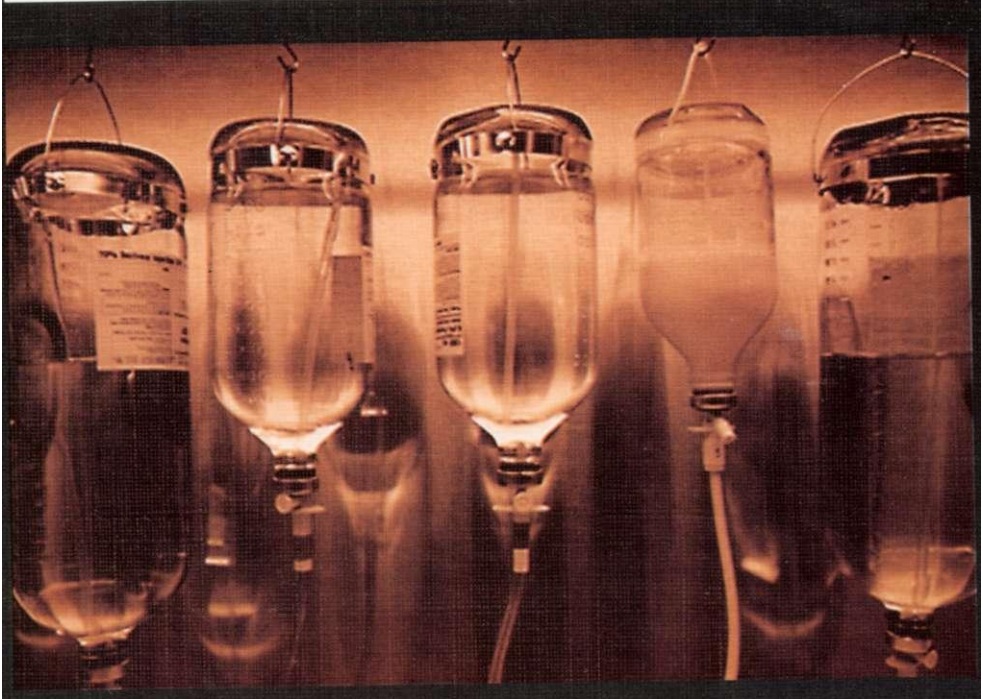
DRUG USE IN ASSISTED SUICIDE AND EUTHANASIA



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Toxicological Issues with Drugs Used to End Life

Barbara Insley Crouch

SUMMARY. Several publications contain euthanizing recipes to aid terminally ill individuals who seek to actively end their lives. Unfortunately, there are few objective data on the lethal doses of most drugs and chemicals in humans. A number of factors may influence the toxicity of individual drugs including underlying illness, other medications and food. Published lethal doses that appear in many aid-in-dying publications may underestimate or overestimate the true lethal doses. Terminally ill individuals who are considering ingesting drugs to hasten death and persons forming opinions on such acts should understand that many factors may affect the toxicity of various drugs and chemicals used to end life and that published euthanizing recipes may be unreliable and lead to prolonged suffering. ***[Article copies available from The Haworth Document Delivery Service: 1-800-342-9678.]***

KEYWORDS. Poisoning, suicide, euthanasia, euthanizing recipes, toxicology, lethal drugs and chemicals, lethal doses, physician-assisted suicide, *Final Exit*

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INTRODUCTION

A number of publications containing pharmacologic recipes to actively end human life are available through right-to-die organizations, the Internet and in bookstores. The intent of many of these publications is to permit comfortable death for individuals suffering from terminal illness; however, a number of factors may interfere with this outcome. This paper discusses some of the factors that may influence the toxic properties of some of the drugs noted in the published recipes. However, it is not the intent of this paper to pass judgement on the relative effectiveness of the published recipes.

The United States death rates from suicide have remained essentially constant at 11.9-12.9 deaths/100,000 for the past 10 years.[1] According to the National Center for Vital Statistics, death from suicide ranked eighth among all causes of death in 1990.[1] The majority of these deaths were a result of violent means. Poisoning with a liquid or solid substances accounted for only 10% of these suicide deaths.[1]

Data on deaths from suicide and suicide attempts are also available from the American Association of Poison Control Center's Toxic Exposure Surveillance System (TESS). This voluntary poisoning surveillance system receives data from participating poison control centers throughout the United States. In 1993, 1,751,476 poisoning exposures were reported to TESS, including 132,788 (7.6%) suspected suicides.[2] Only 338 (0.3%) of the exposures suspected to be suicide attempts resulted in fatality. The death rate from suicide reported by poison control centers remained constant from 1990 through 1993 at 0.3% of attempted suicides resulting in death.[2-5] The substance categories involved in the largest number of deaths were analgesics, antidepressants, stimulants and street drugs, and cardiovascular agents. These are quite different than the substance categories most frequently involved in human poisoning exposures, which are cleaning substances, analgesics, cosmetics and personal care products, cough and cold preparations, and plants.

The frequency of physician-assisted suicide of terminally ill individuals is unknown.[6] The age distribution of individuals seeking physician assisted suicide has not been characterized. A recent study documented that older Americans have a much higher rate of suicide than the general population.[7] Suicides in adults aged 50 and older were more likely to be from violent means (64%) and the most common stressor precipitating the suicide was physical illness. Cancer is more prevalent in older individuals and is probably the most common reason people seek to actively end their lives. However, younger individuals may suffer from permanently disabling conditions or terminal illness that may reduce their functional capac-

ity. The overall reason for seeking active end of life may better relate to physiologic or functional age of the individual rather than actual chronological age.

There are several reasons that suicide is less likely to occur with ingested substances than by violent means. In order to produce a toxic reaction, such as death, a sufficient quantity of a substance, or its toxic metabolite, must reach the site(s) of action in a significant concentration and a sufficient length of time to produce death or toxicity. Interference with the absorption, distribution, biotransformation (metabolism), or elimination of drugs and chemicals may have a pronounced effect on their toxic effects. In addition, prompt medical intervention before a sufficient amount of a substance has reached the target organ will likely result in a much diminished toxic reaction. For most drugs and chemicals, early intervention and good supportive care result in survival of the patient.

LETHAL DOSE INFORMATION

There are few objective data about the lethal doses of drugs/chemicals in humans. The majority of lethality data come from toxicity studies performed in laboratory animals that are conducted during preclinical trials or from case reports. The Lethal Dose 50 **(LD50)** is an experimentally derived dose that causes death in 50% of a sample of animals which receive the agent. This is one of the first tests performed when evaluating the usefulness of a new drug or chemical and provides a crude measure of the relative toxicity of the substance. There are many factors that affect the calculated **LD50** such as species, ages and genders of the animals studied, and environmental factors such as temperature, other chemicals, and diet.

Extrapolation of **LD50** data from animal research to estimate the lethal dose in humans is problematic. Humans may have marked differences from animals in the absorption, distribution, metabolism and excretion of the substances. Additional studies are performed in laboratory animals to determine the effective dose for 50% of a sample of animals receiving the agent **(ED50).** This test evaluates whether a given compound produces the desired therapeutic benefit(s). Two common ways of comparing the relative toxicity of drugs and chemicals are the therapeutic index **(LD50/ED50),** and the margin of safety **(LD1/ED99).** With both tests, the larger the ratio, the greater the safety profile of the compound. As with the **LD50,** there may be problems in directly extrapolating this information to humans.

Another source of data about lethal doses of drugs and chemicals are case reports in the medical literature. One of the primary problems with case reports of human self-poisoning is that they are often based on sub-

jective information. Data on the substances ingested and the amounts ingested may come from histories provided by the patients, friends or relatives. Many studies have demonstrated the unreliability of subjective histories and self report of substance use.[8,9] Survival of the individual following a self-poisoning depends on substance(s) ingested, quantity taken, health of the individual, other medications the individual may have taken, time to medical intervention and the quality of medical care received. Since case reports often do not address many of these issues, fatal dose data derived from case reports may underestimate or overestimate the actual lethal dose of a given substance.

