

# RISK FACTORS FOR SUICIDAL BEHAVIOR IN SOCIAL DISADVANTAGED ADOLESCENTS OF MONTEVIDEO, URUGUAY

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## Introducción

Uruguay integrates the group of countries with highest indicators of suicide. According to WHO there are more than 3 cases/100.000 inhabitants, being a public health priority. Suicidal ideation (SI) is the first step (predictor) of a continuum but its detection is difficult because hiding and fear to ask on the subject. Affective disorders (depression) and hopelessness increase the likelihood of progress on this continuum. Screening adolescent populations at risk has been of great interest particularly because it is a group that hardly communicate their suffering spontaneously. In our country there is no precedent for screening this factors using standardized instruments. Results of a screening of SI and other suicidal risk factors in adolescents of critical context are presented, as part of a wider research on students and educational staff (UTU "Domingo Arena"-P.Blancas).

## Objectives.

To assess frequency of suicidal ideation, depression and hopelessness in students of a social risk area from Montevideo and to describe general characteristics of "at risk" students.

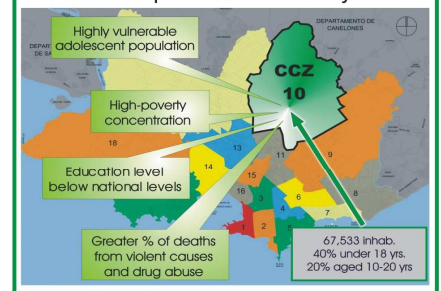
## Methodology:

310 students from 14 to 19 years who consented ( Law 17.823, Art. 8, Code for Children and Adolescents) and whose parents / guardians not rejected participation in research were included. A socio demographic data form and 3 Beck Scales (Depression-BDI, Hopelessness, BHS, Suicide Ideation-BSI) were applied. In "at-risk cases" an interview was conducted later. Data analysis was performed using nonparametric association tests.

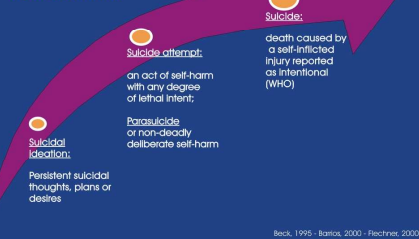
## Results

Internal consistency of the 3 scales was acceptable and maintains appropriate values when analyzed by gender: BSI Cronbach's alpha = 0.94 (same on both); BHS Cronbach's alpha = 0.74 (higher in men) and BDI Cronbach's alpha = 0.87 (best in women). 13 - 14% have SI (using item 9 of the BDI or the BSI respectively), 3.2% scored more than 10 points in BSI; There are no significant differences by gender in scores on the three scales, although in depression there is a trend towards significance (Mann Whitney U.:p <0.06), with women reaching somewhat higher scores. There was a high correlation between the 3 scales (Spearman's rho> 0.30, P <0.001 ). 2% thought in a plan but most were not sure to commit suicide and 7% had previous attempts. Significant associations (p <0.05) were found between suicidal ideation and socio-demographic and psychosocial needs of students. Some of them are common to both sexes: perception of a poor relationship with parents, little family support and conflictive context of family relationships and the perception of problems with friends and mood. The largest association was observed with moderate and severe levels of depression and history of suicide attempts, which is in line with expectations. There are some associations that are specific to the sex: In men the perceived absence of confidants (social isolation), problems with the couple's and presence of known people with suicide attempt. In women, the presence of relatives with cancer.

