

goodat

Suicide and Self-Harm

Global Suicide Scenario

- 41,000 people die by suicide each year in the United States
- 800,000 die every year, 1.4% off all deaths worldwide
- 10th leading cause of death overall.
- 75% of global suicide occurred in low- and middle-income countries in 2012

10 Leading Causes of Death by Age Group, United States – 2013

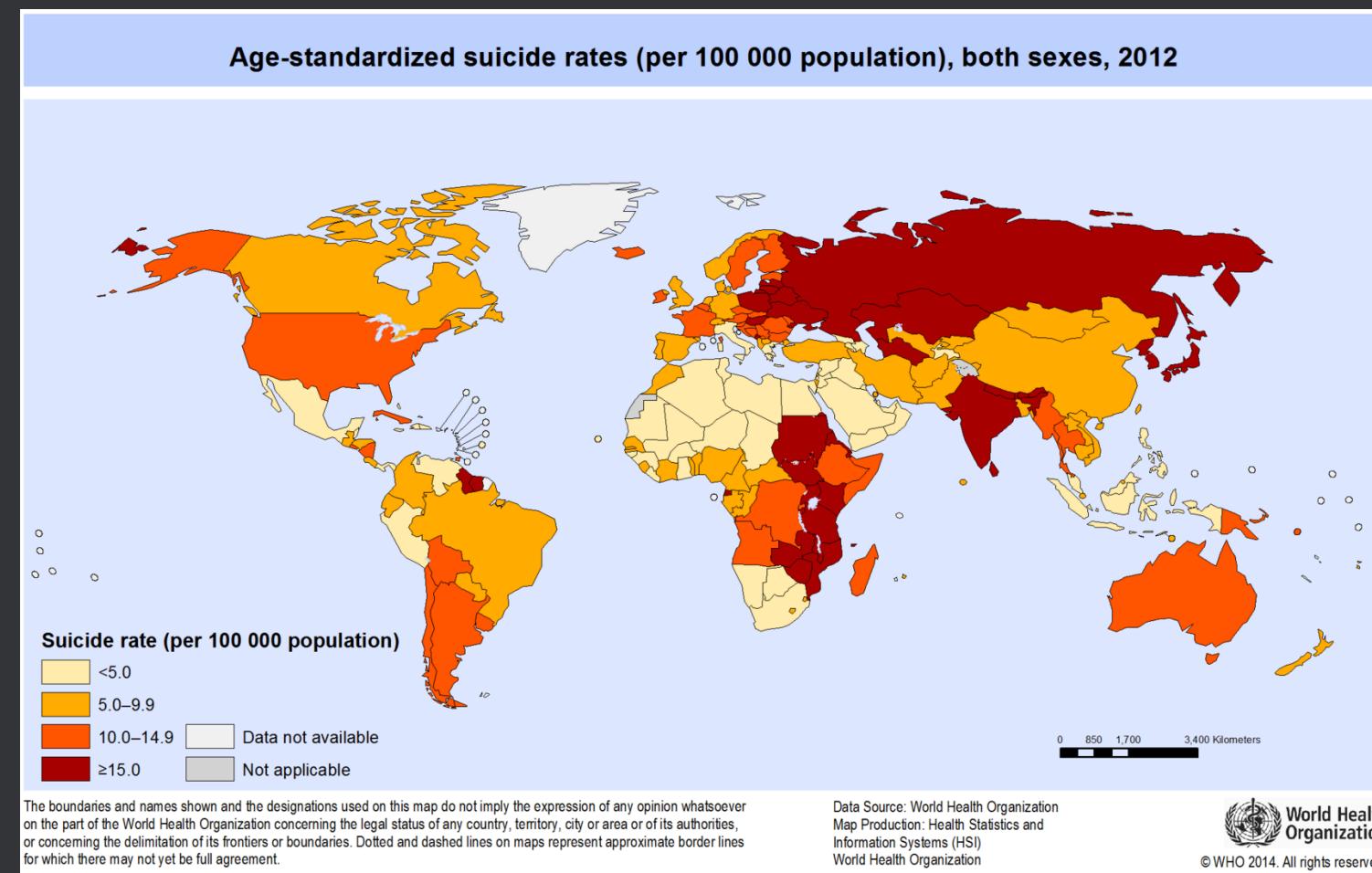
Rank	Age Groups											Total
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+		
1	Congenital Anomalies 4,758	Unintentional Injury 1,316	Unintentional Injury 746	Unintentional Injury 775	Unintentional Injury 11,619	Unintentional Injury 16,209	Unintentional Injury 15,354	Malignant Neoplasms 46,185	Malignant Neoplasms 113,324	Heart Disease 488,156	Heart Disease 611,105	
2	Short Gestation 4,202	Congenital Anomalies 476	Malignant Neoplasms 447	Malignant Neoplasms 448	Suicide 4,878	Suicide 6,348	Malignant Neoplasms 11,349	Heart Disease 35,167	Heart Disease 72,568	Malignant Neoplasms 407,558	Malignant Neoplasms 584,881	
3	Maternal Pregnancy Comp. 1,595	Homicide 337	Congenital Anomalies 179	Suicide 386	Homicide 4,329	Homicide 4,236	Heart Disease 10,341	Unintentional Injury 20,357	Unintentional Injury 17,057	Chronic Low. Respiratory Disease 127,194	Chronic Low. Respiratory Disease 149,205	
4	SIDS 1,563	Malignant Neoplasms 328	Homicide 125	Congenital Anomalies 161	Malignant Neoplasms 1,496	Malignant Neoplasms 3,673	Suicide 6,551	Liver Disease 8,785	Chronic Low. Respiratory Disease 15,942	Cerebro-vascular 109,602	Unintentional Injury 130,557	
5	Unintentional Injury 1,156	Heart Disease 169	Chronic Low. Respiratory Disease 75	Homicide 152	Heart Disease 941	Heart Disease 3,258	Homicide 2,581	Suicide 8,621	Diabetes Mellitus 13,061	Alzheimer's Disease 83,786	Cerebro-vascular 128,978	
6	Placenta Cord. Membranes 953	Influenza & Pneumonia 102	Heart Disease 73	Heart Disease 100	Congenital Anomalies 362	Diabetes Mellitus 684	Liver Disease 2,491	Diabetes Mellitus 5,899	Liver Disease 11,951	Diabetes Mellitus 53,751	Alzheimer's Disease 84,767	
7	Bacterial Sepsis 578	Chronic Low. Respiratory Disease 64	Influenza & Pneumonia 67	Chronic Low Respiratory Disease 80	Influenza & Pneumonia 197	Liver Disease 676	Diabetes Mellitus 1,952	Cerebro-vascular 5,425	Cerebro-vascular 11,364	Influenza & Pneumonia 48,031	Diabetes Mellitus 75,578	
8	Respiratory Distress 522	Septoemia 53	Cerebro-vascular 41	Influenza & Pneumonia 61	Diabetes Mellitus 193	HIV 631	Cerebro-vascular 1,687	Chronic Low. Respiratory Disease 4,619	Suicide 7,135	Unintentional Injury 45,942	Influenza & Pneumonia 56,979	
9	Circulatory System Disease 458	Benign Neoplasms 47	Septicemia 35	Cerebro-Vascular 48	Complicated Pregnancy 178	Cerebro-vascular 508	HIV 1,246	Septicemia 2,445	Septicemia 5,345	Nephritis 39,080	Nephritis 47,112	
10	Neonatal Hemorrhage 389	Perinatal Period 45	Benign Neoplasms 34	Benign Neoplasms 31	Chronic Low. Respiratory Disease 155	Influenza & Pneumonia 449	Influenza & Pneumonia 881	HIV 2,378	Nephritis 4,947	Septicemia 28,815	Suicide 41,149	

Data Source: National Vital Statistics System, National Center for Health Statistics, CDC.
Produced by: National Center for Injury Prevention and Control, CDC using WISQARS™.