Confirmation of the history in poisoned patients is sometimes obtained by laboratory analysis. Laboratory results may be used to estimate the dose ingested; however, toxicology screens vary in scope and sensitivity. Many laboratories test for only 40 to 50 selected drugs and chemicals. More than 10,000 drugs are available. For example, cardiovascular drugs, (such as beta-sympathetic blockers and calcium channel blockers) are associated with a large number of fatalities reported to poison control centers,[2] however, these drugs are not routinely detected in hospital laboratory toxicology screens. Post mortem toxicology analysis may encompass more drugs and chemicals, but this too varies by laboratory.

EUTHANIZING DRUGS

There are a number of publications that provide euthanizing recipes to the lay public. The book *Final Exit,* written by Derek Humphry, is the best known of these publications.[10] It contains a table of specific drugs and drug doses to use for individuals seeking active end of life along with information on how to obtain the medications. The categories of drugs listed in this table include the barbiturates, benzodiazepines, other sedative/hypnotic agents, and opioid analgesics. *Beyond Final Exit* is a new publication published by the Right to Die Society of Canada. This publication contains nine chapters that address various medical and non-medical means to end life as well as a guide to other suicide manuals. Information is provided on the relevant evidence in support of lethal potential of the various means of suicide, a discussion of unpleasant side effects, as well as other pertinent information.[11] *Departing Drugs, an International Guidebook to Self-Deliverance for the Terminally III* describes several methods involving drugs to end life. It has an expanded list of medications that may be used to end life as compared to *Final Exit.*[12] Other publications are available in the United States and other countries.[13]

Barbiturates may be divided into two groups, short acting and long

acting (Table 1). These drugs are primarily used for their sedative-hypnotic and anticonvulsant properties, however, they have largely been replaced by the safer benzodiazepines. Barbiturates depress central nervous system function and have general anesthetic properties when administered in high doses. Initially, patients become drowsy, but will respond to painful stimulation. As the dose is increased, deep tendon reflexes are lost, patients no longer respond to painful stimulation and respiration is slowed. With large doses, cardiac output and respiration become unstable and will cease without appropriate medical intervention. Individuals who take barbiturates on a daily basis develop pharmacodynamic and pharmacokinetic tolerance. Pharmacodynamic or functional tolerance refers to the need for larger doses to produce the desired pharmacologic effect. Tolerance to the effects of sedation and hypnosis is higher than its effects on lethality. Pharmacokinetic tolerance refers to the ability of the drugs to enhance their own metabolism through induction of hepatic microsomal enzymes. Chronic administration of these agents will not only increase their own metabolism, but will also increase the metabolism of other drugs which are metabolized by the same microsomal enzymes.

The differences among the barbiturates are largely due to differences in chemical structure. In general, short-acting agents are more toxic than long acting agents. Of the barbiturates listed in Table 1, amobarbital is currently available only in an injectable form in the United States. Butabarbital is not commonly used and no data appear in the literature about its toxic or fatal dose in humans. The majority of barbiturate deaths reported in the literature involve pentobarbital or secobarbital. Deaths have been reported with as little as 2 grams, yet patients have survived much larger ingestions.

TABLE 1

BARBITURATES LISTED IN *FINAL EXIT*
SHORT-ACTING
Amobarbital
Secobarbital
Pentobarbital
Butabarbital
LONG-ACTING
Phenobarbital

Phenobarbital is commonly used as an anticonvulsant and the mortality rate from phenobarbital overdoses alone is low. Estimates of the lethal dose vary. One source indicated that 1.5 g of phenobarbital was lethal, while another indicated 6 to 9 g were lethal.[14,15] It is reported that one individual survived the ingestion of 25 g.[15]

Benzodiazepines have sedative, hypnotic, anxiolytic and anticonvulsant properties. Benzodiazepines produce qualitatively similar pharmacologic and toxicologic profiles, however, the individual drugs in this class are quantitatively different. With increasing doses, these agents can have profound depressant effects on the central nervous system leading to respiratory and myocardial depression, and eventually death. However, benzodiazepines are considered relatively safe sedative and anxiolytic agents; the therapeutic index is quite large. Few deaths have been reported from the ingestion of benzodiazepines without other drugs or chemicals. The majority of deaths have occurred when alcohol or other drugs are taken concurrently with benzodiazepines.

Final Exit suggests several other sedative-hypnotic agents: glutethimide, chloral hydrate, meprobamate and methyprylon. These drugs have similar pharmacologic activity to the barbiturates and benzodiazepines, and like the barbiturates, they have been largely replaced in clinical practice by the safer benzodiazepines. Chloral hydrate is indicated for nocturnal sedation and is also used for preoperative sedation, especially in children. In addition to the sedative/hypnotic effects, increasing doses of chloral hydrate produce cardiac and gastrointestinal toxicity. Chloral hydrate has a direct effect on the ability of the heart muscle to contract and may produce cardiac arrhythmias.[16] Chloral hydrate has been reported to cause hemorrhagic gastritis, intestinal necrosis and esophagitis with stricture formation.[16,17] In addition, hepatotoxicity and renal toxicity have been attributed to this agent. Death has been reported following the ingestion of 35 to 40 g, however, survival has been noted following the ingestion of 38 g.[18]

Methyprylon has never been widely used and reports of fatalities have been rare. The toxicity of methyprylon is similar to that of the barbiturates. Meprobamate is primarily used as an antianxiety agent although it does have skeletal muscle relaxant properties. It produces central nervous system depression like the other sedative-hypnotic agents. Toxic doses are variable; death has been reported with as little as 12 g, yet survival has been reported following the ingestion of up to 40 g.[19] Glutethimide is primarily used as a hypnotic agent. In addition to its central nervous system depressant effects, it also has anticholinergic properties and may produce a prolonged and cyclic coma. The lethal dose has been reported to

be 10 to 20 g, although individuals have survived ingestion of 45 g.[19] Following chronic administration of chloral hydrate, methyprylon, meprobamate and glutethimide, pharmacodynamic tolerance does develop to therapeutic effects. In addition, cross tolerance among all of the sedative-hypnotic agents does occur. Chloral hydrate, meprobamate and glutethimide are known to stimulate the hepatic mixed-function oxidase system and increase their own metabolism. Tolerance to the lethal effects of all of the sedative-hypnotic agents is minimal.

Opioid analgesics account for one-fourth of the drugs listed in *Final Exit*. Agents in this class that are listed in the book include codeine, hydromorphone, meperidine, methadone, morphine and propoxyphene. The toxic effects of the opioids are primarily on the central nervous system and gastrointestinal tract. Increasing doses of these agents lead to respiratory depression which is the primary cause of death. Noncardiac pulmonary edema is present with severe intoxication. In therapeutic and toxic doses these drugs may cause significant nausea, vomiting and constipation. Certain opioid analgesic agents have additional toxicologic considerations. Seizures may occur after chronic use of meperidine due to the accumulation of a toxic metabolite. Propoxyphene may cause both seizures and cardiac arrhythmias following acute overdoses. Terminally ill patients often receive opioid analgesics for pain management. Tolerance develops to some of the effects of these drugs and extremely high doses may be needed and, indeed are appropriate, for pain control in some terminally ill patients. The acute toxic dose is markedly different for individuals who have not had continual exposure to opioids. Lethal doses, therefore, are difficult to define.

The last compound listed as a euthanizing drug in *Final Exit* does not fit into any of the pharmacologic categories listed above. This is orphenadrine, which has anticholinergic and some antihistaminic properties. The chemical structure of this agent is similar to that of diphenhydramine. Anticholinergic toxicities at high doses include hypertension, tachycardia, dilated pupils, hallucinations, dry and flushed skin and possibly seizures. Large doses will also slow movement through the gastrointestinal tract which can result in delayed or decreased absorption of both this and other drugs and chemicals. Orphenadrine is used as an adjuvant treatment for Parkinson's disease and to reduce skeletal muscle spasm. However, it does not have direct skeletal muscle activity. The lethal dose of orphenadrine is reported to be between 2 and 3 g, however, survival after the ingestion of 5 g has been reported.[20]

Final Exit recommends ingestion of alcohol with many of the drugs listed. Alcohol enhances the central nervous system depressant effects of

the sedative-hypnotic and opioid drugs. However, it is not known how much alcohol is necessary to do so with each individual drug. It is also not known whether increasing the alcohol dose will proportionally reduce the amount of drug needed to cause toxicity. Large doses of alcohol are irritating to the gastrointestinal tract and may cause spontaneous vomiting.

