

## Suicide and Attempted Suicide in Sri Lanka

by

S. A. W. DISSANAYAKE

and

W. P. DE SILVA

*Department of Psychiatry, Faculty of Medicine,  
University of Sri Lanka, Colombo Campus.*

**SUMMARY** The annual figures for deaths from suicide in Sri Lanka greatly exceed the total of sudden deaths due to homicide and accidents.

A study of the suicide pattern in Sri Lanka indicates that the rate has risen sharply over the past two decades. The rate for the island has surpassed the rates of some Western countries like Britain and the U.S.A. and has approached the higher rates prevalent in several other European countries.

This notable increase in the suicide rate seems to parallel the rapid growth of population as well as socio-economic transformations and upheavals taking place in our traditional way of life following independence.

### INTRODUCTION

The importance of suicide as a cause of sudden death in Sri Lanka is shown by the comparative data of deaths caused by suicide, homicide and accidents for the years 1969-1971 (Table 1).

TABLE 1

Deaths from Suicide, Homicide and Accidents, 1969-1971

	Suicide	Homicide*	Accidents*
1969	2407	825	621
1970	2400	973	661
1971	2318	917	688

\*figures obtained from the Police Headquarters.

Previous writers on suicide in Sri Lanka have used two main sources of information on this subject. Thus, Strauss and Strauss (1953) used the annual report of the Registrar-General while Ranasinghe and Jayawardene (1966), who discussed suicide in the Southern Province, used the annual reports of the Inspector General of Police.

Of the two sources, the Registrar General's data are perhaps more reliable.

In spite of the fact that Sri Lanka's data on suicide are more reliable compared to that of many other Asian countries (see below), since an initial attempt by Gunasekera (1951), no comprehensive study or analysis for the whole island has been done. Further, there is no reference in medical literature to any research on attempted suicide in Sri Lanka.

The present study attempts to survey various aspects of suicide and attempted suicide in the island, based on data obtained from the Registrar General's annual reports, hospital records, and a detailed study of a sample of coroners' inquest notes, where the verdict has been recorded as suicide.

#### METHODS OF DATA COLLECTION

The main source of data in this study was obtained from the statistics on suicide published in the annual reports of the Registrar General from 1951 to 1971.

As there was lack of information in such data on the main causative factors in suicide, a detailed study was made of 139 case notes of suicides obtained from the Colombo Chief Magistrate's Courts for the year 1971. 122 of these records were from the Colombo City Coroner and 17 from a group of coroners in the suburban areas.

Data on attempted suicide were obtained from the records available in the Police Post of the General Hospital, Colombo, and from a study of 104 case notes of patients with a history of acute poisoning, who were admitted to the General Hospital, Colombo, in 1971, and survived.

It is likely that even the Registrar General's data are an underestimate of the actual number of suicides. This is unavoidable and understandable. Relatives would, if possible, attempt to conceal that the deceased committed suicide for obvious social reasons. Coroners' verdicts are occasionally inconclusive even though evidence for a suicide verdict is adequate and cases of suicide may be recorded as 'open verdict', or 'accidental death'. Such anomalies also prevail in countries with a better tradition of data collection, as in the U.S.A. or the United Kingdom. Thus, the number of suicides in the U.S.A is most probably higher by one fourth to one third than recorded (Dublin, 1963).

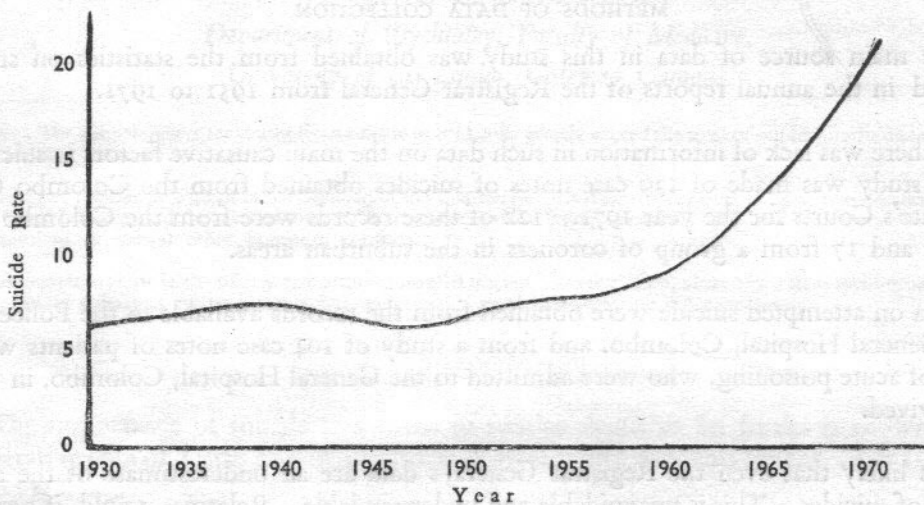
In Sri Lanka, it is statutory that all deaths be registered and that in the case of sudden deaths an inquest be held. There are hardly any religious beliefs and practices or social traditions in the country that hinder the smooth functioning of this process. In fact Strauss and Strauss (1953) have commented "The registration system of Ceylon is unusually good in comparison with those of other Asian countries and it is likely that the figures are directly comparable to similar statistics for western nations, which of course, includes all the usual deficiencies to which such figures are subject".

