Women’s Pain and Psychogenic Diagnoses

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Abstract Healthcare providers often rely on the following sort of concerning reasoning when encountering patients with difficult-to-explain symptoms: in the absence of evidence for a physical cause, the symptoms are presumed to be psychological in origin. In this paper, we take up this concern in the context of chronic pain, with particular attention to how such reasoning disproportionately affects women and how it interacts with the many levels of gender bias in medicine. We first examine the unwarranted inference from diagnostic uncertainty to psychogenic diagnosis and explore how identity prejudice and diagnostic uncertainty interact in clinical practice. We then consider additional contributors to diagnostic uncertainty concerning women’s pain: gendered research gaps and male-centered diagnostic paradigms. After outlining the harms associated with psychogenic diagnoses, we consider the objection that such diagnoses might be pragmatically justified. We end by calling for a more nuanced approach to diagnosing and treating chronic pain.

Keywords chronic pain, women, medically unexplained symptom, psychogenic, bias

1 Introduction

Healthcare and medical providers often rely on concerning reasoning when encountering patients with difficult-to-explain symptoms. The reasoning goes something like this: in the absence of evidence for a physical cause, the symptoms are presumed to be psychological in origin (see, e.g., O’Leary 2018a; Sykes 2010). In this paper, we take up this concern in the context of chronic pain, with particular attention to how such reasoning disproportionately affects women and how it interacts with the many levels of gender bias in medicine.

We argue that, at least in the present moment, psychogenic diagnoses for women’s pain are both epistemically and ethically problematic and should therefore be avoided. Our discussion is grounded in contemporary scientific understanding of chronic pain as an etiologically complex, multifactorial phenomenon. We will therefore not extend our arguments to other difficult-to-explain symptoms, even if some such symptoms (e.g., fatigue and nausea) might be similarly complex. The narrow focus is justified because it allows for a more detailed investigation of the legitimacy of a particular type of psychogenic inference.

Throughout the paper, we use the term 'diagnosis' in a broad sense to encompass both formal diagnoses encoded in medical classification systems and informal inferences providers make about the causes of patients' symptoms (similar to O'Leary 2018a, 7). Such informal diagnoses could be conveyed through a provider's comments, attitudes, or prescribed tests, diagnostic procedures and treatments; a provider need not officially diagnose a patient's pain as psychogenic, or even use the term, to communicate to the patient that this is what they believe. Even when formal labels change, as they have recently, these informal diagnostic tendencies plausibly persist and continue to shape clinical practice and patient experiences.

Even though we focus on how this problematic clinical reasoning is often applied to women's pain, especially cisgender women's pain, we want to acknowledge that other groups, e.g., racial and ethnic minorities and individuals of diverse gender identities, might face similar issues in medical contexts. While *some* of the points we raise might also apply to these other cases, the historical conditions driving different forms of disparity are not the same, and each case deserves its own careful analysis. It is also good to keep in mind that social identities can intersect and prejudices compound, even if exploring these intersections falls outside the scope of this paper.[1]

The paper proceeds as follows. Section 2 examines the problematic inference from diagnostic uncertainty to psychogenesis in the case of pain, with attention to the historical developments that made this inference seem legitimate and the more recent developments in our understanding of pain that challenge it. Section 3 explores how identity prejudice interacts with diagnostic uncertainty to produce psychogenic framings for women's pain in medical contexts, and how evolving medical terminology fits into this picture. Sections 4 and 5 focus on gendered research gaps and male-centered diagnostic paradigms as contributors to diagnostic uncertainty about women's pain. Section 6 outlines the harms associated with the psychogenic diagnoses, and section 7 addresses the objection that

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[1] For recent work on the intersections of race and gender in pain experience and dismissal, see Wiggleton-Little (2024 and 2025).

these diagnoses might be justified by an appeal to pragmatic considerations. Section 8 explores how providers could manifest epistemic humility in their encounters with difficult-to-explain pain, and section 9 concludes.

2 (Chronic) pain, diagnostic uncertainty, and the notion of psychogenesis

For a long time, pain experience was thought to arise as a straightforward response to actual or threatened tissue damage. Descartes ([1664] 1985), 102-103) took pain to be a response to peripheral nerve fibers being “pulled” by harmful contact with external objects, and 19th and 20th century pain science refined this picture by first conceptualizing and later isolating *nociceptors*, i.e., specialized neurons that respond to signs of damage and project to the spinal cord and further into the brain (see Moayedi and Davis 2013, 6-8). In this view, pain was thought to track tissue damage and pain response was considered appropriate when proportionate to the severity of the damage.

The Cartesian picture had little to say about *persistent* pain that seemed *disproportionate* to physical damage.[2] This may have helped the Freudian notion of hysterical pain (see Breuer and Freud [1895] 1957) gain traction in the medical community. This type of pain —later dubbed *psychogenic*[3]—was thought to be *primarily* or *entirely* caused by psychological factors and therefore fundamentally different from “somatogenic” pain that has an organic cause in physical pathology. Throughout the paper, we use the term ‘psychogenic pain’ in this sense, to refer to conscious pain attributable primarily to psychological factors.