There are several limitations to the euthanizing potential of the drugs listed in *Final Exit.* For example, the book does not include some of the more lethal categories of drugs and chemicals such as tricyclic antidepressants, beta-blockers and calcium channel blockers, cyanide, and carbon monoxide. Tricyclic antidepressants are the most common cause of suicide death by poisoning reported to poison control centers. Calcium channel blockers and beta-blockers are also involved in a large number of deaths reported to poison control centers (Table 2). The primary toxic effects of the tricyclic antidepressants are on the cardiovascular and the central nervous system. However, rapid development of seizures make these agents unpleasant means of suicide.

A second limitation is that some of the agents included on this list may also cause unpleasant effects prior to death. Orphenadrine is an anticholinergic agent. Large amounts of this drug will produce hallucinations, flushing, elevated body temperature, racing heart, increased blood pressure and possibly seizures. Seizures also may occur following large overdoses of

TABLE 2

REPRESENTATIVE EXAMPLES OF DRUGS ASSOCIATED WITH DEATHS THAT HAVE BEEN REPORTED TO POISON CENTERS
TRICYCLIC ANTIDEPRESSANTS
amitnptyline Elavil, Endep, generics
doxepin Sinequan, Adapin, generics
imipramine Tofranil, J an amine, generics
BETA SYMPATHETIC BLOCKERS
propranolol Inderal, generics
CALCIUM CHANNEL BLOCKERS
verapamil Calan, Isoptin, Veralan, generics
diltiazem Cardizem, Dilacor, generics
nifedipine Procardia, Adalat, generics

propoxyphene or meperidine. Chloral hydrate is extremely irritating to the digestive tract and vomiting is quite common following an overdose.

A third limitation is that the ability to obtain the drugs listed in *Final Exit* and other publications depends on the willingness of physicians to prescribe large quantities of the medications and the pharmacists' willingness to fill potentially lethal prescriptions. A number of drugs listed in *Final Exit* have been largely replaced by safer, more effective agents in clinical practice. Therefore, pharmacists are likely to question the validity of prescriptions for many of the drugs listed, regardless of the quantity prescribed.

One of the major limitations of *Final Exit* and other suicide manuals that attempt to provide lethal dosage data estimates, is that underlying disease states and chronic drug therapy may affect the absorption, distribution, metabolism and excretion of substances ingested. Factors that may influence the absorption of drugs and chemicals include physical properties of the preparation, solubility of the compound, dissolution rate, gastric emptying time, intestinal motility, tissue perfusion, first-pass hepatic metabolism and surface area for absorption. These factors influence both the rate and extent of absorption. The opioid analgesics, e.g., codeine, hydromorphone, meperidine, morphine, methadone, as well as drugs with anticholinergic properties, e.g., glutethimide and orphenadrine, impede gastrointestinal motility. Such agents may actually delay their own absorption and may delay the absorption of other compounds. This delay in absorption occurs because the primary site for drug absorption is the small intestine. When motility in the gastrointestinal tract is slowed, more drug remains in the stomach for a longer time before reaching the normal site of absorption. Other conditions which may delay absorption include hypotension, changes in the pH of the stomach and intestine, and spasm of the pylorus. The pylorus is the opening between the stomach and the intestine. The actual extent of absorption is usually not affected.

Another reason for a delay in absorption is the formation of a mass or bezoar. Meprobamate is known to form a pharmaco-bezoar; a concretion of tablets in the stomach or intestine that form due to poor solubility characteristics of the drug. This occurs when a large number of tablets is ingested at the same time. Certain drugs used as antiemetics, e.g., metoclopramide, cisipride, may shorten gastric emptying time. Although theoretically rapid passage through the digestive system may move certain drugs past the site of absorption and therefore decrease absorption, this effect has not been documented in humans. Cathartics also increase gastrointestinal motility which might also decrease the extent of absorption of certain drugs. The use of cathartics in the treatment of the poisoned patient have

not by themselves proven to be effective at preventing absorption. Hypotension, shock and other disease states that may result in a diminished blood flow to the stomach and intestines may limit absorption of drugs from the gastrointestinal tract. Chronic gastrointestinal diseases may also affect the absorption of certain drugs and chemicals.

After a drug is absorbed, several factors may influence the rate and extent of distribution of the drug to its site(s) of action. Tissue perfusion, pH, protein binding, tissue binding and lipid solubility are the major factors influencing distribution. These factors may enhance or diminish the toxic effects of a given drug.

The liver is the primary organ for detoxifying drugs and chemicals. Certain drugs and chemicals when administered chronically may induce liver microsomal enzymes which, in turn, may enhance detoxification of the compound. Barbiturates and chloral hydrate induce hepatic enzymes; they may induce their own metabolism and therefore enhance their own elimination from the body.

Elimination of drugs from the body may also be affected by tissue perfusion and pH as well as liver and kidney function. Hypotension, shock and other disease states may also result in diminished blood flow to the liver and kidneys, causing a decrease in the distribution and elimination of the drug or chemical. The acid-base balance (pH) in the blood also will affect the distribution and elimination of susceptible drugs. For example, phenobarbital is a weak acid. If an individual's blood is on the acidotic side, more drug is likely to distribute into the brain resulting in an increase in toxic effects. If the urine is alkalotic, more drug will be eliminated resulting in a decrease in toxicity.

Drug interactions with foods are also important considerations when interpreting toxic doses of drugs. Interactions between two or more drugs may result in a number of types of reactions. Certain drugs and foods may affect the rate and extent of absorption of other drugs. For example, food may decrease the rate of absorption of benzodiazepines. Antacids are known to decrease the rate and extent of a number of drugs (Table 3). In addition, interactions may reduce or enhance the effects of a drug at the receptor site or may affect the metabolism or elimination of the agent. For example, cimetidine, a common ulcer medication, can block the metabolism of a number of drugs such as theophylline, resulting in increased toxicity. Carbamazepine, an anti-seizure medication, can increase the metabolism of cyclic antidepressants, reducing their effectiveness and possibly their toxicity. Such drug interactions may enhance or reduce the toxic effects of any given drug.

No good data exist on fatal doses of drugs taken alone by humans or

TABLE 3

DRUGS AFFECTED BY CO-ADMINISTRATION OF ANTACIDS	
DRUG	**EFFECT**
propranol (beta-blocker)	extent of absorption affected
chloroquine	extent of absorption affected
diazepam	rate of absorption affected
ciprofloxacin (antibiotic)	extent of absorption affected

when one considers the many potential confounding factors. Because of this, reliance on these recipes may result in an unsuccessful suicide. Consequences of unsuccessful suicides are hard to predict. Individuals have recovered completely; others have been left with significant residual disability. According to the 1993 report of TESS, 2% of those poisonings that produced life-threatening signs and symptoms had permanent sequelae.[2]

In summary, reliable data on the consistently fatal doses of drug in humans are lacking. Individual factors such as underlying disease states, other medications, and food also may affect the toxicity of a given compound making it difficult to determine the toxic doses. The recipes provided in books such as *Final Exit* may produce fatal outcomes for some individuals, but it is probable that not all individuals who follow these instructions will have the intended outcomes.

