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Abstract

There is a recurring confusion about the terms and names used to describe dissociation and dissociative disorders. By this we mean somatic disorders, conversion disorders, dissociative disorders, Briquet syndrome, depersonalization disorder or split personality disorder, to mention just a few, without clear-cut boundaries among these diagnostic entities. To describe the psychopathology of dissociative symptoms, it is useful to know the genesis of the disorder, the cultural–historical context that saw its birth, and how it has evolved to the present day.

It is common to relate dissociation to hysteria, and hysteria to women. Today, it is a well-known fact that these associations are not always clear. The idea of dissociation was coined by Pierre Janet in France in the late nineteenth century and was used to diagnose female patients who for the most part presented with hysteria, in a historical period and in a city in which hysteria was related solely to women. Prior to Janet, Charcot had already put forward a psychological explanation for hysteria, with traumas as triggers and somatic symptoms as the most significant manifestations. Freud later challenged the conversive mechanism with the dissociative one as an explanation for hysteria, and both terms have found their way into modern-day psychopathological descriptions, bringing about a chaos in terminology. Here we shed light on the confusion created by the different terms and also try to prove that there is insufficient evidence to support the idea that dissociative disorders are predominantly found in women.

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7.1 Introduction

Modern day psychopathology retains dissociation and dissociative symptoms within the bounds of the psychopathology of consciousness. It defines dissociation as a restriction of the field of consciousness, which denotes a disruption in the normal and continuous flow of ideas, thoughts, perceptions, etc., bringing about a split between cognitive and perceptive elements and behavioral ones, the behavior adopting automatic modes [1]. All of the processes involving a restriction of consciousness have the following psychopathological elements: decrease in the levels of alertness and attention, spatial and temporal disorientation, automatic behavior, post-critical amnesia, absent delirium, and partially preserved sensory reactivity. Other symptoms that are considered dissociative are the dissolution of the self or split personality, dissociative amnesia, depersonalization, derealization, auditory hallucinations [2], trance states [3], and somatoform symptoms.

We owe the term *dissociation* to Pierre Janet, since its genesis can be found in his *désagrégation psychologique* [4], and also to the reformers of eighteenth century associationism, such as Maine de Biran or Herbart, because they provided Janet with a conceptual framework, which was later elaborated upon by Sigmund Freud, another key figure in the emergence of the new concept.

Moving on, we find the *fin-de-siècle* spirit, which reached its zenith in cities such as Paris and Vienna at the turn of the century. The artists in Paris were familiar with Charcot's theories about nervous diseases. Neurasthenia, whose root cause was considered to be the hectic pace of life in the city, became a fashionable affliction. Psychiatry had a strong influence on the spirit of the day, and there is a considerable overlap between the patients described by psychiatrists and the characters portrayed by novelists and playwrights.

Ellenberger [5] cites similarities between Janet's Irene (1907) and Zola's Pauline, from his work *La Joie de Vivre*, between Hofmannsthal's *Electra* and de Breuer's *Anna O*; between Freud's *Dora* and the characters in the short stories by Schnitzler. In this cultural-historical context a predilection for hysteria can be found to be the diagnosis for the women of the day. Consciousness and its alterations become increasingly important and inform the different conceptions that illuminate psychology, psychopathology, and clinical psychiatry [6] throughout the twentieth century.

In 1875, Eugène Azam spoke for the first time of the "French split personality," embodied by Félicité. He first described the case as "temporal amnesia," later calling it "double awareness," and finally "split personality." So many cases of split personality were published during the nineteenth century that Ellenberger [5] saw the need for a classification. It is important to point out that all of the cases involved women—Hélène Smith, Estelle, Mary Reynolds, or Miss Beauchamp—and that only one man is mentioned, Ansel Bourne, treated by William James. An interesting point to debate is whether the proliferation of split personalities among members of the female sex was an epidemiological reality or simply the result of the cultural trend in vogue at the time. Two centuries later we can see how this mental disorder has evolved over time. Today its prevalence seems to be greater in

the USA than in Europe, and according to the latest studies cited in the bibliography, contradictory information about its prevalence in one sex or the other exists, undermining the notion that women are more prone to suffering from the condition.

However, dissociation not only manifests itself in a split personality, today called multiple personality disorder, but also underlies different mental disorders with different psychological and physical manifestations. Dissociation not only includes dissociative amnesia, depersonalization, derealization, and fragmented identity but also, according to Pierre Janet and other psychiatrists working during World War I, a poor integration of somatomorphic components [7]. Different authors [7] have proposed the name psychological dissociation, instead of somatomorphic dissociation, to illustrate that many somatic symptoms have a dissociative mechanism at their core.