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[2] As Van der Linden et al. (2025) describe, early 19th century medicine attempted to explain back pain by physical factors (e.g., “spinal irritation’) but many such pains and other bodily symptoms were “soon to be dismissed as hysteria, as the pathological cause was never clearly defined or found” (2025, 9). In the early 20th century, the idea of the “ruptured disc” as the cause of back pain emerged. But “[w]ithin the Cartesian view of pain, a logical consequence was that pain without observable bulges or protrusions was viewed as ‘psychogenic’ or ‘imaginary’” (ibid., 11).

[3] Robert Sommer introduced the term ‘psychogenic’ into psychiatry in 1894 to describe “a definite, practically important group of cases from the huge area comprehended by the collective name Hysteria” (*ref.* Lewis 1972, 209). The *APA Dictionary of Psychology* defines the term as follows: *“adj.* resulting from mental factors. The term is used particularly to denote or refer to a disorder that cannot be accounted for by any identifiable physical dysfunction and is believed to be due to psychological factors (e.g., a conversion disorder).”

In 1948, Gordon observed that the "recognition of psychogenic pain as a clinical entity [was then] almost universal among doctors" (1948, 596). Engel famously wrote about "pain-prone" individuals "among whom psychic factors play the primary role in the genesis of pain" (1959, 902). He urged providers to pay attention to pain reports that seemed incongruous with "understandable anatomical and physiological principles," otherwise deviated from the provider's expectations, or included vague or elaborate descriptions, as such factors could indicate psychogenesis (ibid., 903-904). He also claimed that pain-prone patients were often "chronically depressive, pessimistic and gloomy people whose guilty, self-deprecating attitudes are readily apparent from the moment they walk into the office" (ibid., 905). Engel's ideas led to a concentrated search for personality traits that might predispose people to chronic pain (e.g., Blumer and Heilbronn 1982; for a critical discussion, see Turk and Rudy 1987).

Our scientific understanding of pain has changed dramatically since the mid-20th century. Empirical evidence has challenged both the view that pain neatly divides into somatogenic and psychogenic varieties and the idea that in normal cases pain straightforwardly tracks tissue damage (for philosophical discussions, see Coninx 2020, Casser 2021, Rosenqvist 2024). Many pain scientists emphasize the etiological complexity and multifactoriality of pain, especially chronic pain. It is common to see the pain system described as "non-linear" and "dynamic," with the implication that pain experience emerges from a complex integration of inputs from multiple bodily systems (e.g., Moseley et al. 2023, 179; see Van der Linden et al. (2025, Ch. 5) on the tension between this new conceptualization of pain and the old Cartesian view of pain).

In line with the new understanding, the latest version of the *International Classification of Diseases* (ICD-11; World Health Organization 2019b) describes all chronic pain as multifactorial, with biological, psychological, and social contributors. It also distinguishes between two kinds of chronic pain; whereas chronic *secondary* pain is linked to an underlying condition (e.g., cancer) or treatment (e.g., chemotherapy), chronic *primary* pain has an unclear etiology (see Treede et al. (2019) for a helpful discussion). The ICD-11 further categorizes chronic primary pain into subtypes, and some conditions that before had distinct diagnostic codes are now grouped within these subtypes. For example, fibromyalgia syndrome is now classified under chronic widespread pain (MG30.01).

Fibromyalgia and other types of chronic primary pains are sometimes described as *medically unexplained*. The neutral sense of the term 'medically unexplained symptom' (MUS) simply captures all symptoms that lack identified biological causes. This makes 'MUS' a non-diagnosis diagnosis, i.e., a way to talk about symptoms that do not *yet* have a diagnosis (O'Leary 2018a, 7; Creed et al. 2010). In practice, however, the label is often equated with the determinate diagnosis of psychogenesis (see, e.g., Kirmayer et al. 2004, 664; Jutel 2010, 233; Sharpe 2013; Katz et al. 2015). As O'Leary (2018a; 2018b) notes, this is an inappropriate response to diagnostic uncertainty: the absence of knowledge about biological causes does not equate to knowing that there are none.

Contemporary pain science recognizes three broad types of pain: *nociceptive* (resulting from tissue damage), *neuropathic* (resulting from nerve injury/disease) and *nociplastic* (associated with altered nociceptive function). The term 'nociplastic pain' was introduced in 2016 as a "mechanistic descriptor for chronic pain not characterized by obvious activation of nociceptors or neuropathy" but showing evidence of alterations in pain system function (Fitzcharles et al. 2021, 2098). As a purely mechanistic descriptor, the term says nothing about etiology, and "[a]lthough often sought out, a causal factor is usually not evident" (ibid., 2100). Various biological, psychological, and social factors are thought to predispose a person to nociplastic pain, and many chronic pains are assumed to be *mixed pains* with both nociceptive/neuropathic and nociplastic components (ibid., 2099; Guven Kose et al. 2022, S57; Moseley et al. 2023, 179).