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When Drugs Fail: Assisted Deaths and Not-So-Lethal Drugs

Stephen Jamison

SUMMARY. One hundred and sixty interviews with family members, partners, and friends who participated in 140 cases of non-physician-assisted death reveal a number of problems that surround assisted dying. These observations describe events in cases in which an assisted death did not occur as planned, often due to the less-than-fully lethal nature of the drugs used. Of 140 deaths, only 15 were designated as suicides; in 41 of these remaining 125 deaths, physicians knowingly provided lethal prescriptions, were fully aware of their patients' plans to end their lives, and signed their death certificates claiming "natural" causes. Self-enacted and assisted death in terminal illness is far more common than has been previously suspected. While self-enacted or assisted death can be important for those involved, it can also produce regrets when drugs fail. The case descriptions related here describe what happens when drugs fail, and how partners and family of the dying person turn to more desperate

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means, often in haste and with inadequate emotional preparation, rapidly escalating from "merely being present" to "doing anything necessary" to ensure death. Frequent failure due to lack of adequate information leads to frequent over-involvement by significant others. *[Article copies available from The Haworth Document Delivery Service: 1-800-342-9678.]*

KEYWORDS. Suicide, assisted suicide, drugs, lethal dose, physician-assisted suicide, death, dying, euthanasia, failure of drugs

In 1991,I began a research project to investigate the behavior of family members, partners, and friends in cases of non-physician assisted death.[1] In particular, I was interested in the circumstances of these deaths, the motives of those who engaged in this practice, and the effects of such actions on participants. By mid-1994,I had completed 160 interviews with participants in 140 deaths.[2]

This paper focuses on some of the problems that surround assisted dying, especially those that occur when significant others attempt to help a loved one die in the absence of potentially lethal prescriptions. Although the cases I describe in the following pages are not unusual, the reader needs to be aware that I have purposefully excluded discussion of cases where an assisted death was accomplished as planned and where nothing unexpected occurred.

THE EXTENT OF ASSISTED DEATH

In the absence of legal opportunities for assisted dying, those with life threatening conditions have three options. The first is to follow the course of their illness to a natural death either at home with home nursing or hospice care or in a medical or convalescent facility. This is the typical way that most of us die. A second option is a death enacted by a patient after he or she has secured potentially lethal means. The third option is a death assisted in some way by one's partner, family members, or friends. Of particular interest here are the second and third options, where a person's choice has been made possible because of "assistance" by others. Such assistance may range from help in securing the lethal means to ensuring the death through further involvement at the end.

No one knows the extent to which these latter two options are used by those with life threatening conditions. This is because both self-enacted and assisted deaths by the terminally ill are often masked by the nature of

their medical condition. Especially when this is combined with lack of evidence to the contrary (i.e., there are no suicide notes, no empty bottles of potentially lethal prescriptions, etc.), the official label of "suicide" is seldom applied. Partners, family members, and friends often cover up the actual cause of death to eliminate the "stigma" of suicide for religious, familial, or social purposes, or to protect themselves or physicians from any suspicion of involvement. In terms of the former, one interviewee told me that he removed all evidence of a physician-assisted and self-enacted death from his partner's home because "this was a self-deliverance, not a suicide." He went on to say that: "There's a huge difference, and I wasn't going to let them apply that label."

This occurred quite frequently in my own sample. For example, in the 140 cases of assisted deaths that comprised my research, only 15 were designated as suicides. None were considered to be assisted deaths, though all were aided in some fashion. Moreover, in these 15 instances, "suicide" as an official cause of death was planned for - in advance - to protect others from any suspicion of involvement. In nearly every case, this became necessary because the individuals were not suffering from a condition where death was imminent. In one case a man's prostate cancer had metastasized to his hip, and was extremely painful, but had not yet spread to his vital organs.

Similarly, in the case of several other individuals, their multiple sclerosis (MS), amyotropic; lateral sclerosis (ALS, Lou Gehrig's Disease) and AIDS-related conditions had not yet reached critical, life-threatening stages. Any attempt to make these assisted deaths look anything other than suicide would have increased the risk for family members, who indeed were quite involved at the end. In a great number of cases it also was apparent that physicians knowingly participated in this secrecy. This can be seen in the fact that in 41 of the other 125 deaths I studied, physicians knowingly provided potentially lethal prescriptions, were fully aware of their patients' plans to end their lives, and signed their death certificates claiming "natural" causes. As one physician told me:

> This was private. It was between the two of us. He was dying, and suffering greatly, and he just decided to eliminate the last few ugly days. He wouldn't have done this had he not been dying. Sure his death was accelerated, but so too are many others in hospital settings that no one would ever claim were anything less than natural.

And even where physicians do not knowingly participate in such assistance, and whether or not they harbor suspicions, they will often sign such certificates due to the terminal nature of a patient's illness. This occurred

in the 84 other cases where the deaths came unexpectedly but could be explained by an underlying physical cause. All of this suggests that self-enacted and assisted death by those with life threatening conditions is far more common than has been previously suspected.

SELF-ENACTED VERSUS ASSISTED DEATH

Leaving aside questions of the morality of assistance and the rationality of particular actions, self-enacted and assisted deaths each have their own benefits and drawbacks. Self-enacted deaths, for example, protect others from the possibility of further involvement by excluding them. On the negative side, however, this exclusion eliminates the potential for them to voice their last minute opposition or to achieve final closure. Moreover, it can leave survivors especially upset that a loved one died alone, and always wondering if the last minutes were emotionally or physically painful and if the final act was truly symptom-driven or was motivated by something else.

Other drawbacks also exist, especially if the act occurs without warning. These include the shock of discovery, the regret of not being able to say goodbye, and the possible burden of an "official suicide" - unless someone acts at the time of discovery to cover up this feature of the death. Most importantly, lone efforts by individuals to end their lives pose a significant risk for failure and, depending on the methods used, can increase the potential for physiological damage should they survive these attempts.

By contrast, a death assisted by a partner, family members, or friends provides the benefit of not dying alone, which can also be important for those who might otherwise regret not being with a loved one at this critical time. The presence of others provides the opportunity for a final closure or for words that can change a person's mind. In addition, it also gives others the opportunity of being present and participating in rituals honoring a life and its end. Most importantly, such a presence can also ensure that a death is completed as it was intended. The latter, however, can also be a serious drawback, and errors can and do occur when others are present-even with the best made plans. Drugs often fail, and partners and family, who may be unprepared emotionally and practically, may hesitantly come to use whatever means are left at their disposal to ensure a dying person's last request. Other failings that can occur include the rush for final action, lack of adequate planning, the intrusion of time into the dying process, the selection of settings that fail to guarantee others with a sense of comfort, attempts by the dying to coerce the attendance of unprepared family members and friends, and less than proper motives for participation.

WHEN DRUGS AND SITUATIONS FAIL

Most participants who expressed regrets to me about their involvement in an assisted death did not oppose the dying person's plans to end his or her life, but attached these feelings to the nature of the event itself. This usually was because their expectations of "helping" in only benign, supportive ways were seriously altered due to the failure of the drugs to work.

Too often, out of perceived necessity, their roles gradually escalated from observers "merely being present" to actors "doing anything necessary" to ensure the death of another. As a result, the character of the event shifted from an expectation of a positive and peaceful death in the presence of loving family and friends to a situation fraught with fear, uncertainty, disorder, and an unwanted concentration on the need to complete a task-to fulfill the other's last wish to die. In this way, earlier expectations of a death, with features of minimal participation, limited risk for participants, opportunities for mutual farewell, and even aesthetic orchestration of final rituals, were often shattered. The act of completing and covering up the actual cause of death took precedence.

Many blamed their problems on the failure of the means, that is, the selection of the "wrong" drugs. This was based on the assumption that if one pill can help you sleep, then a hundred will ensure your death, or that if secobarbital works then so will pentobarbital. In the end, drugs that were used did not cause death in the time anticipated and, as the possibility of death began to appear more remote, others present saw no choice but to intervene. Time also became a factor; most simply, the drugs failed to work within a comfortable time period, and either time or patience ran out. At that moment intervention seemed "far easier than waiting any longer." As one man told me:

> At least I had an idea of what to do when he died. I had a vague understanding of what would happen and had the phone numbers of who to call. But I was totally unprepared for failure. This would mean that it would officially become a suicide attempt and could implicate the doctor who gave us the prescription. Plus, I didn't know if the overdose would cause serious damage when he recovered. I didn't want to see him in worse shape afterwards than he'd been in before.

In this case other factors came into play. These included: lack of practical preparation, elevated expectations of success, and the inability of all parties to communicate about realistic possibilities. In this case, and in nearly every other instance of failure that I documented, the result was

further involvement by participants than they expected or desired. This occurred both where drugs were obtained from non-medical sources and in a few cases, like Jessica's, where physicians deliberately provided medications they believed would be adequate to cause death.