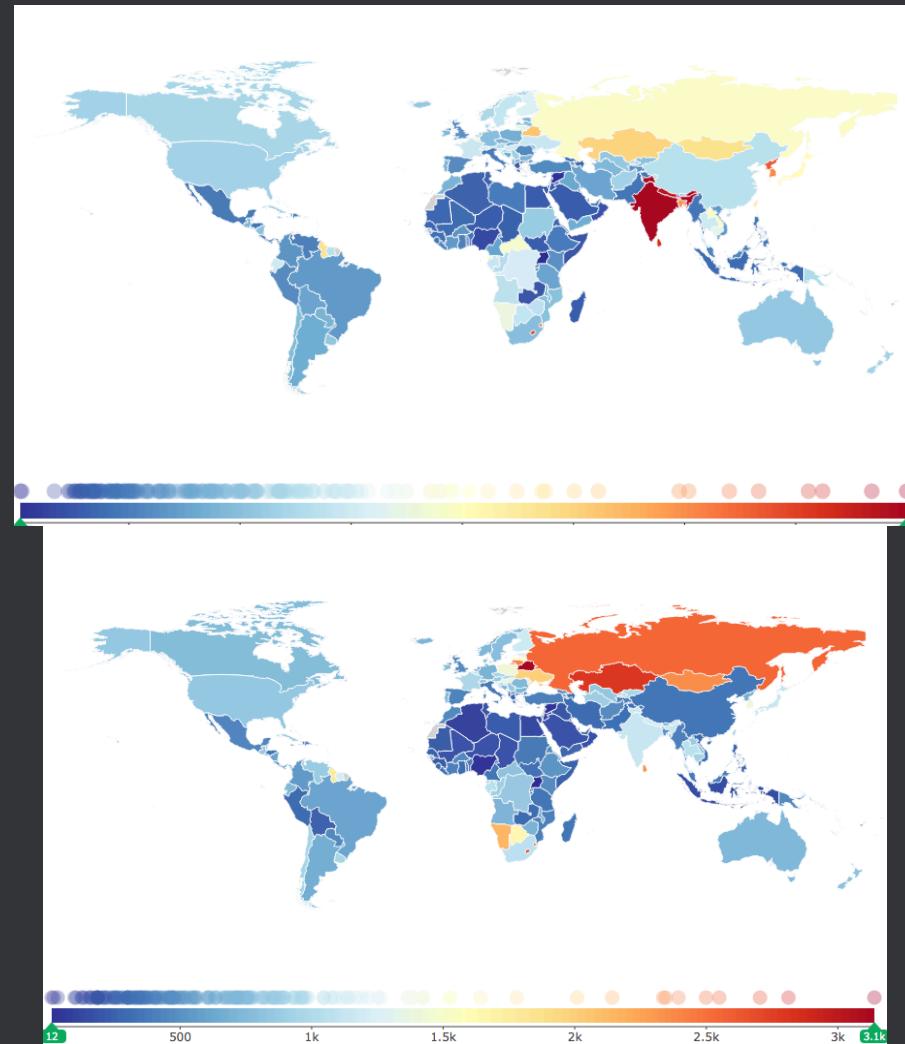


Centers for Disease
Control and Prevention
National Center for Injury
Prevention and Control

Global Suicide Scenario - Map



Global Suicide Scenario - GBD Compare



Global Suicide Scenario

- Self-violence
- Self-poisoning

Table 2

Methods involved in suicide (intentional self-harm and undetermined intent)^a and accidental poisonings.

ICD-10 cause of death	Number (%) of deaths by gender		
	Males	Females	Both genders
Suicides			
Self-poisoning with			
Analgesics	12 (3.6)	6 (3.3)	18 (3.5)
Antidepressants/tranquillisers	17 (5.2)	33 (18.0)	50 (9.7)
CO/other gas	9 (2.7)	4 (2.2)	13 (2.5)
All other substances	53 (16.1)	50 (27.3)	103 (20.1)
Total self-poisoning	91 (27.6)	93 (50.8)	184 (35.9)
Self-injury by			
Hanging/suffocation	143 (43.3)	58 (31.7)	201 (39.2)
Drowning	15 (4.5)	4 (2.2)	19 (3.7)
Jumping from height	15 (4.5)	5 (2.7)	20 (3.9)
Lying before moving object	13 (3.9)	5 (2.7)	18 (3.5)
Firearms/fire/smoke/steam	11 (3.3)	2 (1.1)	13 (2.5)
Sharp/blunt object	10 (3.0)	2 (1.1)	12 (2.3)
All other self-injury	32 (9.7)	14 (7.7)	46 (9.0)
Total self-injury	239 (72.4)	90 (49.2)	329 (64.1)
Total suicides	330	183	513
Accidental poisoning			
Poisoning with			
Analgesics	8 (3.3)	7 (5.9)	15 (4.2)
Antidepressants/tranquillisers	25 (10.4)	10 (8.4)	35 (9.7)
CO/other gas	2 (0.8)	1 (0.8)	3 (0.8)
All other substances	119 (49.4)	51 (44.9)	170 (47.3)
Total accidental poisoning	87 (36.1)	50 (42.0)	137 (38.1)

^a ICD-10 codes: intentional self-harm (X60–X84) or undetermined intent (Y10–Y34).

Determinants associated with increased risk of suicide

- Sociodemographic
 - 1. Men - More deadly
 - Suicide = OR 2.66 (CI 95% 1.72; 4.11)
 - 2. Women - More attempts
 - Self-Harm = OR 1.96 (CI 95% 1.22; 3.15)
 - 3. Incarceration
 - 4. Minorities