There has been a steep increase in the country's suicide rate after the 1950's. Since no corresponding change in the criteria of suicide verdicts in the coroners' courts or in the methods of data collection or recording during these years has occurred, it could be concluded that the rates reflect a real increase.

The data on suicide presented here, unless otherwise stated, are based on figures published in the Annual Reports of the Registrar General's Department.

#### SUICIDE RATE IN SRI LANKA : GENERAL

Suicide figures for Sri Lanka are available from the year 1880. The rates for a few representative years are given in Table 2.



Graph 1. Suicide Rates (Sri Lanka) (per 100,000)

TABLE 2

#### 10 Year Suicide Rates from 1880—1970

Year	Rate per 100,000
1880	2.3
1890	2.9
1900	3.7
1910	5.2
1920	5.6
1930	5.2
1940	6.3
1950	6.9
1960	9.9
1970	19.2

While the upward trend has been slow and steady over the years, the increase has been rather rapid over the last twenty five years or so. In fact, while the increase in rate for the fifty years from 1900-1950 was only 3.2 (87%), the corresponding increase for 1950-1969, a much shorter period, was 12.8 (186%). This steep rise in the suicide rate overshadows the fluctuations in the rate over the decades. On the same rates, the suicide rate of Sri Lanka would have already reached a high 24 per 100,000 exceeding the rate of most Western European countries in 1973. This remarkable increase (see Graph 1) may reflect the rapid socio-economic changes during the period after political independence in 1948. The breaking down of the older social structure, its traditional values and norms, together with the change from a sedate, basically agricultural socio-economic pattern to a definitely competitive one may have been the variables affecting this change.

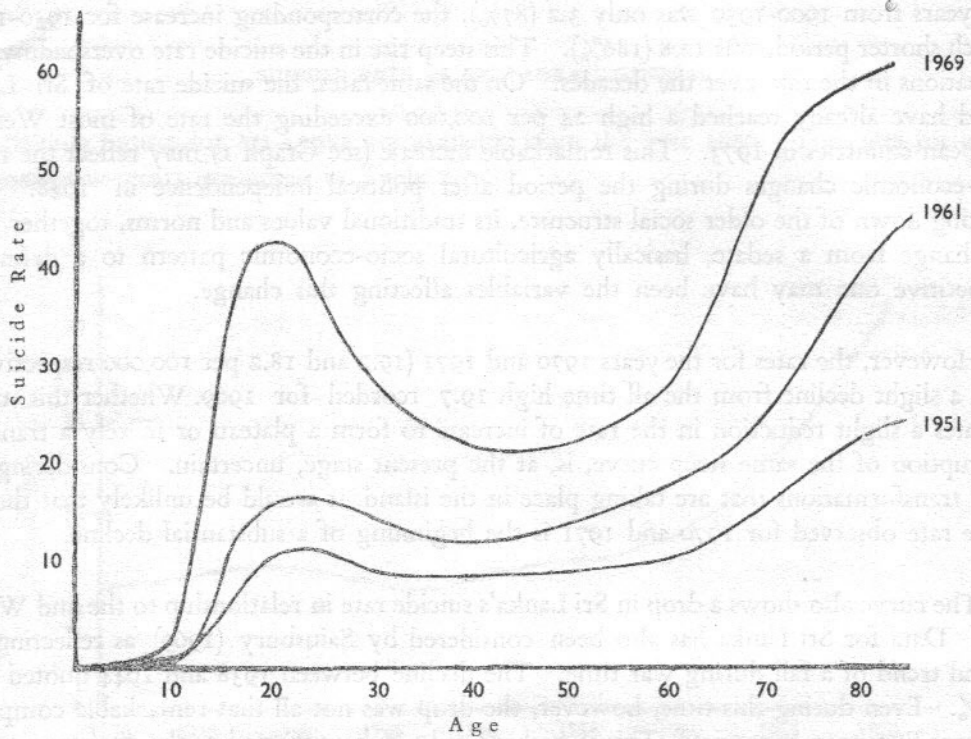
However, the rates for the years 1970 and 1971 (19.2 and 18.2 per 100,000 respectively) show a slight decline from the all time high 19.7 recorded for 1969. Whether this trend indicates a slight reduction in the rate of increase to form a plateau or merely a transient interruption of the same steep curve, is, at the present stage, uncertain. Considering the social transformations that are taking place in the island, it would be unlikely that the fall of the rate observed for 1970 and 1971 is the beginning of a substantial decline.

The curve also shows a drop in Sri Lanka's suicide rate in relationship to the 2nd World War. Data for Sri Lanka has also been considered by Sainsbury (1969) as reflecting the general trend of a fall during war time. The decline between 1938 and 1944 quoted here is 19%. Even during this time, however, the drop was not all that remarkable compared to many European countries. This is perhaps only to be expected as the country entered the war as a territory of the British Empire and would not have been psychologically involved or motivated in a war which was, in a sense, imposed upon it.

Graph 2 indicates that the suicide rate rises steeply to reach a high level in the 15-24 age group, with a subsequent decline in the middle years, with a lowest rate for the 35-44 age group. This is followed by a continuation of the upward trend towards old age. A repetition of this pattern is observed for most of the years in which age specific suicide rates are available (see Table 3).