And so, whereas chronic primary pains might be medically unexplained in the sense of being etiologically unclear, the notion of nociplasticity at least offers a possible mechanistic explanation. Given the current scientific consensus that the causes of altered nociception can be varied, the *a priori* identification of 'medically unexplained' with 'psychogenic' is clearly not justified. In fact, the diagnostic category of chronic primary pain is meant to promote caution and epistemic humility in cases where an underlying condition cannot be identified; it is "intended to be agnostic with regard to etiology; in particular, it aims to avoid the obsolete dichotomy of 'physical' vs 'psychological'..." (Nicholas et al. 2019, 29).

Caution and epistemic humility seem appropriate also in light of historical considerations. As Covington notes, many pains that were once considered to be *obviously* non-organic have turned out to have organic causes, and the supposed diagnostic signs of psychogenic pain have turned out to be unreliable (2000, 287; see also Shapiro and Teasell 1998, 21).

For example, the so-called Waddell's signs (WSs), such as "nonanatomic deep tenderness not localized to one area," that were once taken as evidence of non-organic etiology of chronic back pain, have not been found to correlate with psychological issues or "discriminate organic from nonorganic problems" (Fishbain et al. 2003, 151; see Table 1 for a full list of WSs; see also Shapiro and Teasell 1998, 21-22).

It could be argued that psychogenic diagnoses for medically unexplained pain are warranted in light of (i) data indicating that patients with chronic pain have higher rates of depression and other psychological disturbances (see Aaron et al. 2025), or (ii) the observation that it is rare, in general, for psychogenic diagnoses for MUS to be later overturned (e.g., Canavera et al. 2018; Kanaan 2018). In addition, some might propose that (iii) the effectiveness of psychological treatment interventions for chronic pain speaks in favor of psychogenicity.

But none of these considerations justify the inference. First, when it comes to the association of chronic pain and psychological disturbances, the direction of causation is unclear (Dworkin 1992, 178). Although psychological disturbances could be etiologically related to the onset or persistence of chronic pain, chronic pain itself often causes psychological distress; living with constant pain is challenging and isolating.[4] Second, contra Canavera et al. and Kanaan, there *is* some evidence of psychogenic diagnoses being overturned, although the issue is under-studied. For example, O'Leary cites evidence of individuals with autoimmune and rare diseases self-reporting high levels of inaccurate diagnoses prior to receiving correct ones (2018a, 10; see also Dusenbery 2018, 140-150; Shapiro and Teasell 1998). These cases are particularly relevant for our purposes, since many of the diseases have chronic pain as a symptom. Finally, the effectiveness of psychological interventions need not indicate that the patient's pain was *primarily caused* by psychological factors. If pain is the output of complex, dynamic processing, interventions can be effective even when they do not target the original cause. There is evidence, for example, that psychological interventions can help manage cancer pain (e.g., Ruano et al. 2022), yet few would infer from this that the patient's pain was psychogenic all along (see also Dworkin 1992, 178).

So, while it is *possible* that some (nociplastic) chronic primary pains are psychogenic, it is doubtful that providers in general have adequate grounds for making such attributions

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[4] Similarly, attempts to explain chronic pain by specific personality traits are widely considered to have failed (see, e.g., Turk and Rudy 1987, 239; Tyrer 2006, 92).

(e.g., McCaffery 1980, 29). While one might argue that a lack of evidence for a physical cause raises the probability of a psychological contribution, the leap from uncertainty to psychogenesis is not justified. Even *psychosomatic medicine,* which in its early phases made frequent uses of the notion of psychogenesis, has more recently focused on the *interactions* between biological, psychological, and social contributors to illness and disease (Tyrer 2006; Fava and Sonino 2010; Bikoff 2020, 25).[5]

So far we have shown that psychogenic diagnoses for pain are difficult to justify; in the absence of positive diagnostic signs, such diagnoses tend to rely on reasoning from diagnostic uncertainty to psychological causation. In the next section, we will discuss how such reasoning disproportionately affects women and how it can be mediated by identity prejudice.

3 Identity prejudice, diagnostic uncertainty, and shifting terminology

Empirical data and anecdotal evidence from patients with pain indicate that providers continue to make the problematic inference from diagnostic uncertainty to psychogenesis (see, e.g., Schäfer et al. 2016; Moss et al. 2025).[6] When they do, gender bias is often a contributing factor. There is a long and well-documented history of dismissing women's pain by misattributing it to purely psychological causes, especially when the pain resists diagnostic capture (see, e.g., Hoffman and Tarzian 2001; Hoffman et al. 2022). And, as we highlight in this section, although formal diagnostic categories have changed, psychogenic attributions persist.

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[5] In everyday language, 'psychogenic' and 'psychosomatic' are sometimes used interchangeably, and some might describe any physical pain that is *influenced* by psychological factors as 'psychogenic.' As mentioned earlier, we use the term more narrowly to describe pain that is primarily or entirely caused by psychological factors.

