

Strangled by the Loop: Psychodynamic Perspective in ADHD, OCD and Asperger's Syndrome (TDP Triple Diagnosis Problem)

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Abstract

Background: In this paper, we discuss the presence and implications of a triple diagnosis problem (TDP) for patients with Asperger's syndrome, obsessive-compulsive disorder (OCD), and attention deficit and hyperactivity disorder (ADHD) comorbidity. **Purpose:** The primary purpose of this paper is to offer a clinical and therapeutical perspective of the Triple Diagnosis Problem due to the frequent comorbidity of the three syndromes. The objective is to help therapists to care for this population. **Methods:** After a review of the available literature on the subject, we discuss our clinical experience on a limited number of cases. We then describe the psychodynamic context of these syndromes and the feedback loop we have observed in our clinical practice. Then, we present this disorder's personal, familial, and societal effects. **Results:** Based on our observations, instead of focusing on the differential diagnosis problem, we propose considering the three syndromes as the expression of a single major etiological factor. We advance the hypothesis that this factor is an epileptic-like syndrome that causes both the neurodevelopmental disorder and the "mental loop" these patients describe as extremely anxiogenic and paralyzing. **Conclusions:** We propose therapeutical approaches to this condition, both pharmaceutical and environmental, and further studies that could corroborate or refute our hypothesis.

Keywords

Attention Deficit and Hyperactivity Syndrome, ADHD, Asperger's Syndrome, Triple Diagnosis Problem, TDP, Obsessive Compulsive Disorder, OCD, Epileptic Syndrome

1. Introduction

This article discusses the presence of a triple diagnosis problem (TDP) between attention deficit hyperactivity disorder (ADHD), obsessive-compulsive disorder (OCD), and Asperger's syndrome. We discuss this diagnosis from a clinical and psychodynamic angle based on our clinical experience.

It is, however, unavoidable to provide an overview of the status of the genetics, neuroimaging, and pharmacology studies focusing on these three disorders, which are very costly at the human, but also social and economic levels due to the disabilities they are responsible for.

Attention-deficit/hyperactivity disorder (ADHD), autism spectrum disorder (ASD), and obsessive-compulsive disorder (OCD) all fall into the neurodevelopmental disorders category. They have a relatively significant presence in the general population and frequently coexist. While data on their prevalence differ according to the source, there is a broad consensus on the following prevalence figures for the general population.

The global prevalence of obsessive-compulsive disorder (OCD) is approximately 2% of the general population (Sasson et al., 1997).

An average global prevalence of attention deficit hyperactivity (ADHD), or hyperkinetic disorder (HKD) of ~2.2% (range 0.1% - 8.1%) is estimated in children and adolescents (aged <18 years). The average prevalence of ADHD among adults (18 - 44 years) in various countries in Asia, Europe, the Americas, and the Middle East is ~2.8% (range, 0.6% - 7.3%) (Faraone et al., 2021; Fayyad et al., 2017).

Prevalence rates of Asperger's syndrome range from 0.03‰ to 4.84‰ (per mille) in different studies. In 2014, the overall prevalence of autism spectrum disorder (ASD) was estimated at 16.8‰ (per mille) in children aged eight years (Baio et al., 2018; Erratum, 2018; Fombonne & Tidmarsh, 2003).

Significant psychiatric comorbidity was noted in the Asperger's syndrome population (Mazzone et al., 2012).

Some authors highlight common symptomatology in Asperger's syndrome and ADHD (Carminati et al., 2022a; Carminati et al., 2022b; McFayden et al., 2022) and even cross-genetic (Satterstrom et al., 2020) as well as a common symptomatology between Asperger's syndrome and OCD (Postorino et al., 2017).

The ENIGMA consortium has recently extensively investigated the structural differences of the brain in these disorders in a study including the largest neuroimaging survey until 2020 on structural brain alterations in ADHD, ASD, and OCD. The results of this extensive study highlighted subcortical and cortical differences among disorders by life period (childhood, adolescence, and adulthood), smaller ADHD-specific head volume index (CLI) in children and adolescents, and thicker ASD-specific frontal cortex in adults. However, this study does not mention specific differences in OCD between different age groups or shared brain differences between the three disorders (Boedhoe et al., 2020).

