VOL V

Ciências da Saúde:

Investigação e Prática

Dr. Guillermo Julián González-Pérez
Dra. María Guadalupe Vega-López
(organizadores)

EDITORA ARTEMIS
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PRÓLOGO

El volumen V de ***Ciências da Saúde: Investigação e Prática*** reúne un conjunto de investigaciones que reflejan la diversidad, complejidad y actualidad de los estudios en el campo de las Ciencias de la Salud. A través de distintos enfoques teóricos y metodológicos, los trabajos que aquí se integran abordan problemáticas relevantes que atraviesan tanto la práctica clínica como las dimensiones sociales, culturales y organizacionales de la salud.

Lejos de presentar una visión fragmentada, la obra propone una lectura articulada en torno a ejes temáticos que permiten comprender la salud como un fenómeno integral, en el que confluyen factores individuales, colectivos y estructurales. Esta organización no solo facilita el recorrido del lector, sino que también evidencia la riqueza de perspectivas que caracterizan a la investigación contemporánea en salud.

El primer eje, dedicado a la salud mental, el comportamiento y los contextos socioculturales, pone de relieve la importancia de comprender los procesos de salud y enfermedad desde miradas que integran lo psicológico, lo familiar y lo cultural. Los trabajos reunidos en esta sección invitan a reflexionar sobre experiencias de sufrimiento, aceptación y construcción de sentido, así como sobre prácticas cotidianas vinculadas a la salud, como los comportamientos alimentarios y las elecciones nutricionales en contextos colectivos, destacando la necesidad de enfoques sensibles a la diversidad de contextos y realidades.

El segundo eje aborda los sistemas de salud, la calidad de la atención, la mortalidad y los determinantes sociales, evidenciando que el acceso, la equidad y la experiencia de los usuarios, así como los indicadores sanitarios, no pueden analizarse al margen de las condiciones estructurales en las que se inscriben. Las investigaciones aquí presentadas contribuyen a comprender las tensiones existentes entre políticas, prácticas y realidades territoriales, los retos que plantean situaciones extremas como la pandemia de covid 19, así como los desafíos que enfrentan los sistemas de salud en la búsqueda de una atención más justa y eficiente.

En el tercer eje, centrado en la gestión, los procesos y las prácticas en salud, se destacan estudios que analizan aspectos técnicos y organizacionales fundamentales para el funcionamiento de los sistemas sanitarios. A través de investigaciones vinculadas a la procuración, evaluación y optimización de recursos, se pone de manifiesto la importancia de fortalecer los procesos para garantizar calidad, seguridad y sostenibilidad en la atención.

Finalmente, el volumen se cierra con un eje dedicado al cuidado, la enfermería y los grupos específicos, donde se recupera la dimensión más humana de la salud. Las

contribuciones aquí reunidas abordan el acompañamiento a poblaciones en distintas etapas de la vida, subrayando la relevancia del cuidado centrado en la persona, la autonomía y el bienestar como pilares fundamentales de la práctica sanitaria.

La presencia en este volumen de trabajos realizados por autores de diversos países latinoamericanos (Argentina, Chile, Colombia, Ecuador, México, Perú) y europeos (Portugal, Rumania) brinda al lector la posibilidad de conocer de primera mano no solo aspectos relevantes de la salud de nuestras naciones sino también tener una muestra de por dónde van las inquietudes investigativas en el campo de la salud en la actualidad.

En conjunto, esta obra ofrece una visión amplia y actual de las Ciencias de la Salud, integrando distintos niveles de análisis y destacando la necesidad de enfoques interdisciplinarios. Más que un compendio de estudios aislados, el volumen se presenta como un espacio de diálogo que invita a repensar las prácticas, fortalecer la investigación y contribuir a la construcción de sistemas de salud más humanos, equitativos y eficaces.

