S790 e-Poster Viewing

### **EPV1074**

# Association Study of Suicidal Behavior, Early Trauma, and Psychological Pain in Depressed Women

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**Introduction:** The stress-diathesis model, which indicates an interaction between vulnerability and stress factors is the most acceptable paradigm to explain suicide.

**Objectives:** To assess the association between suicidal behavior, early trauma, and psychological pain among women undergoing psychiatric treatment for a major depression episode.

**Methods:** It was a cross-sectional study approved by the Research Ethics Committee of the State University of Health Sciences of Alagoas (UNCISAL) Brazil (approval number: 14689219.1.0000.5011). The final sample of 48 women was obtained through non-probabilistic, convenience, and consecutive sampling. Data were collected from depressed adult women undergoing outpatient psychiatric treatment in public services in the State of Alagoas, Brazil. The instruments used included a sociodemographic questionnaire prepared exclusevly for this research, modules A, B, and C of the Mini International Neuropsychiatric Interview (M.I.N. I.7.0.2), the Beck Depression Inventory II (BDI-II), the Psychache Scale (PAS); and the Childhood Trauma Quetionnaire (CTQ). Data were analyzed using SPSS 22. After performing the Kolmogorov-Smirnov test, Student's t tests were conducted for parametric analyses. Statistical significance was established at a p-value less than

**Results:** The mean age of the total sample was 42.5 years old. 89.6% presented suicidal behavior. 62.5% of the women had major depression and 37.5% had bipolar disorder diagnosis. BDI-II scores were significantly higher among depressed women with suicidal behavior (27.9  $\pm$ 13.4 vs.16.6  $\pm$ 6.9; p value:0.04). BDI-II scores were also significantly higher in both passive (29.4 $\pm$ 12.6 vs. 13.4 $\pm$ 8.5; p value:0.01) and active (31.4 $\pm$ 12.2 vs. 18.0 $\pm$ 11.3; p value<.01) suicide ideation groups compared to depressed women who did report these thoughts. Psychological pain scores were also hihger in both passive (46.0 $\pm$ 12.8 vs. 34.8 $\pm$ 14.6; p value:0.03) and active (47.7  $\pm$ 12.4 vs. 38.1 $\pm$ 12.7; p value:0.02) suicide ideation groups. Women with active suicide ideation were also more prone to report a history of childhood physical neglect compared to those women who did not report active suicide ideation in the last 30 days (12.5 $\pm$ 4.6 vs. 9.2  $\pm$ 4.0; p value:0.02).

Conclusions: The present study aimed to investigate the association between suicidal behavior, childhood trauma, and psychological pain in depressed women undergoing treatment in outpatient psychiatric public services. The results indicated that suicidal ideation (both passive and active) was associated with a more severe depressive episode and higher scores of psychological pain, demonstrating that psychological pain is an indicator of acute suicide risk in depressed women even when they are undergoing psychiatric treatment. Effectively identifying and addressing psychological pain can play a pivotal role in reducing or mitigating the risk of suicidal behavior.

Disclosure of Interest: None Declared

#### **EPV1073**

### Understanding the role of mental pain in suicidal individuals: from clinical to neuroimaging perspective.

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**Introduction:** In the attempt to shed light on the phenomenology of suicide, this contribution focuses on the role of mental pain as a main ingredient of suicide.

Objectives: Previous studies have shown that mental pain, child-hood negative experiences, and maltreatment are associated with suicide risk. Neuroimaging studies demonstrated that such emotional pain shares the same neuroanatomical circuit of somatic pain. Furthermore, concepts related to death, failure, or other unfortunate circumstances activate specific cerebral areas in a suicidal individual compared to a non-suicidal subject.

**Methods:** The author, through a multicenter investigation, conducted a sizeable clinical study on mental pain related to psychiatric disorders and suicide risk. With this aim, a dataset of more than 2200 psychiatric patients is explored to investigate suicide risk, mental pain, childhood trauma, and the role of depressive symptomatology. Implications emerging from neuroimaging studies are investigated.

**Results:** A framework emerges about the role of childhood traumatization in mediating between suicide risk and mental pain; furthermore, when individuals experience high mental pain and high depressive symptomatology, regardless of the diagnoses, they are exposed to higher suicide risk.

**Conclusions:** Such results are presented in light of neuroimaging studies' role in identifying how mental pain and brain activation are detected in suicidal individuals. Therefore, this contribution aims to understand better mental pain's role in clinical practice and research activities.