Considering the available literature, we find that serotonin dysfunctions seem to be present, if not at the center of the Asperger's problem (Andersson et al., 2021) and OCD (Brakoulias et al., 2016, 2019; Derksen et al., 2020; Oades, 2010; Robbins et al., 2019).

On the other hand, ADHD seems to be rather the result of an adrenergic transmitter and dopamine disorder (Kanarik et al., 2022). The evidence for the link between serotonin and Asperger's syndrome is not unequivocal (Girgis et al., 2011).

Obsessive-compulsive disorder (OCD) is a phenotypically and etiologically heterogeneous disorder with multiple symptomatic dimensions and comorbidities. It is a chronic and disabling psychiatric disorder. Unfortunately, obsessions generated in an attempt to reduce anxiety become a source of anxiety, creating a vicious circle between the rituals performed to escape anxiety and the anxiety caused by the rituals themselves (Derksen et al., 2020).

Psychiatric comorbidity in patients with ASD has been extensively studied (Faraone & Larsson, 2019; Gadke et al., 2016).

Considering similarities and differences between OCD and ADHD, a 2014 literature review on neuroimaging, circuit neurochemistry, neuropsychological, and genetic findings highlighted brain deficits that may be responsible for the OCD symptoms of perseverance and compulsion but also for disinhibited behaviors and impulsivity characteristic of ADHD (Brem et al., 2014).

In some research, dopamine seems to be also strongly affected in Asperger's syndrome and autism more generally (Carminati et al., 2006; Carminati et al., 2016; Nieminen-von Wendt et al., 2004).

Pharmacologically, ADHD is mainly treated with Ritalin, with the interesting option of using bupropion (Verbeeck et al., 2017), i.e., on the dopaminergic side, while OCD is treated with SSRI antidepressants (Derksen et al., 2020). On the other hand, Asperger's syndrome disorders often have treatments addressing anxiety and depression by exhaustion, usually SSRI antidepressants (Tsai, 2007).

2. Our Clinical Experience with TDP Patients

Our clinical practice refers to a population of 21 people diagnosed with Asperger's syndrome (8% of 264 active patients on file as of January 1, 2023), and since 2016, we have evaluated approximately 60 patients (Carminati et al., 2022a; Carminati et al., 2022b).

Of these 21 patients with Asperger's syndrome, 13 have a diagnosis of concurrent ADHD (62%), one patient could not be classified as ADHD (gray area), and 7 are under evaluation because their symptomatology is very suggestive of the disorder. Of the patients with Asperger's syndrome, 20 have a diagnosis of concurrent OCD (95%). The three diagnoses have been confirmed for 12 of the 21 patients with Asperger's syndrome (57%).

Even if separating these three diagnoses has the advantage of clarifying the differences and can help a targeted approach, the therapy usually aims to reduce

the symptomatology rather than addressing a possible common mechanism that triggers and intensifies them.

We use the standard tests to assess Asperger's syndrome, ADHD, and OCD (Carminati et al., 2022a; Carminati et al., 2022b; McFayden et al., 2022). More in detail, for the assessment of Asperger's syndrome, we use a specific battery of tests developed by Baron-Cohen and colleagues (Baron-Cohen et al., 2005). In addition, we have evaluated ADHD symptoms and associated problems through a protocol developed by the Canadian ADHD Resource Alliance (CADDRA, 2017). Concerning the assessment of OCD, we use the Yale-Brown Scale, composed of 10 items rated from 0 to 4, 5 for obsessions and 5 for compulsions (Mollard et al., 1970). Other scales may be used (Cadman et al., 2015).

Considering the symptoms of patients with these disorders, we notice some common traits that we can summarize as follows:

- Inability to move beyond the mother-child dyad.
- Seeing their father as a terrifying giant (i.e., a non-separating third party).
- Subject to pathogenic perfectionism and procrastination.

