

Suicide ideation, psychological adjustment and mental health service support: A screening study in an Irish secondary school sample

Ciara Brennan, Sinéad McGilloway

Ir J Psych Med 2012; 29 (1): 46-51

Abstract

Objective: The aim of this exploratory study was to investigate the extent of suicide ideation, psychological maladjustment and views of mental health service support in a sample of secondary school pupils.

Method: A cross-sectional survey was conducted on a purposive sample of participants (n=93) recruited from a secondary school located in the south east of Ireland. Participants completed a Background Information Questionnaire (BIQ); the Suicide Ideation Questionnaire (SIQ); and the Reynolds Adolescence Adjustment Screening Inventory (RAASI).

Results: Approximately ten percent of participants displayed high levels of suicide ideation whilst one third reported having previously had suicidal thoughts; one quarter reported psychological adjustment difficulties, although these varied by age and sex. Participants' drug use and their levels of parental closeness were both individual factors that significantly predicted both suicide ideation and psychological adjustment. Females reported higher levels of parental closeness than males. Forty percent of respondents rated mental health support services as insufficient to meet their needs.

Conclusion: The findings raise serious concerns about the extent of suicidal thoughts amongst young people in Ireland; they also highlight a potentially important role for parents in this regard. Further research should ascertain national prevalence rates whilst appropriate school-based mental health education/promotion and support services should also be implemented.

Key words: Suicide ideation, Young people, Adolescents, Schools, Mental health.

Introduction

The increasing levels of suicide in Ireland, particularly amongst young people, have attracted much attention in recent years. Ireland has the fifth highest rate of youth suicide in the European Union¹ and suicide is the principal cause of death amongst young men in this country.² In 2006, 409 people in the Republic of Ireland (9.6 per 100,000) reportedly completed suicide.³ Crucially, these figures do not include parasuicide or deliberate self harm, for which the National Parasuicide Registry (NPR) recorded 11,000 hospital attendances in 2004. Recent data released by the Institute of Public Health (IPH) (Barron et al 2008)⁴ indicate an overall suicide rate for the Republic of Ireland of 11.2/100,000 (2001-2004), although this figure conceals considerable regional variations.

A number of factors have been identified as antecedents in suicidal behaviour and suicide attempts,^{5,6,7} whilst a stable progression has also been found between suicide ideation and suicidal behaviour.^{8,9} However, relatively little research on suicide ideation has been conducted amongst young people in non-clinical settings in Ireland, particularly within school-based populations. O'Sullivan¹⁰ and Lynch² have conducted research among young school-going adolescents (13-15 years old), whilst other studies have based their research on older adolescents.^{11, 12} Suicide ideation is evident in both age groups.

The principal aim of this exploratory study was to investigate the extent of suicide ideation in a sample of secondary school pupils and to assess their overall psychological adjustment. The specific study objectives were to: (1) ascertain overall levels of suicide ideation; (2) assess the prevalence of common psychological adjustment problems; (3) explore the relationship between suicide ideation, psychological adjustment and a number of key background variables including parental closeness; and (4) assess overall views of mental health service provision.

* Sinéad McGilloway,
Senior Lecturer and Director Mental Health and
Social Research Unit,
Department of Psychology,
NUI Maynooth, Maynooth,
Co. Kildare, Ireland.
E-mail Sinead.McGilloway@nuim.ie

Ciara Brennan,
HDip Student and Classroom Assistant,
Sandford Parish National School,
Ranelagh, Dublin 6, Ireland.

Submitted August 22nd 2008
Accepted August 4th 2010

Method

Participants and Settings

A purposive sample of 93 participants (46 males and 47 females) aged 15 to 18 years ($Mn=16.73$; $SD=0.75$), was recruited from a large, co-educational secondary school located in an urban area of Wexford in the south east of Ireland. Both younger (15-16 years) and older (17-18 years) age groups were targeted in order that age-related comparisons could be made. The school principal identified four classes in which there were prospective participants of a suitable age and which were deemed to be broadly representative of the different age groups within the school; each class included approximately 25 pupils. All of those present at the time of the study agreed to take part. Whilst we were unable to gauge the exact number of pupils who were absent at the time of questionnaire administration, we would estimate, from the final sample size and the average class size, that the proportion missing was approximately 5%-7%.