The feature of there being a peak in the younger age group for Sri Lanka is quite in contrast with the pattern found in most Western countries where data are available; there the curve is usually one which goes up with age, in a steady increase. On the other hand, the picture found in Japan is similar to that of Sri Lanka (Labovitz, 1968), and unlike that of Hong Kong which was found to be similar to that of many Western countries (Yap, 1958).

As an illustration of the age trends in suicide, age specific rates for several years are given in Table 3.



Graph 2. Suicide Rates (Sri Lanka) — Age Specific for the Years, 1951, 1961 and 1969 (per 100,000)

TABLE 3

Suicide Rate — Age Specific (1951, 1956, 1961, 1966, 1969, 1970 and 1971)

Year	Rate per 100,000								Total Rate
	Age Group								
	5—14	15—24	25—34	35—44	45—54	55—64	65—74	75—above	
1951	0.85	11.63	9.29	9.78	10.18	10.23	17.77	23.07	7.38
1956	0.22	12.59	14.16	9.55	10.81	12.16	25.98	34.61	7.82
1961	0.76	16.18	15.08	12.13	15.12	18.91	24.13	42.37	9.68
1966	1.64	25.88	20.91	16.38	20.30	21.98	34.90	52.94	13.72
1969	2.36	42.77	29.56	21.37	22.44	28.40	53.04	58.66	19.67
1970	1.51	41.20	29.15	23.11	21.20	28.10	46.80	50.50	19.22
1971	1.30	39.10	26.82	21.52	22.24	26.21	41.27	57.80	18.21

It is interesting to note that, in 1968, of every 100 suicides, about 39% were in the 15-24 age group. In the following year, the corresponding figure was again around 39%. When the suicides for the 15-23 age group are added to the 25-34 age group for the year 1969, they account for almost 60% of the total suicides of the country. Despite the high proportion of young people in Sri Lanka's population (60% below 24), this is, nevertheless, an unusually high proportion. The corresponding percentage for the 15-24 age group in 1951 was 35%, and for the 15-34 group 54%. Thus the proportion of young people committing suicide is increasing. In Sri Lanka it seems, by and large, that youth are most vulnerable to suicide.

It is also evident from Table 3 that as in many other countries, the suicide rate for the older age groups—65 and over—is high, and has risen sharply over the past few years. This rise represents the second peak in the curve for age specific suicide rates.

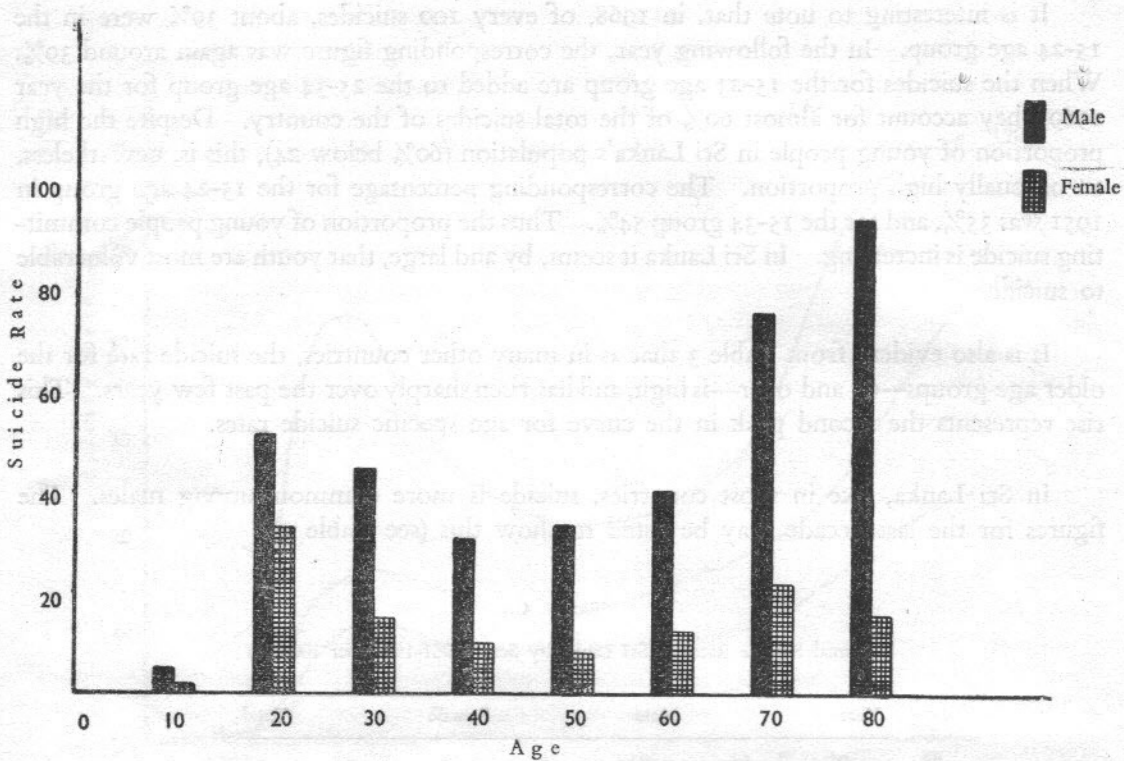
In Sri Lanka, like in most countries, suicide is more common among males. The figures for the last decade may be listed to show this (see Table 4).