The extremely high number of women among those affected by these types of disorders in the nineteenth century must be understood to be a cultural bias pertaining to the age. In this century the role of the female body was limited to maternity. Women were considered weak and prone to suffering from mental disorders [8]. Many women during this century were labeled chronically sick [9]. In all likelihood, girls and women became sick in no small measure because of the horrible conditions imposed upon them, but few doctors at that time would have seen social factors as being possible etiological causes. With the arrival of psychoanalysis and a new interest in female sexuality, the famous cases of Anna O and Dora appeared, treated by Freud, and these women were considered “hysterical, delirious or depressive” [9]. Once again discrimination was an important factor in the treatment of certain diseases, which were considered to be almost exclusive to women. The stress of modern life was cited to be an aggravating factor that made nervous diseases in women even worse, since women were generally perceived as more delicate and sensitive.

However, whether there is a preponderance of dissociative disorders among women over men is something that has to be ascertained. We will try to use all the facts and figures known at present to see whether the disorder occurs more predominantly in one sex or the other. We think it is important to find an explanation for the statistical data that can be found for different disorders, and to elucidate if these depend on factors specific to women or factors determined by culture.

7.2 Janet and Systematic Anesthesia

There is little doubt that the term dissociation had its origin in Pierre Janet, or more precisely, in his idea of *désagrégation*, at a very specific time and place in history, the French *fin-de-siècle*. Sigmund Freud also deserves a mention, because it is around this time when references to the concept of dissociation start appearing in his work. He will soon drop the idea in favor of repression, and his theories will move in a new direction, leaving hypnosis behind and embracing the new ideas of psychoanalysis. Both authors had conflicting views regarding the origin of

dissociation, but their studies overlapped at different points, often leading to the same conclusions [6].

Different concepts start appearing in the works of Pierre Janet (suggestion, subconscious, narrowing of the field of consciousness, psychological misery, fixed ideas) that will lay the foundations and blaze the trail for his *désagrégation psychologique*. His greatest work is *L'Automatisme Psychologique* (1889), the result of the research he carried out in the lab of El Havre hospital, in which he expounds his theory of disaggregation [4].

It was thanks to his clinical observations of patients, and partial catalepsies, that Janet came up with the idea of partial consciousness, the dissociation of the content of consciousness in different compartments. He described women who performed actions subconsciously, that is to say “actions that had all the features of a psychological fact except one, which is that the subject is unaware of what he is doing in the moment he is doing it” [4]. Psychological automatism does not direct all conscious thinking but only a small group of phenomena partially separated from the overall consciousness of the individual that continue to act of their own accord and in a different manner. These partial automatisms have as their simplest form of expression partial catalepsies and suggestions by means of distraction.

For Janet ideas develop into acts. It is no coincidence that his psychological automatism should have carried the subtitle “Experimental-psychological essay on the inferior forms of human activity” [4]. Distraction, according to this author, seems to split the field of consciousness into two parts: one that remains conscious, and another that the subject seems to be unaware of. The distraction would be equivalent to an anesthesia, by means of which we can suggest acts, but also hallucinations. While the distracted consciousness is occupied with other ideas, the suggested act is performed without the subject knowing about it.

By means of suggestion Janet discovers that he can suppress certain sensations, producing in the subject partial blindness or deafness. A suggestion of a negative hallucination or systematic anesthesia was used. The first term came from Bernheim (1886) and the second from Binet and Féré, the latter seeming more accurate to Janet, since he viewed the phenomenon as being analogous to the systematic paralysis of movement [10].

Janet's understanding is that during conscious perception of sensations, there is an operation in two stages. First, there is a confluence of all of the sensations coming from the different senses and then there is an active synthesis of these sensations as they cluster together, and aggregate themselves to a given perception. It so happens that in the “distracted hysterical” [4] subject there are a set of sensations that during the second operation escape from consciousness. They cannot be linked to the personality of the subject, and therefore, the self is not aware of them. Synthesis is weak and restricted.

Janet considers “systematic or even general anesthesia an injury, a weakening, not of sensation, but of the ability to synthesize sensations, rendering a personal perception, all of which implies a true disaggregation of psychological phenomena” [4].

