

NEW REVISED
INTERNATIONAL
EDITION

The Peaceful Pill Handbook

Dr Philip Nitschke
&
Dr Fiona Stewart



About Exit International

Founded in 1996 by Dr Philip Nitschke, Exit International is one of the world's leading dying with dignity organisations.

With dual headquarters in Australia and New Zealand, and our partner organisation in the USA (Exit International US Ltd), Exit International brings a practical focus to the work of the end of life choices movement globally.

More information about Exit International can be found at

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All proceeds from the sale of this book go directly towards funding the on-going research and development program of Exit International, both in Australia and the US. These results will be included in future editions of the Handbook

For Derek Humphry

for his courage and compassion in showing the way

*The
Peaceful Pill
Handbook*

**Dr Philip Nitschke
&
Dr Fiona Stewart**

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What the Critics said about

Killing Me Softly:
Voluntary Euthanasia & the Road to the Peaceful Pill
Dr Philip Nitschke & Dr Fiona Stewart
Penguin - 2005

"The publication of this book will probably prove to be a landmark in the history of the reform of the unenlightened laws that restrict Australians' end-of-life choices." *Canberra Times*

"A fascinating book about a curly issue ... it's a compelling, moving and important book about a difficult subject."
Sunday Mail

"His passion screams from every page of this book ... An informative read." *Launceston Examiner*

"For doctors especially, allow me to thoroughly recommend this book. The authors deliver a potent exposition of the role of medicine in this debate." *Australian Doctor*

"Killing Me Softly does represent, in a full and clear way, the issues surrounding voluntary euthanasia. To read it is to be better informed in the matter." *The West Australian*

"You'll either be for or against euthanasia but this book puts Nitschke and the debate in perspective." *Herald Sun*

"A fine new book" *The Mercury*

"Nitschke has never been shy about speaking out against the establishment and was already no friend of the medical one."
The Big Issue

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Preface

This book has been written at a time when there are very few places in the world where seriously ill people can get lawful help to die. In 1996, the Northern Territory of Australia led the world, becoming the first place where such assistance became lawful. A decade ago, four of my seriously ill patients self-administered a legal, lethal overdose of drugs - a Peaceful Pill if you like. All were able to die peacefully in their sleep - surrounded by people they loved.

I know because back then I was their medical doctor. I was the one who put the needle into their veins. And I was the one who purpose-built for them the small 'Deliverance Machine' that ran the laptop computer program that gave them ultimate control over their life and their deaths. On each separate occasion, the computer presented a short series of questions:

1. Are you aware that if you go ahead to the last screen and press the 'yes' button you will be given a lethal dose of medications and die?
2. Are you certain you understand that if you proceed and press the 'yes' button on the next screen you will die?
3. In 15 seconds you will be given a lethal injection ... press 'yes' to proceed.

After pressing the button for the third time, the machine started up and delivered to each patient a lethal dose of the barbiturate Nembutal. At the time of their choosing the Deliverance machine enabled these four people to die, peacefully and with dignity.

While it is now illegal in Australia for doctors to prescribe Nembutal, it is the drug of choice in places where Voluntary Euthanasia and Physician Assisted Dying (PAS) are legal.

Back then in Darwin, I was privileged to have witnessed what can happen, when a community - via its elected representatives - cares enough about the seriously ill to draft and enact legislation that provides real choice. Under the short-lived Rights of the Terminally Ill Act (the law lasted 9 months before being overturned) people, whose state of health had so compromised their quality of life that death became the preferred option, could get help to die. Ten years ago, when I worked as a medical doctor, I was able to use my profession to help people in this most fundamental way.

Bob Dent, Janet Mills, Bill and Valerie were people who believed that they were in the right place at the right time. They were the lucky ones. They died with dignity, others are not so lucky.

When the Australian Federal Government overturned the Northern Territory's Rights of the Terminally Ill Act, I stopped practicing medicine. In the void that was left, I established the dying with dignity organisation, Exit International. Today, I work as a political change advocate.

But even this seems to upset the politicians. In early 2006, the Australian Government took another extraordinary step, making it a crime for adults to talk openly about end of life issues using the telephone, email, fax or Internet. The Suicide Related Materials Act (2006) is a law without parallel (see http://www.austlii.edu.au/au/legis/cth/num_act/ccarmoa2005n922005479/).

It is because of these deliberate attempts by the State to further restrict, control and censor end of life information that *The Peaceful Pill Handbook* has been written. In Australia we have no constitutional right to free speech. While digital forms of communication are now outlawed, the printed word is still safe, and we make use of this small window of opportunity to ensure the information presented in this book can be shared.

The Peaceful Pill Handbook is the result of over 10 years work in Assisted Suicide and Voluntary Euthanasia. Over the past five years my co-author Dr Fiona Stewart has shared this work with me. As a sociologist, Fiona has brought special insight to her work at Exit; her skills are an excellent compliment to my scientific background. And she is deeply committed to the promotion of human rights. Her contribution to this book is testimony of her belief that it is every rational person's right to die in peace and with dignity, at a time of their choosing. As a leading member of the Exit research team, Fiona has learned first hand of the importance that our supporters place upon a readily accessible, reliable Peaceful Pill.

The Peaceful Pill Handbook is also the product of many other people's hard work and we have many people to thank. To those we interviewed and others who provided eye-witness testimonials, we thank you sincerely. Thank you especially to Neal Nicol, Bron Norman, Arnold Gillespie, book cover designer Branden Barber, and our staff at Exit - Kerri Dennis, Amanda McClure, Bev Hurrelle and Lindy Boyd, and Exit's state-based Chapter Coordinators one and all.

Preface

A Word of Caution

This book *is* intended for seriously ill and suffering people for whom there is little hope that their quality of life will ever recover to a level that is satisfactory to them.

This book is *not* intended for those who are young or irrational or for people who are suffering from psychiatric illness or depression. Of course there is still a risk that this book may be read by people for whom this information is not appropriate. This is why Exit International asks readers to respect the integrity of the book and its stated aims and intentions.

The risk of misuse of this book cannot justify the withholding of information from seriously ill or elderly people. They have every right to make carefully considered and fully informed decisions about their own life, and death.

Seriously ill people need end of life options. It is a basic human right to live and die with one's dignity intact. Books such as this are one way of ensuring that choice at life's end is available and that dignity at the time of death is preserved.

1

End of Life Considerations

Considering Death

People plan their own passing for all sorts of reasons. Some people are so sick and frail and have such an impaired quality of life that death becomes the preferred option. Others find themselves living longer than their parents' and grandparents' generations and having to face a new set of worries that come from longevity. Some are simply 'tired of life.' The reasons that lead the elderly and seriously ill to seek information about their end-of-life choices are many and varied and are intensely personal. And one thing is certain - this desire for knowledge will not diminish. Rewriting the ways in which society experiences death and dying is the challenge of our time.

The Role of Medical Advancements and Technology

In any discussion of end of life issues the role of modern medicine is paramount. While no one doubts the huge advances of medical science over the past 100 years - improving beyond measure the length and quality of our lives - there is inevitably a flip side. In contrast to previous generations, we are now far more likely to die of slower, debilitating conditions that are associated with bodily deterioration. And we are also more likely to be kept alive through an increasingly sophisticated array of medical technologies.

A longer life can be a wonderful thing, but should we be forced to live on, if we come to a point where we have simply had enough?

The Ageing Population

A century ago when life expectancy was approximately 25 years less than it is today, few people had the opportunity to reflect on how they might die. Then people were much more likely to die quickly with little warning. One hundred years ago infectious disease was common. People considered themselves lucky if they were still alive in their mid 50s. The widespread introduction of public health measures, sewerage, water reticulation, good housing, and of course the introduction of modern antibiotics have all played a part in greatly reducing the toll of infectious disease.

In 2006, we have a life expectancy of 75 to 80 years. In industrialised countries, we will now be more likely to experience diseases and conditions that were rare in earlier times. While old age is not in itself predictive of serious physical illness, the gradual deterioration of one's body with age leads to an almost inevitable decline in a person's quality of life.

Control in dying is an increasingly common concern for many elderly people. Exit's workshops are booked out months ahead as elderly folk seek answers to their questions about their end of life options. Although few who attend these workshops have any intention of dying in the near future, most see a need to organise and plan for this inevitable event.

Just as people plan for other aspects of their death (eg. writing wills, appointing executors, prepaying for funerals, preparing advance health directives), so people also want to ensure that they have control in the timing and manner of their death. To be in a position to organise one's death, one must first know one's options.

The Question of Suicide

Anyone who makes plans for their own death can be said to be planning their own suicide. While for some people suicide is a tainted concept, for a growing group it is an acceptable and potentially necessary option. For people who are seriously ill, and for an increasing number of the elderly, suicide is a way out of a life that they consider is not worth living. These people are well aware of the importance of a decision to die and the need to get it right. In this Chapter, we examine the phenomenon of suicide in the context of the modern life course, and why access to end of life information is so important.

A Brief History of Suicide

Over the years, the way in which society views the taking of one's own life has varied enormously. Suicide has not always been seen as the act of sick and depressed person. In ancient Greece, Athenian magistrates kept a supply of poison for anyone who wanted to die. You just needed official permission. For the Stoics of ancient times, suicide was considered an appropriate response, if the problems of pain, grave illness or physical abnormalities became too great.

With the rise of Christianity, however, suicide came to be viewed as a sin (a violation of the sixth commandment). As Lisa Lieberman writes in her book *Leaving You*, all of a sudden 'the Roman ideal of heroic individualism' was replaced 'with a platonic concept of submission to divine authority'. Christianity changed society's view of suicide from the act of a responsible person, to an infringement upon the rights of God. One's death became a matter of God's will, not one's own and it was at this point that penalties were first established for those who attempted suicide. If the suicide was successful, it was the family of the offender who were punished with fines and social disgrace.

With the emergence of modern medicine in the 19th Century, the meaning of suicide changed again and it is this understanding that prevails today. Suicide is now generally thought of as an illness. If a person wants to end their life, then they must be sick (psychiatric illness, usually depression). The appropriate response therefore, is medical treatment (in the form of psychiatric counselling and/or anti-depressant medications).

At Exit International, we question the view of suicide that intrinsically links a person's decision to die to depression and mental illness. Are we seriously postulating that the suicide bombers of Iraq are depressed?

In Oregon, where physician-assisted suicide (PAS) is legal, symptoms of depression have been found in only 20 per cent of patients who request PAS (Battle, 2003). A 1998 study by the Australian Bureau of Statistics reported that only 15 per cent of men and 18 per cent of women who suicided had 'an associated or contributory diagnosis of a mental disorder' (ABS, 2000).

Some studies have found that there is a sadness associated with a serious illness, concluding that this needs to be understood as a normal response to an extraordinary situation (Ryan, 1996). To assume that the suicides of the elderly and those seriously ill are the result of depression or other psychiatric illness is to adopt uncritically a biomedical way of seeing the world.

Suicide and Depression

This is not to argue, however, that those who are suffering from depression are not at risk of suicide; clearly they may be. But there is a significant difference between a person having moments of feeling down or the transitory feeling that their life has lost purpose and the person who has severe clinical depression, where even the most basic daily decisions of life become problematic.

Such severe depressive states can rob a person of the ability to make such decisions and these people need care and treatment until they are once again able to resume control. Yet illness of this severity is not common and needs to be distinguished from the very large group of people who show occasional signs of depression but are in full control of their actions. Rather, the important issue here is that there are legitimate and rational reasons why a person may consider, or want to plan for their own suicide. Wanting to establish control over one's impending death on a yet-to-be-defined future date, does not and should not mean that person is necessarily depressed.

End of Life Decisions and the Role of Palliative Care

Critics of Voluntary Euthanasia often argue that if palliative care is available and of good enough standard, patients will never ask for assistance to die. This is untrue, but to understand the claim, one needs to look at the background of the palliative care speciality.

Palliative care was the first branch of medicine to shift the focus away from 'cure at all costs' and to focus instead upon the treatment and management of symptoms (for people who have a life-threatening illness). In this sense, palliative care's aim has never been 'cure'. Rather, palliative medicine is about symptom control. It is about improving the quality of life of those who are seriously ill and dying.

To date, palliative care has been most successful in the treatment of pain. Indeed, it is often claimed - perhaps exaggeratedly - that palliative care can successfully address pain in 95 per cent of all cases. What is much less spoken about is the speciality's limited ability to alleviate some other common symptoms of serious disease; symptoms such as weakness, breathlessness or nausea. These symptoms can significantly impair a person's quality of life to a point where occasionally, death does become the preferred option.

At Exit, we are frequently approached by people who tell us that their palliative care is second to none, but add that they still wish to be in control of their death. They say that while they might not now be in pain, the quality of their life is nonetheless seriously effected by their illness. And they know that there is often absolutely nothing modern palliative medicine can do about it.

Some of these people are so weak that they cannot move unassisted. Others have shortness of breath which makes independent living impossible. For a significant minority of such people, it is the non-medical issues that have most impact upon the quality of their life. One recent memorable case concerned a female cancer sufferer's inability to play golf. This person was clear. It was her frustration at being house-bound and dependent on visits from friends and family, rather than the physical symptoms of the cancer, that made her choose an elective death (Valerie was the last person to use the Northern Territory ROTI Act before it was overturned).

Palliative care is no universal panacea. While this branch of medicine does have a valuable contribution to make, especially in the field of pain control, it is unhelpful to use symptom management as the predominant benchmark against which a person's quality of life is measured.

People rate their quality of life in different ways with no two individuals' assessment the same. While a life without pain is clearly better than a life with pain, this is not always the most important issue. Rather, in a person's complex assessment of their life's worth, the physical symptoms experienced are often only one of many considerations.

The Tired of Life Phenomenon

In Exit's experience in recent years, a new trend has begun to emerge, one that has caused us to rethink our approach to death and dying. Increasingly we meet elderly people who are fit and healthy (for their age), but for whom life has become increasingly burdensome.

Such people are not depressed. Rather, the sentiment expressed is that 'I have lived enough of the good life and now it's time to go.' The actions of Queensland couple, Sidney and Marjorie Croft, explain this phenomenon well.

In 2002, the Crofts sent Exit International a letter; this letter proved to be their suicide note and explained their suicide pact. Exit had no prior knowledge of the couple's plans, we knew only that they had attended several Exit workshops where they sat up the back, holding hands and asking many questions. The Crofts did not need to write this note yet they wanted us to understand. And in return they asked for our respect.

To Whom it May Concern

Please don't condemn us, or feel badly of us for what we have done.

We have thought clearly of this for a long time and it has taken a long time to get the drugs needed.

We are in our late 80s and 90 is on the horizon. At this stage, would it be wrong to expect no deterioration in our health? More importantly, would our mental state be bright and alert?

In 1974 we both lost our partners whom we loved very dearly. For two and a half years Marjorie became a recluse with her grief, and Sid became an alcoholic. We would not like to go through that traumatic experience again. Hence we decided we wanted to go together.

We have no children and no one to consider.

We have left instructions that we be cremated and that our ashes be mixed together. We feel that way, we will be together forever.

Please don't feel sad, or grieve for us. But feel glad in your heart as we do.

Sidney and Marjorie Croft

The Crofts are the private face of an increasingly common sentiment among the elderly; that a good life should be able to be brought to an end with a good death, when and if a person so wishes. To suggest, as many in the medical profession have done, that the Crofts were 'depressed' is to trivialise and patronise.

Another person who evoked this 'tired of life' phenomenon was retired French academic, Lisette Nigot. In 2002, Lisette Nigot also took her own life, consuming lethal drugs she had stockpiled years before. Lisette's reason for dying? She said she did not want to turn 80. Lisette insisted that she had led a good and full life yet she firmly believed that 80 was a suitable age to die. 'I do not take to old age very well' she told film-maker Janine Hosking whose feature documentary *Mademoiselle and the Doctor* followed the last months of her life.

In late 2002 shortly before her 80th birthday, Lisette Nigot ended her life. Intelligent and lucid to the end, Lisette knew her own mind. A fiercely independent woman, it is not surprising that she expected to be able to control her own death, just as she had her own life. In *Mademoiselle and the Doctor* she explained:

'I don't like the deterioration of my body .. I don't like not being able to do the things I used to be able to do .. and I don't like the discrepancy there is between the mind which remains what it always was, and the body which is sort of physically deteriorating.

Perhaps my mind will go and I would hate that. And certainly my body will go and I wouldn't be very happy with that either. So I might as well go while the going is good'.

When details of the Croft's and Lisette Nigot's death were made public, many tried to medicalise their situations. An assortment of diseases and conditions were suggested as reasons for their decision to end their lives. Underpinning all of this was the belief that 'well' people do not take their own life. Prime Minister John Howard, commenting on Lisette Nigot's actions, stated, 'I have a strong belief that we should not be encouraging well people to take their own life, I'm appalled.'



Fig 1.1: Mademoiselle Lisette Nigot

At Exit we do not encourage anyone, sick or well, to take their own life. We do, however, believe that a decision to end one's life can be rational, and does not always occur in the context of serious suffering or disease. We also believe that people who make such a considered, rational choice should have access to reliable information; information which will be critical if unwanted and unnecessary mistakes are to be prevented.

Conclusion

At Exit workshops, the act of planning for one's death is discussed openly and frankly. People join our organisation to gain information about their end of life choices and options. This book has been written as part of this process, providing the necessary information needed by those who want to plan ahead and be prepared at the time of death.

While many may never use this knowledge, some will. Given that we now live longer than at any time in history and given the advances of medicine in prolonging life, the act of planning for one's death is an increasingly legitimate part of whole-of-life planning. At Exit, seeking knowledge of one's end of life options is seen as little different to the forward planning that many of us undertake when we write our will or plan our own funeral.

End of Life Considerations

Suicide and the Law

In most western countries, suicide is legal, yet assisted suicide is a crime that can attract harsh legal penalties. While a person who takes their own life commits no crime, a person found guilty of assisting another can potentially face a long jail term. Think about it. The law makes it a crime for a person to assist another person to do something that is lawful. How strange that it can be considered a crime to assist a person who is acting lawfully: there is no other example of this type of incongruity in modern western legal systems. Yet, any person who chooses to be involved in the death of another - however tangentially and for whatever reasons - needs to be very careful indeed. This is especially true when friends and family are involved and emotions may cloud one's judgement.

Legal Definitions & Penalties

Assisted suicide is usually defined as 'advising,' 'counselling' or 'assisting' a person to end their life. Sometimes the words 'aid and abet' are also used. In most countries assisting a suicide carries severe legal penalties. In Australia, the penalty ranges from 5 years to life imprisonment, depending upon the jurisdiction. In Britain and Canada the penalty extends to 14 years.

In the USA, assisting a suicide is illegal in slightly more than half of all states, with the remainder treating it the same as the crime of murder or manslaughter. Again the penalties for assisted a suicide vary from state to state. Only in the state of Oregon is there an exception where Physician Assisted Suicide (PAS) is legal in some circumstances. In Michigan, Dr Jack Kevorkian remains in prison for the assisted suicide of his terminally ill patient, Thomas Youk. In assisting Youk to die, Kevorkian was convicted of second degree murder in March 1999 and sentenced to 10 to 25 years jail. With certain caveats, assisted suicide has been legal in Switzerland since the 1950s.

Defining Assisted Suicide

Yet what is assisted suicide? At the current time, argument about what actually constitutes 'assisted suicide' shows no sign of easing. A significant grey area continues to exist at the boundaries, with lawyers unable to give clear and concise answers to many questions about this issue. The dearth of case law leaves it unclear about whether, for example, giving a person the information they need, or even sitting with a person while they take their own life, is assisting with their suicide. On the one hand there is the argument that the mere act of sitting with someone about to suicide provides psychological encouragement? Or does it? Perhaps those present have a duty of care to prevent that person from harming themselves? Perhaps you should leap from your chair and grab the glass of lethal drugs from the person's lips? But wouldn't that be an assault? The law regarding assisted suicide is often ill defined and murky.

VE Legislation - What Type of Law is Needed?

Voluntary Euthanasia laws have attempted to bring clarity and order to the assisted suicide debate. By defining the class of person who could be helped to die and by stipulating the manner in which this help could be provided, the Rights of the Terminally Ill Act (Northern Territory) went a long way towards establishing uniformity and equity. To make use of the law you had to be 'terminally ill,' and this was defined in the Act. You also had to satisfy a number of other strict criteria. If you qualified, however, you obtained the right to request lawful assistance from a doctor to die. Other laws (Oregon, Holland etc) have also set out to define exactly which group of people can have help to die. In all cases, eligibility is tightly controlled.

Yet even where VE laws work well, there is one significant drawback. The very strict set of conditions means that the process of establishing eligibility is demanding and often humiliating. And many people, for example those who are well, elderly, and tired of life, will simply never qualify. In the Northern Territory, the terminally ill person had to obtain two medical opinions, a palliative care review and a psychiatric consultation before they could qualify to use the law (qualify to die!). In practice, this meant that some very sick people had to beg the medical profession in order to get permission to die.

In the course of my involvement with this law, it soon became clear that none of my four patients who used the ROTI Act would have bothered with the exhaustive assessment if they had access to a Peaceful Pill in the cupboard. Why would a person subject themselves to a compulsory psychiatric examination, if they already had control over the means of their death?

They would simply have waited till the time was right and then taken the Pill. The very laws that were supposed to empower these sick and frail people seemed to do the exact opposite. The law denied these individuals' control, placing it instead in the hands of those doctors tasked with establishing eligibility.

While some people may wish to involve a team of doctors in their deaths, others do not. Our point is that death need not be a medical event. It is also arguable whether the medical profession should be given the role of arbiter, of who gets the right to die with dignity, and who does not. (An extensive discussion of Exit's philosophy of death and dying can be found in *Killing Me Softly: VE and the Road to the Peaceful Pill*, 2005). This powerful medical model of death and dying hangs over us and needs to be challenged. This is, in part, the reason this book has been written.

Legal Developments - Restricting Choice

While the past decade has seen several countries legalise assisted suicide or voluntary euthanasia, in Australia, the situation has worsened. Following the overturning of the ROTI Act, the Australian Federal Government amended the Customs Act in 2001 to outlaw the importation or exportation of 'suicide related material,' which even includes the transfer of printed material on suicide technique and methods.

Then, in early 2006, the government went one step further and passed the Suicide Related Material Offences Act (2006). This law prohibits the use of a 'carriage service' such as a telephone, fax, email or the internet to discuss the practicalities of end of life issues and extends legal definitions of assisted suicide to include 'incitement' and 'discussion'.

These legislative initiatives have broadened the crime of assisted suicide, increased the legal uncertainty associated with the practice and made everyday discussion of voluntary euthanasia extremely difficult.

Conclusion

There are many understandable reasons why a seriously ill person (or an elderly person) might plan for their own death. Exit does not accept the proposition that seriously ill people who reflect upon, or plan for, the end of their life are necessarily depressed or mentally ill.

Rather, a person's right to end-of-life information needs to be seen as central, enabling that person to make their own considered decisions and choices, just as they have done all their life. By implementing laws that restrict and withhold this information, the State is behaving in a way that is not only cruel, but fundamentally inequitable and unjust.

Those with money and connections will always be better resourced, better able to bend the rules, better able to get the necessary information and better able to access the restricted drugs, than those who are less well off. In the current climate of restriction, inaccurate and misleading information proliferates.

Bad information is dangerous and serves no one's interest. In the absence of a law that allows voluntary euthanasia, we seek in this book to make reliable and accurate information available to those who want to know they are in control, not only of their lives, but also of their deaths.

Suicide and the Law

What is a Peaceful Pill?

Introduction

The Peaceful Pill is a pill or drink that provides a peaceful, pain-free death at a time of a person's individual choosing; a pill that is orally ingested and available to 'most' people.

Dr Philip Nitschke

It was the late Dutch Supreme Court Judge Huib Drion who first called for the introduction of a Pill. In a letter to the editor of the Dutch newspaper *NRC/Handelsblad*, Drion openly bemoaned the fact that while his doctor friends knew what to do and how to access the right drugs for a peaceful death, as a lawyer he did not.

Drion questioned the logic of why he, a retired judge, should not have the same ready access to a dignified death as his doctor friends. According to Drion, all people over a certain age should have the right to die at a time of their choosing. A pill, he argued, would confer this right.



Fig 3.1: Professor Huib Drion

Elderly and ailing people often realize that, at some time in the future, they could well find themselves in an unacceptable and unbearable situation, one that is worsening. A pill to end life at one's own discretion could alleviate some of their anxiety. Not a pill for now, but for the unforeseeable future so that the end can be humane (Dikkers cited in Nitschke and Stewart, 2005)

Following Drion, Exit research has confirmed that a Peaceful Pill provides peace of mind for its seriously ill or elderly owner, giving that person a sense of control over their life and death. Unlike VE laws that depend solely upon a person's state of health (or illness), Drion's 'universal model' has only one criteria, that of age. Drion suggested that all people over the age of 65 years should have access to a Pill. While the age is arguable, the point remains the same. The 'Drion Pill' or 'Peaceful Pill' should be accessible to the seriously ill *as well as* the elderly.

The History of the Suicide Pill

The idea of a Peaceful Pill - that is, a lethal substance or liquid that can be orally ingested - is not new. In Athenian times, the herb hemlock was the drug of choice for suicide and it was taken as a drink. The most famous hemlock suicide was that of the Greek critical scholar, Socrates.

In more modern times, the chemical compound cyanide has been widely employed as a suicide pill. One recent well known death from cyanide was that of Spanish quadriplegic Ramon Sampetro. In 1998, Sampetro ended his life by drinking cyanide, that had been provided and prepared by his friends.

The award-winning 2004 film *The Sea Inside* provides a remarkable account of his life and death.

For much of the 20th Century, cyanide was routinely issued to intelligence agents as part of their job. Hitler's head man in the SS and the Gestapo, Heinrich Himmler, escaped interrogation upon arrest by the British, by swallowing a capsule of cyanide. Hermann Goering, head of the Luftwaffe, avoided the hangman by taking potassium cyanide the night before the planned execution. Where the purpose is to avoid interrogation and torture, speed of action is essential and cyanide fitted the bill.

The Best Peaceful Pill

Fifty years on and it is pentobarbital (Nembutal) that is favoured as an ideal Peaceful Pill. Nembutal is a member of the barbiturate family of drugs that are made from the salts of barbituric acid. These active barbiturate salts have been used medically for many years, mainly as sedatives or sleeping tablets. In the 1950s, for example, there were more than 20 marketed forms of barbiturate sleeping tablets. Early examples included Veronal, Amytal, Seconal, Soneryl, and, of course, Nembutal. Fifty years ago, Nembutal was a widely prescribed drug, recommended even to help babies sleep, and to calm aching teeth (See Fig 11.1, p 133)

Over the last 30 years the barbiturates have slowly disappeared from the market. The fact that in overdose they caused death, either accidentally or deliberately, and the availability of newer, safer sleeping drugs has led to their decline. Nembutal was removed from the Australian prescribing schedule in 1998. The last barbiturate sleeping tablet, Amytal, was removed in 2003.

Perceived Benefits of a Peaceful Pill

There are many means by which a seriously ill person can end their life, although relatively few of these methods are reliable, dignified and peaceful. In most western countries, hanging and gun shot remain the most common methods of suicide. Yet few people would resort to such means if they had any real choice. Most seriously ill or elderly people who are considering death, seek a method that is peaceful, dignified and pain free. Commonly this is expressed as, 'I simply want to go to sleep and die'

In 2004, Exit International undertook a major study of our supporters' attitudes to various methods of dignified dying (n=1163). What we found was a strong and significant preference for a Pill over all other methods. Indeed, 89% of respondents (average age 72 years) said that they would prefer to take a Pill than use a plastic Exit bag, a carbon monoxide generator (COGenie) or seek help from a doctor to provide them with 'slow euthanasia.' A 'Pill' was defined as something that could be taken as a single oral dose (by mouth) in either tablet form or as a small drink.

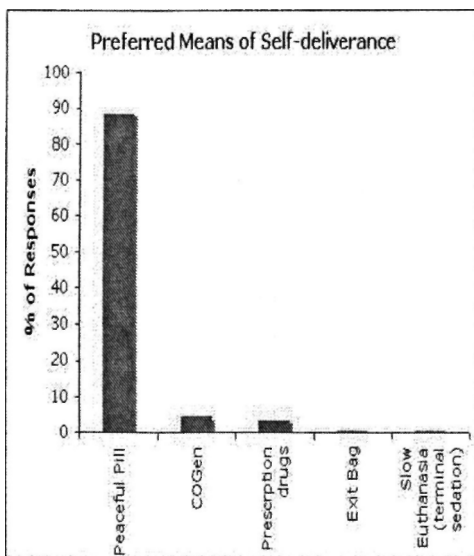


Fig 3.2: Survey of Exit Members
Methods of Self Deliverance

At Exit International these findings have served as a wake-up call. Instead of researching new and better ways of producing carbon monoxide or more effective methods of delivering an inert gas like helium into a plastic Exit bag, Exit's main focus is upon the development of a Pill; a Pill capable of ending life peacefully and reliably at a time of one's choosing.

