Suicide Ideation, Planning and Attempts: Results from the Israel National Health Survey

Daphna Levinson, PhD,¹ Ziona Haklai, MA,¹ Nechama Stein, MA,¹ Jacob Polakiewicz, MD,¹ and Itzhak Levav, MD¹

¹ Ministry of Health, Jerusalem, Israel

Abstract: Objectives: To establish the lifetime prevalence rates of suicide ideations, plans and attempts, and to identify the conditional risks of suicide attempts following the prior onset of suicide ideation or planning. Method: A representative sample extracted from the National Population Register of non-institutionalized residents, aged 21 or older, were interviewed at home between May 2003 and April 2004 using the Composite International Diagnostic Interview which included questions on suicide ideations, plans and attempts The final sample included 4,859 respondents. Results: About 5.5% of the adults reported that they have thought of suicide, and 1.4% that they have attempted to commit suicide during their lifetime. The year following the onset of ideation constitutes the year of highest risk for suicide attempt. Conclusion: The risk of suicide attempt is highest among individuals with mental health disorders, while the transition from suicide ideation to suicide attempt among them is more likely to be planned. The youngest age group has the highest odds of suicide attempts and the highest odds of impulsive suicide attempts.

Introduction

Suicidal behavior might be regarded as a process of varied length that usually stretches over many years, from suicide ideation (thoughts about the worthlessness of life and death wishes) to concrete planning ending in actual suicide attempts (1, 2). The study of such a process in the general population is important, for the prediction of potentially preventable deaths, and for the relief and monitoring of the high distress level expressed by this behavior.

Information on suicide attempts in the Israeli general population was until now based on emergency department (ED) admissions (3, 4). Community surveys on suicidal behaviors were until now limited to samples of school children and youth (5) and to a limited study on suicidal ideation among Jewish-Israeli adults (6).

The Israel National Health Survey (INHS), designed to collect data on a wide variety of mental health and related topics, provided the first opportunity to study the prevalence rates and the associated factors of the three components of suicidal behaviors in the general population. This paper presents the lifetime prevalence rates of suicide ideations, plans and attempts, and the conditional risks of suicide at-

tempts given the prior onset of suicide ideation or plan. In addition, we present the risk of suicide in the context of anxiety, mood or substance disorders and of other socio-demographic variables. The effect of DSM-IV disorders and other risk factors is examined also on the odds of the transition from ideation to planning, and the transition from ideation to attempt in the presence or absence of a plan.

Methods

The Israeli survey is part of the World Mental Health Survey (WMH) (7) and followed the procedures established by the project coordinators (7). The sample was extracted from the National Population Register (NPR), and comprised non-institutionalized *de jure* residents aged 21 and over. It was designed to reflect a distribution of respondents combining gender, age and population groups (i.e., Arab-Israelis, immigrants from the former U.S.S.R. since 1990, Jewish-Israelis and others not included in the first two groups). The interviewed sample was weighted back to the total population to compensate for unequal selection probabilities resulting from disproportionate stratification, clustering effects and non-response. The weights were adjusted to make weighted sample

Address for Correspondence: D. Levinson, PhD, Mental Health Services, Ministry of Health, 2 Ben Tabai St., Jerusalem, Israel, 91010. E-mail: Daphna.Levinson@moh.health.gov.il

totals conform to known population totals taken from reliable Central Bureau of Statistics (CBS) sources. Face-to-face interviews at the respondents' home were conducted from May 2003 to April 2004 in Arabic, Hebrew or Russian. The survey was administered using laptop Computer-Assisted Personal Interview (CAPI) methods by professional survey interviewers trained and supervised by the CBS. A letter, signed by the Government Statistician explaining the purpose of the survey and the rights of respondents, was sent to each potential respondent a few days prior to the first contact attempt. Upon making in-person contact with the sampled respondent, the interviewer explained the survey again and obtained verbal informed consent. Interviews took an average of 60 minutes. The overall response rate was 73%: 88% among Arab-Israelis and 71% among Jewish and others-Israelis, totaling 4,859 completed interviews. There were no replacements. A Human Subjects Committee approved the study.