Remaining at the clinical level, we briefly introduce a psychodynamic framework to discuss these cases. For this work, we identify a “classical” path—if there is one—to the assimilation of parental imagoes that passes through a first phase of fusion with the mother, which we indicate as the “dyadic phase,” the mother-child dyad of Kleinian reminiscence. The “solution” of the dyad comes with “the introduction of the third,” i.e., of the father, and the unfolding of the Oedipal phase. This phase is characterized by the frustration of the child's desire for the opposite sex parent and their¹ access to other sources of satisfaction beyond the parental couple in the social realm.

The child has, at this moment, an overinvestment in all-powerful parental imagoes, both terrifying and protective. The child also believes that once he grows up, he too will be all-powerful like their parents. This illusion of omnipotence is related to infantile omnipotence and narcissism. It is a mechanism to escape the terror of powerlessness in the face of a mother who can decide our life and death by denying us her nurturing breast and a large and overbearing father with whom they compete for access to the mother.

If the child moves beyond the maternal dyad and the Oedipal phase, they enter the “social” realm, interacting with figures beyond the parental couple. There, alas, a second frustration awaits them, as cruel as the Oedipal withdrawal. Entering the social realm, the child realizes their parents are like all other parents. And so, if they are not the “son of the gods,” they will have to make their own way in a hostile world where they will face suffering and death. At this moment, the child is chased, once more, from Paradise.

How to square the circle between maintaining an “archetypal” and reassuring parental imago and “making peace” with our real parents—fallen gods who have so disappointed us—is a major existential challenge and sometimes the work of a

¹Throughout this paper we used the singular “they” and derivatives (them, theirs) to indicate unspecified gender patients.

lifetime. And the source also of many pathologies.

Referring to the above psychodynamic model, we observe in the population we described before an obstruction to the child's development in the form of permanence of the mother-child dyad, with a mother experienced as all-powerful, a harbinger of life and death. The presence of the father-third-party sometimes mitigates this fusional relation. However, in these patients, the father remains overinvested. He is seen as almighty, but unfortunately, he cannot assume his role of separating element in the patient's psyche and remains unusable as support to overcome the maternal dyad.

The psychodynamic development of these patients seems to stop here. They never seem able to resize their parental figures and move into the social realm of relations and activities. Instead, they see "reality" "from within," and it appears to them as frightfully complex and essentially impossible to grasp.

The crux of the problem—because there is a problem—of missing the successive and necessary opening to the social is the failure in the integration of parental imagoes that are reassuring enough to allow the acceptance of the "real" parents, no longer all-powerful but human, mortal, and limited.

They are, therefore, psychodynamically speaking, unable to perform the mourning process for the all-powerful, divine, and saving nature of parents.

The repeated clinical observation of this representation of the parents led us to reflect on the link between neuropsychological and psychodynamic developmental disorders.

As we have pointed out, patients with TDP seem to be affected by an arrest in their development which, psychodynamically, leaves them entangled in a very early state of symbiosis with the mother, the separating third never being included because too frightening. So, we have a mother experienced as engulfing ("swaddling," according to one of my patients) and a father who, even when absent, remains forever a "giant six meters high" and whom we cannot trust and on whom we cannot rely, to detach from the mother.

This development deficit leads to clinical situations that are undoubtedly complex and varied but with very similar underlying dynamics, and this has gotten our attention.

External reality is experienced as an exact projection of the internal one. The patient develops a reasoning to control reality (internal and external) via a mechanism of analysis/classification/paralysis of the external reality modeled on the internal one, akin to a ritual loop (Carminati, 2020).

One of my patients—the same one who describes himself as swaddled by his mother—describes this way of controlling/managing reality as "the big bad loop" (Mirafiori, 2022). In French, this sentence is a pun between the fierce animal of fables (the wolf, "le loup" in French) and the English word indicating a computer loop, in which the execution of the same operations repeats infinitely.