The reasons behind the respondents' preferences became clear as the more of the data set was examined. Most of those surveyed saw the Peaceful Pill as an important way of providing independence (91%). It was also seen as an advantage if one did not have to depend on friends and family for assistance when the time came. A Peaceful Pill was also seen to provide 'peace of mind' (90%), was reliable (88%), and unlike the Exit Bag or the Carbon Monoxide Generator, the Pill was easy-to-administer (87%), since it required no equipment and no technical know-how. In this way, the Peaceful Pill was seen as a method that was accessible and usable, even by the most frail.

Conclusion

Exit's survey has established a strong preference for a reliable and effective Peaceful Pill as the best means of providing the option of a peaceful death at the time of one's choosing. Much of the remainder of this book focuses on the various forms a Peaceful Pill might take. In providing this information we are following the agenda set by members of the Exit community.

What is a "Peaceful Pill"

4

The Exit RP Test

Many end of life options are discussed in this book and it can be a daunting project trying to distinguish or compare the relative advantages or shortcomings of one over the other. To simplify the process, we have developed a simple rating system that can be applied to all end of life methods. We call this the Reliability & Peacefulness Test - the 'Exit RP Test'.

Primary Criteria

The 'Exit RP Test' provides a benchmark against which all end of life options can be considered. The values addressed by the test came to Exit's attention through the Peaceful Pill survey we conducted (see Chapter 3 for discussion). This research identified two principal factors in people's preferences for end of life methods. These factors were 'Reliability' and 'Peacefulness.' In the newly-developed RP Test, Reliability and Peacefulness are each given a score of 1 to 10. The higher the number, the more reliable and peaceful the method in question.

Reliability (R- 10)

Reliability has been consistently identified as a major important factor in assessing end of life methods. A seriously ill person wanting to end their life needs to know the method *will* work. No one wants to take chances with a method that *might* work. Reliability is essential.

Peacefulness (P -10)

Peacefulness is the second major criteria identified by Exit. There is almost no interest in methods that are violent, irrespective of how reliable they might be. The most commonly expressed wish by seriously ill and elderly people is that they be able to die in their sleep.

Secondary Criteria

There are a number of lesser, but nevertheless highly-desired, characteristics for a method of dying. Six additional secondary factors are listed below:

Availability (A)
Preparation and Administration (Pr)
Undetectability (U)
Speed of Effect (Sp)
Safety to Others (Sa)
Storage-Shelf Life (St)

In the RP test, a score of 1 -5 is given for each of these secondary characteristics.

Availability (A - 5)

To be of any use the method must be available. The most peaceful and reliable drug is of no use if it is unavailable.

Preparation and Administration (Pr - 5)

Simplicity of preparation and administration is an important factor. No one wants to use complicated equipment that is difficult to assemble or drugs that are hard to use.

Undetectability (U - 5)

Methods that leave no obvious trace are strongly preferred. In reality, this might mean that an attending physician will be more likely to assume that the death has been caused by a known underlying disease. In this situation, the question of suicide does not arise.

Speed of Effect (Sp-5)

Speed of death is a further significant factor. Speed limits the likelihood of discovery and any possible interference (resuscitation).

Safety to Others (Sa - 5)

Most seriously ill people do not want to die alone. Methods that present a danger to others are unpopular for this reason.

Storage -Shelf life (St -5)

There is a strong preference for methods that use substances, drugs or items that do not deteriorate with time. This means the person should be able to assemble the required items or obtain the required drugs in advance, and not have to worry about linking the possible timing of one's passing to the acquisition of the items.

All of the methods described in this book have been given an Exit RP Test score. The maximum possible is 50 points, the higher the score the 'better' the method. Some criteria will vary of course depending on an individual's particular circumstances. *The RP Test rating should only ever be used as a general guide.*

Take the example of the Exit Bag when used in conjunction with Helium (see Chapter 5).

Test Factor	Score
Reliability: This is good, but technique is important	R=8/10
Peacefulness: There is some short term awareness and alarm	P=7/10
Availability: Necessary items are readily available	A=5/5
Preparation: Items require assembly and coordination	Pr=1/5
Undetectability: If items removed, totally undetectable, even in the event of an autopsy	U=5/5
Speed: Unconsciousness and death occur quickly	Sp=5/5
Safety: The method presents no risk to others present	Sa=5/5
Storage: Equipment does not deteriorate and testing is readily available	St=5/5
Total for Helium and an Exit Bag	41 (82%)

Compare the RP Test result for the Exit Bag + Helium with the Use of Sodium Cyanide (see Chapter 7).

Test Factor	Score
Reliability: This is very high	R=10/10
Peacefulness: Patchy reports, hard to assess	P=5/10
Availability: Difficult to obtain or manufacture	A=2/5
Preparation: This is straightforward	Pr=5/5
Undetectability: Some clinical changes may be noted, certainly noted on autopsy	U=3/5
Speed: Produces a rapid death	Sp=5/5
Safety: There may be some slight risk to those present from possible HCN gas production	Sa=3/5
Storage: Well packaged, shelf life indefinite	St=5/5
Total for Sodium Cyanide	38 (76%)

A Note of Caution

The RP Test score serves only as a guide. Individual circumstances and preferences will always influence a person's decision. There are people for whom a plastic Exit bag over their head will never be a viable option, no matter how peaceful and reliable the method. This may be because of an individual's particular aesthetic concern and have absolutely nothing to do with the method's reliable physiology. Nevertheless, if this is a real concern, the method will not be considered, irrespective of how high the RP Test score.

Similarly, the 'availability' of a particular method can differ from individual to individual. The comparison above suggests that helium would be preferred above cyanide. However, if an individual has recently become so disabled through illness that the use of an Exit Bag is impossible, and yet that same person has access to cyanide powder, the final choice will clearly not be determined by the highest RP Test score.

See Table 1 (Page 203) which provides the overall RP Test scores for the six approaches described in this book.

Hypoxic Death & the Exit Bag

Introduction

The plastic Exit Bag provides people with the means to obtain a simple, effective and peaceful death. While Exit research has found that very few of our supporters would prefer to use a Plastic Bag over a Pill, it remains one of the most accessible methods available.

There is much misinformation however about how a plastic Exit Bag works and why it is so effective. The common assumption is that the bag causes death by "suffocation". Suffocation occurs when a person cannot easily take a breath. Examples of this include tying a rope around the neck, or pushing a pillow into one's face. Mechanically blocking one's breathing is terrifying, and people will struggle with the last of their strength to clear the obstruction.

When used properly, the plastic Exit Bag causes a peaceful death; one that comes from (freely) breathing low oxygen air (hypoxia). With an Exit Bag, a person breathes easily and peacefully. The bag expands and contracts with each breath and the oxygen level inside the bag falls. This is in stark contrast to the terror of suffocation

This is why it is important not to confuse the peaceful hypoxic death that is possible when an Exit bag is used properly, and the grim death that results from an obstruction to the airways. And this is why the media are so remiss when they reinforce this confusion. For example, when referring in 2001 to the importation of Canadian Exit bags *The Australian* newspaper reported these bags as 'reminiscent of the Khmer Rouge's shopping bag executions in Cambodia's killing fields.' Such misinformation shows a significant lack of understanding of the process, and such reports have damaged the image of the Exit Bag.

The Hypoxic Death

Hypoxia is the term meaning 'low oxygen', and a death that results from inhaling insufficient oxygen is a hypoxic death. While there are several ways this might occur, the common method used by those seeking a peaceful death is to place a plastic bag over one's head. To understand why a plastic bag, low oxygen death is an easy and reliable way to die, a basic understanding of human physiology is helpful.

In normal everyday life, we live in an atmosphere that is 21% oxygen. Interestingly, when there is a decline in the level of oxygen in the air we are breathing, we do not experience any particular alarm or concern. As long as one can breathe easily, the sensation one experiences as the oxygen level drops is one of disorientation, confusion, lack of coordination and eventual loss of consciousness. This experience is sometimes likened to being drunk (alcohol intoxication). If the oxygen level falls too far death will result.

Accidental hypoxic deaths are not uncommon and there are a number of scenarios that can bring them about. One example is the sudden drop in oxygen level that occurs when an aeroplane de-pressurises at high altitude. This can lead to a rapid loss of consciousness and the death of all those in the plane. When the plane de-pressurizes, one can still breath easily but there will be little oxygen in the inhaled air. This will cause a sudden drop in the oxygen level in the blood reaching the brain, leading to loss of consciousness and death. It is not uncommon for planes that have suddenly de-pressurized to travel on autopilot until they run out of fuel while everyone aboard has died. Witnesses (from planes sent to investigate) say that it often appears as though everyone on board has just gone to sleep.

Pneumonia is a more common cause of a hypoxic death. Its peaceful reputation led to its common description as the 'old person's friend'. While the air inhaled may contain the full 21% of oxygen, the inflammation of the lungs (caused by the pneumonic infection) makes it impossible for the necessary oxygen to be extracted. The blood reaching the brain will have less oxygen than that required for life, and a peaceful death often results.

The Role of Carbon Dioxide (CO₂)

In normal respiration, the body makes use of oxygen and produces as waste the gas, carbon dioxide. Carbon dioxide is removed from the body as we breath out. While the human body is relatively insensitive to falling levels of oxygen, it is very sensitive to any rise in the level of carbon dioxide in inhaled air.

When the body detects a slight increase of carbon dioxide in the air that we breathe, a warning message from the brain alerts the person. They will be roused and may react by gasping. If a person is using a plastic Exit bag, the rise in the level of carbon dioxide within the bag may result in the person struggling to pull the bag from their head. This reaction is known as a Hypercapnic (high carbon dioxide) Alarm Response.

Sleep Apnoea provides an example of hypercapnic alarm. Here the person with sleep apnea snores so heavily that they deny themselves the oxygen they need. However, it is not the lowering of the oxygen level that alarms and wakes the person, but the accompanying rise in the level of carbon dioxide. If the fall in oxygen were not accompanied by this rise in carbon dioxide, the Sleep Apnoeic would be far more likely to die. In the depressurized aircraft, the oxygen level drops but there is no accompanying rise in carbon dioxide, hence a peaceful death is the common outcome.

Aesthetic and Other Concerns

The image of a bag tied tightly around one's neck causing a grim death by obstructing the airway has turned many away from the plastic Exit Bag. Even at Exit International workshops, it is common for participants to voice their disgust at the Exit Bag, saying 'I don't like the thought of being found like that.' Lisette Nigot (of the documentary *Mademoiselle and the Doctor*) rejected this method. Lisette likened the plastic Exit Bag to being 'wrapped like a piece of ham.' For Lisette and others, the main concern was one of aesthetics. Despite such concerns, if used correctly, the Exit Bag provides a simple, reliable and peaceful way of ending one's life.

A Peaceful Death

There are two common methods employed to deal with the problem of the rising level of carbon dioxide inside the plastic Exit bag. In the following section, we will describe the experiences of two different people, based on eye witness accounts. These accounts illustrate the different strategies.

The first case involved a 75 year old man called Brian. Brian was diagnosed with bladder cancer in 1999. In 2001, he used a plastic Exit Bag and an overdose of common, non-lethal sleeping pills to die peacefully.

The second case involved a 69 year old woman called Joanna. In 2003, Joanna had a heart attack. She survived, but her heart was irreparably damaged and she found herself suffering from congestive cardiac failure. Joanna chose to die peacefully and unassisted, while she still had the means to do so, and used a plastic Exit Bag together with a canister of helium gas. Here are their stories as told by their neighbour and husband respectively.

Brian's Story

Brian Appleyard (not his real name) made contact with Exit shortly after being diagnosed with bladder cancer. He lived in a retirement village on the Gold Coast and was a well-educated man who had served in the airforce during WWII. When Brian made contact with us, he had already done much reading about the use of Exit Bags to achieve a peaceful death. Brian's wife had died some years before and his adult children had long since left home. He was relieved about this because he said he would never want anyone he cared for finding him with a plastic bag on his head.

Several weeks before he died Brian talked to his close friend and neighbour Kevin. The plan was that Kevin would not sit with Brian when he used the bag, but would visit later and remove and dispose of the bag after 'the event'.

Kevin writes:

Following information he had learned at an Exit workshop, Brian began his preparation by crushing up a full prescription of temazepam.

Authors' note - while Brian used Temaze - temazepam, he could successfully have used many others, such as oxazepam - Serapax or nitrazepam - Mogadon. These common sleeping pills from the benzodiazepine class of drug are not considered to be lethal even in overdose and are easily obtained.

Brian told me that he had learned that while the sleeping tablets were not in themselves lethal, they were necessary to keep him asleep and to suppress his body's inevitable reaction to the rising level of carbon dioxide inside the bag. He prepared the drugs by crushing the full packet of 25 tablets and stirring the powder into a small glass of water. He then prepared a second small glass of a strong alcohol. Brian chose whiskey and said the alcohol would remove the bitter after-taste of the mixture. The alcohol was also supposed to increase the potency of the sleeping pills, making them act faster and the whole process more efficient.

Once these two drinks were prepared, Brian sat in his favourite recliner chair, the drinks on a table by his side. He was well aware that with the Exit Bag, technique was important.

He also knew that he did not want to involve me actively in his plan and so would need to carry out his actions without my assistance. The idea was that Brian would take the pills, place the bag on his head and fall asleep. While asleep his body would use up the oxygen in the bag. Sleep would give way to unconsciousness and death would follow. The process was expected to take some time (up to 1 or 2 hours).

Brian adopted the following technique.

1. Prior to placing the Exit bag on his head, Brian prepared, but did not take, the sleeping pill mixture. He adjusted the elastic at the neck of the Exit bag he had made so that it was a comfortable fit around the neck (not too tight or loose).
2. Brian then tested the bag by placing it over his head and observed it in a mirror. Breathing in and out, he could see the bag expand and collapse with each breath.
3. When the time was right, Brian seated himself comfortably, reclining slightly with shoulders supported. He positioned the bag over his head and stretched the elastic neck band horizontally away from his face using the thumbs of both hands.
4. He placed his thumbs inside the neck opening of the bag, pulling the bag away from his face. By doing this Brian allowed a large opening for fresh air.
5. While keeping the elastic stretched with one hand, with the other hand he drank his prepared drink of strong sedative mixed with water. He washed the bitter tasting substance down with his whisky.

Brian remained seated with the elastic stretched by both his thumbs until sleep came, approximately 15 minutes later. At this point his arms relaxed and lowered and the elastic neck band slipped from his thumbs. The bag positioned itself snugly - but not tightly - around his neck. As Brian fell into a deeper and deeper sleep the bag expanded and contracted in time with his breathing. Each breath lowered the oxygen concentration inside the bag from the original 21% , each breath raised the level of carbon dioxide.

Brian experienced a peaceful death once the oxygen level within the bag dropped to <5%. The large dose of sleeping tablets kept him asleep till that point was reached, and prevented him from being woken by the rising level of carbon dioxide in the bag. The bag was not dislodged.

A graph showing the decrease of oxygen and associated increase in carbon dioxide inside a plastic bag during the first 4 minutes is shown below (Fig 5.1)

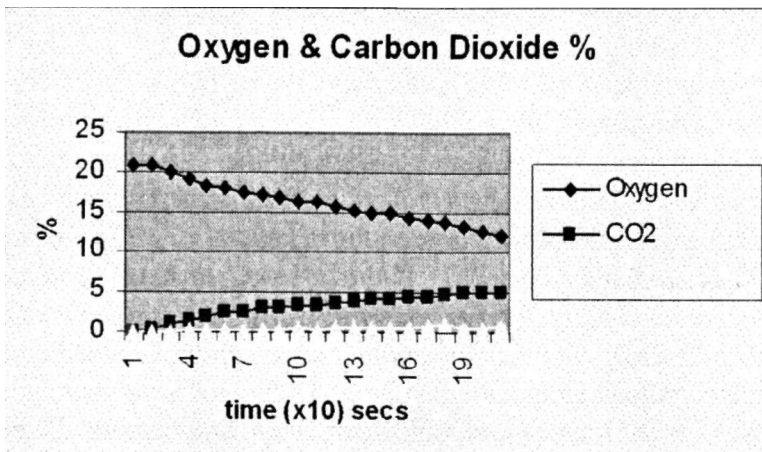


Fig 5.1: Exit bag O₂ and CO₂ levels for first 4 minutes

Point to Note

* While death from an Exit bag combined with sleeping tablets is peaceful and reliable, technique remains very important. A person needs a high degree of control and the ability to coordinate arm movements. For this reason, the method may not be suitable for people with specific medical conditions. Neurological conditions such as multiple sclerosis or Parkinsons disease are examples. If the technique is not followed closely there is the chance that the Exit bag will not be correctly positioned around the neck when sleep ensues. Clearly a witness can ensure that this doesn't happen - but that would be assisting a suicide, and the law would be broken.

* Remember that the process that leads to the hypoxic death does not commence until the person's arms relax and the bag takes up its position around the neck. While the person is awake their fingers keep the neck elastic stretched allowing plenty of air to circulate. If one doesn't sleep, one will not die.

Joanna's Story (as told by her husband Stephen)

Joanna Cataldi (not her real name) joined Exit in 2003 after the development of cardiac failure following a heart attack the previous year. Joanna's prognosis was not immediately apparent. The initial heart attack had left her with significant cardiac damage but her doctors were unsure of just how much this would effect her life. While pleased to have survived the initial attack, Joanna soon found that her condition was deteriorating. She said it was this uncertainty that led her to make contact, first with her local VE Society and then with Exit. At the time of joining, Joanna and Stephen were living in their own home in outer Sydney.

Stephen writes: Joanna had heard about the possible use of a plastic Exit Bag with helium gas as a quick and reliable way of obtaining a peaceful death. Back then, disposable helium canisters were not available in Australia, although she had read about their availability in the US. In early 2005, these helium canisters started to be marketed in Australia and Joanna set about obtaining the equipment she would need.

Joanna knew that the presence of helium in an Exit Bag would dramatically speed the process. When the bag is pulled down over one's head and a deep breath taken, she knew that there would be almost no oxygen in that breath. This lack of oxygen in the inhaled gas would cause her blood oxygen levels to plummet, and she would lose consciousness almost immediately. Joanna knew her death would be very similar to that which occurs when an aircraft rapidly depressurizes.

The helium that fills the bag displaces any oxygen and flushes away the exhaled carbon dioxide. One does not need to wait for the oxygen level inside the bag to fall, and there is no associated build up of carbon dioxide.

Authors Note -With helium in the bag instead of air, one doesn't have to 'breath down' the oxygen in the bag from an initial 21% to < 5%. Helium in the Exit Bag displaces the air (and oxygen). It is important to note that the helium, itself, does not interact with the body. Helium has no taste or smell and quickly dissipates after death. There is no test that can reveal its use. Helium is not the only gas that could be used. There is nothing particularly special about helium, indeed any gas that does not react with the body, is odourless and available in a compressed form would do. Other inert gases that could be used include: argon, neon, even nitrogen - the gas which makes up 80% of the air we breath.

The important thing is the introduction into the bag of a flow of an odourless gas that will displace the oxygen and flush away exhaled carbon dioxide.

Many compressed gases are only available in high pressure cylinders which are rented from gas supply companies (like BOC Gases). For many years, helium has only been available in this form. These cylinders are available for lease, either short term or for an annual fee. The drawback with accessing helium this way is the paper trail that is generated. There is no anonymity.

A second issue of concern is the size of these commercial cylinders. Commercial helium cylinders are large, heavy and difficult to transport. High pressure gas also needs to be controlled with a regulator in order for a usable stream of gas to be produced. Suspicion might arise if an elderly or very sick person is seen leasing a cylinder from their local BOC gas outlet. If someone else were to collect the cylinder for them, this other person may well become legally implicated in assisting in a suicide. These concerns turned many people away from using high pressure compressed inert gas with an Exit bag.

The introduction of low pressure disposable cylinders has meant that helium has become a viable gas for use with an Exit Bag and dramatically increased the popularity of the method. The compressed helium comes as part of a Balloon Kit manufactured in the US. These kits are designed to provide an instant system to fill helium party balloons and contain a light-weight cylinder of helium, a packet of party balloons (30 or 50 depending upon the size cylinder) and tie ribbon. Joanna purchased the kit outright, paid cash and left no paper trail.

Stephen continues:

Of the two sizes of cylinder available, she purchased the larger cylinder which contained 420 litres (14.9 cubic feet) of compressed helium at a pressure of ~ 1500 kPa. (Fig 5.2)



Fig 3.2: 420 litre disposable helium cylinder

She knew this would produce a usable stream of gas which would run for approximately 20 minutes, more than enough time for a peaceful death to occur. Joanna adopted the following technique:

1. She introduced a controlled stream of helium into the Exit Bag through a plastic tube. The tube was fed into the Exit Bag through the neck opening and secured to a tie held by adhesive tape inside the bag.
2. She adjusted the neck of the Exit bag to obtain a snug (not tight) fit around her neck. The Bag was positioned on her head like a hair net - at her forehead at the front and down towards her lower head, upper neck at the back and above the ears at the side. Joanna's face was fully exposed (Fig 5.3a).

3. The tap on the cylinder was then turned fully on. With a regulating jet in place the initial flow of gas at full cylinder pressure was around 15 liters/min. The average Exit bag is around 15 litres in capacity so in about a minute, most of the air (and oxygen) in the bag was displaced. The bag remained over the hair and inflated and excess gas leaked from around the elastic (Fig 5.3b).
4. When the bag was fully inflated, Joanna exhaled completely, and pulled the bag down over her face until the neck band was positioned comfortably around the neck. She then took a full, deep breath of helium (Fig 5.3c).
5. The single breath of helium caused a sudden and precipitous fall in the oxygen level of the blood going to her brain. An automatic reaction was to take a further deep gasp for air, but consciousness was rapidly lost. A peaceful death followed a few minutes later. When Joanna had stopped breathing, I removed and disposed of the Exit Bag and threw away the empty helium cylinder.

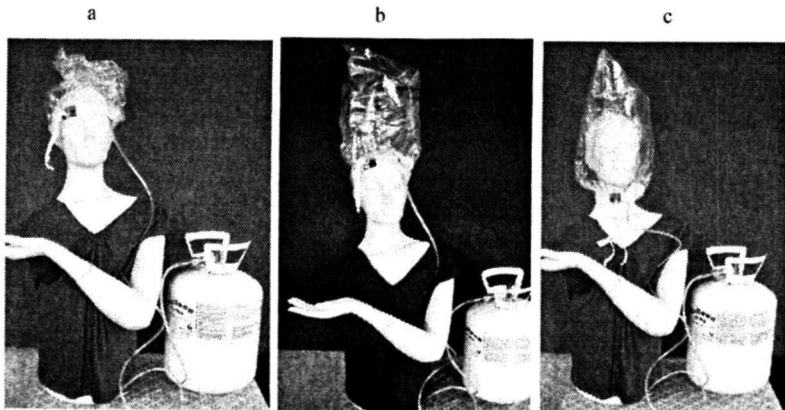


Fig 5.3: Positioning, inflating & Using the Exit Bag with Helium

We had previously discussed in detail how Joanna's death should be dealt with. She did not want to be known as the grandmother who suicided. To hide the true cause of her death, I removed all of the equipment used and concealed any evidence of her suicide. I hoped that the doctor would assume it was a consequence of her cardiac disease. I knew though that if the doctor was uncomfortable and the police became involved, I would have to lie and say that I had no idea how my beloved wife had died. I knew that a hypoxic death is undetectable, but luckily it never got to that point.

The Use of Helium

In planning the end of her life, Joanna had obtained a number of pieces of equipment. She made an Exit Bag and secured a means to control the gas flow. She also wanted to be sure that the cylinder was full before using it. Joanna made the Exit bag and the control kit herself. While I was willing to remove the equipment I did not want to be accused of helping her with her death. Her other equipment included:

1. Plastic tubing (standard 2.1m oxygen tubing with soft connectors).
2. Quick release (Jamec) air-line fitting that attaches to helium cylinder.
3. Gas jet regulator - this is a small, custom-made jet that fits inside the air line fitting.
4. A pressure gauge for testing the cylinder.
5. A plastic Exit bag.

Authors Note - It is important to check if the cylinder is full as some newly purchased cylinders have been found to be nearly empty - presumably because the cylinder tap was leaking.

Helium Canister Testing

At an Exit workshop a year earlier we had learned that occasionally, newly purchased helium cylinders do not contain the full 420 litres of helium. Cylinders occasionally have a faulty tap and when kept in storage for a long period there is the possibility that the gas will have leaked from the cylinder. The easiest way to ensure that a cylinder is full is to check the pressure. Joanna had checked her cylinder on purchase and did so again two days before she planned to use it. Her full canister of helium showed a pressure of 1500kPa (or 220 psi).

She used a pressure gauge fitted with a Jamec coupling that allowed quick testing of pressure, with no gas loss. She borrowed this gauge from our local Exit Chapter (Fig 5.4).

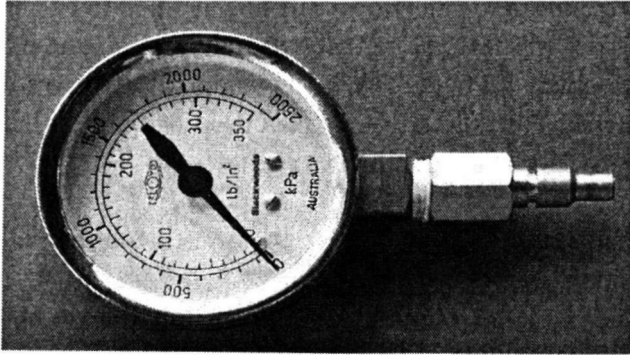


Fig 5.4: Cylinder pressure test gauge

Helium Gas Flow Control

Joanna and I both knew that it would be important when using an Exit Bag with helium to ensure that the stream of helium into the Bag would be adequate and steady. Exit told us that a 420 litre cylinder could provide around 20 minutes of useful gas flow, long in excess of the few minutes that it takes for a peaceful death.

We knew that to ensure this steady flow of gas, some method of gas regulation would be required. While it is possible to use the tap on the cylinder to adjust the flow, there is difficulty and risk with this as the tap on the helium cylinder is designed to simply switch the gas on and off, not to control the flow. Small tap adjustments can greatly affect the gas flow. If they are opened too wide, the gas will exhaust too quickly. If the tap opening is too small, an insufficient gas stream will result. We knew that control of the gas flow would be particularly important if a small (250 litre) helium cylinder was to be used.

Authors note - Exit International has investigated several methods of controlling the gas flow from helium cylinders and developed a gas jet that neatly fits the Jamec cylinder head coupling. Once the jet is clipped into position and the tap on the cylinder switched full on, the gas flows at a rate of 15 l/min at full cylinder pressure. This flow decreases as the pressure falls, which is exactly what is required. At the start of the process, as the bag is filling and prior to the first breath, the flow rates are highest.

The original fitting that comes with the cylinder on purchase, the modified fitting and the control jet to provide the initial 15 l/min flow are shown in Fig 5.6. Construction details are described later in this chapter.

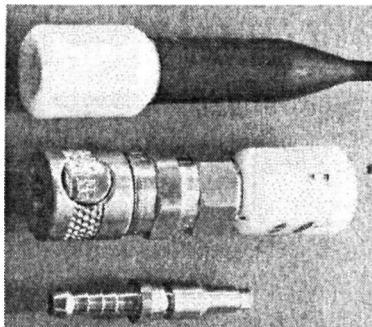
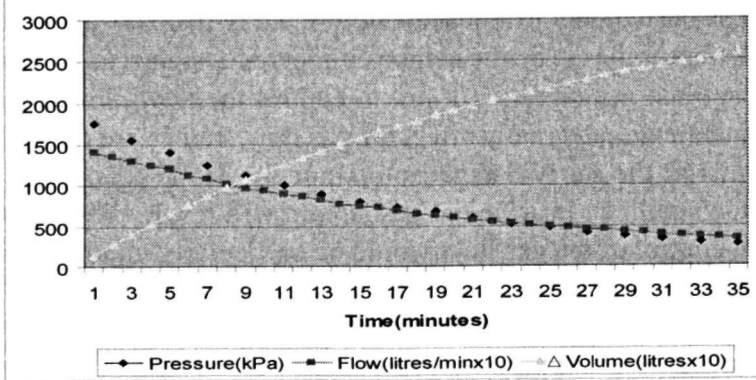


Fig 5.6: Modified cylinder fitting and Jet

Large He Cylinder (420 litre)



Small He Cylinder(250 litre)

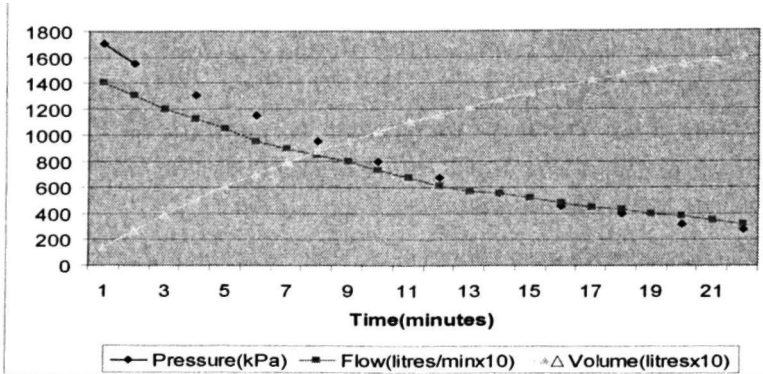


Fig 5.7: Flow Rate, Pressure and Volume changes with Time

A graph of flow rate, pressure and volume of gas with time is shown for the two available cylinder sizes is shown in Fig 5.7. NOTE: Useful flow rates are obtained from either cylinder (>5 litres/min for 15 minutes with the small cylinder, and 25 minutes with the larger).