Measures

Participants completed (anonymously) a questionnaire booklet containing three self-report questionnaires including: 1) *A Background Information Questionnaire (BIQ)*; 2) *the Reynolds Adolescents Adjustment Screening Inventory (RAASI)*; and 3) *the Suicide Ideation Questionnaire (SIQ)*. The BIQ was designed specifically for purposes of this study to obtain key sociodemographic and background information, such as experience of suicidal thoughts (direct questions), parental closeness (Likert scale) and views of mental health provision (open-ended questions). A number of questions on the use and abuse of alcohol and drugs were also included.

The RASSI¹³ is a 32-item, easy-to-administer and psychometrically robust measure that is commonly used to screen for psychological adjustment problems (e.g. antisocial behaviour; anger control problems; emotional distress) in adolescents aged 12-19 years. Participants are asked to rate the extent to which they have experienced a particular thought in the last six months. All items use a three-point response format ranging from 'never' through 'almost never' to 'nearly all the time'. The frequency of symptoms of adjusted problems is recorded for each sub-scale. A 'Total Adjustment' score may also be calculated, based on the scores for all four sub-scales together.

The SIQ-JR,¹⁴ (Reynolds, 1987) is a brief, 15-item screening measure (with good psychometric status) designed to assess thoughts about suicide amongst adolescents aged 12 to 15 years. Item content ranges from general thoughts of death and wishes to die, to serious and more specific thoughts and ideas. Each item is rated on a 7-point scale (0-6) in order to assess the frequency of occurrence during the previous month (maximum score 90); higher scores indicate more numerous, regular suicidal thoughts. Respondents are considered to be 'at risk' if they obtain scores above 31.

Ethical considerations

This study was conducted in accordance with the Codes of Conduct of the British Psychological Society and Psychological Society of Ireland. It was also reviewed internally and discussed in detail with relevant school staff prior to commencement. Parental consent forms, devised for purposes of the study, were distributed to each

pupil and parents were asked to provide their written informed consent on an 'opt-out' basis. Participants were also given the opportunity not to take part in the study, although all agreed to take part. Whilst participants were of an age that did not require the questions to be read aloud, the researcher was on hand to answer any questions and address any concerns. No literacy problems were reported. All participants also received a self-help information booklet (e.g. on local mental health services) following questionnaire completion, and were reminded of the counselling service provided by the school. In addition, the school principal and the school counsellor were identified to the pupils as appropriate support persons. These two individuals were alerted to the findings (in writing) as soon as they became available and indicated their commitment to provide support to the relevant classes in whom 'at risk' pupils were identified.

Results

Participant profile

Most participants were living in rural settings (65%), had parents who were married (79%) and came from families with three or fewer siblings (63%). Three quarters consumed alcohol and 48% of males and 21% of females respectively were classified as 'binge drinkers' (i.e. those who consume more than 5 drinks in one setting) (World Health Organisation, 2004).¹⁵ One third confirmed using drugs such as cannabis, ecstasy, cocaine and 'speed', 42% of whom stated that they did so to relieve stress. Seventy per cent indicated that they had no trouble in acquiring drugs. Whilst females tended to report higher levels ($M=6.94$, $SD=2.9$) of parental closeness than their male counterparts ($M=5.59$, $SD=2.5$) ($t(91)=2.4$, $p=0.18$; $\eta^2=.06$), this failed to reach statistical significance.

Suicide Ideation and Experiences with Suicide

Approximately one third of participants (32%, 30/93) reported that they had, at some stage, experienced suicidal thoughts (Figure 1) (defined as thoughts of death and wanting to die), more than one quarter of whom (27%, 8/30) met the 'at risk' criteria (i.e. scores above 31) on the SIQ; 67% (20/30) of this group were in the older age group (17-18 years). We were particularly interested in exploring any age and sex differences due to previous research that suggests that these are important concerns in this area.^{10,16} Participants experienced suicidal thoughts as young as 10 years, although these most commonly occurred between the ages of 14 and 16 years (78%). More young (15-16 year olds) females (44%) than males (8%) reported being bothered by suicidal thoughts, although this had levelled off in the older age groups. A series of independent t-tests showed no significant gender or age group (younger versus older) differences in SIQ scores ($p>0.05$).