[6] To be clear, many providers do not fall prey to this outdated way of thinking. Our point is just that there remains a non-negligible number who continue to make the problematic inference. The inference also continues to be endorsed by some scholars. For example, Scamvougeras and Howard (2020) suggest that the vast majority of people with medically unexplained symptoms "are suffering the results of direct or indirect expression of underlying emotional distress" (2020, 303). For further discussion, see O'Leary's (2018a) criticism of the inference in the case of MUS more generally and the responses to her (e.g., Kanaan 2018) in the same issue of *The American Journal of Bioethics*. As O'Leary notes in her reply (2018b), several of the commentators engage in the very reasoning her article was meant to critique. For additional evidence that this inference remains prevalent, see the citations in those commentaries.

Psychogenic thinking plays a role in how providers interpret women's pain in part due to identity prejudice, a kind of prejudice that individuals face in virtue of being members of a particular social group. A central way that identity prejudice manifests in the provider-patient relationship is through testimonial injustice. Testimonial injustice consists in attributing the wrong level of credibility to a speaker because of an identity prejudice held towards the speaker (Fricker 2007). Very often, and most relevant for our purposes, testimonial injustice involves a credibility deficit, or a listener assigning less credibility to a speaker than they deserve.

Stereotypes of women as excessively emotional, mentally unstable, overly sensitive, attention-seeking, and prone to fixating on their health likely contribute to the dismissal of women's pain reports in medical contexts (e.g. Samulowitz et al. 2018). If a provider harbors a belief that women are more likely to have these traits, then that provider will be less likely to take women's testimony at face value. Instead, they will regard that testimony with a greater degree of suspicion than they would if it were not issued by a woman.

This skepticism can manifest in two key ways: the provider might suspect that the patient is exaggerating or faking their symptoms (perhaps to gain sympathy or access to some other kinds of benefits), or they might attribute the symptoms to some trait or characteristic discussed in the previous paragraph.[7] Though both judgments are problematic, we focus mainly on the second, as it implies that the pain originates from some psychological disturbance or dysfunction.

Assigning *formal* psychogenic diagnoses to women's pain used to be a common mechanism through which women's pain testimony was dismissed in medical settings, as psychogenic pain was often considered less worthy of investigation and care than pain that was believed to have an organic cause.[8] In fact, the term 'psychogenic' has been associated, from the beginning, with the heavily stigmatized and gendered diagnosis of

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[7] And, indeed, in a study by Schäfer et al. (2016) participants (providers and medical students) estimated women as more likely to exaggerate their pain. They were also more likely to prescribe psychological treatments (and less likely to prescribe analgesics) to women. (2016, 1620-1621.) As the authors note, their "main hypotheses concerned trustworthiness and depression history, but gender emerged as the most influential factor, consistently affecting pain estimates, judgments of expression, and treatment decisions, whereas trustworthiness tended to affect judgments made about women rather than men" (ibid., 1622).

[8] Women are also often acutely aware of the difficulties in having their pain taken seriously in clinical contexts and report investing considerable time and effort into being perceived as credible patients (Werner and Malterud 2003).

hysteria (see Lewis 1972, 209). In Ancient Greek and Roman contexts, "hysterical" symptoms were gynecological and other medical symptoms (e.g., neck pain, breathing difficulty, and dizziness) assumed to be connected to the womb (Trimble and Reynolds 2016, 5-6). Hysteria was therefore initially conceptualized as a women's disease even if its symptoms were considered to be organically caused.

In the middle ages, explanations focusing on supernatural forces (e.g., witchcraft) emerged and held some sway until 17th and 18th century physicians tied hysteria to brain function and emotions, in both men and women (Merskey 2002; Butler and Nicholson 2024, 355-367; Trimble and Reynolds 2016, 6-7). In the 19th century, Briquet attributed certain kinds of paralyses, convulsions, and anesthesias (and many other symptoms) to a neurosis of the encephalon but also suggested a connection to trauma and abuse (Trimble and Reynolds 2016, 9). Charcot conceptualized hysteria as a hereditary disorder but likewise emphasized the role of precipitating trauma and stress, and Freud introduced his (in)famous conversion theory, according to which hysterical symptoms were the physical manifestation of repressed thoughts or feelings (Butler and Nicholson 2024, 367). While neither Briquet, Charcot nor Freud considered hysteria to exclusively affect women, the diagnosis was routinely given to women who had pain and other symptoms that did not have clear biological causes. As Morris writes, hysteria "provided a convenient diagnostic box for imprisoning women whom male doctors were unable to cure" (1991, 109).

The notions of hysteria and conversion symptoms also found their way into official diagnostic systems. For example, the first two editions of the *Diagnostic and Statistical Manual of Mental Disorders* listed *conversion reaction* (DSM-1, American Psychiatric Association 1952) and *hysterical neurosis, conversion type* (DSM-II, American Psychiatric Association 1968). The third edition (DSM-III, American Psychiatric Association 1980) introduced the category of *somatoform disorders*, which included, for the first time, the pain-specific label of *psychogenic pain disorder*. (For additional discussion, see Levenson and Sharpe 2016, 190). An important reason for this terminological change was the desire to avoid conflict with patients who had become increasingly vocal about their dislike of the label 'hysterical.' But despite the change in labels, the assumptions about etiology remained. For example, psychogenic pain was medically unexplained pain in which psychological factors were judged to play important causal roles (Shapiro and Teasell 1998, 24-25).