TABLE 4  
Annual Suicide Rates in Sri Lanka by Sex, 1961-1971 (per 100,000)

Year	Male	Female	Total
1961	12.7	6.3	9.9
1962	16.2	6.5	11.6
1963	16.9	6.7	12.0
1964	19.9	9.0	14.7
1965	18.7	8.2	13.7
1966	18.6	8.5	13.7
1967	23.3	10.0	16.9
1968	24.0	9.8	17.2
1969	25.0	11.4	19.7
1970	26.3	11.45	19.2
1971	25.5	10.42	18.2

The male female ratio of suicide in Sri Lanka in 1960 was 2.5 : 1 and in 1969 2.6 : 1. These are comparable to the ratios in many European countries : West Germany (1959) 1.8 : 1 ; France (1959) 2.65 : 1 ; England and Wales (1959) 1.49 : 1. (Dublin, 1963).

As shown in Table 5 (see Graph 3), the tendency is for the female rate to rise steadily after a fall in middle age. This may be a continuously upward curve or as the figures for 1969 show, a slight fall after the age of 75. The corresponding increase for males is a steep rise to reach the highest rates for any age group, with no evidence of a drop in any of the years since 1951.



Graph 3, Suicide Rates — Age and Sex Specific — 1969

TABLE 5

Suicide Rates by Sex for Age Groups — 1969

Age Group	Male	Female	Total
5—14	2.8	1.9	2.4
15—24	52.2	33.1	42.8
25—34	45.4	14.7	29.6
35—44	31.0	10.2	21.4
45—54	34.0	7.9	22.4
55—64	41.0	11.5	28.4
65—74	77.0	22.9	53.0
75 & over	96.3	15.7	58.7
Total	25.0	11.4	19.7

Yap has drawn attention to the high suicide rates for elderly females in Sri Lanka, Hong Kong and Japan, whereas in many European countries there has been a fall in the suicide rate for this age group (Yap, 1958). The male female ratio for the old age group (over 75) in Sri Lanka is 6 : 1.

## METHODS OF SUICIDE

Data is available on the methods employed by suicides in Sri Lanka, both in the Registrar-General's Reports and the Police Records. But these figures cover only those who have accomplished the suicide act successfully : they leave out the cases of attempted suicide.

On the basis of the Registrar-General's Reports which are, as was observed earlier, the more reliable source of information of the two standard recording systems in Sri Lanka, the commonest method of suicide is the taking of poisons. In fact, in 1969, 72% of the suicides died by poisoning. From the year 1960, taking poison replaced hanging as the commonest method used in this country. The figures in Table 6 illustrate this change, and emphasise the fact that the taking of poison has become progressively more popular over the last decade or so.

TABLE 6

Methods of Suicide : (Poisoning and Hanging in Percentages)

Year	Poisoning	Hanging
1959	37	40
1960	41	37
1961	47	33
1962	53	29
1966	66	19
1969	72	15

The reasons for the increasing use of poison as a means of suicide is quite obvious. Acetic acid is freely available as it is needed for rubber processing ; in 1960 this agent accounted for 75% of all suicides by poisoning (Ranasinghe and Jayawardene, 1966). In fact, if more detailed recent data are examined from the police records, it appears that a large number of suicides are due to the intake of insecticides. From 1900-1949 hanging was the most popular method of suicide in Sri Lanka with drowning the next in order of choice. During 1940-49, 53% of suicides hanged themselves while 15% chose drowning (Gunasekera, 1951). The latter mostly jumped into deep wells found in rural areas for drawing fresh water for household use. In 1969, however, drowning accounted for only 1.6% of males and 4.1% of female suicides. In general, more violent methods like the use of firearms are rare in Sri Lanka.

Poisoning is more popular among females than among males. In fact, even before 1960, during certain years more women preferred taking poison to any other single method as a means of taking their lives. Hanging is more frequent among males ; so is the occasional use of cutting and piercing instruments and of firearms. In fact, only a very few women in Sri Lanka have resorted to firearms as a means of suicide ; (e.g. none in 1951, 1953 and 1966). On the other hand, drowning has always been more popular among women suicides.



The sex differences are illustrated in Table 7.

TABLE 7 (1969)  
Percentage of Total Suicides

Method	Male	Female
Poison	71	77
Hanging	17	9
Drowning	1.6	4.1
Firearms	0.8	0.3

A detailed study of 122 cases of suicide in the Colombo City Coroner's Records for 1971 reveals a similar picture.

Poisoning accounts for 50.2% of the cases in this list, and 50.8% of them follow ingestion of insecticides. A fairly common method is 'jumping in front of a moving train'; more than 16% had adopted this method. However, it must be noted that in Colombo and the suburbs, which are the areas covered in this analysis, railway lines are found in much greater number than in the outstations.

There were seventeen suicides in this study where the victims had set themselves on fire after dousing themselves with kerosene or petrol, and of these, twelve were women (71%). This method which is rare in other countries, is not uncommon in Sri Lanka, especially among women. Kerosene is used in almost every household in the island for lighting or cooking purposes. It is also ingested by many who attempt suicide though this method is often non-lethal.

Taking poison as a method of suicide in Sri Lanka is related to the free availability of insecticides and acetic acid. In contrast is the fact that in the U.S.A., the commonest method is by firearms, and in the U.K., hypnotic drugs and coal gas.