We can see that this initial concept of dissociation, Pierre Janet's psychological disaggregation, is a concept that stems from the analysis of somatic phenomena, partial catalepsy, and systematic anesthesia, and that it describes "the dissociated body" [4] of sick people, generally hysterical women. Even in the prologue to his philosophy thesis, *Psychological Automatism*, he cites the names of four women, Léonie, Lucie, Rose, and Marie, who were the women that Janet considered as having "the conditions of a good psychological experience" [4]. Later, in 1898, Janet [11] published *Néuroses et Idées Fixes*, in which he gathered all of the articles he published between 1891 and 1897 on the subject of different psychopathological disorders and their therapy, and which were the result of his work in the ward of Charcot in La Salpêtrière, treating hysterical patients, among them were Madame D., Isabelle, Marcelle, Justine, Madame A., etc. One of the few references to male patients is the case of Achilles, who suffered from manifestations of demonic possession.

"It is undeniable that what gave hysteria coherence over a long period of time was its exclusively female nature" [12].

Up until the twentieth century three possible origins for hysteria were considered, the uterus, the brain, and the nerves. The first option justified that only women should suffer from the condition, but later on its origin was generally thought to be located in the brain, and, owing to the analogy between crises of hysteria and epileptic convulsions, it was determined that there had to be only one organ involved in the pathology. This is how the concept of hystero-epilepsy came into existence, consecrated by the Charcot school.

In this *fin-de-siècle* Paris, hysteria continued to be a condition exclusively related to women. Records detailing manifestations of hysteria were always connected with female patients. It was Charcot himself, however, who demonstrated that hysteria was also a male affliction. One of his students, Professor Pierre Maire said to his teacher: "The most salient feature of Charcot's work on the subject of hysteria, the main formulation that will not be lost and that will serve as a guideline to future generations of doctors, is his demonstration that male hysteria exists" [13].

We cannot forget the historical context in which this shift to male hysteria took place. The most important phenomenon in the industrial world of the nineteenth century was the railway, which can be considered, in the words of Hacking "the epic symbol of the psychologizing of trauma" [14]. The railway gave the very idea of accident its modern meaning, that is, among other things, that something can happen randomly or without apparent cause. The term railway spine appears, coined by John Eric Erichsen, to refer to those symptoms that did not match any recognizable physical injury. Three years later Russel Reynolds [14] tries to demonstrate that certain disorders such as paralysis, spasms or other alterations of the sensations may depend on the morbid state of a sole idea, or an idea together with an emotion, and such a formulation cannot elude being compared to hysteria. This syndrome was a chance for Charcot to render hysteria potentially male. Gynecologists and obstetricians claimed this territory as their domain; thus, the best way to take the disease away from the gynecologists was to declare that it

belonged to both sexes. Up to then male hysteria was recognized, but within the context of an “effeminate” [14] personality. Charcot [15] in his lessons on the disease of the nervous system (1887) discussed the symptoms that Russel Reynolds had described, provoking, by means of hypnosis, the symptoms in a male subject whose masculinity was beyond question. Thus, “memory, hysteria, hypnosis and physical trauma were closely linked together in the lectures by Charcot” [14].

After having worked for 6 or 7 years in El Havre, Janet [16] arrived at La Salpêtrière and followed the teachings of his master Charcot, which ended with his thesis in medicine *L'État Mental des Hystériques*, in which he outlined and completed his studies on the subject of hysteria. According to López Piñero and Morales Meseguer [17], the historical foundations of Janet's initial thinking could be traced back to his being a student first of Ribot and then of Charcot. And it is precisely Charcot's contributions on fixed ideas that were core to certain neuroses and that formed the starting point of Janet's theory of dissociation. In his work *L'État Mental des Hystériques* the author explains the existence of purely somatic phenomenology whose etiology is psychological and Charcot is the first one to link these physical symptoms with traumatic phenomena. According to Janet, hysteria is a mental illness in which there is cerebral stress and also very vague physical symptoms. There is a weakening of the field of consciousness that prevents certain sensations and images from being perceived, and they remain beyond the scope of personal perception. This lack of synthesis enables parasite ideas to form, and since these are completely isolated from the control of personal consciousness, they manifest themselves as disorders in physical appearance. These parasite ideas are the germ of Janet's fixed ideas, which are the cause of mental accidents in hysterics and were how Charcot explained traumatic hysteria.

Well, gentlemen: thanks to recent findings in the science of hypnotic neurosis, we have been able to intervene to a certain extent, and advance experimentation in the study of cases of this nature. We know that, in individuals in a state of deep hypnosis, it is possible to give birth to, by means of suggestion and intimidation, an idea, a coherent group of associated ideas, which settles in the mind in a similar way to a parasite, becoming isolated from everything else, and which can translate externally in corresponding motor skill phenomena [15].