The reasons for remaining in a dyadic state, under the rule of an all-powerful mother or, at best, under the rule of an all-powerful father, are expressed as very

rational and dictated by an apparent great insight and prudence, which leaves no room for the patient to open to external reality in “effective” terms. The chain of reasoning takes the form of an obsessive ritualization, where each problem has a solution, and each solution generates a new problem. The patient is locked in an infinite chain of myopic “but then” where the action seems impossible, and the global vision is lost. These patients seem to live in a “fractal” world. The complexity is the same at each scale. Each action is decomposed into a set of activities that share the same complexity into a seemingly never-ending chain. This effect is what we mean by analysis/paralysis. Each action needs a preparatory step, which also needs preparation, and so on. Sometimes the preliminary action is a ritual, in case the OCD aspect is predominant, or a frenetic preparatory activity if ADHD is the major component. Asperger’s syndrome patients would prepare and foresee each step until the situation changes, and they must start all over again. The common trait is the ineffectiveness of their strategy and the moral pain when faced with repeated failures to act.

In the paralyzing reasoning that patients describe to us, the so-called external reality is so frightening and full of pitfalls that remaining locked up (entangled, swaddled) into the dyad is still the best survival strategy. These patients say they need “time to change,” and they are honest in their request because “by dint of going around in circles, they do not see the time passing.” Their time, seen from within the dyad, is stopped. The “others,” the neurotypical, are always running, agitating, and making noise; they see them as delusional, often as half-wits, because they do not understand all the complexity of their chain reasoning. But the fact that “they” succeed more or less in their everyday life is an added source of frustration and incomprehension.

Unfortunately, this defense mechanism and the painful existential immobility that it generates are only partially effective, and the patients are not fooled by their own arguments. Nevertheless, all mental efforts to find a way out only lead them back to a reactivation of the obsessive and ritualized loops of their mental processes. This is a lost-in-advance, frustrating, and exhausting exercise. Action becomes impossible because planning the slightest activity becomes a “barber’s mirror” where the thought reflects “ad infinitum.” Depending on the severity of the case, moral pain can be unbearable, and, considering the depressive comorbidity, these patients may become suicidal.

3. An Epileptic-Like Disorder Hypothesis

However, let’s consider the process in reverse. Doing so, we realize that it is not the analysis-classification-paralysis that generates the ritual loop, but rather the ritual loop that produces the analysis-classification-paralysis as a symptom and the developmental blockage as an epiphenomenon.

If we follow this approach, we can hypothesize the existence of a neuronal disorder (pathogenic mechanism, epileptic-like disorder) responsible for generating the obsessive loop, which in turn causes a (need for) analysis-classification

of reality and, therefore, a paralysis of thought that becomes non-functional and which, in turn, blocks the development. In short, the dyad with the all-powerful mother and the all-powerful (and not separating) third are the symptoms of a pathogenic neural loop, which leads to stress-generating social maladjustment that worsens the epileptic-like disorder. See **Figure 1** for a visual explanation.

Now consider ADHD symptoms: difficulty keeping attention, distractibility, and a tendency to procrastinate, together with significant impulsivity in the attempt to “be functional” at all costs.” In other words, mental activity goes in fits and starts, repeatedly falling into infinite, non-functional loops. It is as if ADHD was a form of OCD with a hidden obsession at the center of the symptomatology.

The symptomatology of ADHD varies from a predominant attention disorder to a mainly hyperactive disorder, with the common symptom, well described by patients, of being unable to stop thinking, even at night. A patient of ours described this as having a “bike in your head.”

The same bike, with a more compulsion/obsession-oriented texture, characterizes OCD.

In Asperger’s syndrome, this “bicycle in the head” is characterized by an inability to escape a mental pattern where “everything must be thought out” in detail from beginning to end. Of course, this is simply impossible and useless since no hyper-detailed unidimensional planning ever resists the encounter with reality. The patient perceives this simple fact not as a natural flow of events but as a sign of the unbearable complexity of reality. They are confirmed in the belief that even more detailed planning is needed and spends treasures of energy to plan the next move. Useless to say this increases their stress and probability of failure.

