

PJP

CASE REPORT

PAGDAHUM HIN KALINAW (HOPE FOR PEACE & TRANQUILITY)

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Words cannot fully describe the grotesque experiences of rape survivors. as psychiatry residents, we are faced with the formidable task of trying to understand their inner experiences, so we can journey with them towards healing.

CASE PRESENTATION

Jane is a 23- year-old female, single, Filipino, Roman Catholic, Office Administration graduate, right handed, unemployed, 8th of 12 siblings, and resident of Tacloban City, Leyte. She was admitted for the first time at the Eastern Visayas Medical Center (EVMC) on Nov 19, 2020. She has been following up at our Out Patient Department (OPD) from February 2021 till 2022.

She came in with a Chief Complaint of "nadiri ako!" according to the patient; and "sige hin lakat lakat ginkukulba na kami tanan" i.e. disorganized behavior and harming others according to the family.

Her Premorbid Personality was described as a secretive and prayerful woman with a few selected friends and a homebody. She has an average intelligence (DAP-IQ 94) but she tends to overestimate her capabilities, thinking she can do things on her own without guidance from others. She longs to be financially independent from her family. She grew up in a low-income family, raised by emotionally distant parents i.e. an absentee father and a strict depressed mother. Hence, she dreamed to be a public school teacher someday to be financially stable.

History of Present Illness (HPI) started 2 years prior to admission, at 19 years old, Jane met a 29-year-old college student online while she was in second year college. On their second date, he

forced her to hold his penis and scrotum though no actual sexual intercourse despite being prodded. She felt depressed and thought of herself as being dirty for being treated as a sex object. Two weeks after, the man pestered her to send nude pictures. So, she sent faceless nude pictures. But when he did not reply back, she felt hurt and betrayed. She didn't tell her family but was noted to be irritable and depressed with social withdrawal, difficulty concentrating, easily fatigued, felt worthless and had persecutory delusion of being maligned or victimized. To cope, she went out drinking with friends thrice a week and came to class drunk, yet still able to her school work. She accomplish complained of insomnia. After a few weeks, she also manifested with irritability alternating with elated mood and decreased need for sleep, increased talkativeness, and grandiosity i.e. that she was better than others hence she did not need to listen to their opinion, which resulted in quarrels with her sisters. No consult was done nor were medications taken as her siblings thought that she was just being hard-headed. The symptoms spontaneously improved.

1 year and 7 months prior to admission (June, 2019), she met a middle aged American via Facebook chat/sexting who enticed her to send nude pictures in exchange for tuition money. She thought that it was safe since she believed he deleted her pictures after a few seconds. She accepted the 20 thousand pesos from him, which she used to buy a laptop and cellphone, since her

father was unable to provide enough for her financial needs. There were no noted psychiatric symptoms at this time.

1 year and 3 months prior to admission (October 2019), Jane felt pressured to earn money for her family after she graduated from college. Once when she went to pray in church, she met a man who introduced himself, as a lay minister of the church and guidance counselor. He seemed helpful that Jane immediately trusted him and gave him her cell phone number.

She had lunch with him and rode on his motorcycle. Fearful, she felt obliged to go because he spent for her food. She was brought to his home and raped. Still shocked and unkempt, she was dropped near their house after verbal threats. She didn't tell anyone as she was afraid for herself and her family. She often felt numb, stared blankly and barely noticed her family. A dark cloud of shame and self -hatred overshadowed her as she blamed herself for what happened. She felt unsafe with men and would avoid them. She would be irritable towards her brother and father thus most of her siblings also avoided her. Feeling depressed, she would isolate herself in her room where she would ruminate about what happened over and over again. She also had recurrent dreams of the rape incident. This led to having difficulty falling asleep, anhedonia, poor concentration easily startled with decreased appetite and loss of weight. Feeling depressed, she began to isolate herself. And even as her symptoms worsened over the next 3 months as her siblings noted disorganized speech, visual and auditory hallucinations with sudden unprovoked shouting by herself and making gestures, her siblings brushed them off as nothing to worry about; hence no consult nor medications were given.

[1 year and 3 months prior to admission (October, 2019), Jane felt pressured to earn money for her family after she graduated from college, though her siblings denied pressuring her. Once when she went to pray in church to ask guidance from God, she met a man who introduced himself as a lay minister and gave her counsel on finding work. She did not have any conversations like this with her father before. Hence, she felt grateful and trusted him with her cell phone number. She agreed to have lunch with him thereafter and rode on his

motorcycle. Fearful, she felt obliged to go because he spent for her food. She was brought to his home and raped. Still shocked and unkempt, she was dropped near their house after verbal threats. She didn't tell anyone as she feared for her life and her family. She often felt numb, stared blankly, and barely noticed by her family. A dark cloud of shame and self-hatred overshadowed her as she blamed herself for what happened. She felt unsafe with men and avoided them. She felt irritable towards her brother and father, thus most of her siblings avoided her. Feeling depressed, she isolated herself in her room where she ruminated about what happened repeatedly. She also had recurrent dreams of the rape incident. This led to difficulties in falling asleep, anhedonia, easy startle, decreased appetite and weight loss. She also had difficulties focusing on her house chores and finding a job. Even as her symptoms worsened in the next 3 months, her siblings noted disorganized speech, visual and auditory hallucinations with sudden unprovoked shouting by herself. Her siblings brushed them off as nothing to worry about. Hence no consult was done nor medications were taken.]

One year prior to admission (PTA), Jane tried to distract herself by studying for an bookkeeping exam, so she visited the city library where a uniformed middle-aged man who introduced himself as a Dep Ed employee offered her a job. Without doubting him, she went with him to a secluded room where she was forced to have oral sex. Despite being overwhelmed, she gathered enough courage to go to the same church to ask help from God and why this happened again.

[One year prior to admission (January, 2020), Jane tried to distract herself by studying for a national certifying bookkeeping exam given by TESDA. So, she visited the city library where a uniformed middle-aged man who introduced himself as a Dep Ed employee offered her a job. There were no other people nor security guard present at that time, and an area on the second floor was secluded. Without doubting him, Jane went with him to a secluded room where she was forced to have oral sex. After a few minutes, the man hurriedly closed his pants, ran away, and left her shocked while she sat on the floor. Despite being overwhelmed and no other person to run to, she gathered enough courage to stand

and leave the place. She felt fearful for her safety if she told the authorities. Hence, she decided to go to the same church to ask help from God and why this happened again.]

While praying Jane did not notice that the previous perpetrator was behind her. She was forced to go with him for lunch and was raped again in his home. She was driven out with money to go home where her family didn't notice anything different about her. Her anxiety worsened as she had flashbacks and recurrent memories of the abuses but would forget their faces. She would talk and gesture to herself. She heard male voices cursing her and maggot in her food. She would see headless people walking around. She was irritable and disrespectful to others. She manifested disorganized behavior and would give derailed answers. She also had suicidal thoughts but never attempted to hurt self. She denied any illicit drug use nor any somatic complaints.

Eleven months prior to admission (February, 2020), Jane was brought to a private psychiatrist due to her behavioral changes and was prescribed unrecalled medications. However, her family misread the doctor's instructions, which led to side effects. She was then brought to the OPD, where she was hydrated and given Diphenhydramine HCl, to relieve her of the extrapyramidal side effects. She was sent home with the ff medications: Olanzapine 10 mg/tablet, Itablet after dinner and Biperiden 2mg/ tablet, I tablet twice a day. Jane refused to file a complaint against her perpetrators due to fears in handling the stress of the legal process.

Ten months prior to admission, Jane's symptoms gradually resolved with good medication compliance. Her medications were adjusted to: Valproic Acid 500 mg/ tablet, 1 tablet twice a day then shifted to Sertraline 50 mg/ tab, 1 tablet once a day and Olanzapine 10 mg/ tab 1 tablet once a day. Jane's family brought her to parks so she could relax, though she still had occasional crying bouts. Her family noted gradual resolution of symptoms, as she accepted that the abuses already happened and she planned to move forward.

1 month prior to admission, she planned to apply for work and stopped all her medications, because she felt apparently "well". A week later, she became irritable with labile mood i.e. considered killing herself. She continued to talk therself and pointed at something in the air. She had decreased need for sleep, wanted to sell her belongings and insisted on doing what she wanted to do such as taking a walk at 6am or going to various government offices to get application forms for jobs. Her skin darkened as she was always out and her feet developed pruritic lesions.

This time her family was alarmed and her father followed her and tried to bring her home. She spat on his face and kicked him, shouting "Rapist, kay ano pirmi nala ako niyo ginlalabtan! (Rapist! Why do you always rape me?)

The next day, she thought that it was her 2nd perpetrator whom she had kicked, and didn't realize it was actually her father. She would recall her 1st perpetrator and asked her sisters if they had seen him.