Dr. Guillermo Julián González-Pérez
Dra. María Guadalupe Vega-López

SUMÁRIO

SAÚDE MENTAL, COMPORTAMENTO E CONTEXTOS SOCIOCULTURAIS

SISTEMAS DE SAÚDE, QUALIDADE DE ATENÇÃO, MORTALIDADE E DETERMINANTES SOCIAIS

CAPÍTULO 3

POST-TRAUMATIC STRESS DISORDER – A REALITY

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ABSTRACT: Post-traumatic stress disorder (PTSD) is a mental and behavioral condition that may develop after exposure to traumatic events such as warfare, abuse, domestic violence, traffic accidents, or other life-threatening situations. Typical symptoms include intrusive memories, distressing dreams, emotional or physical reactions to trauma-related cues, changes in cognition and mood, and heightened arousal responses. These symptoms usually appear within the first three months after the traumatic event, although they may emerge years later, and must persist for more than one month while causing significant distress or functional impairment. This study aims to facilitate the recognition of PTSD symptoms in order to support early diagnosis and effective treatment, prevent symptom progression, and improve patients' social functioning and quality of life. It also seeks to contribute to a better understanding of the etiological factors associated with PTSD in order to strengthen prevention strategies. A qualitative clinical approach was adopted through the presentation of a clinical case involving a 25-year-old patient treated at the Medical Center for Human Health. The findings highlight the importance of early diagnosis and long-term treatment in achieving symptom remission and preventing relapse, emphasizing the crucial role of comprehensive psychiatric evaluation. Study limitations include the relatively low incidence of diagnosed cases in the region, patients' limited acceptance of psychological treatment, and restricted access to advanced imaging procedures such as MRI. Nevertheless, the study underscores the growing relevance of PTSD in contemporary society, particularly in the context of wars, social violence, and environmental disasters. The study reinforces the importance of early psychiatric assessment and appropriate therapeutic interventions in outpatient mental health services for individuals at risk of developing PTSD.
KEYWORDS: stress; disasters; flashbacks; nightmares; risk.

EL TRASTORNO DE ESTRÉS POSTRAUMÁTICO: UNA REALIDAD

RESUMEN: El trastorno de estrés postraumático (TEPT) es una condición mental y conductual que puede desarrollarse tras la exposición a eventos traumáticos como

guerras, abusos, violencia doméstica, accidentes de tránsito u otras situaciones que amenazan la vida. Los síntomas típicos incluyen recuerdos intrusivos, sueños angustiosos, reacciones emocionales o físicas ante estímulos relacionados con el trauma, alteraciones en la cognición y el estado de ánimo, así como respuestas de hiperactivación. Estos síntomas suelen aparecer dentro de los primeros tres meses posteriores al evento traumático, aunque pueden manifestarse años después, y deben persistir durante más de un mes, generando un malestar significativo o deterioro funcional. Este estudio tiene como objetivo facilitar el reconocimiento de los síntomas del TEPT con el fin de apoyar el diagnóstico precoz y el tratamiento eficaz, prevenir la progresión de los síntomas y mejorar el funcionamiento social y la calidad de vida de los pacientes. Asimismo, busca contribuir a una mejor comprensión de los factores etiológicos asociados al TEPT, con el propósito de fortalecer las estrategias de prevención. Se adoptó un enfoque clínico cualitativo mediante la presentación de un caso clínico de un paciente de 25 años atendido en el Centro Médico de Salud Humana. Los hallazgos destacan la importancia del diagnóstico temprano y del tratamiento a largo plazo para lograr la remisión de los síntomas y prevenir recaídas, subrayando el papel crucial de una evaluación psiquiátrica integral. Entre las limitaciones del estudio se incluyen la relativamente baja incidencia de casos diagnosticados en la región, la limitada aceptación del tratamiento psicológico por parte de los pacientes y el acceso restringido a procedimientos de imagen avanzada, como la resonancia magnética. No obstante, el estudio pone de relieve la creciente relevancia del TEPT en la sociedad contemporánea, especialmente en contextos de guerras, violencia social y desastres ambientales. Asimismo, refuerza la importancia de la evaluación psiquiátrica temprana y de intervenciones terapéuticas adecuadas en servicios ambulatorios de salud mental para personas en riesgo de desarrollar TEPT.
PALABRAS CLAVE: estrés; desastres; recuerdos intrusivos; pesadillas; riesgo.

1. INTRODUCTION

"Post-traumatic stress disorder" (PTSD) is a mental disorder that occurs as a result of prolonged exposure to a traumatic event: child abuse, sexual abuse, domestic violence, natural disasters (fires, earthquakes, floods, etc.), road accidents or negative experiences from wars.

As symptoms, PTSD includes thoughts, feelings, dreams related to the trauma, reliving traumatic events, altered emotional reactions that are dysfunctional and a hypersensitivity in response to the trauma.

These symptoms appear one month after exposure to psycho-trauma and can appear in the form of memories of negative events even in children.

People with PTSD have a high risk of suicide.

Not all people who are exposed to and experience traumatic events develop PTSD. Children and women who are more frequently exposed to violence, sexual abuse, incest and domestic abuse develop PTSD more frequently than those exposed to accidents or natural disasters.

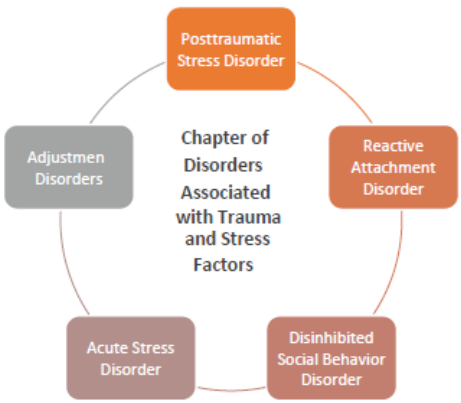
People who are subjected to prolonged traumatic events such as domestic abuse, soldiers on the battlefield develop a distinct entity of "Complex Post-Traumatic Stress Disorder" (CPTSD), respectively Traumatic Stress Complex, which is similar to PTSD, but which has a distinct effect on the emotional regulation of patients and on their identity.