This type of mistake occurred most frequently when physicians were not brought into the equation, and when the person who was dying and his or her partner or family members used themselves as sources for drugs, and assumed that an arsenal of medications had to work because of their sheer volume and variety.

This occurred in Bill's death. As his health deteriorated from AIDS to where he was told that he had but weeks to live, Bill began his planning. He set a date to die after he obtained a new prescription for duragesic patches of a synthetic narcotic analgesic. He then invited his family to his house for the weekend, and used this time to say goodbye. After spending a second full day with his family, he went to his bedroom with his brother and partner. Selecting from a storehouse of medications, he filled six syringes with Demerol, which were to be injected later after he was unconscious. He then took a hot shower, and applied twenty duragesic patches to his body.

Finally, he swallowed more than two hundred tablets of Soma, Valium, Halcyon, and various other pain relievers, including morphine in the form of MS Contin. Within minutes he was unconscious, and the family, gathered in the next room, began what they felt would be a short wait. After three hours, Bill's brother injected the syringes of Demerol into a muscle on Bill's thigh. Some ten hours after Bill began his journey, a cry was heard coming from his room. Bill's father, brother, and partner rushed in only to find him sitting up, conscious, and vomiting. The drugs Bill had taken had not been assimilated. A physician friend later told Bill's father that he believed the morphine "must've paralyzed his gut." Someone else told his partner that "it was probably the Soma." Bill's brother blamed himself for not giving the injections intravenously, because he was "afraid of contact with his blood." Whatever the cause, Bill fell back into a light sleep, while his family debated what to do next. His brother argued that it was too late, that they had failed, and that Bill would probably need to be hospitalized. Bill's father suggested that they use a plastic bag. Bill had prepared for this possibility by leaving a kitchen trash bag and rubber bands on the bedside table. His brother argued that Bill would awaken and "fight it." His father disagreed, and said: "He won't fight; he wants this more than anything." In resignation, his brother agreed to try. Although Bill was asleep, he was not unconscious. As a result, when his brother placed the bag over Bill's head he briefly awakened.

His father and partner told him to "just relax." In response, Bill managed one last word, "okay." He died minutes later, without a struggle.

The family looked upon his as a "good death" and were prepared for the final act of involvement, but the uncertainty about his near-conscious state, and the possibility of his "fighting the bag," created an atmosphere of stress and indecision. Bill's brother told me later that this was "the longest night" of his life.

WHEN TIME RUNS OUT

A doctor once told me that "the only way you can die from Valium is to get run over by the truck delivering it." I was reminded of this when I was told about Peter's death. In his case a mixture of 500 milligrams of Valium with bourbon was followed eight hours later with a similar decision to use a plastic bag. This was motivated not by obvious failure, but by a concern for time. At nearly 11:00 p.m., the participants knew that Peter had but two hours to die. His wife, who wanted to know nothing about the death until after his body was gone, was due home at 1:00 a.m. Although Peter had set aside a plastic bag and rubber bands for this purpose, "his eyes opened instantly" when they placed the bag over his head. "He wasn't conscious, and he didn't say anything, but he "raised his hands to his face to remove it." A split second of confusion was followed by the unspoken joint silent decision by two of the participants to hold down Peter's arms until his death. Doing so, they met their deadline; Peter's body was gone when his wife got home. Nevertheless, one participant told me later that it wasn't what he expected: "If he wasn't dying, and if he didn't want this so badly, I'd call it murder." He then said: "Still, it hasn't been very comfortable living with the images."

This situation developed in Peter's case solely because of his lack of preparation. Two years before he died, he talked openly about getting his "self deliverance kit together." Reading *Final Exit,* he assumed that Valium would work, especially if he also used alcohol. He had failed to read the small print, and found it easier to slowly set aside the same drug he'd been using for years, than to approach his physician or start a search for other drugs. He also failed to think clearly about the time factor. As a result, his friends, who were practically and emotionally unprepared, found themselves being forced to act in ways that weren't in the original script.

This factor of time had another dimension. It became more of a problem when friends were involved instead of family members, and where individuals were isolated in their role as "helpers," and had feelings of exhaustion, locational discomfort, or wanted to be elsewhere. As another man explained:

> I don't want to sound callous, because I really cared for him, but I had my own family, and my own plans, and I was scared, and I didn't want to be there any more, I was tired, and I wanted it over with and to go home.

WEAK DRUGS AND STRONG IMAGES

In an episode similar to that in Peter's case, Sheila described what happened when she and her sister helped their brother die in front of their parents. This case exemplifies what could've happened with Bill, and what his brother feared most but did not materialize. Sheila and her family knew that the plastic bag would be necessary, and were prepared for it emotionally, because they were certain that "the drugs would never do it." Nevertheless, the drugs were "all he had, and he'd run out of time to get any more." What they weren't prepared for was having to "hold his hands down" when her brother "began to fight" against the bag. She then said:

> I just smiled and pretended I was just holding his hand, but this was all for my parents benefit, because I was using all the strength I had. Behind my smile, inside I was screaming. I looked over to my sister and saw that she was doing the same thing. She was using all her strength to hold his arm down, all the while looking into my eyes. Neither of us said anything. We just listened to his breathing and waited several minutes, hours it seemed, until it was over.

She explained to me that she didn't want her brother's death, which was horrible enough, to "become something horrific," a memory her parents would never be able to erase. When her sister asked about what had happened, Sheila said, "Oh it was just a natural response." However, inside she wondered, "Did I just kill somebody? Did he still want to die or was he changing his mind?" Sheila continued, "I had to tell myself, 'He was unconscious, this was just his body trying to get air.' My brother and I had talked about this forever and he never once wavered If he had I would've thought 'My God, this is all a mistake.' So I came to accept that - although it was unpleasant - it was necessary and okay."

Sheila also explained to me that she desperately wanted to talk with someone about the event, but knew that this couldn't be her sister. "I didn't trust my friends' reactions, so I kept it in." She didn't want to talk to her sister and raise doubts in her mind about her role in their brother's death. "I didn't want her to be burdened as I'd been."

One of the key problems is that no one wants to talk about a possible failure. Both the dying and those who assist don't usually want to think about drugs not working, or talk graphically about such a scenario. This can occur even when a plastic bag is present by the bedside. When Bill brought up the topic, for example, his father commented, "The drugs will work, son; you've got enough to kill an army." Nevertheless, Bill did talk briefly with his partner and brother and gave it special thought, leaving it on the table next to his bed. Similarly, a friend of Peter's said that he had mentioned it "but briefly." He explained: "I didn't want to listen to this, because I just knew the combination of Valium and bourbon would work, especially since Peter hadn't had a drink in more than ten years." He added, "If I'd known this would happen I wouldn't have agreed to be there; I only wanted to give him support." And even where the use of additional methods was planned for, full discussion of possibilities was kept to a minimum. This happened in the case of Sheila who said, "The bag was our primary method, but I never thought he'd put up a fight."

YOU HAVE TO TRUST YOUR SOURCE

One man I interviewed said that he would do anything - but use a plastic bag-to help his partner die. He explained that his partner, Daryl, feared suffocation because of a recent hospitalization for Pneumocystis pneumonia. Instead, he decided to obtain street heroin, which the two of them could inject directly into Daryl's "central line," a catheter surgically implanted into his chest to ease the infusion of drugs as part of his treatment for an AIDS-related condition. Because of this central line, Allen believed a lethal injection of heroin to be a "technically simple" matter. The plan was devised due to Daryl's inability to keep food down. Allen's assistance became necessary because Daryl wasn't able to "do it himself with one shot of heroin before he went unconscious. Both knew that further injections would be necessary. After informing an acquaintance who "dabbled" in street drugs about their situation, Allen secured "a balloon with enough heroin to kill four people."

