Report for Cooperation and Working Together of the Ireland North South Urban Rural Epidemiological Study of Suicidal Behaviour
ACKNOWLEDGEMENTS

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We are also grateful to the Research and Development Office DHSSPS (NI); Lloyds TSB; The Tughan Trust; Dr Tom and Peggy Campbell Cleveland Ohio.

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INTRODUCTION

The prevention of suicide and suicide attempts remains a challenge for clinicians in Health Care provision. Suicide and attempted suicide (now usually termed “deliberate self harm” or “self harm” in the United Kingdom) are major problems in most countries in the world. Overall there are more than 800,000 suicides per year worldwide. (University of Oxford, Centre for Suicide Research). Each year in Northern Ireland there are approximately 150 deaths by suicide and approximately 6,000 in the United Kingdom as a whole. (Health Promotion Agency, Northern Ireland). This exceeds the number of people killed in road traffic accidents (Appendix 1).

In Northern Ireland the suicide rate is 9 per 100,000 (Appendix 2), in the Republic of Ireland it is 12 per 100,000 compared to the United Kingdom’s 7 per 100,000. Internationally Latvia has the highest rate of 29 per 100,000, followed by Hungary at 28 and Estonia at 25.

The number of people presenting to hospitals following deliberate self-harm episodes exceeds the number of suicides by at least 20 to one. In the United Kingdom there are an estimated 170,000 occurrences annually. (www.Samaritans.org). This number has increased substantially in recent years. Both suicide and deliberate self-harm involve large numbers of young people, many in their teens. Prevention of suicidal behaviour is a major health care target for the United Kingdom Government, which in 2002 established a National Suicide Prevention Strategy for England. Other strategies are being implemented in Scotland (Choose Life) and the Republic of Ireland (Reach Out). The Suicide Prevention Taskforce is currently working on a similar strategy for Northern Ireland which should be available for consultation by March 2006.

Comparing the United Kingdom and Ireland for the period 1992 to 2002, whilst there was a decrease of 9% in England and Wales, there was a 13% increase in Scotland. However in Northern Ireland there was a 27% increase and in the Republic of Ireland there was a 26% increase. (www.samaritans.org). In the Republic of Ireland suicide and deliberate self-harm continues to be a major health issue. The Irish Association of Suicidology in 2004 highlighted the fact that the Republic of Ireland has the 17th highest suicide rate out of a listing of 24 countries. The Central Statistics Office reported 444 deaths by suicide in 2003 and 457 in 2004.
Tables of suicide rates in Northern Ireland and the Republic of Ireland from 1998 to 2003 are included in the Appendix. The main group contributing to the overall increase in the Republic of Ireland and Northern Ireland has been male suicide.

In the Republic of Ireland the suicide rates for males in the 25-34 year old age group increased by 30%, and by 53% in the 45-54 year old age group from 1992 to 2002.

In Northern Ireland the numbers of suicides in the male 25-34 year old age group has increased by 104% over the same period. Within the 45-54 year old male age group it has increased by 81%. A disturbing trend is the method of suicide. The most common method of suicide in Ireland is hanging for both males and females.
The human tragedy that a family has to face after a loved one has taken their life is one of the most distressing and traumatic events that anyone could face. This traumatic impact of suicide on families, relatives, friends and communities warrants a specific focus by those involved in promoting mental health and emotional well-being.

The INSURE Project is a multi-centred prospective study of suicidal behaviour throughout the island of Ireland. It is co-ordinated by Professor Kevin Malone, University College Dublin. Professor Roy McClelland has been co-ordinating the three study centres in the Northern Ireland/border region at Letterkenny, Omagh and Belfast. With the financial support of the European Union INTERREG IIIA programme secured by CAWT, these three study centres have been enabled to complete a follow-up investigation, over a two-year period, of people being identified as at higher risk of suicidal behaviour.