Purchasing Helium

We purchased our first helium cylinder from a local party shop. We ordered a second cylinder - just in case - by mail order. In Australia, disposable helium canisters can be purchased online or ordered by phone. The telephone number for mail order delivery is: 1300 650 823. Most Spotlight stores also stock the helium canisters. In the US and Canada, major department chains are a good source of supply. In the UK, the larger supermarket chains also stock the cylinders.

At our local shop, we took the advice of other Exit supporters, telling the sales staff that we wanted the canister on stand-by for when the grandchildren visited at weekends and school holidays. Others had told us that it's true, their grandchildren do love filling party balloons with helium. This is why it might be wise to purchase more than one cylinder!

Although available in two sizes, we initially purchased the smaller, 250 litre cylinder of compressed helium that is sold in a green box. Later we purchased by phone the larger 420 litre blue boxed cylinder which cost ~ A\$70. Disposable helium cylinders are light and easily moved and stored (preferably in a cool place), and, as long as there is no fault in the cylinder or tap, the gas will keep indefinitely.

Authors note - While there is enough helium in a small cylinder for a peaceful death, close control of the gasflow rate in the small cylinders is essential. The larger 420 litre cylinders give greater margin for error and are preferred for this reason. Pressure should ALWAYS be checked prior to use to ensure the cylinder is full.

Helium Purity

In 2006 Exit received the first reports of failures by people using Exit bags with helium. Although this information has been sketchy, the descriptions suggest that there has been some unexpected contamination of the helium in the cylinder. The reports have been of people breathing the gas inside the bag for some minutes but with no loss of consciousness.

The only possible contamination that could produce this result would be the addition of a significant quantity of oxygen to the helium. This has long been postulated as a possible means of frustrating the use of disposable helium cylinders by those wanting a peaceful death. The introduction of 10% of oxygen would have no effect on the marketed use of the gas - balloons filled with this mixture would float - but the gas would be of no use in an Exit bag.

In mid 2006, Exit undertook extensive testing. The results of these tests were reassuring. No significant contamination of the cylinders tested was found. The results were:

Oxygen 0.4%, Carbon Dioxide <0.01 %,
Carbon Monoxide <0.1 ppm, Hydrocarbons ~ 40ppm.

The gas from cylinders used in the failed attempts was not tested. This needs to be carried out.

Cylinder gas testing for contaminants is quick but one needs reliable test equipment. Exit offers this service.

Comparing Methods

There is little doubt that the use of helium has greatly improved the acceptance of the Exit Bag. Looking at the RP Test scores for each approach shows why (see below).

The helium method used by Joanna was quick. According to her husband, Stephen, Joanna lost consciousness almost immediately. Nevertheless with this method, the person does not die in their sleep and there is some (short-lived) alarm and anxiety with the first breath. On the other hand, the use of an Exit bag with sleeping tablets by Brian meant that there was a period of more than 15 minutes when he sat anxiously with the bag half on his head and with his arms outstretched, waiting for the tablets to take effect. His anxiety almost certainly prolonged this period. More importantly, the whole process Brian used is much slower than with helium and the risk of discovery with possible intervention and resuscitation is much greater. For some people, though, the increased need for associated equipment when helium is used - gas cylinder, tubing, regulating jet etc - is a significant disincentive.

Note: The helium method produces no changes in the body that can be seen or found on inspection, or discovered at autopsy. If there is no evidence of an Exit bag or cylinder being used, the doctor will likely certify the death as natural, assuming that the person died from their underlying illness.

The Exit Bag is the only method that allows this possibility. If sleeping tablets are used these will be detected at autopsy, although they would probably be at levels unlikely to explain the death. All other approaches described in this book are detectable upon examination or autopsy.

Exit Bags

While different people make slightly different bags, Brian and Joanna both followed a standard Exit Bag manufacturing outline. Both of their bags were:

- a reasonable size
- a suitable soft plastic
- a neck band of elastic that allows the bag to make a snug fit around a person's neck

In the past, Exit Bags have been able to be purchased from organizations such as Right to Die Canada. As the original inventors of the Bag, Right to Die Canada were active for many years in their manufacture and sale and for a while provided a mail-order service for their members.

For a short period in 2001, Exit International also made bags available to supporters of the organization. However, with the experience of Canadian VE activist, Evelyn Martyns, fresh in our minds, (see *Killing Me Softly: VE and the Road to the Peaceful Pill*), the organization was forced to revise its position. Recent changes to the Australian Customs Act have increased the risks associated with distribution and Exit has now abandoned the manufacture of bags. Exit now concentrates on developing strategies that enable people to construct their own bags and associated equipment.

Exit bags vary in size, depending upon whether sleeping tablets or helium is to be used. Because he was intending to use sleeping pills Brian's bag was quite large. He knew he would need to spend some time with the bag half over his head and with his arms holding open the bag's neck before he fell asleep. A smaller bag would have been less comfortable and more likely to bring on a feeling of claustrophobia.

For Joanna who used helium, the bag was smaller and made of lighter-weight plastic. Stephen said that Joanna used a commercial polyester oven bag. Experience has shown that this smaller type of bag can be easily and quickly filled with the helium gas. With helium, the time before loss of consciousness is short, so claustrophobia is less of an issue.

In both methods though, the plastic of the bag was thick enough to ensure that there would be no chance of the plastic obstructing the mouth and nose during deep inspiration (breathing in).

Exit Bag Manufacture

The following items are needed (see Fig 5.9):

- Plastic bag - polyester 'oven bag' available in supermarkets is a good size (Large 35cm x 48cm) 'A & B'
- 1 metre of 10 mm wide elastic, 'D'
- 1 toggle to adjust elastic length
- 1 roll of 20mm transparent sticky tape 'C'
- 1 small roll of ~ 35 mm plastic duct tape
- Pair of sharp scissors

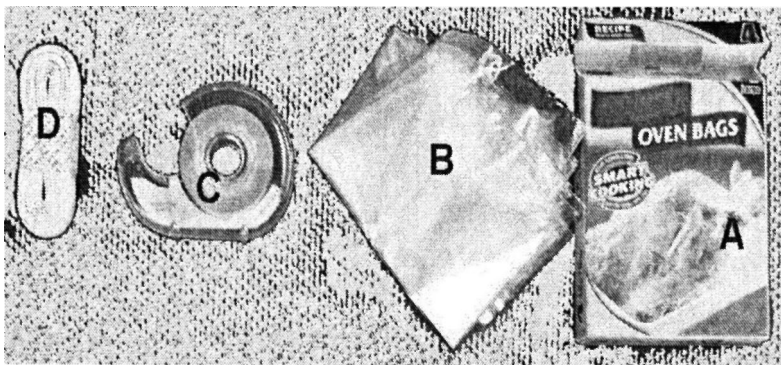


Fig 5.9: Items used to construct an Exit Bag

Construction (See Fig 5.10)

Stephen describes how Joanna made her bag (Fig 5.10)

1. She lay the bag out on a flat surface and folded back ~ 25mm (1") around the open end (A-B)
2. She made a 25mm cut in the folded polyester
3. She lay the elastic (C) inside the fold and had the two ends exit through this cut
4. She taped completely along the folded edge of the plastic with the sticky tape
5. She placed a cut in a ~ 60mm piece of duct tape and folded this over the exiting elastic to strengthen this part of the bag
6. She threaded a small wire tie through two cuts in another piece (~50mm) of duct tape and stuck this to the inside of the bag ~ 15cm up from the elastic (E). This was used to secure the plastic helium hose inside the bag.
7. The toggle was then threaded onto the two ends of the elastic to complete the bag (D)

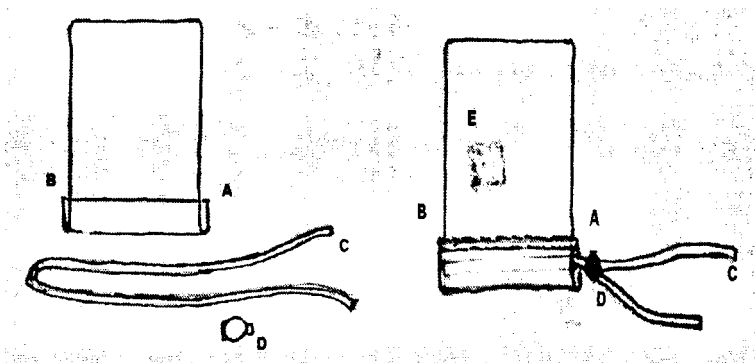


Fig 5.10: Exit Bag Manufacture

Authors 'note - the bag should be tested before use. See Point 2 of Brian s story.

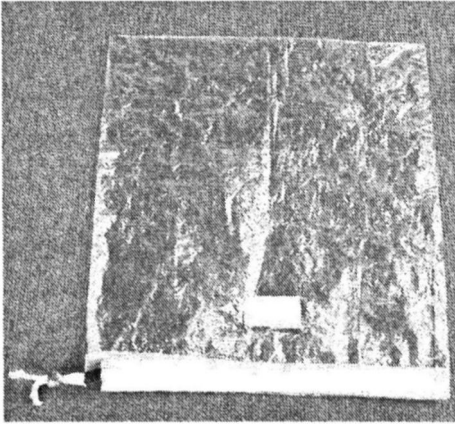


Fig 5.11: The completed Exit Bag

Concluding Comments

For seriously ill people who wish to have the option of accessing a peaceful death at a time of their choosing, Exit bags with sleeping tablets - or helium - provide some options. The method is reliable, simple and does not involve difficult-to-obtain drugs or equipment.

Nevertheless, for the successful use of either of these methods, substantial preparation is required. If sedation is used, sleeping pills (only available upon prescription) will also be needed.

If helium is to be used, a disposable cylinder needs to be purchased, along with the requisite connections and tubing. For both methods, a plastic Exit Bag is needed. For each approach, technique is important and a certain degree of physical dexterity required.

The need for so much equipment and the unaesthetic nature of placing a bag over one's head prevents many people from even considering these methods.

Exit Helium Flow Control kit

The flow control is a simple device for regulating the gas flow from the helium cylinder. The Kit used by Joanna consisted of two parts:

- A nylon/brass fitting made from the nylon balloon valve that comes with the cylinder and a 1/4" BSP female Jamec-Pem compressed air coupling (Part No: 13.0980)
- A control jet (Primus PCS8925 or equivalent) threaded into Jamec-Pem 1/4" hose tail (part No: 31-1117)

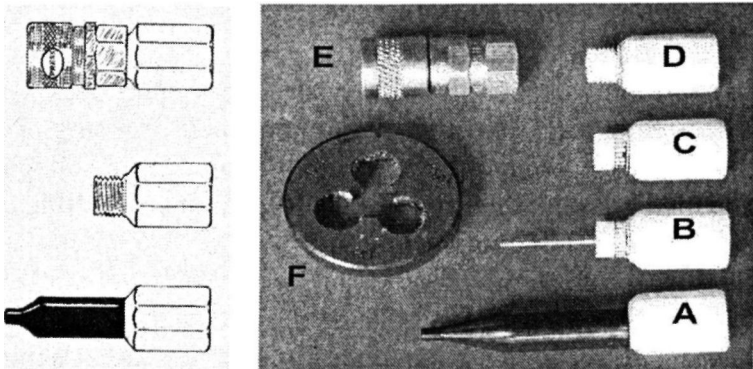


Fig 5.12: Making the cylinder fitting

The Construction of the Cylinder Fitting

(Instructions courtesy of Joanna and Stephen Cataldi)

1. Remove the black rubber from the nylon of the balloon filler valve that came with the helium cylinder (Fig 5.12, A)
2. Remove the central brass pin using a light blow with a hammer. Retain the brass washer and rubber seal (B)

3. Replace the washer and rubber seal into the nylon fitting
4. Using a 1/4" BSP die (F) cut a thread onto the shoulder of the nylon. As the shoulder is only 8mm in length a lathe is useful for this step or one can make use of the purpose made jig provided for loan at all Exit Chapters (Fig 5.13)
5. Using Teflon tape on the thread, fit the nylon to the 1/4" female Jamec-Pem compressed air coupling (E).
6. Test the fitting by screwing the nylon onto the Balloon time cylinder and opening the valve. There should be no leak of helium. Test this using soapy water

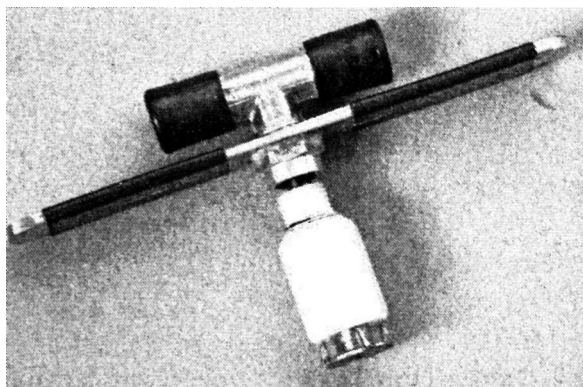


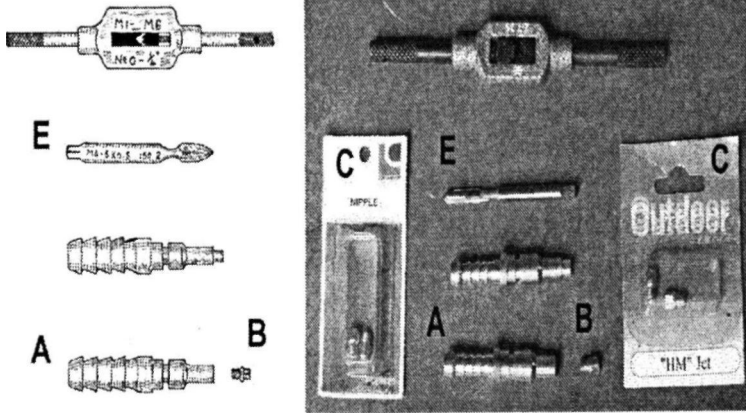
Fig 5.13 Jig for cutting nylon thread

The Construction of the Jet Fitting

(Instructions courtesy of John Edge)

1. Using a 4.5mm metric fine taper tap (E) cut an internal thread into the Jamec-Pem 1/4" hose tail (A, the non-hose tail end). Thread a Primus jet (B,C) into the threaded end of the hose tail and tighten with a spanner.

2. Test to see that the hose tail clips neatly into the brass cylinder fitting. Now when the cylinder is turned on the hiss of gas leaking through the jet at ~ 15 l/min will be



heard.

Testing the Pressure

To test the pressure, obtain a pressure gauge with range up to 2500 kPa (350 psi) and fit to this a female 1/4" Jamec-Pem coupling (Part No 31.1111). (Fig 5.4 & 5.14)

Remove the jet assembly from the cylinder fitting. The gauge can be fitted and will immediately provide the cylinder pressure. A full cylinder should have a pressure

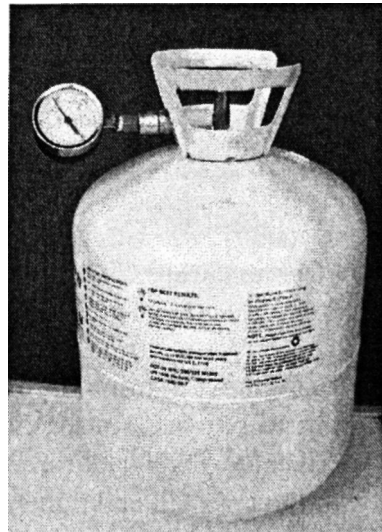


Fig 5.14 Checking to see the cylinder is full

of > 1700 kPa (250 psi)

THE RP TEST SCORE - Exit Bag + Sleeping Pills

Reliability (R = 6/10)

Much more dependent on technique

Peacefulness (P = 5/10)

Depends on the efficacy of the sleeping tablets used

Availability (A = 4/5)

Requires prescription drugs

Preparation (Pr = 2/5)

Taking of tablets and positioning of bag requires skill

Undetectability (U = 4/5)

Undetectable if equipment removed. Sleeping drugs will be found at autopsy

Speed (Sp = 1/5)

Slow, depends on action of drugs and "breathing down" oxygen level

Safety (Sa = 5/5)

Presents no risk to others

Storage (St = 4/5)

Sedative expiry dates must be noted

Total RP Score 31/50 (62%)

THE RP TEST SCORE - Exit Bag + Helium

Reliability (R = 8/10)

The method is reliable but technique is important and a degree of coordination and dexterity is required

Peacefulness (P=7/10)

Considered "peaceful" partly because the loss of consciousness comes quickly. There is the sensation of "air hunger" and alarm

Availability (A = 5/5)

All components are readily available

Preparation (Pr=1/5)

Considerable assembly and "setting up" of equipment

Undetectability (U = 5/5)

If equipment is removed there is no way of establishing the method used - even at autopsy

Speed (Sp = 5/5)

Loss of consciousness comes quickly

Safety (Sa = 5/5)

The method presents no danger to others

Storage (St = 5/5)

Components do not deteriorate with time. Gas pressure test can readily establish helium cylinder is full

Total RP Score**41/50 (82%)****THE RP TEST SCORE - Exit Bag + Sleeping Pills**

Criteria	Score
<i>Reliability</i>	6/10
<i>Peacefulness</i>	5/10
<i>Availability</i>	4/5
<i>Preparation</i>	2/5
<i>Undetectability</i>	4/5
<i>Speed</i>	1/5
<i>Safety</i>	5/5
<i>Storage</i>	4/5
Total	31 (62%)

THE RP TEST SCORE - Exit Bag + Helium

Criteria	Score
<i>Reliability</i>	8/10
<i>Peacefulness</i>	7/10
<i>Availability</i>	5/5
<i>Preparation</i>	1/5
<i>Undetectability</i>	5/5
<i>Speed</i>	5/5
<i>Safety</i>	5/5
<i>Storage</i>	5/5
Total	41 (82%)

Carbon Monoxide

Introduction

Carbon Monoxide (CO) is one of the most lethal gases known. Its toxicity is due to its ability to strongly bind with haemoglobin which greatly reduces the oxygen-carrying capacity of a person's blood. Areas of the brain sensitive to ischaemia (low oxygen level) are affected severely and a rapid, peaceful death is the common result.

Carbon Monoxide is particularly dangerous, as it is a colourless, odourless and a non-irritating gas. Without specialized monitoring equipment, there is often no way of knowing that carbon monoxide is present.

Death by poisoning from carbon monoxide can be reliable, quick and peaceful, provided the concentration of the inhaled gas is sufficiently high. There are often no specific clinical findings to identify this agent as the cause of death, although occasionally the red colouration of 'venous' blood gives a flushed pink colour to the skin. This colouration may indicate the cause of death to an examining doctor. If it is important that the death look 'natural' (and "suicide" not be stated on the death certificate), then poisoning by carbon monoxide may not be the best choice.

Carbon Monoxide and the Motor Car

A carbon monoxide suicide is commonly associated with the motor car. The internal combustion engine of cars produces a small percentage of carbon monoxide in the exhaust gas. If this gas is inhaled, death will result. Piping the gas into the car, or running the car in a closed shed are common approaches. In all cases, though, the carbon monoxide will be mixed with a large amount of other foul-smelling exhaust products. One of the benefits of this approach - peacefulness - is lost.

Older cars tend to produce the highest levels of carbon monoxide in their exhaust gas. With the introduction of unleaded petrol in 1986, there have been controls on the monoxide levels in exhaust gases to meet environmental standards. Since 1997 new cars can emit no more than 10% of the levels of carbon monoxide acceptable in 1976. Mandatory catalytic converters oxidize most of the produced carbon monoxide to form carbon dioxide.

Despite these significant changes in the emission levels of monoxide, motor vehicle exhaust gas suicides continue to occur at a surprisingly high rate. Indeed, in the period from 1976 to 1995 the rate of exhaust gas suicides in Australia increased faster than the rate of motor vehicle registrations (Routley & Ozanne-Smith, 1998). Possible explanations include the fact that idling motors do not necessarily comply with national standards. Additionally, catalytic converters do not function when cold. Rather, they require several minutes to warm from a cold start. Of significance though is the increasing number of *failed* suicide attempts from breathing exhaust gas that were reported in this period.

This is not to say that the motor car cannot be used as a source of carbon monoxide to effect a reliable death, but there are many problems associated with the method. One concern is the mechanical connection of the exhaust to the hose carrying gas to the car. Many modern vehicles have elliptical exhaust outlets. Coupling the exhaust to a round hose, often using plastic tape, can cause problems because of the heat of exhaust gas. If the tape or tube melts or is destroyed by the heat, failure is likely. Fig 6.1 shows a carefully engineered system using metal connections and clamps and heat resistant tubing.

The approach demands meticulous attention to detail and testing is strongly recommended. Testing is readily achieved using a carbon monoxide meter. By placing the meter on the front seat, and running the car using the planned setup, the meter can be watched safely from outside the car. The reading on the meter will rapidly reveal if the system will work. If the meter moves quickly off-scale (most meters full scale at 500ppm), the method is unlikely to fail. If the meter struggles to rise, even when the motor is started cold and allowed to idle, the system should be avoided.



In addition, careful planning is required to avoid the possibility of intervention. A car running with a hose fed into the back window will almost certainly attract attention. And, even if effective, sitting in an environment of hot, foul smelling, burnt engine waste, just to make use of the tiny percentage of monoxide present, is surely an unpleasant way to die. In Exit's survey of our elderly members, only a small percentage showed any interest in carbon monoxide poisoning.

History of the COGen (carbon monoxide generator)

The idea of a seriously ill person having to sit in a car full of unpleasant fumes has little appeal, so attempts have been made to produce pure carbon monoxide that is much easier to inhale. In the 1990s, Dr Jack Kevorkian helped more than 100 seriously ill people to end their lives peacefully, nearly half of whom used carbon monoxide. Dr Kevorkian used a cylinder of compressed carbon monoxide (30% CO in air). The person wanting to die switched on the gas at the cylinder and breathed through a loose-fitting face mask. A few deep breaths of the carbon monoxide-air mixture and the person lost consciousness and died shortly afterwards. Dr Kevorkian would then switch off the gas and remove the cylinder and face mask. Those present at these deaths described the effectiveness and peacefulness of the approach.

In late 2002, Exit International decided to take Dr Kevorkian's use of carbon monoxide one step further. Since compressed carbon monoxide is difficult to source, Exit set out to develop a generator that would produce the carbon monoxide gas when and as it was required. The first carbon monoxide generator (the COGen) made use of the simple chemical reaction that takes place when formic and sulphuric acids are mixed. This generates pure carbon monoxide gas.

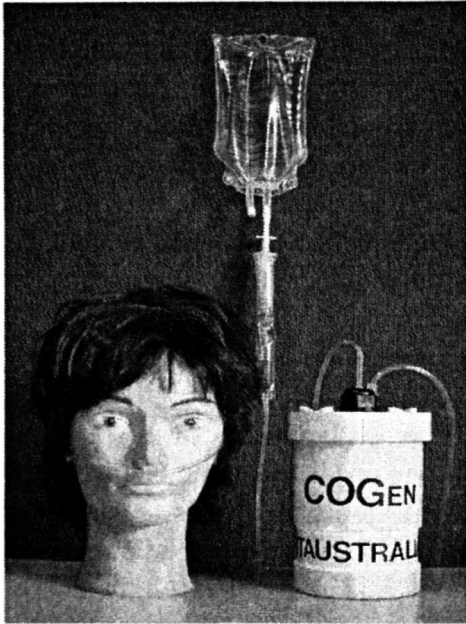


Fig 6.2
The early CoGen

On testing, the first COGen reliably produced one to two litres of carbon monoxide per minute. Filmmaker Janine Hosking recorded this first demonstration at Exit's Darwin laboratory in late 2002, and the sequence was shown in the film *Mademoiselle and the Doctor*. The first public demonstration of the COGen took place at Exit's 'Killing Me Softly' conference in Sydney in May 2003.

In the week following the launch of the COGen, a US website emerged authored by a person unknown to Exit. The site's creator - someone known in the on-line world as 'frog' - pieced together the basic workings of the device from media reports. This website continues to exist today at:

<http://www.geocities.com/monoxidemachine>

The CoGenie is Born

The COGen sparked considerable interest within the Exit community with many contributing their ingenuity and know-how to develop an improved version. The new device became known as the 'COGen Mark II' or 'COGenie'. The initial Exit design has now been modified and refined many times.

Development of the generator by Exit members proved a boost to the entire process. Committed to creating a simpler version of the original COGen, those involved wanted to build a user-friendly COGenie. In September 2003, the working group, led by John Edge, met and built their own COGenie machines at a workshop on the Gold Coast in Australia. At this workshop, ten COGenies were built with many of their main parts sourced from the kitchen aisle of the supermarket, rather than the hardware store. Even a lady's version made largely of Tupperware and kitchen implements was developed.

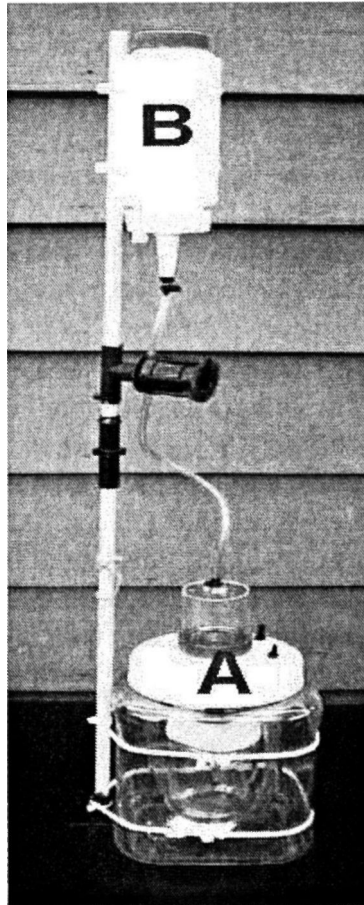


Fig 6.3: The COGenie

This first construction workshop also featured in the film *Mademoiselle and the Doctor*. The ownership of the very first of these devices was determined by raffle, with Exit supporter - Beryl - the winner. Beryl tells us that her COGenie has pride of place in her home and never fails to generate conversation from first-time visitors!

How the COGenie Works

The washing chamber - see Part 'A' of Fig 6.3 - is filled to about half its height with cold tap water. One hundred ml of concentrated sulphuric acid is placed in the reaction chamber, which is then closed and submerged within the washing water chamber.

Fifty ml of 85% formic acid is placed in the gravity-feed chamber ('B'). The control-valve is then adjusted to allow the acid to drip into the reaction chamber at a rate of 2 to 3 drops every 5 seconds (20 to 30 drops per minute or 1 to 2 grams per minute). At this rate of feed, the formic acid continues its feed into the reaction chamber for half an hour or more. Note - carbon monoxide continues to be generated for some time after the formic acid flow has stopped. The gas is washed and cooled by bubbling through the water jacket and is passed on to a loose face mask or nasal prongs.

Recent Developments in COGenie Devices

Queensland Exit supporters have had a particular interest in the COGenie. One of the most innovative recent designs has been developed by members of the Queensland VE Society.

In this model, two glass 'Vegemite' jars with screw plastic lids (Fig 6.4, A&B) are fitted one inside the other. These jars are placed inside a third plastic screw top jar with an outlet line positioned in the wall. The inner jar (A) container holds the 30ml of formic acid, the middle jar (B) contains 60ml sulphuric acid. Four hundred ml of water is placed in the outer large jar.

A small hole is drilled in the plastic lid of the inner container (~ 0.7mm). Upon inversion of the jars, there is a slow mixing of the acids. The plastic tube (E) is fitted to the cap of jar A. A cut is made at the base of the loop (F) so that the gas within the inner jar can escape. The carbon monoxide produced in jar B exits through G and is cooled and washed by bubbling through water in the outer glass jar (C). The gas that has been generated then flows along plastic tube (N) to a set of nasal prongs.

This entire system can be built in 10-15 minutes. The use of relatively small amounts of the two acids (30ml of 85% W/W formic acid & 60ml 98% W/W sulphuric acid) make this device very simple and easy to use. Once loaded with the two acids, and with 400ml of water in the outer container, the generator can stay inert until use. To activate the generator, it is simply inverted allowing controlled mixing of the acids through the bleed hole (D). Within a few seconds, 100% carbon monoxide is generated, producing a lethal gas flow through the nasal prongs. Gas flows of ~ 500ml/minute are reached after a minute. Using the quantities quoted, the theoretical volume of CO generated should be approximately 10-12 litres.

A graph of flow rates with time for this generator is shown in Fig 6.5. Construction diagrams are shown in Fig 6.4.