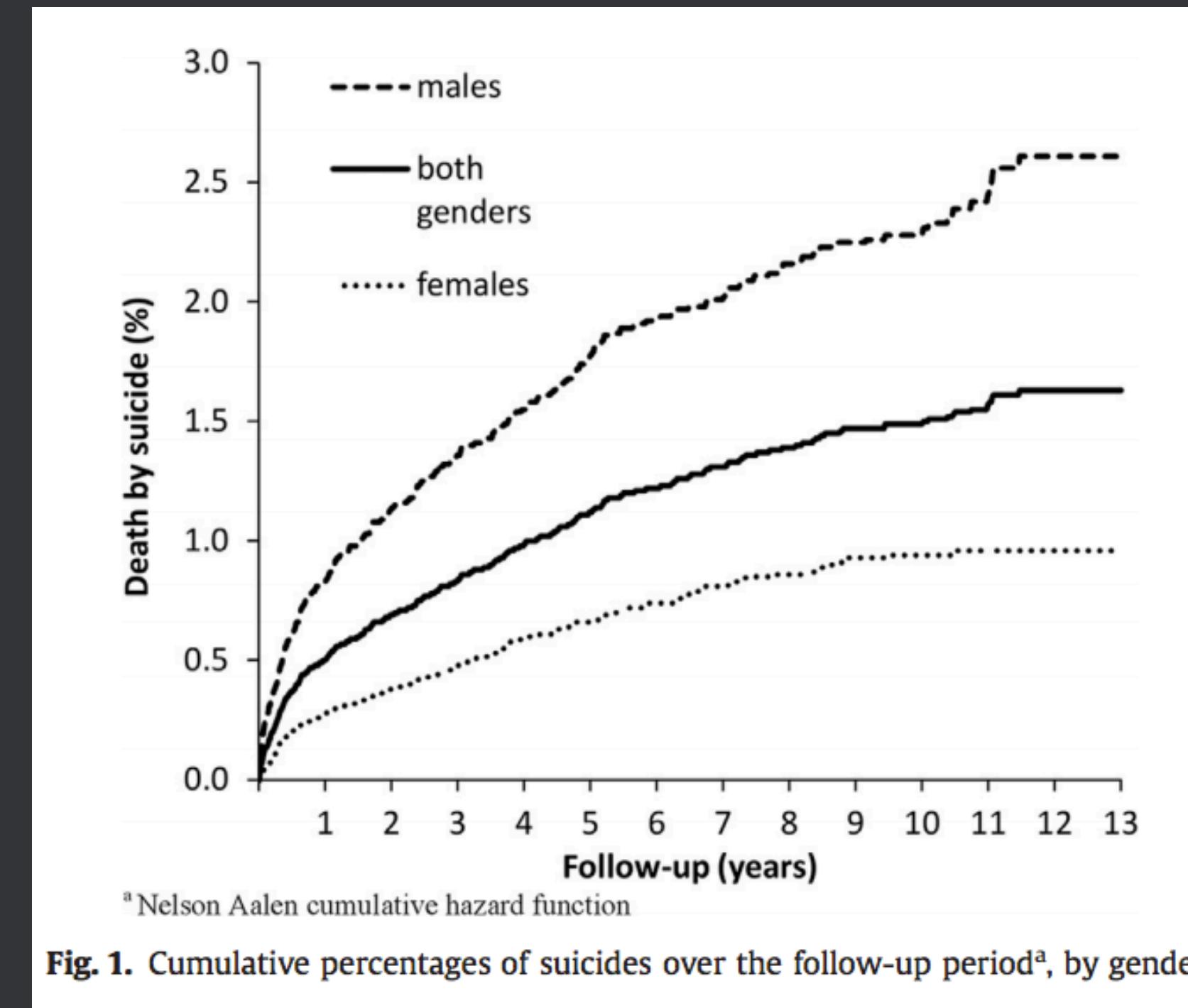


Table 2. Method of suicide death by gender and race/ethnicity, U.S., 2009

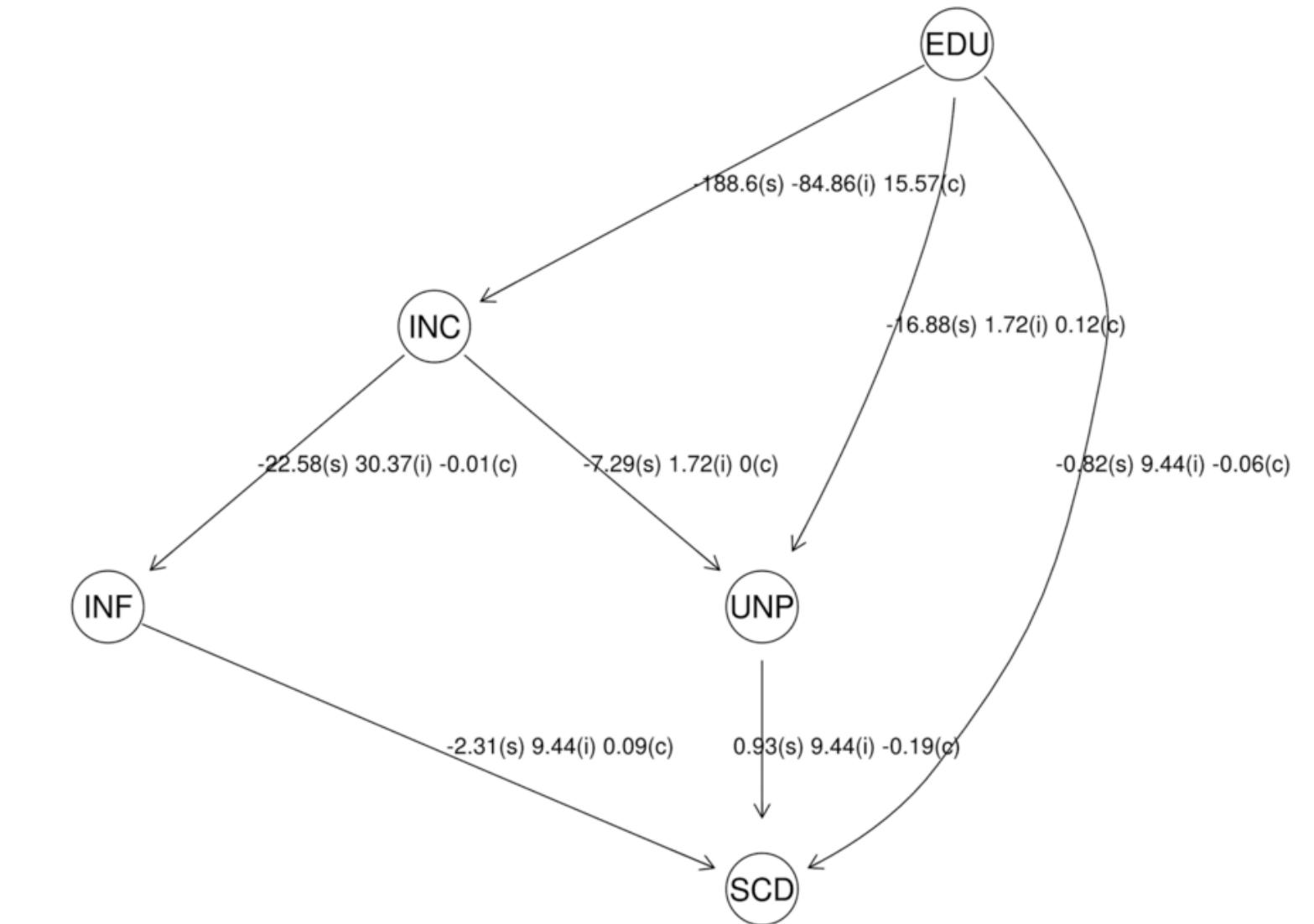
	Number of suicides	Top 3 methods of suicide death	Total accounted for by 3 methods
Male	29,089	Firearm	16,962
		Poisoning	3,573
		Suffocation	7,300
Female	7,820	Firearm	2,428
		Poisoning	1,901
		Suffocation	1,700
White	33,425	Firearm	17,332
		Poisoning	5,036
		Suffocation	7,805
Black	2,084	Firearm	1,034
		Poisoning	274
		Suffocation	537
American Indian/Alaska Native	429	Firearm	161
		Poisoning	61
		Suffocation	188
Hispanic	2,573	Firearm	955
		Poisoning	305
		Suffocation	1,050

Determinants associated with increased risk of suicide

- Psychosocial
 - 1. Family history
 - 2. Family violence
 - 3. Social involvement with suicide attempters
 - 4. Feeling repression and lack of expression

Determinants associated with increased risk of suicide

- Life events
- Guns and other firearms in the home
- Hoplessness = OR 2.20 (CI 95% 1.49; 3.23)
- Suicide Intent/Ideation = OR 3.26(CI 95% 2.70; 7.20)
- Unemployment
 - * Suicide = OR 1.70 (CI 95% 1.22; 2.18)

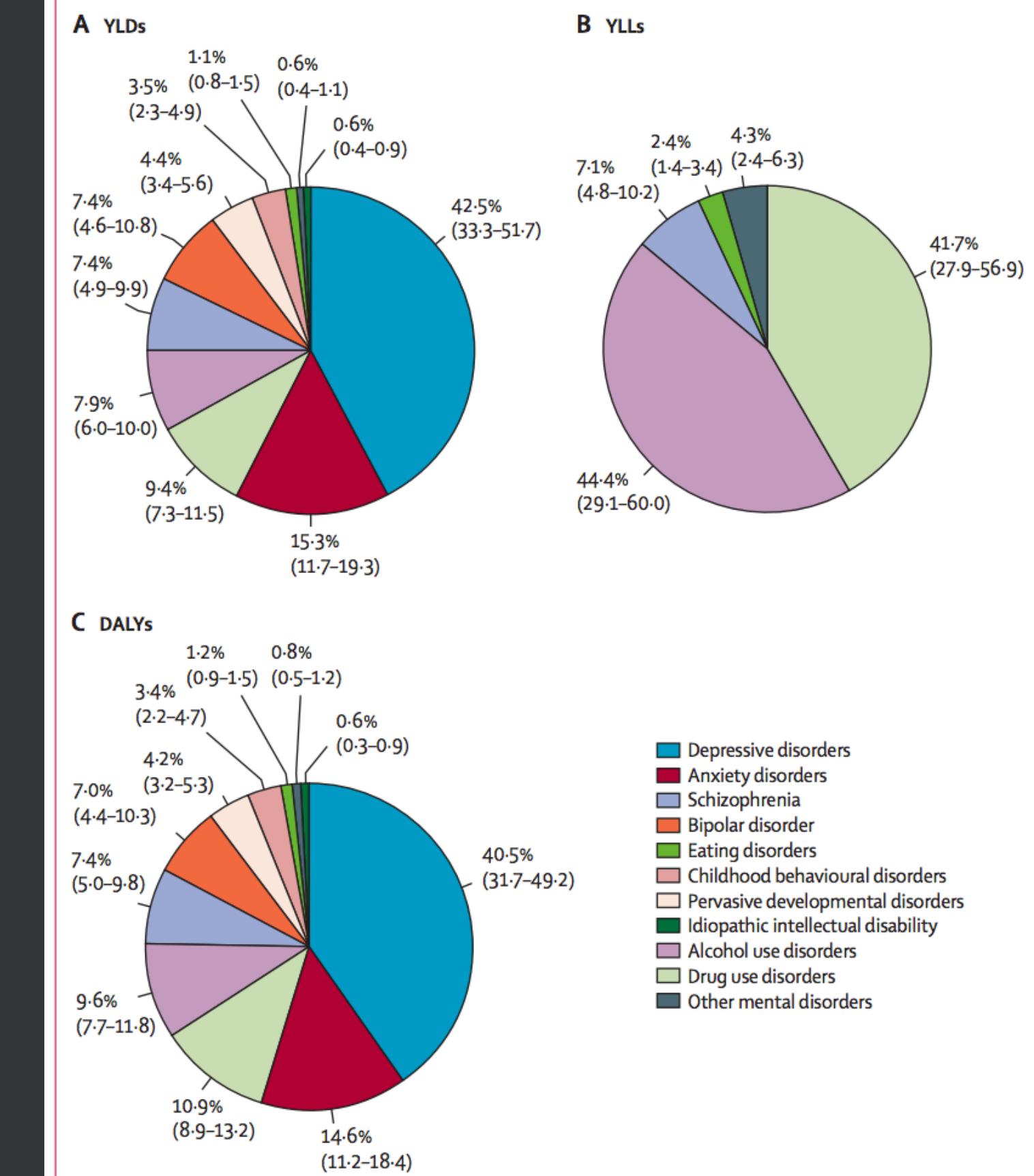


EDU=Education, INF=Informality, INC=Income, UNP=Unemployed, SCD=Suicide

Figure 4 - Relationship between possible suicide's predictors
s=strength, i=intercept, c=regression coefficient