**STUDY AIMS**

The aims of the INSURE (Ireland North/South/Urban/Rural Epidemiological) Study was to better identify risk factors for suicidal behaviour by studying clinical risk factors in high risk populations. Currently known risk factors have low specificity. These factors include Psychiatric Disorder (DSM-IV Axis I), Personality Disorder (Axis II), family history, psychosocial factors and biological factors. An Axis I disorder is a clinical syndrome or other disorder, for example, depression, substance misuse or psychosis. An Axis II disorder is the presence of a personality disorder.

Clinical studies of suicidal behaviour require intensive cross-sectional assessment of large representative at-risk populations, followed by prospective follow-up research (Mann et al 1999, Malone 2000). Psychiatric disorders represent the most important clinical at risk diagnostic group for suicidal acts including suicide, yet little is known about how to scientifically or clinically stratify their risk for suicidal acts including suicide. The limitations of retrospective research highlight the need for a prospective study of bio-psychosocial factors leading to suicidal behaviour. (Hawton & van Heeringen, 2000)
The largest UK community-based case-control psychological autopsy study of suicide (Foster et al, 1999) showed that, following adjustment for DSM-III-R Axis (clinical syndrome) disorder, independent risk factors for suicide included: an Axis II (personality) disorder (particularly antisocial, avoidant and dependent); at least one of 12 life events (from the List of Threatening Experiences) during the previous 4 or 52 weeks (in particular a “serious problem with a close friend, neighbour or relative”); current unemployment; a history of deliberate self-harm and GP contact within 26 weeks. Relative to individuals with no current mental disorder, the estimated risk of suicide in those with Axis I –Axis II co-morbidity (Odds Ratio 346.0) was significantly greater (over six times) than the corresponding risk in those with Axis 1 Disorder(s) only (Odds Ratio 52.4).

The National (UK) Confidential Inquiry into Suicide and Homicide by People with Mental Illness: (Safety First) reported that 64% of suicides in England and Wales, 62% in Scotland and 64% in Northern Ireland had a history of deliberate self harm. In addition 52% in England and Wales, 48% in Scotland and 49% in Northern Ireland had a second (co-morbid) psychiatric diagnosis.

These findings support the rationale of including deliberate self-harm/attempted suicide cases and major psychiatric disorders in the study. It also supports the importance of longitudinal follow up of such an at risk population.

In this Report the findings for the three CAWT funded centres, Belfast, Omagh and Letterkenny are presented at baseline and follow up. It will focus on follow up of year one as the statistical data for year two follow up is presently being completed.
METHODOLOGY

The INSURE Project is a multi-centre study throughout the Island of Ireland. Research sites were identified at Dublin, Belfast, Omagh, Letterkenny, Ballinasloe and Portlaoise.

Year 1
A one-year study of all new psychiatric referrals to the six research sites. This includes referrals to Adult Psychiatric Services, Addiction Services and Psycho-Geriatric Services, 18 years and older.

For the purposes of the study, a newly referred patient was one who has never been in contact with mental health services in the past or one who has been out of contact for over a year.

Year 2
A one year clinical case/control study of a representative population of psychiatric emergencies attending A&E Departments including those admitted to hospital following self harm and suicide attempt.

Year 3
Follow-up of Year One.

Year 4
Follow-up of Year Two

Year 5
Psychological Autopsy. It is anticipated that a portion of those assessed in years 1 and 2 will be included in this psychological autopsy.
Instruments

A clinical diagnosis of a mental disorder (an Axis I Disorder) was obtained using the SCID (Structured Clinical Interview for Diagnostic Statistical Manual for Psychiatric Disorders (DSM-IV)) (Appendices 3 and 4). Personality Disorders (Axis II Disorders) were evaluated using the Structured Clinical Interview for DSM-IV Axis II Disorders. Recent acute psychopathology was assessed. Objective depressive symptoms were assessed using the Hamilton Depression Rating Scale. Patients’ subjective perception of depression was assessed by means of self-report with the Beck Depression Inventory. The presence and severity of psychosis were evaluated in the current episode by using the Brief Psychiatric rating Scale (BPRS). Lifetime aggression was measured using the Buss-Durkee Aggression Inventory. Impulsivity was measured with the Barrett Impulsivity Scale.

