

**DEPRESSION AND VIOLENT DEATHS IN OLDER AMERICANS:
AN EMERGENT PUBLIC MENTAL HEALTH CHALLENGE**

STATEMENT OF

DONNA COHEN, PH.D.

**PROFESSOR AND HEAD
VIOLENCE AND INJURY PREVENTION PROGRAM
DEPARTMENT OF AGING AND MENTAL HEALTH
LOUIS DE LA PARTE FLORIDA MENTAL HEALTH INSTITUTE
UNIVERSITY OF SOUTH FLORIDA**

BEFORE THE

SENATE SPECIAL COMMITTEE ON AGING

A HEARING ON

**SENIOR DEPRESSION: LIFE-SAVING MENTAL HEALTH
TREATMENTS FOR OLDER AMERICANS**

JULY 28, 2003

Chairman Craig, Ranking Member Breaux, and Members of the Committee:

My name is Donna Cohen. I am a professor in the Department of Aging and Mental Health and Head of the Violence and Injury Prevention Program in the Louis de la Parte Florida Mental Health Institute at the University of South Florida. I am also a professor in the Departments of Psychiatry and Behavioral Sciences, Psychology, and Gerontology at the University of South Florida.

Thank you for convening this important hearing. In this era where there are so many compelling issues competing for your time and attention, my colleagues and I appreciate your focus on depression and ways to enhance mental health, vitality, and a meaningful existence for our rapidly aging and changing population. What comes from this hearing and collateral activities will not only affect the aged of today, but our children, who are the aged of tomorrow.

Thank you also for inviting me to testify on the critical public mental health challenges of depression in older Americans and its potential lethal consequences—suicide, homicide, and homicide-suicide. The lack of recognition, diagnosis, and treatment of depression in Americans of all ages, but especially older Americans, is unacceptable since depressive disorders are treatable illnesses. Depression goes undetected in half of the general population, and 80% of the older population.

The bad news is that this is due, in part, to the crippling forces of ageism and fatalism, the inadequate training of service providers, and the shortage of geriatric mental health specialists. The good news is that there are many research, clinical, educational, and community strategies to improve geriatric mental health care, which if successfully implemented will not only decrease unnecessary human suffering, but will also improve the well-being and productivity of our older population.

Depression, coupled with other risk factors, can be lethal. Older persons in the United States and around the world have the highest suicide rates compared to other age groups. However, in the United States older men commit 80% of suicides, whereas in other countries older men and women appear to be equally likely to commit suicide. Older persons show a greater degree of premeditation and lethality of intent compared to younger persons. As seen in Figure 1, from Dr. Jane Pearson, who also is participating in this panel, 72% of older persons use firearms compared to 57% for the general population. The aged are less likely to attempt suicide, with an average of 4 attempts for every completed suicide, compared to 100-200 attempts for every completed suicide in younger populations. Careful planning, increased vulnerabilities, physical health problems, and relative isolation all contribute to increased lethality in older persons.

Suicides are acts mediated by mental health problems, hopelessness, and desperation. Suicide pacts are very rare, but the suicide pact of an older couple in south Florida this past New Year's Eve illustrates the unquiet desperation and what Maris has called a "*bankruptcy of hope and resources*". The method of death is unusual, but the antecedent circumstances—incapacitating illness, depression, and a suicide note—are not.

MS, age 85, and ES, age 80, had planned to die on New Year's Eve. They asked the condominium maintenance man to remove their bedroom screens, complaining that they blocked the ocean breeze. He removed them, and several hours later the couple committed suicide. The results of the medical examiner's investigation showed that MS and ES had crawled across the bedroom floor to the window and fell 17 floors to their death. Both relied on walkers to get around their home. ES appeared to have helped her husband, who was weak and frail from emphysema, by pushing him out the window first before she followed. A note was tape to the telephone; ES had a note in her blouse pocket.