Charcot devotes himself to the study of hysteria, which affects not only women, but also men and children. It is a disease with multiple symptoms such as contractions, paralysis, anesthesia, convulsions, hallucinations or delirium. From 1878 onwards he becomes interested in hypnosis, a method by which he can provoke in his patients the symptoms of hysteria, and he defends hypnosis and hysteria only being possible in people with weak and degenerate nervous systems.

Charcot is criticized by Liébeault and Bernheim, who deny that there is a link between hypnosis and hysteria and defend that the prerequisite that is necessary for hypnosis to be performed is suggestibility and not the mental disease. After this attack, Charcot begins his work on the psychologizing of hysteria, and, without forgetting its neurological grounding, he proposes a psychological explanation, admitting that personality disorders caused by traumas are a triggering factor in

hysteria. This approach permits a therapy to be developed, and such a therapy would be devised by two of his disciples, Freud and Janet [18].

At the end of the nineteenth century and beginning of the twentieth century, the role played by emotion in the triggering of hysteria became controversial. According to Janet past traumatic events that “were forgotten” remained active at the subconscious level, forming fixed ideas, endowed with a life of their own in a dissociated consciousness. From Janet’s point of view emotion produced a state of dissociation, narrowed the field of consciousness, and enabled the fixed idea to settle. From Freud’s point of view, however, emotion, because of its charge of excitation, submits the body to an overcharge that it is not able to get rid of through the normal channels of abreaction (release of emotional tension).

7.3 Freud and Conversion

In the preliminary Communication of 1893, Freud and Breuer extend to all hysteria the pathogenic formula proposed by Charcot for hystero-traumatic paralysis.

Freud describes in this work two psychological operations in the process of traumatic neuroses [19]. One is a mechanism of dissociation, by which there is a rupture in the association between a function of the body and the rest of its psychological activity. The second is a *clivage* (*Spaltung*), which would keep this separation or diversion completely apart, to the point when it becomes unbridgeable, leaving all these dissociated phenomena inaccessible to any form of association. In order for these mechanisms to kick in, there must be a charge of intense affective value. The difference between Janet’s and Freud’s understanding regarding this dissociation is that the former explains it as a result of a deficit in the synthesis function or a narrowing of the field of consciousness, while the latter links it to the affective charge.

For Freud the cases of male hysteria described by Charcot could be paradigmatic for female hysteria, because it is in women and in a decidedly female world in which he creates his theories. In these cases, the subjects suffered a trauma, a railway accident, which made them feel terrified, while in hysterical women experiences that could be considered traumatic could be found to be content in their attacks, but it was not the memory that was in itself traumatic, rather, it had happened in a moment of predisposition, and that is the reason why it became a traumatic memory. Freud’s understanding is that this memory is unconscious, meaning that it can be found in a second state of consciousness [20].

Freud assumes that the symptomatic complex of hysteria justifies the hypothesis of a dissociation of consciousness, with separate psychic groups being formed, but he does not share the views that were current at the time about the origin of such dissociation. For Janet, dissociation was a primary feature of hysteria and was dependent on a genetic weakness in the capacity for psychical synthesis, which meant that degeneration in hysterical individuals was unavoidable, a hypothesis that is not shared by Freud. At the beginning, this author was in agreement with Breuer’s “hypnoid states.”

The split of consciousness, as remarkable as double consciousness, in well-known classic cases, exists in a rudimentary way in all hysteria: therefore, the inclination to dissociate, and along with it, the emergence of altered states of consciousness, which we will summarize under the name of hypnoids, would be the fundamental phenomenon underlying neurosis. [21]

The hypnoid states are singular states of consciousness, of dreamlike qualities, with a diminution in the associative faculty. Any representation emerging from one these hypnoid states is excluded from normal associative connections, broken off from the remaining contents of consciousness, and as a consequence dissociation appears, which is acquired and not primary [6].

In the aforementioned preliminary Communication, the authors defend the idea that traumatic memories retain all of their emotional charge, and the same as a “foreign body” exert an influence on personality, a hypothesis that was backed up by the famous case of Anna O [21].

It will take Freud a long time to leave Breuer’s theories behind and formulate his concept of “conversion” in the so-called “defence hysterias.” Unlike Janet, who considered the dissociation of consciousness one of the defining features of hysteria, Freud [22] (1894) considered the capacity for conversion one of the defining features.