Determinants associated with increased risk of suicide

- Mental health
 - Depression or mental illness symptoms
 - Suicide = OR 2.20 (CI 95% 1.05; 4.60)
 - Self-Harm = OR 2.63 (CI 95% 1.72; 4.04)
 - History of psychiatric illness
 - Self-Harm = OR 3.46 (CI 95% 2.26; 5.30)
 - Substance use
 - Suicide (depression) = OR 2.17 (CI 95% 1.77; 2.66)
 - Prior attempt/self-harm
 - Suicide = OR 4.84 (CI 95% 3.26; 7.20) / depression



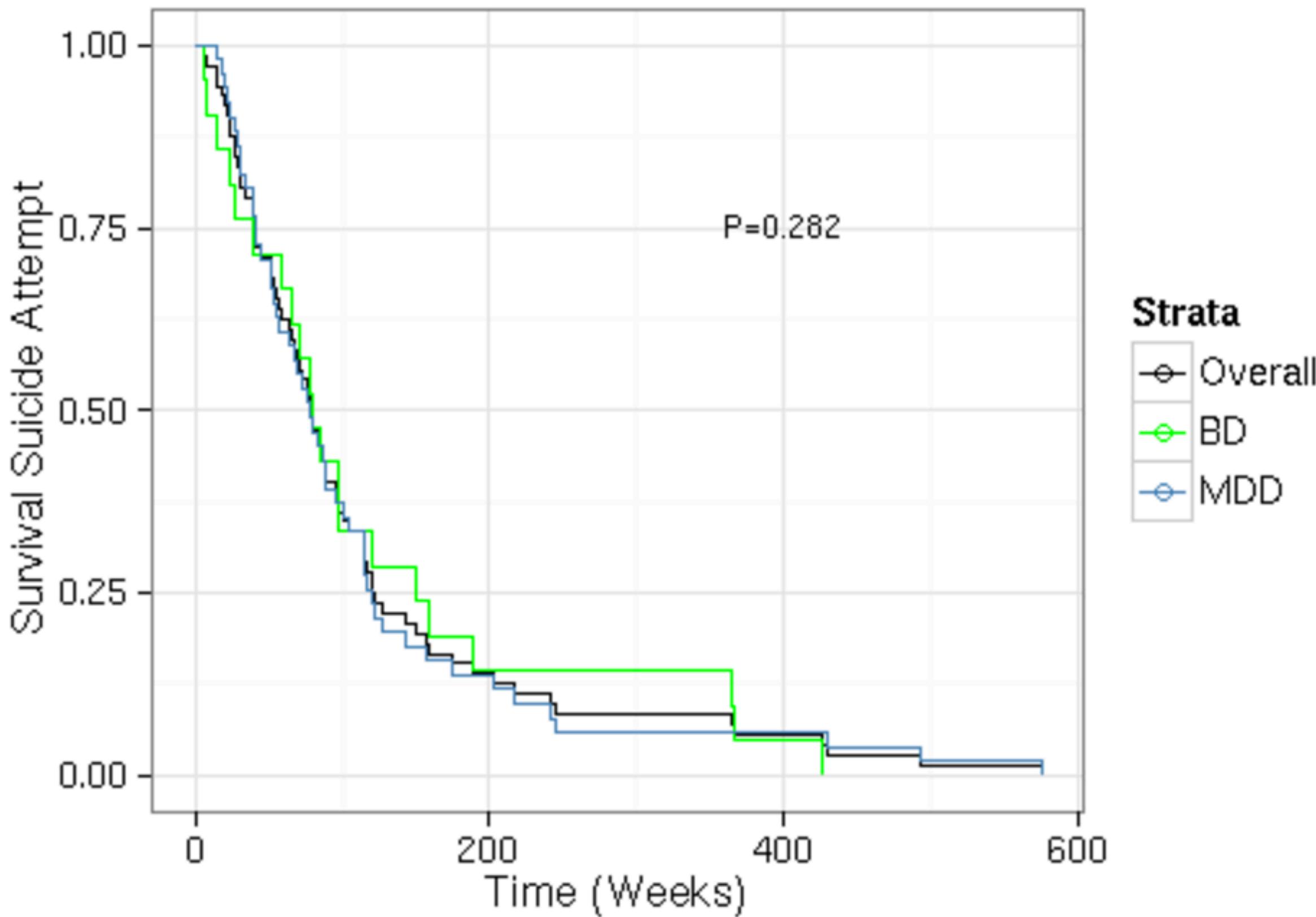
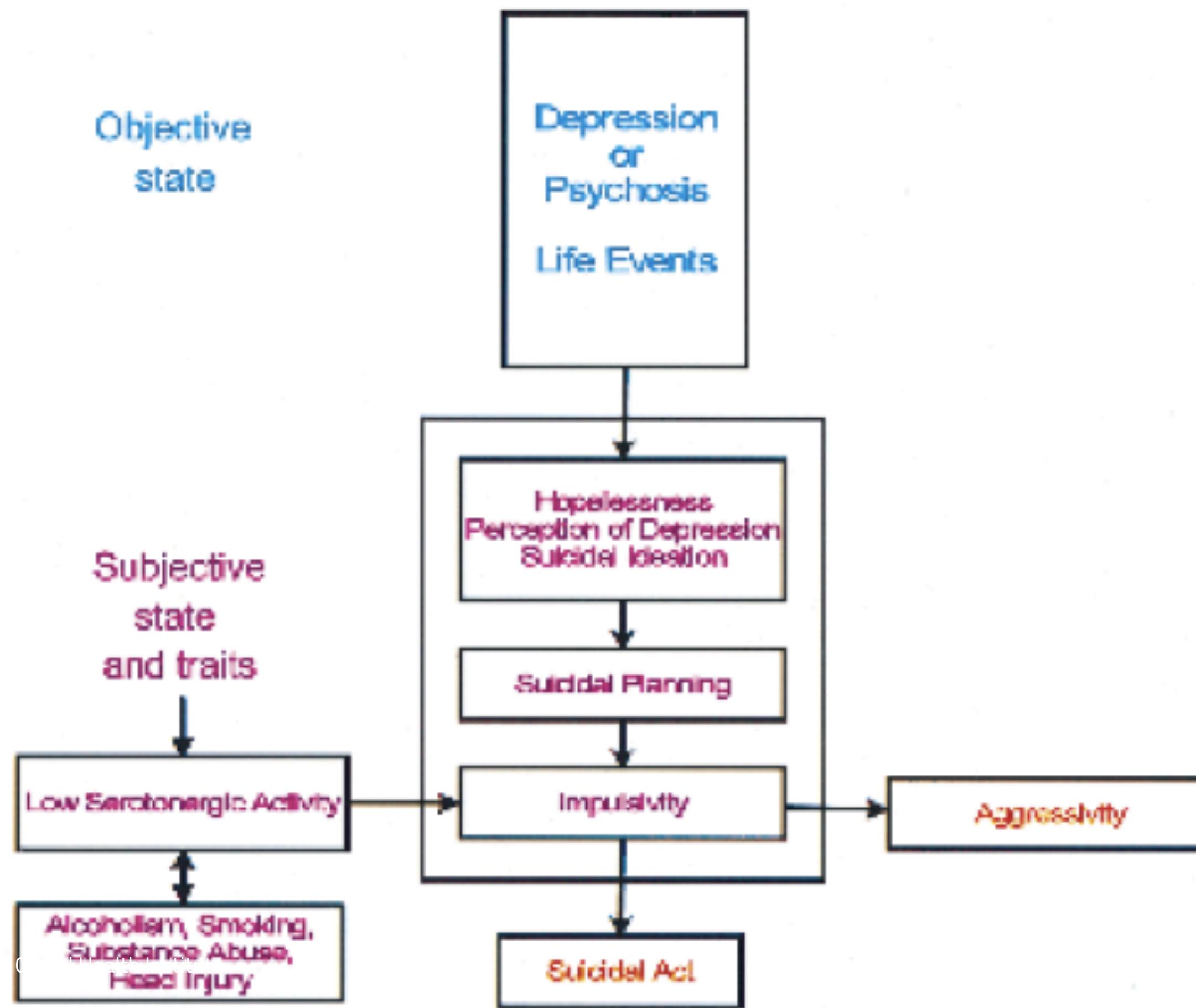
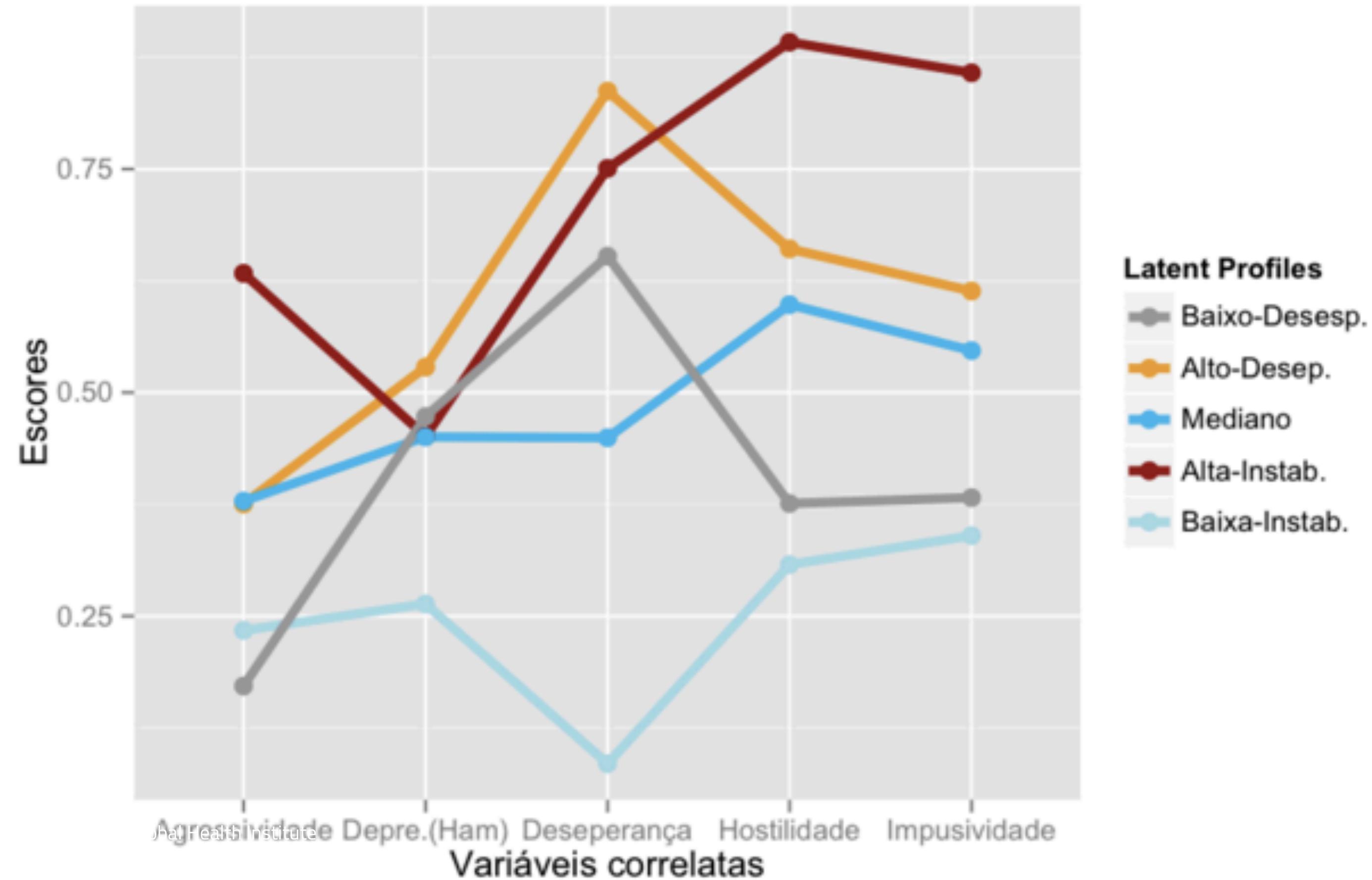