Psychogenic pain disorder was revised to *somatoform pain disorder* in DSM-III-R (American Psychiatric Association 1987) and then to *pain disorder* in DSM-IV (American Psychiatric Association 1994). These changes were accompanied by modifications to diagnostic criteria, but the notion of psychogenesis persisted. For example, DSM-IV still allowed the provider to code for a subtype of the disorder associated *primarily* with psychological factors (for discussion, see Arnaudo 2021, 194; Shapiro and Teasell 1998, 24-25). Unsurprisingly, the term ‘somatoform’ is also considered stigmatizing by many patients (e.g., Kingdon 2024, 388).

The *International Classification of Diseases* (ICD) also underwent terminological changes that left the etiological assumption of psychogenesis intact. For example, ICD-9, like the DSM-III, included the category of *psychogenic pain disorder* (World Health Organization 1977). This was replaced by the category of *persistent somatoform pain disorder* in the ICD-10 (World Health Organization 1990). The 2019 version of ICD-10 describes the condition as follows:

> The predominant complaint is of persistent, severe, and distressing pain, which cannot be explained fully by a physiological process or a physical disorder, and which occurs in association with emotional conflict or psychosocial problems that are sufficient to allow the conclusion that they are the main causative influences. (World Health Organization 2019a, F45.4.)

It is important to note that modified versions of ICD-10 are still in use in many countries,[9] which means that many providers can continue to officially code for psychogenic pain, despite the notion being considered outdated by pain experts.

In addition to the reasons covered in the previous section, the observation that patients find the psychogenic/somatoform label problematic, and the worry that it could be used to dismiss patient testimony are central reasons why pain disorder as a formally or institutionally recognized psychiatric diagnostic category has fallen out of favor in recent decades (see, e.g., Sharpe and Mayou 2004, 465; Katz et al. 2015, 163). The most recent versions of DSM and ICD no longer include diagnostic codes for pain in which psychological factors play primary etiological roles. DSM-5-TR includes *somatic*

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[9] For example, in the US, the CDC’s National Center for Health Statistics modifies the ICD-10 for clinical purposes. See CDC: ICD-10-CM. Available at: https://www.cdc.gov/nchs/icd/icd-10-cm/index.html (Accessed Sept 7, 2025).

symptom disorder (SSD), a common label for somatization and pain disorders,[10] and ICD-11 includes *bodily distress disorder* (BDD). Neither category claims psychological causation and the diagnostic criteria are positive: SSD requires persistent distressing somatic symptoms and "excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns" (American Psychiatric Association 2022, F45.1) whereas BDD requires "excessive attention directed toward" the distressing symptoms (World Health Organization 2019b, 6C20). It is not clear how to judge whether a patient's reactions are excessive or an appropriate response to relentless pain, however (Arnaudo 2021, 195), and we worry that identity prejudice plays a role in who gets diagnosed with BDD/SSD. Women might receive the diagnosis simply because it is *assumed* that they must be overreacting (on account of being women) and, because psychogenic pain is no longer a formally recognized diagnosis in ICD-11 or DSM-5(-TR), a diagnosis of BDD/SSD could be given in cases where psychogenesis is suspected, especially when the pain is not straightforwardly explained by observed physical pathology.[11] As Katz et al. (2015) note, "the main criticism of SSD is a high probability

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[10] *Somatic symptom disorder with predominant pain* replaces *pain disorder* (see American Psychiatric Association 2022, 351).

[11] The ICD-11 does include the category of "dissociative neurological symptom disorder" (6B60), under which pain is listed as a possible symptom in the subcategory 6B60.3 (World Health Organization 2019b). This condition (which has a counterpart in the "conversion disorder/functional neurological symptom disorder" (FNSD) in the DSM-5(-TR)) is characterized by symptoms that are "not consistent with a recognized disease of the nervous system, another mental, behavioral, or neurodevelopmental disorder, or any other medical condition, and that do not occur exclusively during another dissociative disorder" (ibid.). In practice, such symptoms are often assumed to be psychogenic. That said, pain is generally considered an *associated* symptom and not a *core* symptom of DNSM (e.g., Butler and Nicholson 2024, 371). Therefore, a patient whose primary complaint is chronic pain is unlikely to receive a diagnosis of DNSD or FNSD. Although both BDD and DNSD/FNSD have roots in Freud's conversion theory, psychogenic pain disorder was separated from conversion disorder early on and BDD can be interpreted as its descendant, as our discussion above shows.