In hysteria, the unbearable representation is rendered harmless by transforming the magnitude of stimulus into somatic excitations, a process for which we propose the name of conversion. Conversion can be total or partial, and it happens to the motor or sensory innervation more closely linked in one degree or another to the traumatic event. The mnemic footstep does not disappear because of it, but forms here onward the node of a second psychical group. [22]

His theory explaining hysteria and its evolution can be traced in the medical histories of four of his patients, all of them women, from Breuer’s hypnoid state up to his concept of repression [6]. One can see the transition from the hypnoid hysterias of Anna O and Katherina to the defense hysterias of Elisabeth and Lucy, in which the terms dissociation and repression converge, although this is always seen as a defense mechanism.

The concept of repression appears in Freud’s work for the first time in the neuropsychosis of defense [22] (1894) and on numerous occasions later on in his *Studies on Hysteria* [21] (1895). Freud explains that the “dissociation of the contents of consciousness (the result of the act of repression) is a consequence of the volition of the patient, being set into motion by an effort of will power, whose motive can be determined” [22]. “I viewed the psychical split as a result of the process of repulsion, that I then called defence, and later on, repression.” [22]

The growing importance of psychoanalysis, subsequent to the *Studies on Hysteria* by Breuer and Freud, discredited the concept of dissociation, and it was ultimately replaced by the model of repression. Both Freud and Janet believed that psychological trauma played an important role in the forming of symptoms, but with the advent of Freud’s concept of defense, the psychoanalytical theory broke away from the theories about dissociation current at the time, and the popularity of

what had been one the most characteristic theories of the late nineteenth century and early twentieth century decreased, until all interest in it all but disappeared [23].

7.4 Dissociation and Conversion in Modern Day Classifications

The concept of dissociation found in the work of Pierre Janet does not refer to the same idea as that found in the work of Sigmund Freud, as we have already seen in this brief analysis of its conceptual and historical evolution. After the French *fin-de-siècle* the term was used to describe psychopathology in a very different nosological field, that of psychosis, bringing about a dramatic change in the understanding of the term. The main goal of this study of dissociation and the dissociated body is, however, concerned with the fact that the notions of Pierre Janet have provided a framework for modern day diagnostic manuals, both the DSM in the USA and the ICD in Europe [24]. In the changes that were proposed for the DSM IV we can already find the term “dissociative identity disorder” (300.14) instead of “dissociative personality”, “dissociative amnesia” (300.12) instead of “psychogenic amnesia,” or “dissociative fugue” (300.13) instead of psychogenic fugue. All of these terms correspond with manifestations that can be explained by means of Pierre Janet’s dissociation.

Pierre Janet defined hysteria as a “form of mental depression characterized by the narrowing of the field of personal consciousness and a leaning towards the dissociation and emancipation of the systems of ideas and functions that make up personality” [25], these systems of ideas and functions belonging either to the psyche or the body.

Classically, there have been different diagnostic visions between American and European psychiatry. The former has avoided the somatic manifestations of the dissociative disorders, in such a way that the DSM-III-R defined the fundamental feature of dissociative disorders as “a disorder or alteration in the integration of functions connected with identity, memory or consciousness” [25] and in the DSM-IV [26] it was added that there could also be a disorder in the perception of the environment. We can see that in these diagnostic systems the somatoform symptoms are not considered to be of a dissociative nature but are labeled a somatization disorder, pain disorder, conversion disorder, sexual disorder, or dysmorphic body disorder. In stark contrast, the International Classification of Diseases, the ICD-10 does contemplate that dissociation can affect somatoform functions. “Dissociative disorders have in common a partial or complete loss of the normal integration of memories from the past, self-awareness and immediate sensations, and control of body movements.” [27] This diagnostic manual only deals with dissociative disorders presenting as a loss of sensations or loss of, or interference with, movements. Disorders that may include further sensations such as pain are categorized as somatoform disorders, which are the same as somatization disorder. “Multiple and ill-defined complaints of somatic symptoms must be classified as somatoform disorders (F45.-) or neurasthenia (F48.0)” [27].

We would like to point out once again how confusing such terminology is. In the ICD “Dissociative disorders (conversion disorders)” are discussed as if they are equivalent concepts, although, as we have already seen, they refer to different concepts, according to the two different authors who described them.

