UNIVERSITI SAINS MALAYSIA

Suicide Pattern in Malaysia 2001 – 2005

Dissertation submitted in partial fulfilment for the Degree of Bachelor

of Science in Forensic Science

CHIN MEEI LING

School of Health Sciences

Universiti Sains Malaysia

Health Campus

16150, Kubang Kerian, Kelantan

Malaysia

2008

Acknowledgment

Abstract

There were a total of 824 suicide cases in Malaysia from the year 2001 – 2005. The age group '23 – 35' was noted for the highest suicide frequency (287 cases) followed by '36 – 50' (250 cases), 'above 50' (186 cases), '13 – 21' (92 cases) and '1 – 12' (nine cases). 76% (624 cases) of 824 cases were male while female suicide cases accounted for 24%. There was a distinct pattern in each ethnic group. Indian had the highest suicide rate (12.9 per 100,000 populations). Pesticides poisoning was the most popular methods among the Indians (121 cases) and the natives (30 cases). For the Malay and Chinese, hanging was the most popular method (71 cases). Chinese were noted for the highest frequency of CO poisoning (17 cases), drowning (16 cases), hanging (174 cases), jumped from a height (75 cases), self – immolation (four cases) and 'other' methods (ten cases). The majority (58%) of the suicide cases took place in the domicile of the suicides. Hanging was the most popular method in Perlis (seven cases), Pulau Pinang (133 cases), Terengganu (29 cases) and Kelantan (37 cases). Pesticides poisoning was the most commonly used method in Negeri Sembilan (64 cases), Melaka (40 cases), Pahang (42 cases) and Sarawak (51 cases), Different from the eight states above, the most common suicide method in Kuala Lumpur was jumping from high places (39 cases).

Content

List of Figure

List of Table

Chapter 1: Introduction

1.1 Classification of suicidal behavior

For the people who committed suicide, the person would feel extreme pain until he or she did not realize that there were many alternatives to solve difficulties faced, if he or she stays alive (Arsenault – Lapierre et. al., 2004). For them, committing suicide was the only way to get rid of the physical and/or mental problems they had once suffered. At the moment they committed suicide, their mind was filled with self-hatred, guilty, rejection, hopelessness and helplessness (Wasserman, 2001). The suicidal state of mind has been described as constricted (Question about Suicide, 2007) and may lead to a few types of suicidal behavior.

According to Chia (1981), suicidal behavior are categorized into four, which are 'completed suicide', 'attempted suicide', 'suicidal ideas or thought, threats of suicide or suicidal gesture' and 'absence of suicidal ideas or thought'. A person who had intentionally tried and succeeded in killing themselves is said to have 'completed suicide' (Chia, 1981). 'Attempted suicide' refers to those who had tried but did not succeed in killing themselves. These two populations are different in epidemiological aspect but share a lot of similarities in psychological aspects. This current research focused only on 'completed suicide'.

In my point of view, 'completed suicide' and 'attempted suicide' are classified based on the effect and result of a suicidal behavior. While 'suicidal ideas or thought, threats of suicide or suicidal gesture' and 'absence of suicidal ideas or thought' differentiate those who killed themselves intentionally from those who died accidentally, both are considered as committed suicide. The difference between the former and the latter was whether the intention to kill oneself had developed.

The difference would be better understood as follows: a 65 years old man who suffered from severe headache took ten 500mg paracetamol (fatal dose is 4000mg within 24 hours for adults). Consequently, he died of drug overdose. He might be certified dead by suicide if there was no sufficient proof or witness to prove that he accidentally overdosed. However, in the intention aspect, he may not have wished to kill himself but he was not aware of the fatal dose of paracetamol. This is consistent with Chia's (1981) suggestion. Classification on the basis of intention is more meaningful than the result of a suicidal behavior.

There were also situations in which a person acted without considering the consequence of his or her own action (Sterns, 1953). For example, there were men who hanged themselves in order to achieve sexual gratification (Sterns, 1953). I believe this type of suicide victim certainly did not have any intention to commit suicide. Nevertheless, they were still classified as 'completed suicide' or 'attempted suicide' (Sterns, 1953). However, it is very difficult to identify a suicide victim's intention (Hodgson, 2004).

Therefore, classification on the basis of the result of a suicidal behavior is easier to be carried out.

1.2 Data source for this current research

This research was done based on Polis Diraja Malaysia (PDRM)'s record on reported suicide case from the year 2001 – 2005. PDRM data contain the most valid information on the demographic profile of every suicide case. Since suicide is a sensitive issue, first hand and accurate information can only be obtained from PDRM, but not the secondary or the tertiary source like suicides' friends and family or the mass media.

At first, interviewing the attempted suicide victims was thought to be appropriate. Unfortunately, interviews with the attempted suicide victims and family of suicide victim were not able to be carried out due to a few reasons. The period of time allocated to complete this research was insufficient to interview the subjects mentioned above. It was estimated that for each selected suicide case, every family member of the suicide victim had to be interviewed.

Each interview may take at least half an hour. If 50 cases were selected and there were three family members of the suicide victim to be interviewed, at least 150 hours were needed for interviews. In addition, I did not posess the appropriate interviewing skills that would not offend the family members of the suicide victim during the interview sessions.

Another reason that made the interviews impossible to be carried out was the difficulty in tracking down the family members of suicide victims. In addition, obtaining permission from the family members of suicide victim is another problem as it might force them to recall the sad incident. The family members' memory might be inaccurate. The findings of this current research would not be valid if the family members were unwilling to co – operate or their memory did not correspond with PDRM data.

Other sources like suicide notes, past hospital record and memoirs of friends and family of the suicide victim are unsuitable and unreliable. The validity of these sources of information were questionable (Wessely et al., 1996) and researchers might misinterpret the content of the sources. As a result, the findings of this research would not be valid if sources were taken other than PDRM reports.

1.3 Importance of this current research

This research was done to build up the profiles of suicide cases in Malaysia. A better understanding on the suicide pattern in Malaysia was obtained through the process of building up the profile. The suicide pattern statistics play an important role in the investigation of suicide cases as the demographic of suicides and the trend of choosing suicide methods were known. Consequently, the statistics would improve the achievement of Forensic Science in our nation.

In addition, the information would help in the prevention of suicide in Malaysia. The information on demographic of the suicide and trend of choosing suicide would help in planning and designing prevention strategies. This is especially helpful for the Ministry of Women, Family and Community Development, mental disorder expertise and NGO like Jabatan Kebajikan Masyarakat. These organizations play an essential role in suicide prevention.

The suicide prevention models that were effective in foreign countries might not fit in the pattern in Malaysia. This is because sociologically, culturally and geographically, Malaysia is different from the other countries. Therefore, based on the statistics in our country, prevention strategies can be designed to specifically suit the suicide pattern in our country.

Another importance of this research was to keep the statistics in our nation up to date. There was a research done on the suicidal behavior in Malaysia from the year 1975 – 1986 (Ong and Yeoh, 1987). After 20 years, the trend might have changed. Therefore updated statistics are needed to reflect the current situation.

1.3 Definition

In this section, the definition of key words this current research are reviewed. This is done so that readers could understand better the title of this research and thus have a

clearer understanding on the scope and content of this research. The terms explained in this section are 'suicide' and 'pattern'.

'Suicide' means the death caused by oneself deliberately (Shaffer, 1998) or the act of killing oneself intentionally (Suicide and Suicidal Behavior, 2006). According to *Oxford Compact Advanced Learner's English-Malay Dictionary*, 2007), persons who commit suicide are also termed 'suicide'. 'Suicidal behavior' is the act of deliberate self – harming. Examples of 'suicidal behavior' include drug overdosing, hanging and slitting wrist.

'Pattern' means a regular sequence of actions or events (*Oxford English Minidictionary*, 2004). In this current research, 'pattern' referred to :-

a) methods and aiding tools of suicide

b) the states which the suicide occurred

c) locations where the suicide took place

Methods of suicide are actually classified into types of active or passive. Active methods tend to be swift, effective and allow little scope for interruption or time to reconsider. Active methods of suicide include hanging, shooting and jumping from high places. Passive methods include overdose, gassing and drowning. Passive methods are less overtly violent and may allow scope for intervention, or time to reconsider.

Chapter 2:   Objective of the Study

2.1   Main Objective:

To study the pattern of suicide in Malaysia from the year 2001 – 2005. This was done

by analyzing the data provided by PDRM. All the suicide cases that happened in

Malaysia within 2001-2005, including all genders, races and ages of the person who

committed suicide were investigated.

2.2   Specific Objectives

The specific objectives are stated as below. Each of the specific objective focuses on

the relationship between the demographic parameter of the person who committed

suicide and the modus operandi of the suicides. There are five specific objectives:-

1. To find out the relationship between the age of the victim and the methods used to

    commit suicide during this period.

2. To find out the relationship between the gender of the victim and the methods

    used to commit suicide during this period.

3. To find out the relationship between the ethnicity of the victim and the methods

    used to commit suicide during this period.

4. To find out the relationship between the locations of the suicide took place and the methods used to commit suicide during this period.

5. To find out the relationship between the states in Malaysia and the methods used to commit suicide within 2001-2005

2.3 Hypotheses:

$H1_0$ There is no significant relation between the age of the victim and the methods used to commit suicide within 2001-2005.

$H1_1$ There is significant relation between the age of the victim and the methods used to commit suicide within 2001-2005.

$H2_0$ There is no significant relation between the gender of the victim and the methods used to commit suicide within 2001-2005.

$H2_1$ There is significant relation between the gender of the victim and the methods used to commit suicide within 2001-2005.

$H3_0$ There is no significant relation between the ethnicity of the victim and the methods used to commit suicide within 2001-2005.

$H3_1$ There is significant relation between the ethnicity of the victim and the methods used to commit suicide within 2001-2005.

H4$_0$ There is no significant relation between the location of the suicide took place and the methods used to commit suicide within 2001-2005.

H4$_1$ There is no significant relation between the location of the suicide took place and the methods used to commit suicide within 2001-2005

H5$_0$ There is no significant relationship between states in Malaysia and methods used to commit suicide within 2001 – 2005.

H5$_0$ There is significant relationship between states in Malaysia and methods used to commit suicide within 2001 – 2005.

Chapter 3: Literature Review

3.1 Suicide rate in the world

According to McIntosh (2003), suicide rates were calculated using the formula below:

$$\text{Suicide rate} = \frac{\text{Number of suicides by group}}{\text{Population of group}} \times 100{,}000$$

The total number of suicide of a group was divided by the population of the group and multiplied with 100,000 populations. In other words, suicide rate refers to the total number of suicide among 100,000 populations.

Figure 3.1 illustrate the suicide rate (per 100,000 populations) in the countries throughout the world in the year 2007. From figure 3.1, there was no information provided for the countries that was not colored. Most of these countries were located in Africa and in the South – East Asia region.
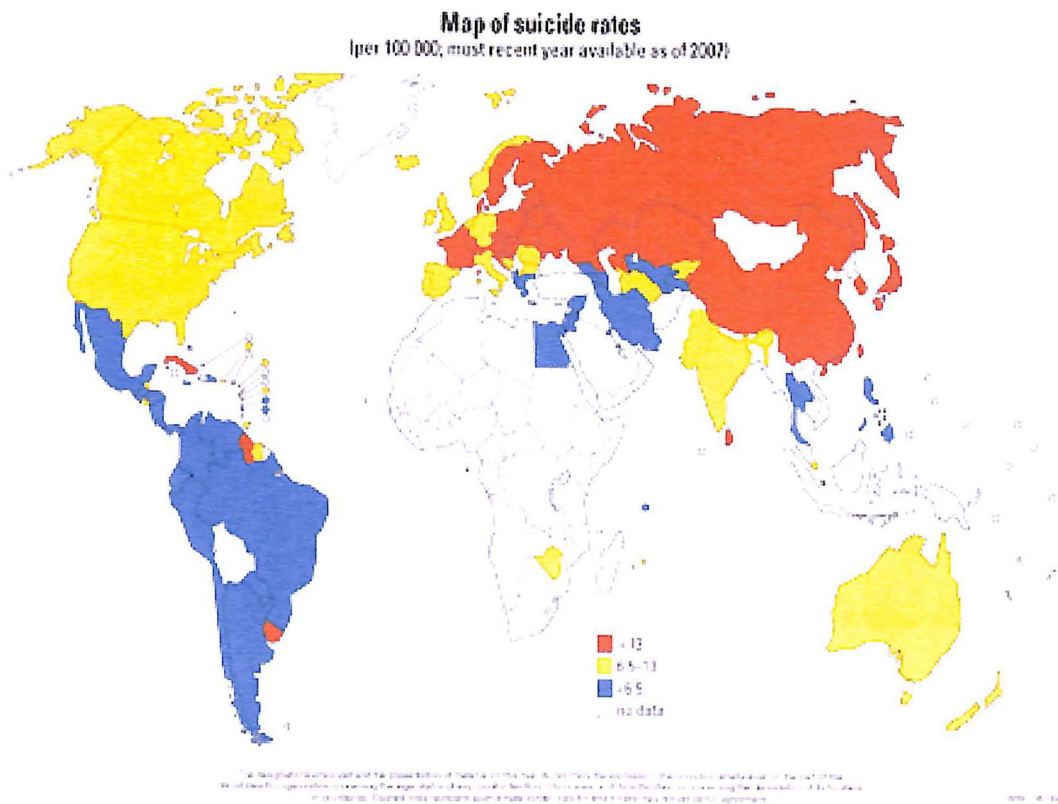
Figure 3.1: Map of Suicide Rate (source: *WHO*, 2007)

The countries that were colored blue had the suicide rate lower than 6.5. The majority of these countries were located in South America, Eastern – Mediterranean and South – East Asia regions. Examples of these countries were Brazil, Iran and Thailand. The socioeconomic conditions in this region were not stable.