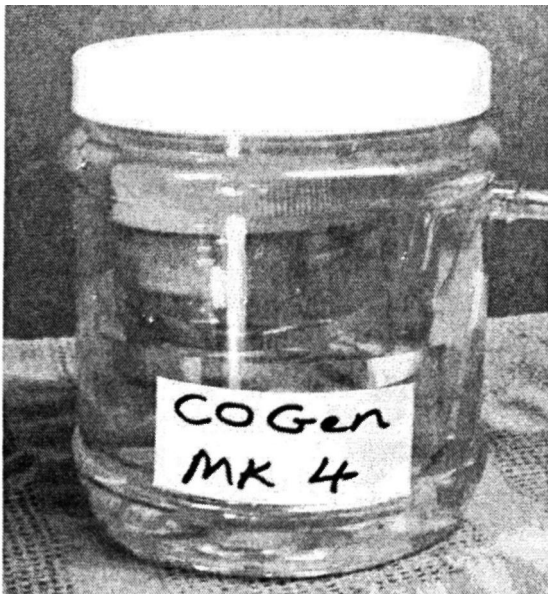
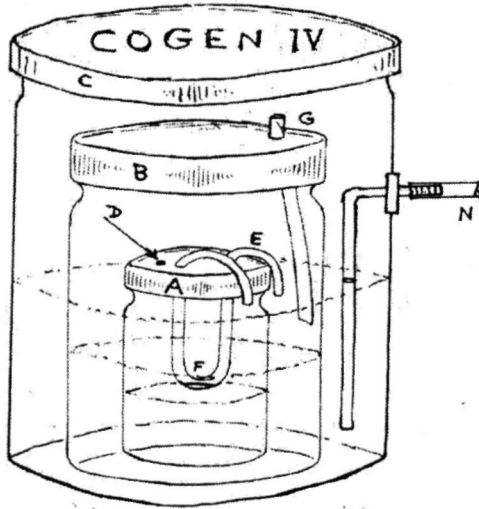


Fig 6.4: COGen Mk4 (Inversion model)
Concentric containers, activation by simple inversion

From the graph below it can be seen that gas production rises steeply for the first minute peaking with a generation rate of ~ 600ml/min. Production then plateaus for 5 minutes at a rate of ~ 300ml/minute before falling away. The measured total gas produced is about 3.5 litres, about 1/3 of that predicted.

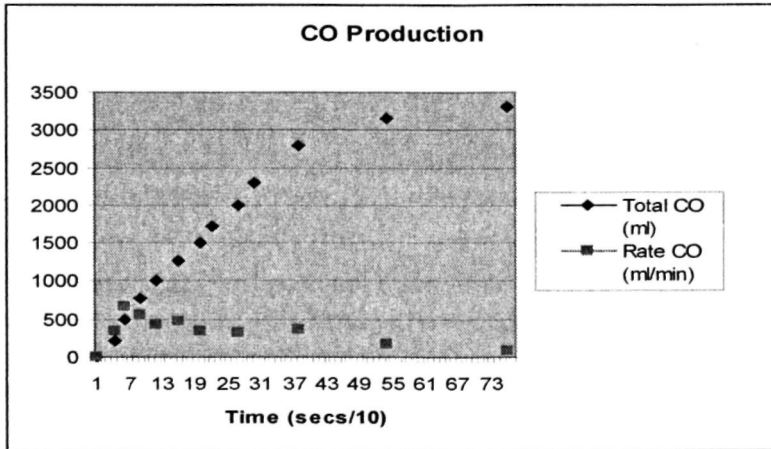


Fig 6.5: COGen Mk4 CO production with time

Chemistry of the Production of Carbon Monoxide

Carbon Monoxide is produced in the COGen by a chemical reaction that occurs when the formic acid (HCOOH) is broken down into water (H_2O) and carbon monoxide (CO). The catalyst for this breakdown is concentrated sulphuric acid. The sulphuric acid remains chemically unchanged but is diluted by the water released. The COGen ceases to produce carbon monoxide when all of the formic acid is broken down, or when the sulphuric acid becomes too dilute to catalyze the reaction.

The chemical equation is: $\text{HCOOH} = \text{H}_2\text{O} + \text{CO}$



Fig 6.6: COGen 4 on fume cupboard test bench with acid bottles and CO monitor

The heat that is generated in the reaction can lead to traces of formic and sulphuric acid in the emerging carbon monoxide. To remove these, the gas from the reaction chamber is cooled and washed by bubbling it through a surrounding water jacket. This jacket also serves to keep the reacting vessel cool.

Sourcing the Acids

Concentrated sulphuric acid (98%) can be purchased from chemical suppliers or at hardware stores where it is sold as a drain cleaner. Concentrated sulphuric acid is an oily clear liquid, the drain-cleaner sulphuric acid can be dark brown in colour because of additives, but this does not effect the generator's operation.

Formic acid is usually available from chemical supply companies. Home hobbyists use formic acid in tanning or bee-keeping. Formic acid can also be purchased online through chemical supply websites.

Safety Note

Concentrated formic and sulphuric acids are extremely corrosive materials. They should be kept secured in glass or polyethylene containers (plastic soft drink bottles are not suitable). When using sulphuric acid, rubber gloves should be worn and eye-protecting goggles and a face splash protector are also essential. Spills of acids onto the skin should be washed off immediately with copious amounts of water. If either of these acids gets in the eyes, wash the eyes continuously for several minutes and then seek medical assistance.

It should also be stressed that carbon monoxide is an extremely lethal gas. An ill person wishing to end their life using a COGenie should not have others near them. This is one significant disadvantage of using carbon monoxide. Because the person who is using the COGenie will not be able to switch off the device, the device will continue to run for some time. If using the device inside, the room should be well ventilated and a warning sign placed at the door to prevent any accidental harm to others who might enter.

The Drawbacks of Carbon Monoxide

To our knowledge the COGenie has not yet been used by anyone seeking a peaceful death. While the COGenie *should* work and the death *should* be peaceful, there are several unresolved issues.

The main concerns of Exit about the COGenie are as follows:

- *Problems dealing with corrosive sulphuric and formic acids* - Both sulphuric and formic acids are corrosive. This means that unless the right types of plastic and glass are used in the construction of the COGenie, leaks can occur. Acids spills are dangerous. Any spills should be quickly and carefully cleaned up. Some hardening of the PVC tubing when in contact with sulphuric acids has also been noted during testing.
- *Increasing difficulty in obtaining formic acid* - In recent months there have been reports of difficulty in purchasing formic acid from chemical supply companies. Those intending on making their own COGenie should be prepared for difficulty.
- *Difficulty in controlling the process* - One significant problem with the COGenie is that once started, the generator is hard to stop. In practice, the COGenie will produce a lot more carbon monoxide than will ever be required by the seriously ill person seeking a peaceful death. There is also the issue of safety for those who may be accidentally exposed to the gas. For example, the family member who discovers the body of the deceased person. The use of minimal amounts of acid in the Inversion Model goes some way to reducing this problem .

Note: Carbon monoxide gas is flammable and this should be taken into account. At the volumes produced, fire is unlikely to be an issue especially if the device is used in a well ventilated room. Clearly, though, a last cigarette while the generator is running is not a good idea!

- *Contamination of the carbon monoxide with minute, but acrid, sulphurous oxides from the acids involved* - The possible contamination of the gas by sulphurous oxides formed as the temperature of the reacting acids increases remains an issue. Although the cooling and washing process is designed to remove these contaminants, any failure to do so will result in the production of contaminated monoxide that will not be odourless. Experimental testing of the monoxide produced has not found any evidence of this, but until actual accounts are received of the use of these devices, this issue will remain unresolved.

Future Research - The CarGen

Design problems associated with the COGen/COGenie models have prompted further research into different methods of generating carbon monoxide. The most promising makes use of the reaction that occurs when carbon is heated and is allowed to partially oxidise.

The Reaction: $2C + O_2 = 2CO$

This method provides some (theoretical) advantages over the COGen/COGenie process. No corrosive acids are used and if the required heating is provided electrically, there is the possibility of a simple control of the system. Monoxide generation would stop as soon as power is switched off.

The CarGen is an electrically-controlled gas generator that produces carbon monoxide from the incomplete oxidation of carbon. Electrically heated carbon rods partially oxidise when air is passed over them using a small electric fan.

One of the first trial models used the power from a car battery. Here, the generator was not attached to nasal prongs. Rather, the carbon monoxide that was produced was simply allowed to fill the closed space of Exit's small test car. The CarGen requires no acids or corrosive liquids and is electrically controlled by a switch. The first prototype of the CarGen (see Fig 6.7) was made in September 2005.

Testing of the CarGen has revealed several features that need to be improved before the device can have practical application. The optimum carbon rod temperature and flow rate of the oxygen/air across the rods needs to be established to maximise CO generation. Nevertheless, the ability to quickly stop monoxide generation by cutting power to the unit was demonstrated and is seen as a design advantage that is well worth pursuing.

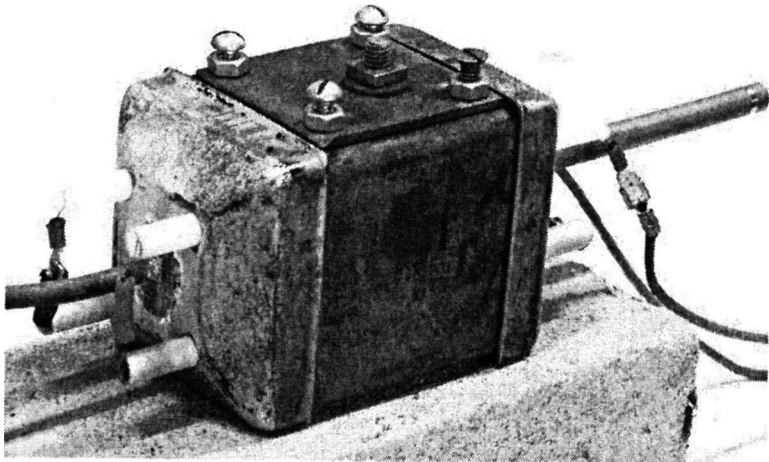


Fig 6.7: Prototype CarGen, Electric monoxide generator

Conclusion

The COGen is a device that could provide a seriously ill person with a peaceful death. There are, however, some unresolved issues with this device, which will need further research to resolve.

Most interest in this method has come from those who reject the taking of drugs orally, for fear of vomiting, and who reject the use of helium because of the need for a plastic bag to be placed over one's head. The COGen addresses these concerns.

Exit RP Test for Carbon Monoxide

The method loses points in the subcategories of Preparation, Undetectability and Safety. Preparation is not simple (Pr=1), there is a significant amount of equipment present at the death, and loading the device with concentrated acids requires care. This method may be detectable on inspection of the body (U=2), and can present some risk to others (Sa=1)

Criteria	Score
<i>Reliability</i>	8/10
<i>Peacefulness</i>	7/10
<i>Availability</i>	3/5
<i>Preparation</i>	1/5
<i>Undetectability</i>	1/5
<i>Speed</i>	5/5
<i>Safety</i>	1/5
<i>Storage</i>	4/5
Total	30 (60%)

Cyanide

The death of Spaniard Ramon Sampedro in 1998 and the subsequent award-winning film *The Sea Inside* has focused attention on the use of cyanide as an effective means by which a seriously ill person can put an end to their suffering.

Sampedro, a quadriplegic since a diving accident at age 26, ended his life by drinking a glass of water in which soluble potassium cyanide had been dissolved. He died quickly, and peacefully. Many people who have seen *The Sea Inside* have asked why these cyanide salts are not more frequently used by those who are seriously ill to provide a peaceful death. In this chapter we explain some of the difficulties involved in using cyanide and provide some answers. It is not unreasonable to expect that the use of cyanide will increase in the future, and it may yet become an acceptable form of the 'Peaceful Pill'.

Some background to cyanide

In 1814, the carbon-nitrogen (CN) 'radical' common to a number of chemical substances was isolated and given the name 'cyanogen' by the French chemist Joseph Gay Lussac. The subsequent name 'the blue generator' referred to the place of the CN radical in a number of chemicals that were used as

blue dyes; the Prussian Blue of blueprints (iron ferro cyanide) is perhaps the best known. In many of these compounds, the CN radical is so tightly bound that the substances are relatively non-toxic.

With the discovery of substances where the CN radical was not so tightly bound - the gas hydrogen cyanide, hydrocyanic acid, and simple salts like potassium and sodium cyanide - it was soon realised that cyanide was extremely toxic to animal cells. By destroying the mitochondria, an essential element within each cell, the CN radical caused rapid cellular death.

In 1921, cyanide gas (hydrogen cyanide, HCN) was proposed as a humane method of execution and led to the passage of the 'Humane Death Bill' in Nevada. The gas was first used to execute Gee Jon in 1924. Since that time nearly 1000 people have died in the execution gas chambers in the US. All chambers used the same method to produce cyanide gas. Pellets of sodium cyanide were dropped into sulphuric acid to release the gas which then enveloped the prisoner.

Hydrogen cyanide is a volatile liquid and can be stabilised and absorbed onto a substrate. In this form (Zyklon B), it was used by the Nazi's during the Holocaust. Originally developed as an insecticide, the pellets were kept in sealed containers and released as HCN gas when the pellets came into contact with air.

Today, cyanide compounds are widely used in industry. Vast quantities of the cyanide salts are produced for use in the gold mining, metallurgy, electroplating and photographic industries. Their toxicity is well known and despite the large quantities used, they remain heavily restricted and difficult to obtain.

Can Cyanide provide a peaceful and reliable death?

Those watching the cinematographic depiction of Sampedro's death would have cause to believe that a death resulting from the ingestion of cyanide salts is peaceful. Unfortunately, not all reports of cyanide deaths support this view. Indeed, there is considerable variation in accounts. While reliability is not an issue, the question most raised relates to the method's 'peacefulness.' Just how peaceful is it to die with cyanide?

Most accounts of death from cyanide poisoning come from witnesses to gas chamber executions where the (unwilling) prisoner inhaled HCN. One study undertaken at San Quentin prison showed that, on average, consciousness was lost within one to three minutes, with death occurring after nine minutes. These deaths were often peaceful with the prisoner falling quickly asleep. On some occasions, however, a violent (and presumably painful) death was observed. This method of execution was largely abandoned in the US in 1994 when the American Civil Liberties Union took a successful action against the California Department of Corrections. In their action, the ACLU argued successfully that the gas chamber violated the US Constitution's ban against cruel and unusual punishment, because it inflicted needless pain and suffering.

Eyewitness accounts of seriously ill people drinking dissolved cyanide salt are also mixed. In his book *Final Exit*, Derek Humphrey describes deaths that are quick and painless. But he also documents one disturbing account that refers to a death that was 'miserable and violent, marked by frequent tetanic convulsions while awake' (Humphrey, 1996: 30).

Toxicology texts of death by cyanide commonly refer to a rapid collapse and loss of consciousness if a large enough dose is absorbed. In his book *Suicide and Attempted Suicide: Methods and Consequences*, Geo Stone makes the observation that while cyanide might be commonly used by suicidal chemists, it is rarely by physicians. He concludes that this may be due to their different levels of access to poisons (Stone, 1999).

In 1995 when the guidelines for the Northern Territory Rights of the Terminally Ill Act (ROTI) were being developed the use of cyanide was not considered; better drugs (the barbiturates) were available. Nor is cyanide used in Oregon or Holland where euthanasia legislation is now in place. In *Final Exit* Humphrey summarises his thoughts on the use of cyanide, 'I believe that the balance of evidence about using cyanide indicates that it is best not used' (Humphrey, 1996: 33).

Cyanide Revisited

For a substance or drug to be useful as a Peaceful Pill two main criteria must be met. It must be, Reliable, and it must be Peaceful. Applying the Exit RP test to a salt like sodium cyanide gives some encouragement.

Reliability is high, few people will ever survive the ingestion of a sufficiently high dose of sodium cyanide. For a dose of 1gm of sodium cyanide, R=10.

There is also a correlation between the size of the dose and the speed of death and this minimises the chance of any adverse symptoms developing.

In terms of Peacefulness, the mixed accounts make this a difficult characteristic to assess. Clearly the size of the dose matters, if one is to minimise symptoms. Preparation is also important. The toxic effect is produced when stomach acid acts on the salt producing HCN which is then absorbed by the gut into the blood stream. This process is facilitated by dissolving the salt in cold water and drinking on an empty stomach where the gastric acid content is high.

An alternative is to place the cyanide salt into a treated gelatin capsule. Taking a 500mg capsule with an acidic drink (lemon juice, vinegar) creates the optimum conditions in the stomach. The delay can also usefully be employed to induce sleep with the addition of a strong soporific (sleeping tablet).

Taken in this manner the likelihood of a peaceful cyanide death is increased significantly. (P= 5)

Looking at the Minor Criteria

Availability (2/5) - Soluble cyanide salts are generally hard to obtain unless one has a contact in the industries where these substances are used. These salts are heavily regulated and restricted. They can however be manufactured (with care) from readily available ingredients, using unsophisticated facilities and equipment. Care must be employed in the manufacture, and the substance produced should be assayed to ensure the desired result.

Preparation (5/5) - Cyanide salts are consumed as a drink or in a gelatin capsule. Some clinicians will note the pink colour and a possible smell of bitter almonds but this can often be missed, especially in cases where there is underlying serious illness.

Undetectability (3/5) - at autopsy the substance will be detected.

Speed (5/5) - optimal administration will cause a very quick death.

Safety (3/5) - there is little risk to others, although the glass should be washed. Note - if vomiting occurs, the gastric contents may give off dangerous HCN.

Storage (5/5). With proper storage, the sodium and potassium soluble cyanide salts have an almost indefinite shelf life.

Exit RP Score for Sodium Cyanide 38 (76%)

Exit RP Test

Criteria	Score
<i>Reliability</i>	<i>10/10</i>
<i>Peacefulness</i>	<i>5/10</i>
<i>Availability</i>	<i>2/5</i>
<i>Preparation</i>	<i>5/5</i>
<i>Undetectability</i>	<i>3/5</i>
<i>Speed</i>	<i>5/5</i>
<i>Safety</i>	<i>3/5</i>
<i>Storage</i>	<i>5/5</i>
Total	38 (76%)

The Manufacture of Sodium Cyanide

(Notes courtesy Bert Tucker)

Sodium cyanide can be manufactured in a number of ways. Two relatively simple methods are described in the scientific literature. The first involves the use of the readily available dye, Prussian Blue (Iron III Ferro cyanide). A second uses the common swimming pool chlorine stabiliser, cyanuric acid.

In the first process the Prussian Blue is first converted to sodium ferrocyanide. This is done by allowing it to react with caustic soda in water. Iron oxide is precipitated and sodium ferro cyanide obtained. This sodium ferrocyanide (Yellow Prussate of Soda) is then converted to sodium cyanide by allowing it to react with concentrated sulphuric acid.

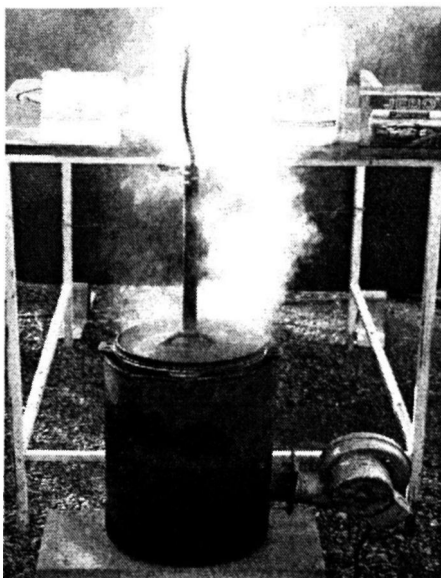


Fig7.1: Forge reduces sodium cyanate with carbon

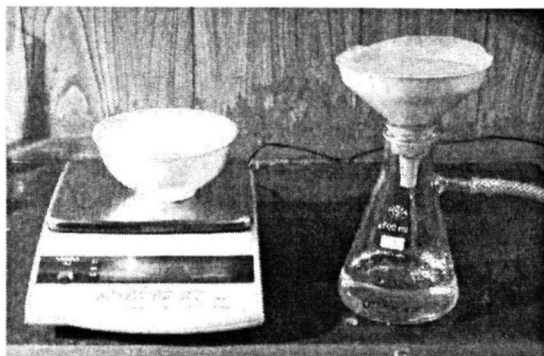
The very toxic HCN produced is passed into caustic soda to form the desired salt. There is considerable information available on this process but it was abandoned after initial experiments, considering it too dangerous for the inexperienced home chemist - some of whom may be readers of this book.

A more suitable method of safe, small-scale home manufacture of sodium cyanide involves the two stage conversion of the common swimming pool chemical cyanuric acid.

The first step is carried out by heating powdered cyanuric acid with sodium carbonate. Sodium carbonate is obtained directly as washing soda (or by converting sodium bicarbonate, baking soda). In the second stage, the sodium cyanate produced is reduced to sodium cyanide by heating it with powdered charcoal in a covered crucible (Fig 7.1).

It is important that this stage is undertaken outside. In this process, carbon monoxide is given off. The resultant glassy mass is cooled, crushed and filtered with water to remove the soluble sodium cyanide from the remaining insoluble carbon (Fig 7.2). Careful drying produces solid sodium cyanide powder.

As with all home manufacture there is a need for great care in carrying out this process. Contaminated items need to be disposed of carefully after traces of cyanide are removed. This is best achieved using chlorine bleach to oxidise any unwanted cyanide and to prevent it contaminating the equipment. The product also needs to be tested by analytic means to determine its concentration and purity. Quantitative tests are available and Exit offers such a service for supporters. Further information that details the manufacturing process can be found in most university and public libraries.



Introduction to Drugs

Introduction

For many seriously ill people, taking drugs or substances orally (by mouth) is the preferred way to end life. Substances taken in this way require no special equipment and is this simplicity that explains the appeal of the Peaceful Pill. The lack of any necessary bedside equipment also means that the death will often be thought of as one from 'natural causes'.

If a person dying of cancer takes the final step by consuming a drug like Nembutal, they will look as if they have died in their sleep. Most examining doctors would simply sign the death certificate indicating that this was a natural, expected cancer death. Of course, if an autopsy is undertaken, the causative drug will be discovered, but autopsies are increasingly rare in situations where the attending doctor believes the cause of death is clear (see Ch 14).

However, while taking oral drugs might seem to be the simplest way of obtaining a peaceful and dignified death, the method does require considerable planning. Knowledge of the substance to be used, its acquisition, preparation and administration are all important.

The Role of the Drug Overdose

Drugs are developed to provide a cure to an illness or to give relief from symptoms. *Drugs are never developed to end life, at least not in humans.* Yet some drugs do cause death, especially if they are administered in ways that were never intended. The usual way to misuse a drug is to exceed the suggested dose: 'the overdose'.

While most drugs have side-effects (effects other than the purpose for which they are designed), and most side-effects are more pronounced when a drug is misused or taken in overdose, a side-effect like death is always going to be a serious problem for a drug manufacturer. The company responsible for manufacturing a drug that will cause death in overdose will always be nervous about such a product and there will be a search to develop safer alternatives. So, while there are some drugs that do reliably cause death if taken in this way, this number is small and decreasing. If a drug that causes death in overdose remains on the market, it is likely that it is an important drug for which there are few current alternatives.

The process of replacing potentially lethal drugs with safer modern alternatives goes on all the time. The old-fashioned, lethal barbiturates have almost all been replaced by modern, safer sleeping tablets. The lethal tri-cyclic antidepressants have almost disappeared, replaced by much safer serotonin uptake inhibitors like Prozac. Pain relieving drugs like propoxyphene are currently under review and have already been replaced in countries such as the UK and New Zealand. The number of drugs that are of practical assistance to a seriously ill person seeking a peaceful death decreases each year.

Drugs, Swallowing and Taste

An ill person seeking death will need to consume the lethal quantity of the drug. Often these drugs are extremely bitter and this can sometimes precipitate vomiting (see *Drugs and Vomiting*). Consuming a large number of tablets can also be a difficult exercise, especially if the person is suffering from a disease that effects swallowing. Examples include some diseases of the throat and oesophagus, or a disease like Motor Neurone Disease that can effect the muscles of the throat. In some cases, problems with swallowing can be so severe that oral ingestion of drugs is simply not an option.

To avoid the bitter taste of the lethal dose, drugs are sometimes mixed with other stronger tasting substances. Another approach is to spray the tongue and throat with a topical anaesthetic like Lignocaine. In *Exit's* experience neither of these strategies is particularly rewarding. This is because the drugs are often so bitter that mixing the drug with another substance, like yogurt or jam, simply creates a much larger quantity of equally-unpleasant substance that then needs to be consumed. Anaesthetic sprays can work, but they are prescription items and require some expertise in administration.

The most effective method of consuming quantities of bitter-tasting drugs is to turn them into a liquid which can then be quickly drunk. This can be done by reducing tablets to powder by crushing them in a mortar and pestle, or by removing the gelatin covering of capsules and dissolving the contained powder in a common solvent - usually water. Even if a drug does not dissolve, a fine powder can still be made drinkable by rapid stirring with a teaspoon so that a suspension of fine particles forms and this can be swallowed.

By keeping the volume of the resulting liquid to 100ml or so, only a few mouthfuls are needed. The bitter after-taste is effectively dealt with by following this with another stronger tasting drink - usually alcohol (see *Drugs & Alcohol*).

Drugs and Vomiting

Any substance taken orally can be vomited up, and concern about this can cause considerable anxiety. A person intending to die must take the full (lethal) amount, so it is important to ensure that vomiting does not occur. Some people are prone to vomiting, and some diseases can cause vomiting. In a minority of cases, vomiting, or fear of it, can be such a problem that it is not possible to use oral drugs.

To minimize the risk of vomiting, an anti-vomiting ('anti-emetic') drug is usually taken for a period of time before the consumption of the lethal drug. There are a number of drugs used for this purpose. These anti-vomiting drugs are readily obtained, although the most effective are prescription items. The most common are metoclopramide (Maxolon, Pramin, Paspertin) and prochlorperazine (Stemetil, Stemazine). The usual procedure is for the person to take the anti-emetic for a full two days before the lethal drug is to be consumed (the usual dose is two tablets every 8 hours). There is then no need to synchronise the time at which the anti-vomiting drugs are taken with the taking of the lethal drugs.

If anti-vomiting drugs are taken for two days, the risk of vomiting is very low and problems are rare, except in cases where it was known to be an issue well in advance. In these cases alternative methods should be explored.

If vomiting does occur, the individual should bring up (vomit up) as much of the drug from their stomach as they can and the attempt to end their life should be abandoned. Ipacec Syrup can be used to encourage vomiting. It may be advisable to have some on hand. Ipacec can be readily obtained from the local pharmacy

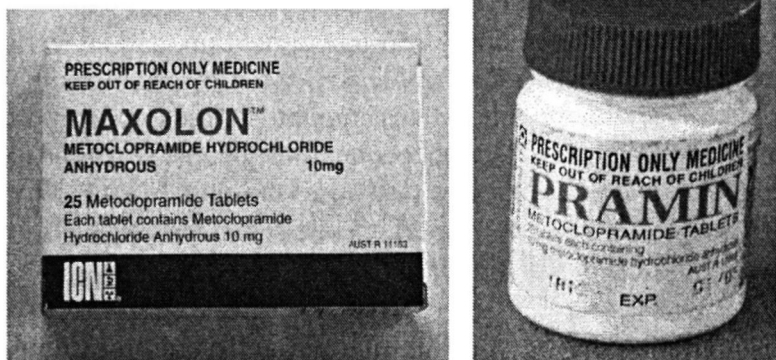


Fig 8.1: The common antiemetic metoclopramide

Drugs & Alcohol

Alcohol is often used as a supplement when drugs are used to end life. It serves several functions.

Firstly, lethal drugs taken orally are often bitter and leave a prolonged unpleasant after-taste. Even when the drug is consumed in a few quick mouthfuls, a seriously ill person can find this taste quite distressing. Strong alcohol is effective in removing this after-taste. As this is to be the person's last drink a favoured spirit or liqueur is often chosen. People sip at their favourite Baileys Irish Cream and the bitter taste quickly disappears.

Secondly, alcohol plays a useful role in 'potentiating' the lethal drug. To follow the drug with an alcoholic drink will usually enhance its speed of action and potency. This is true of most of the commonly-used lethal, oral drugs.

Thirdly, alcohol is a useful calming agent (anxiolytic) in what is inevitably a stressful time. It is important that any alcohol is taken *after* the consumption of the lethal drugs so that there is no clouding of a person's mind.

People should not force themselves to drink though, especially if they find the thought of alcohol distressing. The drugs described in this book cause death, with or without alcohol. The most likely effect of excluding the alcohol is that the process will take longer. Liquid morphine (Ordine) is often used as a supplement/potentiator by people with an aversion to alcohol.

Drug Tolerance

Exposure to a particular drug over a prolonged period of time can often lead to the development of an insensitivity to that drug. If a drug is being taken for a particular medical purpose (eg. the relief of pain), one might find that after a while the same pain relief can only be obtained by increasing the dose. This is known as 'tolerance.'