To complicate things further, a pseudo-dissociative crisis is classified in the ICD 10 [27] as a dissociative disorder, but as a somatoform disorder in the DSM [26]. As already mentioned, in the American classification the conversion disorder can be found among somatoform disorders and is defined as “the presence of symptoms or deficit that affects motor or sensorial skills, and that suggest a neurological disorder or some other medical condition” [26]. The current DSM-5 renames conversion disorders “functional neurological symptomatic disorder” [28], stressing the need for neurological tests (“consistency in the test is a way of proving incompatibility between the symptom and well-known medical or neurological conditions” [28]) and also implying that the presence of relevant psychological factors cannot always be proven at diagnosis, which seems to give currency to the idea that they should not always be linked to psychological disorders.

The opposite occurs in the case of the somatization disorder, which is now called “somatic symptoms disorder” [28], clarifying that in order to reach this diagnosis there must be somatic symptoms and maladaptive thoughts, feelings, and behaviors. Previously, this disorder was defined as having somatic symptoms that could not be explained medically, but in the current diagnostic this criterion is consigned to conversion disorders and pseudocyesis because these are the only cases in which it is thought that the symptoms can be demonstrated to be inconsistent with medical pathophysiology. There is a substantial difference between these diagnostic criteria and the previous ones, since there is a break away from the classic understanding of the somatization disorder (or Briquet syndrome) belonging to hysteria and therefore of psychological causation. Thus, the possibility of a new medical disorder that has not as yet been identified is opened up.

The depersonalization disorder appears in the DSM IV among the dissociative disorders, but in the ICD 10 it is classified in a category of its own, in the section “Other neurotic disorders” together with derealization, as if they were one and the same. According to the DSM, depersonalization is defined as a “feeling of estrangement or detachment from oneself” [26], and “there can be several different types of sensory anesthesia, lack of affective response and feeling of loss of control of one’s own acts” [26], while the ICD 10 speaks of the depersonalization–derealization disorder, which “generally appear[s] in the context of depressive illness, phobic disorders and obsessive-compulsive disorders” [27], with no reference to dissociative disorders, although its definition is similar to that of the DSM.

There are few references in these classifications to the number of manifestations of these disorders in one sex or another. According to Gaviria [29], this approach has been minimal in the DSM I (1952) and II (1968) and was probably due to the lack of research concerning the relation between gender and psychopathology. In the DSM III (1980) there was a slight increase in the interest in sex/gender and in the section on conversion disorder, it is said that “there is no conclusive information” [29], but that *globus hystericus* is apparently more frequent in women.

The DSM III-R (1987) and DSM IV continued to make some headway in this area, and this time there was information about variations in the expression and length of the disorders according to gender that was included in the section called “specific characteristics including culture, age and gender” [26].

In the DSM IV there are details about the somatization disorder “formerly known as hysteria or Briquet syndrome,” [26] indicating that it rarely affects men in the United States, but the high incidence among Greeks and Puerto Ricans suggests that cultural factors can affect prevalence according to gender. Prevalence was in any case variable, between 0.2 and 2 % in women and less than 0.2 % in men, but this could be related to the fact that most doctors were male and a bias may lead him to diagnose more frequently in women. The ICD 10 also concludes that there is a greater prevalence among women, at least in some countries, without taking into account cultural factors. It does mention on the other hand, a link with attention-seeking behaviors (histrionics) [27].

There is only one reference to gender in the description of the depersonalization disorder in the DSM IV-TR, where it specifies symptoms dependent on culture, and that in groups of patients it is twice more frequent in women than in men [30].

Conversion disorders appear more frequently in women than in men, in a ratio ranging between 2:1 and 10:1, and many of these women later present with somatization disorder. In the case of men they find an association with the antisocial personality disorder, in military contexts and in accidents in the workplace [26], which could be interpreted as being based on a sociocultural bias.

Dissociative amnesia is referred to equally in both classifications as affecting men less frequently, and only in extreme cases, such as men subjected to combat stress [26, 27], which definitely is, in our opinion, another cultural bias.

With regard to the rest of the dissociative disorders, the ICD 10 makes no further mention of gender, except in passing when it mentions that young teenage girls suffer more frequently from “moderate and transient variations of dissociative disorders of voluntary motility and sensitivity” [27].

In the case of the DSM IV, there are no distinctions between gender in the rest of the dissociative disorders, with the exception of the dissociative identity disorder, which is diagnosed “three to nine times more in women than in men. . . Women tend to present more identities than men (15:8 by average)” [26].