In the next 6 weeks, she complained of headaches and distorted memories of being raped after the incidents but denied them on follow-up. She claimed that her 1st perpetrator called her to join him in Cebu. As she walked around aimlessly] she relayed how she hitched rides with strangers and claimed that a tricycle driver brought her to a motel where he also raped her. Another story Jane would tell was that she met a man in a carenderia who gave her 500 PhP for transportation and that he too had raped her in a motel in exchange for financial support. Later she denied these and also denied taking any illegal drugs or alcoholic beverages. She continued t be irritable towards men, refused to eat, bathe or talk to her family. She hated her name as she believed it was dirty and broken. She wanted to change her identiy, "tawaga ako nga Faith Kim, Earl Wright" (Just call me Faith Kim or Earl Wright). Still no consult, nor medications were taken as she refused to go with her family for psychiatric consultation.

Two weeks PTA, her symptoms persisted along with increased goal -directed behavior of leaving home to distract her from her traumatic memories. Patient would go the previous church where she met the 1st perpetrator and would sit and stare blankly. She would curse her family and said there was a ghost sleeping beside her sister and often talk to herself in the mirror.

One week PTA, Jane had derealization, unable to recall where she went or how she got to such places. She would dress in all black outfit, going around asking for food and money from strangers, then come home late at night bringing food from unknown places. She burned important documents such as her birth certificate and ID cards, without considering the possibility of burning their house down as she wanted to "burn" her identity after which she would play with the ashes. She also had a grandiose delusion that she was god.

On the day of admission, her family tricked her by saying they were going to Jollibee, but was actually brought for out -patient psychiatric consult and then eventually admitted due to the EVMC.

Past Psychiatric History [revealed that she had a history of emotional neglect in childhood but no history of any physical abuse, nor any legal cases.]

Substance Use History revealed that Jane does not smoke or take alcoholic beverages nor any other illicit drugs.

Past Medical History showed that Jane was admitted for measles in 2019 but denied any other medical illnesses.

Family Psychiatric History

Bipolar I Disorder in her mother who was initially diagnosed to have Major Depressive Disorder with psychotic features in 2010 triggered by her husband's philandering, and a cousin with an undiagnosed psychotic disorder. No substance use in the family.

Family Medical History

Jane's father has arthritis, and PTB in a brother and a sister. Her mother has hypertension, prediabetes and suspected dementia. Her mother's psychiatric medicines include Aripiprazole 10mg tab, 1/2tab OD, Divalproex Na 500 mg tab, ½ tab OD, Diazepam 5mg tab, ½ tab prn for insomnia. Jane's mother was seen first at EVMC OPD last May 2020, then lost to follow up thereafter. No Cancer, Asthma, surgeries.

Family Profile

Lydia (51 years old) is Jane's mother, an AB English undergraduate who was described to be

a very introverted housewife. Lydia isolated herself from her children after the house chores were done, and rarely had casual conversations with them. Due to this, Jane and her siblings felt distant towards her despite her efforts to ensure that they ate adequately and slept in a clean house. Her father's adultery, led to depression and psychosis in her mother (depressed mood, blank stares, irritable, hallucinatory gestures of talking to self) diagnosed in 2004 at our OPD then Bipolar I Disorder on May 2020 after being lost to follow-up for several years. Jane was sad and anxious as she witnessed the transformation of her mother, her parents' separation and their family's brokenness.

Rey (53 years old) is Jane's father, college undergraduate, currently assists her eldest daughter in their carenderia business. Rey was mostly out of the house, working in a 5-6 lending and ice delivery business. At 7 years old, Jane's father had an illicit affair and left them from 2004 - 2013.

Jane's maternal grandparents, Benito and Sarah (67 and 64 years old respectively) were loving towards Jane and her siblings. They took her mother Lydia in and transferred her to Samar with them, when she had her depression, along with the 4 youngest siblings. Jane and the older ones lived with their paternal grandfather Alfred (65 years old) who provided and guided them.

Vanessa is the eldest child and her father's favorite. In childhood, she and her siblings had rivalry with her because she was given more attention and received whatever she wanted at the expense of the younger ones. But when they grew older, Vanessa showed more care towards Jane as she accompanied her in her consultations.

Reynaldo, Reyna and Jessa are her older siblings. Jane felt emotionally distant towards them because they only focused on their own lives, and did not show as much care to Jane and her younger siblings, especially when they began to have families of their own.

Lyn is the third child, a lesbian, high school graduate. She was mostly the only sibling concerned with monitoring Jane's mental health concerns. However, when she felt tired of caring

for her, Vanessa finally stepped in to take care of her since 2022.

Anamnesis

Prenatal- Perinatal: Jane is the 8th of 12 siblings. She was delivered at home by a midwife via normal spontaneous vaginal delivery with no complications. She was an easy infant, and bottle fed throughout infancy. Her caregiver was her mother, and was inconsistently supported by her father. Development was at par with age. Due to a large family, financial constraints, and poor communication, Jane witnessed frequent fights between her parents while growing up. Despite of these, her siblings supported their mother in caring for her.

Early - Middle Childhood: Jane was a friendly and jolly child, who enjoyed playing and learning new things with her siblings. She studied in a public school while her grades were strictly monitored by her mother, including her coming in and out of the house. Jane repeated grade 1, but improved in her studies as her grandfather encouraged her. Hence, she believed that education is her key to overcome poverty and hardships. Despite her parents' tumultuous relationship, her grandparents stepped in to fill in the gaps. Jane coped by sharing her thoughts and feelings with her siblings, and finished elementary with average performance. No history of bullying, delinquency, or any problematic behavior. She was active in school activities and had few, selected friends.]

Adolescence: As Jane studied in a public high school, she was determined on finishing, until 15 years old when typhoon Yolanda hit their home and their father became homeless. With no one to turn to, they hesitantly accepted him into their home; still they had no closure as he never sought their forgiveness. Jane finished high school with average school performance and was active in active in extra-curricular activities. Her family noted a gradual change in her personality when she entered college at 17 years old due to peer influences. Jane spent more time with friends, going out with them without her family's consent. She kept problems to herself, and began alcohol drinking. She finished Office Administration (2 years) course at a private college where she was on the dean's list.

Review of Systems

With weight loss and active skin lesions (both feet). The rest of the systems are unremarkable.

Physical Examination

Skin: Good skin turgor, tanned skin with active skin lesions (pruritic, suppurative) at both feet HEENT: pink palpebral conjunctiva, anicteric sclera, no lymphadenopathies

Chest and Lungs: Symmetric chest expansion, clear breath sounds

Cardiovascular: Normal rate, regular rhythm Abdomen: Flat, soft, non-tender abdomen Neurologic: no aphasia, no agnosia, no apraxia

Mental Status Exam

On her first Mental Status Examination on November 19, 2020 Jane was noted to be petite with unkempt hair, tanned skin, dark eyebags, wearing a red lipstick, white jersey shirt and black pants where she hid 2 xeroxed copies of an ID of a male driver in her pants. She had poor eye contact, uncooperative, very evasive towards interviewer, agitated and wanted to escape. She was angry, then sad and crying but with constricted affect. Speech was spontaneous, with loud volume. Thought process is tangential, circumstantial with looseness of association. She had persecutory delusions that she was being punished by being admitted to the hospital. She had visual hallucinations of seeing multiple objects floating, auditory hallucination of multiple voices. She denied homicidality, but admitted to having thoughts of death ("pataya nala ako niyo"). Her Memory was poor, oriented to 3 spheres, with poor judgment and complete denial of having a mental illness.

After several months of psychotherapy and medication intake, she REMARKABLY improved and is now preparing for a B.A. in Education course.

On her last consult on May, 2023 she was well kempt, wearing a white shirt and blue jeans. She had good eye contact, seated calmly on a chair with good posture and fully cooperative with the interviewer. Her mood was euthymic mood and affect, appropriate. Speech was spontaneous, with normal volume and rate. Thought process was goal-directed. She denied delusions/hallucinations, suicidality. She had fair judgment, and good insight.

Montreal Cognitive Assessment Test taken Dec 2, 2020 revealed MILD cognitive decline; problems with visuospatial, executive functions but Oriented to 3 spheres, fair immediate recall, but poor delayed recall, poor calculation.

In the Basic Personality Inventory, Jane had moderately elevated scores on Hypochondriasis, Denial, Alienation, Thought Disorder, Self Depreciation. She had highly elevated scores on persecutory ideas and Low scale scores on depression, interpersonal problems, anxiety, impulse expression, and social introversion

Based on the Draw a Person Intellectual Ability Test her IQ Score was 97 (average cognitive function), behavioral abnormalities are not present and she is emotionally stable.