Life stressors were measured by using the St. Paul Ramsey Questionnaire, this rates the severity of individual stressors from one (none) to seven (catastrophic) in six categories ranging from marital to occupational stressors. Hopelessness was measured with the Beck Hopelessness Scale. The Reasons for Living Scale was used to assess possible protective factors against suicide attempts.

A history of physical and sexual abuse and traumatic head injury were rated as present or absent. Substance use disorders were diagnosed by using the SCID. The Royal Free Questionnaire measured religious beliefs and attitudes. Trauma was assessed using the SCID and the Mississippi Scale for non-combat trauma. Attitudes to death and dying were also assessed.

A suicide attempt was defined as a self-destructive act with a degree of intent to end one’s life. These attempts are classified as low, medium and high. Suicidal ideation was characterised by using the Scale for Suicidal Ideation. Suicide attempts were characterised by using the Suicide Intent Scale, which assessed the subject’s expectation regarding the outcome of the suicidal behaviour.
FINDINGS AT BASELINE

The Year One subjects for the three Northern sites were

Belfast 123 Subjects. These were new psychiatric referrals
Omagh 86 Subjects. to the research sites, including referrals
Letterkenny 90 Subjects. to Adult Psychiatry, Addiction Services
Total 299 Subjects. and Psycho-Geriatric Services.

The primary diagnosis for the three sites consisted of
9% Psychosis,
60% Affective Disorder,
17% Substance Misuse,
7% Anxiety Disorders,
7% No Disorder.
A history of previous suicide attempts was found in Belfast in 42% (52 Subjects), Omagh in 21% (18 Subjects) and Letterkenny in 32% (29 Subjects) giving a mean of 32%. Overall 36% of subjects with psychosis attempted suicide, 38% with affective disorder, 27% with substance misuse, 12% with anxiety disorders, 30% with no disorder.

Overall, 94% of those who had attempted suicide received a diagnosis of an Axis I disorder, compared with 93% who had not attempt suicide. 9% of attempters had a diagnosis of psychosis whereas 8% of non- attempters had psychosis. 67% of subjects who had attempted suicide were diagnosed with affective disorder whereas 57% of people who had not attempted were diagnosed with affective disorder. 14% of those who had attempted suicide, had a diagnosis of substance misuse, compared with 35% who had not attempted suicide. 3% of people who had attempted suicide, were diagnosed with anxiety disorder whereas 9% of people them did not attempt suicide were diagnosed with anxiety disorder. Finally, 6% of those who attempted suicide had no diagnosis, whereas 7% who did not attempt it had no diagnosis.
The attempted suicide subjects scored an average of 27 on the Beck Depression Inventory (BDI) compared for those who did not attempt suicide with an average score of 16 (p < 0.02).

A history of major psychological trauma was significantly associated with a history of suicide attempts. Overall 36% of subjects with a history of trauma attempted suicide compared with 25% of those with no history of trauma (p < 0.05).

The trauma of sexual and physical abuse was strongly associated with attempted suicide with 53% of those sexually abused compared with 29% not sexually abused having a history of suicide attempts (p < 0.001) in 48% of those physically abused compared with 28% not physically abused (p < 0.001).

46% of those with a family history of attempted suicide had attempted suicide compared with 31% with no family history (p < 0.01).
However a family history of psychiatric illness was not significantly associated with increased risk. 36% of the subjects with a family history of psychiatric illness attempted suicide compared with 29% who had no family history (p < 0.1).

42% of subjects who were separated from either parent for over six months before the age of 15 attempted suicide compared with 29% who were not separated (p < 0.007).

A past psychiatric history of hospitalisation or attendance at psychiatric out-patients was significantly associated with suicidal attempt. 38% of those with a past history attempted suicide compared with 26% of those who had no past psychiatric history (p < 0.001).

46% of the subjects who were unemployed attempted suicide compared with 28% who were not unemployed attempted suicide (p < 0.001).
The presence of a Personality Disorder was significantly associated with a history of suicide attempt. 42% of those who attempted suicide had a Personality Disorder compared with 27% of those who had not attempted suicide (p < 0.001). The association was significant for Cluster B (Antisocial, Borderline, Histrionic, Narcissistic) (p < 0.001) and Cluster C (Avoidant, Dependent, Obsessive Compulsive, Passive Aggressive) (p < 0.001), but not for Cluster A (Paranoid, Schizoid and Schizotypal).