#### ATTEMPTED SUICIDE IN SRI LANKA

In Sri Lanka, as in many other countries, every case of suicide is the subject of a coroner's inquest and subsequent registration. However, this does not apply to attempted suicides where the subject survives the attempt. It is possible that many such cases of attempted suicide never reach the hospital. In the Sheffield Study in the U.K. it has been found that this proportion of attempted suicides is about 20% (Stengel, 1965). In Sri Lanka, many of those who attempt suicide, when subsequently obtaining treatment at a hospital, often do not divulge the truth in view of the risk of prosecution by the Police in accordance with the existing laws. Hence an accurate estimation of the extent of this problem is difficult, or even impossible, under the present circumstances.

The Police Post in the General Hospital, Colombo, maintains records of all patients treated or admitted to the hospital following any injury, self-inflicted or otherwise, and after poisoning. A study was made of such police records for the years 1970, 71 and 72 for cases admitted to the General Hospital for poisoning (Table 8).

Police data on a sample of 270 interviews out of the 857 who were admitted in 1972 were available. Of these it was found that 131 persons (49% of those interviewed), had admitted that they had taken the poison in order to commit suicide. The remaining 139 persons had claimed that it was accidental. This information on attempted suicide had been given to police interviewers in spite of the awareness of the interviewees of the risk of legal prosecution. Though the actual percentage of attempted suicide could be much higher, it could be surmised from available data that about half of the persons admitted to the General Hospital with a history of poisoning, took poison with some intention of committing suicide or as a suicidal gesture.

TABLE 8

Admission to General Hospital, Colombo, for Poisoning, 1970—1972

Year	Male	Female	Total
1970	398	268	666
1971	429	250	679
1972	541	316	857

With these data, an accurate assessment of the prevalence of attempted suicide and of a ratio in relation to suicide in Sri Lanka is not possible. However, these data may be profitably compared to the corresponding figures of suicides admitted to the General Hospital, Colombo. On this basis, the ratio of consummated to attempted suicide for the year 1971 is roughly 1 : 4. It is apparent that this ratio and the data are an obvious underestimate of the true incidence of attempted suicide. Many surveys conducted in the U.S.A. and the U.K. have in fact shown that the incidence of attempted suicide is six to ten times that of the suicide, with a higher proportion of females and the younger age group (Stengel, 1961).

If the poisoning cases of the General Hospital, Colombo, is any guide to attempted suicide in Sri Lanka, the male preponderance of suicide is maintained in the attempted suicide group by a ratio which varies from 1.5 to 1.7 : 1 (see Table 8).

A study of a sample of 104 hospital case notes of patients admitted to the General Hospital, Colombo with a history of poisoning, also showed that the male female ratio was 1.9 : 1, with a mean age of 24.3 compared to the mean age of 35.6 for the 122 suicide cases as recorded by the Colombo Coroner in 1971.

In comparison with the police records, it was not possible to obtain more information from the hospital records in this sample, as in 75% of the cases, there were no notes recorded by the Medical Officers as to whether the poisoning was accidental or attempted suicide. Of the 26 case—notes where such information was available—nearly 40% had admitted to attempted suicide. It appeared that the Medical Officers did not think it necessary to find out whether the poisoning was accidental or a suicide attempt, or to record it. This task seems to have been relegated to the policemen, in view of the medico-legal aspects of the problem.

In this sample, there was a wider spectrum of poisons and drugs, with kerosene and copper sulphate—which could be considered as relatively non-lethal poisons—comprising about 35%. It appears that kerosene is often ingested by many of those who exhibit only suicide gestures or ambivalent attempts, while the others who are more determined pour kerosene on their bodies and set themselves on fire.

#### PRECIPITATING AND PREDISPOSING FACTORS

Suicide is the culmination of a series of causative factors or a combination of circumstances. However, the evidence in a Coroner's Court is the interpretation or explanation of suicide by a key-informant witness. Hence, one or two factors taken in isolation from the background and highlighted by witnesses as causative of suicide is an over-simplification, and gives an incomplete picture. Nevertheless, such data may be useful in identifying some aspects of the motives and causes of suicide in Sri Lanka.

As many researchers have pointed out, it is by no means possible to be certain of the specific precipitating factor in a given case of suicide. The investigation is essentially almost always retrospective, and therefore much reliance has to be placed on the evidence of relations and friends, and on past records. Further, what is usually taken as the precipitating cause is the one which is, according to evidence, dominant. Thirdly, a factor which precipitates suicidal behaviour in one person does not necessarily have the same effect in another person, the difference being determined by individual, psychological as well as constitutional factors. These difficulties in interpreting data on precipitating factors must be borne in mind in any analysis of them.

In discussing the precipitating and predisposing factors of suicide in Sri Lanka, as there was no relevant information available in the Registrar General's Reports, data was drawn from the study of the records of the Colombo City Coroner.

Of the 122 cases studied from the records of the Colombo Coroner for 1971, acute interpersonal disputes (hypereridism) account for 16.4% and thwarted love for 9.6% (Table 9). Taken together, almost one-fourth of the cases (25.4%) were due to some interpersonal problem. It is worth noting that in Hong Kong 38% of suicides were due to such interpersonal problems (Yap, 1958). Of course, this reflects the layman's attitude to the causation of suicide, for relations and friends giving evidence after a suicide often attribute interpersonal problems as the main cause. In fact, in some cases, it may be that there are other causes as well, the significance of which the layman does not see.