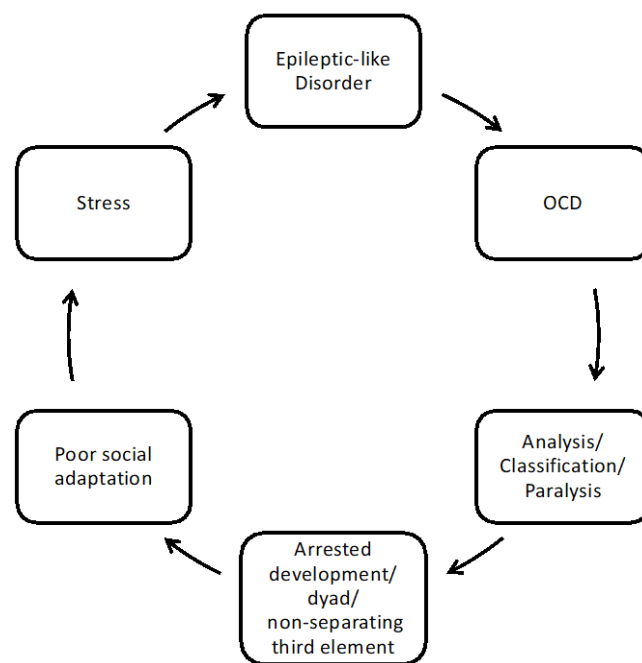


Figure 1. TDP patients’ obsessive feedback mechanism.

Yet, the patient cannot stop the compulsive thinking, which seems to be spontaneously generated, without the person being able to get out of this “obligation to think.”

In all three cases, Asperger’s syndrome, OCD and ADHD—that we collectively call TDP—this mental “looping” pattern, unfortunately, depending on the clinical situation, leads to irreversible exhaustion. It seems that the “stress capital,” like the skin “sun capital,” once exhausted, is no longer recoverable.

Considering the OCD mechanism of patients with Asperger’s syndrome leads us to hypothesize that obsessive thoughts and compulsive behaviors mask—in part—difficulties in accepting certain impulses, such as aggressiveness. However, the more the loop activates, the more there is an unconscious resistance in Asperger’s patients to confront their aggressiveness, which takes the form of anger, rage, disturbing feelings, desires, etc. This emotional constellation could be the source of psychic fragmentation.

Especially if this aggressiveness has a traumatic origin (in the broad sense), the person with Asperger’s syndrome fights against its irruption into the conscious space, and this is where the problem lies: the awareness of their aggressiveness would allow the patient to “relativize” and consider it as a possible and livable reality. Simply put, the subject could weigh the pros and cons of a shouting match or even a physical confrontation rather than dreading each conflict as a “fight to the death” or a nuclear Armageddon.

OCD hides the fear of being able (and somehow forced) to develop aggression-related fantasies. And from then on, getting “out of their mother’s skirts” becomes more complicated. To explain this logical passage, we note that the tendency to remain a child offers the illusion of eternal innocence due to the apparent intrinsic inability of the infant to harm because too weak and too dependent. To grow, and we could also say, when we grow up, we must have access to this side of emotional life, aggressiveness, with its procession of anger, rage, disturbing feelings, and desires. When directed toward the external reality, these “dark sides” of our soul allow us to establish the boundaries of identity and self and interact with the world. This movement from internal to external reality is circular, and it creates “feedback,” allowing us to adapt and live in an acceptable compromise between these two aspects.

Rebellion against the separating third party—the paternal figure—is a necessary step to evolve, even if its success depends partially on the boundary conditions. We have to “trust” the “third party” to be able to rebel against it. If we can see our aggressiveness and situate it in context, we can imagine confronting our father because we trust ourselves, and also, we trust him to “limit” the conflict. On the other hand, if an all-powerful father terrorizes us, we can only imagine a terminal struggle with him. We have no choice but to repress our aggressivity, exorcising it with “big bad loops.”

Introducing the third and the law (in other words, the culture and, later, the social order) into the primary symbiotic relationship with the mother is, all the same, violent for everybody. And even more so in hypersensitive subjects like

those suffering from Asperger's syndrome. We should also revisit the idea of hyposensitivity and hypo-reactivity in autistic people, who are somewhat defensive towards sensory and emotional overflow.