Figure 1. Cumulative proportion of patients attempting suicide.

Theoretical Models





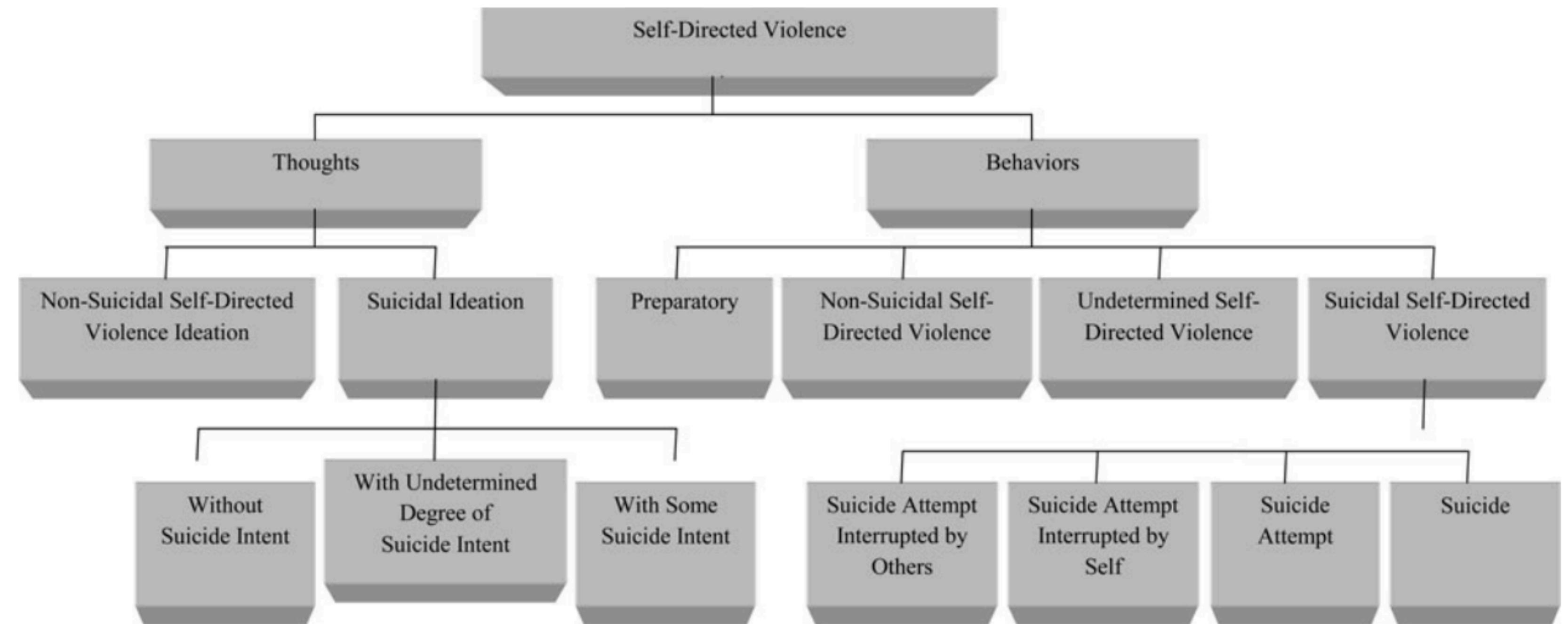


Figure 1. Hierarchical diagram of the Self-Directed Violence Classification System from the Centers for Disease Control and Prevention.⁸⁻⁹

Responding to distress

- Managing distress (affect regulation) – managing painful unpleasant emotional states including: making emotional pain physical; blocking bad memories
- Interpersonal influence – changing or responding to how others think or feel; help-seeking
- Punishment – usually of self, occasionally of or by others
- Managing dissociation – either switching off or bringing on feelings of numbness and unreality
- Averting suicide – non-fatal self-harm to ward off suicidal acts or thoughts

Self-harm as a positive experience

- Gratification – self-harm as comforting or enjoyable
- Sensation seeking – through a sense of non-sexual excitement or arousal
- Experimenting – trying something new
- Protection - of self or others
- Developing a sense of personal mastery

Defining the self

- Defining boundaries – self-injury is a means of defining or exploring personal boundaries
- Responding to sexuality – through self-harm as creating quasi-sexual feelings or expressing sexuality in a symbolic way.
- Validation – demonstrating to self and occasionally to others one's strength or the degree of one's suffering.
- Self as belonging or fitting in – to a group or subculture
- Having a personal language – including one for remembrance: a means of conjuring up or acknowledging good past feelings or memories