Some drugs are particularly prone to this effect. The body's response to opiates like morphine or pethidine is an example. After taking morphine for even a short time, the effect of a particular dose will lessen and greater amounts will be needed to achieve the same pain-relieving effect.

After a period off the drugs, one's sensitivity usually returns. This explains why people often accidentally die when taking illegal narcotics like heroin. A person using heroin regularly soon develops a tolerance for it. If they are unable to continue taking the drug - perhaps because their supply has broken down or perhaps they have spent time in an institution, they will redevelop a sensitivity. When a new supply becomes available, this greater sensitivity increases the likelihood of accidental death (see Chapter 9 for more information on the opiates).

Tolerance to a particular drug can be an important factor when choosing a drug to end one's life. If a seriously ill person has been taking a drug for some time and has developed a tolerance for this particular drug, the necessary 'lethal dose' for the drug can be higher than that usually quoted.

Slow Release Drugs

Many drugs are manufactured in a way that allows a slow, steady absorption from the gut into the blood stream. The 'slow release' forms of a drug are often given the initials 'SR.'. Some drugs that are used to provide a peaceful death are available in SR forms, but one should be aware that these forms of the drug are usually less effective than standard preparations.

This is because the drug's lethal effect usually depends on a rapid rise in the level of the drug in a person's blood, (ie. at a rate that is too fast for the body's normal excretion mechanisms). Slow Release forms do not cause such a steep rise in the blood level of the drug. Crushing or dissolving the drugs before consumption is unlikely to alter this. *Powdered, slow release drugs are still slow release.*

Opiates like morphine are often prepared in a SR form so that a stable level of the drug forms in the bloodstream to give continuous pain relief. Tablet SR forms of morphine (MS Contin, Kapanol) are of little use for sudden increases in pain. In these instances, an immediate-release form of morphine is usually used to provide rapid relief (eg. Ordine liquid).

If a seriously ill person were to use morphine to end their life, the liquid form would be much more effective than the same amount of crushed, slow release tablets.

Alternative Routes of Administration of Drugs

Stomach Pegs & Nasogastric Tubes

People who have difficulty swallowing often have a surgical procedure that allows the introduction of liquid food directly into the stomach. This feeding tube is inserted through the wall of the abdomen and is called a 'stomach peg'. The administration of drugs is often easier for a person who has a peg. There are no concerns over bitter taste, vomiting, or the person's ability to swallow the required quantity of the drug. For a person with a peg, a drug can be injected directly into the stomach.

Nasogastric tubes are also occasionally used to provide fluids to someone who is having difficulty swallowing. This temporary procedure sees a small diameter tube positioned through the nose and down the throat into the stomach. It is possible to deliver fluids directly into the stomach through such a tube. Lethal drugs given in this way would need to be in liquid form. Veterinär' liquid Nembutal can be delivered in this way.

Intravenous Drugs

Many drugs are delivered directly into the body through a needle or cannula that is placed into a vein. Drugs delivered by this route must be liquids. The procedure of inserting a needle into a vein requires a degree of expertise and this can be difficult for people who have not had some medical or nursing training. The speed of action of any drug administered in this way is much greater than for those administered orally. The rapid effect of such administration can occasionally cause difficulty. If the person decides to inject the drug themselves they may lose consciousness before they have finished pushing the syringe plunger, and only part of the required dose would be delivered.



Fig 8.2: Intravenous drug administration

To ensure that the full lethal dose is administered intravenously, a bag of saline can be used. The saline bag is attached to a cannula through a standard intravenous 'giving set' (Fig 8.2). The drugs are added to the saline and continue to flow, even if consciousness is lost. One advantage of intravenous administration is that it extends the range of drugs that can be used. Some drugs that are not well absorbed through the gut when taken orally, can cause death when administered intravenously.

Rectal Administration

Drugs are occasionally administered rectally using suppositories, or by direct infusion (enema). This is usually done if there is difficulty swallowing or if vomiting is a problem. Some lethal drugs can be quickly absorbed in this way, and occasionally this provides a way of proceeding if there are intractable difficulties associated with oral administration.

Resuscitation

Taking a lethal drug does not result in an immediate death. The time that elapses from consuming the drugs until death, depends on a number of factors. The most important determinant is the drug itself.

Some drugs or substances taken orally do act quickly. In some cases, speed of death *is* an important factor, such as the case of a spy taking a suicide pill to prevent interrogation or torture. Hermann Goering used cyanide in his cell the night before he was due to be executed. Although Goering was being watched very closely, his death was so quick that resuscitation was impossible. However, such a rapid death is rarely a consideration for a seriously ill person wanting to put an end to their suffering.

People often think of a 'peaceful death' as dying in one's sleep, and drugs that cause this are sought out. The time spent asleep before death can vary considerably. The longer this time, the greater the likelihood of some unexpected intervention. To reduce any chance of this, it is in the person's interest to obtain those drugs which bring about sleep, then death, relatively quickly. This is a feature of the barbiturate, Nembutal.

Other commonly-used drugs have a much longer 'window period' when intervention can occur. For the common propoxyphene/oxazepam combination (Ch 10), this window period may be a matter of hours. Considerable planning may be needed to reduce the chance of discovery during this time.

The possibility of unwanted intervention is why many people prefer to take lethal drugs in the evening when there is less chance of discovery. If hours pass and the deeply unconscious person does not die, this can present a significant problem to the person either tasked with, or who accidentally, finds them. On discovery, a person must do something to protect themselves, even if they are aware of the unconscious person's plan.

It would not be acceptable, for example, to claim in the morning that you noticed that your friend or relation was unconscious but you chose to do nothing about it. During the night a person can argue that they had been asleep and hadn't noticed. In the morning, the situation changes. A person in this position needs to consider their options carefully. If an ambulance is called, they will be protected, but the attending paramedics will attempt to resuscitate the unconscious person and this may well thwart their wish to die.

Remember, ambulance officers are generally under no legal obligation to abide by a person's Living Will. The officers will usually say that these issues 'can be sorted out at the hospital.' (For more discussion about the pros and cons of Living Wills and role of emergency workers see *Killing Me Softly: Voluntary Euthanasia and the Road to the Peaceful Pill.*)

Alternatively, someone discovering an unconscious person may protect themselves by calling the family doctor.

The doctor should be aware if a Living Will exists and can avoid initiating resuscitation without risking legal repercussions. A doctor who knows the background may well begin a morphine infusion, and allow their patient to peacefully die.

The Shelf Life of Drugs

Most drugs are subject to some form of degradation with time. This may be brought about by chemical, physical or microbial breakdown. These degradation products are unlikely to have the same clinical effect as the original drug. The main impact of degradation on a drug is a loss of potency. To ensure that drugs are as effective as possible, manufacturers include storage instructions and an 'expiry date' with each item. The time taken from manufacture to expiry date is referred to as the drug's 'shelf life'. It is in the manufacturers' interest to make this as long as possible.

This is not to say that a drug will not be effective after the stated expiry date. Rather, this date merely indicates that no significant chemical, physical or microbial degradation of the drug will occur before this date. Research shows that many drugs remain highly effective long after their expiry date and effectiveness is usually defined as > 90% potency. For modern medicines, expiration dates are usually set for two to three years after the date of the manufacture of the drug.

The form the drug is in will often effect its shelf life. For example, pills and capsules stored in their original, air-tight containers at cool room temperatures free from humidity are often viable for around 10 years. This is much longer than the stated expiry date. For drugs in liquid form, the shelf life is commonly shorter.

To tell if a drug has deteriorated, there are some common sense guidelines. In the case of a liquid, the drug's appearance is important. One should check, colour, clarity (has it become cloudy); particulate matter (eg. tiny visible particles); preservative content (if stated); sterility (has the bottle been tampered with or opened) and whether the drug has interacted with its enclosure (bottle or lid) are all factors. If none of these signs are present, then the liquid in question is more likely to be viable, than if there were any signs of degradation.

If the drug is in tablet form, signs of degradation include the tablet's appearance, moisture content, hardness (have the tablets become as hard as rocks), friability (uncoated tablets), disintegration time (when placed in water) and uniformity of content. Again, any of these tell-tale signs may indicate chemical degradation.

Of course, the only certain way of establishing whether significant degradation has taken place is by carrying out a chemical assay on the product. For drugs that are hard to obtain and not easily replaced with fresh samples, such a test makes sense.

For example, Nembutal is extremely stable and known to be effective well past its expiry date. However, if the particular sample of the drug is old, an assay should be carried out to give confidence and avoid risk. An assay service for the barbiturates has been developed by Exit (see Chapter 11).

Conclusion

This Chapter details some of the extra issues that should be considered if a seriously ill person is planning to use drugs to achieve a peaceful, dignified death. Specific issues such as preparation, administration, vomiting, and the shelf-life of a drug etc are common to all drugs, and an understanding of these issues reduces the chance of failure. This Chapter should be read in conjunction with the chapters that detail the use of particular drugs (Chapters 9 - 11).

Drug Options - Morphine & Slow Euthanasia

Introduction - The Doctor's Loophole

Slow euthanasia or the 'Doctrine of Double Effect' as it is often called, is the only way a caring doctor can hasten the death of a patient and escape any legal consequence.

Known commonly as the 'doctor's loophole' slow euthanasia allows a doctor to end a patient's life by slowly increasing the amount of a pain-killing drug. In the eyes of the law it doesn't matter if, in the course of treating a person's pain, the person dies. It is the administration of the pain-relieving drug that causes the double effect; it relieves pain but it also causes death. As long as the stated primary intention is the treatment of the person's pain, the doctor is legally safeguarded.

While slow euthanasia is relatively common, few doctors will ever admit their involvement. Even while administering slow euthanasia, some doctors will argue that they are only treating the patient's pain. Others know exactly what their 'prime intention' is, but wisely decide to keep quiet about it. Others just prefer not to think about it too closely.

It is a pity that this practice is so cloaked in secrecy. Clearly, it would be better if there were open and honest communication between the medical system (represented in the doctor and health care team), the patient and the patient's family. However, with laws in place that make it a serious crime to hasten a patient's death, but make it no crime at all to aggressively treat pain, there is little prospect of change.

How Slow Euthanasia Works in Practice

A doctor practising slow euthanasia usually gives a narcotic analgesic (morphine), while periodically reviewing the patient's pain. The claim is then made that treatment is inadequate, and the morphine dose increased.

If this review takes place every 4 - 6 hours, morphine levels will rise. Eventually lethal levels will be reached and the patient will die. The doctor defends his or her actions by simply saying that they were trying to control the patient's pain. Death, they argue, was an unplanned consequence of either the patient's disease or the necessary treatment for the pain.

It can take days for the levels of morphine to become high enough to cause death. It is important for the doctor's safety that the process is slow. Indeed, it is the length of time taken that gives credibility to the argument that there was effort put into establishing just the right dose of morphine.

If, for example, a single large dose of morphine was administered and death resulted, it would be almost impossible for the doctor to argue that their prime intention was the treatment of the patient's pain. Slow euthanasia is necessarily slow; it must be, to safely exploit this loophole.

Another way of understanding the process of slow euthanasia is to consider the link between cause and effect. The time taken for the morphine to end life muddies the water and blurs the connection between the cause (the commencement of morphine) and the effect (the patient's death). By blurring this link, a doctor can help a patient die and escape the legal consequences.

Problems with Slow Euthanasia

Slow euthanasia has a number of features that limit its appeal to a patient. Firstly, it is the doctor who is in control. While a patient might ask for this form of help, it will be the doctor who decides if and when it will be provided. Just because you - the patient- feel that now is the right time to begin the process, there is no guarantee that the doctor will agree. They may feel you should wait; wait until you become sicker, perhaps until your haemoglobin drops a few points, or your respiratory function tests deteriorate further. The sicker you are, the safer it is for the doctor to go down this path. If the doctor disagrees with you and thinks the 'best time' to help should be several weeks away, there is absolutely nothing you can do about it.

Another drawback of slow euthanasia is the restriction on the range of drugs that a doctor might use to help a person die. If the doctor's defence is to be that it was the treatment of the patient's pain that caused the death, then a pain-relieving drug like morphine must be used. A doctor could not, for example, administer a large dose of a barbiturate. While a barbiturate might provide the most peaceful and quickest death, barbiturates are not pain relieving drugs, and the claim that such a drug was being used to treat pain makes no sense.

This use of morphine by doctors to end life has led to the common community misconception that the best drug to use to end one's life is morphine - it must be, because that's the drug doctors use! This unfortunate misunderstanding leads to many failed suicide attempts.

And the process must be slow. Indeed, slow euthanasia can often take days or even weeks. Often the patient is given a sedative that keeps them asleep through the whole process; midazolam is the drug of choice. Coupled with morphine, this morphine - midazolam mix (known as 'Double M Therapy') places the patient in an induced coma for the time needed to raise the morphine level sufficiently. Double M therapy allows the patient to sleep through their own death and gives rise to another name for the process - 'pharmacological oblivion.'

The doctor still makes the assessment about the need for larger and larger morphine doses. Here the decision is based not on the patient's complaints, but upon a clinical assessment of the unconscious person.

The doctor will also choose the place of death. It is unusual for slow euthanasia to take place in a patient's home. Usually it occurs in an institution, commonly a hospital or hospice. In an institution, a team is often involved in providing care and several doctors might participate in the relentless increase of the morphine. This further blurs the link between cause and effect and makes it even safer for the medical staff involved.

While slow euthanasia could take place at the patient's home, in practice this presents many logistical difficulties. The doctor would need to make many visits, perhaps several a day, to facilitate the relentless increase in drugs.

Also full nursing care is required; an unconscious patient needs to be moved regularly and watched constantly to ensure the flow of drugs is not interrupted. This is often an extremely difficult time for those close to the patient as they find themselves participating in this deliberate, slow death watch.

For these reasons, few people opt for slow euthanasia as their preferred choice for a peaceful, dignified death. More commonly, it is an option of desperation, when few alternatives exist. In such dire circumstances, if a doctor does offer help (usually through a nod, a wink and an understanding), patients will grab the chance, reasoning correctly, that this is better than nothing.

Those who are left often see this as an example of a doctor helping someone to die, and this leads to the commonly expressed view that there is no need for a euthanasia legislation. People say 'I can't see what all the fuss is about with voluntary euthanasia - it goes on all the time - doctors are always helping people to die.' It is as well to remember that 'what goes on all the time' is the grim process of suspending a sick person by a thread between life and death for an arbitrary time, until the thread breaks. That is slow euthanasia!

Asking for Slow Euthanasia

The process of slow euthanasia is always controlled by the doctor. Because of this, there is usually little a patient can do to ensure that the option is available. Often when patients realize that they have a deteriorating medical condition, they ask their doctor whether or not they will be able to help them 'at the end.' The doctor may even volunteer to have this discussion and this is encouraging - but be careful.

When doctor and patient begin speaking in this tangential way, there is a very real chance that significant misunderstandings can occur. It is not uncommon for a doctor to promise 'every assistance when the time comes' and for the patient to draw immense comfort from this. A patient might even imagine that the doctor is saying that 'when things deteriorate I will give you access to lethal drugs.' In reality, this is highly unlikely. Few medical doctors would risk de-registration and a significant jail term. The only assistance likely from the doctor, is for them to initiate slow euthanasia, with the patient being admitted to an institution, a hospital or hospice. And there may well be argument about when the process should commence.

Exit suggests that in situations where slow euthanasia has appeal, that early discussions between patient and doctor take place. Be blunt. If the doctor promises help 'when the time comes', insist on knowing who will decide when that time is, and exactly what sort of help is being promised? If there is any attempt to skirt or dismiss your questions, be very wary. Try discussing the issue with another doctor, or look into an alternative end of life strategy.

The Role of Opiates and Opioids

Opiates are naturally occurring compounds that originate from the sap of the poppy, *papaver somniferum*. Substances derived from these compounds are opioids. These compounds all effect the same receptors in the brain and are generally used for the control of strong pain. While morphine is the commonest example, other examples include, pethidine, codeine, methadone and fentanyl. The illegal drug heroin is also an opiate. All opiates have properties that make them difficult drugs for a person to use to reliably end their life.

The biggest problem associated with taking opiates is predicting the effect. There is remarkable individual variability in sensitivity to these drugs within the normal population. People who are similar physically (same height, weight, sex etc) can have a vastly different response to the administration of an opiate. A small dose of morphine may have almost no effect on one person, while that same dose could kill another. Predicting the effect of the drug on an individual is difficult. When these drugs are used clinically the rule of thumb has been to 'start low and go slow' until the individual's sensitivity to the drug is established.

Another difficulty with opiates is the rapid development of tolerance when the drugs are taken for any period of time. Within days, the morphine that initially had a powerful effect on the pain can become almost ineffective. To obtain the same pain relief the dose must be increased. If these drugs are taken for long periods, very large doses might be needed to provide adequate pain control. These required doses can become so large that if they were taken before the tolerance had developed, death could well have been the result. It is this development of tolerance, and its rapid loss once the drugs stop, that often leads to the accidental death of people who self-administer opiates, especially heroin. If there is a break in supply and the acquired tolerance is lost, a sudden resumption may result in an unexpected fatal overdose.

Morphine is commonly prescribed as a slow release (SR) tablet. MS Contin and Kapanol are marketed forms in Australia. These may be taken once or twice a day and slowly release the morphine to give 'background' pain control. For the onset of sudden (breakthrough) pain, a fast release form of the drug, liquid morphine is often prescribed (Ordine).

Many very sick people receive these drugs for the pain of serious illness and sometimes go to great lengths to stockpile tablets believing that they will soon acquire a lethal dose. But knowing how many morphine tablets to accumulate is like asking the length of a piece of string? A single dose of SR tablet morphine may cause death, but the result is often unpredictable. The fast-acting liquid morphine may be a more effective form of the drug, but the problems of sensitivity and tolerance remain.

For these reasons it is difficult to advocate the opiates as stand-alone, single-dose, oral agents to provide a reliable death. One exception to this general rule is propoxyphene (see Chapter 10). When this drug is taken with a (non-lethal) benzodiazepine, a reliable death will occur.

Opioids

Natural

Opium
Morphine
Heroin
Codeine

Semi Synthetic

Heroin

Synthetic

Pethadine
Methadone
Fentanyl



Fig 9.1: Liquid morphine

The opiates do, however, have a role as supplementary or potentiating agents, (ie. a drug taken to enhance the effectiveness of another drug). This role is usually filled by alcohol, but for people who do not drink, morphine liquid can be a good alternative.

The Use of Heroin

Exit is occasionally asked about whether heroin should be obtained from 'the street' and used to end life. These questions are often prompted by news reports of people dying from a heroin overdose. In reality, there is little to be gained by using heroin. As an opiate heroin suffers from the problems of tolerance and sensitivity mentioned above. In addition there is the question of the uncertainty of the dose with heroin. Because it has been acquired on the streets, one can never be exactly sure what or how much one has actually purchased. It also needs to be injected intravenously. In Exit's experience, few elderly and seriously ill people have these skills.

Note: If heroin is taken orally, it turns back into morphine in the gut and offers no advantage over prescription tablet morphine, where at least the exact dose is known.

One final point on the opiates. If one does die taking these drugs, the death is likely to be very peaceful. Morphia is, after all, the goddess of dreams.

Conclusion

In Exit's internal polling of over 1000 of our supporters, less than one percent (0.3%) of Exit members say that they would prefer slow euthanasia over all other possible methods of dignified and peaceful dying. In comparison, 89% say they would prefer a Peaceful Pill. Slow euthanasia is one of the least-preferred methods of dying, and one that is usually avoided when other options exist. Given a choice, people seem always to prefer to have control of the dying process, and this is not the case with slow euthanasia. It is rare to find someone who wants to spend their last days in a drug-induced coma. When people decide that their suffering is so great that death is preferable, they hope that their passing will be quick. Slow euthanasia is almost always, therefore, an option of last resort. It is the method accepted when nothing else is on offer, and the only alternative is relentless and ongoing suffering.

There is a common belief that the opiates are the best drugs to end life. This undeserved reputation comes from their almost-universal use in slow euthanasia, where doctors have little choice. While a single overdose of morphine may cause death, individual sensitivity and tolerance to these drugs make this an uncertain and unpredictable process. The opiates are best used to do the job they are designed to do, control strong pain. There are better euthanasia options available.

The Exit RP Test for Morphine

Morphine (or any of the other opiates) do not score particularly well on the RP Test. When used as a drug and taken as a single dose by a person wanting to die, the difficulty of establishing the lethal dose significantly reduces Reliability (4/10). Peacefulness though is good (10/10).

Minor criteria scores are patchy. Availability (3/5), sometimes morphine is available - if a person is suffering from a recognised painful disease. But the use of the opiates as drugs of addiction and their place in the illegal narcotic trade can also make them occasionally very difficult to obtain. Preparation is easy (5/5), although constricted 'pinpoint' pupils can often alert a medical officer to the presence of these drugs in the system (Undetectability = 2/5). Death can also take some time, depending on one's tolerance and resuscitation is often straightforward using the opiate antagonist Naloxone (Speed = 2/5). There are no safety issues (Safety = 5/5), and the drug has a moderate shelf life (Storage = 3/5).

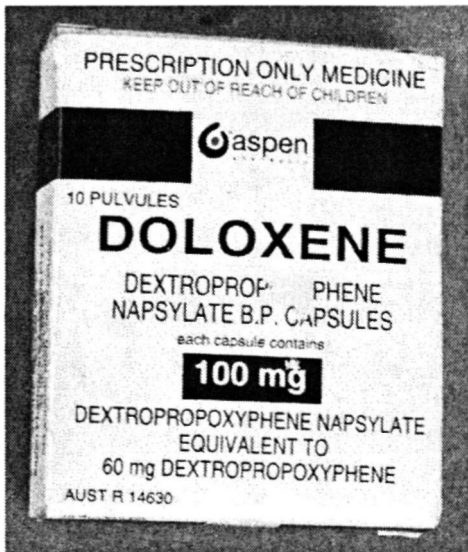
Exit RP Test - Morphine

Criteria	Score
<i>Reliability</i>	4/10
<i>Peacefulness</i>	10/10
<i>Availability</i>	3/5
<i>Preparation</i>	5/5
<i>Undetectability</i>	2/5
<i>Speed</i>	2/5
<i>Safety</i>	5/5
<i>Storage</i>	3/5
Total	34 (68%)

Drug Options - Propoxyphene

Introduction

A useful, lethal drug, still prescribed by doctors in many countries, is propoxyphene. The drug is marketed under various names and used as an oral analgesic (pain reliever). If prepared in a certain way, and taken in combination with a common benzodiazepine sleeping pill such as oxazepam (Serepax), propoxyphene will provide a reliable, peaceful and dignified death.



The Various Forms of Propoxyphene

In the United States, propoxyphene is marketed as Darvon. In Australia propoxyphene is marketed as Doloxene. In Germany the same drug is called Deveril. In the Netherlands it is called Depronol. Regardless of its name, the key necessary ingredient is propoxyphene - either as the hydrochloride or napsylate, and it is important that the drug labels are read very carefully. For the rest of this chapter we will use the name Doloxene to refer to propoxyphene.

Doloxene capsules have only one active ingredient (dextro-propoxyphene napsylate). However, the drug propoxyphene is often marketed in combination with other common analgesics such as paracetamol (acetaminophen) and marketed as Di-Gesic (Darvocet). These combination products are of limited use. Taking a large amount of the associated drug can complicate the process. The ingestion of a substantial quantity of paracetamol (acetaminophen) for example may well lead to death, but it would not be regarded as particularly peaceful.

Note: With the withdrawal of the barbiturate sleeping tablets from the medical prescribing list, Doloxene has become the most common doctor-prescribed medication used by seriously ill people to end their lives. In the past 12 months, the unique properties of Doloxene have begun to attract attention; first in the UK and New Zealand and more recently in Australia and the US. Doloxene will soon be restricted or removed from the prescribing lists of many countries.

When is Doloxene Prescribed?

Doloxene (dextropropoxyphene napsylate) is available from a doctor on prescription, and used for pain management. Doloxene is usually prescribed when over-the-counter pain relievers prove inadequate and when other, more common prescription pain-relievers (eg. Panadeine Forte, a mixture of paracetamol and codeine) prove unsatisfactory.

In Australia, Panadeine Forte is likely to be prescribed as the front line analgesic. This is because Panadeine Forte is on the Australian Pharmaceutical Benefit Schedule and subsidised while Doloxene is not. This makes Panadeine Forte a relatively cheap option for patients. Doloxene is similar in strength to Panadeine Forte, and can be used whenever there is a need for general pain relief. In the US, propoxyphene and combinations including it constitute one of the most prescribed drugs, coming in as the 12th most prescribed generic drug in 2004 (Public Citizen, 2006) There are almost no contraindications.

How Lethal is Doloxene?

Doloxene has a very narrow therapeutic margin. The difference in dose between that providing analgesia and that causing death is small. Like all of the opioids, the outcome from a particular dose can be difficult to predict (See Chapter 9), but the drug produces a cardio-toxic metabolite when it breaks down which particularly increases its usefulness as a self-deliverance agent. When another drug, the readily-available, non-lethal sleeping tablet, oxazepam, is added with alcohol, the result is even more certain. Exit has no reported failures from this combination.

As the reputation of Doloxene has grown, so script sizes have been reduced. The standard packaging number for Doloxene is now 50 capsules. All capsules contain the same 100mg of dextropropoxyphene napsylate. If 10gm of dextropropoxyphene napsylate powder is obtained from 100 capsules and taken with 10 or more moderately, long-acting sleeping tablets like oxazepam, death will follow. Doloxene is usually prescribed at the rate of 4-6 capsules per day (400 - 600 mg) to deal with pain. Ten grams of the drug would provide around 2 to 3 weeks of pain control.

The Role of Oxazepam

Oxazepam (Serepax) is a moderately, long-acting, non-lethal sleeping tablet. Another moderately long-acting sleeping tablet often used in combination with Doloxene is nitrazepam (Mogadon).



Fig 10.2: The common sleeping tablet - oxazepam (Serapax)

These modern sleeping tablets are members of a drug class known as benzodiazepines and are not usually lethal, even if taken in large amounts. *Note: no modern day sleeping tablets are considered to be lethal and it is important to stress this.*

When taken in combination with Doloxene, oxazepam or nitrazepam reinforce the effect of a propoxyphene.

Note: The most common sleeping tablet currently prescribed in Australia is the short-acting benodiazepine temazepam (Temaze or Normison). Duration of action is important and temazepam is not a particularly satisfactory alternative.

When is Oxazepam Prescribed?

Well known as sleeping drugs, oxazepam and nitrazepam are available on prescription from a doctor. They are prescribed for insomnia (when a person is unable to sleep). Oxazepam is usually prescribed in packets containing 25 sleeping tablets, which come in two sizes, 15mg and 30mg. Seriously ill people who plan to end their suffering using Doloxene, often supplement using the 30mg oxazepam tablets and take the whole packet.

Betty's Story

Betty Macmillan (not her real name) was 73 years old when she was diagnosed with cancer of the pancreas. Up until the time of her diagnosis Betty had been a fit and healthy retiree living with her husband in the family home in Melbourne's inner east. The proud grandmother of five

grandchildren, she had been a regular at the local bowls club for the past 30 years. Falling ill with cancer rapidly changed the life she knew.

As is so often the case with pancreatic cancer, Betty's health deteriorated rapidly over the 12 month period leading up to her death in May 2005. While she had always agreed with voluntary euthanasia and had long since prepared a Living Will 'in case anything should happen to me and I lose the ability to speak', she thought she would be the last person to ever want to willingly shorten her life. But that is precisely what she did. Unable and unwilling to cope with the indignity of her failing health, Betty took that ultimate step. Over a period of weeks she obtained on prescription from her doctor enough Doloxene (propoxyphene) and Serapax (oxazepam) to bring about her peaceful death. The following account of Betty's actions has been provided to us by her surviving husband, Jack.

Fig 10.3
100 mg pink
Doloxene Capsules



Fig 10.4:
10gm of white
propoxyphene
powder



In the 48 hours before her chosen day Betty spent considerable time preparing. Her first step was to pull apart the 100 pink gelatin capsules. Betty did this by twisting and separating the pink halves. As her fingers became sore, she used scissors to snip the last few in half. Each capsule contained a small amount of white powder which Betty collected in a medium size glass. She discarded the empty pink gelatin capsules by flushing them down the toilet. She then covered the glass and set it aside.

After she had prepared the Doloxene, Betty prepared her dose of Serepax. I watched her crush an entire packet of 25 Serepax tablets with a mortar and pestle. She placed this powder in a second glass, covered it and set it aside.

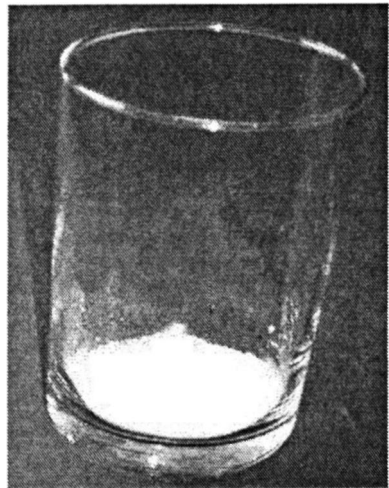


Fig 10.5: Propoxyphene powder ready for mixing with water

Betty had chosen night time as the time to die. She wanted to die in her own bed, with me by her side. She thought that by dying at night there would be less chance of her being disturbed and she and I could fall asleep together. By going to bed at our normal hour, we thought that I would be more likely to be protected legally since I could say that I had been asleep and had not known what had gone on. According to Exit , loved ones often say that they were asleep in the next room when death occurred. This is legally safe.