The ICD-11 also includes the category of "hypochondriasis" (6B23; the closest DSM-5(-TR) counterpart is "illness anxiety disorder" (F45.21)). Hypochondriasis is "characterised by persistent preoccupation or fear about the possibility of having one or more serious, progressive or life-threatening illnesses" and it does not require the presence of distressing bodily symptoms, whereas patients with BDD "are typically preoccupied with the bodily symptoms themselves and the impact they have on their lives" (World Health Organization 2019b, 6B23). Although a person with chronic pain could also be diagnosed with hypochondriasis if a provider judges their primary preoccupation to be with the possibility of a serious illness, this might often indicate that the provider does not take their pain to be serious (note that the DSM-5-TR illness anxiety disorder diagnostic criteria explicitly require that "Somatic symptoms are not present or, if present, are only mild in intensity" (American Psychiatric Association 2022, 359)). The ICD-11 also does not note gender differences in the prevalence of hypochondriasis, contrary to BDD. For these reasons, our discussion in this paper focuses on BDD/SSD.

of misdiagnosing a medical illness, including chronic pain conditions, as a mental illness" (2015, 164).

The stigma associated with medically unexplained pain persists through other disease categories as well. Diagnostic labels like 'fibromyalgia,' 'chronic migraine,' and 'non-specific chronic back pain' continue to act as vehicles through which pain testimony, especially women's pain testimony, is dismissed. For example, fibromyalgia is a contested disease and providers are divided on the issue of organic vs. psychosocial etiology (Agarwal et al. 2024; see also Wolfe 2009). Women are much more likely to receive the diagnosis than men (e.g., Arout et al. 2018; Wolfe et al. 2018), and once the diagnosis is given, this often closes down further inquiry into potential biological contributors—additional evidence of the tendency to attribute the condition to psychological causes (for general discussion, see O'Leary 2018a).

In a medical system where centuries-old stereotypes about women being prone to exaggeration and psychogenic pain have become institutionalized and enshrined into professional literature, change in attitudes is likely to be slow.[12] Dusenbery (2018) aptly observes:

> While science may, at its best, be self-correcting, medical facts can be stubbornly self-fulfilling—at least in a medical system that has an alternative explanation for any symptom in women that it can't explain. Once accepted, medical myths create their own reality. (2018, 311.)

Even etiologically neutral pain-associated diagnoses can be employed with psychogenic interpretations in mind (as providers' attitudes toward fibromyalgia illustrate), and psychiatric diagnoses (e.g., depression) can be assumed to account for patients' pain (see Bueter 2023). Note that women with organic conditions often experience diagnostic delays, and these delays appear to be associated with being initially (mis)diagnosed with a psychiatric or medically unexplained condition. For example, many patients with

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[12] The identity prejudice that contributes to inaccurate psychogenic and other psychiatric diagnoses might often be inherited from medical texts. For example, providers may disproportionately assign these diagnoses to women due to the significant body of medical literature, including medical training textbooks, that claim that women are more likely to have psychogenic disorders. For example, conversion disorders are often described as being two to three times more prevalent in female patients (e.g., Summergrad et al. 2020, 686). Well-meaning providers may encounter this material and reasonably conclude that they should see a greater incidence of psychogenic symptoms in women, thus giving this diagnosis to women more frequently.

endometriosis (who are almost always women) or systemic autoimmune rheumatic conditions (most of whom are women)[13] report having their symptoms initially misattributed to a mental health condition or a non-organic cause (see, e.g., Bontempo and Mikesell 2020; Sloan et al. 2020).

Now, we shouldn't conclude that the dismissal and/or psychologization of women's symptoms is *always* rooted in identity prejudice. But it seems likely that identity-prejudicial credibility deficits often play a role. For example, in the cases mentioned above, the women were ultimately found to have underlying biological conditions, which makes it plausible that their symptom reports were initially dismissed without proper justification. And the well-documented observation that many healthcare providers harbor gendered stereotypes, such as beliefs that women are more emotional or prone to exaggeration, provides a plausible explanation for why such dismissals occur.

In real-world clinical settings, diagnostic uncertainty and identity-based prejudice often operate together and influence one another. First, diagnostic uncertainty can activate or amplify existing identity prejudice, and trigger identity-prejudicial credibility deficits. For example, Bernardes and Lima (2011) found that nurses' assessments of women's pain were influenced by the presence or absence of diagnostic evidence of physical pathology, whereas assessments of men's pain were not. In cases of uncertainty, i.e., when such evidence was lacking, women's pain was more likely to be attributed to psychological causes.

Second, the fact that there is diagnostic uncertainty in certain cases may itself be a product of identity-prejudicial credibility deficit. If women's pain reports are taken less seriously, providers might be less likely to order diagnostic tests or perform procedures that *could* uncover an underlying organic pathology. Supporting this idea, Hamberg et al. (2002) found that medical interns, when presented with identical case descriptions that differed only in patient gender, were more likely to recommend psychosocial inquiries and nonspecific diagnoses for female patients and order more laboratory tests for male patients. The idea is that identity prejudice might generate or maintain diagnostic uncertainty by putting an end to the investigation into potential physical causes. In other words, identity prejudice might create the very ambiguity that is later used to justify psychogenic interpretation.

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[13] According to some estimates, 80% of people diagnosed with autoimmune conditions are women (see, e.g., National Institutes of Health, Office of Research on Women's Health 2024, 4).