There was a significant association between a history of alcohol abuse as defined by the Structured Clinical Interview for Diagnostic Statistical Manual of Mental Disorder IV and attempted suicide. 40% of subjects with a history of alcohol abuse attempted suicide compared with 30% of those with no history (p < 0.02)

Similarly 42% of Subjects with a history of any substance abuse were associated with attempted suicide compared with 29% with no history of substance abuse (p < 0.02). Substance misuse includes illicit drugs and prescribed drugs.
12% of the subjects had ever suffered troubles related trauma. There was no difference between victims and non-victims in age, Axis I and Axis II disorders, depression scores and a history of abuse. Victims were likely to be male and currently unemployed. There was no statistical difference between those subjects who had experienced troubled-related trauma and those who had not. 26% of those with troubled related trauma had attempted suicide compared with 33% of those with no history of troubled-related trauma (p < 0.375).

However a history of interpersonal stressors was statistically significant with 36% of subjects who have experienced interpersonal stressors attempted suicide compared with 25% of subjects who had not experienced interpersonal stressors (p < .05).
FOLLOW-UP FINDINGS

Demographic Data
Belfast

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<tr>
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Not contactable includes – no fixed abode, no contact details, address given as hostel (since moved), moved from previous address with no forwarding details, out of country

Omagh

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<td>Number not contactable</td>
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<td>11</td>
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**Clinical Findings**

In this follow up analysis the data from Year One was examined. This analysis found that 18 (13%) from 138 subjects followed-up had attempted or completed suicide from the initial first interview, males 10, and females 8. Considering each study location 11 (20%); 95% CI 10-33% of the Omagh follow up subjects, 4 (11%); CI 3-26% of the Belfast follow up subjects and 3 (6%); CI 1-18% of the Letterkenny follow up subjects attempted suicide. There was no statistical difference between the three sites.
The average age of the attempters was 35 years compared with 41 years for non-attempters, a mean age difference of 6 years. This emphasises the increasing trend towards younger people attempting suicide in this study. A history of being separated from a partner was associated with attempted suicide during the follow up period. 7 (39%) of cases that attempted suicide was separated compared with 11 (61%) who were never separated, risk ratio 3 (p < 0.02).

The average number of lifetime Axis I Disorders for attempters was 3 compared with 2 for non-attempters (p < 0.4).

The prevalence of Axis II Disorder (Personality Disorder) among attempters was 3 times that with non-attempters (p < 0.04).

52 (38%) subjects experienced a history of physical abuse: 9 (17%) of the 52 attempted suicide during follow-up while compared with 9 (10%) of 86 with no history of physical abuse (p < 0.24).

31 (22%) of the follow up group experienced Sexual Abuse. 7 (22%) of the 31 attempted suicide during follow-up compared with 11 (9%) of 107 with no history of sexual abuse (p < 0.05).

Overall 15% of cases that experienced either sexual or physical abuse attempted suicide during the follow up period.

A family history of psychiatric illness was associated with increased risk of attempted suicide. 18% (15 out of 83) with a family history of psychiatric illness attempted suicide compared with 5% (2 out of 55) with no family history who attempted suicide, risk ratio 3.4 (p < 0.03)

18% (9 out of 48) of subjects that had a history of substance abuse attempted suicide compared with 10% (9 out of 90) who had no history of substance misuse (p < 0.16).

Of the 138 cases in the follow up study, 7 had a family history of completed suicide. From the 18 cases that attempted or completed suicide one had a
family history of completed suicide. 24 of the follow-up sample had a family history of attempted suicide, 9 (38%) had attempted suicide during follow-up in comparison to 8% of those who had no family history of attempted suicide, risk ratio of 4.8. (p < 0.001).