In the DSM IV-TR (2000) a great effort was made to broaden and deepen the scope of information related to gender [29], but in our opinion, at least in terms of disorders related to dissociation, there is no additional information except that related to the depersonalization disorder.

In the recently published DSM-5 (May 2013), many new additions have been controversial [28]. In terms of the subject we are dealing with here, we have to point out that there is a different structure. The multi-axial evaluation has been dropped and there is a framework of information about age, gender, and characteristics of development of the patient throughout the text. Prior to its publication, we find in the literature critical analysis of the shortcomings to be found in these manuals in terms of the knowledge gathered about variables of age and gender in psychiatric diagnostics [31, 32].

The dissociative identity disorder appeared in a completely different light in the DSM-5 with more information being given about differences in gender, although no specific etiological explanation related to gender is provided, or any other kind. First, it is stated that the condition is more predominant among adult women, but there are no data on children. Denial of the symptoms and traumatic memories among men is postulated as commonplace, and this would account for a high number of false-negatives. Among women, acute presentations are more common (flashback, amnesias, fugues, conversion symptoms, hallucinations, or self-mutilation). Men present more violent or criminal behavior, and the triggers for acute dissociative episodes are combat, being an inmate in prison, or physical or sexual aggression [28].

With regard to dissociative amnesia, in the DSM-5 we find a brief mention of a greater predominance among women. This reference is contextualized within the USA and derived from only one “small” study [28] on the prevalence of the disorder over 12 months: 1.8 % (1 % men, 2.6 % women). Moreover, it includes dissociative fugue within this disorder as just another feature and not as a separate diagnostic entity.

This manual follows the same criterion as the ICD and labels derealization and depersonalization as one and the same disorder, but it remains in the category of dissociative disorders. It adds a prevalence of the disorder of 2 % and a ratio related to gender of 1:1, unlike previous manuals, which claimed that they did not have any information related to this.

As for somatic symptoms disorder, the DSM-5 estimates a greater prevalence than that put forward for the old somatization disorder owing to greater flexibility in the diagnostic criteria, the fact that symptoms that cannot be explained medically should not be required, and the smaller number of symptoms present. It is estimated to be between 5 and 7 %. Also, it does not specify, but it does mention a greater prevalence among women [28].

With regard to conversion disorder, the DSM-5 points to, but once again offers no explanation for, the claim that “the disorder is two to three times more common among women than in men” [28].

7.5 Female Gender in Dissociative Disorders

We start from the assumption that there seem to be differences in how psychical symptoms are perceived in men and women, although this premise could be questionable according to other variables such as social class, ethnic group or cultural environment. In our sociocultural context, women frequently present a subjective perception of lower psychical well-being, worse quality of life, and worse state of health than men and tend to use health services more often [33].

Assuming traumatic events to be factors of vulnerability and triggers of mental disorders, it is known that if these traumatic events take place during infancy, they are more serious. Thus, suffering from sexual abuse in infancy increases the risk of suffering from anxiety disorders. There is, moreover, a different response to a

psychical trauma according to gender. In general, women suffer a lower number of traumatic experiences, but they are more vulnerable to them [34].

A subtype of post-traumatic stress disorder is described, which is called “dissociative,” and is characterized by dissociative symptoms. Evidence comes from studies on adults and children, which include functional neuroimaging, as well as different types of trauma, including sexual and physical abuse in childhood and traumas associated with military combat. Studies estimate a prevalence of sexual abuse in childhood in this disorder as being 20 % for women and 8 % for men [35]. In a study with veteran soldiers it was found that 15 % of men and 8 % of women suffered from post-traumatic stress disorder 15 years after serving in Vietnam [36].

These international studies demonstrate that boys have a greater probability compared with girls of suffering or being threatened with physical aggression or having a friend or relative who has been assaulted [37]. They also have a greater chance of being hit by a car, getting hurt in a playground, and being witness to violent confrontations. In contrast, girls are at greater risk of sexual assault [37].

We continue to link hysteria with the female gender today. There is a widely-held belief that dissociative symptoms and disorders are predominantly found in women. Empirical studies in the general population and in different clinical trials indicate that there are no differences between genders [38]. One explanation that has been postulated to account for this apparent prevalence of dissociative disorders among women is that women resort more often to health service providers while the condition is usually identified among men in law-related environments such as prisons or forensic institutions [39]. A study in New York [40] did not find any gender differences in the distribution of dissociative disorders. There is a general belief, based on clinical observations and pointed out in the DSM-5 [28], that among clinical populations, male patients easily hide their symptoms and histories of trauma. On the other hand, Sar et al. [41] found in a Turkish study, among high performance university students, that the male students reported more traumas during childhood than the female students.

