

This is a note I wrote Bill to prepare. It is rather incomplete and as discussed meant the holes filled in and a clearer picture of where paraquat fits into the total suicide deaths & suggestions in Samoa. It will almost certainly produce a more definite formulation as one step in an endeavor to lower the death rate.

POISONINGS BY PARAQUAT. WESTERN SAMOA.

1971 - 1978

BACKGROUND

Since the introduction of paraquat into this country there have been a number of deaths and illnesses and a considerable amount of concern expressed by doctors and others in Samoa and by PPD and CTL staff of I.C.I. (UK).

In 1976 it was felt necessary by PPD to send their Divisional Medical Officer, Dr Keir Howard to Western Samoa to talk with the medical profession over their concern. Prior to that visit there was some thought that the Western Samoan Government may ban further importation of paraquat - a circumstance that could have led to a chain reaction in other countries.

As a result of this concern an emetic (PP796.) was developed by Dr Mike Rose and colleagues at CTL which was incorporated with the paraquat and since the end of 1977 has been the only form of paraquat sold in Western Samoa (I.C.I. New Zealand has the sole monopoly on supply to this market).

During the last 3 years I have visited Apia on three occasions, the first as part of a general visit of the South Pacific area - Fiji, Tonga, Samoa, to see in what areas I could assist David Browne, the second and third visits, at the request of Mike Rose to monitor the paraquat situation. Both these latter visits were hurried, limited in scope and for a specific purpose.

PURPOSE

I believe that I.C.I. New Zealand has a responsibility to look more closely and critically at a situation which, if it continues, could have adverse effects on the sale of paraquat, the image of I.C.I. in the Pacific but more importantly the health of the community in Western Samoa.

SALES OF PARAQUAT

The table following (obtained from David Browne) indicates the sale of paraquat to Western Samoa 1971 - 1978 (to date July 1978).

SALES PARAQUAT WESTERN SAMOA

<u>Year</u>	<u>Quantity (litres)</u>	<u>Approx. Value - (\$NZ)</u>
1971	1000	4000
1972	1500	6000
1973	2000	8000
1974	3000	12000
1975	4000	18000
1976	27000	121,500
1977	29000	145,000
1978	40000	200,000

HOSPITAL ADMISSIONS 1971-1978

Records are incomplete, the table is based on information I have gained from perusing files in Apia General Hospital during my last two visits together with a report in the Fiji Medical Journal 1975.

HOSPITAL ADMISSIONS/DEATHS 1971-78

<u>Year</u>	<u>Survivals</u>	<u>Deaths</u>	<u>Total</u>
1971		no information	
1972		no information	
1973	2	7	9
1974	6	1	7
1975	5	4	9
1976		no information	
1977	17	11	28
1978	4	2	6
TOTAL	34	25	59

DEATHS AND SURVIVALS BY AGE GROUP

<u>Year</u>	<u>Age Group Deaths</u>				<u>Age Group Survivals</u>				<u>Total</u>
	under 20	20-29	30-39	40+	under 20	20-29	30-39	40+	
1971									
1972									
1973	3	4				2			9
1974	1				2	4			7
1975	1	3			1	3		1	9
1976									
1977	5	4	2		6	10	1		28
1978				2	3	1			6
TOTAL	10	11	2	2	12	20	1	1	59

Young people in their teens and twenties comprise the bulk of both deaths and survivals.

REASON FOR TAKING PARAQUAT

<u>Year</u>	<u>Accidental</u>	<u>Suicidal or in Anger</u>	<u>Unknown</u>	<u>Total</u>
1971				
1972				
1973	not available for Fiji Med. J. article			
1974	3	4	-	7
1975	6	3	-	9
1976				
1977	8	13	7	28
1978	1	4	1	6
TOTAL	18	24	8	50

OUTCOME FROM CAUSE 1974 1975 1977 1978

<u>Cause</u>	<u>Death</u>	<u>Survival</u>
Accident	4	15
Suicide	11	13
Unknown	3	4

Most accidents survived, about half of the suicides or fits of anger died. It is important to appreciate that a number of the deaths from suicide were emotional and immediate responses to a scolding by a parent and not calculated attempts to die.

WHERE TO FROM HERE?

1. I believe firstly, it is important to complete the picture by filling in the gaps in the tables shown. This information is carefully filed in the Apia General Hospital and would take about 4 days to collate.
2. What can I.C.I. New Zealand do to help?
 - (a) It is yet too early to measure the effectiveness of the emetic.
 - (b) A case of paraquat poisoning is very demanding on staff for nursing care and on medical and laboratory skills. It is in this area that I believe we should help:
 - (i) by ensuring that necessary life saving equipment is available;
 - (ii) by offering training to staff in a New Zealand hospital.

These are my suggestions, not those of the doctors at the hospital. If they are to be considered they would have to be done in consultation with Western Samoan doctors.

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