In the days leading up to her death, Betty wanted to make sure that she would not vomit up the bitter-tasting drugs. To ensure this she took an anti-vomiting drug for two days before the chosen night. Betty took metoclopramide (Maxolon). *Authors note - see Chapter 8 for a discussion of other options.* On the night, Betty ate tea and toast, she had to have something light in her stomach. An hour later I sat with her as she drank her Doloxene drink. She had converted the Doloxene powder into a drink by mixing it with water and stirring the suspended mixture. She then added more water to the glass to ensure that all the powder was consumed.

Once she had swallowed the Doloxene, Betty drank the second drink of the Serepax powder mixed with water. To this glass she added more water to ensure that she consumed all of the drug and that there was none left in the bottom of the glass. As her final step, Betty sipped a small drink of her favourite Sherry. My lovely wife fell asleep within 15 minutes of finishing the three drinks. My estimation is that she died during the night, approximately six hours later.

Shelf Life of Doloxene

As a drug, Doloxene has a relatively long shelf life. Prescribed capsules have an expiry date stamped on each card and this is usually 2 or 3 years into the future. Although this provides only a rough guide, in the absence of any available testing of the drug, it is the only indication one has. Capsules that have reached their expiry date should be treated with caution (See Chapter 8 for a discussion on shelf life).

The Future of Doloxene

Doloxene faces an uncertain future in Australia, the UK, New Zealand and the US. The withdrawal of the drug from the prescription schedule in the UK in early 2005 has led to the commissioning of a report on possible similar restrictions in Australia. In February 2005, it was reported that the Australian Therapeutic Goods Administration was undertaking a new review of the safety of Doloxene. This, they said, followed the decision by the British Medicines and Healthcare Products Regulatory Agency to withdraw the drug from the prescription schedule (National Prescribing Centre, 2006).

It has also been reported in the UK that drugs including propoxyphene are responsible for up to 400 accidental or intentional overdose deaths each year. Given that a significant number of Doloxene-based suicides are likely to be reported as deaths from 'natural causes' (and thus missed), the use of this drug is probably under-reported. The US has recently been petitioned to ban all propoxyphene products (Public Citizen 2006). We expect that propoxyphene will become an increasingly difficult drug to obtain in the future.

RP Test for Doloxene

Doloxene scores relatively well on the RP Test. There are no confirmed reports of failure that Exit has received and it rates 9/10 for Reliability. The time for sleep to occur is longer than for drugs like Nembutal and there may be considerable anxiety in this period. Peacefulness (7/10).

In the minor categories: Availability is listed at 4/5. Most people who set out to get this drug will acquire it. Remember though that if the drug is withdrawn, availability will drop to zero. Preparation is more complicated than with other ingestibles (Pr=3/5). The drug is undetectable - unless there is an autopsy, although constricted pupils may cause suspicion (D=3/5). The process is slow (Sp=2/5) the drug presents no risk to others (Sa=5/5). The drug has a moderate shelf life (St=3/5). Total 36 or 72%

RP Test for Doloxene

Criteria	Score
<i>Reliability</i>	9/10
<i>Peacefulness</i>	7/10
<i>Availability</i>	4/5
<i>Preparation</i>	3/5
<i>Undetectability</i>	3/5
<i>Speed</i>	2/5
<i>Safety</i>	5/5
<i>Storage</i>	3/5
Total	36 (72%)

11

Drug Options - Nembutal

I am hoping to get access to your 'peaceful pill' - not for immediate use, but to have on hand should my health deteriorate too much in the future. Arthur, 77 years

Introduction

The barbiturate Nembutal is the drug that comes closest to the concept of the Peaceful Pill. Exit defines the 'Peaceful Pill' as a pill, tablet or mixture that can be taken orally and that is guaranteed to provide a peaceful, dignified death at a time of one's choosing.

A Short History of Barbiturates

Nembutal is an important and historically significant drug. Although Nembutal is one of over 50 barbiturate derivatives to have been used medically, it is the drug of choice when it comes to dignified, peaceful dying.

All Barbiturates are derivatives of barbituric acid which was first synthesized by Adolph von Bayer in 1864. A 'condensation' of malonic acid and urea, barbituric acid is said to have acquired its name after St Barbara's Day (4 December) - the day on which it is believed to have been discovered. Other historians have speculated that the discovery

TOPS IN TASTE, COLOR APPEAL AND MISCIBILITY

New improved
NEMBUTAL® Elixir
 (PENTOBARBITAL SODIUM)

Compare the old, so-called "wine" and the new, in this case it is an attractively colored, better tasting NEMBUTAL Elixir. It is not only sweeter than the old product, but it is readily miscible with other medications.

SWEETENED to a large extent with SWEETENED Sodium, Abbott's non-caloric, heat-stable sweetening agent, the new NEMBUTAL Elixir is a *marked* improvement over the old, which was a good product in itself and a leader in its field for 25 years. The new Elixir does not contain oil content, but containing that it contains a barbiturate. It is palatable. Adults and children can take it straight without any difficulty. When diluted with water or fruit juices, its taste is hardly noticeable.

ONE TABLETSMPH (1.5 mg.) represents 15 mg. (1/2 gr.) of the active NEMBUTAL. So in equal oral doses, no other barbiturate excites another *higher* state of consciousness.

COMPATIBILITY of the new Elixir is superior to the old. It can be mixed with various complex elixirs of zinc, aluminum hydroxide gel, bismuthine, dextrose, codine in the phosphate, DRUGS™ Elixir, epinephrine hydrochloride or sulfate, ferrous sulfate, Milk of Thiamine™, potassium iodide, sodium salicylate, Valium™ and many other types of medication. It can be given with various formulas of whole milk and soft or hardening. *Pharmacies everywhere have the new NEMBUTAL Elixir.* Its superior taste and pleasant effects.

FOR A GENEROUS SAMPLE
 of the new better-tasting NEMBUTAL Elixir, hold a coupon to fill in the attached coupon early next

Fig 11.1 Nembutal women's magazine advertisement from 1950's

may have been named after the chemist's favourite barmaid, Barbara. Either way, the name stuck and barbituric acid has enjoyed an infamous history ever since (Mendelson, 1980). Barbituric acid was found to have no physiological effect and it took another 40 years before chemists, Fischer and von Mering, discovered that the introduction of two additional side-arms onto the molecule produced a range of compounds with marked physiological activity. It was only then that it became known that the nature of the sedative, hypnotic, or anaesthetic properties of the substance were determined by the characteristics of the side-arms attached.

The first of these di-substituted barbiturates was Veronal. Here two ethyl side-arms were added to produce diethyl-barbituric acid a weak hypnotic/ depressant which was marketed by the Bayer company as 'Veronal' in 1904. This was followed by phenobarbital (Luminal) in 1913. While barbituric acid is a German discovery, during the First World War when German shipping was blockaded, American chemists made use of the "Trading with the Enemy Act," to copy the work of the Germans and manufacture their own modifications of barbituric acid .

Barbiturate Sleeping Pills

In the first half of the 20th Century, barbiturates were manufactured around the world, with production peaking in the 1950s. By then there were more than 20 marketed forms of barbiturates, with most sold as sleeping tablets. Along with the original Veronal, there was Barbital, Amytal, Seconal, Soneryl, Nembutal and several others.

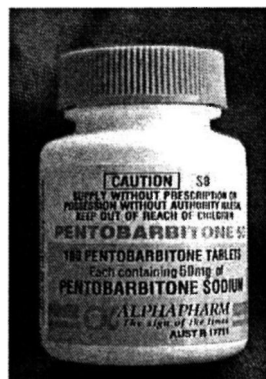


Fig 11.2a: Pentobarbital (Nembutal) sleeping tablets

While these barbiturates were highly effective sleeping tablets, a significant problem was the very serious side-effect associated with their overdose - death. This was found to be especially true if the pills were taken with alcohol. Many famous people have died - some deliberately, some inadvertently - from an overdose of barbiturates. Marilyn Monroe, Judy Garland and Jimmy Hendrix are a few.

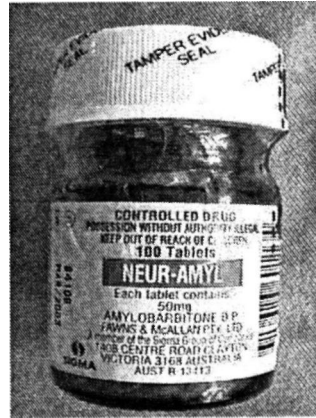


Fig 11 2b: Amylobarbitol (Amytal) sleeping tablets

Barbiturates as Drugs of Abuse

In the 1960s, the image of barbiturates suffered further when they were found to be useful mood-altering drugs. At this time, the depressant effect of the drugs was exploited. By carefully adjusting the dose, a desirable soporific and tranquil state could be achieved and they became known as 'downers.' As downers, barbiturates would often be intermixed with 'uppers' - drugs like amphetamines. This type of usage led to a set of slang street terms for these drugs such as 'Pink Ladies', 'Yellow Bullets', 'Peanuts' and 'Dolls' (from Barbie dolls) (Mendelson, 1980). With only a small margin of safety in dose between the desired sleep, euphoria and death, there was considerable danger associated with the prescription of these drugs. History shows they fell out of favour with the medical profession once newer, safer sleeping tablets became available.

The advent of Non-barbiturate Sleeping Pills

The first of the new class of sleeping drugs (the benzodiazepines) was diazepam (Valium), which became available in the early 1960s. These drugs were welcomed by the medical profession as a safe alternative to the barbiturate sleeping tablets. At this time there were many prescribed forms of barbiturates on the market but with the introduction of these new benzodiazepines, the use of the barbiturates steadily declined. By the mid 1990s in Australia there were just two barbiturate sleeping tablets left, amylobarbitol (Amytal) and pentobarbitol (Nembutal). In 1998 Nembutal was withdrawn with little notice. In 2003 Amytal was also withdrawn. Today, the only barbiturate prescribed by doctors in Australia is the slow-acting Phenobarbitol. This drug still finds a niche in medicine as an anti-convulsant.

Barbiturate Use in Veterinary Practice

The veterinary use of the barbiturates has persisted. Nembutal, in particular, is used as an agent for euthanasia. A large dose delivered intravenously, quickly and peacefully ends an animal's life. The green-dyed form of the drug is known as Lethabarb or Valabarb and is also known as 'the green dream.' A sterile form of Nembutal has also persisted as a useful complete anaesthetic agent that can quickly render an animal unconscious for surgery. Pentobarbitol continues to play a role in veterinary practice to this day even though its use by the medical profession has all but disappeared. One recent development that led to a small resurrection of these outdated drugs was the short-lived Voluntary Euthanasia legislation of the Northern Territory.

Nembutal in Countries where Assisted Dying is Legal

Nembutal is the drug of choice in countries where VE and Assisted Suicide are legal and is used in The Netherlands, Belgium, Switzerland and Oregon. When the world's first VE law - The Rights of the Terminally Ill Act - was passed in the Northern Territory, we had to decide which drug or substance would produce the most humane, peaceful reliable death. After much searching and consultation - a process that even saw us seeking information about the drugs used for execution in the US - a decision was made to sanction the use of a large intravenous or oral dose of Nembutal.

The four people who died using the Territory legislation all injected themselves - with the help of the Deliverance Machine - with Nembutal. While these people could also have simply drunk the liquid Nembutal, each preferred intravenous administration. When delivered in this way, loss of consciousness is almost immediate (seconds), with death following a short time later.

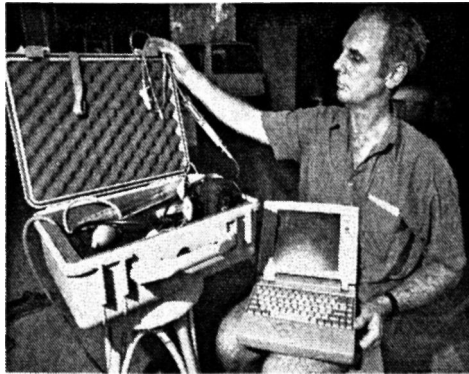


Fig 11.4: The 'Deliverance' euthanasia machine

In countries that have introduced dying with dignity laws similar to the one of the Northern Territory, Nembutal is the drug of choice. The state of Oregon in the US allows a doctor to prescribe a 10 gm oral dose of barbiturates to a patient. In Holland and Belgium, it is lawful to provide barbiturates as an injection to a dying patient. The drug used is Nembutal.

How Barbiturates Work

Barbiturates effect the action of the brain chemical GABA. They enhance the effect of GABA on the brain and may even act in its place. GABA slows the activity of the brain, and enhancing its action can cause sedation and sleep. In larger doses, the barbiturate may even replace the GABA in the brain. An overdose of a barbiturate can depress brain function so severely that respiration ceases and the person dies.

As discussed above, the depressant effect of barbiturates can be useful in counteracting the irritability and paranoia that can result from the use of amphetamines. Barbiturates have also been reported to be effective in alleviating the symptoms of heroin withdrawal and in the 1960s, injecting drug users were reported to have substituted barbiturates for opiates like heroin and methadone if such drugs were not available.



Fig 11.5: Sterile veterinary Nembutal

Available Forms of Nembutal

For human use, Nembutal is predominantly marketed as tablets or capsules. The usual dose being 100 mg. Even though Nembutal disappeared off the Australian market in 1998, many people have old stocks which are still potent.

Warning: One hundred of these capsules (100 x 100mg = 10gm of barbiturate) is a lethal dose.

Barbiturates are also well absorbed rectally and some countries have marketed forms of suppositories. 'Nova Rectal' in Canada is one such example. Sterile ampules of injectable Nembutal for intramuscular and intravenous administration as a hypnotic, anti-convulsant and pre-operative sedative still find a small place in medicine in some countries including the US.



Fig 11.6: Non-sterile coloured veterinary Nembutal (lethabarb)

The veterinary forms of the drug are also still used in either the sterile injectable form for anaesthesia, or a non-sterile form (Valabarb or Lethabarb) for animal euthanasia (Figs 11.6 & 7). The sterile form of this barbiturate is marketed in small, sealed 100 ml bottles that are protected with a metal seal (Fig 11.5). This metal cap makes tampering obvious. The Nembutal inside is a clear liquid with concentration of 60 mg/ml. Each 100 ml bottle has a total of 6 gm of Nembutal - more than enough to provide a peaceful death.

If stored in a cool place and kept in its sterile, sealed bottle until use, Nembutal has a very long shelf-life. The drug's expiry date will be printed on the label. Note: This is a guide only. If properly stored Nembutal can be expected to maintain its potency long after the stated date.

Pentobarb and Phenobarb - Confusing Names

Nembutal is the commercial or trade name for the barbiturate whose chemical name is pentobarbital ('pent-o-barb-it-al'). This drug is different to another barbiturate called phénobarbital. Phénobarbital is a slow-acting drug, used predominantly as an anti-convulsant to stabilise people suffering from epilepsy. While phenobarb can be lethal in overdose, it has a much slower action than Nembutal and is not an ideal method for self-deliverance. These two barbiturates should not be confused.

Sources of Nembutal

In Australia and New Zealand there are now no medically prescribed barbiturate sleeping tablets. What remains in the public consciousness, however, is the belief that an overdose of sleeping tablets - any sleeping tablet - will cause death. This misconception leads to many failed suicide attempts as seriously ill people stockpile, then take, large numbers of modern, non-lethal sleeping tablets.

Let us be clear. There is no point in asking your doctor for sleeping tablets if you plan to end your life. Tablets obtained this way will not be barbiturates and the drugs obtained will be unlikely, even in significant overdose, to cause death.

The only source of life-ending barbiturates in Australia is the veterinary profession, and this supply is likely to diminish in time. There is no legitimate or plausible reason for a vet to provide this drug to any member of the public.

Nembutal and Vets

Veterinary Nembutal has been used by vets to euthanase animals or as an anaesthetic in surgery for many years. Before 1998, when Nembutal was still being prescribed by doctors, it may just have been possible to argue that your insomnia was so bad that only the rare and dangerous Nembutal could help you get a good night's sleep. In 2006, there is no plausible story that can be told to a veterinarian. One can not claim an urgent need to operate on the family cat! There is simply no excuse one can give a vet to obtain this drug.

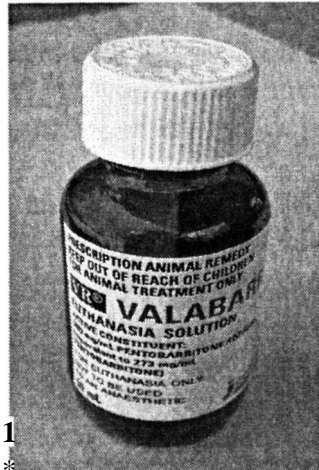


Fig 1.7: Non-sterile veterinary Nembutal (Valabarb)

If a vet were ever to provide Nembutal - knowing what the person has in mind - they could face a charge of assisting a suicide. De-registration and a possible prison term would be the likely consequence. In 2001 the Australian Veterinary Board became concerned about the increasing use of veterinary Nembutal as a human euthanasia option and put out a warning to its members urging caution in the storage and use of the drug, (see *Veterinary Surgeons Board, 2003*).

Exit knows of only a handful of cases where ill Exit members have been able to obtain this drug from Vets. When there is public mention of the practice, the Australian Veterinary Association reacts quickly denying the practice (see Australian Veterinary Association, 2006)

Moves to further restrict the use of veterinary Nembutal has meant that the anaesthetic form of the drug (see Fig 11.5) is becoming more difficult to obtain. This is the form of the drug favoured by those wanting it for human use. The fact that it comes in a clearly-labelled sterile sealed bottle, is comforting. Warning: The 6 gm in one 100ml bottle is a lethal dose.

The non-sterile green dyed form is more concentrated. Marketed as Valabarb (Fig 11.7) or Lethabarb (Fig 11.6) the concentration of pentobarbital is 300mg/ml (five times higher than in the sterile anaesthetic form). A single 50ml sample will contain 15gm of Nembutal and be lethal. This non-sterile green liquid needs to be decanted from a larger 500ml bottle. If drunk it can stain the lips and tongue. With such staining it is unlikely that an attending doctor will cite natural causes on the death certificate!

A Case Study in Nembutal

When asked about Nembutal at Public Meetings and Workshops, I tell people that it can be very handy to know a vet. Some time ago, I was making a clinic visit to the bedside of Harry, a dying patient. With his wife at his side Harry asked me about 'the best drugs', the ones that would let him peacefully end his own life.

I explained that the 'best' drug was Nembutal, but that this was only available in Australia from a vet. 'How many vets do you know really well' I asked, 'ones that will risk jail helping you?' His silence answered my question, and we went on to talk about other more easily available, but less effective, drugs.

After the visit, I left the bedroom and had a cup of tea in the kitchen with Harry's wife, Esme. Tentatively she said, 'You know when you asked about knowing a vet?' I looked at her, confused. She went on 'well, I knew a vet, very well indeed.' I waited, not knowing what was to follow. She continued. 'In fact, some time back I had an affair with a vet. My husband knows nothing about it, and I want to keep it that way. But that vet owes me some bloody big favours and I'm going to call them in!'

A few weeks later, Harry died of his disease. I heard that Esme did indeed call in the favour, obtaining the 100ml bottle of liquid Nembutal. She told me that the bottle sat in the bedroom with Harry during his last weeks and that he drew immense comfort from knowing it was there. As he faced every new day, he was reassured by the knowledge that if the day became too difficult, he could leave at any time. Indeed the presence of the drug, prolonged Harry's life.

The number of people who have a vet as their best friend, a friend prepared to risk jail for them is very small. There has only been a handful of occasions when I have seen help provided in this way, and Harry's was one of them. Perhaps the question put to patients should be rephrased, perhaps I should be asking 'have you ever had an affair with a vet?' When I told this story at a recent public meeting, one elderly woman shouted back 'I wish you'd told me that 40 years ago!'

Nembutal and the Black Market

Exit has received several reports of people paying a very high price for black market Nembutal. Desperate for the drug, some have paid over \$5,000 for a single 100ml bottle. This same bottle would retail to a vet for less than \$50. Despite the huge potential profit to a dealer, Nembutal is rarely found this way. The usual laws of supply and demand that govern the illegal drug trade do not apply, as no one will ever want more than one bottle of this drug. Supply chains, therefore, do not develop.

The Nembutal that does find its way on to the street is usually in the form of the sterile veterinary liquid. It is presumed that it is obtained when veterinary clinics are broken into by people looking for tradable veterinary steroids. If the seal and labelling of a Nembutal bottle is intact and the expiry date not exceeded, the drug is likely to be effective. Nevertheless, one is advised to be very careful if planning to use such sources.

Nembutal on the Internet

Exit is often asked about buying Nembutal over the Internet. Despite repeated attempts, we have been unsuccessful in making such a purchase. This is despite finding the occasional website that has it on their drug lists, and despite making internet orders. One person who was able to obtain Nembutal using the Internet was retired barmaid Nancy Crick (see *Killing Me Softly: VE and the Road to the Peaceful Pill* for further discussion). Nancy was fortunate and able to make use of her unique Internet diary. Her pleas for the drug through her daily Net Diary were heard around the world and Nancy's Nembutal arrived anonymously in the mail at her Queensland home. Nancy was truly one of the lucky ones.

Nembutal from Other Countries

Many people travel to other countries to obtain their Nembutal. Those who succeed in obtaining it return to their country of origin without declaring the drug. Once home, they lock it away in the cupboard.



These elderly, and often seriously ill, people draw great comfort from knowing that they are back in control and have the option of a peaceful death, should their health take a turn for the worse. Of the many countries that Exit has investigated, it is Mexico where Nembutal is most readily available.

Every month, Exit receives a handful of stories from people who have travelled to Mexico in order to make such a purchase. In this section, we provide one of the typical first hand testimonials that has been provided to us.

Authors' note - by providing this information the authors are not advocating or inciting readers to break any laws in Australia, Mexico or the US. We acknowledge however that the practice of travelling to Mexico to obtain this drug is increasing. We seek to provide accurate information so that those contemplating such action are in a better position to judge whether this is an appropriate option for them. It is impossible to safely make such a decision without access to the best information.

Caroline's Story

Caroline Hutchinson (not her real name) is a 68 year old retired teacher from Adelaide who is suffering from terminal breast cancer. Caroline comes from a family where all her close relatives have died of cancer of one form or another. More than 10years ago, Caroline witnessed the protracted and agonising death of her mother and felt determined that the same pain and suffering should not befall her.

Caroline was diagnosed with breast cancer some 7 years ago, and from attending Exit workshops she had known about the 'Mexican option.' In April 2006 Caroline, accompanied by her friend and neighbour Mary Gatens, took a holiday in the US. Amongst the many tours they took was a day long shopping trip to Tijuana, Mexico where they both bought bottles of Nembutal. This is the story of their trip.

Shortly after Easter this year, Mary and I took a holiday. As close friends we had always wanted to go travelling together. My deteriorating health meant that we had to go sooner than later. While Mary initially had no intention of joining me in visiting Mexico, upon thinking about her own situation she soon saw the wisdom of being prepared for life's contingencies. When we left Australia she was as committed as I to purchase Nembutal and bring it back into Australia (albeit illegally).

From attending Exit workshops, we had heard that Nembutal can be easily purchased in many Mexican cities and we knew the price ranges from ~ US\$11 to US\$35 for a standard 100ml bottle, depending upon the outlet involved.

Other Exit members had told us that the drug goes by many names. Prominent amongst these are: 'Pentobarbital Injectable' and 'Anestesal' and 'Sedalphorte' and 'Sedalpharma'. One couple who went to Mexico only the week before us reported that their bottles were labelled 'Barbital' and 'Sedal-Vet' so there were six names to look out for.

From Exit workshops we knew to purchase our Nembutal from veterinary supply shops. We had heard that in some outlets, it would be provided by the shop assistant on first request. At other shops we'd heard that the resident vet may be called to oversee the sale. Either way, we knew that the drug was a relatively easy one to acquire.



Fig 11.6: Veterinary Shop. Tijuana CBD

Fig 11.6a

**Figs 11.6 (a - f): Mexican veterinary sterile Nembutal**

- 11.6a: Anestesal
- 11.6b: Sedal-Vet
- 11.6c: Pentobarbital injectable
- 11.6d: Scdalphorte
- 11.6e: Barbithal
- 11.6f: Sedalpharma

Fig 11.6b





Fig 11.6c



Fig 11.6d



Fig 11.6e



Fig11.6f

Visiting Tijuana

Tijuana is Mexico's fourth largest city and lies adjacent to the US-Mexico border on the south west coast of California. We stayed in Los Angeles and caught a one day shopping bus tour from our hotel. The bus took us over the Mexican border, we were given a free tourist map, and we disembarked near the main street of Tijuana called 'Revolucion'. There was no border check on entering Mexico and the border is open 24 hours a day.

Our bus tour cost around US\$80 each. Although the border checks are the same - and you need to leave the bus to have your luggage X-rayed and passports checked - the process of getting into and out of Mexico by bus was a lot simpler than if we'd been tourists travelling by tram from San Diego.

No visa is necessary if only visiting Tijuana. If you plan to venture further afield and make a holiday of the visit, then your passport should be stamped at the local 'Migracion' office (a small fee in US dollars is then payable).

Veterinary Supply Shops in Tijuana

We found Tijuana to be a tourist city brimming, not only with veterinary supply shops, but with pharmacies, dentists and doctors and alternative practitioners. Many veterinary supply shops are within short walking distance of central Tijuana. Some were located in the main streets and at main intersections, others were hidden up side streets and in alleys. By walking several blocks in downtown Tijuana, we discovered a number of these shops.

Buying Nembutal in the Veterinary Supply Shop

At the counter in the first Veterinary supply shop we entered, we asked for Sedalforte (one of many trade names). When the shop girl looked at us blankly we said 'maybe Anestestal or Barbithal.' At this point we showed her a photo of a bottle of Barbithal. She immediately recognised the image and disappeared into the back of the shop. Obviously, some veterinary supply shop staff speak better English than others. Although her English was not good upon showing her the photo, she understood what we were wanting. When she brought the bottle to the counter we checked the metal seal as we had been advised to do. Yes it was intact. We also checked the use-by date. Yes, it was not expired. The bottle we bought had an expiry date of May 2008 so that too was fine. We paid the lady \$35 and left the shop.

In order for Mary to buy her bottle, we visited another shop. We asked again for Sedalforte or Sedalparma. The shop assistant knew immediately what we wanted and he didn't leave the counter. From the shelf behind the counter he passed us the brightly coloured blue cardboard box with the Sedalparma labelled bottle inside. This time the bottle cost US\$28. This bottle too had its seal intact and the use-by date was good for two years.

On neither occasion were we asked questions about why we wanted the drug. Had we been asked questions, others had advised us to say that we had a sick dog or horse at home in Australia and we wanted to treat them ourselves. We had also been warned that some shops might not want to sell us the drug because we weren't vets. We had been told if this was the case to simply try another shop.

Returning Home

After obtaining our Nembutal we did some tourist shopping as we were there to be tourists and we thought it might look odd if we were to return to the US empty-handed. Mid afternoon we returned to the bus and headed back to the border. From our seats we could see the long queue of people on foot waiting to be processed by US customs and immigration and were glad we'd taken the bus tour

At the checkpoint, we had our hand luggage X-rayed and we walked through metal detectors. Our passports were checked and questions were asked about the reason behind the day trip in Mexico. Our bottles of Nembutal did not show on X-ray or by metal detection. While we were concerned about what would happen if the bottles were noticed, we felt safer knowing that we only had one bottle each, just enough to give us the choice of a peaceful death should we need it.



Fig 1.7: Cars wait for inspection to enter the US. Tijuana - San Diego crossing

We were soon back in LA and then flew home to Australia the following day. Upon entering customs and immigration in Sydney we were worried about the penalties if we were caught bringing the drug into Australia. But we were both determined to have control of our own end of life choices and for us this was the only possible way. As for the sniffer dog? He showed no interest in us at all.

We were very nervous going through immigration, but drew comfort knowing that we did not look like drug couriers. We are not young, and we were certainly not importing a lot quantities of the drug. Nor were we planning on selling the drug to anyone else. We simply packed our Nembutal in the middle of our luggage.

Authors' note - Exit knows of no one who has had their Nembutal confiscated by customs at US - Mexico borders, or on return to Australia. Recent terrorism threats have, however, focused attention on the transport of liquids by air and the situation is likely to change in the future.

Mailing Nembutal Home

While we were in Tijuana, we thought of mailing our Nembutal home to ourselves. Exit told us of reports of people attempting this. In most of these cases, the drug had been intercepted by customs. One elderly couple had received a warning letter stating that a parcel had been confiscated and any future incident would lead to an investigation. However, Exit also knew of at least one case where the bottles were waiting to be collected at the person's local post office, a full two weeks after the Mexican leg of this man's holiday.