41 subjects had a history of been separated from either parent for over a period of at least six months before the age of 15 years. 7 (17%) of the 41 attempted suicide during follow up compared with 11 (27%) with no history of separation (p < 0.35). One of the cases that attempted suicide was adopted

The mean score in the Beck Depression Inventory was 23 in the attempter group was not significantly different from that in the non-attempter group which was 19.

The Reasons for Living Scale examined the reasons a person has for living. It encompassed protective factors that guard against suicide. These factors include a person’s responsibility towards family, their survival and coping beliefs, fear of social disapproval, moral objections to suicide, fear of suicide and child related concerns. The mean total Reasons for Living Score was significantly different for suicide attempters (211) than for non-attempters (230; p < 0.04) (completed at baseline).

The Beck Scale of Suicidal Ideation (SSI) was completed by 16 of the subjects that attempted suicide. The mean score prior to the attempt was 10 compared to non-attempter’s score of 4 (p < 0.03) (completed at baseline)

The Suicide Intent Scale (SIS) measures the severity of the suicide intent of an act of deliberate self-harm as high, medium and low intent. From the 17 subjects one rated as high intent, while 6 were rated at medium intent, 10 subjects rated low. 7 (44%) out of the 17 subjects had been separated, 7 (44%) had a history of sexual abuse of which 6 (35%) rated in the medium to high category of the suicide intent scale. 12 (75%) of the subjects were diagnosed with an Axis II (personality disorder) of which 7 (58%) rated in the medium to high category of the SIS.

Significant associations were found between level of intent and history of partner separation (p < 0.02), family history both of psychiatric illness (p < 0.03), and attempted suicide (p < 0.01) and Axis II Disorder (p < 0.04).

While the risk ratio for substance abuse is 1.7 it is not statistically significant (p < 0.26). The same applies for unemployment with a risk ratio of 1.45
(p < 0.42). A history of psychiatric outpatient appointments or hospitalisation has a risk ratio of 1.25 (p < 0.79), again not statistically significant.

From the initial study in Year One there have been 8 (2.72%) deaths, four in Letterkenny, two in Belfast and two in Omagh. One of the deaths in Belfast was suicide. Of the remaining seven deaths one is reported as “suspicious” and is awaiting a Coroner’s Report. The findings highlight the high mortality rate among people with an initial referral to Mental Health Services.

DISCUSSION

Discussion of Findings

Since some of the patients "attempting suicide" in the INSURE Study (Northern sites) were found to have low suicide intent (e.g. 10/17 in the follow-up group) there is a need to be cautious about the extent to which the study findings inform the issue of suicide prevention. We can be more confident about the findings contributing to our understanding of the prevention of non-fatal (deliberate) self-harm. Of course, the Northern Ireland Suicide Study revealed that non-fatal self-harm was an independent (of Axis I disorder) risk factor for suicide (Foster et al, 1999).

The findings at baseline and of the follow-up study have been presented for Year 1. It is anticipated these findings will be enhanced by the information from Year Two currently being collated.

In total 8 deaths have occurred during the follow-up period for Year One of which one was suicide. The preliminary findings for Year Two follow up indicate 22 deaths during the follow up period of which 7 were suicide. Overall 30 deaths recorded during the follow-up period of which 8 were suicide.

The study methodology combined a retrospective analysis of risk factors for suicidal behaviour with a prospective assessment of future risk of such behaviour. A number of well recognised risk factors were again found to be correlated with a history of suicidal behaviour namely a family history of suicide intent, a past psychiatric history, a history of major psychological trauma, interpersonal stressors, early separation from parents,
unemployment, personality disorder and history of alcohol or substance misuse. Several of these were also found to be risk factors of suicidal behaviour during the follow-up investigation namely family history of attempted suicide, history of sexual trauma, the presence of personality disorder. Additional risk factors elicited during the follow-up investigation were family history of psychiatric illness, a history of relationship separation, low scores on Reasons for Living. These associations remained when consideration was taken of the intensity of the suicidal intent.