Countries that were colored yellow had moderate suicide rates that was between 6.5 – 1.3. Examples of these countries were Canada, United States, New Zealand and Australia. Besides these developed countries, India also had a moderate suicide rate. This showed that in a country, the states of development did not play a major role in having moderate suicide rate.

The countries that colored red had high suicide rates, which was more than 13. These countries included Uruguay, Sri Langka, China and Cuba. In addition, countries that were once part of Soviet Union like Russia, Ukraine, Lithuania and Kazakhstan had suicide rates more than 13. The high suicide rate in these countries might be due to war which contributed to social and political instability.

The average suicide rate of world population was 14.5 (*South India Suicide is World High, 2004*). According to the same source, the suicide rate for men was three times higher than women. 75% of the deaths of young women and 25% of the deaths of young men were due to suicide.

3.2 Statistics in different countries

The analyses of suicide statistics in different countries are included in this section. The analyses were done according to the references obtained. The countries included here are U.S., England and Wales, Canada, Germany, Singapore, South India, China and Japan.

3.2.1 Statistics in U.S.

3.2.1.1 Suicide Demography

According to Curry (2000), suicide was the most common clinical emergency handled by psychologists in U.S. The average practicing psychologist may treat up to five suicidal patients per month, and as many as one – third of those psychologist have lost a patient to

suicide (Curry, 2000). According to the information released by The Centers for Disease Control and Prevention (1998), the suicide rate in U.S. was 11.3 per 100,000 populations.

The suicide rate was 1.7 times more than the homicide rate (Suicide Facts and Figure, 2001). Suicide was the eighth leading cause of death among all Americans. According to the same statistics, males were four times more likely to die from suicide than females, but females were more likely to attempt suicide than males. This is due to the fact that males preferred more violent suicide methods like firearms suicide (Rodham, 2005). In 1998, white males accounted for 73% and white females accounted for 18% of all suicides (Suicide Facts and Figure, 2001).

According to the same statistics, in 1998, suicide rate was the highest amongst American aged above 64 years old (Suicide Facts and Figure, 2001). For young people aged 15 – 24, suicide was the third leading cause of death after unintentional injury and homicide (Suicide Facts and Figure, 2001). In 1998, 15% of the suicide were youths aged below 25 years old. The suicide rate among the African – American males aged 15 – 19 years old increased 105% from the year 1980 to the year 1996.

3.2.1.2   Rankings of suicide methods

Table 3.1 shows the ranking of suicide methods in U.S. from the year 1999 – 2001. Firearm suicide was the most popular suicide methods among all Americans. This might

be due to the possession of firearm license in the American society. This was followed by 'other' methods (20%) and suffocation/hanging (17%). Poisoning was the fourth (17%) most common method.

Suicide Methods	Number of cases	Suicide rate	Percent of total
Firearm suicides	16869	5.9	55%
Suffocation/Hanging	6,189	2.2	20%
Falls	651	0.2	2%
Drowning	339	0.1	1%
Others	13753	4.8	45%
Poisoning	5191	1.8	17%
Cut/Pierce	458	0.2	2%
Fire'/'Flame	147	0.1	1%

Table 3.1: Ranking of Suicide Methods in U.S., 1999 - 2001
(Source: McIntosh, 2003)

3.2.2 Statistics in England and Wales

According to *Suicide Rate Drops in Young Men* (2005), the suicide rate among young men aged '15 – 24' years old was 8.5 per 100,000 population in 2005. For those aged '25 – 34' years old, the suicide rate was 15.7 per 100,000 population. Out of the total cases, 47% of women aged '15 – 35' committed suicide by hanging in 2005.

A research was done on 50,000 suicides in England and Wales from the year 1993 –

2003 by the Institute of Psychology (*Suicides rates rises in hot weather, 2007*). According

to this research, suicide rate rose four percent when the average daily temperature topped

18 °C. The rate of violent suicides rose five percent per degree rise in temperature. There

were 53623 cases during this period, which meant there was an average of 13 cases per

day. According to the same research, suicide rate rose by 46.9% when there was a heat

wave in 1995.

According to the same source, 75% of the suicide victims from the year 1993 – 2003

were males. The highest daily suicide count was recorded for 1st January. The largest

number of suicides took place on Mondays, with the numbers declining as the week went

on.

3.2.3   Statistics in Canada

In 1997, there were 3681 suicides reported in Canada (WHO, n.d). According to the

same source, the male to female suicide ratio was 4:1. There were 261 suicides aged '15 –

19 years old' and 293 suicides aged '20 – 24 years old' (WHO, n.d). Throughout 1993 –

2007, 229 children aged '5 – 14 years old' committed suicide (Question about Suicide,

2007). Suicide accounted for 1.7% of total deaths and the suicide rate during 1993 – 1997

was 13 per 100,000 populations (Question about Suicide, 2007).

3.2.4 Statistics in Germany

A research on all suicide cases of women by firearm in Berlin provided some details regarding suicide patterns (Schmeling et. al., 2001). This research concluded that there was no sex – specific differences regarding the type of weapon, location of entry wound, the scene where the suicide took place and influence of alcohol. From the year 1990 – 1999, 5488 suicide cases took place in Berlin. Firearms were used in 238 cases in which women aged '21 – 88 years old' accounted for 20 cases.

According to Schmeling et. al (2001), 16 of these women killed themselves in their own apartment, mainly in their bedroom. The weapons used were pistol (ten cases), revolver (six cases), riffle (two cases) and a blank cartridge gun (one case). These 20 cases shared a similarity that was only one shot was released. The site of bullet – entry was the right temple (eleven cases), high - parietal (two cases), mouth (three cases), neck (one case) and chest (two cases).

Gunshot suicide rate in Germany was relatively low (5 -7%) compared to U.S. (Schmeling et. al, 2001). This is because in the U.S., gun control laws are considerably more liberal than in Europe. Therefore the possession of firearms is more prevalent among the Americans. Schmeling et. al (2001) found that females less preferred gunshot suicide compared to men. It was conjectured that women had pride in their own appearance. Women might reject disfiguring methods of suicide in order to ensure that they looked good in death.

3.2.5   Statistics in Singapore

According to WHO (n.d.), the suicide rate in Singapore had risen gradually since 1960 (8.6 per 100,000 population) until 1995 (13.4 per 100,000 population). The suicide rates decreased from 1995 until 2000 (9.5 per 100,000 population) and then increased to 10.1 per 100,000 population in the year of 2003. The suicide rate among the males was always higher than females. The highest suicide rate of males occurred in 1995, which was 16.3 per 100,000 population. While for female, the highest suicide rate occurred in 1990 and 1995, which was 11.5 per 100,000 population.

According to the same source, there were 214 suicide cases in 2003. 121 of the total were men aged '25 – 54 years old' in 2003. Although among women, the age group '25 – 54' was also noted for the highest suicide frequency, the number of cases was merely 50% of the male (68 cases). In the context of suicide rate, the elderly aged above 75 years old was noted for the highest (41.2 per 100,000 population), with 57.7 per 100,000 populations for the men while 29.7 per 100,000 population for the women. The second highest age group was '65 – 74' (18.0 per 100,000 population).

3.2.6   Statistics in South India

3.2.6.1 Suicide Demography

In India, the suicide rate among the youth was the highest in the world (*South India*

Suicide is World High, 2004). According to the same source, for those aged between 10 and 19 years old and female had a higher tendency to commit suicide than males. The average suicide rates for the men and women in South India were 58 and 148 per 100,000 populations respectively (*South India Suicide is World High, 2004*).

3.2.6.2 Suicide Methods

Hanging and pesticides poisoning was the two most common suicide methods reported (*South India Suicide is World High, 2004*). From my point of view, the tools used to aid in these two suicide methods were easily available in daily life. For example, a rope or a length of cloth is available in almost every household. In addition, pesticides is common nowadays as part of agricultural lifestyles.

3.2.7 Statistics in China

3.2.7.1 Suicide Demography

There was an average of 250,000 suicides in China every year (*250,000 Chinese Kill Themselves Annually, 2001*). According to the same source, the suicide rate in China was 22 per 100,000 populations. This figure is higher than U.S, Canada and England. The youth and the elderly were the most at – risk groups. It was found that rural populations had a higher tendency to commit suicide than urban populations (*250,000 Chinese Kill Themselves Annually, 2001*).

One of the factor leading to the unique trend in China was that suicide prevention service was available in a few urban areas like Nangjin, Changsha, Beijing and Dalian but not in rural areas (*250,000 Chinese Kill Themselves Annually, 2001*). Therefore, suicide problems in rural area had been neglected.

3.2.7.2 Suicide methods

Pesticides poisoning was the most commonly used methods among the women in rural areas (*250,000 Chinese Kill Themselves Annually, 2001*). This was due to the easy availability of pesticides in rural areas where agriculture was the major economic activity. This method was not common in urban areas because agricultural industry was not developed in urban areas.

3.2.8   Statistics in Japan

The numbers of Japanese who commit suicide (32,155) decrease in 2006 but had stayed above 30,000 for the ninth year (Japan suicides top 30,000 for ninth straight year, 2007). Out of the total, more than one – third was the elderly. According to the same source, Japanese police attributed the decrease to an improved economy. The number of suicides which were due to financial problems had decreased 10.1%. The highest record (34,427) occurred in 2003 (Japan suicides top 30,000 for ninth straight year, 2007).

The numbers among the elderly aged above 60 years old and teenagers below 19 years old did not decrease. The number of the elderly had increased 226 in 2006 (Japan suicides top 30,000 for ninth straight year, 2007). While for teenagers, the increase was 15 suicides.

4.1 Steps of completing this research

The main aim of this session was to explain how this research was done. The methods involved four stages. These four stages were 1) collect data from Polis Diraja Malaysia (PDRM), 2) key-in and recode the data in SPSS, 3) Conduct analysis based on hypotheses and finally 4) presentation of the findings. The sequence of these four stages are illustrated in Figure 4.1. Every stage is explained in detail to give a better picture on how the fruits of this research was obtained.

Collect data from PDRM
↓
Key – in, and recode the data in SPSS
↓
Conduct analysis based on the hypotheses
↓
Presentation of the findings
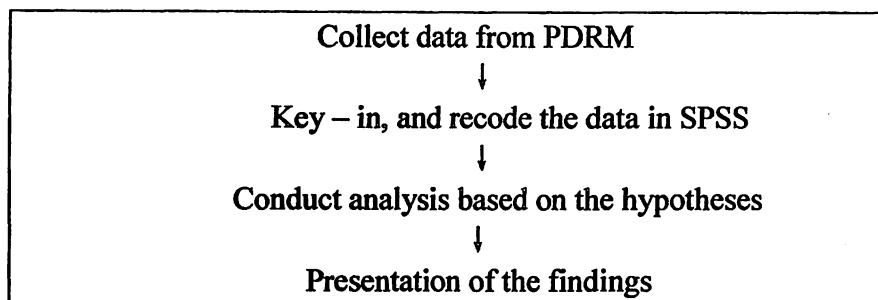
Figure 4.1: Methodology

First of all, data on demographic of suicide cases in Malaysia, from the year 2001 until the year 2005 was collected from the Head Quarter of Polis Diraja Malaysia (PDRM), Bukit Aman. Three documents had been sent to Bukit Aman. Two of the documents were formal letter, one of these formal letters requested for the data while another to promise that I will keep the data confidential except for education purposes. Besides, a form, BORANG CML/01.dt.07, was sent to them in order to record the demography of every

single case. Examples of all these three documents are attached as Appendices

In PDRM Head Quarter (HQ), Bukit Aman, all suicide cases are categorized under sudden death cases. In order to obtain the demographic variables of every single case, request letters had been written by PRDM HQ to branch offices throughout Malaysia. Then the branch offices in every states sent the filled – in forms back to PDRM HQ. After that, I went to PDRM HQ to collect the forms. This process took four months.

