

Suicide in Samoa

TERRY BOURKE*

Introduction

Suicide is undoubtedly a world wide problem and has been a national concern in Samoa for hundreds of years: it dates back to pre-Christian days, again not only in Samoa but throughout the world. Suicide can only be understood in the context of the total health picture of Samoa, as many causes of suicide undoubtedly touch on aspects of mental health and relate back to factors such as proper counselling, education and proper medical treatment, as well as healthy families and child raising issues. However a point I want to make here is that available data suggests that Samoans living outside Samoa (in New Zealand, Amerika Samoa, Hawaii, US mainland and Australia) do not have the suicide rates we have here (John Bowles, 1983 seminar on suicide (organised by Fiaola Suicide Awareness Committee). So what are the factors here in Samoa which appear to exacerbate this issue? In this article, suicide will be considered on its own.

"... in 1981, we were losing lives at about one per week. Something was wrong to be causing this, where so many people were choosing to die rather than face the problems of living."

The issues

The vastness of the suicide issue in Samoa is seen in Table 1 data. Figures were supplied by the Fiaola Crisis Centre. Those from 1988 onwards are from the Centre from the Health Department. The actual figures are probably higher, as we know that some attempted and actual suicides in the rural areas do not get reported to the Health Department, or Police.

Finding solutions

Let us look at the table and discuss some aspects of the problem. With the serious suicide problem evident from 1979 through to 1981, some action had to be taken. Sister Barbara of the Fiaola Clinic, with the assistance of the Catholic Church, established a counseling service for all mental health problems in 1980 at what had previously been established as natural family planning centre, in 1976.

In 1981, the Clinic, together with YMCA the Fellowship of Churches, Red Cross, Health Department, Police and concerned, individuals established a Suicide Awareness Committee, under Sister Barbara as chairperson.

The Committee decided on a programme based on:

- publicity through the local press and over radio. At that time, this was a controversial decision as many people thought that by publicizing the problem, this would lead to increased rates of suicide. This had happened in other countries, but did not happen in Samoa.
 - a public seminar was held in 1983 as a part of this public awareness campaign and to draw the problem to government's attention.
- discussion on the paraquat component in the suicide problem and possible ways to reduce this.

Sister Barbara continued with the Clinic's counseling service during this period and there was some counseling on the problem in a few villages and schools.

As Dr Bowles commented "The programme seemed important at the time because suicide deaths had increased over recent years and in 1981, we were losing lives at about one per week. Something was wrong to be causing this, where so many people were choosing to die rather than face the problems of living."

The apparent success of the Committee's programme in reversing and lowering the suicide rate can be seen from the figures in Table 1. Publicity, a committed counseling service and a vigorous rural health and suicide awareness education programme through the Health Department's rural nursing system, contributed. I say contributed as it was

*Consultant, Ministry of Health, Apia, Samoa.

Table 1. Suicide data for 1979 to 2000 (7 February)

Year	Attempts all cases	Deaths all cases	Attempted paraquat	Deaths by paraquat
1979	80	40	58	24
1980	70	44	55	29
1981	94	49	74	40
1982	68	35	43	23
1983	42	24	34	13
1984	33	15	20	5
1985	34	25	21	13
1986	47	20	41	18
1987	49	23	43	18
1988	41	17	40	16
1989	38	25	28	18
1990	36	21	25	15
1991	38	20	25	13
1992	39	16	30	12
1993	37	23	28	19
1994	46	34	27	20
1995	32	16	16	8
1996	30	16	17	10
1997	25	20	14	11
1998	23	17	11	8
1999	39	20	16	10
2000	14	8	6	4
Totals	938	527	660	340

impossible to obtain hard statistical data to show what part these three factors actually played.

As a part of the programme, fullers earth kits were to be distributed throughout the rural areas - district hospitals and villages. Fullers earth (bentonite clay), if administered in a large enough dose, quickly to the person who swallowed paraquat, can be important saving their life. If Fullers earth is not available, soil will do the same job, but Fullers earth is preferred.