All students identified as 'high risk' (8/93) (as measured by the SIQ) were currently using drugs and more commonly reported binge drinking (43%, 13/30) than those without suicidal thoughts (29%, 18/63). Similarly, over half of this group (57%, 17/30) reported consuming drugs in the past, compared to only 14% (9/63) of those who reported no suicidal thoughts. Furthermore, 70% of all participants (64/93) knew someone who had either attempted, or completed suicide and this group was significantly more likely to experience suicide ideation than those without such knowledge ($\chi^2=5.4$, $df=93$ $p=0.02$).

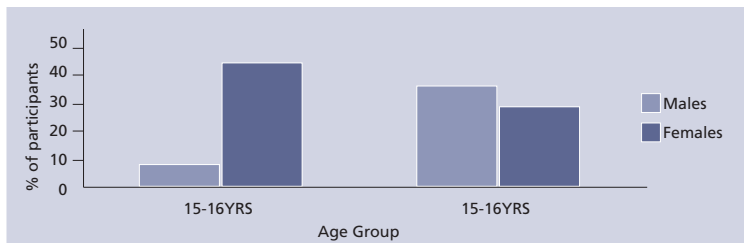


Figure 1: Proportion of participants (n=93) who had, at some stage, experienced suicidal thoughts

Psychological adjustment

Clinically relevant levels of adjustment problems were reported in one quarter (23/93) of participants and most commonly included negative self-esteem and emotional distress respectively (Figure 2). Unsurprisingly, moderate to strong positive correlations were found between the SIQ and all sub-scales of the RAASI. One third of those experiencing maladjustment (i.e. high total adjustment scores) also reported 'high-risk' levels of suicide ideation. Parental closeness was negatively and strongly correlated with both suicide ideation [$r = -.466, n = 92, p < 0.000$] and total adjustment [$r = -.437, n = 92, p < 0.000$]. None of the male participants showed signs of emotional distress, although one-quarter (6/24) of the 17-18 year old females reported clinically significant emotional problems. Poor anger control and antisocial behaviour respectively were seen in 9%-12% of older males and 5%-9% of younger females. None of the younger males or older females reported these problems. No significant age or gender differences were found with respect to the RAASI total adjustment scores, or each of the sub-scales, with the exception of emotional distress scores, which were significantly higher for females ($M = 9.66, SD = 5.1$) than for males ($M = 6.11, SD = 3.8$) ($t(91) = 4.12, p = 0.000, \eta^2 = 0.6$).

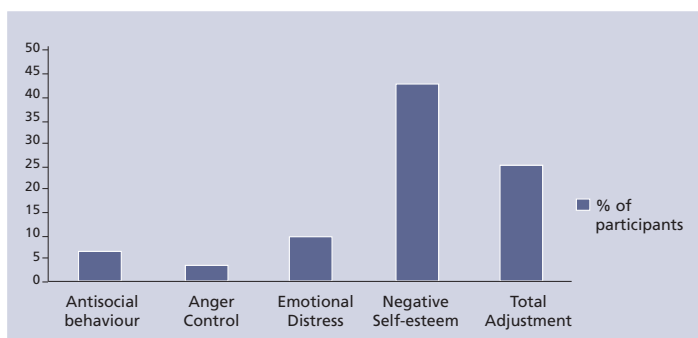


Figure 2: Levels of clinically significant adjustment problems in the sample (n=93)

A number of predictor variables were regressed upon suicide ideation and overall adjustment problems in two standard multiple regression analyses (Table 1). These variables included drug use, binge drinking, parental closeness and knowledge of someone who had completed suicide (age and sex were not included as these were only weakly correlated with SIQ and total RAASI scores). In the first analysis, 41% of the variance in SIQ scores (adjusted $R^2 = .38$) was predicted by the model and both drug use and parental closeness respectively, emerged as significant predictors of suicide ideation. Thus, the size and direction of the relationships suggested that those who engage in drug use and have low levels of

perceived parental closeness, were more likely to experience suicide ideation. Neither binge drinking, nor knowing a suicide victim, contributed significantly to this model. The second regression model (Table 1) explained 36% (adjusted $R^2 = .32$) of the variability in adjustment scores and again, drug use, followed closely by parental closeness were the most influential variables and were of a similar size and direction to those indicated above. As in the case of SIQ scores, neither of the other two independent variables made a significant unique contribution to the model.