During the second stage, the raw data (the demopgraphic information of the cases) was keyed in. SPSS lectures were given by Dr. Geshina Mat Ayu Saat. We were taught using SPSS program to label the variables and their values in this current research. The ways how to transform and analyze the data were taught also. This process took six months.

At the same time, articles and journals that were similar or related to the topic of this research were reviewed. Most of these researches were from foreign countries. Statistics on different countries like Japan, U.S., India and China were taken and recorded for comparison. This was done as comparing the statistics in Malaysia with other countries was one of the specific objective for this research.

During the third stage, the keyed-in data were then transformed and analyzed. The relationship between the location of the suicide, age, race and gender of the suicide with the methods used by the same population to commit suicide was then generated. Data were analyzed at the levels of univariate, bivariate, and multivariate. This process took two weeks. Finally, the findings of this research was presented.

4.2   Data Analysis

The flow chart in figure 4.2 below summarizes the major types of analysis using SPSS procedures. There are mainly two types of variable of an analysis, which are qualitative and quantitative test. Qualitative variables have characteristics that are subjective and can merely be categorized. While the quantitative variables are measurable. Since this research was done based on frequecy (number of suicide cases), quantitative variables were used.

Based on the information in figure 4.2, quantitative variables test either the relationship or the differences between two or more variables. In testing relationships, Spearman's rank is used to find out the single relationship between two variables while multiple regression is used to find out the multiple interrelationships or correlations among the variables.
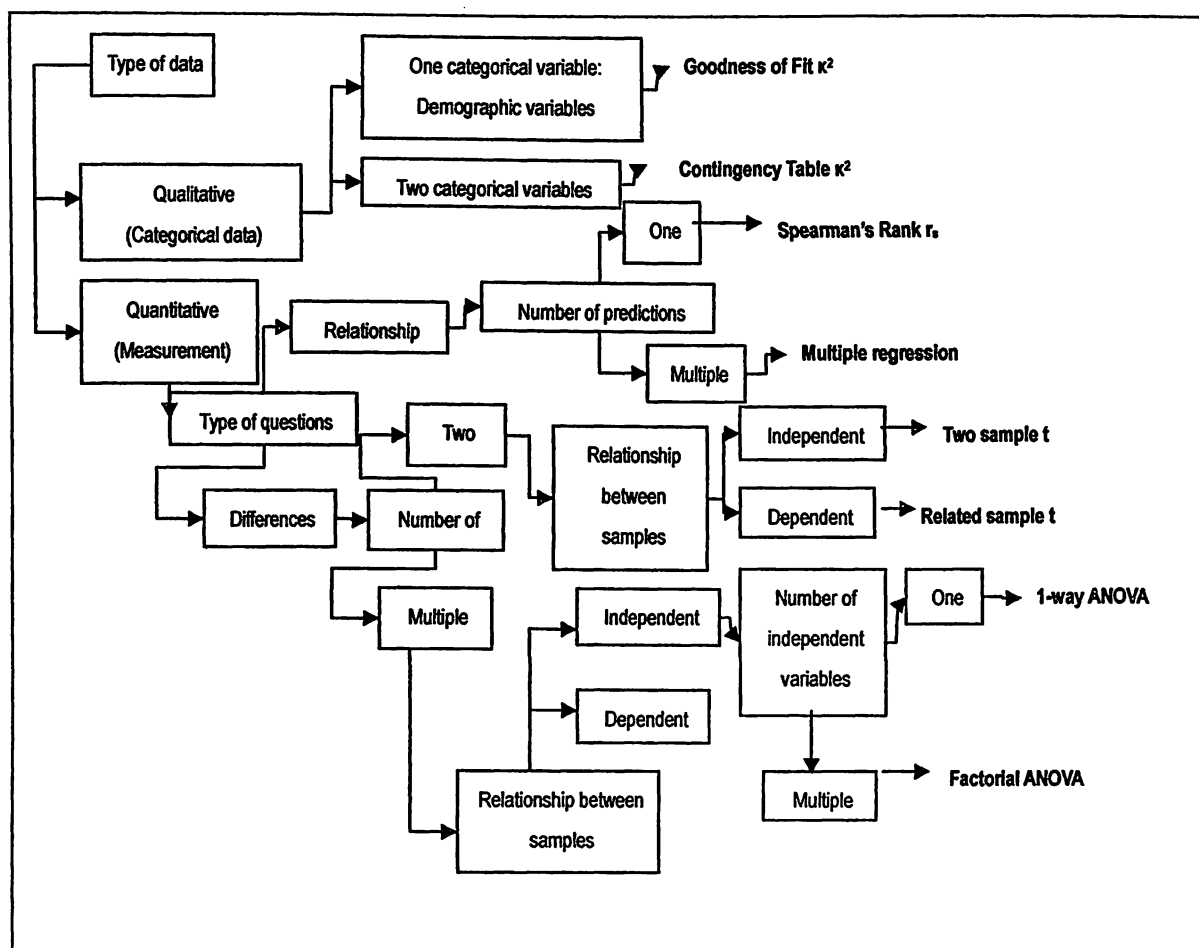
Figure 4.2: The Major Types of Analysis Using SPSS Procedures
(Source: Howell, 1995)

Pearson Correlation Coefficient and Spearman's rho are the numerical measure of the association between two variables (Howitt & Cramer, 2003). However, instead of Pearson Correlation Coefficient, Spearman's rho was used, although the former is the more common (Howitt & Cramer, 2003). The reasons were:

i)   Spearman's rank is applied to variables after the two variables have been separately ranked or classified into different categories.

ii) The data are markedly asymmetrical (skewed) on a variable, but not normally distributed with equal variances.

In other words, Spearman's rank (for Non – parametric test) is the alternative of the Pearson's Correlation Coeeficient (for Parametric test) when dealing with data being correlate into ranks. Parametric test requires the data to be normally distributed with equal variances while Non – parametric test is applied when data being analyzed consist of rankings or classifications.

In this current research, Spearman's rank was used to achieve the specific objectives below:-

1. To find out the relationship between the age of the victim and the methods used to commit suicide during this period.

2. To find out the relationship between the gender of the victim and the methods used to commit suicide during this period.

3. To find out the relationship between the race of the victim and the methods used to commit suicide during this period.

4. To find out the relationship between the locations of the suicide took place and the methods used to commit suicide during this period.

For each specific objective, only single relationship between two independent variables was tested. The variables in this current research were all quantitative and every variable was ranked into different categories. Furthermore, the data of each variable were not normally distributed. Therefore, Spearman's rank was used.

In determining the difference of mean scores of a variable between two set or sample of people, there are a few analysis available. Different tests are used depending on the number of sample to be compared, whether only two sample or more than two. Furthermore, samples come from the same group of people need analysis that is different from those coming from different groups.

The t – test is applied when estimating whether the difference between two samples is significant (Howitt & Cramer, 2003) . Two sample t – test, or also called Unrelated t – test, is used when the two sets of scores to be compared come from different groups of people. It is also used when the correlation coefficient between the two sets of scores is high. Related t – test is used when the two sets of scores come from a single sample of people.

Analysis of variance (ANOVA) is applied when there are more than two (multiple) sets of score are compared (Howitt & Cramer, 2003). There are a few types of ANOVA available, which are one-way ANOVA, Factorial ANOVA, and correlated ANOVA. Number of comparison made and whether the sample is dependent or independent

One-way ANOVA, or, the unrelated ANOVA is applied to determine whether two or more sets of scores significantly different in their means (Howitt & Cramer, 2003). It assumes the samples are independent, which is come from different group of people. They do not necessary have equal number of scores.

However, if more than one comparison is made between samples, Factorial ANOVA is used (Howitt & Cramer, 2003). Also, it is used for independent samples. It is useful when there are more than one pair of means. It tells which particular pairs of means are significantly different from each other in the analysis of variance.

On the other hand, if the multiple sets of scores is dependent, that is merely single sample of individuals contributing to each of the different sets of score, correlated /related analysis is used. Related analysis of variance tells whether several sets of scores have very different means. However, it assumes that the correlation coefficient between sets of scores are large.

4.3 Hypothesis Testing

In order to test the null hypothesis, two tests were used. These two tests were the Kruskal Wallis Test and Mann – Whitney U Test/Wilcoxon Rank Sum Test. Both of these two tests are applicable on independent samples only.

Kruskal Wallis test is one of the K independent samples tests. It is the alternative of one – way ANOVA (Howitt & Cramer, 2003). It is used to test more than two independent samples that come from the same population. It assumes that there is at least one ordinal level of measurement among the underlying variables but does not assume the scores are normally distributed.

Kruskal Wallis Test makes comparisons based on the means of the samples (Howitt & Cramer, 2003). It can tell whether several independent samples have identical distributions but is limited to how the groups are different. This test was used to test whether choice of method of suicide was related to the age, ethnicity and of the person who committed suicide and where he or she did so.

The Mann – Whitney U Test/Wilcoxon Rank Sum Test is used to test whether the two samples have identical distributions. These samples must be randomly and independently drawn. It requires the measurement within the two samples to have the properties of at least an ordinal scale of measurement (Howitt & Cramer, 2003). This test was used to investigate whether choice of method of suicide as related to the gender of the person who committed suicide.

Chapter 5: Data Analysis and Discussion

5.1 Hypothesis Testing

This section explains whether the five null hypothesis of this current research were rejected. Two SPSS methods were used which were Kruskal Wallis Test and Mann Whitney Test. The reason why these two tests were used had been explained in Chapter 4.

5.1.1   Relationship between Age and Methods of Suicide

	Methods of Suicide
Chi – square	3.20
df	4
Asymp. Sig	0.52

Table 5.1: Hypothesis Testing Relationship between Age and Methods
(Kruskal Wallis Test)

Table 5.1 shows the results of Kruskal Wallis Test on the hypothesis below:

$H1_0$ There is no significant relationship between the age of the victim and the methods used to commit suicide within 2001-2005.

$H1_1$ There is significant relationship between the age of the victim and the methods used to commit suicide within 2001-2005.

From Table 5.1, the H value was 3.20. The predetermined critical point for $\alpha= 0.01$, was 7.77 (chi-square distribution table, in Howitt & Cramer, 2003). The H value is less than the critical value. Therefore, the null hypothesis was not rejected. In other words, there was no significant relationship between the age of the suicide and the methods used to commit suicide in Malaysia within 2001 - 2005.

5.1.2 Relationship between Gender and Methods of Suicide

	Methods of Suicide
Mann-Whitney U	58723.50
Wilcoxon W	246914.50
Z	-.95
Asymp. Sig. (2-tailed)	.34

Table 5.2: Hypothesis Testing Relationship between Gender and Methods (Mann-Whitney test)

Table 5.2 shows the results of Mann – Whitney Test on the hypothesis below:

$H2_0$ There is no significant relationship between the gender of the victim and the methods used to commit suicide within 2001-2005.

$H2_1$ There is significant relationship between the gender of the victim and the methods used to commit suicide within 2001-2005.

From Table 5.2, the Z value is 0.953. The significance level is 0.05. The Z value is more than the critical value (0.853). Therefore, the null hypothesis is not rejected. In other words, there was no significant relationship between gender and methods of suicide in Malaysia during 2001 – 2005.

5.1.3 Relationship between Ethnicity and Methods of Suicide

	Methods of Suicide
Chi-Square	79.58
df	6
Asymp. Sig.	.00

Table 5.3: Hypothesis Testing for Relationship Between Ethnicity and Methods (Kruskal Wallis Test)

Table 5.3 shows the results of Kruskal Wallis Test on the hypothesis below:

. H3₀ There is no significant relationship between the ethnicity of the victim and the methods used to commit suicide within 2001-2005.

H3₁ There is significant relationship between the race of the victim and the methods used to commit suicide within 2001-2005.

From Table 5.3, the H value was 79.58. The predetermined critical point for $\alpha=$ 0.01, was 16.81 (chi-square distribution table, in Howitt & Cramer, 2003). The H value is more than the critical value. Therefore, the null hypothesis was rejected. In other words, there was significant relationship between the ethnic group of the suicide and the methods used to commit suicide in Malaysia during 2001 - 2005.