Differential Diagnoses

Several psychiatric disorders were considered to help understand Jane's problem. For the mood disorders, Bipolar II Disorder was considered due to the presence of hypomanic episodes in 2018 and depressive episodes in 2018 to 2020. However, the manic episodes with psychotic symptoms and socio-occupational dysfunction can be explained better by Bipolar I Disorder, hence Bipolar II can be ruled out. Bipolar I Disorder, Medication - induced (Sertraline) was considered due to also antidepressant (Sertraline) intake from April - Oct 2020. However, the manic symptoms developed during October - November 2020 did not develop during or soon after medication exposure, and these symptoms developed several days after all medications were discontinued. Hence, it is also ruled out. Bipolar I Disorder, Manic with Psychotic Features was considered Presence of manic episode (Oct - Nov 2020), can be explained by Bipolar I Disorder due to the presence of manic episode for at least 1 week, with socio-occupational dysfunction, psychotic symptoms, as mentioned. Bipolar I Disorder, Manic with Mixed Features cannot also be ruled out because Jane also had mixed features such symptoms prominent as dysphoria, irritability, feelings of worthlessness, excessive guilt, and recurrent thoughts of death which were observed by her relatives.

Due to the recurrent trauma exposure, Posttraumatic Stress Disorder with Dissociative symptoms was considered Recurrent, distressing memories flashbacks, avoidance of thoughts, feeling, memories, depressed, irritable mood, angry outbursts, decreased appetite and weight, feeling detached from others, hyperarousal (easy startle), derealization, and reckless self-destructive behavior, with duration of symptoms for at least 1 month.

Diagnosis

The current working impression is Posttraumatic -Stress- Disorder with Dissociative symptoms; Bipolar I Disorder, MRE Manic with Psychotic and Mixed Features as well as the ff V Codes: (1) Past Personal History Adult Sexual Abuse, subsequent encounter; (2) non-adherence to medical treatment; (3) wandering associated with a mental disorder; (4) low income; (5) parent-child relational problem; (6) sibling relational problem; (7) disruption of family by separation of parents

Management

She was admitted to the Psychiatry Ward of EVMC, initially given Risperidone 2mg/tablet, 1 tablet bedtime, Divalproex Sodium 500mg/tablet, 1 tablet in the morning. Due to persisting psychotic symptoms, Olanzapine 10mg/tablet, ½ tab ODHS was added to improve her appetite and sleep. Risperidone was not increased instead due to her increased risk for extra-pyramidal symptoms. For the trauma symptoms, Sertraline 50mg/tablet, ½ tab then eventually increased to 1 tablet once daily. She had unremarkable CBC, urinalysis, fecalysis, electrolytes, FBS, lipid profile, kidney and liver function tests. Supportive psychotherapy and psychoeducation were done to the patient and watcher, and family meetings were done to improve adherence of the patient and her family to the management. She was then discharged improved after 14 days of admission.

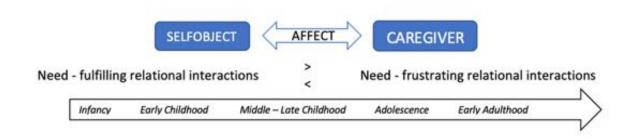
A referral to WCPU was also done to address the sexual abuse. The Obstetrician's anogenital findings on May 1, 2020 indicated that she had a history of blunt force or penetrating trauma (i.e. hymenal laceration at 2,5 and 11 o'clock position), and pregnancy tested negative. Jane's family opted to ask legal advice from a lawyer. But since she had difficulties recalling important details regarding the identity of her perpetrators they did not proceed with filing a legal case. Jane eventually accepted this, through her psychotherapy sessions, and focused on

personal healing from her trauma instead.

Psychological tests were done last December 1, after her admission. In the Basic 2020 Personality Inventory, Jane had moderately elevated scores on Hypochondriasis, Denial, Disorder, Thought Alienation, and Self Depreciation. She had highly elevated scores on persecutory ideas and Low scale scores on depression, interpersonal problems, anxiety, impulse expression, and social introversion. Based on the Draw a Person Intellectual Ability Test her IQ Score was 97 (average cognitive function), behavioral abnormalities are not present and she is emotionally stable. Thus, a combination of these scales may show that she may experiencing hallucinations and delusions.

Jane then later had regular monthly to bimonthly OPD consults, and had improved monitoring regarding her medication intake and consultation from her siblings. Medications were adjusted as follows: Olanzapine 10mg/tablet, increased to Itablet after dinner after 1 month due to occasional hallucinations and persecutory ideas (as shown in her psychological test), but tapered down after 8 months due to remission of psychotic symptoms; Divalproex Sodium 500 mg/ tablet, increased to ½ tablet 4 times a day to stabilize her mood, while Sertraline was eventually tapered down 6 months after her admission due to remission of trauma symptoms. Her manic, psychotic and trauma symptoms gradually improved. Currently, since January 2023, she was able to enroll in her dream course, BS Education, able to comply with school requirements and socialize with friends while having regular consultations at our OPD.

Psychodynamic Formulation

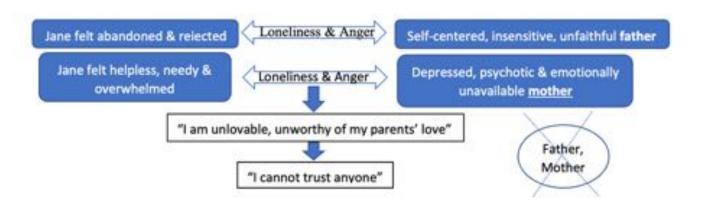


We can use object relations theory to help link Jane's current problems and patterns to the subconscious repetition of early relationships with others. This theory states that young children take in their experiences with important caregivers through internalization. These internalized relationship patterns are called templates, which remain in the patient's

unconscious mind, and are used to navigate the world and relationships later on throughout development. Selfobject, caregiver and the affect/emotion are all internalized to become a template, however there are times when the templates are not based on reality especially when there is poor communication in the family, just like in Jane's family.



ane's problems and symptoms are circumscribed to the traumatic events in her life, which lead to unrealistic expectations of herself and others, and problems in trusting others.



Due to a lack of a firm and supportive authority figure, Jane lacked direction and guidance in life. She coped through denial of her real thoughts and feelings, splitting in how she perceived her parents (both love and hate feelings), and projection of her inner turmoil to others manifested in her psychotic symptoms, and became mistrusting of others due to projective identification. ("I don't need them. I'll keep my problems to myself. I need to stand up and strive on my own and be successful, pay them back, to prove my worth to them.") Having no source of guidance and mistrust lead to lower chances of learning social and cognitive skills (i.e. interpersonal skills, problem solving, sound judgment and decision-making, self-esteem, impulse and affect regulation, memory and attention, and a healthy objective perception) which are usually attained from healthy relationships1. Hence, she became naïve and vulnerable to opportunistic men who took advantage of her. Family history of psychiatric disorder, alcohol use, parental neglect, social media, poverty and stress due to family problems all further increased the risk for her to develop psychiatric problems.



events indeed Traumatic overwhelm ordinary human adaptations to life (see figure 1). These include the fight - flight - freeze, response, arousal response, attention, sensory perception and emotional regulation which overwhelmed and become disorganized. Traumatic events recondition our entire nervous system including the entire body. Neurochemical abnormalities such as increased Epinephrine, Norepinephrine and Cortisol occurs which contribute to disrupted cognitive processes due increased reactivity of the amygdala, suppression of the hippocampus and disrupted prefrontal cortical functions. And these events interact with preexisting factors such as genetics and cumulative life adversities which further increase the risk to develop posttraumatic stress and mood disorders (3).

Filipinas, 68% experienced social media harassment, which occurred frequently (50%) or very frequently (33%) (Plan Int'l), and more often than actual street harassment.

Even before COVID, rape cases (30%) and physical injuries (15.1%) have increased among women aged 15-49 from 2018 (6). The pandemic further made women and children vulnerable to trauma, as prolonged lockdowns forced them in physical and emotional isolation, several of them with their abusers. As young adults have an appropriate need to find love and belongingness, they inevitably resort to online means to find them.