It is still a form of aggression to chase us from Paradise, even if necessary. If we do not consider this aspect when dealing with a person with Asperger's syndrome, given their hypersensitivity, it will paralyze them in most cases, and it may even block them completely. They will "come out of their mother's skirts" but remain in a "false self" posture and ultimately return to the idealized maternal figure (which is a sign of profound helplessness), more for lack of alternative than as a conscious choice of what is better for them. People with Asperger's syndrome who fail to emerge from the maternal dyad often suffer unspeakably, even if sometimes they give the impression of having developed deep interests. This existential pain paralyzes them, blocking access to their aggressiveness and the vital energy trapped inside it, which alone could allow them to break the stalemate, adding some temporality to their state. We speak of time because there is no time in symbiosis: everything is past, present, future, undifferentiated, and therefore immortal because in(de)finite.

But the maternal figure must also let go of her Asperger's child. The young mother's obsessiveness can prevent the autonomy of the son or daughter, given her encapsulation power (especially if the mother also suffers from Asperger's syndrome). It is up to the attachment figures, the parents typically, to think about the temporality of the child's life, imagining future possibilities, and not let the child project into their future alone. In this temporality, parents must also consider that one day they will die, as their child will (just as their projects, loves, passions, and so on). As hard as it may seem, this "contemplation of finitude" may help counter the dyad's timelessness and give back to the child their own time as the indispensable dimension where to imagine a real life.

This is what we do as therapists when we say to the patient: "I remind you that your time in this life is limited, dear Madam, dear Sir, do you want to die without having really lived?" This concept is essential for patients with a mother who continues to treat them like infants, trapping them in the infinite and falsely immortal dyad. The therapist's work is also to help them to mourn the dyadic Paradise that will soon be lost. But, as we said before, the patient may feel "aggressed" by the therapist and can react with considerable anger at the (perceived) "injustice" of this process.

The observation of people with Asperger's syndrome leads us to think that they are much more aware of (or at least sensitive to) these anxiety-provoking realities because they have fewer filters than neurotypicals when confronted with reality. The presence of other pathologies, such as ADHD and OCD, could generate a circular cause-and-effect dynamic, stress being both an etiological component and aggravating factor, as well as the result of the three syndromes.

For someone with Asperger's syndrome, ADHD, and OCD, denial and a fusional relationship with the mother are felt as a "safe" and understandable protection against existential pain face to the frightful complexity of the "neurotyp-

ical” world. For these patients, it is also complicated to blame their mother and father for having forced them to come into a finite world (and in the connected temporality of emotions). OCD can appear as a remedy for the anxiety of living in a world where time passes irretrievably: we see these attempts in the content of obsessive thoughts, for example: “if I do not press the light switch 28 times, then we will all die in my building”.

For people with Asperger’s syndrome, there are several reasons to be aggressive, including the fact that they are more likely to be a victim of parental and fraternal abuse, bullied at school, in their sentimental relationships, and so on. These traumatic realities block and prevent the thought and development process. In traumatic situations, it is difficult to bring out healthy aggressiveness (which helps with social affirmation). People with Asperger’s syndrome are quickly stunned and cut off from their ability to react on the spot, and, at the same time, they feel guilty for experiencing negative and aversive affects towards others and themselves. Sometimes there are people with Asperger’s syndrome whose intense guilt leads to self-harm (a form of OCD).

The loop whose existence we had postulated as a triggering cause intensifies when there is a psychic refusal of certain aspects of reality, which are felt as aggressive. This refusal, in turn, hampers the adaptation to reality, especially family and social, which increases stress and feeds the vicious circle of the loop.

4. Therapeutic and Social Considerations

We would like to emphasize that this part of the paper is based on clinical observations without any support from pharmacological research. The presence of several pathologies requires comprehensive psychopharmacological care in the population described. A depressive state with considerable anxiety is very often present in people with Asperger’s syndrome, and the pharmacological treatment aims at correcting it. If there is concurrent ADHD, it is also necessary to treat with Ritalin while considering its possible interaction with serotonergic and or adrenergic antidepressants. For this reason, a low dose gradually introduced is the preferred strategy. Ritalin facilitates normal psychological functions and helps avoid the exhaustion of psychic resources and overadaptation. Both situations are common in people with Asperger’s syndrome and ADHD. Antidepressant treatment is also effective for OCD symptomatology, which is almost always present in patients with Asperger’s syndrome.