The other point that must be made about the figures is that paraquat accounts for just under two thirds of all suicide and some actually do. It is the underlying causes which lead these people to consider suicide, as the answer to their problem, that needs to be studied and addressed.

Underlying causes of suicide

All now working in this field would agree that even after 20 years of suicide awareness and counseling, much more statistical data and research is needed to arrive at the true underlying causes of suicide in Samoa.

Dr Bowles, during his consultancy at the National Hospital, identified many of the probably causes of suicide at that

time. To quote: "People talk about the presumed effects of such things as "western influence", changing expectations of the young, the generation gap, economic difficulties and the cash economy, unemployment, education, alcoholism, increasing family difficulties, migration, etc."

Dr Bowles was able to come to some conclusions:

1. Samoan people living outside Samoa do not have the same suicide rates as those living in Samoa.
2. A similar pattern of suicide is found in the Truk (Caroline) island group in Micronesia.
3. Elsewhere, as in Tonga, Fiji, the Cook Islands, Tokelau and Niue, suicide is much less common or rarely reported.
4. In Samoa, the age group most at risk, is young people. In 1982, 26 of the 35 deaths were in people less than 25 years of age.
5. "Now it could be argued that most people in Samoa are in this age group" and indeed 75 percent are. "However, despite this high proportion of young people in the age where suicide is most common, only one person over the age of 45 committed suicide in 1982. A similar pattern of age distribution applies in previous years. This is in contrast to data from overseas where suicidal death tend to increase with age," Dr Bowles stated.
6. Overseas, "an increasing number of younger people attempt suicide or make suicidal gestures, but these

Table 2. Suicide as perceived by youth, 15-35 year age group

Perceived health problem	Total questioned	Age group (years)			
		15-19	20-24	25-29	30-34
	10845	3445	3385	2269	1746
Suicide	5353	1888	1625	1109	731
Suicide/Drinking	271	90	73	55	53
Suicide/Smoking	200	72	69	30	29
Suicide/Poor relations with Parent	31	8	12	7	4
Suicide/Disobeying parents	21	6	8	3	4
Suicide/Child molestation/ Murder	19	3	7	7	2

attempts are often not fatal because the method used in countries overseas is not especially lethal. An overdose of some medication is usually used, which is less of a life risk than say paraquat."

7. "Deliberate self poisoning with paraquat is uncommon overseas in countries where Gramoxone is used as a weed-killer."
8. "Alcohol abuse appears to be an important factor, especially in young men. Often we learn these young men had been drinking to excess at the time of the suicide attempt. In some cases, it seemed clear the man concerned was so influenced by alcohol that his thinking, judgement and control of feelings, had been seriously effected. Some men, when asked why they tried to kill themselves, simply said they were drunk, as if that was sufficient reason. Others said they were confused by drink and mistook the bottle they drank from which contained poison, usually paraquat, rather than beer".
9. "In 1983, the last seven suicide cases recorded at the National Hospital had alcohol involved. Six were men in the 20-30 year age group. The seventh was a young woman who poisoned herself because she was so upset with her father's drinking and she appeared unable to express her distress in a more rational way. Another young woman told the same story, in 1982. Others, especially women, have been placed in what they see as a hopeless situation because of drinking and sometimes violence in the men who are important to them".

Dr Bowles also recognized the problem of different expectations by parents for their children's behaviour and achievements, required under the fa'a Samoa and those which the increasingly more westernized children, expected. Also, the lack of communication between parents and children in many instances and other areas where personal relationships become strained.

From the publication *When I Grow Up*.

- "In the fa'a Samoa, when a child grows up, he knows nothing. He had nothing to offer except to keep his mouth shut, listen and observe," Samoan matai, interviewed.
- "For them, for their generation, it was just their traditional life. For us it is the traditional life and the European

influence. It is not our choice that we are living in this society as we are now. It is more pressure on us because we cannot neglect our traditional life". Samoan youth, interviewed.