Table 1: Summary of findings from two standard multiple regression analyses of key variables on suicide ideation (SIQ) and total adjustment (RAASI) scores respectively

	B		S.E.		Beta	
	SIQ	RAASI	SIQ	RAASI	SIQ	RAASI
Drug Use	4.5	2.9	3.7	9.63	.442	.378***
Parent closeness	1.77	.43	.54	1.28	.379	.309**
Binge drinking	.45	1.3	1.7	.008	.034	.001 ^{ns}
Know suicide Victim	2.69	2.6	3.3	3.07	.102	.125 ^{ns}

Note: SIQ: $R^2 = .41, \text{Adj } R^2 = .376$; RAASI: $R^2 = .363, \text{Adj } R^2 = .324$
 *** $p < 0.001$; ** $p < 0.01$; ^{ns} = non-significant

Service provision

Almost one third of participants reported that they had received professional help, primarily for anger management, stress and family problems. Forty per cent of those who had experienced suicide ideation (12/30) reported that they had never received any professional help whilst only one quarter of the 'high risk' group (2/8) were receiving counselling. Forty per cent of the total sample reported that they would like to receive additional information and education on mental health and that they needed more support services to help them during times of stress. Some suggestions included: the provision of younger counsellors to whom pupils could more easily relate; stress management classes; advice on supporting others with mental health difficulties; problem solving; and regular counselling sessions available to everyone.

Discussion

The principal aim of this study was to obtain a 'snapshot' of suicide ideation in an opportune sample of secondary school students. However, overall levels of psychological adjustment and participants' views of mental health service provision were also assessed. The findings suggest that a significant proportion of teenagers struggle with suicide ideation at some point in their lives and yet, most of those deemed to be currently at risk, do not appear to be seeking or receiving appropriate professional support. Nonetheless, it is interesting to note the relatively high proportion of the total sample overall, who reported that they had received professional help, primarily for anger management, stress and family problems. No information was sought on precisely the type of services used, although it is likely that a proportion of this group

sought help from the school counsellor, given the relative dearth of youth mental health services. Similarly, Sullivan and colleagues¹⁷ report that almost one in five teenagers who were experiencing problems, had received professional help.

Previous research conducted in Ireland suggests that the proportion of young people with suicide ideation has not changed substantially during the last ten years, despite greater suicide awareness and ongoing attempts to improve both formal and informal service provision.^{2,11,18} For example, an early study by O'Sullivan and Fitzgerald¹¹ found that suicide ideation and self harm rates within a sample of 13-14 year-old Dublin schoolchildren (n=88-101) ranged from 29% to 44% respectively. Another Irish study,¹⁸ conducted with younger adolescents (13-15, n=195) in a school setting, found that 15% reported suicidal thoughts – much lower than the one third seen in the current study, which also included older adolescents. In 2004, Lynch and colleagues² identified almost 20% of a sample of Irish 12-15 year-olds (n=723) to be at risk of possible suicide ideation and mental ill health. This is consistent with Sullivan et al¹⁷ who reported that 20% of pupils showed signs of possible depression. They also found that just over 30% of girls had serious thoughts of harming themselves. Thus, it is clear that there is considerable variation in suicide ideation/self harm rates amongst adolescents in Ireland. It is also difficult, on the basis of available data, to make comparisons with other countries. For instance, rates in Poland amongst adolescents appear to compare favourably to Ireland,⁷ although Italy has lower levels than reported in either country.¹⁰ It is likely, of course, that such disparity may be due to methodological differences across studies, as well as variations in sample size and overall quality.

Whilst the above studies focus on younger adolescents, the current research also included older adolescents, but more large-scale research with this group is needed, particularly as these young people are moving into an important transition phase in their lives. Furthermore, the current study was based in county Wexford, an area in which there has been a recent spate of family suicides and which has a suicide rate (13-15/100, 00) that is higher than the national average;⁴ consequently, the researchers were interested in establishing (albeit in an exploratory manner) any possible effects of this on young people living in the area. The findings reported here confirm that most of the young people surveyed knew someone who had attempted, or completed suicide and, in line with work from elsewhere, this group was more likely to experience suicidal thoughts and ideas.^{6, 12, 19} Therefore, it would appear that the young people living in this area represent a particularly important target group for mental health professionals and schools, in terms of developing effective suicide prevention strategies and appropriate support services, including school-based initiatives.