Unfortunately, Region 8 has one of the highest VAWC (Violence against Women and Children)

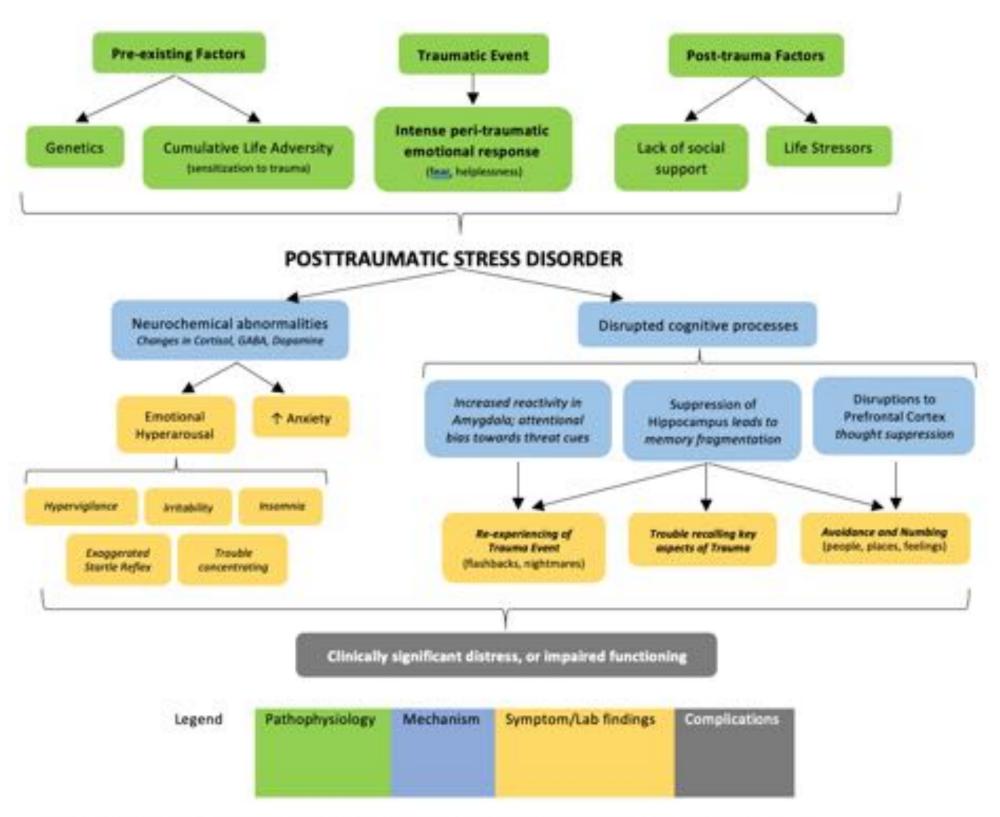


Figure 1. Pathogenesis and clinical findings in Post-Traumatic Stress Disorder³

Young Filipinos face unparalleled challenges today. When the Philippines first embraced the internet, it also opened the door to misuse such as cyberviolence. It is an online behavior that leads against physical, assault the psychological, & emotional well-being of a person or group. Since the youth are always online, it is not surprising that almost half of **Filipinos** aged 13-17 affected by are cyberviolence(4). In a survey5 of 500 young

cases (6) in the country. Hence, we may encounter them without even knowing it, and not only as patients. She may be a teary-eyed neighbor, or a saleslady with bruises. We have a choice. We can be either neutral, part of the solution, or the problem. We must ensure a safe and supportive atmosphere whenever we face patients with possible trauma history. We should not be afraid to reach out, talk to them, and ask how they are doing. We can advise them to talk to a caring

relative or even seek professionals such as psychiatrists. Let us remember that crises such as COVID, does not only ravage physical bodies, but the hearts and souls of abused people. No matter the education, status or creed, everyone can help. A KIND GESTURE CAN REACH A WOUND THAT ONLY COMPASSION CAN HEAL.

Case Discussion by Bernardo L. Conde, MD, FPNA, FPPA, FPsyche, FPCAM

In discussing this case, it is important to describe the neurobiological concepts pertaining to the brain and its impact on behavior, emotion and thinking process as a consequence of the emotional trauma that follows an event.

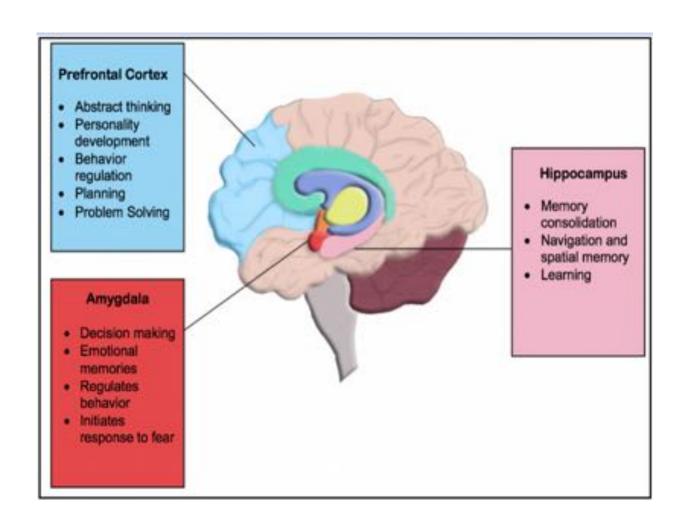
The Diagnostic and Statistical Manual of Mental Disorders -5th edition, Text Revision defines Post Traumatic Stress Disorder (PTSD) triggers as exposure to death, serious injury, and sexual violation. One of these situations is directly experiencing the traumatic event, as in the case. Others witness the traumatic event in person, or they learn that the traumatic event occurred to a close family member or close friend (with the actual or threatened death being either violent or accidental). The experiences may be experienced first hand, and maybe repeated, with extreme exposure to aversive or unpleasant details of the traumatic event.

Trauma exposure is the least initiating factor behind PTSD but, not everyone, however, who experiences trauma will develop Posttraumatic-Stress- Disorder. So why did this patient suffer from PTSD?

The psychological trauma due to the experience of profound threat is limited to an acute, transient phenomenon. This can be grouped into three clinical dimensions: (1) reminders of the exposure— which somehow your patient has intrusive thoughts;(2) activation; and (3) deactivation.

Usually, such reactions are self-limited. They don't know how well mentally able is the patient able to cope with such situation. However, for some, the experience of profound threat on the unpleasant event leads to a longer-term syndrome – PTSD in the clinical literature. PTSD produces a devastating functional impairment. And the worst part to this is that, some patients bear the scars for life.

What goes on inside the brains of people with PTSD? PSTD is painful and frightening. The memories can be can be totally devastating and for some, their lives become meaningless.



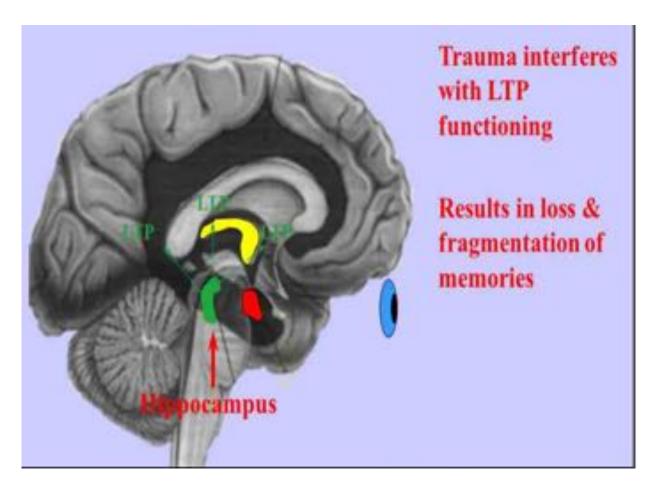


Figure 5. The Three Primary Brain Regions affected by PTSD and their functions (12)

The brain reacts to trauma in the following ways: (1) releases high stress chemicals; (2) produces a high degree of intense amygdala activity; (3) strong encoding of emotional and sensory memories; (4) prefrontal cortex impairment due to an overloading coming from the hippocampus and the amygdala. Because the prefrontal cortex is impaired, the production of language also becomes impaired.

This is the impact of trauma, on top of releasing high stress chemicals, high amygdala activity, strong emotional component, and a significant impairment of the prefrontal cortex. Along these three, these are the three main ingredients of PTSD: the hippocampus, amygdala, and prefrontal cortex. The three are totally intertwined with each other. One feeds into the other and the other feeds into the other.

The more important aspect about this tragic relationship is the fact that, if you have a significant well-functioning prefrontal cortex, this is basically the cognitive aspect, which controls the hippocampus and the amygdalar functions. The prefrontal cortex is the overall modulator of one's fear and emotions. So, if the prefrontal is impaired, your overall control is totally hampered.

These are the risk factors (16) in trauma. Trauma exposure is the initiating factor behind PTSD, yet not everyone who experiences trauma will develop Posttraumatic- Stress- Disorder; thus how can one explain this. The genetic and environmental interactions may be able to explain this, as this have been noted in almost all mental disorders including bipolar disorder.

Exposure to childhood trauma (16) is thought to interact with various susceptibility genes to increase the risk of bipolar disorder (BD), or to a more severe clinical expression of the disorder. This mechanism is called "genewhich environment interaction", in phenotypic response to an individual factor is conditioned by the genotype of the individual. Although, the literature is scant about BD; interactions between childhood trauma and candidate genes have been reported to influence age at onset of the trauma and the response or the suicidality risk. The sexual violation and trauma this patient had significantly started when she was 18 years old. Yet at the age of 7, her father totally left them, and since this patient was close to her father, this could have been traumatic for her too.

The function of the serotonin transporter gene (the short versus the long allele) or reuptake is definitely to modify synaptogenesis and the degree of response of the individual to stress. Recent data (7,8,9) suggests that, short allele of the serotonin transporter gene is associated with decrease risk of PTSD in low -risk environment, in other words, in a really posh village, where the crime rate is low, the short allele is associated with a decrease risk of PTSD. But there's an increased risk of PTSD in high- risk environment. This suggests that environment modifies the effect of serotonin transporterlinked polymorphic region or 5-HTTLPR genotype on PTSD risk. In other words, everyone may have the of genotype to develop PTSD but the phenotypic expression of that particular susceptibility gene significantly sputtered only

when one is in a significantly high-risk environment i.e. high risk for crime. This is a gene environment interaction.