A WHO study published in 1994 said "male suicide rates in Samoa, Federated States of Micronesia, Marshall Islands, Guam, Palau and among Indo-Fijians are higher than any other countries. While male suicide rates tend to exceed those for females, the Pacific holds the global record for the highest suicide rates among young women".

In "State of Pacific Youth 1998", an UNICEF, Suva, Fiji, study and publication, the main reasons given for attempting or committing suicide "is a feeling by the young person that is no one to turn to discuss his or her emotions - whether broken love, anger or frustration and alienation. The stresses of social change - which are occurring in different degrees around the youth of the Pacific where traditional culture only listens to the voices of elders. Young people are truly to "be seen and not heard".

"The different forms of pressure that (the children) encounter include peer pressure, study, family pressure, religious and cultural pressure. These are imposed on them by the expectations of their families, teachers, society and their personal ambitions. Sometimes the pressure is not as great as the weight of disappointment that follows when one is unable to achieve his/her goals".

"For some, the discouragement is too much to bear and they end up indulging themselves in socially illegal, emotionally harmful and medically fatal acts. However most end up very confused, tired and astray".

Therefore, it is important that they are guided to enable them to achieve their goals.

In a government report: Report on the Apia Urban Youth Survey 1994, Vol III, 55 percent of the youths between 15 and 24 years questioned, considered that suicide and a related problem, was the most serious health problem facing youth. In more detail, the results of the survey can be seen in Table 2.

Table 3. Recent suicide trends

Year	Attempts, by sex (%)		Age - attempts		Paraquat cases (%)	
	Male	Female	Range	Median age	All attempted cases	All fatal cases
1995	56	44	15-57	26.5	50	50
1996	67	33	13-48	24.8	57	66
1997	70	30	17-51	29.6	56	55
1998	65	35	13-48	24.5	48	57
1999	79	31	12-76	33.1	42	50

Recent suicide trends

A study of the attempted and fatal suicide figures for 1995 to 1999 (see Table 3), show that the situation may be changing through:

1. the dominance of males over females, about 2 to 1, in attempted suicides
2. a trend developing with older people over 29 attempting and committing suicide.
3. the decrease in importance of paraquat as a tool of suicide.

Main underlying causes in Samoa

One of the recommendations made latter is the need for more in-depth research and statistical data on suicide, especially as to the underlying causes. As Dr Bowles commented in his 1983 paper "many theories about the possible causes of suicide in Samoa have been put forwarded, but of course no one can be sure about the exact cause and effect in these cases".

That would still appear to be the case, other than for the work done by Dr Bowles and Matamatua. In discussions with those working in the fields of mental health and counseling in Samoa, it appears that the probably main, unsubstantiated, reasons which lead to people consider and actually commit suicide are:

- the inherent problem of different expectations by parents for their children's behaviour and achievements required under the fa'a Samoa and those which our increasingly more westernized children expect. All in counseling agreed on this. Lone losefo, a trained counselor of Fiaola Clinic, now the Fetuolemoana Counseling Service said "tourism is the most important factor here, followed by TV, radio and the availability of pornographic material". "With tourism, it is the fact that tourists do not understand that it is not acceptable to walk around in scanty bathing costumes and clothes, especially in villages. Nor acceptable to eat while walking through villages". "Availability of pornography can lead to imitation by young people and prostitution and unwanted pregnancies, all of which can strain the parent/child relationship and lead to possible suicide crises. It can also lead to

unwanted babies being abandoned".

Rev. Falefatu Enari and Nuausala Siasosi agree that tourism is leading to problems.

All counselors agree that there is a lack of communication between parents and children which can lead to conflict and stress.