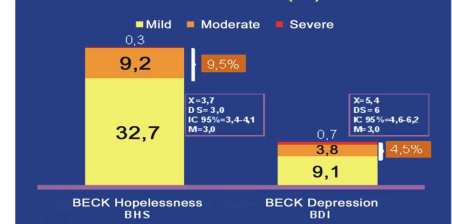
## CCZ10: Population under 18 years



## Suicidal Behavior as a Continuum



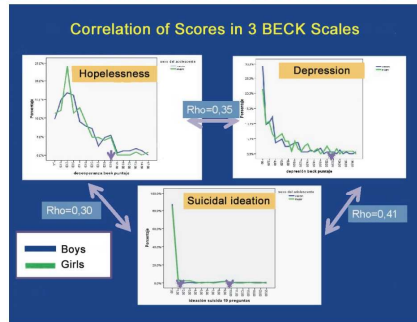
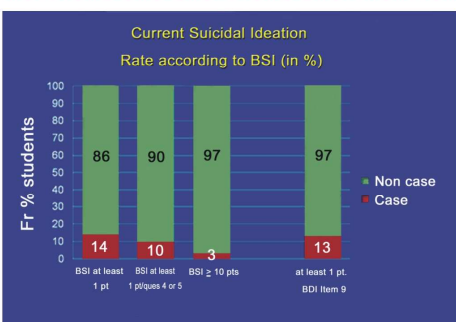
## Rate of hopelessness levels according to BECK scales (%)



## Current Suicidal Ideation Risk Factors Found in Both Sexes (significant associations p<0.05)

Risk Factor	OR	IC 95%	P ≤
Bad relationship with parents	4.44	1.9 - 10.5	0.001
Little family support	5.71	2.5 - 12.9	0.001
Bad family atmosphere	7.6	2.7 - 21.8	0.001
Friend problems *	8.9	3.16 - 25.08	0.001
Mood problems *	5.15	2.28 - 11.6	0.001
Prior suicide attempts (IAE)	12.5	4.7 - 33.3	0.001
Desire to die in attempts	18.5	4.2 - 82.3	0.001
Depression (categories) *	25.0	10.0 - 62.5	0.001
Hopelessness (categories) **	3.2	1.31 - 7.59	0.007

\* In girls, only in most sensitive cut points  
\*\* In boys, in most sensitive cuts; in girls, in most specific



## Current Sex-Specific Suicidal Ideation Risk Factors (significant associations p<0.05)

Risk Factor	OR	IC 95%	P ≤
Not having someone to confide in	5.08	1.48 - 17.410	0.02
Boyfriend/girlfriend problems	17.1	4.13 - 70.8	0.001
Not living with father *	3.6	1.15 - 11.3	0.04
Self-image problems *	4.33	1.28 - 14.6	0.02
Knows someone with IAE *	3.31	1.21 - 9.09	0.015
Relative with cancer	5.16	1.48 - 17.93	0.02

## Conclusions

Results are consistent with those reported in other countries, environmental factors playing an important role.

- \* Frequency of hopelessness, depression and suicidal ideation in students from UTU "Domingo Arena" is similar to other national and international reports in general population (non-clinical).
- \* High correlation between the three types of symptoms with no significant sex differences.
- \* Women have a higher frequency of depressive symptoms but some symptoms are more severe in men.
- \* Most students with suicidal ideation have symptoms that indicate a lower intensity.
- \* Risk factors of suicidal ideation vary by sex and severity of suicidal ideation. These data are consistent with those reported by Gonzalez et al Bark (1997) in Mexican adolescents, Salvo Let al (1998) in Chile and Werlang Guevara, et al (2005) in Brazil and the review by King C et al (2008)

The research clearly identifies the need to go in search of cases: most students with suicidal ideation commented it with peers but not with adults and have not received attention but is willing to receive it. The study conducted showed that screening is a useful tool when applied by qualified personnel and continued with a system of guidance and support, approaching health sector, education and adolescents. It helps the detection of risk cases who have not requested specific assistance, opens up possibilities for appropriate interventions and helps to raise awareness of the problems both of all teenagers and educators who are in contact with them.

Results are consistent with those reported in other countries, environmental factors playing an important role. Data emphasize screening for suicidal ideation in educational settings as a tool for diagnosis and prevention among adolescents.

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