Measures

This report covers the following sections of the more extensive interview schedule:

Socio-demographic information

A standard questionnaire on socio-demographic variables was administered to all respondents. The variables included in the analysis were gender, age cohort and educational attainment. The cohort variable was coded to differentiate respondents aged 21–34, 35–49, 50–64 and 65 and over. Educational attainment was coded to differentiate respondents with first onset of either ideation plan or attempt while they were students, from those who had one or more of those behaviors after finishing their schooling. Within this group we differentiated those who had less than high school education, completed high school, had some college education, or graduated from college or had further education.

Diagnostic Assessment

The diagnostic instrument in the WMH was the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI) (7), a fully structured diagnostic instrument which assesses lifetime and recent prevalence of selected psychiatric disorders according to both the International Classi-

fication of Diseases (ICD-10) and the DSM-IV classification systems. In our survey, the following disorders were assessed: anxiety disorders (panic disorder, generalized anxiety disorder [GAD]), agoraphobia without panic disorder, and post-traumatic stress disorder (PTSD), mood disorders (major depressive disorder, dysthymia, bipolar I and II disorders) and substance abuse disorders. In this survey, the anxiety disorders excluded specific phobias or social anxiety disorder.

The presence of mental disorder was determined by whether respondents' past or current symptoms met the 12-month and/or lifetime diagnostic criteria for DSM-IV disorder. For each disorder, a screening section was administered to each respondent. All participants answering positively to a specific screening item were asked the questions of the respective diagnostic section of the questionnaire. Organic exclusion criteria were taken into account in the determination of the DSM-IV diagnoses. In this paper only lifetime disorders are presented given the rarity of suicidal behaviors during one-year period (N=11).

Suicidal behavior

The question about suicide ideation was administered to all respondents. Those who answered positively were subsequently asked about suicide plans and attempts. Suicide ideation was explored as follows: "Have you ever seriously thought about committing suicide?"; suicide plan by the question "Have you ever made a plan for committing suicide?"; and suicide attempt by the question "Have you ever attempted suicide?" For each of the suicide outcomes, information was obtained about age at first occurrence and about possible occurrence in the last 12 months.

Suicide Attempts admitted to Emergency Departments

The age of onset distribution of the suicide measures obtained in this survey was compared to the age distribution of individuals admitted to the ED for attempted suicides in 25 general hospitals during the year 2002 (the last available administrate data). These hospitals include 94% of all admissions to EDs in the country

Analysis

Simple cross-tabulations were used to investigate the associations among suicide ideation, plans and attempts. Discrete-time survival analysis with time-varying covariates was used to study retrospectively assessed socio-demographic and diagnostic correlates of each outcome. Coefficients were converted to odds ratios (ORs). Standard errors and significance tests were estimated using the Taylor series method of the SUDAAN software to adjust for design effects. The accumulated distribution of the age of onset reported for suicide ideation, plan and attempt was compared to the accumulated age distribution of all suicide attempts admitted to emergency departments.

Results

Prevalence rates

The estimated lifetime prevalence rates of suicide ideation, plans and attempts were 5.5% (95% CI 5.2-5.8), 1.9% (95% CI 1.7-2.1) and 1.4% (95% CI 1.2-1.6), respectively. All outcomes were higher among females than among males: lifetime prevalence of suicide ideation, 6.2% (95% CI 5.7-6.7) vs. 4.8% (95% CI 4.3-5.2); lifetime prevalence of suicide planning, 2.3% (95% CI 2.0-2.6) vs. 1.5% (95% CI 1.2-1.8); and lifetime prevalence of suicide attempts, 1.7% (95% CI 1.4-2.0) vs. 1.0% (95% CI 0.8-1.2).