It is possible to prevent the occurrence of post-traumatic stress in those individuals who present a faint (mild) symptomatology.

In the United States, 3.5% of adults have a PTSD diagnosis in a given year and 9% of the population develops PTSD during their lifetime. This disorder is more common in areas of armed conflict and more common in women than in men.

Post-traumatic stress disorder is an integral part of the Chapter of Disorders Associated with Trauma and Stress Factors, along with the following entities:

1. Posttraumatic Stress Disorder;
2. Reactive Attachment Disorder (found in children);
3. Disinhibited Social Behavior Disorder;
4. Acute Stress Disorder;
5. Adjustment Disorders.



The first symptoms of PTSD were described by Samuel Pepys, who described the distress symptoms following the fire of London in 1666. During wars, PTSD was variously described, for example as "combatants' neurosis".

The term "Post-traumatic Stress Disorder" was recommended for the first time in 1978 in a working group at "The Committee of Reactive Disorders". The term was then introduced in DSM V in 2012.

PTSD has also been closely linked to disasters (September 11 attacks, Hurricane Katrina). These events led to the emergence among the population of PTSD and the neurological implications associated with the disorder.

Thus, considering the implications arising from PTSD in DSM IV and DSM V, the diagnostic criteria for this disease were established.

The term PTSD came into use after the Vietnam War, when it was diagnosed in military veterans of the war and officially recognized as a diagnostic entity in 1980 by the American Psychiatric Association in DSM-III.

Other authors have used the terms “Post-traumatic Stress Syndrom” or “Post-traumatic Stress Symptoms” (PTSS).

There are several diagnostic elements of PTSD, namely the onset of PTSD and the development of symptoms after exposure to one or more traumatic events.

The symptoms are varied. Behavioral symptoms, emotional symptoms, emotional reactions and recall of trauma events may predominate.

Interventions in the first days or weeks after the trauma reduce PTSD symptoms.

The objective of present research is to acknowledge in an easier and simplified way the symptoms of PTSD with a view to establishing a correct and efficient treatment, prevent further unwanted progress of the disease and remissions of symptomatology which lead to social integration and improvement of life quality.

Another objective of the present research is a better knowledge of the etiology of PTSD factors for an increased prevention of further PTSD occurrence.

2. THEORETICAL FRAMEWORK

2.1. ETIOLOGY

There are several risk factors in the occurrence of PTSD.

Thus, the risk factors for PTSD are more severe in military combatants, survivors of crimes, survivors of traffic accidents, rapes, soldiers on the battlefields, survivors of natural disasters (fires, floods, earthquakes).

The occurrence of PTSD is higher in certain occupations, which require a long-term and more prolonged exposure to traumatic events (these include police officers, firefighters, paramedics, emergency medical personnel, car drivers).

PTSD is more common in women than in men, most frequently appearing in sexual abuse and domestic violence, peritraumatic dissociative manifestations being a predictive indicator for PTSD.

There is a strong link between the development of PTSD in mothers who experienced domestic violence during the perinatal period of pregnancy.

Refugees have always presented a risk factor for PTSD due to exposure to war, hardship and traumatic events. There is an increased rate of PTSD among the refugee

population, from 4%-86%. The appearance of PTSD in refugees is also due to the change in social status, the change in the existential level. Among the refugees, some were more affected, depending on their vulnerability. Among the refugees, the most affected are women, the elderly and unaccompanied minors. PTSD and depression in the refugee population tend to affect educational success.

A large number of patients developed PTSD after the unexpected death of a loved one (the disease rate was 20%).

There are also a number of medical conditions frequently associated with the development of post-traumatic stress. Among these somatic diseases we mention heart attack, stroke, cancer (breast cancer with mastectomy), as well as parents whose children have disabling chronic diseases.

2.2. RISK AND PROTECTION FACTORS

The risk and protection factors are classified into:

a. Pretraumatic factors

1. They include the existence of previous mental disorders: panic disorder, obsessive- compulsive disorder; emotional disorders in childhood.
2. Environmental factors: educational level; exposure to previous trauma; low IQ; family history.
3. Genetic and physiological factors - There are certain genotypes that offer protection against trauma.

b. Peritraumatic factors – These factors include the severity of the trauma, the perception of the threat to life and the dissociative syndrome, which occurs during the trauma and is a risk factor.

c. Posttraumatic factors

1. Temperament factors – Inadequate coping strategies, coping mechanisms, negative appraisals, Acute Stress Disorder.
2. Environmental factors – Subsequent and repetitive exposures to events that cause memories of the trauma.
3. Social and family support is a protective factor that mitigates the consequences of trauma.

