremendous increase in the adult attempted or completed suicide rates. This community suicide prevention project was designed to provide education to those needing professional assistance but did not have the knowledge of where to obtain help. The variables of age, gender, child abuse or adult abuse, family history of suicide, economic level, alcohol, depression, and education level have all been researched. Prevention programs or interventions need to be implemented in an attempt to reduce the number of attempted or completed suicides. Two major posters were designed with information about facts of suicide, crisis phone numbers, warning signs, how to help someone who is suicidal, and to provide local hospitals or offices numbers for receive help. Flyers from Moccasin Bend Mental Health Center, Parkridge Valley Hospital, Fortwood Mental Health were included in the project as well as the New

Beginning Counseling Service. Information was also obtained from the local Suicide Hotline organization and the suicide internet sites. In addition to the posters, pockets size-warning sheet are available for the taking to be placed in their wallets or purses along with business cards that have the hotline phone numbers of the local and national suicide prevention hotlines.

Population and Setting

The population that this community suicide prevention project was focused on was two local health care facilities that gave regular medical care to those individuals that attempted suicide on a regular basis. The project's purpose was to try to make an impact on this group with the goals of yielding a decrease in the suicide attempts. The posters were set up in two emergency room lobbies with the business cards and warning information sheets available for the taking when an individual was looking at the posters. In addition, business cards and the information sheets were taken to several doctors' offices in the areas near the health care facilities.

Discussion of Communication of findings

The project will be presented to the faculty of Southern Adventist University School of Nursing and to the cooperating facilities and physicians before implementing the material into the community.

Significance of Potential Findings

The significance of education in this project could save thousands of lives as well as save thousands of local health care dollars. Teaching plans will continue to be designed to assist patients in coping skills to decrease the levels of

adult attempted suicides. These findings could specifically benefit the local hospitals in utilizing specific skills to better serve the local community, save lives, and impact the local medical centers that are having budgetary problems.

Summary of the Project

This project consisted of defining potential risk factors that could have a significant impact on the local population in regard to life safety. It also can have a significant effect on the amount of health care dollars that are needed to take care of the adult attempted suicide. Community awareness and projects to prevent suicide can be taught to local hospitals, churches, and businesses. The programs can also be set up at health departments in an attempt to incorporate the indigent population. With these possible goals in mind, ongoing changes can be implemented to impact our fellow citizens around us with the possibility of helping those in other communities.

Recommendations

A research study will need to be implemented for the results of the suicide prevention project. Data will need to be examined after adequate time has elapsed. If the program has proven to be beneficial with decreasing the rates of attempted suicides, then this data may be shared with other high risk communities. Saving lives has to be a never-ending goal in the health care field.

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Appendix A

Appendix B

APPENDIX C

APPENDIX D

APPENDIX E

APPENDIX F

APPENDIX G

APPENDIX H