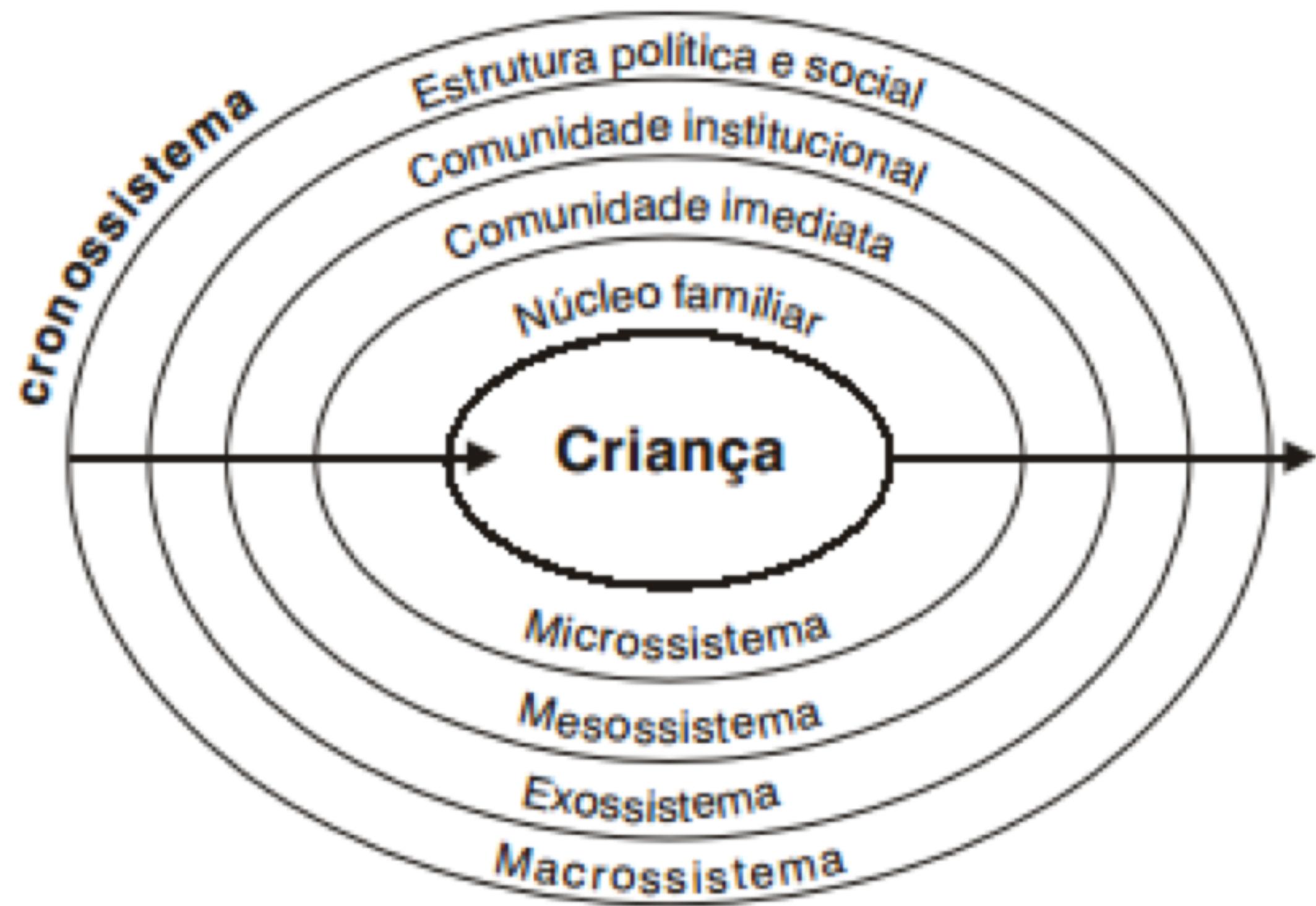
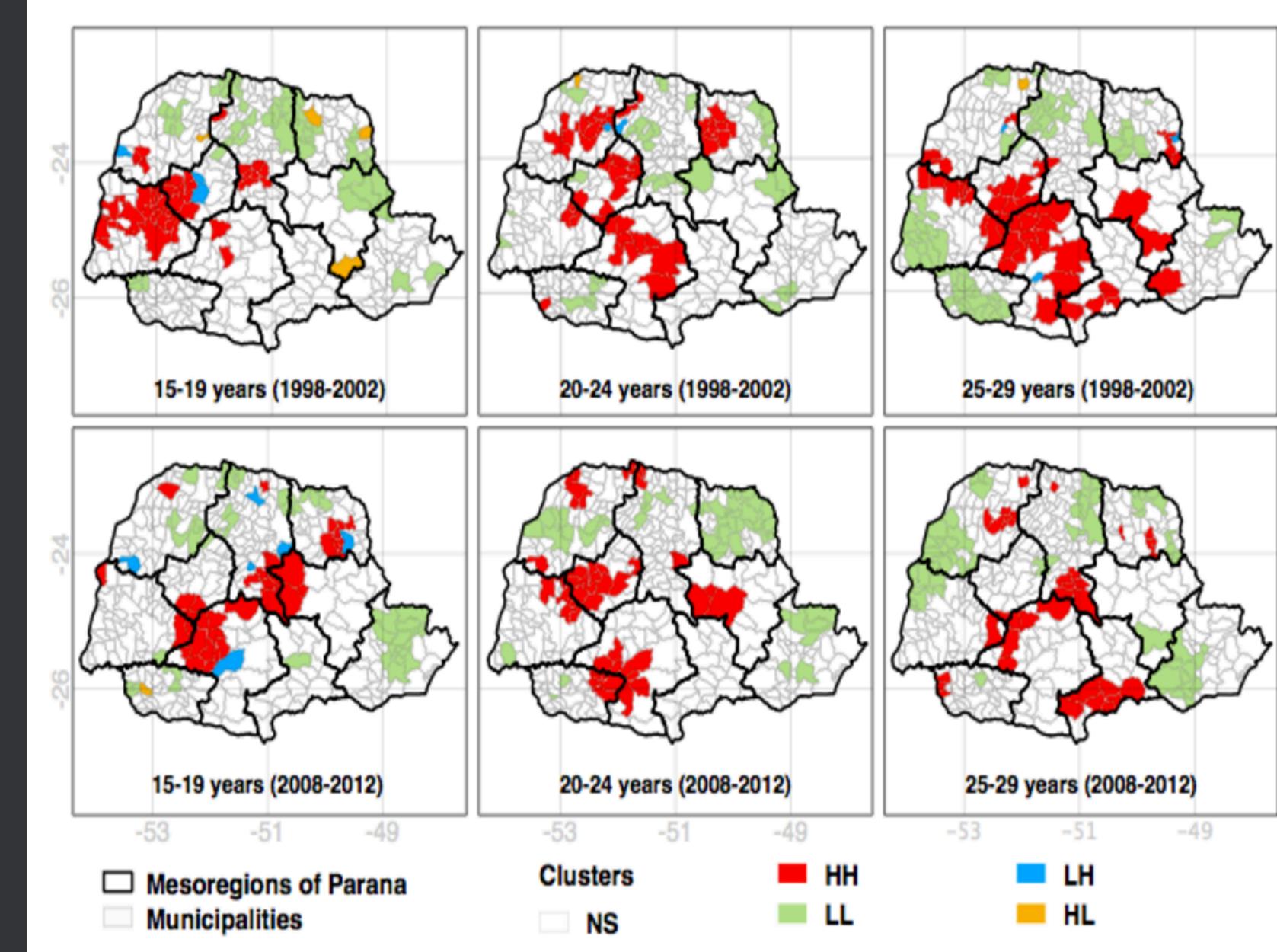


Figura 1 • Teoria ecológica do desenvolvimento¹⁵

Highlight trends and cultural aspects associated with increasing risk of suicide globally

- Cultural barriers
 - Problems with reporting
 - Underreporting
 - Stigma and Mental Health



REDE DE ATENÇÃO À SAÚDE MENTAL



crisis of meaning

Identity / Autonomy / Emancipation

Signs and measurements

	Clinical assessment	Potential actions
Increasing risk	<p>Definite plan of suicide and current intent or escalating suicidal behaviour (seriousness, frequency)</p> <p>Significant mental illness or unstable psychosocial situation with impending crisis</p> <p>No protective factors</p>	<p>Immediate attempt to ensure safety</p> <p>24 hour support and review with follow-up</p> <p>Remove access to lethal means of suicide</p> <p>Defuse emotional crisis (let the person express emotion but not to point of extreme distress, maintain hope, show acceptance of person and situation)</p> <p>Full assessment of mental health, psychosocial problems, and crisis prevention</p>
	<p>Frequent or fixed suicidal ideas</p> <p>Has considered methods of suicide and has access to preferred means of suicide, but no intent</p> <p>Lack of fear of death or increasing loss of hope</p> <p>Significant mental illness or unstable psychosocial situation with impending crisis</p>	<p>Consider 24 hour care or follow up at intervals in next 24 hours, with review</p> <p>Remove access to preferred means of suicide that person may impulsively use</p> <p>Defuse emotional crisis</p> <p>Full assessment of mental health, psychosocial problems, and crisis prevention</p>
	<p>Intense or more sustained thoughts of suicide, but no suicide plan or intent</p> <p>History of impulsive or dangerous behaviour (not just suicidal attempts), including recent self discharge or absconding from psychiatric hospital</p> <p>Evidence of mental illness or unstable psychosocial situation with impending crisis</p>	<p>Follow up at intervals in next 24 hours</p> <p>Consider removing or restricting access to means of suicide, particularly if history of suddenly self harming with it</p> <p>Defuse emotional crisis</p> <p>Full assessment of mental health, psychosocial problems, crisis prevention (for example, offer counselling aimed at solving underlying problem or explore alternative coping strategies in crisis such as contacting family or friends, not drinking, etc)</p>
	<p>Any significant mental illness requiring admission or crisis intervention, even if no suicidal ideation</p> <p>Any distressing or new suicidal ideation (without a plan) on first assessment or escalation of suicidal ideation</p> <p>Any severe depression at first assessment</p>	<p>Follow up within 24 hours</p> <p>Full assessment of mental health, psychosocial problems, and crisis prevention</p>
	<p>Fleeting thoughts of suicide which are soon dismissed</p>	<p>No specific action in relation to suicide risk</p> <p>Address any underlying physical or psychological health problems</p>

