



## Factors Related to Attempted Suicide among Young Adults Admitted at the General Hospital, Matara

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### 1 INTRODUCTION

An attempted suicide is referred to as an act in which the individual deliberately puts himself at the risk of death (De Leo *et al.*, 2006). Attempted suicide is an enormous public health problem in young adults within the age range from 15 to 34. It is the most common cause of hospital admissions among this age group and the most common cause of death. In Denmark, the suicide rate for the young adults has decreased during the last 20 years from 12 to 6 per 100,000 persons. But at the same time the annual rate of attempted suicides has increased from 200 to 300 per 100,000 persons (Christoffersen, 2009). The World Health Organization South-East Asia Region has revealed that 7% of young adults in Sri Lanka have attempted suicide one or more times in 2009.

The international literature yields a generally consistent account of the risk factors that lead to suicidal attempts in young adults. They are social and educational disadvantages, family adversity, psychopathology, personal vulnerabilities, exposure to stressful life circumstances, social, cultural and contextual factors (Beautrais, 2000). The western literature associated with suicidal

attempts includes young age, female gender, low educational attainment, unemployment, living alone, and history of socioeconomic deprivation (Schmidtke *et al.*, 1996). A study done in India proved that the young adults who were unmarried and had emotionally unstable and/or histrionic personality traits have high risk for suicidal attempts (Radhakrishnan and Andrade, 2012). Most of the descriptive studies in Sri Lanka have only concentrated on the methods of suicide and demographic features of the victims (Silva *et al.*, 2015). Large caseloads of self-harm patients have overburdened the country's limited medical resources as well as it negatively affects the quality of life (Marecek, 2006). Therefore, examining the factors related to attempted suicide in Sri Lanka is crucially important in order to take necessary preventive actions. Accordingly, the current study was planned to investigate the predominant psychological, socio economic factors of attempted suicide among young adults, in 15 -34 age group who were admitted to the General Hospital, Matara. Further, in this study the mode of suicidal attempts was also observed.

## 2 METHODOLOGY

A quantitative descriptive design was employed in this study. A purposive sample of 125 hospital attendees after suicidal attempts within the age 15 – 34 years were recruited. The data was collected from the participants using a self-administered questionnaire consisting structured questions related to demographic, psychological, socio economical details and mode of suicide attempts. Details related to medical history, diagnosis were recorded from the bed head ticket of the participant by the investigators. Study was conducted at the General Hospital, Matara with admitted patients during the period of November 2015 to January 2016. Ethical approval was obtained from Ethics Review Committee in Faculty of Medicine at University of Ruhuna and permission was obtained from the director of General Hospital, Matara. Informed consent was obtained from each participant prior to the study. Descriptive analysis was performed using Statistical Package for the Social Sciences (SPSS) 24.

## 3 RESULTS AND DISCUSSION

The response rate of the study was 84.8%. Among them 60.4% were males. A large number of participants were from the Sinhala ethnic community (83%); Tamil 9.4%; and Muslim participants were considerably low in number (7.6%). The unmarried participants (62.26%) were higher than married participants (22.64%). The separated (11.32%) and living together (3.77%) participants were considerably low. The data has been presented under the mode of suicide attempts, socio economical and psychological factors.

### 3.1 Mode of suicidal attempt

The frequent mode of attempting suicides was drug overdose (50%). Paracetamol

over dose was the commonest method among schooling group. Patients with psychological diseases have taken high doses of their own drugs. Poison was the second common mode of attempting suicide among participants (36.9%), followed by hanging (7.5%), and cut injuries (5.6 %). Weedicide, insecticide and some plants found in Sri Lanka such as '*kaneru*', '*niyagala*' were included among the poisons. Ingestion of toxins (40%) and hanging (25%) were the most common methods in India between 2008 and 2012 (Kumar *et al.*, 2013).