**Policy Implications**

All patients referred to mental health services should receive a comprehensive psychosocial assessment incorporating consideration of risk and protective factors for suicide. The INSURE Study's findings need to be considered carefully in the context of clinical implications arising from previous research including the Northern Ireland Suicide Study (Foster et al, 1997; Foster et al, 1999) and the National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (Appleby et al, 1999; Appleby et al, 2001; Meehan et al, 2006).

The biopsychosocial complexity of suicide necessitates a comprehensive package of preventive measures within and beyond the health service. The low base rate of suicide and the lack of specificity of predictors (large numbers of false positives) combine to prevent accurate prediction of suicide in individuals. Morgan (1994) stated that the "golden rule" for the assessment of suicide risk "must always be that the fundamental basis of risk assessment should be full, thorough clinical evaluation of each individual." No suicide assessment scale can be substituted for clinical judgement (Range & Knott, 1997). According to Brown (2002), existing suicide assessment scales suffer from high false positive and false negative rates and have very low positive predictive values. Recent American Psychiatric Association Practice Guideline (2003) concluded that "such rating scales cannot substitute for thoughtful and clinically appropriate evaluation and are not recommended for clinical estimations of suicide risk". The Guideline suggested that self-report rating scales "may sometimes assist in opening communication with the patient about particular feelings or experiences." The INSURE Study provides a small amount of evidence that the Scale for Suicide Ideation and the Reasons for Living Inventory may complement
clinical assessment, particularly in situations where experience of suicide risk assessment is limited. The Reasons for Living Inventory also affords a structured opportunity for people at risk of suicide to consider in detail the personal relevance of a range of possible protective factors.

The variables associated with non-fatal self-harm in the INSURE Study should be borne in mind when assessing patients referred to mental health services. Although Axis I disorders (depression, alcohol misuse, substance misuse, etc) present the most obvious initial focus for treatment, the current study and other studies confront us with the difficult challenge of Axis II (personality) disorders (particularly Clusters B and C). The weak evidence base for treatment of personality disorder and the lack of local specialist personality disorder services do not augur well for successful management of this aspect of suicidal behaviour in the near future. Kreitman (1989) considered the prospect for suicide prevention presented by those with personality disorders to be "as daunting in psychological terms as that which confronted the Victorian reformers faced with the urban slums of the 19th century" and he pointed out the need to be "aware that appropriate measures may require action just as widely based and hence equally beyond the possibilities available to the single-handed therapist". Nevertheless, the mental health needs of people with personality disorder should be considered in the strategic development of mental health services.

The INSURE Study highlights again the important role of alcohol and other substance misuse in the aetiology of suicidal behaviour. Foster (2001) suggested that "global suicide prevention strategies should include a focus on alcohol use disorders in terms of prevention, brief intervention by adequately trained and supported non-specialist staff (including in primary care), availability of multidisciplinary specialist alcohol services, and aggressive management of comorbid depression." It seems reasonable to suggest a similar strategy for non-alcohol substance misuse. In the Northern Ireland Suicide Study current unemployment was an independent (of Axis I disorder) risk factor for suicide, conferring a five-fold increased risk. The INSURE Study highlights again the ongoing need for government to tackle unemployment and its consequences.

The findings of the INSURE (Northern sites) Study are consistent with and reinforce those from other jurisdictions and earlier findings in Ireland. It is
hoped that these findings will inform local policy on prevention of non-fatal self-harm. We look forward to the outcome of Year Two data analysis and ultimately results from all the Irish sites involved in the INSURE Study.
## Appendix 1

### Suicide Rates

#### Northern Ireland

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<th>Per 100,000</th>
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<tr>
<td>Mean</td>
<td>139</td>
<td>114</td>
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**Source:** Belfast Registrar General’s Office, 2005

![Bar chart showing Suicide Rates in Northern Ireland](chart.png)
## Suicide Rates
### Republic of Ireland

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Source: Irish Association of Suicidology, 2005

![Republic of Ireland Suicide Rates](image-url)
Appendix 3

Clinical Instruments - Baseline
The clinical instruments utilised in year one were a combination of observer and self rated scales, they consisted of:

Sociodemographic Variables
• Socio-Demographic Data (modified to an Irish population)
• Clinical History