In addition, Table 1 shows the dependency between the three outcome measures. Among suicide

ideators, the conditional probability of ever making a suicide plan was 35.3% (95% CL 32.1–38.4), and 25.0% (95% CL 22.1–27.9) for ever making a suicide attempt. The probability of attempt among ideators with a plan was 55.5% (95% CI 50.0–61.0), but considerable less, 8.3% (95% CI 6.2–10.4), among those without a plan.

Prior DSM-III-R disorders as risk factors

Table 2 shows the odds for having suicide ideation, designing a plan or making an attempt *after* the onset of any one of the disorders investigated (see Methods). For instance, the presence of prior panic disorder increased the odds of suicide ideation 2.8 times; of a suicide plan, 8.5 times; and of suicide attempt, 12.1 times.

The presence of each of the mental disorders investigated was associated with an increased risk of a subsequent first onset of suicide ideation, plan and attempt. The risk of suicide was highest for respondents with bipolar disorders (odds of 13.4, 22.8 and 43.0 for ideation, planning and attempt, respectively). Next in order were dysthymia and post-traumatic disorders. Substance use disorders were the lowest relative to other disorders. There was a significant dose-response relationship between number of prior disorders and odds of attempted suicide. Thus respondents with three or more disorders had relative odds of an attempt 19.7 times higher than respondents with no disorders.

Table 1. Lifetime Prevalence Rates of Suicidal Behaviors, Total Sample (N = 4859)

	Total			Males			Females		
	N	%	SE	N	%	SE	N	%	SE
Ideation	268	5.5	0.3	112	4.8	0.5	156	6.2	0.5
Plan	93	1.9	0.2	35	1.5	0.3	58	2.3	0.3
Attempt	66	1.4	0.2	24	1	0.2	42	1.7	0.3
Plan among ideators ¹	93	35.3	3.2	35	31.6	4.7	58	38	4.4
Attempt among ideators ¹	66	25.0	2.9	24	21.8	4.1	42	27.3	3.9
Attempt among ideators									
without a lifetime plan ²	15	8.3	2.1	6	8.4	3.4	9	8.2	2.7
Attempt among ideators									
with a lifetime plan ³	51	55.5	5.5	18	50.7	9	33	58.4	6.8

 $^{^{1}}$ N of ideators = 268 2 N of ideators without a lifetime plan= 175 3 N of ideators with a lifetime plan= 93

Table 2. DSM-IV Disorders as Risk Factors for 1st Onset of Suicidal Behaviors: Total Sample (N=4837)

	I	deation	Plan			Attempt		
Disorder	0R	(95% CI)	OR	(95% CI)	OR	(95% CI)		
Anxiety								
Panic disorder	2.8	(0.7-11.2)	8.5*	(2.0-35.6)	12.1*	(2.9-50.4)		
Generalized anxiety disorder	7.9*	(4.8-13.0)	5.5*	(2.2-13.2)	7.8*	(3.1-19.6)		
Post-traumatic stress disorder	6.5*	(3.3-12.5)	10.0*	(4.0-24.7)	16.6*	(7.0-39.1)		
Any anxiety disorders	6.5*	(4.3-9.9)	7.1*	(3.7-13.7)	12.1*	(6.3-23.4)		
Mood								
Major depressive episode	7.7*	(5.5-10.9)	9.9*	(5.8-16.8)	10.0*	(5.3-18.7)		
Dysthymia	10.8*	(6.5-18.0)	19.5*	(9.4-40.4)	15.8*	(6.4-39.4)		
Bipolar disorder	13.4*	(5.0-36.0)	22.8*	(6.2-84.2)	43.0*	(13.0-141.8)		
Any mood disorders	8.5*	(6.0-11.8)	12.1*	(7.2-20.5)	12.2*	(6.5-22.8)		
Substance use								
Alcohol abuse	2.0	(1.0-4.2)	4.8*	(2.0-11.7)	6.0*	(2.2-16.6)		
Drug abuse	6.4*	(3.2-12.8)	5.4*	(1.8-16.5)	5.7*	(1.5-21.0)		
Any substance use disorders	3.0*	(1.7-5.2)	5.1*	(2.3-11.2)	5.8*	(2.2-14.9)		
Any								
Any disorders	6.7*	(4.9 - 9.1)	11.1*	(6.8-18.2)	15.2*	(8.5-27.0)		
1 disorder	2.3*	(1.4-3.8)	4.2*	(2.0-8.9)	4.1*	(1.7-10.2)		
2 disorders	7.4*	(4.9-11.3)	5.9*	(2.9-12.0)	11.1*	(5.5-22.2)		
3+ disorders	14.8*	(9.3-23.7)	22.6*	(12.0-42.6)	19.7*	(9.3-42.0)		