There are other explanations, determined culturally, that would explain a greater prevalence of dissociative disorders among women, as demonstrated by Wolfrad [42], in his study seeking the relation among dissociative experiences, anxiety features, and paranormal beliefs among a sample of students, in which these were more frequent among women along with higher scores in dissociative experiences. Along the same lines, Pires [43] demonstrated that there was a greater psychological impact on women than on men who have suffered a car accident, but they did not find any significant differences between gender when looking at the peritraumatic dissociation.

Other studies, the vast majority, demonstrate that there is a greater prevalence of dissociative and somatoform disorders among women. Nicolai [44] offers different explanations for these differences in the prevalence according to gender, and one is the occurrence of attachment disorder and abuse in the childhood of these women.

Zona [45] has studied longitudinally the impact of exposure to violence among city teenagers. For both sexes an increase in the number of symptoms was predicted

prospectively (externalization, internalization, post-traumatic stress disorder and dissociation). The boys referred on average to greater exposure to violent situations, while the girls were more prone to suffering dissociative experiences, suggesting different specific paths dependent on gender, in terms of the specific psychopathology of the trauma.

Some of the results of the study are of special interest to clinicians who treat somatizations or other somatoform disorders without a clear medical etiology.

The Adverse Childhood Experiences (ACE) [46] in which a direct relation is found between the probability of sexual abuse in childhood and the number of medically inexplicable symptoms in adult age. Women have a 50 % greater probability of having suffered five or more categories of adverse experiences in childhood. Felitti et al. [46] consider that this is key to understanding the greater propensity women have to suffering health problems such as fibromyalgia, chronic fatigue syndrome, obesity, irritable bowel syndrome, and nonmalignant pain syndromes.

Many studies find a higher prevalence of conversion disorders among women [47], although this difference can vary according to the type of disorder. Stone et al. [48] found that the proportion of women was lower in cases of psychogenic weakness syndromes than in cases of epileptic pseudocrises.

Non-epileptic psychogenic crises are recognized in all studies as being more prevalent in women than in men [49, 50], which seems to be consistent with a greater prevalence in conversion disorders as well, and both are included among somatoform disorders in the DSM.

Against a hypothesis explaining this prevalence of conversion disorders in women that would focus on cultural differences, we refer to the comparative study by Cubo et al. [51], who finds a higher prevalence of psychogenic movement disorders among women in different healthcare settings in the USA and in Spain.

Conclusions

Dissociative symptoms are present in different psychiatric disorders, if current diagnostic classifications such as the recent DSM or ICD-10 are used as a yardstick. In order to understand the psychopathology of dissociative symptoms, it is important to know in what cultural–historical context the concept of dissociation was born, and what paths its evolution has followed throughout the history of psychiatry. Down through the years, other related concepts have appeared to have been coined by different authors, among them Jean Charcot or Sigmund Freud.

Different psychological theories have tried to explain somatic and psychogenic symptoms, those whose medical etiology is unknown, and links to hysteria and its phenomenology have been discussed. All of this has culminated in a considerable amount of confusion when it comes to concepts and terminology that we have tried to clarify, insofar as that is possible. From Pierre Janet and his *desagrégation psychologique*, to Sigmund Freud and his conversion, or the somatization disorder described in the DSM IV, there is a descriptive psychopathology that is constantly changing. This conceptual foundation has been

addressed in the latest diagnostic manuals, but unfortunately they only add a new dimension to the confusion.

Dissociation has always been related to hysteria and hysteria with women. We have tried to find the cultural and historical basis accounting for this prevalence in the nineteenth century, which is when the concept was born, and remind our readers of the medical references to male hysteria described at the time, now for the most part forgotten, but that were an important part of Charcot's casuistry and his description of traumatic hysteria. Split personality or demonic possession was a condition in no way exclusive to women, and these are clearly considered to be dissociative disorders in modern day psychopathology.

Epidemiological studies indicate that there is a prevalence of conversion disorders among women, but dissociative disorders do not seem to be appearing in the same numbers, and findings are more controversial. There is no explanation as yet for this statistical difference, and it is possible that there may be a reason, dependent on gender psychopathology, accounting for the greater prevalence of somatoform disorders among women. This leads us to the conclusion that further studies are required and that more interest in the field of mental health care for women is desirable. We need to incorporate gender perspective if we want to achieve quality science.

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