Even if one gives an allowance for this however, it must be pointed out that the number of suicides due to interpersonal conflicts is high in the Sri Lanka data. The number of suicides due to these conflicts also partly explains the high peak found in the younger age group. It is notable that, as in Hong Kong, females (9.8%) tend to outnumber males (6.6%) in this group.

These data of the Colombo City Coroner has been analysed further (see Table 9).

Thwarted love is generally considered by the public as a more frequent cause for suicide than the 9% found in this study would indicate. This could be an erroneous impression created by frequent newspaper publicity given to such suicides.

TABLE 9  
Precipitating Factors — Colombo City Coroner's Records, 1971 — 122 Cases

	Male	%	Female	%	Total	%
Probable Psychosis						
Affective	4		4			
Schizophrenia	5		3			
Unclassified	2		2			
	11	9.0	9	7.4	20	17.3
"Alcoholism"	16		0		16	13.1
Interpersonal Disputes						
With Spouse	0		7			
Parent	5		3			
Brother	1		2			
Son/Daughter	2		0			
	8	6.6	12	9.8	20	16.4
Thwarted Love						
Involving Partner	2		3			
Parent	2		1			
Brother	2		1			
	6	4.9	5	4.1	11	9.0
					31	25.4
Economic						
Unemployment	3		0		3	
Stress at Employment	3		1		4	
Financial Problems (debts etc.)	8		0		8	
	14	11.5	1		15	12.3
Organic Disease	12	9.8	1		13	10.7
Grief Reaction	1		2		3	
Marital Unhappiness	1		1		2	
Other	5		3		8	
Not Known	4		3		7	
Unidentified Persons	7		0		7	5.7
Total	85		37		122	

Thwarted males, were in two cases due to the partners leaving them, and in four others due to objections by elders. In the female group, three out of five were jilted by their lovers.

The idea of 'love' marriage often conflicts with caste and ethnic barriers and the 'status' of the family. Though more and more young people are getting married for love, especially

in the urban areas, the social restraints imposed on lovers particularly among the tradition bound conservative sections of the population, may impel some of them to commit suicide. That the traditional family life pattern is still preserved to some extent even in the Colombo region, is emphasised by some of these suicides.

However, it may be that some of those committing suicide due to interpersonal problems also have a personality disorder of some degree. In fact, a detailed assessment of the witnesses' statements revealed that in four cases out of twenty where family dispute was the main cause, some personality abnormality of the victim was evident. "He was stubborn", "He did not help in the field", "He did not try to get a job", "He was a very hot-tempered person", were some of the descriptions given by relatives who were witnesses. The reference in such cases, was to an abnormal trait in the person rather than to a mental derangement as such. A few of them could have been chronic schizophrenics. What is significant however is that the relatives and the coroner interpreted the suicide as following some interpersonal dispute.

There were sixteen (13.1%) cases of suicides where 'Alcoholism' was the primary cause. Of these, there were eleven who were 'dependent', three who showed acute intoxication with no clear history of addiction, and in two the drinking followed a definite stressful event. Out of these sixteen, it was found that in fourteen cases, there were other contributing factors as well. In this study, they are all considered as being 'alcoholic' as the main precipitating factor was drinking. Thus only eleven of these sixteen were chronic alcoholics in the usual sense. Even this, however, is a high figure though it is not surprising in view of the high amount of alcohol consumed in Sri Lanka today. Stengel (1969) has observed that "there is a positive connection between the alcohol consumed in a country and its suicide rate". On the other hand only one opium addict was found among the suicides studied and none who was dependent on other drugs.

Organic disease accounted for a fair proportion of suicides in the study ; 13 out of 122, that is, 10.7%. All of them excluding one was male (Table 10). All had a history of physical illness as mentioned in the witnesses' evidence, and this was generally confirmed in the post-mortem report. They suffered from chronic ailments with little prospect of cure within the foreseeable future, cancer accounting for four of them—the largest group. The mean age of the victims who had a physical illness was 47.9. The total percentage, here, of 10.7 is less than that found by Yap (1958)—that is 27.9%. The present figure could be compared to that of Sainsbury for London, where physical illness was the principal cause in 18% of cases (Sainsbury, 1955).

In Asuni's study (1962) of suicide in Western Nigeria (1962) the corresponding figure was 20 out of 221—that is 9%.

An important group found in the present study were those who had evidence of a serious psychiatric illness, "probable psychosis". This diagnosis, in the cases of most of them, had been arrived at by the relations themselves, who used statements such as "mentally

deranged", "mentally ill" or "severely depressed" in describing the subjects. They formed 20, that is a percentage of 16.4. This may be compared with those of Yap (1958), 7.8% ; Sainsbury (1955), 37% ; and 20% for the U.S.A.

Ranasinghe and Jayawardene, in their study, of suicide in the southern province of Sri Lanka (1966), obtained a figure of 20% for the 'insane' group.