I am going to focus my comments today on three key points:

- Depression, which is prominent in 30-50% of patients with Alzheimer's disease and related disorders, goes unrecognized in acute care and long term care settings. Death wishes or suicidal ideation occur in as many as 50% of patients, at least 15% are at significant risk and 3% complete suicide.
- Depression can be harmful to older caregivers and their patients. It is the most common negative consequence in family caregivers, especially older spouses. Unrecognized and untreated, affected family caregivers are less able to care for their relative and are at risk for a compromised immune system and health problems as well as premature death. The presence of depression in Alzheimer caregivers also increases the risk for elder abuse and severe violence, e.g., kicking, stabbing, and beating.
- Depression can be lethal. Unrecognized and untreated, depressed older persons are at high risk for violent, tragic, and unnecessary deaths—suicide, homicide, and homicide-suicide. Older persons not only have higher suicide rates compared to all other age groups, our research indicates that older persons also have higher homicide-suicide rates than younger persons. Homicide-suicides, where an older person (usually a man) kills one or more persons before committing suicide, are increasing in the older population.

Depression and Violent Deaths in Alzheimer's Disease and Related Disorders

Caring and the value of human life are woven into our society's moral fabric. With the increasing numbers of individuals with Alzheimer's Disease in our older population (from 4 million in 2000 to a projected 9 million in 2030), a group already believed by many to be a drain on the productive growth of our society, the pressure to reexamine our ethical responsibilities and moral contract with the aged has become an issue of

international concern. Alzheimer's disease has become a metaphor for aging, challenging us to appreciate the inalienable dignity of living and dying.

Depression co-exists with Alzheimer's disease in about 30% of patients, and the prevalence is higher in vascular dementias. Depression is most easily recognized early in the disease when individuals can communicate their thoughts and feelings to others, but detection is more difficult in later stages. Left untreated, depression and other psychiatric problems lead to disruptive behavioral problems, inappropriate use of psychotropic drugs, and premature deterioration. On the other hand, accurate diagnosis and interventions can significantly enhance functioning and emotional well-being throughout the course of illness, what one patient described as *"an oasis of hope in a dust bowl of despair."*

Little is known about the prevalence, causes, and risk factors for suicide and homicide in the dementia population, important information to prevent suicide and other violent deaths. It is estimated that about 10% of patients may be at high risk for suicide (400,000 persons) and that 3% (120,000 persons) commit suicide. Suicidal ideation, depression, physical illness, and other psychological problems are prominent, and these patients are capable of killing themselves, often in painful and unusual ways. The methods of death, e.g., ingesting poisons or glass or other agents, drowning, jumping, and hanging, are different than seen in non-dementia populations, where guns are most frequently used.

Homicides and homicide-suicides are rare in the dementia population, but they do occur. A 76-year old husband with dementia stabs his wife in the head with a pick-ax, killing her. A 62-year old daughter shoots her 90-year old mother before turning the gun on herself. An 80-year old husband beats his wife to death with a telephone and cane. An 85-year old man stuffs plastic in the mouth of a bedridden assisted living resident and smothers her with a pillow. The presence of psychotic depression, paranoia, and co-existing vascular dementia appear to be predisposing factors. Random circumstances may escalate into violent deaths at home and in long term care residences when residents have catastrophic reactions, over-react, or misinterpret the words or actions of others.

These violent deaths are largely preventable, but prevention is predicated on prediction, and we are not very good at prediction. Research is key to improving our ability to prevent suicide, homicide, and homicide-suicide in this at-risk population of patients. Not only will the numbers escalate because of increasing life expectancy, proportionally more will have mild and severe dementia as a result of improved early detection and better health care over the course of the illness. The result will be more patients who are not only living longer but also taking longer to die, and families will be coping with what one daughter called *"the death of the mind, the worst death imaginable."*

Depression Can Be Harmful to Older Persons and Family Caregivers

The high prevalence of depression in family members dealing with the stress and strain of caregiving is well documented, especially in Alzheimer families. Older spouses have the highest prevalence of depression, likely reflecting the responsibilities, values, and commitments of marital loyalties. Depression occurs in more than 60% of wives, 40% of husbands, 40% of daughters and daughter-in-laws, 25% of sons, and 25% of other relatives caring for relatives with dementia at home.