4 Gendered research gaps and poorly understood conditions

Diagnostic uncertainty can be the result of identity prejudice but it can also stem from gendered research gaps that deprive providers of the epistemic resources necessary for accurate diagnosis. As the previous section suggests, many women whose persistent pain is dismissed as psychogenic might be affected by poorly understood conditions that are difficult to diagnose (see also Dusenbery 2018, Ch. 4). These conditions likely include many autoimmune diseases as well as conditions like fibromyalgia and endometriosis, whose mechanisms and etiologies are even less well understood. And even though diagnostic tests exist for some of these conditions, the tests are often unreliable, especially in the earlier stages of disease.[14]

Many of these conditions have a higher prevalence in women: endometriosis almost exclusively affects people assigned female at birth, and fibromyalgia and systemic autoimmune diseases all have pronounced gender/sex disparities (Whitacre 2001; Ngo et al. 2014). For example, fibromyalgia is widely considered a "women's disease" and those afflicted often report judgements rooted in gendered stereotypes, such as beliefs that fibromyalgia symptoms are exaggerated or faked by fragile, emotional women (Colombo et al. 2025, Sect. 4.2.1.3).

The lack of knowledge surrounding these conditions reflects gender disparities in research priorities; it is well-known that female-predominant conditions receive disproportionately less research funding relative to their impact and disease burden (e.g., Karpel et al. 2025). In fact, some of the lowest-funded conditions by this metric, e.g., myalgic encephalomyelitis/ chronic fatigue syndrome (ME/CFS) and endometriosis, primarily affect women (Mirin 2021). That said, not *all* female-predominant conditions suffer from funding disparities, e.g., breast cancer receives more funding than would be expected based on its disease burden. So what is it about *some* female-predominant conditions that make them such unattractive recipients of funding?

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[14] For discussion of the diagnostic challenges associated with endometriosis, see, e.g., Chapron et al. (2019); for similar challenges in the context of autoimmune diseases, see Lenti et al. (2022). When it comes to fibromyalgia, there exist no definitive biomarkers to confirm diagnosis; providers have to rely on a set of symptoms that often overlap with those of other conditions. There is also no consensus on the underlying pathophysiology of fibromyalgia, and some suggest that what is currently grouped under the fibromyalgia label might in fact be a number of distinct conditions with overlapping symptoms. For further discussion, see Wolfe (2017); Brum et al. (2022).

Mirin highlights the role of stigma, pointing out that “ME/CFS…was incorrectly deemed psychogenic and stigmatized for decades” (2021, 962). Dusenbery (2018) notes that endometriosis used to be thought to have been brought on by “career women’s” choice to postpone childbearing (2018, 222-223). Stigma like this connects to *disease prestige*, a term used for the regard or esteem assigned to specific disease categories. Disease prestige is tied to funding decisions; examples of high-ranking diseases which tend to get high amounts of funding include brain tumours and different types of cancers, whereas many poorly researched female-predominant conditions often rank low (see, e.g., Album et al. 2020; Grue et al. 2015). Disease prestige is also visible in public discourse: it is rare to see people make fun of brain tumors, whereas disparaging comments and jokes about fibromyalgia or ME/CFS are easy to come by.

All this points to a vicious cycle: many diseases that mainly affect women have historically been stigmatized and labeled as psychogenic, and this stigma has plausibly contributed to them being poorly researched. In other words, low disease prestige likely feeds itself; a condition that has low prestige due to psychogenic associations is less likely to receive the kind of research funding that could challenge those associations. The resulting gaps in medical knowledge contribute to diagnostic uncertainty, which in turn reinforces skeptical attitudes toward women's pain, and the cycle repeats. If psychogenic diagnoses of unexplained pain in women are often *missed* diagnoses of underlying medical conditions that are difficult to identify (and often difficult to treat) due to gendered research gaps, then this adds another layer of harm to such diagnoses; by falsely attributing women’s pain to psychological causes, *providers risk reinforcing those very gaps themselves*.

5 Gender data gaps and diagnostic paradigms

Whereas many female-predominant medical conditions continue to be underresearched, conditions that are either male-predominant or not sex-biased have, until recently, primarily been studied in biological men (e.g., Peters and Woodward 2023; for a detailed discussion, see Dusenbery 2018, Ch. 1). The underrepresentation of women in clinical studies further complicates the diagnostic process and plausibly contributes to the tendency to label women’s pain as unexplained and psychogenic. This is because when research is conducted primarily on men, typical male symptoms find their way into diagnostic guidelines, textbooks, websites, and research/clinical literature and so get established as the standard for identifying disease in *all* sexes and genders. These male-centered diagnostic paradigms can then lead to women's symptoms being overlooked and misdiagnosed; the way many diseases manifest in women might seem *unusual*, and the more unusual your symptoms, the less likely you are to receive an accurate diagnosis.[15]

Consider, for example, coronary heart disease, a condition in which symptom presentation differs significantly between men and women, with male symptoms firmly codified in the medical literature (see Rollini et al. 2009; Khamis et al. 2016). Many of us have been taught to recognize heart attack by its classic symptoms: pain in the chest and difficulty breathing. But, as it turns out, women are less likely to present with these symptoms. Countless reports describe women in cardiac distress being misdiagnosed in clinics and emergency rooms, with their symptoms attributed to anxiety, stress, indigestion, and other causes that have little to do with their hearts (e.g., McSweeney et al. 2017).