However, young people must also be prepared to seek and receive help and recent qualitative research has shown that young student males, in particular, may not be willing to seek help for a mental health problem due to a lack of understanding, stigma and confidentiality issues.¹² This may explain, at least in part, the lower levels of emotional distress reported in the young males in this study. It is also possible that there is a lack of openness among young males to recognise or admit to these feelings. Reassuringly,

the Irish Mental Health Initiative of 2003²⁰ highlights the importance of education and positive mental health promotion in suicide prevention. One of its aims is to educate adults and young people on the prevention and recognition of mental illness, to teach them how to deal with stressful situations and create their own support network. For instance, the National University of Ireland, Galway (one of the seven universities in Ireland), introduced a 'mind body and soul programme' in 2002 to promote general well-being amongst its student population. This approach has since been used in several other third level institutions and may offer a useful model for secondary level schools. Similarly, Eckert and colleagues²¹ found that implementing curriculum-based programmes to educate students about mental illness and suicide was viewed (by American students) as less invasive than school screening procedures. The Finnish government²² (which is well known for its innovative mental health service provision), has also implemented a national strategy which has effectively reduced suicide deaths across all age groups, by involving local communities in regional decision making strategies and procedures.

Research has shown that negative family environments contribute to emotional distress which, in turn, can affect suicide ideation.^{23, 24} Thus, those who have a supportive family environment are less likely to report suicidal behaviour.²⁵ Irish society, particularly in rural areas of the country, is characterised by strong family ties, and parental closeness was one factor that was examined in this study; this has not previously been reported in Irish studies. The findings outlined here suggest, in line with previous cross-cultural research,^{26, 27, 28} that parental closeness is a strong negative correlate of suicide ideation, and second only to substance abuse. This, coupled with drug use, predicted a sizeable proportion of the variance in both suicide ideation and psychological adjustment scores, although other factors are clearly at play. This highlights the potentially critical role of parenting and of strong parent-child relationships in preventing suicide, but this merits further research, both nationally and internationally, in order to tease apart the precise mechanisms involved in this relationship.

The current sample reported high levels of alcohol and drug abuse similar to those seen in other larger samples,²⁹ particularly in young people deemed to be at risk. Substance abuse has been identified as an important risk factor in suicide ideation^{30, 31} and research would suggest that the provision of mental health education and promotion in schools, should incorporate some information on substance abuse as well as depression, anxiety and some of the other more common adjustment problems seen in this study. Interestingly, the one quarter of participants in the current study who experienced some form of adjustment problem, is marginally higher than the 20 percent prevalence of mental ill health typically found amongst young people elsewhere,^{1,32} although no clinical diagnoses were used in this study.

Conclusion

This exploratory screening study was limited by a relatively small sample drawn from a single large, urban-based school and the results do not include clinical/diagnostic interviews. While the sample was one of convenience, there is no reason to expect that the 5th and 6th year classes included in this study were in any way

atypical of young people generally in this age group and indeed the findings would tend to support this; for instance, the results are consistent with those found elsewhere with both similar-sized and larger samples.

Overall, the findings raise some serious concerns about the extent of suicidal thoughts and ideas in young people whilst also highlighting, amongst other things, the importance of the parent-child relationship into the teenage years. The latter is something about which very little is known. However, it would be useful to assess regional variations within a larger national longitudinal study in order to describe and track the overall prevalence of, and changes in, suicide ideation amongst young people over time and the extent to which these relate to actual suicide rates.

It is widely acknowledged that young people on the island of Ireland lack specialist mental health service provision³³ whilst mental health services spending is also well below what is required.³⁴ Nonetheless, it is imperative that vulnerable, at risk young people can be identified as early as possible and appropriate prevention strategies put in place in order that potential deaths can be avoided into the future. The Irish National Strategy for Action on Suicide Prevention 2005-2014³⁵ advocates the development of counselling services and crisis response protocols in all primary and secondary schools throughout Ireland. Likewise, one of the aims enshrined in the recent Programme for Government document in Northern Ireland,³⁶ is to establish a suicide prevention helpline, as well as initiatives aimed at improving the life and coping skills of all those at risk of suicide.