^{*} OR significant at the 0.05 level, 2-sided test

Table 3. DSM-IV Disorders as Risk Factors for 1st Onset of Suicidal Behaviors: Relationship between Outcomes

	Plan Among ideators		Attempt among ideators		Attempt among ideators without a lifetime plan		Attempt among ideators with a lifetime plan	
	(n=246)	1)	1=246)	(r	n=175)		
Disorder	OR	(95% CI)	0R	(95% CI)	0R	(95% CI)	0R	(95% CI)
Anxiety								
Panic disorder 152	7604*	(726883.1- 3210385)	2.7	(0.5-13.7)	1.0*	(1.0-1.0)	5.8*	(1.1-30.0)
Generalized anxiety disorder	0.8	(0.3-2.3)	1.5	(0.5-4.7)	1.4	(0.1-13.8)	3.7	(1.0-14.6)
Post-traumatic stress disorder	3.0	(0.7-12.5)	7.6*	(2.7-21.4)	5.7	(0.6-50.4)	17.1*	(5.7-51.6)
Any anxiety disorders	1.6	(0.7-3.8)	3.2*	(1.5-6.8)	1.9	(0.3-10.9)	6.4*	(2.2-18.7)
Mood								
Major depressive episode	1.5	(0.8-2.8)	1.4	(0.6-2.9)	0.4	(0.1-1.8)	2.2	(0.7-6.5)
Dysthymia	3.5*	(1.3-9.3)	1.6	(0.6-4.5)	0.0*	(0.0-0.0)	2.9	(0.7-11.9)
Bipolar disorder (broad)	3.1	(0.7-12.8)	7.3*	(2.1-25.7)	0.0*	(0.0-0.0)	23.4*	(3.8-144.6)
Any mood disorders	1.8	(1.0-3.3)	1.4	(0.7-3.0)	0.4	(0.1-1.8)	2.2	(0.8-6.3)
Substance use								
Alcohol abuse	3.1	(0.8-12.9)	3.2	(0.9-10.8)	5.2	(0.4-68.8)	3.2	(0.9-11.2)
Drug abuse	1.0	(0.3-3.6)	0.8	(0.1-5.8)	3.9	(0.6-24.4)	0.4	(0.0-3.9)
Any substance use disorders	2.3	(0.8-6.6)	1.7	(0.5-6.5)	5.5*	(1.0-29.0)	1.1	(0.3-4.3)
Any								
Any disorders	2.2*	(1.2-4.1)	2.8*	(1.3-5.7)	1.3	(0.4-4.5)	4.8*	(1.5-15.4)
1 disorder	2.0	(0.9-4.3)	1.5	(0.5-5.0)	1.5	(0.3-8.0)	1.1	(0.3-4.9)
2 disorders	0.9	(0.4-2.0)	2.3	(1.0-5.4)	1.5	(0.5-4.6)	3.0	(0.8-11.3)
3+ disorders	3.0*	(1.1-7.6)	1.6	(0.7-3.7)	0.0*	(0.0-0.0)	3.4*	(1.1-11.0)