5.1.4 Relationship between location and methods of suicide

	Methods of Suicide
Chi - Square	50.42
df	6
Asymp. Sig	.00

Table 5.4: Hypothesis Testing Relationship between Location and Methods (Kruskal Wallis test)

Table 5.4 shows the results of Kruskal Wallis Test on the hypothesis below:

H4₀ There is no significant relationship between the location of the suicide took place and the methods used to commit suicide within 2001-2005.

H4₁ There is no significant relationship between the location of the suicide took place and the methods used to commit suicide within 2001-2005

From table 5.4, the H value was 50.42. The predetermined critical point for $\alpha=$ 0.01, was 16.81 (chi-square distribution table, Howitt & Cramer, 2003). The H value is more than the critical value. Therefore, the null hypothesis was rejected. In other words, there was significant relationship between the location of the suicide and the methods used to commit suicide in Malaysia, from the year 2001 - 2005.

5.1.5 Relationship between States and Methods of Suicide

	Methods of Suicide
Chi-Square	95.21
df	8
Asymp. Sig.	.00

Table 5.5: Hypothesis Testing Relationship between States and Methods (Kruskal Wallis Test)

Table 5.5 shows the results of Kruskal Wallis Test on the hypothesis below:

$H5_0$ There is no significant relationship between states in Malaysia and methods used to commit suicide within 2001 – 2005.

$H5_0$ There is significant relationship between states in Malaysia and methods used to commit suicide within 2001 – 2005.

From table 5.5, the H value was 95.21. The predetermined critical point for $\alpha=$ 0.01, was 20.09 (chi-square distribution table, in Howitt & Cramer, 2003). The H value is more than the critical value. Therefore, the null hypothesis was rejected. In other words, there was significant relationship between the state in Malaysia and the methods used to commit suicide for the period of 2001 - 2005.

5.2 Overview of the suicide demographic in Malaysia, within 2001-2005.

This section explains the demographic patterns of suicide in Malaysia for the year 2001-2005. The ethnicity, gender and age of the suicide are discussed. The methods of suicide chosen are discussed as well. Based on the information provided by PDRM, the total valid cases reported throughout these five years were 824. However, these data was actually not obtained from every state in Malaysia.

There are 13 states and three Wilayah Persekutuan in Malaysia. However, only data on 11 places including Kuala Lumpur were available. Out of these 11 places, data on Perak and Sabah were not valid. The states with sufficient data were Perlis, Pulau Pinang, Kuala Lumpur, Negeri Sembilan, Melaka, Pahang, Terengganu, Kelantan, Sarawak and Kuala Lumpur. The states which data were unavailable were Kedah, Selangor and Johor. As a result, there may be underestimation in the pattern of suicide in our country.

5.2.1   Age

This section explores the frequency of suicide according to different age groups. This is shown in Table 5.6. The percentages of every age group comprising the total cases were included in Table 5.6. The ages of the person who commit suicide were divided into five different groups, that were '1 – 12' (children), '13 – 21' (teenagers), '22 – 35' (young adult), '36 – 50' (middle – aged adult), and 'above 50' (elderly). This is shown in Table 5.6.

Age Group (year old)	Frequency	Percent
1 – 12	9	1
13 – 21	92	11
21 – 35	287	35
36-50	250	30
Above 50	186	23
Total	824	100.0

Table 5.6: Frequency of suicide in different age group

'1-12' were the youngest age group. This group included infant (under one year) and children. '13 – 21' include the early adolescence (13 – 16 years old) and late teens. The group '22 – 35' includes early adults. Sometimes, the boundaries between late teens and the beginning of early adulthood are not clear cut. This is because transforming from the former to the later occurs at different time from one individual to another. However, according to social norms and also the law in our country, 21 years old is considered the age of maturity attainment. '36 – 50' included people who are the middle – aged while those aged above 50 years old were grouped as the elderly.

The highest suicide frequency was found among those from the group '22-35' (35%). This was then followed by the group '36-50' (30%) and the group 'above 50' (23%). The group '13 – 21' contributed about 11% to the whole, while the remaining one percent consisted of '1 – 12' group.

Suicide among the group '22-35' could be due to a few reasons. For instances, failure in career or studies, conflicts with family members and relationship problems. The same kind of problems could be encountered by the group '36 – 50'. The health problem is

common in both '36 – 50' and 'above 50'. Teenagers commit suicide most probably due to inability to cope with pressure in their studies and/or the breakup of romantic relationships. The problems of mental disorders might cause suicide in any age group.

This trend is different from U.S. in which citizens aged above 65 years old had the highest suicide rate (*Suicide Facts and Figures*, 2001). In the year 1998, youth below age 25 accounted for 15% of the suicide in the U.S (*Suicide Facts and Figures*, 2001). The condition in our nation was also different from Canada. In Canada, 229 children aged between '5 -14' committed suicide throughout 1993-1997 (Question About Suicide, 2007). The number is far more than amongst Malaysian children (nine cases) reported within 2001-2005.

5.2.2   Gender

This section explains the gender of people who commit suicide in Malaysia between 2001 and 2005. 76% (624 cases) of 824 cases were male while female suicide cases accounted for 24%. This is shown in the pie chart below (Figure 5.1).
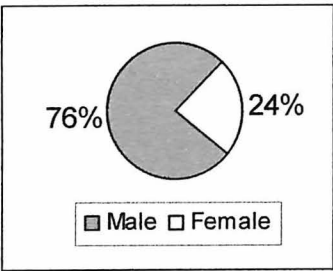
Figure 5.1: Gender of the suicide

The suicide pattern in Malaysia was different from the pattern in India. According to Hassan (2006), there were more females than males committed suicide in India. This was due to the situation that the basic rights of women were not respected in India (Hassan, 2006). Hassan (2006) mentioned that many women in India experienced physical abuse at home. What made the situation worse was that the relatives and neighbors blamed women themselves as being responsible for these tragedies (Hassan, 2006). I believe this situation is comparatively mild in Malaysia.

The suicide trend in gender context in Malaysia was similar to U.S. and Singapore, whereby fewer females killed themselves than the males. In the U.S., women are treated equally as men (Hassan, 2006). The basic rights of both genders are protected in developed countries, by rules and regulations (Hassan, 2006). In my point of view, the issue of basic right between genders places Malaysia between U.S. and India. The women in our nation are getting a better social status day by day and yet, women's liberty is not as good as in the U.S.

After all, what makes more males commit suicide than the females? Physiologically and psychologically, men are different from women. The differences between men and women in physiological aspect are due to difference in hormone level (Daly, 1994). Men's testosterone hormone level is higher (Daly,1994). Consequently, I believe men are more violent than female. This is related to higher success rate in killing oneself. Compared to men, women with lower testosterone level have lower success rate in killing themselves.

Another reason that explains why more men commit suicide than women is that men are bad communicators (Wasserman, 2001). In my own experience of interaction with both genders, males are unlikely to discuss their problems with people around them. In contrast, girls and women who depend more on relationship with friends and family, like to talk and voice out their difficulties. In other words, women establish better social network so gain more likelihood of social support than men in dealing with the negative events in their life.

In addition, women posses some protective factors that men do not (Wasserman, 2001). According to Wasserman (2001), women have greater capacity to adjust than men. This makes them adapt well when facing changes in life. Furthermore, they enjoy greater self-sufficiency in activities of daily living (Wasserman, 2001). For those who are married and have children, they establish strengthened feelings of usefulness through commitment to children and grandchildren (Wasserman, 2001). In this way, women do not loss the sense of self-worth. So, the tendency to commit suicide among women is lower then men.

5.2.3   Ethnicity

Table 5.7 demonstrates the distribution frequencies of suicide among different ethnic groups in Malaysia, for the year 2001 – 2005. The race categories were Malay, Chinese, Indian, the natives, Indonesian, Siamese and others. The natives referred to the races other than the three major ethnic groups (Malay, Chinese and Indian). They include Dayak, Iban,

Kelabit, Melanau, Dayak Selako, Bidayuh, lun Bawang, Dusun, Bajau. These minor groups are heavily distributed in Sabah and Sarawak. Iban is the predominant ethnic group in Sarawak.

Races	Frequency	Percent	Suicide rate (per 100,000 population)
Bumiputera			
Malay	133	16	1.2
Natives	45	5	
Chinese	344	42	5.7
Indian	241	29	12.9
Non- Malaysian			
Indonesian	29	4	
Siamese	9	1	4.4
Others	23	3	

Table 5.7: The Ethnicities of the suicides

Indonesian and Siamese who committed suicide in Malaysia originated from the neighboring countries, which are Indonesia and Thailand. The 'others' actually referred to the foreigners, other than Indonesian and Siamese. The nationality of this group included Pakistani, Nepalese, Burmese, India Indian, German, Korean and Singaporean Chinese. There were too few cases for each of these nationalities, thus each ethnicity was not suitable to be categorized as separate groups.

The leading ethnic group in suicide frequency was Chinese (42%). The second was Indian (29%) while the third was Malay (16%). The fourth was the natives (6%). It was then followed by Indonesian (3%), 'others' (3%) and Siamese (1%). The differences between ethnicities were also found in U.S. According to *Suicide Facts and Figures*

(2001), 90% of the persons who committed suicide in 1998 were white and while the remaining 10% consist of non – white.

In 2000, the ethnic composition in Malaysian population were: Malay and the natives – 65%, Chinese – 26% and Indian – eight percent (*Population and Housing Census 2000*, 2005). In Sarawak, Ibans accounted for 30% of the state's total Malaysian citizens. According to the same source, the total population in Malaysia in the year of 2001 was 23.27 million. Non – Malaysian totaled 1,385,000 in 2000 (*Population and Housing Census 2000*, 2005).

Indians had the highest suicide rate (12.9 per 100,000 populations). This might be related to the religious beliefs of Hinduism. Indians believe in reincarnation. Reincarnation means 'to be made flesh again' (Reincarnation, 2008). Reincarnation is a doctrine that the spirit or soul of a living being will be reborned in a new body (Reincarnation, 2008). When an Indian was unable to endure the difficulties and the sadness in the current life, he or she would commit suicide with the hope that a new personality would be developed during the new life in this physical world. So, the suicide rates among Indians were high.

In this study, it was found that the Chinese had the highest suicide frequency and second highest suicide rate (5.7 per 100,000 populations). However, Chinese are not the race with the highest population. In fact, there was a decrease in the Chinese population (*Population and Housing Census 2000*, 2005). This phenomenon can be explained by the urbanization

context. According to *Population and Housing Census 2000* (2005), Kuala Lumpur and Pulau Pinang were two of the states that had very high proportion of urban population, 100% for Kuala Lumpur and 80.1% for Pulau Pinang. In addition, the leading suicide ethinicity in these two states was Chinese, with 151 in Pulau Pinang and 51 in Kuala Lumpur. Was this a coincidence?

The Chinese populations in these two states were high compared to other states. Urbanization does change the social structure of a geographical area (Maguire, Morgan and Reiner, 2002). Community-oriented life has been gradually replaced by individualistic lifestyles. According to Wasserman (2001), community-oriented life implies an effective form of social control because people gain social support from each other. Therefore the traditional familial lifestyle among the Chinese community was diminishing, especially in these two urbanized states.