Again, genetic markers (17), like for example, significantly important because the 5-HTTLPR and the genes are associated with the hypothalamic-pituitary-adrenal (HPA) axis. In other words, there is really an association between these particular genes—transporter genes and the HPA axis. And of late, research (10) has been shown that the retinoid-related orphan receptor alpha protein - because these are important in cases of degenerative disorder that would significantly causes oxidative stress in most of our patients. Mental disorders are not just disorders of mind and function of brain but basically, reflect sub-degree of oxidative stress to the particular brain.

Societal factor, social support, or lack of it, is a critical risk factor. Those who have limited options for social support can be at greater risk for PTSD. The patient comes from a dysfunctional family and the 8th of the 12 siblings, the father abandoned them when she was 7 years old, leaving the mother to take care of the 12 children. People who try to generally cope with challenges in isolation, like for example our patient, may be at a greater risk of developing PTSD.

Aside from the stressful home environment, the biological and neurological factors11 such as IQ, which is low and neuroticism further complicate Jane's vulnerability. Neuroticism refers to the trait or disposition to experience negative affects, including anger, selfanxiety, consciousness, irritability, emotional instability and depression. This may be due to her negative beliefs about herself, which then leads to ineffective social functioning. With negative selfconcept, patient then views her self-worth as significantly low. So, the symptoms of PSTD are hypothesized to represent the behavioral manifestation of stress- induced changes in brain structure and function. And these are the significant disturbances in the different parts of the brain - hippocampus, amygdala and the prefrontal cortex.

The lasting effects of trauma on the brain show long term dysregulation of norepinephrine and cortisol systems that makes the hippocampus, amygdala and medial prefrontal cortex vulnerable. There is a strong degree of relationship between HPA axis that is modified when there is a high adrenocortisolism or cortisolism and ACTH. (12,13,14,15)

Normally all these three areas: thinking behavior, emotion, and fear are significantly congruent i.e. if your thinking is clear, you can express your emotions well and behave properly. A healthy individual should be able to control their emotions. In the presence of severe trauma, theses thought processes, these emotions, and behavior become totally incongruent.

The different parts of the brain the in a patient with PTSD has the ff changes: sensory- motor cortex has increased activation while the thalamus has decreased cerebral blood flow; parahippocampal gyrus stresses sensitivity and the hippocampus has increased responsiveness; amygdala also has heightened responsiveness while the prefrontal cortex has decreased responsiveness; orbitofrontal cortex decreases in volume and the anterior cingulate cortex has reduced volume with the brain at a higher resting metabolic activity. All of these parts of the brain are significantly intertwined, and somehow are no longer in the utmost metabolic condition because of severe stress brought about by trauma.

The childhood traumatic events are risk factors for developing bipolar disorders and the earlier the onset, the more suicide attempts (16). An epigenetic factor may also be involved in the neurobiological consequences of childhood trauma in bipolar disorder. Biological sequelae such as chronic inflammation, sleep disturbance, or telomere shortening are potential mediators of the negative effects of childhood trauma in bipolar disorders.

These are the different subtypes of trauma assessed by Childhood Traumatic Questionnaire (CTQ), as defined by Bernstein in 1994: emotional neglect, emotional abuse, physical neglect, physical abuse and sexual abuse. Among all of these, emotional abuse ranks the highest in terms of significant traumatic diseases of the person16.

These are the different kinds of psychiatric disorders that have been reported at a much higher rate among patients who have experienced childhood trauma: Substance Use, Psychotic, any Mood or Anxiety Disorders and Suicide attempts.

With regards to the connection of Bipolar Disorder, PTSD and trauma, both have affective lability like in personality disorders with reduced performance in recognizing anger (16). Telomeres are the DNA- based caps and protein structures at the chromosome tips, which shorten after each cell division, their length being used as a marker of biological aging, as well as, being associated with several conditions as diabetes mellitus type II and cancer in the general population. A shorter telomere length maybe partially related to early stressor events. Two recent review articles suggest that childhood trauma is a casual factor for the long -term reduction or telomere length (16).

What are telomeres? Telomeres stop the ends of chromosomes from fraying or sticking to each other, much like the plastic tips on the ends of shoelaces. Telomeres also play an important role in making sure our DNA gets copied properly when cells divide. If a person has a shorter telomere, then definitely one cannot elongate any of it, thus becoming a genotypic susceptibility.

Table 1. Trauma subtypes assessed by the Childhood Traumatic Questionnaire (CTQ)16

Trauma Subtype	Definition
Emotional Neglect	Failure of caretakers to meet children's basic emotional and psychological needs, including love, belongingness, nurturance, and support
Emotional Abuse	Verbal assaults on a child's sense of worth or well-being or any humiliating or demeaning behavior directed towards a child by an adult or older person
Physical Neglect	Failure of caretakers to provide for a child's basic physical needs, including food, shelter, clothing, safety and health care
Physical Abuse	Bodily assaults on a child by an adult or older person that posed a risk of or resulted in injury
Sexual Abuse	Sexual contact or conduct between a child younger than 18 years of age, and an adult or older person

And when the traumatic environment and situation is experienced, then that particular susceptibility is expressed as a phenotypic response to that particular susceptibility (16).

Other genetic association studies in PTSD using the Single Nucleotide Polymorphism (SNP). Single Nucleotide Polymorphism is a type of polymorphism involving variation of a single base pair. SNPs are used in this study of human genomes correlated to disease, drug response and other phenotypes.

PTSD is associated with FK506 binding protein 5 (FKBP5) mRNA and protein expression. What is FKBP5 mRNA? It is a molecular chaperone of the glucocorticoid receptor complex that modulates the cellular glucose signaling and plays an important role in homeostatic stress response. The FKBP5 is somewhat insignificantly impaired in PTSD. This particular protein is a predictor of the severity of adult PTSD symptoms in abuse cases (22,23).

The serine protease neuropsin is critical for stress- related plasticity in the amygdala by regulating receptor tyrosine kinase EphB2-N-methyl-D-aspartate (NMDA) receptor activation of FKBP5 expression. And EphB2-NMDA receptor is significantly important in synaptogenesis. If you cannot form this particular synaptogenetic mechanism, then the patient becomes incongruent (24).

Studies (16) have shown that emotional abuse is a more specific risk factor in bipolar disorder. A study by Martin et. al. in 2014, confirmed that emotional abuse was a risk factor for mood disorders, including patients with Bipolar Disorder. These are the evidences that process the intertwined relationship between PTSD and Bipolar Disorder (16).

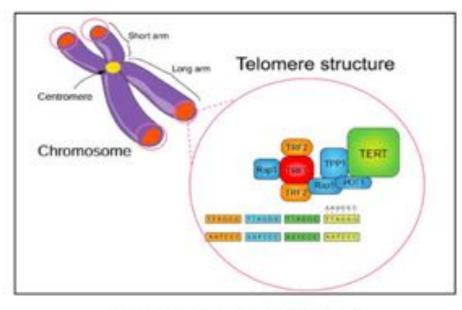


Figure 6. Telomere structure16

These are the converging risk factors of bipolar disorder: environmental i.e. stressful life event such as sexual abuse, biological i.e. gene and dimensional i.e. too much anxiety, insomnia.

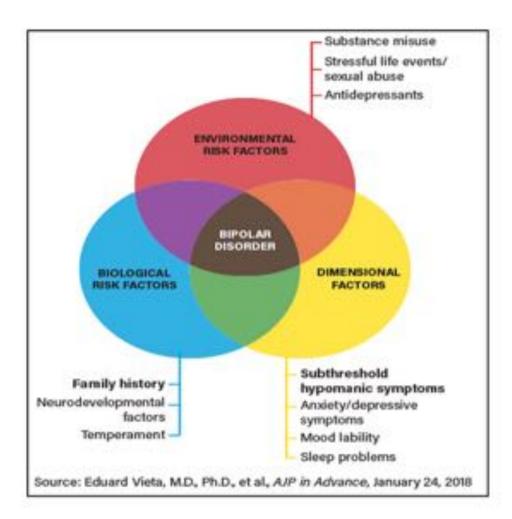


Figure 7. Converging Risk Factors of Bipolar Disorder

The top down control of the amygdala by the hippocampus and prefrontal cortex results in the increased activation of the amygdala, as is observed in subjects with PTSD.

What is down control? The bottom drive, on the other hand, is the amygdala. If the amygdala fires many triggers, then the amygdala cannot control the overall top-down breaking system coming from the prefrontal cortex, the anterior cingulate cortex, because the anterior cingulate cortex has been significantly reduced in volume. The prefrontal cortex volume has been significantly reduced due to so much activity coming from the over-aggressiveness of the amygdala. The top-down breaking system is significantly unable to control the bottom-up drive coming from the amygdala.