Allen then told me his story. The saga began on a Sunday afternoon. At 2:30 pm Daryl took four sleeping pills, waited ten minutes, and then injected liimself with one dose of heroin. He then asked Allen to help him get to bed. He soon became unconscious, and Allen immediately gave him a second injection and followed with four shots of liquid oral morphine. For Daryl, death did not come quickly. Over the next several hours Allen gave him two more shots of heroin, more than sixty shots of liquid oral

morphine, and even ten injections of vodka. None of this worked. He went on to explain:

> At ten he was still alive so I slipped a plastic trash bag over his head and held it around his neck with my hands. It only seemed to take about four minutes before he finally stopped breathing. As soon as he was dead, I called the answering service to locate his doctor.

Although Daryl's physicians had agreed to sign his death certificate, they could not be reached, and Allen was eventually connected to another backup physician. This man told Allen that he "wouldn't sign anything," but that Allen should call 911. Not knowing what else to do, he did. Allen told them that he thought Daryl was dead, but they arrived in full force.

> I hopped in [the ambulance], and they began working on him. One turned to the other and said: 'I think I got a pulse.' That did it. I began to cry, and I said: 'Please, just let him die.' They looked at me, stopped working on him, and slowed down all the way to the hospital.

Allen finished his story by saying that this was "the longest day" in his life. "I'd been there for more than ten hours without a break; I had no one to talk to, and no one to relieve me." He added that giving the injections was the most difficult thing he'd ever done in his life. I'll never forget dulling all those needle points and tearing up his line with all those injections. His last words were, " 'Don't let me wake up.' So I didn't." Allen's situation was intensified by the excessive nature of the act - by giving more than seventy injections, and then still having to use the plastic bag, something he'd been trying to avoid all along. The negative nature of the death was accentuated by his extreme isolation, constant feelings of failure, and fear of discovery. He summed up his experience by saying: "I'd use a .38 before ever going through this again; It would have been quicker and a lot easier."

WHEN GOOD DRUGS FAIL

When Florence asked her daughter, Helen, to help her die, it didn't come as a surprise. This occurred back in 1979, before the birth of the Hemlock Society. Nevertheless, as a nurse practitioner, Helen knew what to do. She supplied her mother with a large amount of pentobarbital.

There was nothing imminently wrong with Florence. She'd had a mas-

tectomy and partial hysterectomy in the early 1950s, and was left with a permanent disability in one arm due to her surgery. Because of the breast cancer she was unable to take estrogen following the removal of her ovaries. This left her with an insidious depression for twenty five years. Her mother had been an active member of the Christian Science Church, which Helen had rejected. Still, one part of this philosophy rubbed off on her. According to Helen, this was to "not hang around and inch out life." As the general effects of aging also set in, the two of them talked about her philosophy and about how she would do it. Florence's husband had died some ten years earlier, and in addition to Helen, Florence had another daughter and son.

Florence perceived that at 80 years of age "things were not getting any better." She had recently fallen and now needed care. Her son offered to set her up in her own apartment adjacent to his house, but she refused. Florence had other ideas. Florence's first attempt to die came without warning. She had held onto the pills Helen had given her for about five months. She failed and went into a deep coma. When she was found by a nurse's aide, she was unconscious "supposedly from a thrombosis at the base of the brain." The doctors who had hospitalized her told Helen that her mother "had apparently suffered a stroke," but she knew better. "When I was told that 'Mom's unconscious with a stroke.' I said 'Uh-huh, oh yeah, right.' I went to her house and sure enough I found the empty bottle under the bathroom sink, where she had stored her pills."

At the hospital Florence was placed in the ICU and the physician told Helen and her siblings that she'd had "a massive stroke at the base of her brain." After a while Florence finally began to respond to pain. As a result, Helen told them to "just let her go and keep her comfortable." Helen had other plans. After everyone left the room and Helen was alone with her mother in a single room at the hospital, she realized that she "was the only one who could appreciate" what Florence had done. "They hadn't seen this for what it was, a suicide attempt." Helen continued:

> When I knew I was completely alone with her I took an extra pillow and began to smother her with it. Suddenly I could hear noises in the hallway and recognized my sister's voice, and I knew that she and whoever she was with were going to be coming through the door any second. I instantly hid the pillow and in walked my sister and the nurse. As they did I called out 'Oh my goodness, I don't know what's happening to her.' I don't know if the nurse suspected anything, and I didn't care, because I knew I could get away with it without a problem. However, I now knew that something else was going to have to be done.

Helen immediately took her siblings aside and told them that they needed a family conference. When they met, away from the hospital, Helen told them "what really happened to their mother, about her taking the pills." Helen's sister, who lived in another state, complained about her mother's decision to act without her, without saying good-bye. In response, Helen told her: "She wasn't doing it for you or me and David. She was doing it because she had to do it for herself. Mom was angry and frustrated with life." Helen's sister calmed down, and then said that her mother had a living will. Grasping this as justification, they decided to help her die, that "this was what her living will really meant." There were some other arguments, "but not about this."

Taking charge, Helen first decided to gently approach her mother's doctor, but changed her mind once she discovered he was Catholic. "We talked about not using heroic measures, and he said that he had no trouble with this, but I decided not to talk with him further about helping."

> During the next three days Helen made her plans. Another medical professional helped her get what she needed, "something like curare." She then went to the hospital and waited for the nurses to make their rounds. With me I had a syringe of sleeping medication and two vials of this muscle paralyzer. I gave her the sleeping medication and then injected her with the other. I knew there would be no post-mortem autopsy. I stayed with my mom a little while then went into the waiting room. An hour after I gave her the drugs my sister made the discovery. Unfortunately, mom began to show some signs, and I think they knew that something had happened, but they wouldn't have done anything. After all, my father had been a prominent physician at the same hospital.

After Helen and her sister finally left the hospital, they gathered with the rest of the family. Helen told them what she'd done. "My husband was totally sympathetic, and we all laughed and cried." Helen and her husband have never told their own children, who were in their early twenties at the time. And Helen's sister never told her own husband, as "his own brother committed suicide" and Helen's sister "didn't think that it was appropriate to burden him with this information, that it might bring up his own grief." Helen added that: "We didn't want to mess with his defense mechanisms." As a result, Helen, her sister and brother, and two of their spouses hold the secret.

Helen "considered it an honor to help." She'd had a special relationship with her mother, and the two shared a "great deal of humor, trust, and honesty." One time, for example, her mother had even told Helen that,

though she loved her, she "would've aborted her had it been legal at the time." However, this level of honesty didn't seem to apply to all things, especially her mother's final decision to die. As Helen told me: "I regret that I couldn't have talked to her more directly about the issues before she died, but whenever I tried to bring up the topic, mom would say, 'Don't be maudlin.'" After her mother's death, Helen did go in for counseling, twice, some three months after her death, "just to talk about it with someone because I knew this was important." She said, "You have to understand that I had no problem with Mom's death, but as a medical professional I decided that I needed it; it was on my agenda from the very start." Although she suggested the same for her siblings, no one else followed suit.

> Until now, I've never talked about it with anyone except for those two visits with the therapist. It was quite something. I was crying and he was crying and the therapist then told me 'I want you to know that we had a similar situation in our family.' I had sat on it for three months before I went to the therapist. We're not all alike. My husband has never initiated communication about this and I was too distant to bring it up. I wanted to talk with someone about it.

Five years later, Helen found out about the Hemlock Society from another healthcare professional. Helen picked up a copy of *Let Me Die*, and then joined. Looking back, Helen has had no remorse over giving her mother an injection. Nor was she afraid of discovery. As she said, "My own status in the community was quite high. We were an important family. No one would've prosecuted me, it would never have gotten that far." And in looking at other losses, and the impact of this event on her grieving process, she has seen no difference. Instead, "my only grief was over the lack of knowledge of ways to make her more comfortable during life."

The event has had one effect on her, however: Helen and her husband have made a pact. She has told her husband, a physician, that "If I need help, you bloody well better do it." He knows what she expects to be done and that, "if the drugs don't work, he'll help with the plastic bag." In addition, his own mother is infirm, and they've talked about the possibility of his eventual Alzheimer's. Helen's husband has asked that if this should happen, she should take him out "for a walk on a cold night." She explained, "You don't leave tracks in falling snow, if you know what I mean." Even with her experience, which she has defined as positive, she still believes that "legalization without strong controls would be wrong," and thinks that "old age abuse by adult family members would be a problem." Her brother's wife has taken a different approach. "She took

this all very hard," Helen told me. "She went back to her town and actually started a hospice program there, partly because of mom, and partly because of the death of her own father."