5.2.4   The methods of suicide

Figure 5.2 demonstrates the frequencies of different suicide methods reported in Malaysia for the period 2001-2005. The methods of suicide reported were Carbon Monoxide (CO) poisoning, drowning, hanging, jump from high places, self – immolation, pesticides poisoning and others. 'Others' included self-shooting using firearm, jump out from a moving vehicle, slitting wrist/throat, suffocation with plastic bag, run over by train, alcohol intoxication, drug overdose and those use more than one method. These 'other'

methods happened in very few cases thus making them unsuitable to be classed as separate categories.
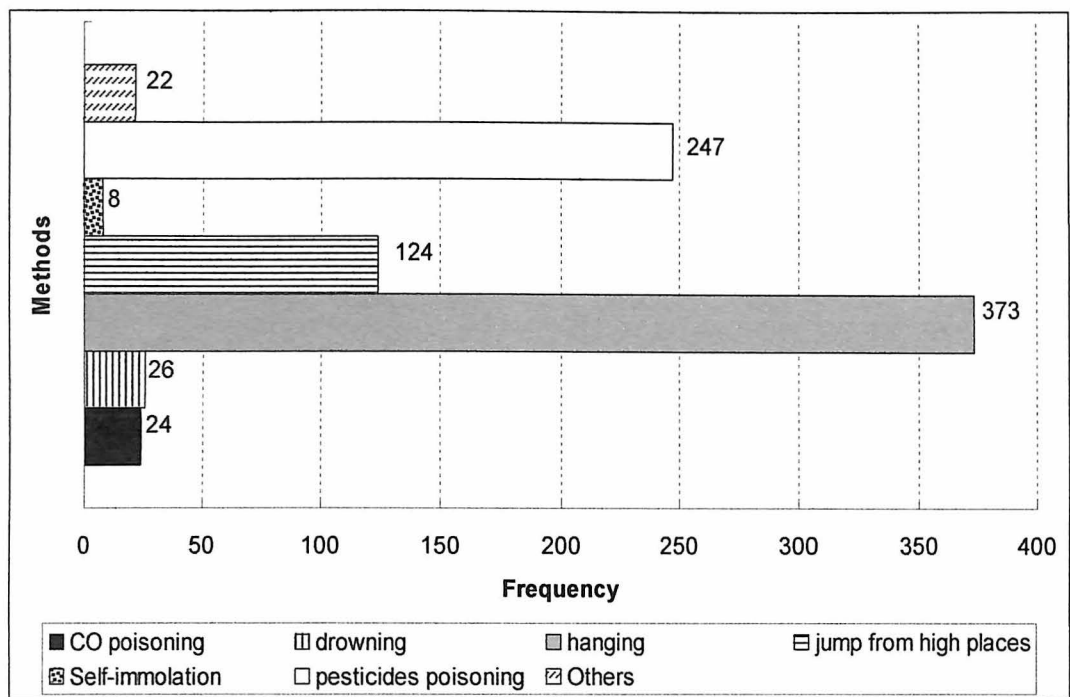
Figure 5.2: The methods of Suicide

Hanging was the most popular method in Malaysia for the period 2001-2005 (373 cases; 45%). The tools used to aid hanging are usually plastic/nylon rope, wire, belt or a length of cloth. The second most common method was pesticides poisoning (247 cases; 30%). Paraquat was the most commonly used herbicides to kill oneself. Other than that, insecticides were reported also. The third most common method was jumping from a high place (124 cases; 15%). The high places included buildings and bridge. The fourth common method was drowning (26 cases; 3%). This was followed by CO poisoning (24 cases; 3%). Compared with these five methods, self-immolation was the least common (eight cases; 1%).

The trend in our country is different from U.S. In the U.S, firearm suicide had been accounted for 55.1% of suicide (*McIntosh*, 2003). While in Malaysia, there were merely six cases of firearm suicide throughout 2001 – 2005. The difference is due to the availability of firearms in daily lifestyle. In U.S, suffocation/hanging was the third most common method while jumping from a height and drowning accounted for 2.1% and 1.1% of suicide respectively.

This means in Malaysia, the method of suicide seems to be a cultural and economic concern. Firearms are not commonly seen in Malaysians' daily lifestyle. When compared to firearm, the tools used to hang oneself and pesticides poisoning is cheaper. Jumping from a height does not need any tool. So, the cost and availability of the tools needed to aid a suicide method were taken into account when choosing the method of suicide.

5.4   Overall Correlation

Table 5.8 demonstrates the correlation matrix between the variables. The above results were obtained using Spearman rank on the basis of that data have been ranked and the data was not normally distributed. Most importantly this statistical method was used in order to achieve some of the objectives of this research which were to:-

a) find out whether there is a significant relationship between the locations of suicide and the methods of suicide used.

b) find out whether there is a significant relationship between age of the suicide and the methods used to commit suicide.

c) find out whether there is a significant relationship between gender of the suicide and the methods used to commit suicide.

d) find out whether there is a significant relationship between ethnicity of the suicide and the methods used to commit suicide.

e) find out whether there is a significant relationship between states in Malaysia and methods used to commit suicide

	State	Location	Age	Ethnicity	Methods	Tools	Gender
State	1.00						
Location	-.08*	1.00					
Age	-.21**	.01	1.00				
Ethnicity	.00	.00	-.03	1.00			
Methods	.18**	-.13**	-.04	.20**	1.00		
Tools	.17**	-.04	-.11**	.20**	.75**	1.00	
Gender	-.09*	-.04	-.09*	.06	.03	.04	1.00

Table 5.8: Overall Correlation between two variables

Key:

Coast=   East Coast (Kelantan, Terengganu, Pahang and Sarawak) and West Coast (Perlis, Pulau Pinang, Kuala Lumpur, Negeri Sembilan dan Melaka)

Location=   Location where the suicide was commited such as domicile, working place and hospital

Age=   Age of the suicide

Gender=   Gender of the suicide

Ethnicity=   Ethnic group which the suicide belonged to

Methods=   Methods of suicide such as hanging, drowning and firearm

*   Correlation is significant at the 0.05 level (2-tailed).

**   Correlation is significant at the 0.01 level (2-tailed).

From table 5.8, the highest significant correlation at 0.01 level was between 'methods' and 'tools' (0.76 r_s). This suggests that the type of tool that one chooses to commit suicide depends on the methods he or she committed suicide. This is logical. Persons who hanged themselves will use rope or cloth instead of a knife. For example, on 14th July 2001, a Chinese man in Pulau Pinang, hanged himself using a nylon rope.

There was also a statistically significant correlation at 0.01 level between ethnicity of the suicides and the suicide methods used (0.20 r_s). This means that every ethnic group preferred certain types of methods. In other words, a method of suicide is predominant by certain race. For example, there were 45 suicide committed by the natives in Sarawak. Out of these, 30 of them poisoned themselves with pesticides. This indicates that pesticides poisoning was preferred by the natives.

Since the methods used to commit suicide are correlated with the ethnicity of suicides, there should also be correlation between the race and the tools used. This is due to the reasons that the tools used to kill oneself is dependent on the methods used to commit suicide As can be seen in table 5.8, at 0.01 level, there is an equally statistical significant correlation between the 'ethnicity' and the 'tools' (0.20 r_s). For example, one will not utilize eczos gas while hanging him/herself.

Another reason that accounted for this correlation is that the availability of the tool in daily life. Most of the natives are involved in the agricultural industry. The prevalence of herbicides and insecticides in their daily life makes them prefer to end their life by drinking the pesticides available. For them, this is the easiest way. It is unlikely that one who wishes to commit suicide shoot him/herself with firearm while he or she actually has no way to obtain the firearm.

From table 5.8, there is a significant negative correlation between methods of committing suicide and the location where the suicide took place (-0.13 r_s). This means that the decision of where to commit suicide is not related to the methods of suicide chosen. This finding negates the perception that the method of suicide is dependent on the location of suicide. Normally one would think that for the suicide which took place in a toilet, a hose would be used to hang oneself. Instead, people who kill themselves do not necessarily use whatever is handy at the location. It seems like there is prior planning involved by thinking of how to kill themselves using what tool.

There was also a significant negative correlation between the age of the suicide and tools used to commit suicide. The tools chosen to aid in committing suicide were not significantly related to their age (-0.10 r_s). In other words, the age of the person who wished to commit suicide did not influence what type of tools was preferred. Utilizing a nylon rope to hang one self is equally common in both the young and the elderly. Again, using what tool to kill themselves had been determined in their prior planning.

It is obvious that there is no correlation at all between 'ethnicity' and 'location' (0.00 r_s). Regardless of what race a person is, the location where he or she commits suicide is not an issue. This is because all races live in all the states investigated. This is contrast to the finding of Curry (2000) who claimed that suicide rates is related to a person's ethnicity and where they live.

From Table 5.8, there was a statistically significant correlation at 0.01 level between the states where the suicide took place and the methods of suicide chosen (0.18 r_s). This means residents in certain states preferred certain types of method. This relationship was mainly due to the different social and economic condition in every state. The ethnic distribution is different in every state in Malaysia. Every state is predominant by a certain ethnic group. For instance, the predominant ethnic group in Sarawak is Iban while in Kelantan, Malays are the majority. Since every ethnic group preferred certain types of methods, the trend in every state varied according to ethnic distribution.

The economic activity varies in different states. For example, the economy in Pahang is mainly agriculturally- based while in Kuala Lumpur, business and trading are the major economic activities. Pesticides are essential in the agricultural industry in Pahang and are prevalent in daily life of the population involved in this industry. This might lead to higher tendency to commit suicide by pesticides poisoning. By the same mechanism, prevalence of tall buildings in a state would encourage people in that area to commit suicide by jumping from a height. In other words, the economic activity in certain state influences the

tools available to aid in suicide. Thus, there was also a statistically significant correlation at the 0.01 level between the states which the suicide took place and the tools used to commit suicide.

5.4 Relationship between Demographic of the suicides and the Methods of Suicide

This section discusses the relationship between the suicide and the methods of committing suicide. The 'demographic' here refers to the gender, age and race of the persons who commit suicide. The relationship between method of suicide and each demographic parameter will be discussed in separate sections.

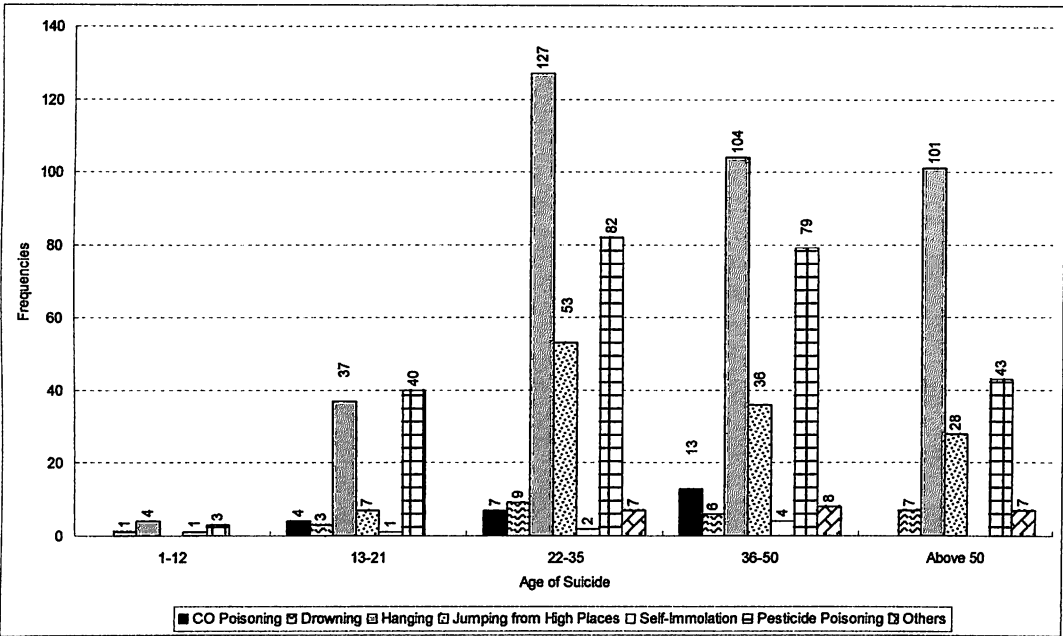## 5.4.1 Relationship between Age of the Suicide and the Methods of Suicide

Figure 5.3: Age of Suicide and the Methods of Suicide

The chart above illustrates frequencies of different suicide methods in five separate age groups. The age groups were a) '1 – 12', b) '13 – 21', c) '22 – 35', d) '36 – 50' and e) 'above 50 year old'.

For those aged '22-35' the ranking of methods of suicide used were: hanging (127 cases; 44%), pesticides poisoning (82 cases; 29%) and jumping from a height (53cases; 18%). For the age group '36 – 50' and 'above 50', the ranking of the first three most common methods were the same as group '22 – 35'. For the group '13 – 21', pesticides poisoning was the most common method (40 cases; 43%) while hanging was the second most common (37 cases; 40%). The numbers of jumping from a height were seven for this age group. There were four types of methods reported among the group '1 – 13'. These four types of methods were hanging (four cases; 45%), pesticides poisoning (three cases; 33%), jumping from high places (one case; 11%) and drowning (one case; 11%).

CO intoxication was found among those aged between 13 and 50 years old. The number of cases was four for the '13 – 21', seven for the '22 – 35', and 13 for the '36 – 50'. None were reported among those from extreme age groups. Suicide by self – immolation was not found amongst the elderly within 2001 – 2005 in Malaysia.