With all these provocative stimuli, the patient's experiences can be overwhelming to sensory processing. How did this woman process that particular violation of her sexuality? How did this sensory experience and behavioral experience affect her? The early information processing, the cognitive impression of what has been through in her life can be categorized as cognitively impaired due to the sensory overload experienced. How can she be violated by someone she trusted? This could lead to some distortion in her cognition and emotional overload of the amygdala. Just like the Pavlovian fear conditioning model could help explain how

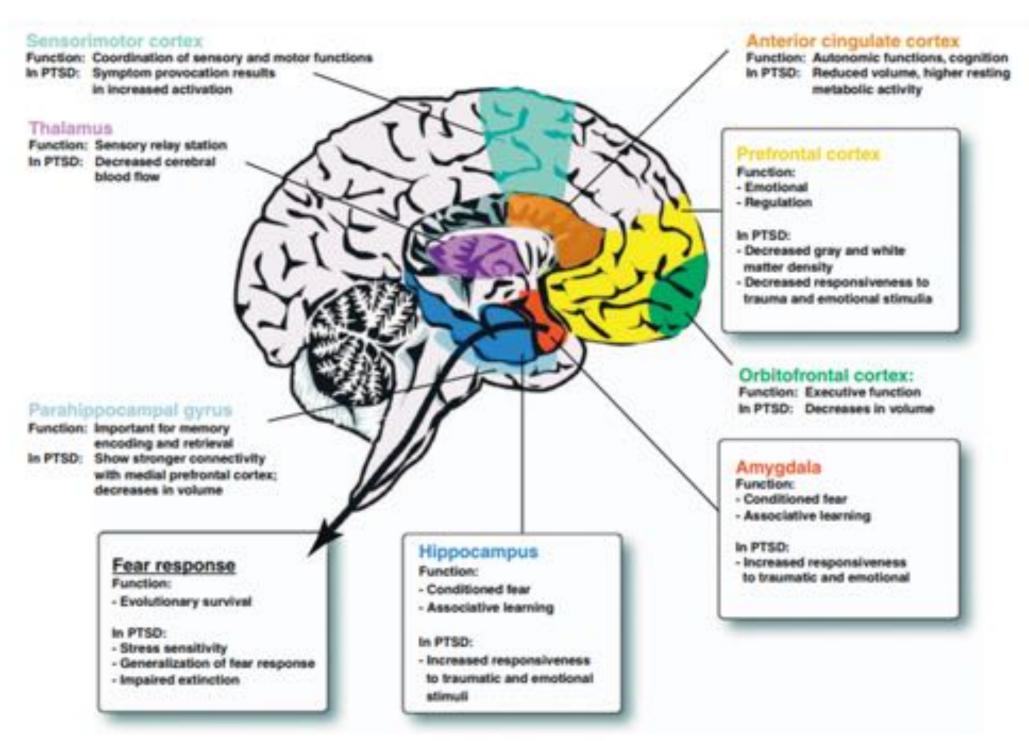


Figure 8. This schematic diagram emphasizes how the limbic system is involved in Posttraumatic Stress Disorder.

how to understand the underlying mechanisms of pathological fear responses with reduced top-down control of the amygdala, possibly resulting in a hyper-responsive amygdala signal to more fearful stimuli. Normally when one is confronted with fear, there is a fight or flight response; but this patient neither fled nor fought off the perpetrator. She was totally overwhelmed by the fear, thus leaving her motionless and numb.

The neurobiology of psychological trauma can be explained in the following way: the volume of the hippocampus is significantly reduced that leads to an inability to discriminate between past and present experiences or correctly interpret the environmental contexts due to the interference of past memories in the hippocampus.

This particular PSTD patient has reduced levels of N-acetyl aspartate (NAA), which is a marker for neuronal integrity. Something is wrong with this neuron because NAA (N-acetyl aspartate) is one of the enzymes that plays a significant role in neuronal activity and integrity. If the concentration of NAA is low, the neuronal integrity is significantly hampered. NAA reductions have also been correlated with higher cortisol levels in patients experiencing extreme stress. Under high levels of Stress, too much cortisol is released. There is reduced BDNF levels that then leads to atrophy or death of a neuron (18,19).

In patients with PTSD the Prefrontal Cortex i.e. ventromedial prefrontal cortex has marked decrease in its volume, which then minimizes its functional ability if at all. People suffering from PTSD tend to exhibit fear, anxiety and extreme stress even in response to a stimuli that was not associated with the actual trauma. Again, however, this particular patient died not escape or fight the perpetrator the second time around; she simply let it happen again. Most likely due to the fact that the hippocampus can no longer differentiate what was happening right there and then versus what happened in the past. At the same time, psychologically speaking she was already thinking, she was worthless anyway, thus did nothing and even refused to report or file a legal case against the perpetrator even when she had the opportunity. It seems that the only way to prove herself worthy would be to satisfy the other person, thus giving in to the rape.

Reduction in Anterior Cingulate Cortex (ACC) volume has also been correlated with PTSD symptom severity in some studies (31).

The neurobiological findings in the prefrontal cortex of patients with PTSD are the ff: decrease N-acetyl aspartate levels; abnormal shape of the ACC; and decreased activation of the medial prefrontal cortex (PFC) in PTSD patients (32,33). Successful SSRI treatment has been shown to restore medial prefrontal cortex activation patterns.

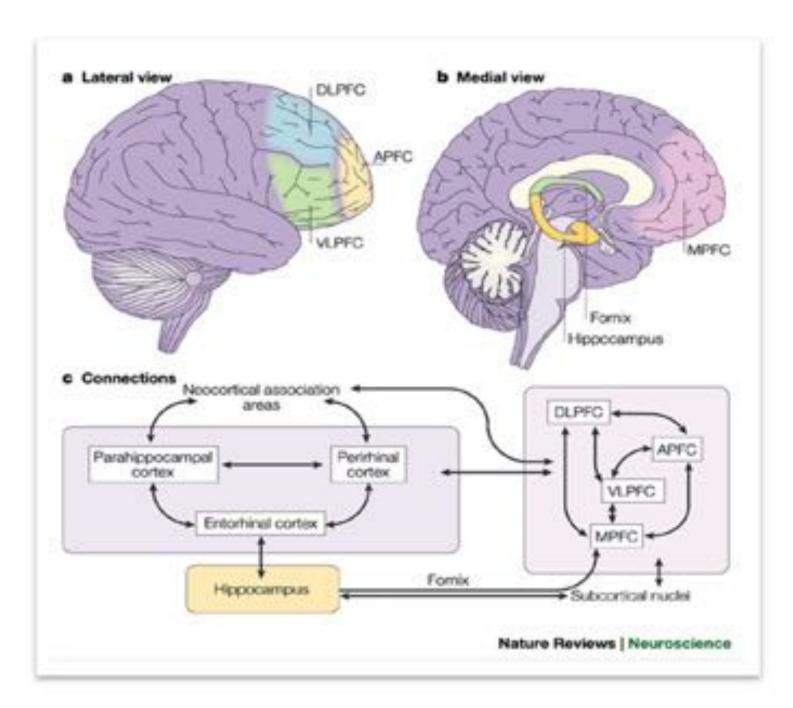


Figure 9. The hippocampus process information and conveys to the mammillary bodies via the fornix, the outflow tract of the hippocampus

Cortisol

For the pharmacological means of preventing or treating PTSD, SSRIs are recommended but one must also consider that this patient may also be suffering from Bipolar Disorder, thus posing a dilemma.

Structural alterations of the amygdala is still unclear, but functional imaging studies have revealed hyper-responsiveness in PTSD during the presentation of stressful scripts, cues, and/or trauma reminders. Trauma increases activity in the amygdala as a response to stimuli. It has been found that fearful faces produced greater activity in the amygdala while a neutral or happy face had no difference in the amygdala activity.

Another aspect of the neurobiological basis for PTSD is that the corticotropin- releasing factor (CRF)/ hypothalamic- pituitary- ad\renal (HPA) axis plays an important role in the stress response. Cortisol facilitates survival. In addition to its role in triggering the HPA axis, CRF triggers other neurochemical responses to stress, such as the noradrenergic system via the brain stem locus coeruleus. That is why, the reduced volume of the hippocampus, the major brain region inhibiting the HPA axis, is a cardinal feature of PTSD. The low volume in the hippocampus can significantly control or at least inhibit partly or partially the HPA axis (34,35,36). As a result of this, the other chemical substance or neurotransmitters I the mesolimbic system is also implicated for fear conditioning.

There is evidence, that human exposure to stressors induces mesolimbic response, which in return modulates the HPA axis (37). In other words, catecholamines are important in the control of emotions and fear and response.

noradrenaline

and

Catecholamines and PTSD

enhances

dopaminergic activities in the brain (38).