 $^{^{\}star}$ OR significant at the 0.05 level, 2-sided test

The effect of the presence of mental disorders was much smaller on the transition from ideation to planning or attempt. Yet, the odds of moving from ideation to attempt were 7.3 and 7.6 higher among respondents with bipolar disorder or PTSD, respectively. Table 3 also shows that the presence of a mental disorder had a much higher effect on suicide attempts with a plan than without a plan. The odds of planned suicide attempts were higher, while more of them were significant, compared to the odds of "impulsive" attempts; i.e., attempts without a preceding plan. This was the case with regard to the odds of planning attempts among those with panic disorder, 5.8; PTSD, 17.1; bipolar disorder, 23.4; and, in general, among those with "any anxiety disorder," 6.4; "any disorders," 4.8; or having "3 or more" mental disorders, 3.4.

Suicide ideations, plans or attempts were significantly more common among the youngest age cohort. The odds of suicide ideation decreased between the age cohorts 21–34, 35–49 and 50–64 compared to aged 65, from 10.8 to 4.0 and 2.1; for ideation, from 8.3 to 3.6; and 2.6, for planning; and from 16.0 to 6.8 and 4.0 for attempts (Table 4).

Table 4 shows also that the younger age cohorts not only have higher odds of suicide attempts but also have higher odds of "impulsive" attempts. That is, in the younger age groups more suicide attempts among ideators had been committed without a preceding suicide plan.

Table 5 shows that the 12 months following the onset of suicide ideation were of highest risk. During the first year after onset of ideation the odds of having a suicide plan or a suicide attempt without or with a plan were 99, 107 and 24,540 times higher, respectively, than after 10 years. In the subsequent 5 or 10 years, the odds of a suicide attempt were higher among those who had a plan.

Table 4. Odds of Suicidal Behaviors by Age Cohort. Total Sample (N=4837)

Suicidal behaviors		21–34		35–49	50-64		
	OR	95% CI	OR	95% CI	OR	95% CI	
Ideation	10.8*	(6.2-18.8)	4.0*	(2.4-6.7)	2.1*	(1.3-3.3)	
Plan	8.3*	(3.3-20.9)	3.6*	(1.4-8.9)	2.6*	(1.2-5.9)	
Attempt	16.0*	(4.5-56.8)	6.8*	(2.0-23.5)	4.0*	(1.2-12.6)	
Plan among ideators ¹	0.8	(0.3-2.2)	1.0	(0.4-2.5)	1.7	(0.7-4.2)	
Attempt among ideators ¹	3.9	(1.0-15.5)	4.2*	(1.2-14.5)	3.0	(0.9-9.6)	
Attempt among ideators without a lifetime plan ² Attempt among ideators	16.9*	(1.5-190.9)	7.7*	(1.2-50.9)	1.0	-	
with a lifetime plan ³	3.3	(0.6-18.6)	4.6	(0.9-23.7)	3.6	(0.8-15.7)	

¹ N of ideators = 246 ² N of ideators without a lifetime plan= 163 ³ N of ideators with a lifetime plan= 83

Table 5. Years since Onset of Ideation as Risk Factor for First Onset of Suicide Plans or Attempts

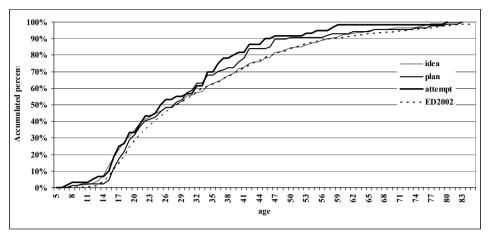
Suicidal behaviors		Years since Onset of Ideation								
		0		1–5	6–10					
	0R	95% CI	OR	95% CI	OR	95% CI				
Plan among ideators ¹	99.0*	(25.1-390.2)	1.9	(0.4-8.0)	0.9	(0.1-5.3)				
Attempt among ideators ¹ Attempt among ideators	122.2*	(25.8–578.2)	4.0	(0.8-19.9)	0.8	(0.1-9.5)				
without a lifetime plan ² Attempt among ideators	107.7*	(8.6-1347.1	8.7	(1.0-72.2)	0.0*	(0.0-0.0)				
with a lifetime plan ³	24540.5*	(2896.9-207890.0)	1744.0*	(315.9-9627.1)	13953.8*	(1256.7-154931.8)				