5.4.2   Relationship between the Gender of the Suicide and the Methods of Suicide
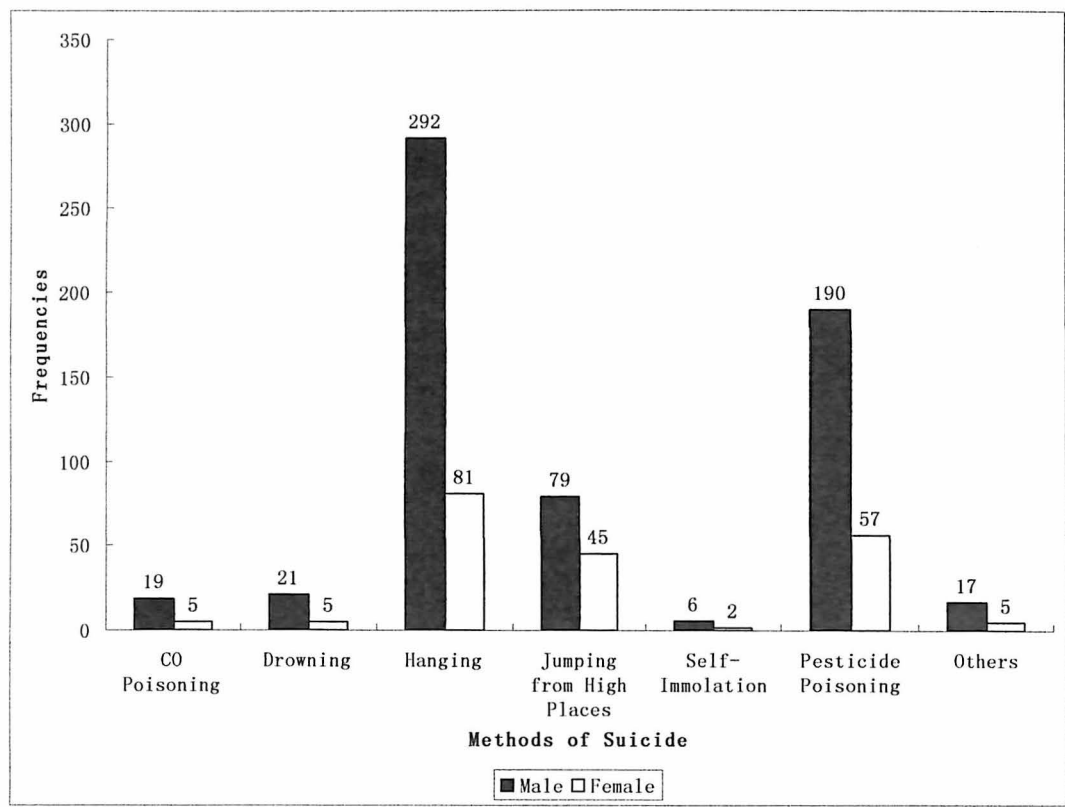
Figure 5.4: Gender of the suicide and the Methods of suicide

The graph above demonstrates the frequencies of different methods chosen by each gender throughout 2001-2005. The methods of suicides were a) CO poisoning, b) drowning, c) hanging, d) jump from high places, e) self-immolation, f) pesticides poisoning and g) others. The 'others' category denotes choices like drug overdose, piercing, run over by train, smothering, alcohol intoxication, shooting with firearm, slitting the wrist or throat, etc. These other methods happened in very few cases thus making them unsuitable to be classed as separate categories.

For men, hanging was the most preferable, with 292 cases (47%) within the past five years. It was then followed by pesticides poisoning (190 cases; 30%). The third most popular method was jumping from high places (79 cases; 13%). The fourth was drowning (21 cases; 3%). This was followed by CO poisoning (19 cases; 3%) and then others (17 cases; 3%). The lowest was self-immolation, with only six cases.

The pattern among women was merely slightly different from men. For women, the methods with highest and second highest frequency were hanging (81 cases) and pesticides poisoning (57 cases). The third was same with the men too, that was jumping from high places (45 cases). This was followed by CO poisoning, drowning and others, with five cases for each method. The lowest was self – immolation (two cases).

When looking at the distribution between the two genders in each method of suicide, the pattern of difference was the same (hanging, pesticides poisoning and followed by jumping from high places). However, males were always more than females in each method of suicide. For example in pesticides poisoning, there were 190 males and 57 females. The biggest difference was seen in hanging with as many as 211 cases; the smallest difference was found in self-immolation, with only four cases of difference.

5.4.3 Relationship between the Ethnicity of the suicide and the Methods of suicide
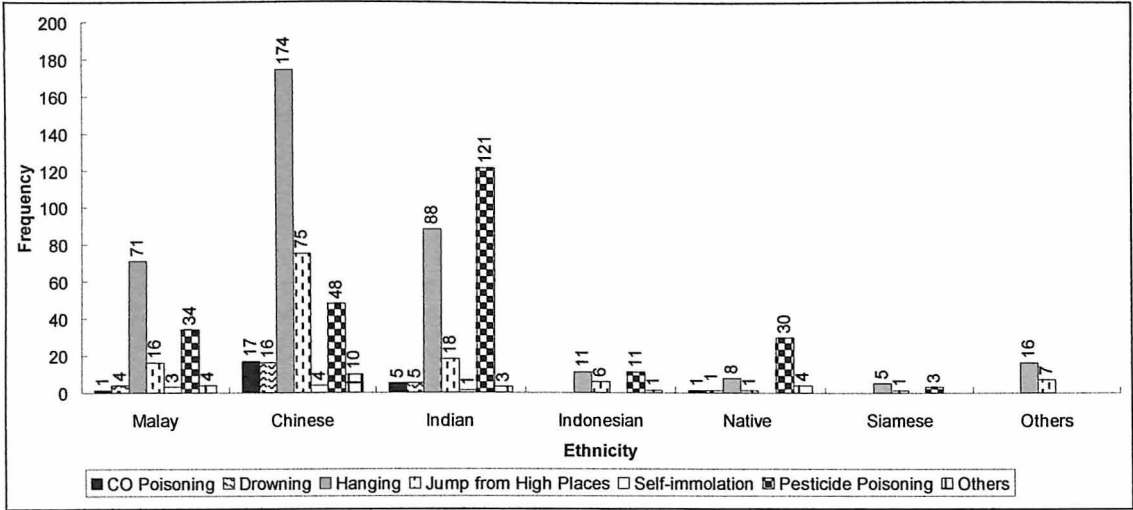
Figure 5.5: Ethnicity of the Suicide and the Methods of Suicide

Figure 5.5 shows the ethnicity of the suicide and the frequency of the methods of suicide chosen by each ethnic group, within 2001-2005. This current research focused on the suicide committed within Malaysia. Since it was not limited to Malaysian citizens, any other race or nationality which did not originate from our country were included. The race categories were Malay, Chinese, Indian, the natives, Indonesian, Siamese and 'others'.

There was a different and unique trend for every ethnic group when it comes to suicide. For the Malays, the most frequently chosen method of suicide was hanging (71 cases; 53%). The second most frequent method was pesticide poisoning (34 cases; 26%). This was followed by jumping from high places (16 cases; 12%). There were two methods with four cases each - drowning and 'others'. There were only three self-immolation cases and one CO poisoning case.

Similar to the Malays, hanging was the most frequently chosen method among the Chinese during 2001 – 2005. However, the number of cases was 103 more cases than the Malay. This was followed by jumping from high places (75 cases; 22%) and pesticides poisoning (48 cases; 5%). There were 17 cases or 5% CO poisoning and 16 cases (4%) of drowning. The Chinese was the leading ethnic group for all the methods except for pesticides poisoning.

Amongst the Indians, the trend was different. Pesticides poisoning was the most often chosen method (121 cases; 50%). This was followed by hanging (88 cases; 37%). The third is jump from high places, with 18 cases (7%) reported. CO poisoning and drowning were equally frequent for Indians. There were five cases for each of them. Indians were noted as having the highest number of pesticides poisoning among all the ethnic groups.

Similar to the Indians, among the natives, the two most popular methods were pesticides poisoning and hanging. There were 30 (76%) pesticides poisoning cases and eight (18%) hanging cases. There were four cases of 'others'. Three of them took place in Sarawak, where two Iban and one Bidayuh shot themselves using a shotgun. The remaining three cases were one CO poisoning, one drowning and one jumping from a high place. The natives had contributed to 47% of the suicide cases in Sarawak during 2001 – 2005.

The patterns among foreigners were distinct too. From data gathered between 2001 –

2005, Indonesian and Siamese were the two most suicide ethnicities amongst foreigners in

Malaysia. Hanging and pesticides poisoning were equally frequent amongst Indonesian.

There were 11 (38%) cases for each method. Six (21%) Indonesians jumped from a height

and one (3%) used 'other' methods. For Siamese, five (56%) hanged themselves in our

country, three (33%) made use of pesticides and one (11%) jumped from a high place.

Among other foreigners, 16 (70%) of them committed suicide by hanging while seven

(30%) jumped from a height.

There were a few reasons why the foreigners killed themselves in Malaysia. For

instance, some further their studies here while some came here to earn a living. The

foreigners work either as a blue collar or at the management level. Due to poor

relationships with colleagues and friends, wage issues, poor working environment, stress

and other reasons, the foreigners may choose to end their lives in Malaysia rather then

going home and facing humiliation. The humiliation may come from their inability to

survive in a new environment.

5.4.4   Relationship between Locations of Suicide found and Methods of Suicide

Figure 5.6 shows the frequencies of different methods of suicide according to location

between the year 2001 – 2005. The 'location' represents the scene where the suicide had

taken place. The categorizations of locations were: a) domicile – the suicide's residence, b)

working place of the suicide, c) car, d) hospital, e) estate, jungle, bushes or plantation area,

f) hotel or resorts and f) others.
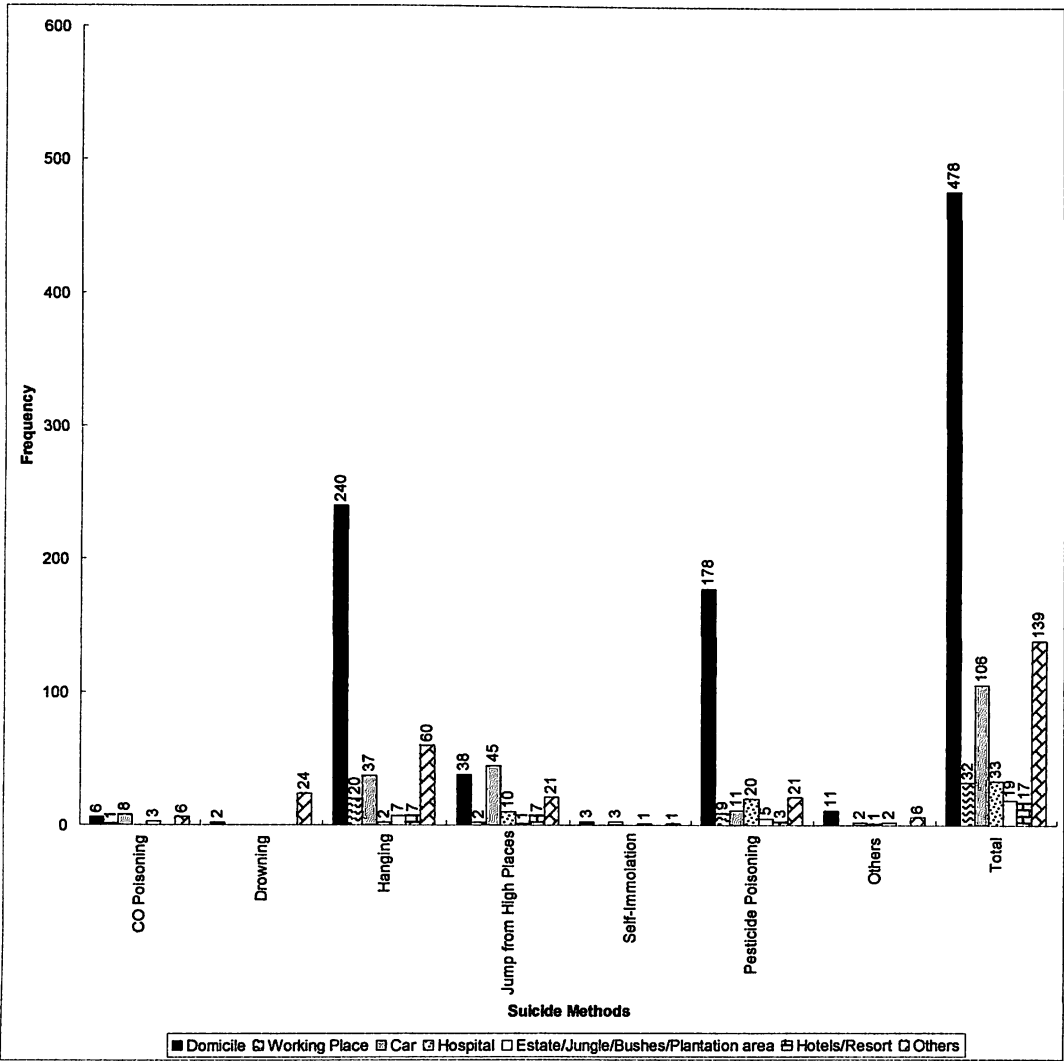
Figure 5.6: Locations and Methods of Suicide

The 'others' category included such locations other than those mentioned previously.

