



Abstract

Sri Lanka had one of the highest suicide rates in the world since the beginning of the last decade and the annual suicide rates still remain high compared to other countries. Prevention of suicide and deliberate self-harm is a priority in the health sector in Sri Lanka. Identifying those having high suicidal intent and at risk of repeating the act of self-harm has become a vital component of prevention.

The objectives of this study were to validate the Pierce Suicide Intent Scale to obtain a profile of the socio-demographic and risk factors in the sample of patients and identify the risk factors associated with high suicidal intent.

The study was carried out at Teaching Hospital Kalubowila from 20.07.2004 to 17.01.2005. The sample consisted of 206 patients.

For validation of the scale, face validity, content validity and criterion validity were assessed. For assessment of criterion validity, the values obtained by using the Pierce Suicide Intent Scale were compared with the independent assessment by a Psychiatrist. When the ROC curve to detect those with high and moderate suicidal intent from those with low suicidal intent was considered, the best sensitivity and specificity occurred at the cut off point of 5.5. Therefore the value 5 was selected to be the best cut off point to differentiate between high

and moderate intent patients and those with low suicidal intent.

Regarding differentiating the high and moderate intent patients from the low intent patients the following rates were obtained

Sensitivity : 97%, Specificity : 85%, Positive predictive value : 92.1%

Negative predictive value : 94%, False positive ratio : 14.9%, False negative ratio : 3.0%, Positive likelihood ratio : 6.46, Negative likelihood ratio : 0.035

When the ROC curve to detect those with high suicidal intent from those with moderate and low suicidal intent was considered, the best sensitivity and specificity occurred at the cut off point of 10.5. Therefore the value 10 was selected to be the best cut off point to differentiate between high intent patients and those with moderate and low suicidal intent.

Regarding differentiating the high intent patients from the moderate and low intent patients the following rates were obtained. Sensitivity : 97%, Specificity : 89%, Positive predictive value : 80.8% , Negative predictive value: 98.4%, False positive ratio : 11.4%, False negative ratio : 3.1%, Positive likelihood ratio : 8.82, Negative likelihood ratio : 0.033

Using criterion validity the Pierce Suicide Intent Scale was demonstrated to be very acceptable as a screening instrument to assess suicidal intent of patients following acts of deliberate self-harm.

In the analysis of socio-demographic factors and risk factors, majority, 79% were in the age group less than thirty years. Female to male ratio was 2:1.

62% were single. 50% had studied up to the G.C.E.(O.L.).

54% were employed. Self-poisoning was the method used by the majority, with ingestion of a drug overdose being the commonest method used, with 52% using this method. 21% had past suicidal attempts.

10% had a alcohol misuse or dependence using the ICD 10 diagnostic criteria.

47% had a psychiatric illness. 29.6% had evidence of a depressive episode, Schizophrenia was present in 2% and alcohol dependence in 6%.

Adjustment reactions occurred in 6%.

Of the psychosocial problems, relationship problems related to love affairs were the most common(32%). 8% had chronic illnesses.71% lived with their families.20% lived alone or with non-relatives. 16% had no family support.

Social isolation was felt by 25%. 22.8% had a current suicidal risk.

When the association between selected risk factors and socio-demographic factors was considered, being male and above 30 years were factors associated with the presence of a psychiatric illness.

Taking a drug overdose was associated with the female sex and age below 30 years. Being above 30 years was associated with the presence of past suicidal attempts.

Having depression was associated with psychosocial problems. Relationship problems were commoner in those below thirty years, in single people and in both males and females and in those with depression, although not statistically significantly associated with any of these factors.

When the risk factors associated with high suicidal intent were analyzed high suicidal intent was found to be significantly associated with age, having a current mental illness, the presence of depression, having a past psychiatric illness, presence of past suicidal acts and the presence of psychosocial problems.