WHEN DOCTORS FAIL

In a seemingly significant number of cases, physicians who decide to help a patient die are either unaware of what might work, or are reticent to prescribe the truly lethal means to do so. This hesitation may well be out of fear that because drugs such as barbiturates are tracked by government agencies, the death of a patient might be investigated. As a result, some doctors provide what turn out to be the "wrong" drugs. The consequences of this can often be even worse than when partners, families, and friends take matters into their own hands and pool their own pharmaceutical resources. This is because, if physicians are involved, the expectations of failure and potential family involvement are lessened; a patient and their significant others may place too high a level of trust in both the physician's knowledge and in their prescription.

This happened in the case of Jessica, whose physician-assisted death failed because her attempt was discovered in progress. Her physician had assured her that the large number of Percocet tablets would be effective for this purpose. Instead, the attempt left her in extreme physical pain with near fatal liver damage. Now hospitalized with but days to live, her doctor was afraid to prescribe her any further drugs, because of her now known suicide attempt. As a result, Jessica's daughter "hit the streets" in search of heroin with which to inject her mother.

This lack of medical knowledge as to "what works" was similarly shown to me in what happened with Mark and his mother. In this case, the physician's help did not come in the form of a prescription, but from his own personal supply. Like Jessica's doctor, he felt that this was safer than leaving behind a lethal paper trail. Mark's mother's diagnosis of stomach cancer came as a shock. "In just a matter of weeks, she went from feeling fine to surgery to never eating again to quickly wasting away." This made her decision easier about "when to die." Mark explained that: "She probably would've died in another week if she hadn't taken her own life at that point." During these weeks Mark's mother, a long-time member of the Hemlock Society, began asking physician friends if they could assist her, or help her obtain what she'd need to die comfortably and safely. Over the years, she had worked closely with many doctors, and it took little effort before one man, a personal friend, agreed to help. After making a fairly rapid final decision, Mark's mother called her friend who immediately

came with a quantity of liquid morphine. The physician then explained that he could not take an active role, but would "provide the medication" and be "willing to stay in the house in case of an emergency." He told Mark and his father that they should be the ones to actively assist, but that they should come to this decision together. They agreed. Their plan was to help her fulfill her last wish "to have something to drink." The cancer had crept up her throat and she couldn't swallow due to the pain. If they could deaden the sensation with morphine, "there might be a little period where she could have a couple of last sips and nibbles. More than anything they wanted her to be able to take a few last sips of ginger ale. This was not to be. "The bottom line is that nothing worked that day." Mark continued: "We injected the morphine into the heart catheter and were very surprised that she was instantly made unconscious. We thought that there'd be a period of grogginess during which time we could say our good-byes. Then she would pass into unconsciousness. Well, we injected it and she was gone."

They kept trying to offer her ginger ale, but it was too late and "there was no more communication." But they rationalized that "it was okay" because "she got to slip away easily." He added: "After all, we'd been saying good-bye for weeks anyway." After an hour there was no change in her heartbeat or respiration. They consulted with the physician, who said, "Well I was worried about this; that morphine was something I'd been keeping around for myself for several years and maybe it wasn't potent anymore." At that point the doctor suggested that he could obtain a quantity of insulin, and that a large dose "injected in the heart catheter should induce death." He returned an hour later with several syringes which Mark's father took charge of, injecting them each one after another. They waited, and again nothing happened. As a last resort, the physician had also brought over a very large syringe, which could be used to inject air and induce heart failure.

> We ended up having to repeatedly inject air. It was . . . nightmarish, horrific, how this process seemed to keep on and on. But it finally worked and she passed on. It took at least five hours from when we started. I stayed with her all of that time. This felt very important to be right there holding her hand and to be present with her to the very end.

THE EFFECTS OF LIMITED INVOLVEMENT

Sometimes even if drugs eventually work without further planned involvement of others, the circumstances surrounding the death can lead to

dissatisfaction and regret, and family members or partners can be left feeling that they "didn't do enough" or that they "could've done better." This was the situation that followed Julie's participation in her brother Jerry's death. Jerry had been suffering for years from progressive multiple sclerosis, and Julie, a nurse, "was the only member of her family who could talk to him about his dying." After discussing it for four years, Julie finally supplied him with what she believed would be a lethal dose of Demerol. Jerry kept the drugs for several months, and Julie became increasingly worried that he was taking so long, and that he'd soon lose the capacity to swallow. Without warning, he made his decision on Julie's next visit. In the early hours on the day after she arrived, Jerry took forty Demerol tablets. In the morning he was discovered unconscious by his mother. About noon, with Julie and his mother by his bed, he awoke. Now aware that his attempt had failed, they called Jerry's doctor. He told them that, most likely, the pills had lodged in a pocket in his throat and hadn't dissolved. Jerry was upset and confused, but the physician told them all to "let nature take its course," and do nothing until the next day. During this time only Julie, her mother, and the physician knew what was occurring. No other family members had been informed of the attempt. As a result, Julie had to leave late in the afternoon to join her father for a family dinner, "as if nothing was happening." Julie's mother remained with her son and fed him more food, which "washed down the pills." Jerry ended up dying only two hours later. When the authorities were informed of his death, they arrived in force and "asked questions about a possible suicide" until they discovered that he'd been sick a long time.

In looking back, what affected Julie the most was that Jerry "had to go through that horror of awakening after he'd gathered the courage to finally make the attempt." For Julie, "the horror of those hours and the look in his eyes" was something she couldn't forget. In retrospect, Julie regretted that her brother had to do this alone, and that no one was at his bedside when he took the pills. As Julie said: "I've really struggled with how could I have left him and how awful for him to be left." For Julie, this "secrecy" prevented his death from being the special event it might otherwise have been, and kept the full family from knowing of his plans and achieving closure. Instead, it required that they proceeded "as though nothing was happening."

THE EFFECTS OF ISOLATION

In some instances, those who are dying seem only concerned about their desire to die, and others only see the need to help, regardless of the

consequences. This type of co-dependency can be accentuated by the private relationship that caregiving often entails, and can especially be intensified by the privacy and secrecy that often develops when two individuals begin planning an assisted death.

This can be seen clearly in the case of Michael and his father. Michael became his father's caregiver after his father was diagnosed with colon cancer and had a mass removed from his liver. At that point Michael's father asked him to secure the drugs, to "someday" help him die, and to keep this a secret from the rest of the family. For the next year Michael worked to obtain "the right drugs," and eventually secured a large amount of Dilaudid. As his father required more care, Michael moved back home, feeling that he was the only one his father could rely on. "This became our secret pact," Michael said, and as a result, he felt a mixture of pride and a heightened sense of awareness and duty, but still resented the fact that "this wasn't the loving act" he wanted to do.

As his father's death drew near, Michael reached burnout. Due to a lack of continuity of care with "day attendants changing every few days," he took on the sole responsibility of caring for his father. His workload increased and, to be able to fulfill his final duty, he began excluding others. As he saw it, he "couldn't take the risk of others getting in the way." Eventually, his father's cancer spread to his liver, which began to press on his diaphragm, causing uncontrollable hiccups. The oncologist "didn't know what to do" to ease his father's discomfort. One night, as a result, his father took several of the Dilaudid. They failed.

In the next two weeks the choices diminished, and Michael's sense of isolation and despair increased. Finally, one night his father fell and was badly cut. Michael got him bandaged and into bed. The next afternoon his father announced, "Today's the day." Michael pleaded with him to wait, but his father said "No!" Michael finally agreed, got the medications, ground them up, and mixed them into his father's pudding. Michael explained that he was in a "profound and heightened state of consciousness." At that moment, after his father had taken the drugs, he finally began to ask him all the questions for which he wanted answers. Michael, exhausted from caregiving, had not taken the time to ask him these questions earlier. He wanted to know how his father had made it through life, and if he had any advice for him. But it was too late, the drugs had taken effect, and his father shared no secrets.