Signs and measurements

- Tests!!!
 - Beck Depression Inventory- BDI
 - Beck Hoplessness Scale- BHS
 - Beck Scale for Suicide Ideation - BSS
 - PHQ9
 - High-Risk Construct Scale (NEW)
 - Life orientation
 - Life Expectancy

Table 3. Sensitivity, specificity, and predictive values for six clinical rating scales

Scale	Cut-off score validated (y/n) ^a	Sensitivity (%)	Specificity (%)	Negative pred. value (%)	Positive pred. value (%)
MSPS	≥6 (y)	100	60	100	45
NEW	≥5 (n)	92	63	96	42
BDI	≥30 (y)	100	55	100	36
BAI	≥26 (y)	100	38	100	28
BHS	≥15 (y)	100	71	100	45
BSS	≥24 (n)	100	90	100	71

^a y = cut-off score previously validated; n = cut-off score not previously validated.

Item	Question	True	False
1	I look forward to the future with hope and enthusiasm		
2	I might as well give up because I can't make things better for myself		
3	When things are going badly, I am helped by knowing they can't stay that way forever		
4	I can't imagine what my life would be in 10 years.		
5	I have enough time to accomplish the things I most want to do		
6	In the future, I expect to succeed in what concerns me most		
7	My future seems dark to me		
8	I expect to get more of the good things in life than the average person.		
9	I just don't get the breaks, and there's no reason to believe I will in the future		
10	My past experiences have prepared me well for my future		
11	All I can see ahead of me is unpleasantness rather than pleasantness		
12	I don't expect to get what I really want		
13	When I look ahead to the future, I expect I will be happier than I am now		
14	Things just won't work out the way I want them to		
15	I have great faith in the future		
16	I never get what I want so it's foolish to want anything.		
17	It is very unlikely that I will get any real satisfaction in the future		
18	The future seems vague and uncertain to me.		
19	I can look forward to more good times than bad times		
20	There's no use in really trying to get something I want because I probably won't get it		

BREAKTHROUGH

Signs and measurements

- Suicide is tragic. But it is often preventable. Knowing the risk factors for suicide and who is at risk can help reduce the suicide rate.
- Many older adults and women who die by suicide saw their primary care providers in the year before death.

Podcast

Signs

- Change in sleep and eating habits
- Social isolation
- Violent and/or rebel conduct
- Alcohol and substance use
- Lack of personal hygiene and care
- Personality changes
- Persistent bad mood, concentration and school performance
- Physical symptoms linked to emotional sensations (psychosomatic)
- Lack of interest in activities
- Feeling like a bad person
- ***Verbal signs*** such as "nothing is worth it", "nothing matters"
- Psychotic symptoms

Prevention initiatives



Prevention initiatives

- Therapeutic approaches
- Lethality
 - Decline in lethality is a decline in suicide
- Social support
 - Social media
 - Lifeline

Prevention initiatives - Therapeutic

- Psychotherapy
 - 1. Developmental group psychotherapy
 - 2. Multisystemic therapy
 - 3. Skill-based treatment
 - 4. Mental and emotion regulation training
 - 5. Attachment-based family therapy
 - 6. Cognitive and/or behavioral, analytic or dialectic

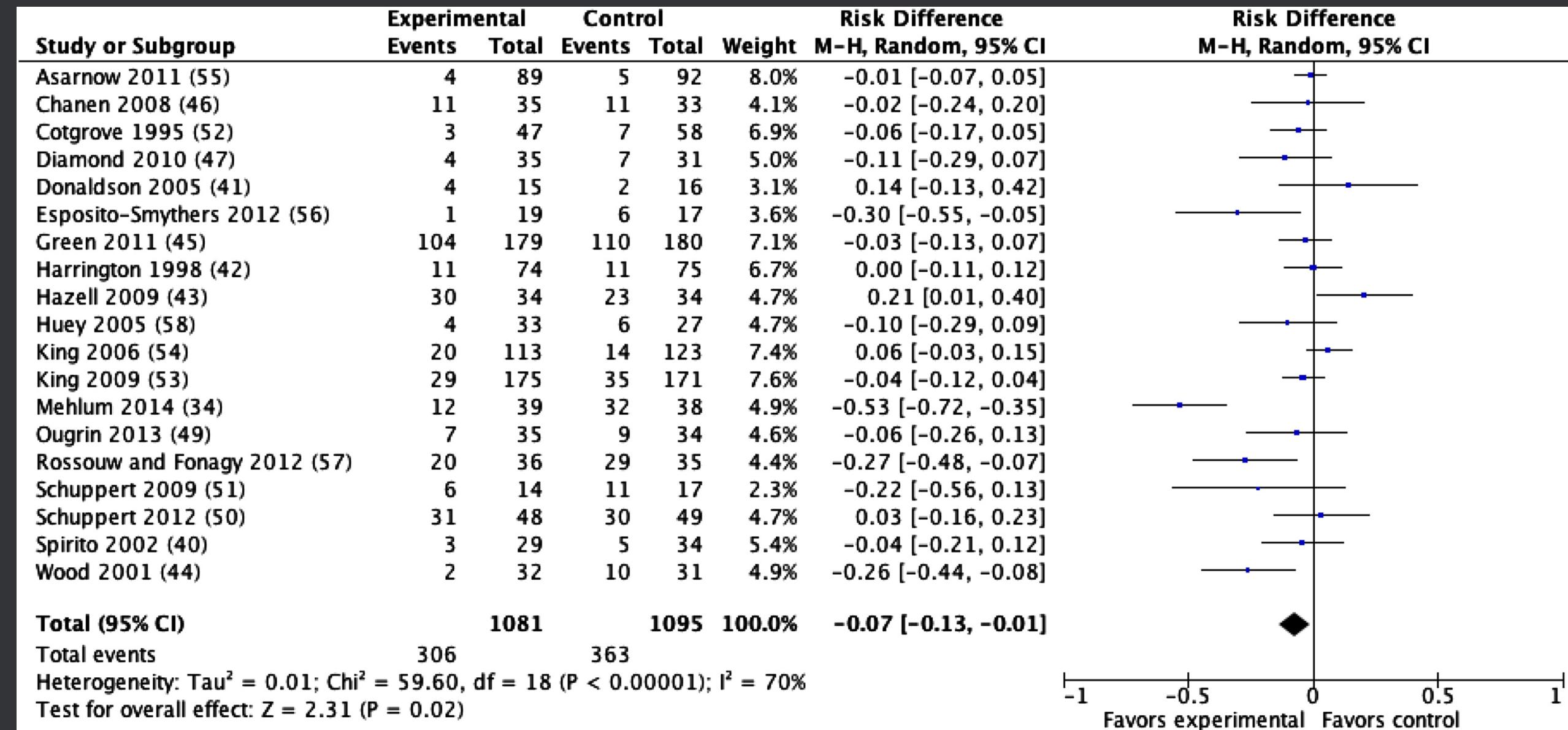
Any one! Just DO IT!