- "Young children who have been living, working or studying overseas, living in an environment where they were allowed to speak out and be heard on many issues, can find it difficult. When they return, this raises the expectations of other children who have not been overseas and can lead to stress. Those returning will also be in a situation where they will be expected to conform to their parents expectations. (Rev. Siasosi)
- Rev. Enari said "one of the major problem area is the drift of children from rural areas into Apia for schooling because many parents think rightly or wrongly, that the standard of education in the rural areas is lower than that in the Apia town area. This leads to children being sent to Apia to stay with even distant relatives or friends of the family. This can lead to overcrowding in the house or reduced control over the child which, in turn, can lead to stress.
- "The influx of village people in the Apia town area, besides the problems with education, also leads kids to join street gangs, roaming around of a night indulgence in crime, kids sleeping around in the open and bad eating habits" (Rev. Siasosi).
- "Disciplining of children can become abusive, especially when the mother or father losses self control. This leads to frustration and stress in some of the children getting punished and an urge to pay the parents back by attempting suicide. They turn their anger and frustration back onto themselves, hoping they will hurt their parents". (Rev. Siasosi)
- "Many young girls who get pregnant can, for a time, be rejected by the family and placed under stress. Samoan parents have pride in their children and find it difficult to talk over problems with, or express their feelings to their

children. The scolding of children is probably the major stressful situation that children can be placed in," said lone.

- "Another stressful situation can occur when newly weds go to live with the wife's or husband's family. The in-law husband or wife can be placed under much stress until he or she is finally accepted by the family and this may take some years. Stress can develop between husband and wife" (lone). Rev. Siasoi agrees.
- "Too many people rush into marriage without understanding the commitments required for successful marriage - the need to plan their children, the financial and education requirements for children and the family as a whole. This lack of planning can lead to stress" (lone).
- "With some families, the husband or wife does not want their children to visit the wife's or husband's family. This can lead to stress between the husband and the wife" (lone).
- "Sexual misbehaviour - incest or adultery - can lead to stress" (lone).
- "With school children, there are two types of stress they can be subjected to. The first, from the parents to achieve scholastically, especially at the time of their UE and SC exams and the second from their peers, to conform as a member of "the gang". This scholastic stress is continued into tertiary institutes" (lone). "It is a matter of pride for the parents to see their children succeed" (Rev. Siasoi). "Samoan parents are very proud and authoritative" (lone). "If you don't do what your peers do, for example, go to nightclubs (older children) the children can be placed under a lot of peer pressure". (Rev. Siasoi)
- All agree the stress some young adults are placed under by families, to assist with money matters - faalavelaves and peletis - is always present. All agree that suicides increase the week before and the week after holiday periods - Christmas/New Year, Easter, Independence, Teuila Festival and White Sunday, again through money pressure, especially on young adults.
- The fact that there has been a lessening in the effects of the faifeau's (pastor's) daily schools out in the villages was raised as a possible contributory factor.

What is being done?

Nurse Lecturer at NUS, Matamua Iokapeta Enoka, who has had over 20 years experience in mental health, including suicide, counseling, when asked what percentage of the population presented at the Health Department last year with mental health problems, replied "just over one percent; 2,000 people". She further commented "mental health has been integrated into community health and a training process has been implemented to detect those under stress very early so that early action can be taken to assist these people".

The Health Department is already offering a counseling service. "It is especially important to offer immediate counseling to the families of those who have attempted or committed suicide," said Matamua. This counseling is available from the Mental Health unit at the National Hospital or from the Community Health Nurse Service.

All those working in the field agree that counseling is essential in overcoming the mental health/suicide problem. The figures from the Fetuolemoana Crisis Centre are very impressive here. Over the past five years, they have counseled 580 people out of which only five committed suicide. The Centre accepts all types of mental and other cases which require counseling, and has an active follow up procedure.

If the client does not show up for a follow up appointment following the first interview, the Centre waits for a week and if they don't turn up, the Centre will actively seek them out. "The number of people seeking assistance with drug

abuse is rising", said lone.