Authors Note - In New South Wales, it is a summary offence to possess less than 10 grams of a prohibited drug (barbiturates). A bottle of Nembutal contains 6 grams. If caught a person could be charged with the offence of possession, the penalty for which is 2 years imprisonment and/or a \$2200 fine. A first offence is most likely to attract a fine only.

At the Federal level, barbiturates are 'border controlled drugs', and it is a crime to import them. Section 307.4 of the Commonwealth Criminal Code states that there is a maximum penalty of 2 years imprisonment for importation. However, if the person who is bringing the drug in can prove that he/she does not intend to sell the drug, then no offence is committed. That said, a third law - the Australian Customs Act - makes it an offence to import a prohibited drug (Nembutal) without a license. The penalty under this Act is capped at \$20 000 and the matter is dealt with summarily, before a Magistrate. If a person is importing a single, 6 gram bottle of Nembutal for their own use, it is unclear what, if any, crime is committed.

At Exit International we know of no one who has declared their Nembutal and of no one who has had their Nembutal confiscated in customs. We do not encourage readers of this book, however, to break the law in this regard. The provision of this information is so informed decisions can be made.

Like most people who visit Mexico, Caroline and Mary had no intention of using the drug they obtained in the near future. There are, however, a minority of travellers who know that their time is running out. Richard is one such man.

Richard's Story

Richard Hamen (not his real name) is 76 years old, married and suffering from emphysema. He spent much of his life working in heavy industry and the doctors believe that his condition was most likely due to his history of heavy smoking and working in an environment that was often very dusty. This is his story, told by his wife Celia.

Richard was originally diagnosed with emphysema in December 2005. His difficulty breathing had become noticeably worse by May 2006 and he required oxygen much of the time. As his condition worsened, he decided that he could not rest until he felt he had full control over his life, and death. We had both attended Exit's workshops and so knew about the 'Mexican option.' I booked our tickets and in the last week of May we took a five day holiday in the US. It would have been much easier for me to have gone alone, but Richard knew that if he took a drug that I had travelled overseas to get, and if this were to be revealed, then I would immediately be suspected of assisting with his suicide. He insisted on travelling with me, just to keep me safe.

We wanted the quickest and easiest way to get to Tijuana and then back to Australia. By the time we were ready to travel, Richard was too breathless to do much more than be pushed around in a wheel chair. Walking was beyond him and despite an overnight stop in Hawaii, he found the trip pushed him to the edge of his endurance.

On arriving in LA we checked into the Hilton airport hotel. The following morning we caught an American Airlines flight down to San Diego, and Richard spent the rest of the day in bed, trying to regain his strength. I used this time to find out about travel to the Mexican border. The tourist information people were very helpful and I made plans for us to catch the blue line tram the following day.

With Richard's wheel chair collapsed and under my arm, we boarded the tram, arriving 40 minutes later at the border. I put Richard in the wheel chair and pushed him across the footbridge that marks the Mexican border. Stairs were a problem but eventually we made it to the main business district of Tijuana and located a veterinary supply shop. As Richard sat in his wheelchair, I ventured in and returned in 5 minutes with the desired bottle.

The purpose of our trip had been accomplished. Although still only 10.15am in the morning, I thought it best that we go back to our San Diego hotel. At the border, we passed through the metal detector and our small bags were checked. We said nothing about the bottle and no questions were asked.

Once back in San Diego, I rang the airline office to bring our return flight forward. I was now eager to get home and caring for Richard was very stressful. It broke my heart to see my once strong, proud husband so broken by this illness. The following day we flew out of San Diego and a day later flew home to Sydney. At each port, the customs and immigration staff were nothing but pleasant to us. After all, we were hardly your typical drug mules.

Once back home in Belmont (south of Newcastle), Richard indicated that his time was soon coming. We arrived home on a Friday. He chose Sunday to die.

As we had been previously advised, Richard took an anti-vomiting drug from the day of our return until the Sunday. He did not want to take any chances with his stomach rejecting the drug. At around 5pm on this Sunday in early winter, he put himself to bed, and I brought him in a light supper as had been recommended. About an hour later he told me that this was the time for him to go.

We had spoken so much about this moment, but nothing can prepare a person for the heartache that is about to come. I wanted Richard to have his dignity back and I knew that with his illness this was not possible. I wanted to help him but at the same time I could not bear the thought of being without him. He was desperate for me to be strong, and through my tears I tried.

When settled in our bed, he drank down the Nembutal that I had poured out into a glass for him. As advised, he followed that drink with the smallest sip of his favourite port. I held and kissed him and cried, and within a few minutes he had slipped into a deep sleep. Time passed and I kept holding him and I'm not sure when he finally stopped breathing, but it didn't seem like long.

Richard's passing was as peaceful as any death can be. Now, months on, I mourn his absence more and more every day. My life can never be the same. My only solace is that he is no longer suffering.

Concluding Comments

The barbiturate pentobarbital (Nembutal) is the best euthanasia drug and comes closest to the concept of the Peaceful Pill. In countries where it is lawful to help someone to die and any drug or substance could be used, the choice is always Nembutal. Yet Nembutal is a hard drug to obtain. In Australia doctors can no longer prescribe the drug, and its restricted use by vets makes it increasingly difficult to access.

Nembutal can be obtained from overseas and it is in Mexico where it is most accessible as the first hand accounts that have been provided to Exit illustrate. But not everyone can afford a trip overseas. And not everyone will want to openly break the law in the process. An alternative approach is for people to make their own drug. This is the strategy behind the Peanut Project described in the next chapter.

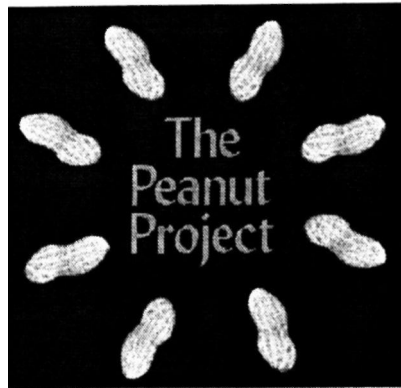
Exit RP Test - Nembutal

Criteria	Score
<i>Reliability</i>	<i>10/10</i>
<i>Peacefulness</i>	<i>10/10</i>
<i>Availability</i>	<i>2/5</i>
<i>Preparation</i>	<i>5/5</i>
<i>Undetectability</i>	<i>4/5</i>
<i>Speed</i>	<i>4/5</i>
<i>Safety</i>	<i>5/5</i>
<i>Storage</i>	<i>4/5</i>
Total Score	<i>44 (88%)</i>

The Peanut Project

Background to the Project

Given the importance placed upon a Peaceful Pill by people who are elderly or seriously ill, and the difficulty in obtaining the best example of it, Nembatal, Exit has looked at ways in which this need can be met. Much of our R&D work now focuses on the development of a home-made Peaceful Pill. That is a pill or drink that could be made from readily-obtainable ingredients, using equipment no more complicated than that found in the average kitchen. To avoid legal risk, this Pill would need to be made by the person who may one day intend to use it.



Certain considerations are apparent. Firstly, there is no point creating a new Peaceful Pill, if its critical ingredients can be restricted by the government or another authority. Exit's early work on a home-made Pill concentrated on the use of two substances that the State would have the greatest reluctance to restrict, alcohol and nicotine. The idea of the State forgoing the revenue it collects from these drugs is unimaginable.

The Nicky Finn

Exit's first kitchen trials of the home-made Peaceful Pill - the 'Nicky Finn' - were completed in 2004. Named after the famous Micky Finn drink of the Lone Star Saloon in Chicago in the early 1900s, Exit's Nicky Finn is made largely from alcohol and nicotine. Manufactured by chlorinating alcohol and combining this chloral hydrate with pure nicotine, the Nicky Finn should prove highly effective and highly lethal when taken as a drink.

However, a problem remains with the testing of this product. Exit does not wish to pursue *in vivo* testing of such a potentially harmful substance on either humans or animals. At this time, therefore, this version of the Peaceful Pill remains untested. As the issue of 'reliability' is critical to our members, Exit has had to change focus to concentrate on a different Peaceful Pill; one whose reliability can be chemically ascertained. One which does not need to be tested on humans or animals.

Changing Focus

Exit International launched the ambitious 'Peanut Project' in early 2005. Named after an old-fashioned street term for barbiturate (Peanuts), the Peanut Project brought together a large group of elderly people, some of whom were seriously ill. All were Exit supporters and the group shared one common belief. They reasoned that the only way that they would be able to access the best end of life options in the foreseeable future would be to create their own barbiturate.

They all accepted that since the drug Nembutal is used in countries where voluntary euthanasia is legal then it must be the best. And, because they did not want to settle for second best, their goal was clear. How could they make their own barbiturate or a similar chemical compound?

How could they make something:

- they could take orally
- that could be manufactured without outside assistance that would provide a peaceful and dignified death
- that would be certain and for which there would be minimal risk of failure.

One benefit of a barbiturate-like Peaceful Pill is that there would be no need for human testing. Laboratory testing would tell quickly if the substance made was a barbiturate or not and if so which one. These substances need no other testing - their effect on those who take them is well known. But could a professional-strength, Nembutal-like Peaceful Pill be made 'in house?' The group decided to find out.

The philosophy behind the first ever Peanut Project was that everyone must participate. Each person must contribute according to his or her particular skills; from sourcing the laboratory equipment and chemicals, to finding a venue, to mixing and distilling the ingredients and operating the laboratory equipment to sweeping the floor and making the afternoon tea. None were professional chemists although several had studied chemistry at university many years ago. The first Workshop was held in late 2005 on a remote property outside the nation's capital in rural New South Wales.

Prior to starting the project, most participants made a gift to the project of \$2000 to cover costs. Those who were not able to do so attended for free, but contributed in other ways. The funds donated were used to purchase necessary equipment and supplies, as well as to find a suitable venue. Much effort went into establishing an elaborate method of communications, which was essential given the coordination and secrecy needed for such an ambitious project. The first workshop was attended by the participants and several overseas observers.

Peanut Project Participants

The average age of participants in the first Peanut Project was 80 years, although some were in their mid 90s. Several who participated were seriously ill. These criteria were set by the participants and seen as providing the group with some legal protection. What government would want to be seen taking legal action against a group of 80 year olds for simply setting out to establish their own end-of-life choices? What authority could justify taking action against a group of elderly folk for doing something which, if the politicians had done their job properly, would not be needed?

Tempting Fate?

A key organizing principal behind the Peanut Project was the concept of mass civil disobedience. Just like the civil rights movements of the 1960s, the participants of the first Peanut Workshop felt that they would have a better chance of success and remain safer, if the group worked as one.

It is the lack of a law providing end-of-life options, and the unlikelihood of one being introduced, that motivated the group to take matters into their own hands. And because they were elderly, with some in poor health, they surmised that prosecution would be far less likely than if they were younger and healthier. The group believed that their actions were challenged, they would present to the authorities much more of a political problem, than a legal one.

Legal Issues

Setting out to manufacture one's own Peaceful Pill - especially one related to the Barbiturate class of drugs exposes those involved to significant legal risk. At a state level the manufacture of barbiturates is governed by the Drug Misuse and Trafficking Act 1985 (NSW) which makes it a crime to manufacture, possess or supply such a drug. The penalties that apply depend upon the amount of the prohibited drug involved. If the amount is less than 10gms, the penalty is 2 years jail and a fine of \$5,500. If greater than 20Kg are involved, the penalty is life in jail and a fine of \$550,000.

At a Federal level, there are also a number of offences that relate to the management of narcotic and psychotropic drugs; this includes the manufacture, possession, sale, supply and importation of these substances. Again the penalties depend upon the amount of the drug involved, and range from 2 years jail and a fine, to life imprisonment. Finally, there would be the additional legal question of whether, if one member of the group ever took the substance and died, the remaining members could be accused of having assisted with that person's suicide.

In the first Peanut Project, the participants were all aware of the risk they were taking. This is why the participants operated as a group and why everyone helped each other. There was no leader (or teacher) who instructed the others on the process and techniques required. Considerable effort was put into ensuring that everyone participated as equals, contributing equally to the success (or otherwise) of the project. The group mixed responsibility so that each member's contribution formed part of what is sometimes described as a 'tumble dryer defence'.

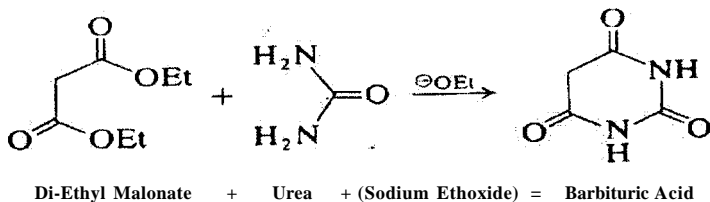
In the Peanut Project it was stated clearly at the start, that no one in the group would make more than they needed for themselves. No one was making a Pill for someone else, and no one would sell any of the substance manufactured. Finally, no one would acquire more than 10gm of the manufactured barbiturate (the common lethal dose). Any excess would be destroyed. The final cost of production of the Peaceful Pill was estimated to be ~ \$500 per person.

Tales from the first Peanut Project

(this account comes courtesy of four of the group's participants - Elizabeth, Reg, Bridgette and David)

The processes we used to manufacture our Peaceful Pill have been known for many years. Barbiturates are derivatives of barbituric acid. Chemistry books state that barbituric acid was first synthesised by Adolph von Bayer in 1864, when he condensed malonic acid with urea. An easier and more contemporary method makes use of the di-ethyl ester of malonic acid (di-ethyl malonate) which reacts with urea in the presence of sodium ethoxide; a base is formed by dissolving metallic sodium in absolute alcohol (ethanol).

Our process of synthesis can be depicted as follows.



In our Peanut Project the reaction took place under reflux for a number of hours at 110°C. Crystals of barbituric acid were obtained by acidifying the reaction mixture, then filtering and cooling the filtrate. But as barbituric acid has no physiological activity, we had to take the process further to develop a barbiturate that could peacefully end life. The sedative, hypnotic, and anaesthetic properties of the barbiturates are determined by the characteristics of two additional side-arms (or side-chains) attached to the barbituric acid molecule.

The first of these di-substituted barbiturates is Veronal (Barbital). Two ethyl side-arms are added to produce a compound that is a weak hypnotic. Other compounds (mixtures of various alkyl, aryl, or alicyclic groups attached) are also known to affect the central nervous system. The two of particular interest to us were amylobarbital (Amytal) and pentobarbital (Nembutal). The process of adding side-arms (di-substitution) was undertaken before the condensation of the malonate and urea. In Amytal the two alkyl side-arms are (a) ethyl, introduced as ethyl-bromide and (b) 3-methylbutyl, introduced as 1-bromo-3-methylbutane. In both substitution reactions the malonate is heated under reflux first with one and then the second alkyl bromide. In both reactions sodium ethoxide was used as the catalyst.

The final step in the production of sodium amylobarbitol is heating of the resultant di-substituted malonate (3-methyl-butyl-ethyl malonic ester) with dry urea under reflux for another 12 hours, again in the presence of dry alcohol and sodium. Excess alcohol was removed by distillation and the residue - predominantly sodium amylobarbitol - was dissolved in water to form the Peaceful Pill. The product was tightly stoppered in glass bottles and then taken home to be stored in a cool dark place.

In all of the di-substitution reactions and in the condensation with urea, it was essential that there was no water present. Care was taken to prevent atmospheric moisture reaching the reactor vessel, and all substances used were dry. In particular, the alcohol we used in the production of the sodium ethoxide needed to be as dry as possible, or the yield would have suffered and there may not have been enough to ensure that we all got our 10gms.

To produce *pure* amylobarbitol (Amytal, 5-Ethyl-5-(3-methyl-butyl) barbituric acid), special effort would be needed to remove the unwanted mono and di-substituted esters. In the sequential process we outlined above, there would have been some di-ethyl malonic ester formed and some di 2-methyl-butyl malonic ester, and there may even have been some monosubstituted ester (ethyl malonic ester and 2-methyl-butyl malonic ester). All of these unwanted esters would have competed for the added urea and the final residue would have been 'contaminated' with small amounts of di-ethyl barbituric acid (Veronal) and di 2-methyl butyl barbituric acid, along with ethyl barbituric acid and 2-methyl butyl barbituric acid.

However, none of these 'contaminants' detract from the use of the residue as a Peaceful Pill. Indeed, the presence of some Veronal in the product would likely prolong the action of the faster-acting Amytal, making the resultant mixture more lethal than a pure sample of sodium amylobarbitol. This suited our purpose.

The synthesis of pentobarbital (Nembutal, 5-Ethyl-5-(1-methylbutyl) barbituric acid) followed a similar path. In this case a side-chain was now 1-methylbutyl, produced from 2-bromopentane. Furniss (1989), states that the resulting di-substituted ester (1-methyl butyl ethyl malonic ester) should again be heated under reflux with urea in the presence of dry alcohol and sodium. The excess alcohol is then removed to leave predominantly sodium pentobarbital (sodium 5-Ethyl-5-(1-methylbutyl) barbituric acid). This water soluble residue will again have several "contaminants", including some Veronal.

Equipment

In our Peanut Project, the synthesis required a period of prolonged reflux (Fig 12.1). We used a two litre glass reaction vessel with 3 Quickfit taper necks (24/29), fitted with an efficient double surface condenser. A heating mantle and a means of stirring the mixture and monitoring the temperature were also needed. To protect the reacting substances from atmospheric moisture we used calcium chloride guard tubes. To remove excess alcohol in the final stage a double surface condenser was attached to the reactor vessel by means of a distillation head. The alcohol that was distilled was collected in a glass receiving vessel that was also fitted with a calcium chloride guard tube (Fig 12.3). An accurate chemical balance capable of measuring to 0.1 gm was required to weigh out the necessary reactants.

The Peanut Project

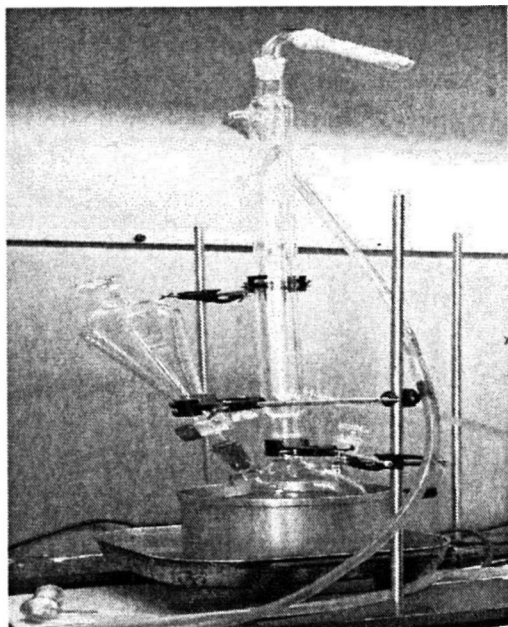
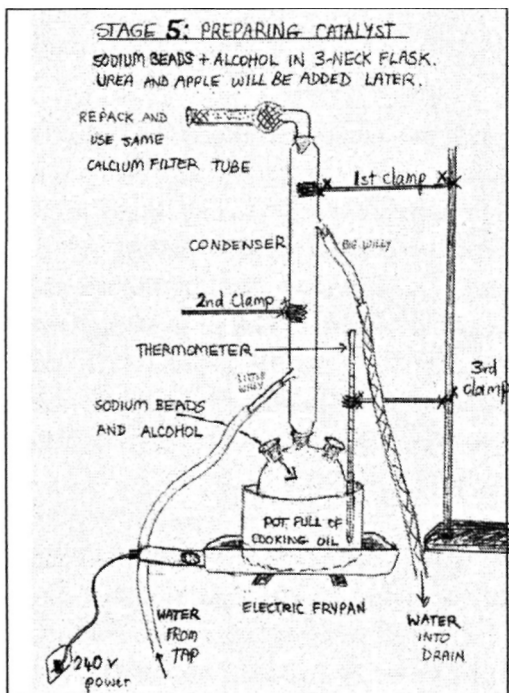


Fig 12.1: Reflux system used for barbiturate synthesis



We have recently considered the use of a specialised reaction vessel that would replace the glassware and the reflux condenser. This sealed stainless steel vessel (autoclave) allows the reaction to take place under pressure, which will shorten the time and reduce the problem of contamination from atmospheric moisture.

Techniques

The setup of the glassware for reflux we used is shown in Fig 12.1. Note the presence of the guard tube on the top of the reflux condenser. The distillation setup is shown in Fig 12.3. Although a 'splash guard' is shown in the photograph, this was not essential to our work. Collection of the distillate was in a 1-litre, 2-neck flask with guard tube attached.

Special Dangers

As is usual when carrying out chemical processes, utmost care was needed at all times. The glassware was clean and dry before use. Many of the liquids used in the synthesis were flammable and naked flames were not used. Heating of the reaction vessel was by way of a laboratory heating mantle and by using an electrically heated oil bath. The most dangerous substances used in the process were metallic sodium and the strongly basic intermediary sodium ethoxide. Standard organic chemistry texts (eg. Solomons & Fryhle, 2004) spell out these dangers of handling these substances.

CAUTION: Sodium must be handled with great care and under no circumstances should the metal be allowed to come into contact with water as an explosion and fire may result. Sodium is stored under paraffin or xylene and should not be handled with the fingers, but with tongs or tweezers.

Waste or scrap pieces of sodium can be placed in a bottle containing paraffin or xylene, and not in the sink. We destroyed scrap sodium by placing it in small portions into large quantities of methylated spirits. The commercial sodium we used was covered with a non-metallic crust. Furniss (1989) describes a method of removing this. We added the metallic sodium to dry xylene and heated it to 100°C on a hot plate. Swirling the flask as the sodium melted resulted in globules free of crust, which were removed by a spatula. The remaining crust was disposed of in methylated spirits (see Fig 12.2 below).

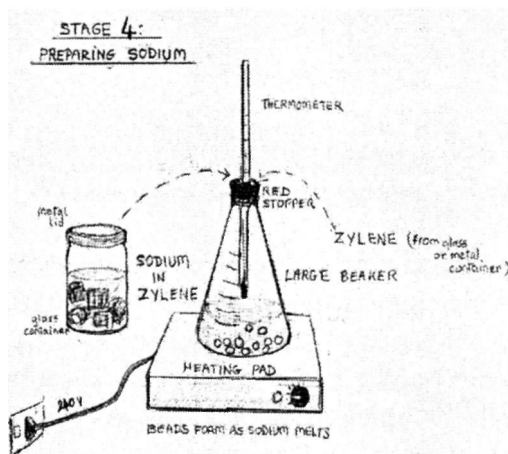


Fig 12.2: Cleaning metallic sodium in a xylene bath

Precursors

None of the chemicals required by The Peanut Project are subject to specific government restriction (at the time of press). Application to a reputable chemical supplier for ethyl malonate and the chosen side-chain alkyl bromides should be successful provided one can detail a legitimate purpose in the required end user statement. The sodium metal Some endeavour may be required to obtain the sodium metal and dry ethyl alcohol.

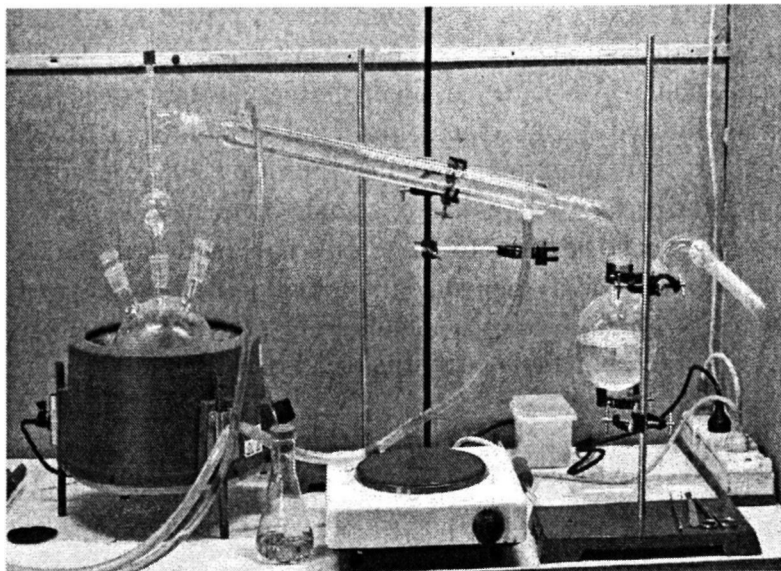


Fig 12.3: Distillation system used to remove alcohol from the final product

In some cases, the group was able to make do with substitute ingredients. If there are problems in obtaining absolute alcohol, methylated spirits (95.6% alcohol) can be used as a starting point. For the first Peanut Project, this was heated under reflux with dry (recently fired) calcium oxide and then distilled to produce absolute ethanol (99.5%). Urea was obtained from the hardware store.

Authors' note - the chemicals required by the group to make a Peaceful Pill could be classified as 'precursors.' Possession of significant quantities of these items is an indictable offence and could be dealt with before a judge in a higher court. The penalty for possessing precursors is a maximum 10 years imprisonment and a fine of \$220,000. The legal risks taken by this group were significant.

Acquiring Necessary Equipment

Laboratory glassware is becoming increasingly hard to obtain. This is a reaction on the part of the authorities to the existence of clandestine laboratories that manufacture illegal drugs (predominantly amphetamines) for commercial gain. Some of the chemical techniques used in the synthesis of the Pill are the same as those used to make amphetamines.

Distributors of this specialized glassware (eg. reaction vessels with Quickfit necks, double-surface condensers, distillation heads, guard tubes etc) are now required to inform authorities of 'suspicious' purchases. Our group, therefore, was grateful that we knew someone who knew someone who had access to the necessary glassware .



Fig 12.4: Adjusting the condenser for distillation

Testing the Product

As with any homemade product, careful testing is necessary. Although the group was able to separate out some crystals of amylobarbitol and measure their melting point in a glass capillary, full reassurance only came from detailed, quantitative analysis using gas chromatography and mass spectroscopy (GC-MS). A commercial laboratory will charge approximately \$500 (\$250 to set up, \$150 per sample) to test a product and will need approximately 1-2 gm of the substance. It is a long-term aim of Exit International to acquire the equipment that will enable a similar service to be offered.

Exit expects to run this international service for people who have old prescription barbiturates - the possession of which is quite legal. When there is doubt about the composition and concentration of the shelf life of a substance, this service will provide the reassurance necessary.

Concluding Comments

The Peanut Project represents the most sophisticated strategy ever adopted by a group of elderly and seriously ill people demanding the right to access a peaceful and dignified death at the time of their choosing. A published account of the first stage of the Peanut Project can be found in an article by David Hancock titled 'Deaths Cocktail' which was published in *The Bulletin* magazine on 8 November 2005 (or at <http://www.exitinternational.net/documents/exit45.pdf>).

Since the above article appeared, Exit has been contacted by more than 1000 elderly and seriously people in Australia and around the world, wanting to participate in future gatherings. A more detailed account of the experiences of the first group is in production.

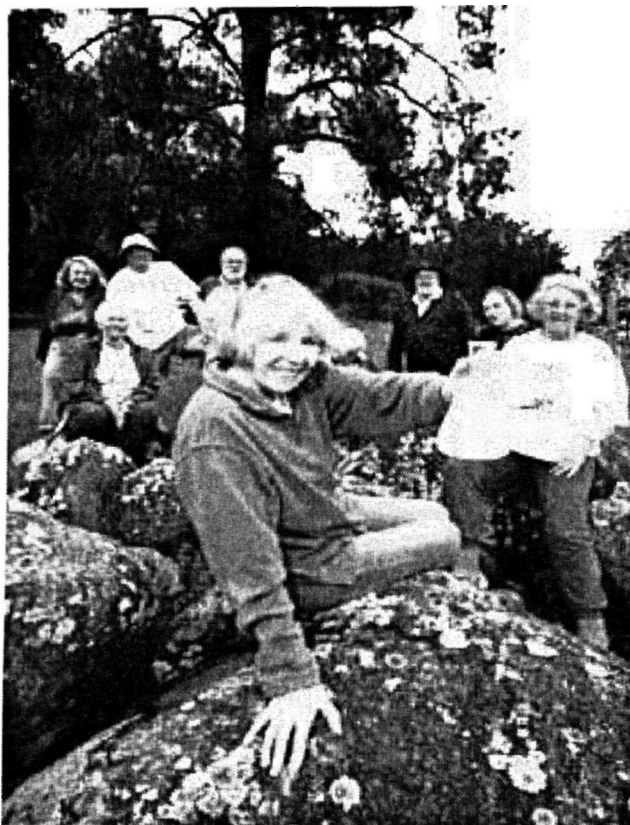


Fig 12.5: The first synthesised barbiturate

The Swiss Option

Introduction

There are only four places in the world where Voluntary Euthanasia or Assisted Suicide is legal.