¹ N of ideators = 246 ² N of ideators without a lifetime plan= 163 ³ N of ideators with a lifetime plan= 83

^{*} OR significant at the 0.05 level, 2-sided test

 $^{^{\}star}$ OR significant at the 0.05 level, 2-sided test

Figure 1: Age of onset of suicide ideation, plan and attempt vs. age of suicide attempt admitted to hospital emergency department during 2002: Accumulated distributions



Age of onset

Figure 1 presents the accumulated distributions of the age of onset reported for suicide ideation, plan and attempt; in general, the three distributions were almost parallel. Of all respondents who reported a suicide ideation, plan or attempt, about 60% had the first ideation, plan or attempt before they reached the age of 35. The age distribution of all those who attempted suicide and were registered in the emergency departments showed that of all those admitted within one year, about 60% were of individuals before the age of 35.

Socio-demographic effects

The effects of gender and education on ideation planning or attempts did not reach statistical significance, and there were no effects of gender or education in predicting plans and attempts among ideators.

Discussion

The results of the Israel National Health Survey showed that over their lifetime, 5.5% of the adults reported that they have thought of suicide and that 1.4% have attempted to commit suicide.

About 60% of the individuals ever thinking or planning or attempting to commit suicide have done it for the first time before the age of 35. This finding, based on retrospective self-report of the occurrence and timing of thoughts and attempts, received some external validation from the age distribution of all those who attempted to commit suicide and were

registered in the emergency departments in Israel in 2002.

The results also show that the first year after onset of ideation is the one of highest risk for suicide attempt.

In addition, the present study shows the odds of transition from ideation to plans and to actual suicide attempt. The relationship between common mental disorders and suicide attempts (8) exists, to a large extent, on the relationship between common mental disorders and suicide ideation only.

With the exception of bipolar disorder and PTSD, the mere presence of common mental disorder did not increase the risk of suicide attempt among those who have already contemplated it. Bipolar disorder and PTSD are associated with factors that cause the transition from ideation to suicide attempt.

Planned attempts vs. impulsive attempts

Another noteworthy result is that among ideators with mental disorders, the odds of a suicide attempt with a plan were higher than the odds of impulsive (attempt without a plan) suicide attempt. The opposite is true for ideators of the youngest age group. Individuals in this group who contemplate suicide were more likely to act upon their ideations impulsively (without a plan) than after the formulation of a suicide plan.

Our study had some limitations that should be considered when evaluating its results.

First, the response rate was relatively high but could have been related to the presence of mental disorders or suicide-related outcomes. To the extent that the sample consists of the more healthy individuals, the results obtained provide an underestimate of the prevalence of suicide related behaviors.

Second, our survey focused only on the common mental health disorders. It did not cover the full spectrum of mental disorders and might have excluded important disorder-related risk factors such as schizophrenia.

Third, the data were based on retrospective self-report of the occurrence and timing of suicide-related outcomes, and could therefore be biased. In an attempt to compensate for this limitation we included the age distribution of all attempts that were admitted to emergency departments of the general hospitals. The comparison between the distributions strengthen our confidence that memory lapses in the survey did not change significantly the broad picture.

These limitations notwithstanding, the results provide valuable and previously unavailable information on the rates of suicide-related outcomes in Israel

From a public health perspective the results of this survey have two implications:

First, the risk of suicide attempt is highest among those with mental health disorders. This group is more likely to have suicide ideations and the transition from suicide ideation to suicide attempt is more likely to be planned. The provision of treatment to those suffering from mental disorders is not only necessary to reduce suffering but is a matter of life and death for some.