2.3. GENETIC FACTORS

It is obvious that susceptibility to PTSD is hereditary. About 30% of PTSD cases are caused by single genes. Studies conducted on soldiers in Vietnam, monozygotic twins showed a higher risk of developing PTSD than dizygotic twins.

In the first findings, it was found that women with a small hippocampus develop PTSD more easily.

Research has shown that PTSD has multiple genetic influences that are common with generalized anxiety and panic (60% of cases). There are genetic links (in 40% of cases) and with alcohol, nicotine and drug addiction.

Several biological indicators have been identified as being related to the subsequent development of PTSD.

Intense sensory responses together with a reduced hippocampal volume have been identified as risk biomarkers for the development of PTSD.

Later studies showed that the soldiers whose leukocytes. presented a higher number of glucocorticoid receptors, were more likely to develop PTSD after a traumatic experience.

2.4. NEUROENDOCRINE AND NEUROANATOMIC FACTORS

PTSD symptoms occur when a traumatic event causes an excessive adrenergic response, which causes deep neurological patterns in the brain. These patterns can persist long after the event and attract emotions, marking a hyper-responsivity to the future and to emotional situations.

During traumatic experiences, a high level of secreted stress hormones suppresses the activity of the hypothalamus, which can be an important factor leading to the development of PTSD.

PTSD produces biochemical changes in the body and brain that are different from those produced in major depression. Patients diagnosed with PTSD have a stronger response to the suppression test with Dexamethasone than individuals diagnosed with depression.

Many patients with PTSD have a low secretion of cortisone, but a secretion of catecholamines in the urine with a higher ratio of norepinephrine/cortisol than in the undiagnosed.

This finding is a contradiction in the “fight-or-flight” response, in which both catecholamines and cortisol levels are elevated after exposure to the stressful factor.

Catecholamine levels are high and the concentration of corticotropic factor RF is high.

Together, these changes suggest abnormality of the hypothalamus-pituitary-adrenergic axis (HPA axis).

Fear maintenance has been shown to include the HPA axis, the locus coeruleus-noradrenergic system and connections between the limbic system and the frontal cortex.

The HPA axis, which coordinates the hormonal response to stress, activates the LC Noradrenergic system that intervenes in consolidating the memory of trauma-related events. This memory consolidation increased the possibility of developing PTSD.

The amygdala plays an important role in the production of PTSD. The basal lateral amygdala nucleus is responsible for the development of associations between responses to conditioned and unconditioned stimuli, the result of which is, in conditions of fear, PTSD. The basolateral amygdala nucleus (BLA) activates the central amygdala nucleus (CeA), which elaborates the fear response, including the behavioral response and the sensory response. Descending inhibitory impulses from the prefrontal cortex regulate the transmission from the baso-lateral nucleus to the central nucleus in the amygdala, this representing the hypothesis of the conditioned response to fear.

MRI studies have shown that the entire amygdala hyperactivity is involved in PTSD, there is a great degree of heterogeneity compared to social anxiety and phobic anxiety.

Comparing the dorsal portion of the amygdala (CeA) and ventral (BLA), a ventral hyperactivity was found, while hypoactivity is evident in the dorsal cluster. These explain hyperemotional states and hypersensitivity.

In 2007, studies of Vietnam War veterans showed a 20% reduction in hippocampal volume in those with PTSD compared to those without such symptoms.

Studies from Germany (in patients with PTSD) have highlighted a decrease in the level of endogenous cannabinoids in PTSD (in particular anandamides) and with an increase in cannabinoid receptors (CB1) in a compensatory way.

It seems that there is a link between the increase of cannabinoid receptors (CB1) in the amygdala and threatening manifestations or hyperexcitability, but they do not disappear in trauma survivors.

A meta-analysis of MRI examinations in Vietnam War veterans found an association between reduced total cranial volume, hippocampus, insular cortex and anterior cingulate gyrus and PTSD symptoms.

Patients with PTSD have a decrease in brain activity in the dorsal and rostral anterior cingulate gyrus in the cortex and the ventromedial frontal cortex, which is closely related to emotional experiences and emotion regulation.

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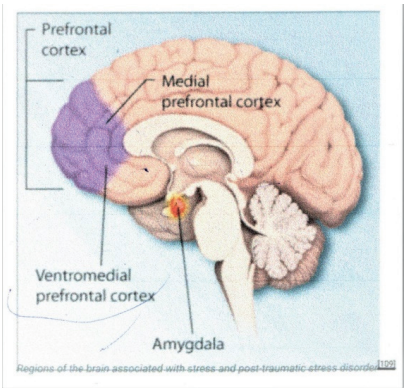
In PTSD, a series of changes occur at the brain level, which we can conclude as follows:

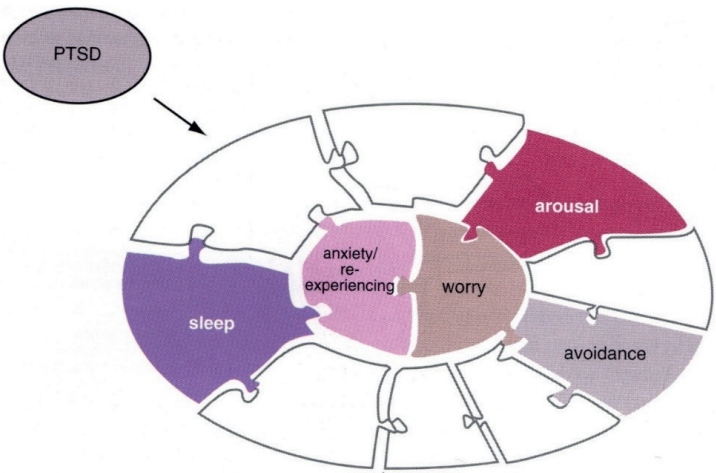
- The amygdala is hyperactive - which leads to increased emotional responses, which exceed the modulatory mechanisms;
- The hippocampus - has reduced dimensions (by 12%). This atrophy is considered to be due to the decrease in neuronal density. The atrophy of the hippocampus would be due to the atrophy of the whole brain, as I mentioned, and the generalized atrophy is due to the white matter. In patients with PTSD, it is considered that the reduction of the hippocampus would be a risk factor for the development of this disorder, not a consequence.
- The decrease in the activity of the anterior cingulate gyrus would be due to a failure of the cortex to modulate the responses of the amygdala and not to a cognitive deficit.
- The modification of BDNF (brain derived neurotrophic factor) at the hippocampal level was demonstrated.

- Also, exposure to glucocorticoid hormones leads to the inhibition of neurogenesis, as well as to the atrophy of the dendrites. Antidepressants have the opposite effect, they decrease the amount of cortisol, leading to cell growth.

The amygdala-centric model is that the amygdala is insufficiently controlled by the medial prefrontal cortex and the hippocampus. This is considered a deficiency in modulating the activity of the amygdala and its response to determining conditioned and unconditioned stimuli.

The hypothalamic-pituitary axis is responsible for coordinating the response to stress.





A strong suppression test to dexamethasone is due to HPA axis abnormalities, which give us predictions on strong negative feedback of inhibition to cortisone due to the increased sensitivity of glucocorticoid receptors.

It was hypothesized that PTSD represents a maladaptive conditioning to the emotional response, characterized by hypersensitivity, hyperreactivity and hyperresponsiveness of the HPA axis.

It is known that the locus coeruleus - noradrenergic system - mediates emotional memory. High cortisol levels reduce noradrenergic activity, but because PTSD patients have low cortisol levels, they cannot modulate their noradrenergic increase in response to posttraumatic stress.

Intrusive memories and emotionally conditioned responses are believed to be a response to associated triggers.

Neuropeptides (NPY) reduce the increase in norepinephrine and have an anxiolytic effect in animal models.

People with PTSD, with low levels of neuropeptides, have increased levels of anxiety.

These changes that appear in patients show us the role of the bio-psycho-social model. PTSD is one of the mental disorders that overlaps the bio-psycho-social model. The social part is represented by the existence of an external precipitating event - the social component of the model.

This event immediately surpasses the adaptive mechanisms of the autonomous adaptive system and the HTP that represents the biological component of the model. In conclusion, all the hormonal mechanisms are different from those that appear in periods of short stress or from depression.

After traumatic events, corticotropin-releasing hormone is increased, individuals show low levels of cortisone due to the amplified negative feedback exerted by cortisol and the increased sensitivity of tissue receptors for glucocorticoids.

In patients with PTSD, elevated plasma levels of thyroid hormones were also found, which can explain the somatic symptoms of PTSD.

Other changes that include other neurotransmitters are:

- The decrease in serotonin levels in PTSD patients with chronic evolution is associated with behavioral symptoms such as anxiety, rumination, irritability, aggression, suicide, impulsiveness. Serotonin has the role of stabilizing the production of glucocorticoids.
- Low levels of dopamine in people with PTSD contribute to symptoms such as apathy, anhedonia, attention disorders and motor deficits. Increased dopamine leads to psychosis and agitation.

These two allostatic types of adaptation contribute to increasing sensitivity to catecholamines and other stress mediators.

Hyperresponsiveness of the noradrenergic system can lead to continued exposure to high stress. The activation of receptors in the prefrontal cortex may be related to the occurrence of flashbacks and nightmares frequently experienced by those with PTSD.

The decrease in norepinephrine prevents the cerebral memory mechanisms in the brain from processing the experience and emotions of people during flashbacks and makes them not associated with the current events in the environment.