Life Events
• St Paul Ramsey Scale
• Life threatening events – past six months

Measurement of Depression Scales
• Beck’s Depression Inventory
• Hamilton Depression Inventory

Suicide Assessment Scales
• Suicide History
• Beck’s Suicide Intent Scale
• Beck’s Scale of Suicidal Ideation
• Beck’s Hopelessness Scale

Clinical Diagnostic Tools
• SCID 11 for Personality Disorders
• SCID 1 for Clinical Diagnosis

General Psychopathology
• Brief Psychiatric Rating Scale
• Global assessment Scale

Others
• Royal Free Questionnaire on Beliefs and Attitudes
• Attitudes to Death and Dying
• Reasons for Living Inventory
• Barrett Impulsivity Scale
• Buss-Durkee Inventory
• Buss-Durkee Aggression History
• Mississippi Scale for non combat trauma
• History of Physical / Sexual Abuse
Appendix 4

Clinical Instruments – Follow-Up

The clinical instruments availed of in the follow-up study were again a combination of observer and self rated

Sociodemographic Variables
- Socio-Demographic Data (Columbia University, modified to an Irish population)
- Clinical History

Life Events
- St. Paul Ramsey Scale
- Life threatening events – past six months

Measurement of Depression Scales
- Beck’s Depression Inventory
- Hamilton Depression Inventory

Suicide Assessment Scales
- Suicide History
- Beck’s Suicide Intent Scale
- Beck’s Scale of Suicidal Ideation
- Beck’s Hopelessness Scale

Clinical Diagnostic Tools
- SCID 1 for Clinical Diagnosis

General Psychopathology
- Brief Psychiatric Rating Scale
- Global assessment Scale

Others
- Royal Free Questionnaire on Beliefs and Attitudes
- Attitudes to Death and Dying
- Reasons for Living Inventory
- Barrett Impulsivity Scale
- Buss-Durkee Aggression History
- Mississippi Scale for non combat trauma
- History of Physical / Sexual Abuse
## Appendix 5

### Risk Factor Comparison

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Risk Ratio</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>P value</th>
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<tbody>
<tr>
<td>Separated</td>
<td>2.8</td>
<td>1.2</td>
<td>6.4</td>
<td>0.02</td>
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<tr>
<td>Sexual Abuse</td>
<td>2.2</td>
<td>0.9</td>
<td>5.3</td>
<td>0.07</td>
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<tr>
<td>Physical Abuse</td>
<td>1.7</td>
<td>0.7</td>
<td>3.9</td>
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<tr>
<td>Family Hx Psychiatric Illness</td>
<td>3.4</td>
<td>1.0</td>
<td>11.1</td>
<td>0.03</td>
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<tr>
<td>Family Hx Attempted Suicide</td>
<td>4.8</td>
<td>2.1</td>
<td>10.8</td>
<td>0.001</td>
</tr>
<tr>
<td>Any Axis 11 Disorder</td>
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<td>7.0</td>
<td>0.04</td>
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<tr>
<td>Substance Abuse</td>
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<td>Unemployment</td>
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<td>0.6</td>
<td>3.5</td>
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<td>Previous History of Out Patient Hospitalisation</td>
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<td>3.2</td>
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Comparison of risk factors in the follow up study of non-attempters (120) as opposed to attempters (18).

95% Confidence Interval
### Appendix 6

<table>
<thead>
<tr>
<th>Continuous Tests</th>
<th>Mean Difference</th>
<th>Lower Limit</th>
<th>Upper Limit</th>
<th>P value</th>
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<tbody>
<tr>
<td>Age Difference</td>
<td>5.4</td>
<td>-1.6</td>
<td>12.3</td>
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<td>0.02</td>
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<tr>
<td>Beck’s Depression Inventory</td>
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<td>Scale Suicidal Ideation Prior</td>
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<td>Scale Suicidal Ideation Current</td>
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<td>-0.5</td>
<td>10.6</td>
<td>0.07</td>
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</tbody>
</table>

**Comparison of continuous tests in the follow up study of non-attempters (120) as opposed to attempters (18)**

*Confidence Intervals 95%*
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