Importantly, a significant proportion of the young people in the current study were not satisfied with mental health support and indicated a high level of unmet need. While some of their suggestions for improvement in this regard have significant resource implications (e.g. regular counselling), others could be more easily implemented in schools (e.g. younger counsellors). It is also important to note that the Irish school curriculum includes a Social Personal Health Education (SPHE) module aimed at: developing self-awareness and personal skills; emotional health; relationship skills; stress management; and promoting a greater awareness/knowledge of mental illness. Other elements of the programme are aimed at helping students to develop the confidence to protect their mental health and well being, and to examine the factors that might impact on these. It is difficult to know to what extent this programme has been effective, but at the very least, it is providing a forum to discuss the many issues that affect young people.

The prevention of suicide amongst young people continues to be controversial due, in large part, to the paucity of population-based studies and a failure to take account of the multiple risk factors involved.³⁷ The results of the research were conveyed to the school that was the focus of this study and in this way, research findings such as those reported here, may help to develop mental health promotion initiatives in schools, thereby potentially preventing deaths from suicide in 'at risk' young people into the future. However, it remains to be seen to what extent the current downturn in the Irish economy will impact upon the much needed implementation of school and other community-based mental

health promoting initiatives and support services for our young people.

Acknowledgements

We would like to thank the school principal and all of the pupils for participating in this study.

Conflict of interest

None.

References

1. WHO. World Health Organisation, European Ministerial Conference 2005. Mental health: facing the challenges, building solutions (2005).
2. Lynch F, Mills C, Daly I, Fitzpatrick C. Challenging times: a study to detect Irish adolescents at risk of psychiatric disorders and suicidal ideation. *J Adolesc* 2004; 27(4): 441-451.
3. Central Statistics Office. Vital Statistics Fourth Quarter & Yearly Summary 2006. Released 31 July 2007. http://www.cso.ie/newsevents/pr_vitalstatsq4andyear2006.htm
4. Barron S, Balanda K, Graham A, Fahy L. Irish Health Poverty Index (interim release). INISPHO Data Briefing No.2008:1. Dublin: Institute of Public Health, 2008.
5. Friedman AC. Prevalence and correlates of suicidal ideation and self-reported attempts in an adolescent community population. *Dissertation Abstracts International Section A: Humanities and Social Sciences* 1998; 59 (1): 0322.
6. Leo DD, Cerin E, Spathonis K, Burgis S. Lifetime risk of suicide ideation and attempts in an Australian community: Prevalence, suicidal process, and help-seeking behaviour. *J Affective Disorders* 2005; 86: 215-224.
7. Gmitrowicz A, Szymczak W, Kotlicka-Antczak M, Rabe-Jablonska J. Suicidal ideation and suicide attempts in Polish adolescents: Is it a suicidal process? *Int J Adolesc and Med Health* 2003; 15 (2): 113-124.
8. Miros NJ. Depression, anger, and coping skills as predictors of suicidal ideation in young adults: Examination of the diathesis-stress-hopelessness theory. *Dissertation Abstracts International: Section B: The Sciences and Engineering* 2000; 61(6): 3286.
9. Wong JPS, Stewart SM, Ho SY, Rao U, Lam TH. Exposure to suicide and suicidal behaviors among Hong Kong adolescents. *Soc Sci & Med* 2005; 61: 591-599.
10. O'Sullivan M, Fitzgerald M. Suicidal ideation and acts of self-harm among Dublin school children. *J Adolesc* 1998; 21: 427-433.
11. Miotto, P., De Coppi, M., Frezza, M., Petretto, D., Masala, C., & Preti, A. (Suicidal ideation and aggressiveness in school-aged youths. *Psychiatry Research* 2003, 120, 247-255.
12. Burke S, Kerr R, McKeon P. Male secondary school students' attitudes towards using mental health services. *Ir J Psych Med* 2008; 25(2): 52-56.
13. Reynolds WM. Reynolds Adolescent Adjustment Screening Inventory. Professional Manual Psychological Assessment Resources. Odessa FL: Psychological Assessment Resources, 2001.
14. Reynolds WM. Suicide Ideation Questionnaire. Odessa, FL: Psychological Assessment Resources, 1987.
15. World Health Organisation. Global Status on Alcohol – Binge drinking defined. Geneva: World Health Organisation, 2004.
16. Bensley, L S, Van Eenwyk, J, Spieker, S J, Schoder, J. Self-reported abuse history and adolescent problem behaviours I: Antisocial and suicidal behaviours, *Journal of Adolescent Health*, 1999, 24, 163-172.
17. Sullivan C, Arensman E, Keeley HS, Corcoran P, Perry IP. Young People's Mental Health: a report of the Lifestyle and Coping Survey. National Suicide Research Foundation, 2004.
18. Rowley J, Ganter K, Fitzpatrick C. Suicidal thoughts and acts in Irish adolescents. *Ir J Psych Med* 2001; 18(3): 82-86.
19. Fergusson DM, Beatrais AL, Horwood LJ. Vulnerability and resiliency to suicidal behaviour in young people. *Psych Med* 2003; 33: 61-73.