It included railway, lock up (national term for temporary jail), pond, mine or water tank,

seaside, roadside, temple, entertainment center and bridge. In each location, there were

very few cases for example, between 2001-2005, there were only three incidents of suicide

at a Buddhist or a Hindu temple. In addition, 'temple' did not fit any of the predetermined

locations. The other locations in 'others' category were categorized on the basis of same reason.

From figure 5.6, between 2001-2005, the most popular location for committing suicide is domicile (478 cases; 58%), followed by 'others' (139 cases; 17%) and car (106 cases; 13%). Number of cases that happened in hospital were 33 cases (4%), while the number of cases in a working place were 32 cases (4%). Estate, jungle, bushes or plantation area and hotel or resorts accounted for 19 (2%) and 17 (2%) cases respectively through out these five years.

The location with the most number of cases was domicile. The two most common methods that took place in domicile were hanging (240 cases; 50%) and pesticides poisoning (178 cases; 37%). This was followed by jumping from high places (38 cases; 8%), in which this category of suicides lived in apartment or condominium.

The high number of cases (58% out of 824 cases) in domiciles shows that when a person wishes to kill him or herself, he or she prefers to do it in a familiar place. In my opinion, the sense of property probably played a major role. Suicide by drowning cases was less likely to happen at home (two cases). In Malaysia, it is unlikely to find a suicide victim who drowned himself or herself purposely in the bath tub or the water tank in his or her own house.

Eight (out of total 26) carbon monoxide poisoning cases took place in a car between 2001-2005. When the engine is running, carbon monoxide (CO) is produced in eczos. Eczos gas is usually transported into the car with the aid of a plastic pipe. Availability of CO has made the car popular as a place to commit suicide. Besides CO poisoning, there were 11 (out of total 247 cases) pesticides poisoning cases in a car. Similar to persons who committed suicide in domiciles, persons who chose to commit suicide in their own car were influenced by a sense of property. The latter might drive the car to a place where their suicide will not be deterred by friends or family members.

Hospitals were the fourth favored location. Between the year 2001-2005, there were 20 (61%) pesticides poisoning in hospitals while ten (30%) suicides jumped from hospital buildings. In addition, two persons hanged themselves in a hospital. The remaining one incident committed suicide in a hospital by drug overdosing. There was no CO poisoning, self-immolation or drowned cases in hospitals.

On 12th October 2003, a middle-aged Chinese man in Bera, Pahang, hanged himself in a hospital for the reason of biological health problem. Although it was not stated in PDRM's data whether this man was mentally ill, this case had proved that biological health problem was able to cause one to commit suicide. This has been supported by Copeland (1986). Copeland (1986) suggested that suicides in hospital may involve psychiatric or non-psychiatric patients.

As can be seen in Figure 5.6, the total cases throughout the five years that happened in locations of 'others' category was quite high (139 cases; 17%). Out of these, there were as many as 60 (43%) hanging cases. Five had taken place in the lock up (temporary jail) in Pulau Pinang during these five years. Other than that, 24 (17%) drowning cases had taken place under 'others' locations. Places like pond, mine or water tank, seaside were chosen for suicides sites. At this moment, it is not known why they did so. It was interesting to note that there were 14 drowning cases from the Penang Bridge. It seems that the Penang Bridge was a popular location in Pulau Pinang to commit suicide.

5.4.5   Relationship between states in Malaysia and Methods of Suicide

Figure 5.7 demonstrates the frequency of different suicide methods in states in Malaysia from the year 2001 - 2005. As mentioned before, the states which data were available were Kelantan, Kuala Lumpur, Melaka, Negeri Sembilan, Pahang, Perlis, Pulau Pinang, Sarawak and Terengganu. The total numbers of suicide cases in these places during 2001 – 2005 are included in Figure 5.7.

From Figure 5.7, Pulau Pinang was the state with the highest number of suicides (256 cases; 31%). 133 (52%) cases was suicide by hanging. As mentioned before, the urbanization rate in this state was high. Intense life pressure is positively related to urbanization (Hassan, 2006).Thus the high number of suicide cases in this state was perhaps due to this reason. Pulau Pinang was the leading state for the suicide methods of

hanging, jumping from high places, drowning (15 cases), CO poisoning (seven cases) and

self – immolation (five cases).
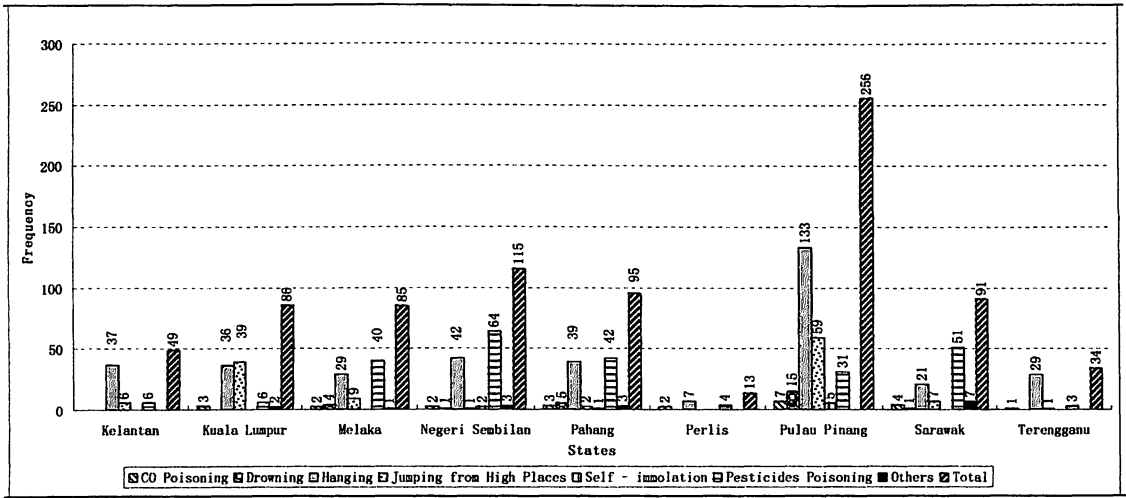
Figure 5.7: Frequency of different suicide methods in states in Malaysia

The second highest number of suicide cases was found in Negeri Sembilan (115 cases;

11%). This state was noted for the highest cases of pesticides poisoning (64 cases) among

the nine states. The urban population in Negeri Sembilan was not high (*Population and*

Housing Census 2000, 2005). Instead, the residents in this state are mainly involved in

agricultural industry. Therefore the tendency to commit suicide by pesticides poisoning

was comparatively higher. Another suicide method that was commonly used in Negeri

Sembilan was hanging (42 cases; 37%).

The same trend was seen in Pahang. Pesticides poisoning and hanging were the two

more commonly used methods in Pahang. There were 42 (44%) pesticides poisoning cases

and 39 (41%) hanging cases in Pahang from the year 2001 – 2005. Similar to Negeri

Sembilan, agriculture is the main economic activity in this state. Thus residents were more likely to kill themselves by pesticides poisoning. In addition, pesticides poisoning was also the most popular method used in Sarawak (51 cases) and Melaka (40 cases).

In Kuala Lumpur, the most popular suicide method was jumping from high places (39 cases; 45%). This was probably due to the prevalence of tall buildings in Kuala Lumpur. The second most common method in Kuala Lumpur was hanging (36 cases; 42%). In Kelantan, Terengganu and Perlis, hanging was the most commonly used method. From the year 2001 – 2005, there were 37 hanging cases in Kelantan, 29 cases in Terengganu, and seven cases in Perlis. Perlis was the state with the lowest suicide frequency. Throughout these five years, there were 13 (2%) suicide cases reported in this state.

Chapter 6: Conclusion

This chapter concludes the findings of this current research. By analyzing data provided by PDRM using SPSS, it was found that in Malaysia, there was a discernible suicide pattern from the year 2001 – 2005. There was significant correlation between the suicide methods with the race of the suicide and the states where the suicide took place.

There was no significant relationship between the age of suicide and the method of suicide chosen. From the year 2001 – 2005, hanging had been the most popular among those aged '1 – 12', '23 – 35', '36 – 50', and 'above 50' and was the second most popular for those aged '13 – 22', but the age factor did not influence them in deciding which methods to choose. There was no specific trend in any age group. Instead, hanging was the most popular method in Malaysia.

The preference of suicide methods was the same for both males and females. The sequence of methods of suicide ranking from most popular to the least popular was: Hanging, pesticides poisoning, jumping from a height, drowning, CO poisoning, 'others' and self – immolation. However, both genders differed from each other on the basis of frequency. Males were more likely to kill themselves than females. The female to male ratio was roughly 1: 3.

There was a significant relationship between the ethnicity of the suicides and the methods of suicide chosen from the year 2001 - 2005. The rankings of suicide methods were different among each ethnicity. The Chinese were noted for the highest number of suicide cases, especially in highly urbanized states. On the other hand, the ratio of suicides to population for Indians was the highest among all ethnic groups. Indians were the group with highest pesticides poisoning cases while Chinese were the group with the highest number of cases for all methods other than pesticides poisoning.

The location where the suicide occurred did not influence the decision on what suicide method to select. However, there were locations where the tendency for suicide was higher. The majority of suicide cases within these past five years took place in the residence of the suicide. Other locations reported were working place, car, hospital, estate/jungle/bushes/plantation area, hotel/resorts and others.

The preference of suicide methods was correlated to the states where the suicide occurred. Pulau Pinang had the highest suicide frequency while Perlis had the lowest suicide frequency. Hanging was the most popular method in Perlis, Pulau Pinang, Terengganu and Kelantan. In Negeri Sembilan, Melaka, Pahang and Sarawak, the most commonly used method was pesticides poisoning. Different from the eight states above, the most common suicide method in Kuala Lumpur was jumping from high places.

References:

'Reincarnation'. (2008). Retrieved on 22 April 2008 from: http://en.wikipedia.org/wiki/Reincarnation

AllPsych Online-The Virtual Psychiatric Classroom, *Psychiatric Disorders*, (2004). Retrieved on 13 March 2008, from: http://allpsych.com/disorders/dsm.html

American Psychology Association (2007). *Suicide Rate Rises in Hot Weather*, [Press Release], Retrieved on 23 November 2007 from: http://news.bbc.co.uk/2/hi/health/6925882.stm

Arsenault – Lapierre, G., Kim, C., Turecki, G. (2004). *Psychiatry diagnoses in 3257 suicides: A meta – analysis*. BMC Psychiatry, Nov 4; 4:37. PMID 15527502

BBC News, *South India Suicide is World High* (2004). Retrieved on 14 November 2007 from: http://news.bbc.co.uk/2/hi/south_asia/3590847.stm

BBC News, Suicide Rates Drops in Young Men (2008). Retrieved on 19 November 2007 from: http://news.bbc.co.uk/2/hi/health/7244486.stm

Centre for Suicide Prevention, *Question about Suicide* (2007). Retrieved on 22 November 2007 from: http://www.suicideinfo.ca/csp/go.aspx?tabid=30

Chia, B.H. (1981). *Suicidal Behavior in Singapore*, Tokyo: Seamic Publication, (pp. 10-13 & 14-21)

Copeland, A.R. (1986). *Suicide in the Hospital*, Journal of the Forensic Science Society, Florida, USA, Vol 26. pp 311-322

Curry, L.M. (2000). American Psychology Association, *Eight Factors found Critical on Assessing Suicide Risk* of Monitor on Psychology, [Press Release], Retrieved on 23 November 2007 from: http://www.apa.org/monitor/feb00/suicide.html

Department of Statistics Malaysia, *Population and Housing Census 2000* (2005), Retrieved on 11th April 2008 from: http://www.statistics.gov.my/english/frameset_census. php?file=census

Fathers for Life, *Suicide rates in countries throughout the world*, (2002). Retrieved on 24 November 2007 from: http://fathersforlife.org/health/who_suicide_rates.htm

Fleischmann A., Bertolote J. M., Belfer M., Beautrais A. (2005). Completed Suicide and Psychiatric Diagnoses in Young People: A Critical Examination of the Evidence, American Journal of Orthopsychiatry, Vol. 75, No.4, pp 676-683

Hassan, M. (2006). Committing Suicide: The Rich World vs The Poor World, Retrieved on 22 November 2007 from: http://www.southasiabiz.com/2006/07/committing_suicide_the_rich_wo.html

Healthline, *Suicide and Suicidal Behavior* (2006). Retrieved on 18 November 2007 from:http://www.healthline.com/adamcontent/suicide-and-suicidal-behavior

Healthline, *The Answers May Be Hiding In Your Crazy Family Tree* (2005). Retrieved on 25 November 2007 from:http://www.healthline.com/selfcontent/the-answers-may-be-hiding-

Hodgson, S. (2004). *Cutting Through the Silence: A Sociological Construction of Self – Injury*, Sociological Inquiry, Vol. 74, No. 2 pp. 162 – 179

Hole, G. & Hawker, S. (2004). *Oxford English Minidictionary*, New York: Oxford University Press

Hornby, A. S. (2007). *Oxford Compact Advanced Learner's English-Malay Dictionary* (pg. 1048 & 1494) Malaysia: Oxford Fajar

Howell D.C. (1995) *Fundamental Statistics for the Behavioral Science* (3rd ed), California: Duxbery Press.