Despite frequent medical care visits, usually for the patient, depression in family members goes unrecognized. Even when caregivers know they are having emotional problems, they are usually reluctant or unwilling to admit it and reach out to family members or professionals for help. This is especially true for men, who also manifest depression differently than women, an issue that has been targeted by a new NIMH initiative.

Depressed caregivers are not only less able to care for the patient as well as their own health, they are also at an increased risk to harm their relative or themselves. The overall prevalence of severe violence, e.g., kicking, hitting, stabbing, in family members caring for relatives with dementia at home is 17%. About 6% are cases where caregivers are violent towards patients, 15% are circumstances where patients are violent towards caregivers, and 4% are situations of mutually interactive violence. The presence of significant depression in the caregiver was associated with a three-fold increased risk of severe violence. However, caregiver depression coupled with a living arrangement where the patient lived with family members but without their spouse, was associated with a nine-fold increased risk for severe violence.

Depression Can Be Lethal: Violent Deaths

Homicide-suicides are rare, compared to suicides and homicides, but they are an emerging public health problem, especially in the population age 55 and older. It is estimated that they account for 1,500-2,500 deaths a year, similar to the mortality count for deaths due to meningitis, viral hepatitis, or pulmonary pneumonia. It is important to emphasize that homicide-suicides are not crimes, but rather public health concerns that require our attention in the continuum of violent, unnecessary deaths.

Until recently, there were no studies of the prevalence or clinical patterns of homicide-suicide in older persons. They were assumed to be primarily violent acts involving younger persons who were mentally ill, angry, and jealous of spouses and intimates. When older people were involved they were presumed to be suicide pacts between old, sick husbands and wives or altruistic deaths where sick, older men killed their sick wives before committing suicide. However, these are myths. Homicide-suicide in the aged is much more complicated.

Available data indicate that homicide-suicides in the older population are predominantly spousal/consortial, where the husband, who is usually 4-10 years older, kills a spouse or

girlfriend. However, older perpetrators also kill other family members, children, and nonfamily members. Table 1 compares the characteristics of homicide-suicides in the U.S. population by age.

Although the CDC is developing a National Violent Death Reporting System, there are presently no national data on the prevalence of homicide-suicide. Several national newspaper surveillance studies suggest that older persons account for 500-900 of the estimated 1,500-2,500 total homicide-suicide deaths in the United States each year. In addition to the impact on family members, entire communities are dramatically affected by these tragedies.

Statewide epidemiological studies in Florida have shown that 40% of all homicide-suicides occur in the population age 55 and older, and the rates per 100,000 persons are at least twice as high as seen in the population under age 55. Furthermore, the state incidence rates are increasing in the older population but remaining constant in the younger population.

The results of a national newspaper surveillance study, presented in Table 2, shows that seven states in the United States, with 43% of the U.S. population and 43% of the population age 55 and older, have the most homicide-suicides. Florida not only has the most homicide-suicides, but also the highest rates per 100,000. Florida is followed by California and Texas, tied in second place, and then Pennsylvania, New York, Ohio, and Virginia. These are likely to be underestimates.

Depression, unrecognized and untreated, is a core characteristic of older homicide-suicide perpetrators, who are predominantly men. Analyses of medical examiner post-mortem data show that almost none are being treated with antidepressants. These older men also appear to be making the decision unilaterally, and women are unknowing victims. Furthermore, most of the perpetrators have seen a physician within a week or month of committing the homicide-suicide. These patterns mirror findings about older suicides.

The motivations for spousal homicide-suicides are complex. In addition to depression and other types of psychopathology in the older perpetrator, relationship variables play a role, such as caregiving stress, a strong attachment to the victim, domestic conflict, a pending separation, and other life stressors. Although the risk factors overlap with those for older suicides, there appear to be differences: many homicide-suicide perpetrators are caregivers, while older suicides are care recipients. There are at least three types of spousal/consortial homicide-suicides in the aged. Fifty percent are known as "Dependent-Protective" where the older husband is caring for a wife who is sick or whom he believes is sick; 30% involve domestic violence; and 20% are "Symbiotic," where both have been known to express a desire to be dead, but there is no clear evidence of a pact.