Second, the youngest age group has the highest odds of suicide attempts but also has the highest odds of impulsive suicide attempts. Impulsive attempts cannot be predicted, but from this survey we learn that they are more likely to occur within the first year following the onset of suicide ideation. Given that almost 40% of first ideations occur before the age of 20 when most individuals are still in educational or army- type settings, follow up (9–11) on individuals who express suicide ideation seems to be the better approach.

Acknowledgements

The National Health Survey was funded by the Ministry of Health with additional support from the Israel National Institute for Health Policy and Health

Services Research and the Israel National Insurance Institute. The views and opinions expressed in this chapter are those of the authors and should not be construed to represent the views of any of the sponsoring organizations, or of the Government.

The Israel Health Survey was carried out in conjunction with the World Health Organization/World Mental Health (WMH) Survey Initiative. We thank the staff of the WMH Data Collection and Data Analysis Coordination Centres for assistance with instrumentation, fieldwork and consultation on data analysis. These activities were supported by the National Institute of Mental Health (R01 MH070884), the John D. and Catherine T. MacArthur Foundation, the Pfizer Foundation, the U.S. Public Health Service (R13-MH066849, R01-MH069864, and R01 DA016558), the Fogarty International Center (FIRCA R03-TW006481), the Pan American Health Organization, Eli Lilly and Co, Ortho-McNeil Pharmaceutical, Inc., GlaxoSmithKline, and Bristol-Myers Squibb. A complete list of WMH publications can be found at http://www.hcp.med.harvard.edu/wmh/.

References

- 1. Goldney RD, Wilson D, Dal Grande E, Fisher J, McFarlane AC. Suicidal ideation in a random community sample: Attributable risk due to depression and psychosocial and traumatic events. Aust N Z J Psychiatry 2000;34:98–106.
- Kessler RC, Borges G, Walters EE. Prevalence of and risk factors for lifetime suicide attempts in the National Comorbidity Survey. Arch Gen Psychiatry 1999;56: 617-626
- 3. http://www.health.gov.il/pages/default.asp?maincat= 2&catId=396&PageId=2707 (Hebrew)
- 4. Levinson D, Haklai Z, Stein N, Gordon ES. Suicide attempts in Israel: Age by gender analysis of a national emergency departments database. Suicide Life Threat Behav 2006;36:97-102.
- 5. Harel Y, Molcho M, Tillinger E. Youth in Israel: Health, well being and risk behavior: Summary of findings from the third national study (2002) and trend analysis (1994–2002). Ramat Gan, Israel: Bar-Ilan University, 2003 (Hebrew).
- Levav I, Magnes Y, Aisenberg E, Rosenblum I, Gil R. Sociodemographic correlates of suicidal ideation and reported attempts. A brief report on a community survey. Isr J Psychiatry Relat Sci 1988;25:38–45.

- 7. Kessler RC, Ustun TB. The World Mental Health (WMH) survey initiative version of the World Health Organization (WHO) composite international diagnostic interview (CIDI). International J Methods in Psychiatric Research 2004;13:93–121.
- Cole TB, Glass RM. Mental illness and violent death: Major issues for public health. JAMA 2005;294:623-624
- 9. Evans MO, Morgan HG, Hayward A, Gunnell DJ. Crisis telephone consultation for deliberate self-harm patients: Effects on repetition. Br J Psychiatry 1999;175: 23–27.
- 10. Cedereke M, Monti K, Ojehagen A. Telephone contact with patients in the year after a suicide attempt: Does it affect treatment attendance and outcome? A randomised controlled study. Eur Psychiatry 2002;17:82–91.
- 11. Vaiva G, Ducrocq F, Meyer P, Mathieu D, Philippe A, Libersa C, Goudemand M. Effect of telephone contact on further suicide attempts in patients discharged from an emergency department: Randomised controlled study. BMJ 2006;332:1241-1245.