As in so many other cases, however, death didn't come. Michael repeatedly entered his father's room in disbelief that the 200 milligrams of Dilaudid "weren't working." His fear and isolation built. This especially became apparent later that evening when Michael's former girlfriend called. She had

known that Michael was home and caring for his father. Needing someone with whom he could share his anxiety, he immediately told her what was happening in the next room. Later, at 1:30 am., he then called his business partner and asked his advice. Finally, two hours later, he made his decision. He got two dry cleaning bags and placed them inside one another.

> I didn't think I could do it. It took me a couple of minutes before I could go ahead. But I forced myself. I felt I had no choice. I said some kind of prayer that it would be okay.

This was clearly a loving act, but it seemed like forever. After he removed the bags, he put them in the garbage behind the local supermarket then returned to call the mortuary. They called the coroner, who came with a sheriff's detective. After talking with the doctor, they determined that it was a natural death.

After this, Michael went into "a state of shock" until the funeral was over. A sleep disorder, which began months earlier, continued, and he began to second guess his decision to help. In all of this, he wasn't helped by the secret he carried. Now suffering from insomnia and depression, Michael entered a treatment facility a month after his father's death. Although he was put on medication, the effects continued, and he kept "replaying the event over and over again."

DISCUSSION

These cases exemplify several of the features of what can go wrong in a non-physician assisted death, or even in one assisted by a physician. Most significantly, we can see how patients often fail to talk honestly with their physicians about their desire to die and, as a result, fail to secure the most effective means by which to do so. Instead, they depend on valium, oral morphine, or other substances prescribed to deal with the symptoms of their physical conditions. We also can see how even drugs effective for this purpose can be thwarted when lone attempts are unknowingly discovered in progress by family members and friends, who similarly have been left uninformed of a person's final plans for such an act. This especially can become a problem for family members who find themselves morally bound to carry out a loved one's desires, but who may not be emotionally prepared for the consequences. This shows an inherent problem with "prescription-only" legislation in support of assisted dying.

Without some form of mandatory notification of someone charged with discovering the death, the potential exists for interruption and emergency resuscitation. I have yet to see this dealt with directly and realistically by

anyone supportive of such legislation. We further can see the effects of exhaustion from caregiving, absence of support from others for the decision, fear of discovery, and differences about closure and the final timing for a death.

Obviously, part of what goes wrong in assisted deaths is that the very nature of its illegality often raises barriers to positive experience in the form of inadequate drugs and knowledge, fear, and lack of appropriately trained practitioners. But the question that is raised is: How does one accomplish an assisted death in the most "efficient" and yet emotionally positive manner unless one has done it before or has well-developed models to use for this purpose? In this way, the lack of models, experience, and training makes this an act that must be constantly reinvented. Every experience is new, fraught with its own fears, hesitancy, and ignorance, and nearly every one who participates is an actor with an unrehearsed script This, more than anything else, perhaps, creates the potential for errors, fear, dissatisfaction, and a focus more on methods of death and a concern for secrecy than on a sense of respect for what is actually occurring. For example, when I asked one man, Randy, what he remembered most about his partner's death, he didn't say, "The loss of my partner and closest friend." Instead, he said, "shooting the rubber bands out the window, and wondering if they could be fingerprinted." Similarly, others told me about the "fear of discovery," the "quiet long night," the "isolation," and "wondering when to leave" and "where to dispose of the plastic bag." Others have told me of their apprehension of a last minute autopsy, or of being stopped on the way home by the police while carrying "extra drugs," or even something so mundane as a "plastic bag." Such thoughts are normal, given the illegality of the act and the secrecy represented. However, they also provide us with an insight into what might make for a better death. Drugs and knowledge are key here, but so too are set and setting. Although the latter are not my concern in this paper, they obviously can be assisted by discussion among all significant others of a patient's desire and intent the full acceptance of the patient's decision to die, the exploration of every alternative, and planning for all contingencies. In this way, a death without secrecy would appear to hold several advantages. But these still don't eliminate the problem of drugs and knowledge, which raise several issues for consideration.

Most important is the question of whether those with life threatening conditions, under certain restrictive conditions, should have access to potentially lethal medications. Reform in this area, of course, follows the prescription-only model of legislation (as in the case of Oregon's Measure 16), which, in principle, would allow terminally ill patients to request and receive lethal prescriptions from physicians. The common ethical ques-

tions about euthanasia apply. These include: whether it's ever right to actively help rather than allow to die, whether this violates the long standing traditional role of physicians as healers, whether such a request can be rational, and whether the "right" to receive assistance would soon be expanded to ever larger populations of non-terminally ill or would become an "expectation" and subject to abuse.

The issue of knowledge raises other ethical questions. Although books like Derek Humphry's *Final Exit* have been protected by First Amendment guarantees, it is obvious that the public still lacks accurate knowledge of what works and what doesn't. And it also is obvious that even those who do read such books don't always read them with care. The question this raises is whether healthcare professionals, with help from pharmacists, should provide terminally ill patients with this type of information upon request-even if they still refuse to provide patients with the lethal means to actually end their lives. In this regard, can the provision of information be justified if the intent is to reduce harm to others rather than to cause a patient's death?

This new "double effect" argument follows the model of needle exchange programs used to reduce the risk of HIV exposure among IV drug users, that is, one is not condoning IV drug use, but attempting to slow the spread of HIV infection. In this case, however, the reduction of harm would apply to partners, families, and friends who otherwise might stand a greater risk of becoming directly involved in assisting another to die. As can be seen in the stories presented here, this risk involves a range of criminal actions, including assisting in a suicide, mercy killing, and evidence tampering. The effects also include long-lasting questions of one's role in a death which, in some instances, can affect the grief and post-mortem adjustment processes. Such a program of public information would, of course, be problematic to those supportive only of the healing role of physicians and pharmacists, as well as to advocates of suicide prevention for all categories of individual, even the terminally ill.

Nevertheless, a program of public information about assisting in dying would seem to fall well within First Amendment protections, and could be designed as only a small part of an overall public outreach program of education aimed at preventing rather than encouraging assisted deaths at inappropriate stages in the dying process, or without counseling and consultation with specialists in the area of palliative care. Although I am not here proposing such a program be implemented, I am saying that my findings point to frequent failure in the case of assisted death as well as frequent over-involvement by significant others. And it is obvious that these findings have both ethical and public policy implications.

NOTES

1. I began this project by using a snowball sample in the San Francisco Bay Area, and made initial interviews through contacts with health professionals and right-to-die activists I had made as regional director of the National Hemlock Society. I then expanded my project by eventually announcing a call for interviews in publications of the local chapter of the Hemlock Society and in the National Hemlock Society's *Hemlock Quarterly.* In 1992, I expanded my research to Great Britain, and received assistance from both the Voluntary Euthanasia Society of Great Britain and the Voluntary Euthanasia Society of Scotland. Combining telephone and in-person interviews, I used a narrative approach and allowed each person to tell me their story. I followed up with a set of open-ended questions covering: relationships among the parties involved, the decision-making process, discussions prior to the assisted death, alternatives considered, motives for dying and for helping, expectations about the experience, methods of assisted death, type and source of drugs, the nature and setting of the death, the "official" cause of death, knowledge among friends and family about the actual circumstances, and both the initial and delayed effects of participation. These interviews lasted as long as ten hours over multiple meetings. Where possible, interviews were tape-recorded. Whenever possible, I also interviewed other parties who were involved in these deaths. To protect my sources, I applied pseudonyms to each case, and erased all tape-recordings after transcription. At the end of the project, I also destroyed all written records bearing names, phone numbers, return addresses, or other indicators of identity. Although my respondents were self-selected, and usually obtained by contacts from right-to-die groups, more than half were not members of such organizations. And most who were members only joined after they assisted in the deaths of partners, family members, or friends.

2. These do not include cases where individual details were lacking or could not be accurately described. Nor do they include cases where interviews could not be completed, or the substantiated case of one woman who claimed that she had been present at some thirty assisted deaths, of which she directly assisted in twenty.