Prevention initiatives - Therapeutic

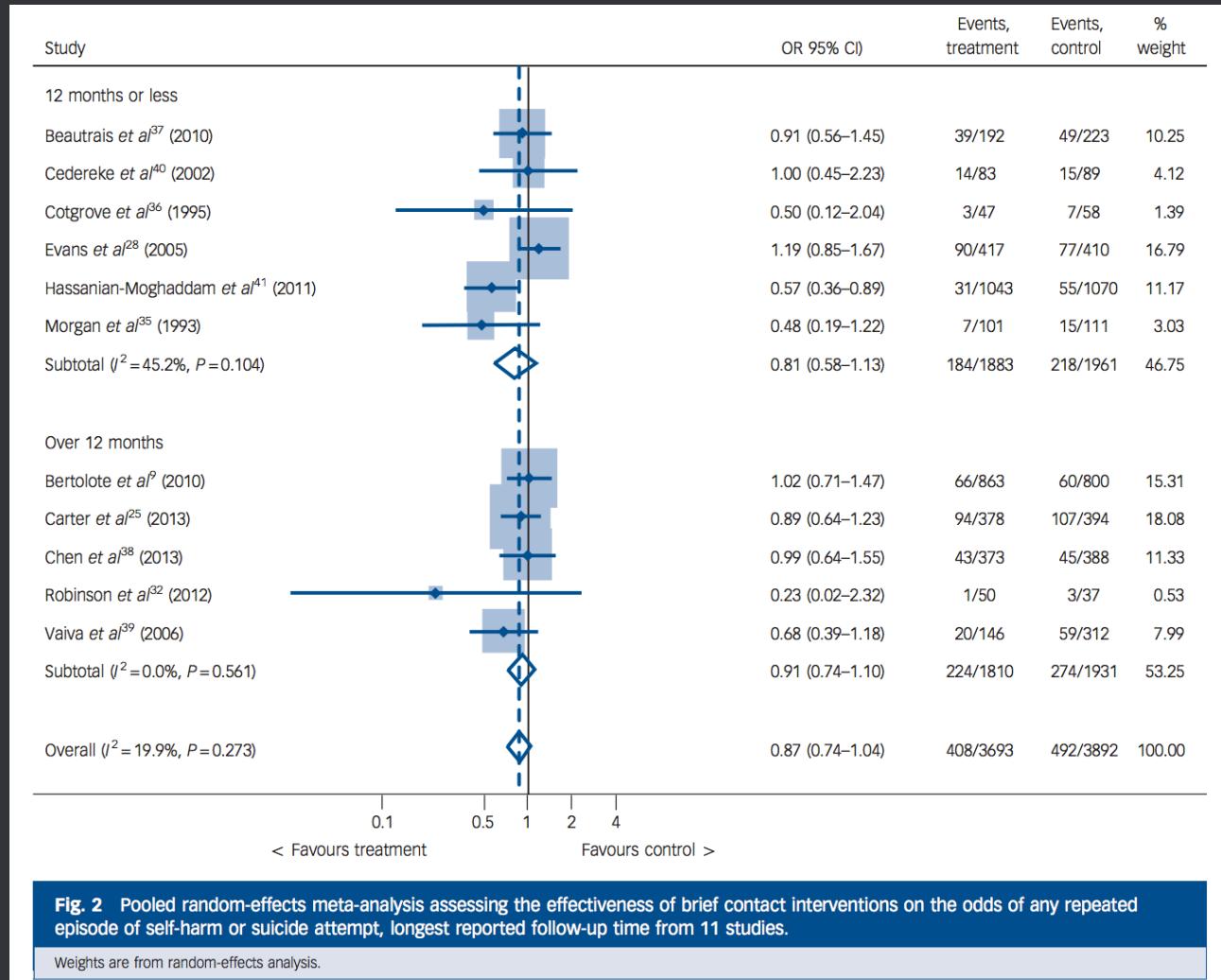
- Instrumental
 - 1. Readmission flexibility
 - 2. Family intervention
 - 3. Compliance enhancement and disposition planning
 - 4. Youth based intervention

Contingency Plan

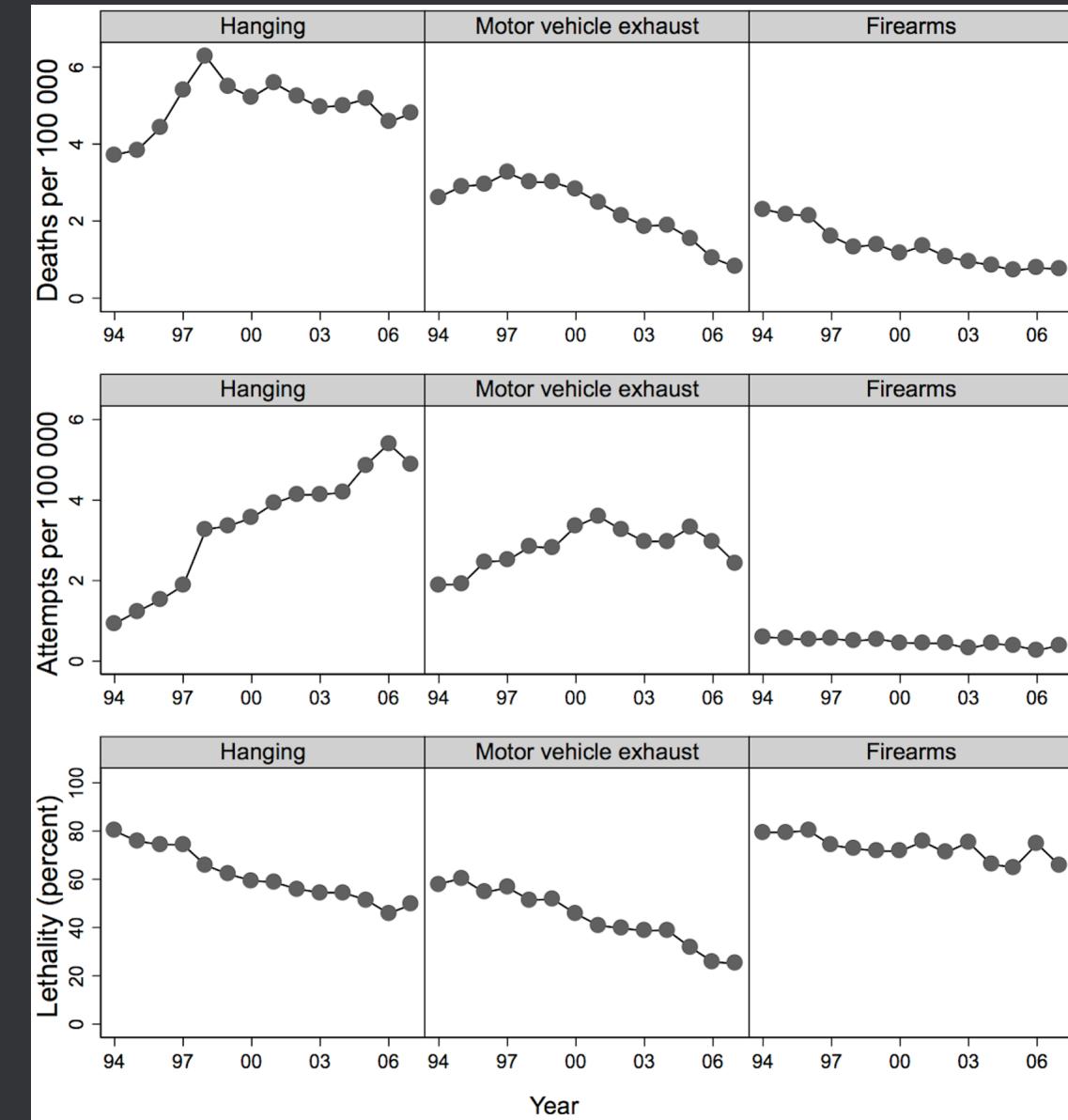
Prevention initiatives - Therapeutic



Prevention initiatives - Social support



Prevention initiatives - Lethality



Study cases - Case 1

- History
Middle aged man, recently unemployed farm worker. In debt, feels humiliated, depression, strong urge to drink alcohol. Hard type of person, not accepting any help from others. Thinks his family would be better off without him. Have reports of aggressive behavior towards his wife and children in cases of extreme stress. Recently made his will arguing to protect his family in case something happened. Evasive when asked about suicide ideation.

Study cases - Case 1

- Risk
 - **High risk group**
 - **History of substance abuse**
 - **History of family violence**
 - **Farm = gun and pesticides**
 - **Impulsive behavior and unstable social status**
- Protective factors and contingency plan
 - Family
 - Immediate referral to surveillance and monitoring

Study cases - Case 2

- History

Young woman in recently graduated in grad school. Seen constantly in casualty after cutting her wrists. Taken a large overdose, but not in a level requiring further medical intervention. Drug use history. Good social environment and reports bad relation with family. Hates her current work as a resident. Father has history of bipolar but no suicide attempts. Lives alone in another city for residency, reports constant stress and recently had a major scandal which is a cause for anxiety. Reports no reason to keep up with current activities and self-harm behavior is a way to get back to her father for forcing her to be a doctor.

Study cases - Case 2

- Risk
 - **Mental health**
 - **Poor social relations and isolation**
 - **Access to medication**
 - **Drug use**
 - **Recent life event**
- Protective factors and contingency plan
 - Family
 - Education status
 - Socio Economic Status