Rev. Siasoi's experience with the running of a "life-line crisis" centre from his house some months ago, was also instructive. For one month, the service was used constantly. In the end, the pressure was too much for one person to successfully operate the service. The main period for calls was between 10 am and 3 pm. This is in line with overseas life-line centre experience and appears to be related to the fact that this is the time when people, stressed or depressed, become inward thinking and suicidal.

Rev. Siasoi was also running an education programme in selected villages with both parents and children, in separate parents and children groups, to explain and overcome the two different attitudes, which may exist between the groups which can lead to stresses and conflicts. Ways to overcome these differences are discussed with both groups. Again, pressure of work (Rev. Siasoi is the pastor of the Apia Protestant Church) has meant a curtailing of this most necessary counseling/education programme.

"It is especially important to offer immediate counseling to the families of those who have attempted or committed suicide," ...

Leo o Viiga (Rev. Enari) is also running a life-line crisis centre and also has a follow-up service. It also has an outreach programme which features live dramas, discussion groups and one on one counseling.

Other NGOs also run programmes and workshops on suicide, other mental health and social problems.

Paraquat

Paraquat was apparently introduced into Samoa in 1974/75. The place of paraquat in both suicide and agriculture in Samoa has been under discussion for 30 years now. The problem is not paraquat itself, but its misuse.

In many countries where paraquat (Gramoxone) has been used as a weed killer or desiccating agent (it is often used on cotton to kill off any green growth a few days before the cotton is harvested), suicide using it is either rare or non-existent.

Why do we have this problem in Samoa?

Nobody really knows. We do know that back in the 1950s/1960s an arsenic compound which was injected into old coconuts to kill them to allow replanting, became the preferred method of suicide, until it was banned.

Dr John Bowles, in his paper on suicide in Samoa 1981/82, comments: "One fact (in regard to causes of suicide) seemed so important that it deserved special attention, was the significance of paraquat poisoning as a cause of death. Over recent years, the rise in numbers of suicide and attempted suicide, was due mainly to the rise in the number of paraquat poisonings. In 1981, the worst year so far, about 80 percent of the cases involved paraquat. Furthermore, the significant rise in numbers began in the mid 1970s when paraquat was made more freely available and its (agricultural) use was increasing".

"In 1981, 49 people died, 39 from paraquat, 10 from other causes. In 1982, 35 died, 23 from paraquat, 12 from other causes. It is clear that the significant reduction was due to the lower number of paraquat deaths. A saving, in fact of 14 lives. It has been argued that if people were intent on killing themselves and they were prevented from using one method, they would find another. These figures do not support this - 14 less paraquat deaths but only an increase of two in all other methods, combined. In fact, we have noted that while the total number of suicide deaths have increased over recent years, the rise in paraquat deaths has been the main cause and suicide from all other causes has remained fairly

constant".

The figures for death from paraquat poisoning are now running at a lower figure. Over the past five years, this has been from 8 to 13 per year. The percent of all suicide deaths from paraquat has also dropped from 80 percent in 1981 to 50 to 66 percent (see Table III). This probably supports Dr Bowles argument.

But these figures are still disturbing, and it shows the need for more researched and statistical data. Any suicide death is an unnecessary death.

Can agriculture do without paraquat?

There is a world-wide trend to organic farming without pesticide, including weed-killer use. This farming method is being promoted in Samoa, but its full implementation may be some year off yet.

The use of weed-killers such as "Sting", "Roundup", "Buster", etc, as pre-plant treatments can be replace paraquat in this situation and give a better control of weeds. Unfortunately, all are more expensive than paraquat.

Buster is an interesting material and is quicker acting than the other two. All three of these pesticides are systemic, having to enter the plant in order to kill it. Paraquat is a contact weed killer and actually dries the green foliage off.

It has been argued that if people were intent on killing themselves and they were prevented from using one method, they would find another.

Some people say that systemic weed-killers cannot be used in established taro or young plantation crops (coffee, cocoa) but this is not so. They can be safely used, using spray drift shields placed on the spray wand. These spray

shields were, in fact recommended by ICINZ in the early days of paraquat, to protect taro plants from that weed-killer. Of course, farmers should be encouraged to hand weed their taro, rather than use weed-killers.