In the US, citizens and residents of the state of Oregon who qualify, can obtain a prescription for a lethal drug. But they cannot ask a doctor for more assistance than this. In Oregon, voluntary euthanasia is illegal, while Physician Assisted Dying (PAD) and suicide are legal (see *Killing Me Softly: VE and the Road to the Peaceful Pill* for more discussion of the difference between VE and PAS). To make use of Oregon's Death with Dignity law a person must be a resident of that state and be able prove this with suitable documents. It is not enough even to be a Californian. Rather the law is only open to 'true' Oregonians.

In the Netherlands, the Termination of Life on Request and Assisted Suicide Act 2002 allows voluntary euthanasia, but again there are strict residential requirements. In this country a person wanting to make use of the law must satisfy medical requirements and have a long standing relationship with a Dutch doctor. This effectively restricts the use of this euthanasia law to Dutch citizens. And in Belgium, too, where voluntary euthanasia was legalised in 2002, the person must also be a citizen of that country.

Switzerland - Laws and Loopholes

In Switzerland, assisted suicide is allowed by law as long as the person providing the assistance has no selfish motive. Importantly, the person receiving the assistance does not need to be a Swiss citizen. Given that voluntary euthanasia remains illegal there, it is interesting that Swiss law has allowed for assisted suicide since the 1940s when the Swiss penal code was amended to read: 'a person who, for selfish motives, persuades or assists another person to commit suicide will be punished with imprisonment up to five years.' People other than the selfish, commit no crime in their assistance of the suicides of others.

It is not surprising then to find that Switzerland harbours several right to die organizations which each have their own memberships and differing modus operandi. Such groups include Exit - The Swiss Society for Humane Dying, a Swiss organization called Exit International (not the same as our Australian-based Exit International) and Dignitas. While little has been written about the first two of these groups, it is the newer and more active group Dignitas that has caught the world's attention.

Dignitas

Dignitas was established by Ludwig Minelli in 1998 as a Swiss, non-profit organization. Based in Zurich Switzerland, Dignitas aims to provide its members with the option of a dignified death. Recognising the limitations of organizations such as Exit Switzerland which only provide their services to Swiss nationals (despite Swiss law allowing foreigners to take advantage of their unique assisted suicide laws) Minelli set about creating a service to cater the increasing demand around



Fig 13.1: Dignitas Director, Ludwig Minelli

Dignitas' own guidelines say they assist people who have been diagnosed with a terminal illness, an incurable disease, or who are in a medically hopeless state. Such people may have intolerable pain or an unreasonable handicap. You need not necessarily be considered terminal.

Interestingly, quite recently Minelli has gone further than

this suggesting that people

with mental illness should not be automatically excluded from the Dignitas service as their suffering is real and deserves to be addressed as such. However this is an area fraught with danger and comment on the use of Dignitas by people with a mental illness remains unknown.

The Dignitas Process

Speak to a relative of a person who has died using the Dignitas service and that relative will tell you that it is best to approach Dignitas well ahead of the date of a perceived need. This is because the process for acceptance into Dignitas can be lengthy and drawn out.

The first step to using the Dignitas service is to join the organization. For a one-off joining fee of \$95 and a yearly membership fee of \$50, a person can become a member. From there the person can choose to apply to make use of the service some time in the future, when/ if the need should arise.

You can join Dignitas by writing to them, emailing or phoning (contact details are given at the end of this chapter). While a proficiency in German is not mandatory on the telephone, it will help greatly when dealing with more complex questions you may wish to ask. The Dignitas phone reception does have an English language option, but this often leads to an answering machine, depending on the time of day you call.

To make use of Dignitas to obtain a peaceful death in Switzerland, there is a formidable list of documents required. To be able to help you, Dignitas needs to ensure that you are who you say you are and that your illness has been fully investigated, diagnosed and recorded in an official medical case history in your home country. Documents which may be required by Dignitas upon application include:

- Birth certificate
- Passport
- Marriage certificate
- Medical records (tests and results)
- Medical specialist reports
- General Practitioner medical reports
- Current local government rates notice (to prove place of residency)
- Current drivers license
- Statements from family members (children, grandchildren)

To apply to use the Dignitas service, a client would complete the application form and forward this, along with copies/ and originals of the above to Dignitas in Zurich.

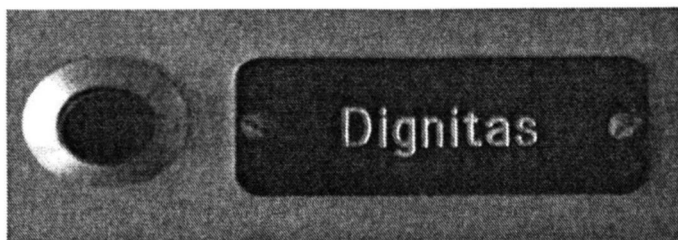
Note - Swiss authorities insist that at least some of these documents are certified extracts, some may need to be witnessed by a Justice of the Peace or Public Notary. Others may need to have been issued within the last 6 months. Be prepared to do a fair bit of running around to gather the paperwork together, especially if the person and their spouse's place of birth is a country other than Australia.

Upon receipt of this application form, Dignitas reviews each applicant's situation. If deemed suitable, a provisional letter of acceptance will be mailed to the client (called the "green light"). It is at this point that plans for travel to Zurich can be made

Upon Arrival in Zurich

Upon arrival in Zurich, the client contacts Dignitas. An appointment is then made with one of a number of consulting physicians who work in conjunction with the organisation. These medical doctors are independent of Dignitas and work from their own rooms. There is a lengthy meeting with the consulting doctor and the medical records are re-examined. If relatives or loved ones have accompanied the client to Dignitas, the doctor may wish to interview these family members and/or friends as well. Don't be surprised if you are interviewed together, then individually then together again.

Once the medical consultation has taken place and if the doctor is satisfied, a prescription for pentobarbital will be written. The drug is not handed over to the client at the time of the consultation with the doctor. Rather, approval at this stage means that the final appointment - the time when the death can take place - is then able to be made. The doctor's approval means that the drug will be available for consumption by the client at the Dignitas apartment on the chosen day.



The Final Appointment

The final appointment is held at one of two of Dignitas' apartments (both are in the same residential building) in an inner suburb of Zurich. The final appointment can take place quite quickly, sometimes the next morning on the day. Two Dignitas staff will be in attendant at the final appointment. A third member of the Dignitas team will arrive during the appointment and deliver the drugs that will be used.

The Drug that is Used

As is the case in all places (Netherlands, Belgium, Oregon) where assisted suicide or voluntary euthanasia is legal, the drug that is used at Dignitas is pentobarbital sodium (Nembutal). A prescription is written out for this drug by the consulting doctor who has seen the client. This prescription is collected from the doctor by Dignitas staff who then have the prescription filled. It is the Dignitas staff who bring the Nembutal to the apartment for the final appointment. At the appointment, staff will dissolve the pentobarbital sodium powder in water to form a drink. This is done when the person indicates that it is their wish to go ahead with their death.

The Pentobarbital used by Dignitas is the soluble sodium salt and 15gm are dissolved in ~50ml of water just before use. The concentration of Nembutal in the liquid consumed is 300mg/ml

The amount consumed is ~30 mls which is no more than a few mouthfuls. NOTE: This differs significantly in concentration from the sterile veterinary anaesthetic Nembutal that is often used by those arranging their own death. Anaesthetic Nembutal has a concentration of 60mg/ml, about 5x weaker than that used by Dignitas.

Dying at Dignitas

Once the client and their family and friends arrive at the Dignitas apartment for the final appointment, a few further tasks must be attended to. There is need to complete additional legal paperwork concerning, consent, power of attorney and forms to release the body. This final hurdle clears the way for the death to take place.

At this time, the client reads, approves and once more signs papers indicating that they know what they are about to do and indicating that they are acting of their own free will. Their signature is witnessed by those present. With the paperwork out of the way, the Dignitas staff explain that the person can opt out of the process at any time.



Fig 13.2: The Dignitas apartment lies in suburban Zurich

The client is asked if they'd prefer to stay seated around the table or if they'd like to lie down. Either way, it is the client who determines what happens and how it happens.

The Dignitas apartments are bright, airy welcoming rooms. They are decorated in warm colours. There is a coffee machine and CD player for those who wish to have music. And in case you forget to bring your own music, there is even a Dignitas CD compilation of well known relaxing popular music, in case you feel that music might be a valuable last minute addition.

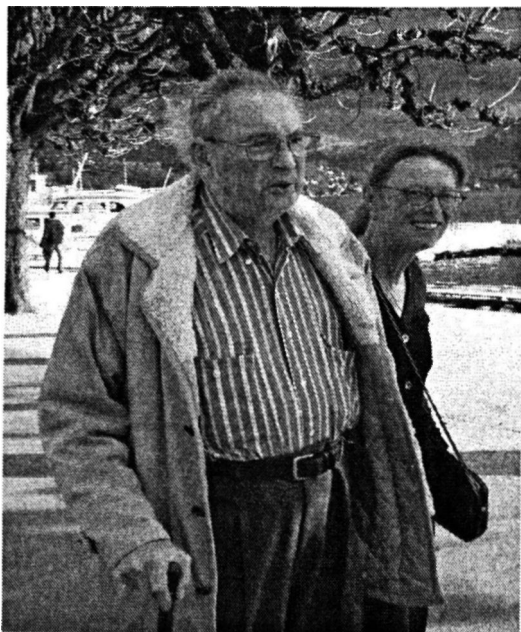
Upon completion of the paperwork and if the client wishes to go ahead, the staff then set up a video recorder on a tripod in the corner of the room. All proceedings from this point on will be recorded. This is done to provide evidence about the death if questions are ever asked as to its voluntary nature. After the death, the police may view the tape to ensure that nothing untoward took place.

With the Digicam rolling the client is then given access to the first of two drugs. The first drug is an anti-emetic (anti-vomiting drug) and is taken in the form of a small drink. The drug provided is metoclopramide (see page 100). The Dignitas staff place the glass on the table and the client can reach for the glass and take the drug if they wish. After this drug is swallowed, a half an hour is needed for it to take effect before proceeding. This time can be very stressful and the Dignitas staff are skilled in providing a calm environment for the client and others who may be present.

When the time has passed, the client is then given access to the Nembutal. Once again, the Dignitas staff ask if the client wishes to proceed, and reminds them that they can still opt out and change their mind. If the client wants to proceed, the staff place the small glass of pentobarbital sodium solution

At the death we attended, Sydney doctor, John Elliott, reached quickly for the glass. Dying of multiple myeloma (a cancer of the bone marrow), his last weeks had been a nightmare and he wanted release from his suffering.

John had a problem with reflux, and some difficulty swallowing caused by the palliative radiation therapy he had recently undergone. He was afraid he would vomit, and pleased when he was able with little difficulty to consume the 50ml drink. Even the bitter taste he had been warned to expect seemed of little consequence, claiming as he finished the drink, "that didn't taste too bad."



John had brought along some cognac to share in his final moments. He felt cognac would take away the drug's bitter after-taste, and would make the Nembutal work faster. We clinked glasses, and while his wife Angelika held him he nodded peacefully off to sleep. John Elliott died within the hour.

Fig 13.3: Dr John Elliott and his wife Angelika in Switzerland shortly before his death

After it's Over

After about an hour, one of the Dignitas staff members performed several simple tests in order to confirm death. Once this was established, the staff called the police who arrived with a medical doctor and an officer from the Coroners department. The funeral home was also contacted at this time.

In all deaths, those present are asked to leave the room and the doctor examines the body. The police may view the video tape of the death and interview those present about the nature of the death. Was the death peaceful? Was it desired? Did it go according to the person's wishes?

Once all questions are answered and the officials are comfortable, the family and friends of the deceased person can leave. The body is then removed to the funeral home, in preparation for either cremation or transportation back to the person's country of origin.

Dignitas and the Swiss Law

While the statistics tend to vary, Dignitas reports that currently - 300 people use their assisted suicide service each year. Well over half of these people are from countries other than Switzerland. Although there have been a handful of situations where a client's family has become disgruntled (these cases have been reported at length in the international media), most people are incredibly grateful to Ludwig Minelli and his compassionate team of workers who make this choice in dignified dying possible.

There are several points to note. Firstly, it is important to understand that Dignitas does not provide voluntary euthanasia.

Swiss law does not allow a doctor to administer a lethal injection to a client. The client must be able to act for themselves and consuming the lethal drug. This means that unless a person is able move their arms enough to lift the glass to their lips, or suck on a straw, or swallow, or empty the drug into their own stomach 'peg', then Dignitas is not the service for them.

Remember, at Dignitas there is no doctor present at the death. Once a person has been accepted by Dignitas, this is very much a DIY model of operation. With Founder Ludwig Minelli having a background in law not medicine, Dignitas provides as de-medicalised a model of dying as Swiss law will allow.

Dignitas is unique in that it represents the only legal option for dignified dying for people living outside of jurisdictions where voluntary euthanasia and assisted suicide are legal. In Exit's opinion the popularity of the service is only likely to continue, although the distance the suffering have to travel will ensure that it is never first choice amongst elderly or seriously ill Australians and New Zealanders.

Dignitas Costs

The Dignitas organization asks for a one-off joining fee of approximately AUD\$95 and an annual member contribution of at least approximately AUD\$50. There is a cost of approximately AUD\$5000 to make use of the service to obtain an assisted death.

The Swiss Option

Dignitas Contact Details

Director: Ludwig Minelli

Address: PO Box 9, CH 8127, Forch, Switzerland

Telephone: 0011 41 44 980 44 59

Fax: 0011 41 44 980 14 21

Email: dignitas@dignitas.ch

Website: <http://www.dignitas.ch>

After it's All Over

Introduction

For those left behind, the period immediately following the death of a loved one can often be a sad and stressful time and a voluntary euthanasia death presents a unique set of circumstances. On the one hand, family and friends may be enormously relieved that their loved one was able to die peacefully and with dignity. On the other hand, there may be feelings of resentment, even anger that the person they loved has chosen to leave them. While it is one thing to know that a person you love is about to die by their own hand, it is another to be able to predict just how this will make you feel.

There will also be a number of practical issues, and hopefully, many of these will have been discussed before the death. For example, is anyone responsible for clearing away equipment from the death scene, and what about the suicide note, should one be required? Then there is the issue of having the death certificate signed, whether or not an autopsy will be conducted, and if there will be a coronial investigation? Many of these issues can be anticipated and prepared for. This chapter gives some guidelines.

What happens after a death?

If a death takes place in the home, and outside of a hospital, hospice or other medical institution, it is normal practice upon 'discovering' the death, that the family doctor be called. Upon arriving at the house, the doctor will then have two options.

If the death looks natural, the doctor can certify death and sign the death certificate. The person's underlying disease is usually cited as the cause of death. There will be no red tape. The body will be released immediately, and funeral arrangements can be made.

If on the other hand, the doctor suspects that the death is *not* natural (eg. If the death is clearly a suicide or if the cause of death is unclear) they will certify death, but may not sign the death certificate. In this case the doctor will call the coroner's office and the police will be involved. Those close to the deceased may be required to be interviewed by the police about their relationship with the deceased, and about their possible role in the person's death.

The first option is the usual one sought. If the deceased was known to be seriously ill and if effort is made to choose a method that leaves no obvious physical signs, or if the person and/or friends and family ensure that any evidence of suicide is removed from the scene, this will be the most likely result.

The second option presents a greater risk to the family and friends of the person who has died. Although suicide is not a crime, police will attend the death scene to ensure that no laws have been broken - eg. did anyone help the person die? The police are usually very sensitive and respectful, but they

are there to do a job and this may involve the questioning of those who were in the house at the time. They may look at the degree of incapacitation of the person who took their life and ask whether or not the method used could have been carried out solely by the individual. If there is any doubt, the questioning of those left can intensify. The issue of whether anyone was present when the suicide took place may well arise and is no guarantee that legal action will not be taken against a person who admits to this.

There are several steps that can be taken to increase the likelihood that the death will be seen as 'natural'.

Cleaning Away

The act of cleaning up after a death generally involves the removal of equipment such as an Exit Bag or empty drug packets so that the death looks as natural as possible. In some situations, this can be done well ahead of time. Many people ending their lives can do this themselves - removing any drug packaging, and even rinsing the glass after the lethal drug has been consumed. If this is done, the attending doctor will likely assume that the cause of death is the underlying disease.

However, where equipment has been used (for example helium and an Exit bag), the cleaning away involves the removal of the bag from the person's head, along with the discreet disposal of the helium canister, tubing and other tell tale signs. For a death to appear normal, there must be no evidence of equipment that could have been used in the suicide. While some people might not care whether their death is listed as 'suicide' or as 'natural', the legal risk to those close to the deceased is higher if the death is a known suicide.

Cleaning Away and the Law

It is a crime to interfere with the 'circumstances of a death.' However, such actions taken after a suicide do not constitute a serious infringement of the law. If authorities do discover that cleaning up has taken place, the family or friends often explain their actions by saying that they were protecting the family's reputation. They say it would be a blemish on the family if the suicide of a family member were ever to be made public. There is little likelihood that the act of 'cleaning away', if carried out for this reason, will attract anything more than a legal slap on the wrist.

Note: there is a large legal distinction between removing a plastic bag after use and letting the doctor assume it was a natural death, and helping someone put a plastic Exit Bag on their head. The latter is clearly assisting a suicide and may well attract a savage penalty if discovered.

Finding the Suicide Note

Given the uncertainty of the law where assisted-suicide is concerned, it is always worthwhile for a suicide note to be written. Writing a note and storing it in a safe place or with a trusted friend makes a good deal of sense. If the unexpected does occur, and the doctor is uncomfortable and refers the death to the coroner, questions will be asked. In this situation the note can be 'discovered' and may well provide a useful safeguard if loved ones are implicated. If the person taking their life does not care that the death be a known suicide the note can be left alongside them. In either case, the existence of the suicide note can provide some legal protection for those left behind.

If the death is documented as 'natural', there will be no questions asked and a suicide note will never be needed. This is why Exit advises people to write a note 'just in case.' A good suicide note will state that the person's death was entirely caused by their own actions and that no one else was involved. The note should be signed and dated by the person who takes their life.

Death Certificates

A doctor called to attend a death, is asked to perform two tasks. Firstly, the death is confirmed by carrying out a number of simple tests to establish that the person is indeed dead, not simply in a catatonic or comatose state. Having confirmed this, the next issue is the signing of the death certificate. There are a number of requirements that must be satisfied before this can be done. The two of particular interest are:

- The doctor must know the patient. Usually there is the requirement that the doctor has seen the patient in a professional capacity - not just to say hello at the golf club - in the past two months.
- The doctor must be satisfied that the death is natural.

The requirement that the doctor be known to the patient sometimes causes difficulty. Some very sick people have little contact with the medical profession, and finding a doctor who could even sign the certificate can be a problem. It can sometimes be wise to call your doctor for a visit prior to the planned death and complain, perhaps of some imagined developing fever and breathlessness. When this doctor is called back some days later, they are often quick to assume a natural death involving pneumonia.

Some people worry a great deal about the way their death will be recorded on their death certificate. They fear being known as someone who 'committed suicide.' Others have no preference, saying 'who cares what they write, I'll be dead anyway?' Nevertheless, the fact remains, if a person about to die from a terminal disease, puts an end to their suffering, the death will be recorded as 'suicide.' If that person does not want 'suicide' recorded on the death certificate, they need to take steps to disguise the truth.

Clearly a method of death that leaves no obvious signs needs to be chosen. In this case the likely assumption is that the patient's underlying disease has caused the death. Most drugs used to end life leave no obvious identifying signs. Death from sterile veterinary Nembutal (Fig 11.5) is an example; the person will appear as if they had succumbed to their cancer or heart disease. But drinking the dyed form of the drug (Fig 11.6) can stain the lips and the death will be less likely to be thought of as 'natural.' A method that leaves no trace, even at autopsy, is the Exit Bag with helium. But then, for the death to be recorded as natural, the bag and the helium canister would need to be removed.

It can be useful if a family member or friend can 'discover' the body in the morning. This person will then be in a position to call the family doctor and remind the doctor of the underlying illness. One can claim that everyone in the house was asleep during the evening when the death took place.

Autopsies

If there is any doubt, the doctor will contact the coroner and an autopsy can be arranged. An autopsy involves the dissection of the body by a pathologist, the visual and microscopic inspection of organs, and the biochemical testing of body fluids, stomach contents etc. At autopsy, the existence of drugs in the body will be discovered. If the drug is uncommon or difficult to obtain, questions may be asked about whether or not assistance was provided in obtaining, preparing or administering the substance.

Although permission for an autopsy will be sought, and next of kin have the right to refuse, it is as well to remember that refusal can be overridden. Autopsies are only sought if there is some legal or medical mystery associated with the death - if there is uncertainty about how or why the person died. In these situations, especially if there is possibility of a criminal act (eg. the assistance of a suicide), the decision will be made irrespective of family wishes.

In cases where the death is clearly a suicide, an autopsy will not necessarily be performed. Autopsies are expensive and only undertaken if possible benefit can be established. They are by no means routine, and their use is becoming much less frequent (O'Connor, 2004). In the case of a seriously ill person who takes an overdose of prescription propoxyphene and leaves the empty packets by the bed in addition to a clearly written suicide note, there is little likelihood of an autopsy being performed.

Grief Counselling

The suicide of a seriously ill person is an event which evokes mixed reactions in those close to the deceased, and the community's reaction to it may also be mixed. While most people support the concept of voluntary euthanasia there is still a significant minority who do not. It cannot be assumed that there will always be sympathy for those left behind. Rather, family and friends will need to decide just what they want to say about the death and to whom. Who is to be told the truth?

Counselling in this period can be of great assistance. The ability to talk things through can be very therapeutic and go a long way towards easing the inevitable grief and despair.

Private counsellors list their services in the White and Yellow Page telephone directories. Community health centres also commonly offer counselling as part of their staple range of health services. In addition, there are a number of community telephone help lines. A further source of specialised counselling is provided by the Nancy's Friends Network.

Nancy's Friends

Nancy's Friends is the end of life choices support network that was established by Exit International in 2005. Named after long-term VE activist Nancy Crick, Nancy's Friends provides an Australian and New Zealand network of trained volunteers who provide support and information about all aspects of end of life decision-making.

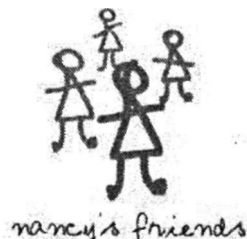


Fig 14.1: Nancy's Friends Logo

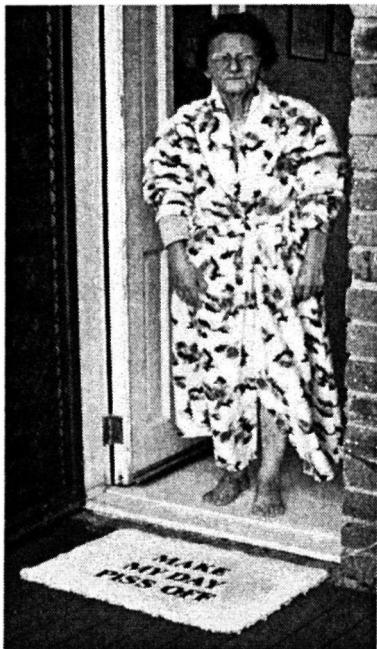


Fig 14.2: Nancy Crick shortly before her death in May 2002

Nancy's Friends can provide an important and useful source of advice and comfort for those left behind. With Nancy's Friends there is the added knowledge that the counsellor will be philosophically supportive of euthanasia and able to understand the dimensions of a hastened death.

At the current time, there are more than 50 Friends operating throughout Australia. The group will extend its services to New Zealand in the coming 12 months.

To contact Nancy's Friends in Australia, call 1300 NANCYS (62 62 97). From outside Australia call 61 500 83 19 29 or email the Coordinator of Nancy's Friends, Lindy Boyd at lindy@exitinternational.net

Telling the Public

Many suffering people who choose to end their life, resent the fact that they have to prepare and carry out this act in secrecy. They rightly point out that their actions are rational and that laws that force them to behave as criminals in this last phase of their life are unjust. They want their death to make a difference and want to help bring about the changes needed for a more enlightened society. Some decide to tell their story to the media in order to make this difference.

Several options are available. The media shows considerable interest in such personal stories that often involve suffering and heroism, and there are a number of possible approaches.

The most powerful accounts are those told by the person planning their death. If these stories are made public before death, there can be considerable scrutiny of the individual and possible frustration of their plans. Nancy Crick's death was an example of this. With the nation knowing she intended to take her life, she became a virtual prisoner in her home. Nevertheless, telling the story as it happens provides the most powerful account and captivates public attention.

An alternative approach is for the person planning their death to record their story, or film an interview, with the provision that it only go to air or be published after the death. This is a safer course, but remember that tapes and records can be subpoenaed and possibly used as evidence, if any assistance is alleged, following the death. Dr Kevorkian's help of motor neuron patient Thomas Youk falls into this category.

The third possibility is for the family and those closest to the person who died, to tell the story after the death. This is a very safe option, but without the imagery and direct quotes of the person who died, the stories have less impact.

Getting these stories out to the broader public is an essential part of initiating political change and is encouraged by Exit. Remember though the media can be a double edged sword and there is a chance of burning one's fingers. Be careful.

Concluding Comments

It is not that long ago that I was sitting at the bedside of a very sick man in Sydney. This was my second visit to this man's small bedsit in this southern beaches suburb. Dying of prostate cancer, Terry was in bed on both occasions.

On the first visit we had discussed the range of options open to him. Like everyone else he wasn't interested in much besides Nembutal. While he didn't know any vets he did have a 'mate in the race horse industry'. He told me he thought that this mate would help him.

On the second visit, Terry was surprisingly happy. He told me that his friend had indeed proved to be a true mate. He'd got him his Nembutal. What a stroke of luck, he told me. He invited me to inspect the prized bottle on a shelf at the back of his refrigerator. But when I found what he was referring to, my heart sank. The bottle he'd paid a full \$5000 for was not Nembutal at all. It was an unrelated drug; the lethal pentobarb was no where to be seen.

I broke this to Terry and his joy turned to absolute despair. We sat for some minutes in silence, digesting this awful news; finally Terry spoke,

'I've got a gun' he said, 'I just didn't want to use it. But now I'll have to. Can you tell me how to do it.'

I looked at him stunned. My years as a hospital photographer had left me with gruesome memories of the damage that firearms cause. I couldn't image anyone, other than the most desperate, choosing to do that to themselves. There is no dignity in dying like that, with your body broken and damaged so badly.

Yet Terry *was* desperate. Given the emotional roller coaster he'd just been through with the news that he'd been tricked and robbed, I did not have the heart to deny him his answer.

I told him the best place to put the muzzle of his rifle was inside his mouth, pointing the barrel slightly upwards, against the hard palate, in the midline.

I was horrified, repulsed and appalled to find myself in the position of having to answer Terry's question. What sort of crazed world do we live in when we force our terminally ill to live on amidst their pain, suffering and utter humiliation, yet go to such lengths to refuse them access to a peaceful exit? And why should advocates like myself have to clean up the mess and confusion left by our politicians; politicians who have neither the honesty nor the courage to face up to and deal with the question of how we die.

Terry did use his gun. Now, thinking back about Terry, I never want to be put in that situation again. More than that, I never want to see a dying person forced to resort to a gun, or to hanging, or to jumping off a city building to get the exit they want.

Dignity in dying is more than a slogan. It's a way of life and of death. And it is something all of us need to face.

By offering this book, I am hoping that men like Terry and the many other seriously ill and elderly people whose experiences I've described, all have a choice. Not the choice of last resort but of first resort. Not a passive choice of desperation that is no choice at all. But a choice that represents the most active, well considered and, above all, life empowering decision they will ever make.

Exit **RP** Test

	Hanging	CO	Exit Bag + Drugs	Morphine	Cyanide	Doloxene	Exit Bag + Helium	Nembutal
Reliable(10)	10	8	6	4	10	9	8	10
Peaceful (10)	0	7	5	10	5	8	7	10
Available(5)	5	4	4	3	2	4	5	2
Preparation(5)	2	1	2	5	5	4	1	5
Undetectable(5)	0	1	4	4	3	4	5	4
Speed(5)	1	5	2	1	5	2	5	4
Safety(5)	5	1	5	5	3	5	5	5
Storage(5)	5	4	4	3	5	3	5	4
TOTAL(50)	28	31	32	35	38	39	41	44
%	56%	62%	64%	70%	76%	78%	82%	88%
Rating	8	7	6	5	4	3	2	1

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Drug Misuse and Trafficking Act 1985 (NSW) at: http://www.austlii.edu.au/au/legis/nsw/consol_act/dmatal985256/index.html

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Dr Philip Nitschke PhD, MBBS, BSc (Hons) is a leading authority on Voluntary Euthanasia and Assisted Suicide. As the first doctor in the world to administer a legal, lethal, voluntary injection under the Rights of the Terminally III Act of the Northern Territory, Philip has experienced all sides of the dying with dignity debate.

Born in rural South Australia in 1947, Philip was awarded his PhD in the School of Physical Sciences at Flinders University in 1974. A serious accident in 1979 forced a career change and Philip returned to university, graduating from Sydney University Medical School in 1988. Philip lives in Darwin Australia and travels regularly with his work for Exit International.

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