### 3.2 Socio- economical factors

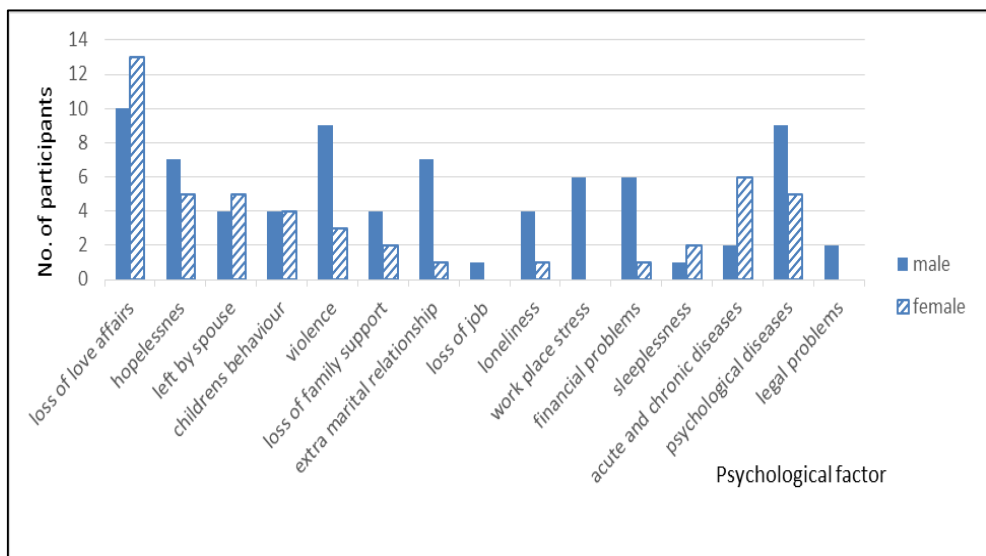
Males show higher suicidal attempted rate (60.4%) in Sri Lanka. A study done in India also showed the similar findings with a male predominance; male--female ratio ranging from 1.13:1 to 1.63:1 (Radhakrishnan and Andrade, 2012). Unemployment has accounted for 47.16% of cases. The percentage of self-employees was 25.47%. The association between unemployment and suicidal attempt was also more significant for young adults in India (Radhakrishnan and Andrade, 2012). Similarly, non-income group constituted the majority-- about 42.45 % -- of the total suicidal attempters. A similar study done in India proved that lower socio-economic groups such as agriculturists, housewives and unskilled workers represented 75% of the total subjects of suicidal attempters (Gouda and Rao, 2008). Interestingly, the lowest attempted suicidal rate was found among those who earn less than Rs.10, 000 as given in in the study (Table 1).

Considering the education level, suicidal attempts were more prominent in those who were educated only up to Ordinary Level (O/L--44.33%. Among those who possessed tertiary education qualifications it was significantly low (5.65%). The similar findings were discovered in Denmark (Christiansen *et al.*, 2015).



**Table 1.** Socio economical factors of the study

Socio economical factors		Percentage (%)
Civil status	Unmarried	62.26% (66)
	Married	22.64% (24)
	Living together	3.77% (04)
	Separated	11.32% (12)
Education level	Grade 1-5	9.43% (10)
	Still schooling	26.41% (28)
	Up to Ordinary Level	44.33% (47)
	Up to Advanced Level	14.15% (15)
	Diploma	4.71% (05)
	Degree	0.94% (01)
Type of employment	Government	11.32% (12)
	Private sector	16.03% (17)
	Self-employee	25.47% (27)
	Unemployed	47.16% (50)
Income level	Non income	42.45% (45)
	Below Rs.10000	8.49% (09)
	Rs.10000- Rs.15000	15.09% (16)
	Rs.15000- Rs.20000	17.92% (19)
	Over Rs.20000	16.03% (17)



**Figure 1:** Distribution of psychological factors for attempted suicide among the participants

## 4 CONCLUSIONS AND RECOMMENDATIONS

In conclusion, the findings of the study reflect variations in suicide attempts with socio economic and psychological factors. Among the suicide attempters, low education, unemployment and non-income are more prominent socio economical factors which persuade suicidal attempts. The majority of suicidal attempters have only completed their secondary education. They may not be still mature enough to control the suicidal ideation which arises in their mind. The poor income and unemployment are other stressful factors which are directly related to suicidal attempts. The unmarried group showed higher propensity for suicide while those married, living together and have separated less. Some psychological factors associated with suicidal attempts are loss of love affairs, left by spouse, violence, hopelessness, suffering from acute and chronic diseases and psychological diseases. Loss of love affairs has accounted for majority of the reported cases. Drug overdose, poison, hanging, cut injuries are the common methods of suicidal attempts. The frequent mode of attempting suicides was drug overdose. Findings of the present research will be helpful for health care workers as well as the community to increase attention and concern regarding suicide attempters to reduce the rate of suicidal attempts in Sri Lanka.

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