Paraquat has a deadly effect on recently transplanted cocoa, pineapple, kava and to a lesser extent coffee plants, as of course do the systemic weed-killers, if care is not taken with them.

ICI's (now Crop Care's) Gramoxone contains both an emetic, a substance to cause vomiting and a stenching agent, to give it a foul smell to stop it being drunk. Both were added to ICI's Gramoxone to make it less likely for people to misuse or swallow it for suicide purposes.

But do these additives work, or are they being used by Crop Care as a marketing ploy, to protect its Gramoxone market

against paraquat formulations which do not contain them? Needless to say, those formulations without the emetic and stenter are cheaper. I did e-mail Crop Care, through Venture Exports, who supply Gramoxone to Samoa, as to whether they had any hard data to show whether either agent, or both together, had any effect on reducing likely suicide from paraquat ingestion. They have not replied.

If you look at the paraquat attempts and deaths figures in Table I you can follow my reasoning. It is a matter that has concerned me for some years now. To me, the agents don't appear to be working. But let's await the reply from Crop Care.

Some 20 years ago the Health Department's Occupational Health Committee looked at the paraquat suicide problem and came up with a set of recommendations on the sale and handling of paraquat weed-killers, but the recommendations were not acted on.

The same recommendations were brought forward to the Fiaola Clinic's Suicide Awareness Committee and again adopted. They were:

- ❑ All stores selling Gramoxone had to keep their supplies behind closed and locked doors. When a sale was made, the doors were to be unlocked to remove the Gramoxone and then locked again. This was to drive the point home that Gramoxone was dangerous, if misused and must be kept under lock and key.
- ❑ The person buying the Gramoxone would have to sign a register in which the date and amount purchased purchaser's name and address were to be entered and the purchaser was to then sign the register.
- ❑ At the same time, the seller was to explain that the purchaser had a responsibility to look after the Gramoxone, to make sure that it was not decanted into other containers, must be kept under lock and key and that if his or her Gramoxone was misused, they would be held responsible.
- ❑ It was hoped that any case of misuse, the police would carry out a thorough investigation into the matter.

A suggested approach to the suicide problem

This suggested programme has been put together in consultation with Matamua Iokapeta Enoka. There are certainly to be some areas overlooked.

The need for more in-depth research and statistical data on the suicide problem has been mentioned previously. While many opinions have been advanced on why people attempt and commit suicide, more definite data is required.

1. There is a need to set up a 24 hour Life-line crisis/counseling centre to be readily available to all those who require assistance in overcoming periods of stress or depression. This centre needs to be located somewhere in the centre of Apia, if not in Apia then in a prominent position at the National Hospital compound. It should be prominently sign-posted. The Crisis Centre should be a joint Health Department - NGO Project, perhaps with government or the Department providing the infrastructure, medical and training service and advice required and the NGOs to supply the counseling personal to man the Center. From 60 to 80 trained counselors would be required to provide the 24 hour, seven days a week, 52 weeks a year service, each serving a four hour shift, with three telephones to be manned and other counselors on hand to handle face to face interviews. A follow-up service should also be provided.
2. The need for more in-depth research and statistical data on the suicide problem has been mentioned previously. While many opinions have been advanced on why people attempt and commit suicide, more definite data is required.
3. The need for a continuing counseling and education programme to assist in explaining and relieving the major stress promoting areas which may turn people towards suicide.
4. The need for paraquat in Samoa's agriculture to be re-examined in the light of alternate materials being available.
5. If paraquat's use is to continue, the recommendation's suggested by the Fiaola Suicide Awareness Committee on sale and handling of paraquat be re-examined.
6. Perhaps the need to ensure that Fullers earth kits and training in their use is spread to all women's committees in Samoa for inclusion in their first aid kits. The need to train up three members of each committee is recognised as is the need to ensure that the kits are always present.