Disclosure of Interest: None Declared

### **EPV1074**

# Statistical model of the dynamics of suicides in ukraine before a full-scale war

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**Introduction:** The problem of suicides is one of the most critical problems of the public health care system. In Ukraine, official data on the number of deaths and their causes were released by the State Statistics Service only in 2021, on the eve of a full-scale military invasion. This made it possible to conduct statistical analysis and build a mathematical model of the seasonal dynamics of suicidal activity in Ukraine.

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**Objectives:** Develop a statistical model of the dynamics of the number of completed suicides, considering regions of Ukraine and months. For this, a time series of the number of suicides from 2005 to 2021 was created, a mathematical and statistical analysis of the dynamic characteristics of the time series was carried out, and a forecast of the dynamics of the number of completed suicides was built.

**Methods:** Time series analysis using autocorrelation analysis with the calculation of Leung-Box statistics and the method of seasonal exponential smoothing were applied.

Results: Autocorrelation of the absolute indicators of the number of completed suicides made it possible to construct correlograms for each separate region of Ukraine. In order to ensure the statistical reliability of the autocorrelation coefficients, the number of lags was equal to 50, based on the fact that  $k \le n/4$ , where k is the maximum number of lags, and n is the number of observations. The correlograms of the regions that characterized the built statistical model of the dynamics of changes in the number of completed suicides were clustered in the form of four groups. The calculation of the coefficient of determination indicated that a high proportion of the total variation for Ukraine as a whole (R2=0.656) and for its individual regions (R2=0.731±0.051) can be explained using the model we built, and the model itself should be evaluated as consistent. Based on the developed model, it was established that the period from March to May, July and, to a lesser extent, January is characterized by the highest number of suicides.

**Conclusions:** The constructed statistical model of the dynamics of suicides in Ukraine is coherent and statistically reliable. It can be used for forecasting, provided corrections are made, taking into account the social changes of wartime. The study of chronobiological aspects that drew attention during the analysis is promising for further targeted scientific research and may be of practical interest for the creation of national suicide prevention programs in Ukraine.

Disclosure of Interest: None Declared

#### **EPV1075**

### Deliberate self-poisoning in children and adolescents

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**Introduction:** Suicide is a significant global public health issue that has a severe impact on children and adolescents.

**Objectives:** This study examined the epidemiological features of self-poisoning events among these groups in Morocco.

**Methods:** In this retrospective study, data on intentional poisoning cases among children under 15 years of age and adolescents aged 15-19 years were analyzed. The Moroccan Poison Control Center has reported these cases over a period of 34 years.

Results: During the study period, 7,111 deliberate self-poisoning cases were documented among children and adolescents, representing 30% of all reported self-poisoning cases (out of a total of 23,711 cases with known ages). The vast majority of the cases (80.8%) involved females, indicating a significant female-to-male ratio of 4.2. The patients had a mean age of  $16.05 \pm 2.10$  years. Notably, drugs were the predominant method of self-poisoning, comprising 51.7% of the cases, followed by pesticides at 31.3%. The symptoms of poisoning manifested with significant variation, contingent on the type of toxin involved, the amount ingested, and the time passed before medical care was administered. Of the 4,711 cases with known outcomes, 144 (3.06%) were fatal. Nonetheless, the outcomes were favorable for the remaining cases, with or without lasting sequelae.

**Conclusions:** The ongoing prevalence of suicide and suicide attempts among children and adolescents is a prominent issue in public health. Our research emphasizes the crucial necessity to address suicide, as it remains one of the primary causes of mortality in young individuals.

Disclosure of Interest: None Declared

### **EPV1076**

## Understanding collective suicides in Morocco: A 35-year epidemiological study

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**Introduction:** Suicide is a major public health concern, ranking among the leading causes of death worldwide.

**Objectives:** This study investigated the epidemiological features of collective suicide incidents in Morocco.

**Methods:** We performed a retrospective analysis of suicidal poisoning cases recorded by the Moroccan Poison Control Center (MPCC) over a 35-year period.

Results: During the study's duration, the MPCC recorded 168 suicide cases. The mean age of those involved in these incidents was 23.9 years, with a female-to-male ratio of 1.57. The majority of those affected were adolescents and young adults, specifically between 15 and 34 years of age. Pesticides and drugs were the most commonly used methods of suicide and accounted for 31.1% and 20.1% of the cases, respectively. The majority of incidents occurred in the home environment and were primarily caused by oral exposure. The symptoms of poisoning varied according to the consumed substance, amount ingested, and elapsed time until medical treatment. The symptoms included disturbances in the neurological, gastrointestinal, respiratory, and cardiovascular systems. Of the 100 cases with known outcomes, one person died due to poisoning, whereas the remaining cases survived, although some enduring complications.