Depression also plays a critical role in older homicides, often referred to as "mercy killings." Older persons rarely kill. National data show that 5% of all homicide offenders are age 55 and older, and 17% involve a spouse, usually male, killing a spouse. There are

several common characteristics of the perpetrator and victim as well as the nature of the killing in this narrow band of spousal homicides. The couple has been married a long time and has enjoyed an intimate, fulfilling relationship. There is almost never evidence of physical or psychological abuse, domestic conflict, financial exploitation and gain, or violence. The older man is almost always caring for a wife who has been sick a long time, and is either suffering from disabling conditions or is terminally ill. The older man is usually severely depressed, exhausted from the stress of caregiving, and the depression has gone undetected despite many medical care visits. The man has also been intimately involved in his wife's care and has done everything possible to secure appropriate services, often lacking.

There is great prosecutorial and judicial discretion in the way these older men are treated in the criminal justice system. Sentences range from jail time served and probation to life in prison. Most spend 1-2 years in prison. Killing is not to be socially sanctioned. However, it is important to examine mitigating issues, including the lack of community resources, the undetected depression, and the severe shortage of physicians and other clinicians trained in geriatric care and palliative care.

Concluding Comments

In addition to continued support for clinical research, interventions need to be developed, tested, and implemented to improve detection, intervention, prevention of suicide and other violent deaths in our older population. Comprehensive recommendations targeting suicides have been identified in recent volumes: the 1999 and 2001 reports from the Office of the Surgeon General's report, the 2002 Institute of Medicine report, and the 2002 Centers for Disease Control report. The blueprint is well-defined. We now need to move forward. We cannot afford not to.

Thank you for listening to me. I am happy to answer any questions.

Suicide by Method, United States 2000 Total Population and Persons 65+



NIH
National Institutes
of Health

TABLE 1. COMPARISON OF CHARACTERISTICS OF YOUNGER AND OLDER HOMICIDE-SUICIDES (Cohen, Brock, Eisdorfer, Putney, in press)

	Young	Old
Suicides		
N (%)	223 (79.4)	58 (20)
Age Range (yr)	20-54	55-90
Gender		
Male	202 (90.6)	52 (89.7)
Female	21 (9.4)	6 (10.3)
Homicides		
N (%)	268 (80.7)	64 (19.3)
Age Range (yr)	<1-84	11-89
Gender		
Male	78 (28.2)	14 (21.5)
Female	199 (71.8)	51 (78.5)
Subtype		
	n (%)	n (%)
Spousal/consortial	158 (73.5)	41 (71.9)
Familial	17 (7.9)	6 (10.5)
Infanticide/pedicide	14 (6.5)	3 (5.3)
Extrafamilial	22 (10.2)	6 (10.5)
Mass murder/Workplace killings	4 (1.9)	1 (1.8)
Method of death		
Firearm	195 (87.4)	49 (84.6)
More than 1 weapon/method used, but at least one gun	16 (7.2)	5 (8.6)
More than 1 weapon/method used, neither or none a gun	5 (2.2)	1 (1.7)
Asphyxiation	1 (0.5)	2 (3.4)
Knife	2 (0.9)	0 (0.0)
Other	4 (1.8)	1 (1.7)

TABLE 2. ESTIMATED ANNUAL HOMICIDE-SUICIDE RATES PER 100,000 POPULATION IN SEVEN STATES WITH THE MOST HOMICIDE-SUICIDES IN 2001 (*Cohen, Brock, Eisdorfer, Putney, in press*)

State	Homicide-Suicide Rate		
	Young	Old	Total
Florida	0.31	0.72	0.41
California	0.17	0.20	0.17
Texas	0.26	0.22	0.25
Pennsylvania	0.26	0.13	0.23
New York	0.13	0.30	0.14
Ohio	0.20	0.16	0.20
Virginia	0.34	0.29	0.33