-
20. Kracen, A. The Mental Health Initiative: a resource manual for mental health promotion and suicide prevention in third level institutions. A partnership initiative between Trinity College Dublin and the Northern Area Health Board. Supported by the National Suicide Review Group, the Department of Health and Children, and the Department of Education and Science, 2003.
 21. Eckert TL, Miller DN, Riley-Tillman TC, DuPaul GJ. Adolescent suicide prevention: Gender differences in students' perceptions of the acceptability and intrusiveness of school-based screening programs. *J School Psychol* 2006; 44: 271–285.
 22. Jenkins R, Singh B. Suicide prevention strategies – an international perspective. *Int Rev Psychiatr* 2000; 12(1): 7–14.
 23. Connor JJ, Rueter MA. Parent–Child Relationships as Systems of Support or Risk for Adolescent Suicidality. *J Family Psych* 2006; 20(1): 143–155.
 24. Stanley H. Family characteristics that influence and differentiate adolescent non-single, and multiple suicide attempts. *Dissertation Abstracts International: Section B: The Sciences and Engineering* 2004; 65(5-B), 2008.
 25. Evan DL, Foa EB, Gur RE, Hendin H, O'Brien CP, Seligman MEP, Walsh BT. *Treating and Preventing Adolescent Mental Health Disorders: What we know and what we don't know*. London: Oxford University Press, 2005.
 26. Borowsky IW, Ireland M, Resnick MD. Adolescent suicide attempts: Risks and protectors. *Pediatrics* 2001; 107: 485-493.
 27. Séguin M, Lynch J, Labelle R, Gagnon A. Personal and family risk factors for adolescent suicidal ideation and attempts. *Arch Suicide Res* 2004; 8(3): 227-238.
 28. Bridge JA, Goldstein TR, Brent DA. Adolescent suicide and suicidal behaviour. *J Child Psych and Psychiatry* 2006; 47(3): 372–394.
 29. McCrystal P, Percy A, Higgins K. Drug use patterns and behaviours of young people at an increased risk of drug use during adolescence. *Int J Drug Policy* 2006; 17(5): 393-401.
 30. Fombonne E. Suicidal behaviours in vulnerable adolescents. Time trends and their correlates. *Br J Psychiatry* 1998; 173: 556–7.
 31. Cleary A, Nixon E, Fitzgerald M. Psychological health and well-being among young Irish adults. *Ir J Psych Med* 2007; 24(4): 139-144.
 32. Department of Health and Children. *A Vision for Change*. Dublin: Department of Health and Children, 2006.
 33. McGilloway S, Donnelly M, Scott D. Teenagers in adult psychiatric inpatient care in Northern Ireland. *Ir J Psych Med* 2000; 17(2): 54-58.
 34. O'Shea E, Gannon B, Kennelly B. Eliciting preferences for resource allocation in mental health care in Ireland, *Health Policy* 2008; doi:10.1016/j.healthpol.2008.03.018.
 35. Health Service Executive. *Reach Out: National Strategy for Action on Suicide Prevention 2005-2014*. Dublin: The Health Service Executive, 2005.
 36. Northern Ireland Executive. *Building a Better Future – Programme for Government 2008-2011*. Belfast: Northern Ireland Executive, 2008.
 37. Donnelly M, McGilloway S. Mental Disorders. In: Yarnell J, Ed. *Epidemiology and Prevention: A Systems-Based Approach*. London: Oxford University Press, 2007.