TABLE 10

Suicide and Organic Disorder - Colombo City Coroner's Records, 1971

Cancer	Tuber- culosis	Heart Disease	Epilepsy	Leprosy	Bronchial Asthma	Skin Disease	Other
4	1	2	2	1	1	1	1

Average Age: 47.9

Total - 13: 10.7%

In the present study, of the probable psychotic group (20) eight suffered from a 'significant depressive illness'. Eight were classed as 'schizophrenics' and the other four could not be placed in any specific category of psychosis with the evidence available. Even in the sixteen mentioned above, the diagnosis was by no means certain. Out of the eight cases of labelled schizophrenia, many evidently had been mentally ill for several years. Four had received treatment at a Psychiatric Hospital, one at the General Hospital, Colombo and one at a private hospital. The relations had stated that all of them were of "deranged mind".

Probable effective psychosis was diagnosed on the description of the patient by the relatives as "severely depressed" for several months. Of these eight, two had attempted suicide earlier. Three had had treatment from a General Practitioner and one had been treated at a Psychiatric Hospital, one by a private psychiatrist and another by a native practitioner in psychiatry. One was an inmate of the Eye Hospital, Colombo, at the time of suicide. Three of these eight had expressed suicidal intentions, according to the evidence, sometime before the actual event.

The four unclassified cases were also described as "deranged". One of these had had treatment at a psychiatric hospital and one at a provincial hospital.

Thus, in the present study, a large proportion of the 'Probable Psychosis' group—about—75%—had had either some form of psychiatric or medical treatment earlier. In fact a previous history of such treatment was also taken into consideration in classifying some suicides in this group.

Of the 122 cases of suicide, there were 15 who, apparently committed suicide due to economic factors. This constitutes 12.3% of the total number. Economic factors, however, may have had a role to play even in some of the other suicides, as for example, in those

whose main precipitating factor has been ascertained as alcoholism or family disputes. Of the 12.3% whose main precipitating factor was economic, most committed suicide due to specific financial problems like debts, while the others took their lives as a result of unemployment or loss of employment. The proportion of females committing suicide due to economic factors was very low.

Of the cases studied, there were eight classified as having committed suicide due to 'other' causes. They included two males with court cases pending, one prison inmate, an opium addict, one who was suffering from impotence and a girl who had failed an examination.

Of the group where the precipitating cause was 'not known' (7 out of 122), there were three whose relations were ignorant of a cause. There were three others with some evidence of an affective disorder, but these were not included under the 'probable psychosis' group as the evidence was not adequate to arrive at a diagnosis. According to the relatives two of these persons were apparently suffering from aches and pains and had been treated at local hospitals. There were no clues however of there being any organic disorder, and the post-mortem reports were negative. Many patients suffering from endogenous depression in Sri Lanka present themselves with somatic symptoms, and it is probable that these two belonged to this category.

Seven other persons in the study who had obviously committed suicide were unidentified, and their motive for suicide was unknown to the Coroner.

#### SUICIDE AND YOUTH

One of the most striking features of suicide in Sri Lanka is that it occurs predominantly in youth. Thus in 1969 almost 40% of suicides were between 15-24 years of age, with a rate of 42.8 per hundred thousand.

This high rate should also be seen in the context of a rapid growth in the youthful population and the island's stagnant economy. The population between 15-24 has doubled itself since 1946 to form 2,305,000 with a rate of growth of 3.8% which is one of the highest in Asia.

Though the rate of suicide in relation to unemployment and economic status in Sri Lanka could not be established due to inadequate statistical evidence, it is our impression that the unemployed and the poverty stricken are more vulnerable to exhibit suicidal behaviour than the more affluent section of the population.

Social stresses among the youth have also found expression through other channels than suicide. In addition to many instances of student indiscipline and strikes, Sri Lanka experienced, in 1971, the horrors of an abortive ultra-radical youth uprising which claimed, according to official estimates, about 1,300 victims among them. The most important factor which led to this tragedy has been identified as unemployment, particularly among the educated youth.

The figures of the Department of Census and Statistics show the unemployment rate for the island in 1971 to be 7.3%, which is higher than the corresponding figures for Europe or the U.S.A. (see Table 11). When the distribution of the unemployed population is classified by age, it is observed that in 1971, 82.7% of them belong to the age group of 15-24 years.

To understand the full significance of this high unemployment rate, it is necessary to consider the youth problem in a historical perspective. The traditional pre-colonial culture with its authoritarian hierarchial caste system was an inbuilt organisation of apprenticeship and full-employment associated with complete integration. The traditional centre of learning in the village was the Buddhist temple where knowledge of the vernacular and Buddhist ethics was imparted.

TABLE 11  
Population 15 Years and Over, Classified by Activity and Sex (in '000)\*

Activity	Male		Female		Total	
	No.	%	No.	%	No.	%
Employed	2730.6	73.1	804.8	21.6	3535.4	47.4
Unemployed	332.8	8.9	213.0	5.7	545.8	7.3
Own house work	31.6	0.8	2274.3	58.3	2205.9	29.5
Student	355.5	9.5	294.8	8.0	653.9	8.8
Retired, old, disabled	261.9	7.0	224.7	6.0	486.6	6.5
Other	24.0	0.7	14.7	0.4	38.7	0.5
Total	3736.4	100.0	3729.9	100.0	7466.3	100.0

\*Source — Dept. of Census and Statistics (1971).

Under the British administration (1815-1948) the stability of this system was shaken to its foundations and a new caste, the English educated upper and middle class with high status, emerged. The quest for white collar jobs began through mass education given in schools controlled by the government or by Christian missionaries.