Howitt D. & Cramer D. (2003), *Correlation coefficients: Pearson's correlation and Spearman's rho* (pp 71-80) *A Guide to Computing Statistics with SPSS 11 for WINDOWS*, England: Pearson Educated Limited.

International Society for Mental Health Online, *Major Depressive Disorder-Diagnostic Criteria* (2004). Retrieved on 13 March 2008 from: http://www.allaboutdepression.com/dia_03.htmlin-your-cra
zy-family-tree

La Vecchia, C., Lucchini, F., & Levi, F. (1994). Worldwide trends in suicide mortality, 1955 – 1989. <u>Acta Psychiatrica Scandinavica</u>, 900, 53 – 64.; Lester, Patterns, 1996, pp. 28 – 30.

Lies, E. (2007). MyDepressionConnection.Com: *Japan suicides top 30,000 for ninth straight year*, Retrieved on 28 November 2007 from:http://www.healthcentral.com/depress
ion/news-40615-66.html

Maguire, M., Morgan, R., & Reiner, R. (2002). *The Oxford Handbook of Criminology (3rd ed)*, New York: Oxford University Press

McIntosh, J. L. (2003). American Association of Suicidology- *U.S.A. SUICIDE: 2001 OFFICIAL FINAL DATA, Washington. DC,* Retrieved on 16 November from:

http://www.floridasuicideprevention.org/PDF/AAS_2001_US_Data_Sheets%5B1%5D.pdf
McIntosh, J. L. (2006). American Association of Suicidology- *U.S.A. SUICIDE: 2004 OFFICIAL FINAL DATA, Washington. DC, Retrieved on 18 November from: http://www.floridasuicideprevention.org/PDF/AAS_2004_US_Data_Sheets%5B1%5D.pdf*

People's Daily Online (2001). *250000 Chinese Kill Themselves Annually*, Retrieved on 16 November 2007 from: http://www.china.org.en/english/LI-e/21403.htm

RIA Novosti, Russian News and Information Center (2006). *60000 People Commit Suicide in Russian Annually*, Retrieved on 16 November 2007 from: http://en.rian.ru/russia/20061004/54514777.html

Rodham, K. (2005) "Deliberate Self – Harm in Adolescents : the Importance of Gender", Psychiatric Times

Schmeling, A., Strauch, H. & Rothschild, M. A. (2001). *Female Suicides in Berlin with the Use of Firearms*, Forensic Science International, Elsevier, Vol. 124, pp 178-181

Shaffer, D. J. (1998). *The Epidemiology of Teen Suicide: An Examination of Risk Factors".* Journal of Clinical Psychiatry 49 (supp.): 36 – 41. PMID 3047106. Retrieved on 12 April 2006.

Shuster, J. L. (2000). *Can depression a terminal illness?* Journal of Palliative Medicine. Winter; 3 (4): 493 – 5.

The Centers for Disease Control and Prevention, (2001). *Suicide Facts and Figures*, [Press Release], Retrieved on 21 November from: http://www.apa.org/monitor/nov01/suicidefacts.html

Wasserman, D. (2001). *Suicide-An Unnecessary Death*, In Dunitz M. (ed), *A stress vulnerability model* (pp: 11-27), Stockholm: Swedish National Centre for Suicide Research and Prevention of Mental Ill-Health

Wesselt et al. (1996) *Deliberate self – harm and the probation service: An overlooked public health problem?*, Journal of Public Health Medicine, 18, 129 – 32

World Health Organization (n.d.). Retrieved on 15 November 2007 from: http://www.who.int/mental_health/media/sing.pdf

World Health Organization, Suicide Prevention (2008). Retrieved on 18 November 2007 from: www.who.int/.../suicide/suicideprevent/en/

Appendices

I)   <u>Request Letter</u>

Cik Chin Meei Ling
Kursus Sains Forensik
Pusat Pengajian Sains Kesihatan
Universiti Sains Malaysia Kampus Kesihatan
16150 Kubang Kerian
Kelantan.
Tel: 0179809126
E-mail: fatling_03@yahoo.com

Melalui
Dr. Geshina Ayu Mat Saat
Pensyarah Kriminologi
Pusat Pengajian Sains Kesihatan
Universiti Sains Malaysia Kampus Kesihatan
16150 Kubang Kerian
Kelantan.
18 September, 2007

Kepada:
Pengarah
Jabatan Siasatan Jenayah
Polis Diraja Malaysia
Bukit Aman,
Kuala Lumpur.

<u>Memohon Mendapatkan Data-data kes Bunuh Diri bagi Tujuan Penyelidikan</u>

Saya, Chin Meei Ling, No. Matrik 81599, siswazah kursus Sains Forensik di Universiti Sains Malaysia Kampus Kesihatan, ingin memohon kebenaran untuk mendapatkan data terperinci kes-kes bunuh diri bagi menjalankan thesis penyelidikan saya yang bertajuk Kajian Corak Kes Bunuh Diri di Malaysia dari Tahun 2001 hingga 2005. Kajian ini saya jalankan di bawah penyeliaan Dr. Geshina Ayu Mat Saat, seorang Pesyarah Kriminologi di Universiti Sains Malaysia Kampus Kesihatan.

2) Data-data dari tahun 2001 hingga 2005 yang saya memohon termasuklah:
    a)   Umur mangsa bunuh diri. Kategori umur adalah seperti berikut:
           0-12, 13-21, 22-35, 36-50, 51 dan ke atas
    b)   Jantina mangsa
    c)   Bangsa mangsa (Melayu, Cina, India atau kaum-kuam lain)
    d)   Cara membunuh diri
    e)   Tempat kes berlaku
    f)   Tarikh kes berlaku
Segala maklumat boleh diisikan ke dalam boring yang saya sertaka bersama surat permohonan ini.

3) Selain itu, saya turut sertakan surat janji memelihara kesulitan maklumat terperinci kes-kes bunuh diri yang diterima dari pihak PDRM dan kertas kerja penyelidiakan ini. Kertas kerja ini memperihalkan cara-cara menjalankan penyelidikan, tujuan dan objektif, serta kepentingan penyelidikan ini. Segala maklumat terperinci tentang kes-kes bunuh diri yang saya terima daripada pihak PDRM akan saya memelihara kesulitannya.

4) Segala timbang rasa dan kerjasama pihak tuan akan dihargai .

5) Saya boleh dihubungi melalui
  Alamat menyurat   :40, Lorong 41, Taman Kaya Fasa 3, 34000, Taiping, Perak.
  No telefon Bimbit   :017 9809126
  Alamat e--mel :fatling_03@yahoo.com

Sekian, terima kasih.

Yang Benar,

_____

(CHIN MEEI LING)

II) <u>Letter of Confidentiality</u>

Chin Meei Ling
Matrik No.: 81599
i/C NO: 841206-08-5756
Program Sains Forensik
Pusat Pengajian Sains Kesihatan
Universiti Sains Malaysia Kampus Kesihatan
16150 Kubang Kerian,
Kelantan.

Kepada:

Pengarah
Jabatan Siasatan Jenayah
Polis Diraja Malaysia
Bukit Aman
KualaLumpur.
25 September 2007

SURAT AKUR KERAHSIAAN

Saya, dengan nama di atas menjamin bahawa segala maklumat terperinci berkaitan dengan kes-kes bunuh yang dikongsikan oleh pihak PDRM dengan saya, akan dipelihara sulit sepenuhnya dan digunakan untuk tujuan penyelidikan semata-mata.

2. Bahan-bahan audio dan video yang dirakamkan semasa temuramah dengan pegawai polis, juga akan dipelihara sulit sepenuhnya. Butir-butir peribadi pegawai polis tidak akan diumumkan dalam sebarang penerbitan.

3. Semua bahan dan maklumat akan disimpan di tempat yang selamat berdasarkan keperluan etika penyelidikan agar tidak diperolehi dalam mana-mana bentuk oleh pihak yang tidak berkenaan.

4. Semua bahan dan maklumat akan dihapuskan setelah kerja penyelidikan disiapkan menurut tatacara etika penyelidikan.

Sekian, terima kasih.

Yang benar,

(Chin Meei Ling)

BORANG CML/01.dt.07

Bahagian A: Latarbelakang Rekod

1. No. Rekod Polis:_____   2. Tarikh Kes:_____

Bahagian B: Latarbelakang Kes
ARAHAN: SILA '/' BAGI MANA – MANA YANG BERKENAAN

1   Lokasi Kejadian

   [ ]   a)   tempat tinggal

   [ ]   b)   tempat kerja (pejabat, kilang dan sebagainya. Sila nyatakan.)
            _____

   [ ]   c)   tempat – tempat lain (Sila nyatakan.)
            _____

2   Umur mangsa

   [ ]   a)   0 – 12

   [ ]   b)   13 – 21

   [ ]   c)   22 – 35

   [ ]   d)   36 – 50

   [ ]   e)   above 50

3   Jantina Mangsa

   [ ]   a)   Lelaki

   [ ]   b)   Perempuan

4   Etnik Mangsa

[ ]   a)   Melayu

[ ]   b)   Cina

[ ]   c)   India

[ ]   d)   lain – lain (Sila nyatakan)

_____

5   Cara membunuh diri

[ ]   a)   Kelar tangan

[ ]   b)   Keracunan CO

[ ]   c)   Mati Lemas

[ ]   d)   Pengambilan dadah

[ ]   e)   Gantung

[ ]   f)   Suicide attack

[ ]   g)   Terjun dari bangunan tinggi

[ ]   h)   Lain – lain (Sila nyatakan)

6   Peralatan untuk membunuh diri

     [   ]   a)   Wire

     [   ]   b)   Pisau

     [   ]   c)   Pisau Cukur

     [   ]   d)   Parang

     [   ]   e)   Gas Memasak

     [   ]   f)   Gas dari Kenderaan

     [   ]   g)   Senapang/Pistol

     [   ]   h)   Beg Plastik

     [   ]   i)   Lain – lain (Sila nyatakan)

7   Posisi mangsa yang membunuh diri

     [   ]   a)   Meniarap

     [   ]   b)   Bergantung beberapa jarak dari lantai

     [   ]   c)   Terduduk

     [   ]   d)   Sandar pada perabut

     [   ]   e)   Baring pada susuk kanan

     [   ]   f)   Baring pada susuk kiri

     [   ]   g)   Posisi lain (Sila nyatakan)

8   Orang yang menjumpai pembunuh diri

☐   a)   Suami/isteri mangsa

☐   b)   Ibu/bapa mangsa

☐   c)   Adik – beradik mangsa

☐   d)   Anak Mangsa

☐   e)   Ahli keluarga mangsa

☐   f)   Rakan mangsa

☐   g)   Penjaga keselamatan

☐   h)   Pekerja am bangunan

☐   i)   Rakan kerja mangsa

☐   j)   Orang yang tidak mengenal mangsa

☐   k)   Lain – lain (Sila nyatakan)

Bahagian C: Keputusan Kes
ARAHAN: SILA NYATAKAN BAGI SETIAP SOALAN

1   Masa dan tarikh mangsa disahkan meninggalkan dunia_____

2   Tarikh ahli keluarga dihubungi mengenai kematian mangsa _____

3   Ulasan sebab membunuh diri _____
     _____
     _____