Antiepileptics with a good anxiolytic effect help reduce the doses of antidepressants, and Ritalin needed. In addition, pregabalin and gabapentin, even in minimal amounts (25 or 50 mg/d for pregabalin, for example), positively affect sleep.

The diagnosis of TDP (triple diagnosis problem) must be made early. The evolution of patients and their quality of life depend on the development of their education and socialization.

According to our empirical observation of the lifelong evolution of these pa-

tients, the working activity for people with TDP lasts about 15 years. Then burnout sets in, and taking sick leave becomes a survival necessity. This results in a complete cessation of professional life, even in people with high or very high levels of education. The presence of a chronic depressive state is the norm.

Beyond medications, these patients should be able to “modulate” the pace of their academic and professional life. Unfortunately, their adaptation problems cause a continual and inevitable “chafing” against reality and a wearing down of their psychical “capital.” Medications can—and do—reduce existential pain and ease social and personal interactions. However, they alleviate the symptoms but do not solve the problem we postulate as an epileptic-like disorder.

The academic curriculum of these patients should be spread over a longer time, splitting each year into two, devoting the remaining time to adapted social activities, leisure, and sports. This reduced pace is independent of the academic performance or giftedness of the patient. On the contrary, in our observation, gifted patients tend to be more sensitive to stress and worn down more quickly by academic demands. The trouble is that most academic institutions do not allow this readjustment of the curriculum. Moreover, the patient and their entourage (wrongly) consider academic achievement as a mark of normality. How many times have we heard, “My (son, daughter) goes much better now, they has passed the exams,” perhaps accompanied by “I think they does not need treatment any longer.” The patient, thinking they have finally got a grip on this complex reality, increases the pace and the stress, ultimately hastening their perdition. Again, how many “I do not understand, they was doing so well” still ring in our ears.

Work is possible, but part-time, 50% at most. This reduced pace of work may eventually avoid burnout, sick leave, and, ultimately, social welfare, or at least delay all this by many years. Moreover, such a part-time activity allows for a longer productive life, with a net benefit for the patient’s well-being and an economic benefit for the patient and society at large.

5. Conclusion

Based on our clinical experience with ADHD, OCD, and Asperger’s syndrome patients, we have observed a very high comorbidity, also reported in the literature. Due to this fact, and the similarity of symptoms, these patients often present a “triple diagnosis problem” (TDP). Instead of discussing a triple differential diagnosis, we have considered these patients’ symptoms as gradations on a spectrum. We have supposed that a single underlying etiological factor is at the root of these diseases. This would explain the similarity of their symptoms and the frequent comorbidity, while their difference would come from secondary etiological factors.

From a clinical perspective, we hypothesize the presence of a neurodevelopmental factor in the form of an epileptic-like disorder. This disorder causes an irreducible mental “loop” where the thought is frozen and destined to repeat it-

self indefinitely. From this “obsessive” common root, the three syndromes emerge and partially differentiate under the influence of concomitant etiological factors and individual and biographical differences.

Our clinical observation that stress is a significant aggravating factor is consistent with our hypothesis. Furthermore, the fact that these patients seem to improve when treated with low-dose antiepileptics such as gabapentin or pregabalin is also compatible with our idea.

We are aware of the limitations of a neurodevelopmental hypothesis based solely on small-scale clinical experience and pharmacological evidence. Still, we wanted to open the debate on a possible interpretation of a cluster of pathologies at the origin of severe human suffering and high social cost. We sincerely hope that more rigorous epidemiological and neurological research will confirm or falsify our intuition.

Disclaimer

This work is in adherence to the Helsinki Declaration for research with human subjects. According to the Geneva Canton’s *Ordinance on Organisational Aspects of the Human Research Act*, ethics approval is unnecessary when dealing with grouped (i.e., non-individual) data.

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