The introduction of free and compulsory education (1947) without a corresponding change in the educational policy accentuated the problem further. "The rationale of this system was that the young men who got a smattering of English shunned manual occupations and became misfits in a society" (Wijesinghe, 1969).

These youth had rejected the dress of their fathers, and the caste-occupations which were available. Their job-aspirations, work experience and training were not related to an agricultural economy with its limited avenues of white-collar employment.

It has been found that in spite of the post-independence 'educational explosion', about 92% of the students were compelled to return to hereditary occupations (Wijesinghe, 1973). The present unemployment rates also correlates positively with rising levels of education.



In 1970, 55% of university graduates in the country forming 12,000 were in the ranks of the unemployed. Most of them were graduates who had followed courses in arts. Many of them had come from the poorer and rural sections of the community, because their schools were ill-equipped to prepare them for science and professional courses with better prospects for employment.

These form at least a section of the alienated youth with an identity crisis. Many expressed their disenchantment through rebellion, others probably find an outlet through suicidal behaviour.

#### CONCLUSION

Sri Lanka's statistics on suicide are fairly reliable and could be well compared to those of developed countries. In general, the Island's suicide rate has been lower than that of most countries where such data were available and this rate has remained relatively stable until recently.

This study has revealed that the suicide rate has risen sharply since 1960 to reach an all time record in 1969.

What is of considerable sociological and psychiatric interest is the high rate of suicide among the youth. This peak in the incidence of suicide among the youth and young adults, is non-existent in Western countries.

While it is not easy to explain this rise in the overall suicide rate and its high incidence in the younger age groups, one cannot rule out the possibility that rapid socio-economic and cultural changes are making their impact felt on society, where its younger members are most vulnerable.

It is perhaps in the past few years that the island has begun to feel the full impact of the post-war rise in population and unemployment. The post-independence social and economic changes appear to be causing a breakdown of the traditional social norms and values, where the increase in demands and expectations of youth are not being met.

The popularity of insecticides and other agrochemicals which account for a large majority of cases of suicide is related to the "green revolution" as such poisons are now readily available.

Leaving aside those who commit suicide due to a major psychiatric disorder and organic disorder, the main causative factors seem to be hypereridism, alcoholism and unemployment or financial problems. Perhaps these too are a reflection of a traditional society in a state of instability and transition. This trend may continue till such time as a new equilibrium is achieved.

## ACKNOWLEDGEMENTS

Our thanks are due to Mr. R. I. Abeysekera, Chief Statistician, Registrar General's Department, Colombo ; Mr. E. Gunawardene, Superintendent, Planning and Research, Police Headquarters, Colombo ; and Mr. D. P. Gunaratne of the Department of Census and Statistics, for providing us with the statistical data on suicide.

We are particularly indebted to Mr. V. Navaratnam, Assistant Director, Department of Census and Statistics, for his valuable comments and advice, and the Chief Magistrate, Colombo, for giving permission to study the Coroners' records on suicide in Colombo.

## REFERENCES

- ASUNI, T. (1962). Suicide in Western Nigeria. *British Medical Journal*, **2**, 1094-1096.
- DUBLIN, L. I. (1963). *Suicide — A Sociological and Statistical Study*. pp. 3-170. New York : Ronald Press Co.
- GIBBS, J. P. & MARTIN, W. T. (1959). Status Integration and Suicide in Ceylon. *American Journal of Sociology*, **64**, 585-591.
- GUNASEKERA, N. D. (1951). Some Observations on Suicide in Ceylon. *Journal of the Ceylon Branch of the British Medical Association*, **46**, 140.
- LABOVITZ, SANFORD (1968). quoting Mamoru 1961 in *Suicide*. Ed. Gibbs, Jack P., Part I, ch. I p. 65. New York : Harper and Row.
- PARKIN, D. & STENGEL, E. (1965). Incidence of Suicidal Attempt in an Urban Community. *British Medical Journal*, **2**, 135-137.
- RANASINGHE, H. & JAYAWARDENE, C. H. S. (1966). Suicide in the Southern Province. *Ceylon Journal of Medical Science*, **15**, 31-40.
- SAINSBURY, P. (1968). *Suicide and Depression*. Special Publication, No. 2, ch. I, pp. 3-5. London : R.M.P.A.
- SAINSBURY, P. (1955). *Suicide in London*. Maudsley Monograph No. 1, pp.60-82. London : Chapman and Hall.
- STENGEL, E. (1969). *Suicide and Attempted Suicide*. pp. 43-89. London : Penguin Books, Harmondsworth.
- STRAUSS, J. H. & STRAUSS, M. A. (1953). Suicide, Homicide and Social Structure in Ceylon. *American Journal of Sociology*, **58**, 461-469.
- WIJESINGHE, C. P. (1969). Youth in Ceylon in *A Transcultural Psychiatric Approach*. Ed. Massermann, J. H., p. 32. New York : Grune & Stratton Inc.
- WIJESINGHE, C. P. (1973). Youth Unrest and the Psychiatrist in Sri Lanka. *Australian and New Zealand Journal of Psychiatry*, **7**, 313-317.
- WOOD, A. L. (1961). Crime and Aggression in Changing Ceylon. *Transactions of the American Philosophical Society, Philadelphia*, **51**, 107.
- YAP, P. M. (1958). Suicide in Hong Kong. *Journal of Mental Science*, **104**, 274-297.