Prazosin, which was previously used to control blood pressure has now been used in the treatment of PTSD. It is considered sufficiently lipophilic to cross the blood- brain barrier and antagonizes the **\alpha**1 receptors in the CNS, blocking these stress responses. Through this mechanism, Prazosin can improve sleep and reduce nightmares PTSD. associated with Administration of the $\alpha 2$ receptor antagonist yohimbine increases Norepinephrine (NE) release that induces flashbacks and increased autonomic responses in patients with PTSD (57). Propranolol is also given to remove the physical

response of the fear and anxiety i.e. rapid

heartbeat of a patient and with increased

palpitations, the more the patient feels anxious

thus releasing even more noradrenaline that

A recent small and controversial study (71) suggested that the street drug "ecstasy" or MDMA (methylenedioxymethamphetamine) can alter the central serotonin transmission that it may be

considered in the treatment of PTSD. It causes

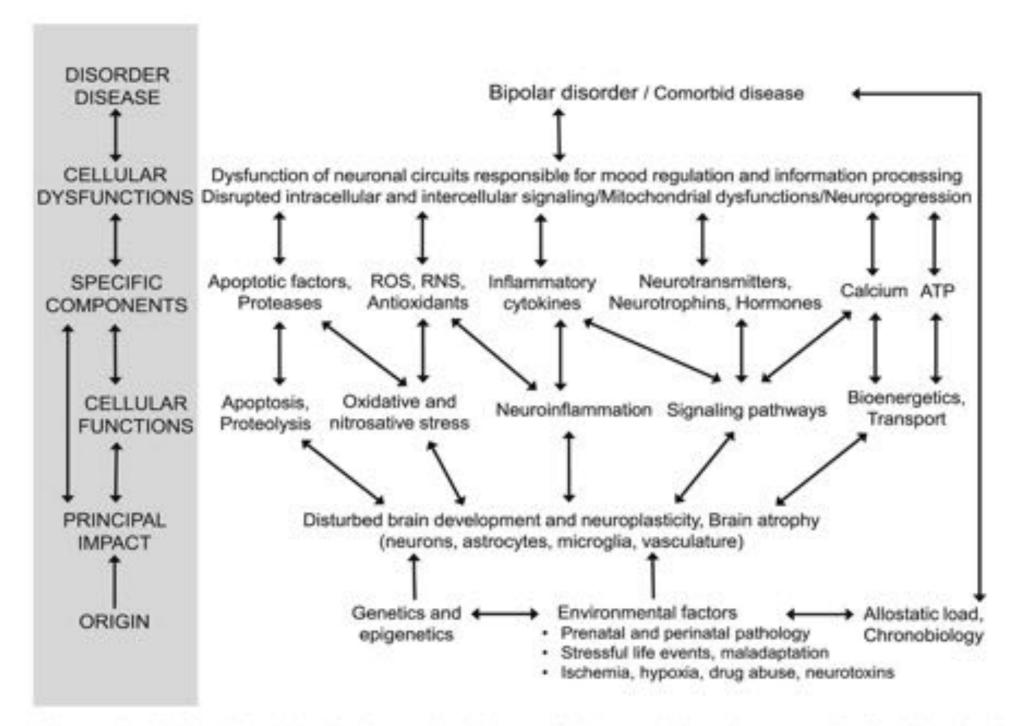


Figure 10. Bipolar Disorder is characterized by multiple associations between disturbed brain development, neuroplasticity, and chronobiology, caused by: genetic and environmental factors; defects in apoptotic, immune-inflammatory, neurotransmitter, neurotrophin, and calcium-signaling pathways; oxidative and nitrosative stress; cellular bioenergetics; and membrane or vesicular transport⁷⁶.

one to become disinhibited, boosts their self confidence and allows them to focus on seeking pleasure.

GABA has been implicated with the use of benzodiazepines after exposure to psychological trauma but targets only the symptoms and may be given over a long period of time (72-75).

PTSD though may continue for a lifetime thus the need for combining therapeutic pharmacotherapy and non-pharmacologic therapies. Transcranial magnet stimulation (TMS) could be a treatment option, and is good for depression but not so much for PTSD.

Although all persons have the vulnerability to develop PTSD, there is also a natural resilience that allows a person to bounce back and not all individuals exposed to trauma develop PTSD.

The origin is in genetics and epigenetics... this is the principal impact. In the synthetic model of mental illness, everyone started in the interacting genes. It will impact how your brain is structured or how your brain will function. How your brain will function will impact on how you will be in the environment, or in the society. And how you impart yourself in the society, will tend to show you whether you will develop into schizophrenia, or manic illness, or whatever.

Child Abuse Edwin Menguito, MD, FPPA (Life)

To discuss child abuse let us first define it as the infliction of physical or psychological injury, cruelty or neglect, sexual abuse or exploitation of a child. There are four (4) categories of child abuse:

Physical Abuse is defined as a nonaccidental injury inflicted on a child. The abuse is usually afflicted by the hands of a caretaker but can be perpetrated by another adult or, in some cases, an older child. These are the indicators of physical abuse: unexplained bruises, welts, burns, fractures and lacerations or operations. The behavioral indicators observed in children that would make one suspect about the possibility that the child is being physically abuse may be the following: wary of adults; becoming other apprehensive when children aggressiveness, withdrawal or overly compliant; afraid to go home or doesn't want to go home; prefers to stay with or in other people's houses; runs away from home; exhibits anxiety about normal activities, e.g. taking a nap; complains or soreness and moves cowardly; self- destructive or being prone to accidents; wears clothing that covers body parts even if inappropriate for the weather or occasion; cannot tolerate physical

contact or touch; and of course when the child reports having been injured by parents.

The second category of child abuse is Physical Neglect, which is actually the most common form of child abuse. Physical neglect is a condition in which a caretaker responsible for the child, deliberately or by extraordinary either inattentiveness, permits the child to experience available suffering and/ or fails to provide one or more of the ingredients generally deemed essential for developing a person's physical, intellectual and emotional capacity. What are the tell tale signs of a child being neglected? The child is consistently hungry with poor hygiene and inappropriate outfits. They are left unsupervised to the point of engaging in potentially dangerous activities; often left alone or abandoned; their physical or medical needs are left unattended; presence of lice, distended abdomen and emaciated or malnourished. In terms of the child's behavior, physical neglect may be considered when the child is: begging or stealing food, complains of constant fatigue, is listless and unable to fall asleep; frequent tardiness or absent from school and eventually drop out; destructive and pugnacious; states there is no caretaker at home and may request for early emancipation from his/her family.

The third type of child abuse is Sexual Abuse, which is defined as contact with a child where the child is being used for sexual stimulation by another person. This is seen in cases of incest or sex between family members; molestation by other adults whether relatives or outside the family; sexual exploitation through pornography, which could be showing naked pictures of the child on the internet or prostituting the child, selling them to sex rings locally or internationally (child trafficking). Some children who are in orphanages or foster homes may also be sexually abused (institutional abuse). Child advocates and medical doctors need to be sensitive to physical cues of possible sexual abuse as noted by the ff. difficulty sitting torn, stained walking; or underclothing; pain or itching in the genital area--- bruises or bleeding in external genitalia, vaginal or anal areas; presence of venereal disease or STD, frequent urinary or yeast infections; and frequent unexplained sore throats. For the behavioral indicators of sexual abuse, the child is: unwilling to participate in certain physical activities; sudden drop in school

performance; socially withdrawn, engaging in fantasy, or unusually infantile behavior; crying without any provocation; bizarre, sophisticated or unusual behavior that may be sexually provocative and inappropriate for the child's age; poor peer relationships; afraid of males; chronic runaway reaction; early pregnancy in the female child and definitely if the child repots of having been sexually abused.