There has been much controversy regarding the neurobiology of PTSD. Studies from 2012 showed that there is no definite link between cortisol levels and PTSD, PTSD patients have high levels of corticotroph-releasing hormone, low cortisol levels and hyper response to negative feedback in the dexamethasone suppression test.

3. DIAGNOSIS

The diagnosis is based on:

I. Exposure to a concrete situation or severe injury, sexual violence (the individual is always exposed or the intensity of threatening events is particularly high.)
II. The existence of several symptoms that are closely related to the event:
    1. Recurring dreams;
    2. Dissociative reactions - in which the individual behaves as if the event were to repeat itself;
    3. Involuntary and intrusive memories of traumatic events;
    4. Significant reactions to external or internal stimuli that symbolize trauma;
    5. Intense psychological discomfort to stimuli that symbolize trauma.
III. Alterations of cognition and mood after the traumatic event.
    1. Negative beliefs about oneself, about the world;
    2. Loss of interest in important activities;
    3. Negative emotional state;
    4. The inability to feel positive emotions.
    5. Feelings of detachment or alienation;
    6. Inability to remember an important aspect of the event;
    7. Distorted interpretations.
IV. Persistent avoidance of stimuli associated with the traumatic event (after the traumatic event has occurred).
V. The duration of the event is longer than one month.
VI. The disturbance causes a significant deficit in professional or social life.
VII. Significant effects of reactivity and excitability associated with the traumatic event.

1. Exaggerated startle response.
2. Nighttime rhythm disorders;
3. Hypervigilance;
4. Concentration difficulties;
5. Irritable and angry behavior;
6. Reckless and self-destructive behavior.

The symptomatology associated with the psycho-stressful event can be with:

- Derealisation -> persistent or recurrent experiences of unreality of the environment (the individual perceives the surrounding world as unreal, as in a dream, distant, distorted);
- Depersonalization -> persistent or recurring experiences in which the individual feels detached (perceives as if he is an outside observer of his own mental processes or his own body; feels a sense of unreality of self or body or the feeling that time passes slowly).

In order to make the diagnosis, it is necessary, along with the highlighting of the traumatic event (abuse, domestic violence, rape), the highlighting of natural disasters (the events of September 11, Hurricane Katrina, military conflicts, occupations with a high risk of developing such a syndrome - firemen, paramedics, the police, the military).

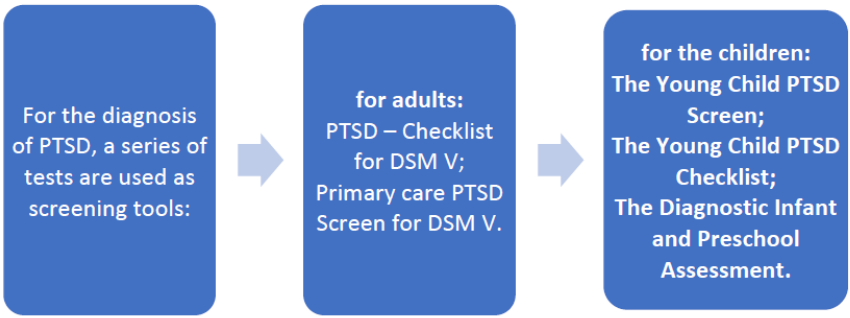
To these risk factors we must add the 4 clusters of basic symptoms included in DSM V:

- re-experiencing the trauma;
- avoiding trauma;
- cognitive dysfunctions;
- changes in reactivity (sensitive hyperreactivity).

The 3 criteria of ICD 11 are:

- re-experiencing the trauma;
- avoiding trauma;
- hypersensitivity.

The differential diagnosis is made with Acute Stress Disorder; Obsessive-compulsive disorder, Generalized Anxiety Disorder, Depressive Disorder.



4. COMPLICATIONS OF PTSD

Suicide - Repeated childhood abuse is associated with an increased risk of suicide. People with PTSD can present autolytic ideas, passive and active, suicide attempts, even suicide planning.

PTSD is associated with important social, professional and physical disabilities – these patients are high users of medical services with considerable economic costs. Dysfunctions are present in several fields: interpersonal, evolutionary, social, educational, occupational, public health.

In the study samples among the veterans, it was observed that they have reduced family and social relations, with absenteeism at work, with low salary level, low professional and educational achievements.

As well as complications, we remember the stigma of PTSD patients due to increased emotionality and decreased opportunities. PTSD is especially complicated with the abuse of psychoactive substances and alcohol. Thus, PTSD patients have a higher risk of developing alcohol and drug addictions.

Also, the condition can be associated more frequently with depressive disorders, with obsessive-compulsive disorders and with generalized anxiety. The individual always makes efforts to avoid memories, thoughts, feelings about the traumatic event. The patient avoids people, activities, places that cause recall of the event.

Patients with PTSD have an increased sensitivity to potential threats, including those related to the traumatic experience.

After traumatic events, evolutionary regression can occur, there can be hallucinations, as well as paranoid ideas. The individual may present dissociative symptoms, difficulties in controlling emotions and difficult interpersonal relationships. Other comorbidities are added to these symptoms.

Thus, in survivors of traumatic events, depressive and anxious elements are present more frequently, as well as the harmful use of alcohol and psychoactive substances. PTSD also has a strong association with tinnitus, and it is possible that PTSD is the cause of tinnitus.

Children and adolescents who are subjected to traumatic events remain with important emotional difficulties and imbalances of emotional reactions.

5. TREATMENT

The treatment consists of psychological treatment and psychopharmacological treatment. In the treatment of PTSD, the basic treatment is the psychological one, followed by the psycho-pharmacological one.

5.1. PSYCHOLOGICAL TREATMENT

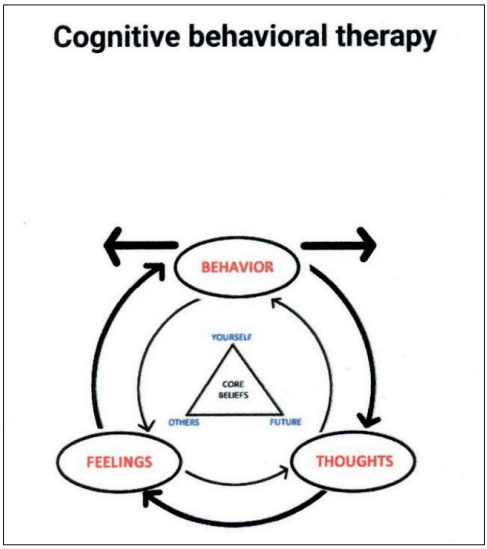
For the prevention of the occurrence of PTSD, we consider an important role to be quick access to cognitive-behavioral psychotherapy and psychoeducation. Psychological treatment is decisive in the evolution of PTSD symptoms. Thus, benefits were observed through the early start of cognitive-behavioral therapy.

Another psychological method used is “Psychological Debriefing”, which involves counseling several individuals who participated in the event and helping them to remember the event. Psychological Debriefing was not very useful in therapy and included several stages of treatment.

Another very useful psychological tool is Cognitive-Behavioral Therapy (CBT), which tries to remove pathological adaptive coping mechanisms and use defensive means of adaptation to remove negative emotions.

CBT has proven to be an effective treatment for PTSD, reducing the symptoms of the disorder until it disappears.

“The United States Department of Defense” showed that in CBT, individuals learn to identify their thoughts, to feel their fears and to reframe them into less stressful thoughts.



5.2. PSYCHOPHARMACOLOGICAL TREATMENT

The aim of the treatment is to minimize the disabilities, to reduce the key symptoms of PTSD and associated comorbidities, to prevent recurrences and improve life quality.

The most important psychopharmacological therapies are:

- Antidepressants, inhibitors of serotonin recapture (ISRS):

ANTIDEPRESSIVES	DOSIS
Escitalopram	10-20 mg
Citalopram	20-60 mg
Fluvoxamina	100-300 mg
Paroxetina	20-40 mg
Sertralina	100-150 mg

- Antidepressives with dual mechanism:

ANTIDEPRESIVE	DOSIS
Venlafaxina	150-225 mg
Mirtazapina	15-45 mg

- The use of anticonvulsants (Lamotrigine, Sodium Valproate, Carbamazepine, Gabapentin).
- MAOI (Phenelzine 45-75 mg, for intensive symptom relief).
- α1 adrenergic blockers – Prazosin administered in the evening in a dose of 1-4 mg to relieve nightmares and intrusive symptoms.

- Benzodiazepines - in improving sleep disorders.
- Neuroleptics - administered to agitated patients (Olanzapine, Quetiapine).

The psychopharmacological guide recommends the use of medication in stages: SSRIs are recommended in the first-choice therapy of PTSD due to their effectiveness. If it does not respond to SSRIs, another compound can be tried: Nafazodone, Amitriptyline, Imipramine, Lamotrigine.

In cases where a partial response is obtained to the second treatment, an attempt is made to obtain a response to the third treatment, which involves the use of Lithium or an anticonvulsant, and in patients with fits of anger, an atypical neuroleptic (Olanzapine or Quetiapine).

If PTSD has a chronic evolution, it is indicated to continue the treatment for at least 1 year after obtaining the response to the treatment, and the decrease will be done progressively.

The prevention, recognition and early treatment of PTSD must be a priority for psychiatrists, who must take into account the disabilities that this disorder produces and try to improve the quality of life for patients through appropriate treatment.