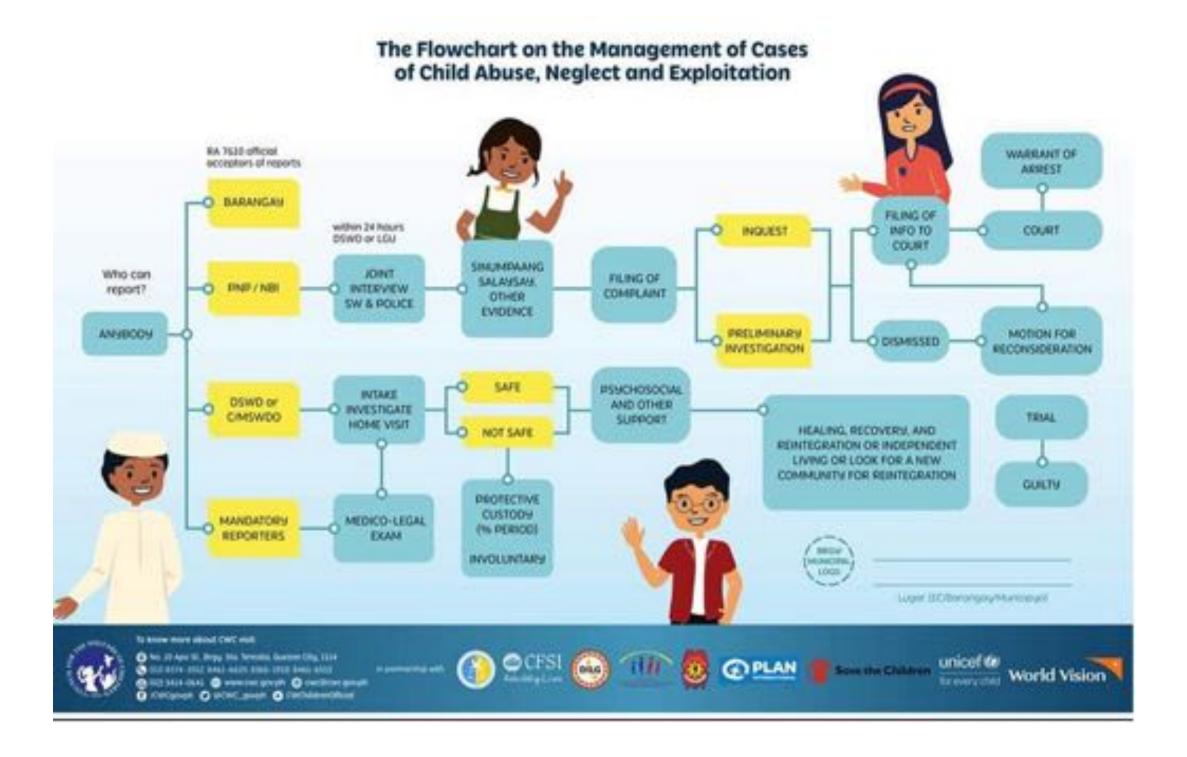
Emotional Abuse is the type of abuse that refers to undermining the self- esteem of a child or humiliating, politically rejecting, isolating or terrorizing child. These are its physical indicators: speech disorders; poor physical development; failure to thrive especially in defense, asthma, severe allergies or ulcers; and abuse of substances. Its behavioral indicators would be the ff: sucking, biting, or rocking the body; conduct problems e.g. destructive, quarrelsome, delinquent or antisocial traits; sleep difficulties with inhibition of play; the child may become extremely compliant and passive or aggressive and demanding. Even overly adaptive behavior inappropriate for their age may heighten your sensitivity and vigilance to the possibility of emotional abuse.

Why do parents or adults abuse their children?

This may be due to parent's ignorance, emotional immaturity or compounding stressors in their life such as breakdown of marriage, economic and emotional or mood problems. Some adults may be sexually preoccupied or perverted or under the influence of alcohol or prohibited drugs. A predisposition toward maltreatment can be observed in children who have difficulty controlling their anger or impulses.

Reporting CHILD ABUSE

Under Presidential Decree 603 or RA 7610, every person who has sufficient knowledge of child abuse is duty bound to report it, either in writing, by telephone or by personal contact to the proper authority. The Reporting Party may be any of the ff: child or youth responsible enough; parents, guardians or relatives; barangay officials; police/ park wardens/ law enforcers; hospital/ clinics/ private physicians; citizens/ organizations; concerned school officials, particularly teachers or professors; other government or non-government agencies; as well as churches and mosques. Such cases



should be reported to any of the ff: Barangay Council for the Protection of Children; PNP or the National Police; Hospital/ Clinics/ Private Physicians; National Bureau of Investigation; and the Dangerous Drug Board. Cases of Child Abuse may also be reported to the ff persons or offices: Department of Social Welfare and Development (DSWD) where the DSWD Social Workers have the responsibility of final assessment of the child's situation. DSWD also provides appropriate social services to the child and the child's family. The DSWD can assist the victim of child abuse and their family in order to avail of legal assistance. The Social Worker will coordinate with other agencies in providing rehabilitation services. After that, the prosecutor of the fiscal will take over the case, so the will be conducted investigation the prosecutor; and then finally the case will be filed in court, usually at the Regional Trial Court where the judge will either convict the person who is guilty or acquit the person.

This is a useful chart from the Commission of Human Rights that shows the referral network for child abuse cases.

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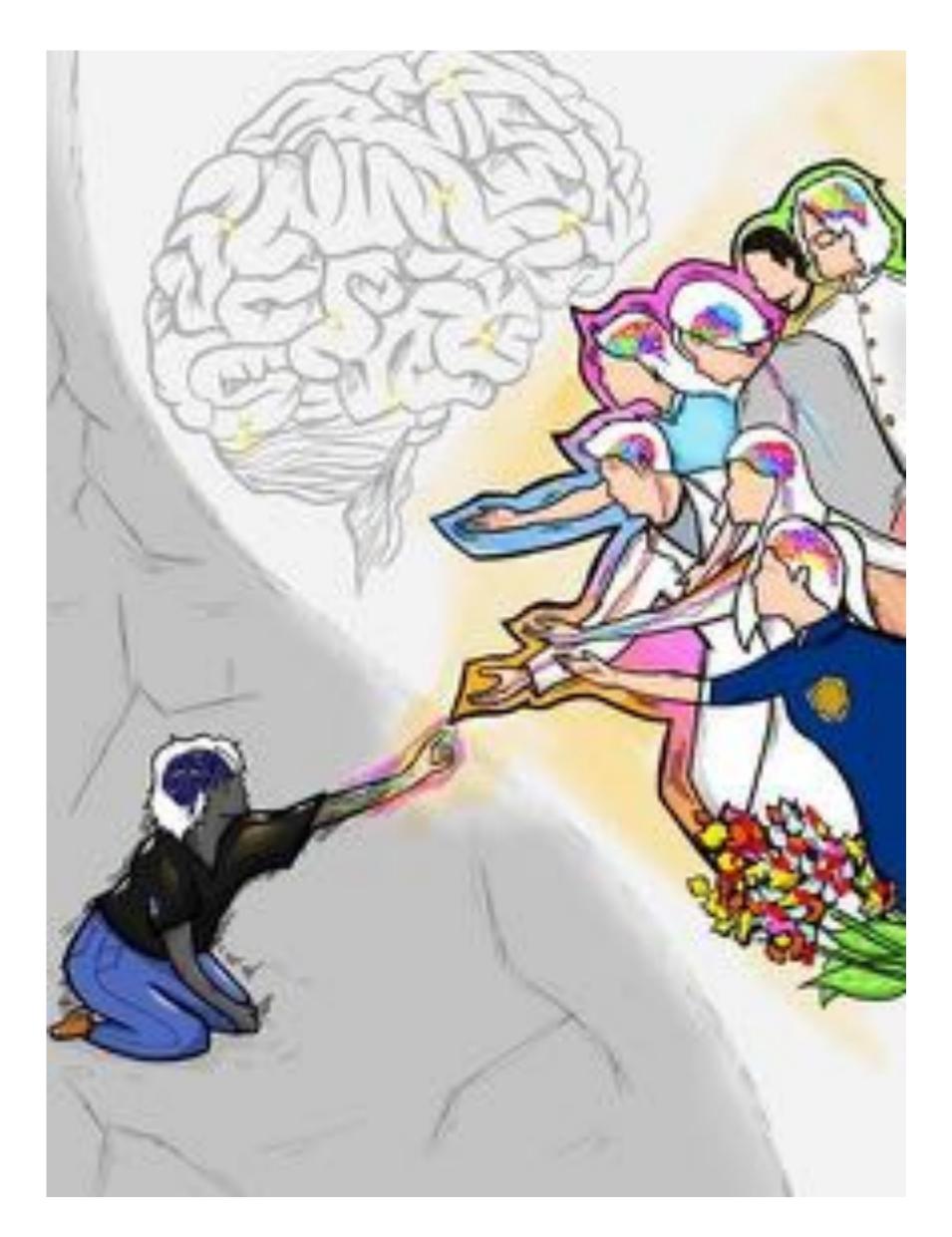
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PAGDAHUM HIN KALINAW (HOPE FOR PEACE & TRANQUILITY)
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The human brain is the most superior and the most complex of all the organs in the body. This three pound mass of nervous tissue not only directs our internal body functions, it also helps us understand and out meaning to external cues from the world around us. The brain of a person who experiences trauma undergoes changes that range from minor to traumatic. Trauma induces changes to the brain can result in varying degrees of cognitive impairment and emotional dysregulation that can lead to hostile problems for the person who survives the trauma.

As clinicians, we are constantly challenge to understand our minds and that of other people including that of our patients coming to our care. In the course of treatment, we have distinct parts to play that all vitally contribute to patient recovery. As different minds come together, we can collectively give the best help to our patients.

The gladiolus is a delightful flower that symbolizes collective strength and determination as we pursue healing for our patients who are trauma survivors. Very much like the gladiolus, we serve us beacons and figures of hope and tranquility for them.