6. METHODOLOGY

Clinical case presentation:

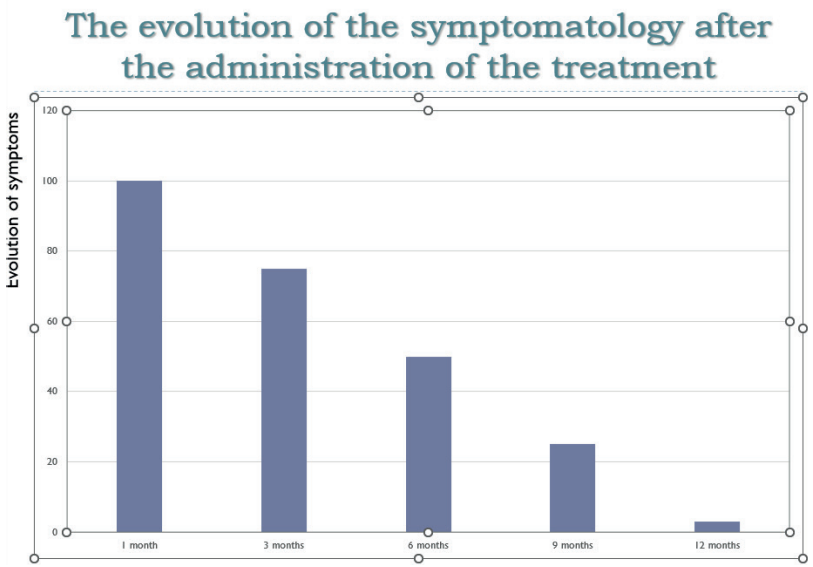
The 25-year-old patient M. A. presents herself at the Medical Center for Human Health.

Symptomatology at the psychiatric consultation:

- Dissociative manifestations;
- Insomnia;
- Anxiety;
- Terrifying dreams;
- Nightmares;
- Depressive mood;
- Flashbacks related to psycho-traumatic events that happened in childhood;
- Depressive mood;
- Irritability;
- Behavioral disturbances;
- Feelings of derealization and depersonalization.
- The symptomatology appeared 5 years ago, intensifying in the last year and affecting social, family and professional functionality.

- *Personal history:* The patient was the victim of a psycho-traumatic event in childhood and was repeatedly sexually abused by her cousin. The patient lived in a precarious environment, her parents being divorced, having a stepfather, lack of emotional support, showing educational deficiencies (she attended 10 classes) and an average IQ. The patient has an average IQ and due to these educational deficiencies.
- *Heredocollateral antecedents:* The patient's mother was diagnosed with Major Depressive Disorder in the past.
- Although the symptoms appeared for about 5 years, the patient did not have the opportunity to benefit from specialized medical services.
- Currently, the patient is married, has 2 children and a quiet family life, having emotional support from her husband. However, the symptoms present at the Medical Center have worsened over the past year.
- Paraclinically, the usual analysis was normal.
- A CT scan of his skull was performed. It showed no visible changes.
- Following the analysis of the clinical manifestations (emotional and cognitive disorders), the highlighting of the psycho-traumatic event with prolonged duration in childhood and its recollection at the time of exposure to the places where the events took place, as well as the impairment of functionality, she was diagnosed with Stress Disorder Traumatic.
- The applied treatment was a complex treatment: biological, psychological and psycho-educational.
- As a first-line biological treatment, the antidepressant (SSRI) escitalopram tablets, 10 mg, was administered. It started with minimal doses and reached a dose of 20 mg/day. As anxiolytics, Lorazepam (Anxiar) was administered for 4 weeks, 1 capsule/day.
- Under the treatment, the symptomatology faded after 3 months.
- Because the patient continued to show irritability, emotional lability, behavioral disturbances, a thymostabilizer (Gabapentinum) 100 mg, 2 tablets/day was administered.
- To these was added, for interpretive symptomatology, treatment with the neuroleptic Quetiapine, 50 mg, 1 tablet/evening.
- Under the medical treatment applied, only after 1 year, the symptomatology was remitted.

- The patient remained on maintenance treatment, considering the psycho-trauma to which she was exposed and the long exposure time.
- As psychological treatment, psycho-education and psychological counseling were tried, the patient not being compliant with cognitive-behavioral therapy.
- Also, psycho-educational therapy was applied to family members, in order to ensure emotional support.
- After the treatment, the patient's functionality improved, as well as her quality of life.
- It was recommended to periodically reassess the patient and continue the maintenance treatment after achieving remission, at least for a year.



7. RESULTS AND DISCUSSIONS

The research showed that early diagnosis and adequate treatment on long term led to obtaining a remission and prevent of refalling and the importance of correct diagnosis through a psychiatric evaluation.

Limitations of the study were connected to limited incidence of this pathology in our area and difficult acceptability of means of psychological treatment by the patients and unavailability of RMN or other complex imagistic procedures.

8. CONCLUSION

We can conclude that PTDS is a very important issue of our times, bearing in mind the realities such as wars, world conflicts, natural disasters caused by climatic changes, increase in aggressivity and intolerance and abuses we all face. Therefore, a more important attention should be paid to this mental disorder.

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