A similar pattern might be found in the diagnosis of psoriatic arthritis (PsA), a chronic autoimmune condition characterized by joint inflammation. While the prevalence of PsA does not seem to differ substantially between men and women, the clinical presentation does: women tend to report a greater disease burden, more pain, and higher tender/painful joint counts, whereas men tend to show more radiographic joint damage and skin lesions. Women also generally have to wait longer for a diagnosis. (See Passia et al. 2022.)

In an effort to explain why women with PsA face delayed diagnoses, Passia et al. suggest that "women reporting more pain than men may contribute to underdiagnosis or late recognition of symptoms in women" (2022, 7). The idea is that women's pain might be perceived as too intense or widespread to fit the diagnostic criteria, especially in the absence of observable damage and lesions that the providers would expect to see. The fact that women tend to report more pain and higher levels of pain than men might owe to hormonal differences and/or sex-based differences in immune and nociceptive function (see, e.g., Friedman et al. 2023; Gregus et al. 2021; Stratton et al. 2024). The problem is that, as a result of such factors, women's reports of pain might *often* seem excessive. What is therefore also needed is more sex-specific *pain* research (see, e.g., Stieger et al. 2025). If the preliminary findings are any indication, then biology is at least partially to

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[15] For a related philosophical discussion of normativity and gender in psychiatry, see Russell on 'Tik Tok Tourette's' (2024, Sect. 4).

blame for more women having more (chronic) pain. This may also make diagnosing women with SSD/BDD problematic in the case of medically explained conditions. If the standards of what is excessive rely on disease manifestation in men, women's preoccupation with their *more intense* pain might appear pathological.

We might not be able to determine, in singular cases, whether diagnostic delay results from identity prejudice, male-centered diagnostic paradigms, or a combination of both (see Arcila-Valenzuela and Paez 2022 on detecting testimonial injustice). We can, however, map out how the paradigms and identity prejudice might work in mutually reinforcing ways. Consider a woman with undiagnosed PsA who reports severe joint pain but does not have skin issues or visible joint damage. Because she does not fit the paradigm, a provider might be tempted to attribute her pain to psychological causes instead of pursuing diagnostic testing, especially if the provider's judgment is influenced by identity prejudice. This psychogenic diagnosis could also serve to reinforce the prejudice if the diagnosis becomes a data point in the age-old narrative that women are especially prone to psychologically caused pain, which in turn might discourage providers from questioning and revising their diagnostic frameworks.

Identity-based biases (implicit and explicit) are common and there's no good reason to assume that healthcare and medical providers constitute an exception. In addition, *all* providers, regardless of personal beliefs and attitudes, operate in a nonideal medical system where research priorities and practices, and the resulting knowledge, tend to mirror and perpetuate existing social hierarchies and biases. So even if individual providers did not harbor harmful stereotypes, accurate diagnoses might still evade many women who experience persistent pain, as long as the systemic issues discussed in this paper are not rectified. Having examined the epistemic and structural factors that contribute to psychogenic diagnoses of women's pain, we now turn to the harms these diagnoses cause.

6 The harms of psychogenic diagnoses

The primary harm of assigning psychogenic diagnoses for medically unexplained pain is arguably that doing so increases the risk of obstructing access to appropriate biological care (e.g., O'Leary 2018a). In particular, it can lead to under-treating those for whom biological treatment would be beneficial. This is because concluding that symptoms are caused by psychological factors often brings the diagnostic process to a close. The provider no longer has a reason to continue inquiring into biological causes, and will not prescribe biological treatments because they are deemed unnecessary and seen as risking iatrogenic harm. A psychogenic diagnosis *after* a thorough investigation into possible biological causes would not obstruct access to currently available biological care. But, as O'Leary notes, "no such procedure exists in practice…psychogenic diagnosis is encouraged without criteria of any kind, without any evidence at all of mental illness (2018b, K9)." In short, psychogenic diagnoses are often assigned without adequate grounds, whether because diagnostic testing was never pursued, or because normal test results were taken as evidence that the patient is healthy even when the available tests are known to miss certain conditions.[16]

Even when providers do their due diligence to rule out biological dysfunction, there remains a significant risk of missing possible organic causes. This is especially the case with unexplained chronic pain given that the relevant research is still in a nascent stage (Kahn 2025), and the available diagnostic procedures are likely inadequate for capturing all the possible causes. As highlighted in sections 4 and 5, gendered research gaps and male-centric diagnostic paradigms compound the risk of missing biological contributors to chronic pain among women. And, because psychogenic diagnoses for women's pain can reinforce harmful narratives about poorly understood or medically unexplained conditions being psychologically driven, while also reinforcing male-centered thinking about many other conditions, they might not only obstruct access to care that is currently available but also hinder future research, thereby blocking the development of new treatments and limiting access to *potential* care.

When patients deny that their symptoms are primarily caused by psychological distress, but providers insist otherwise, they risk not only being denied adequate biological care, but also suffering distinctively epistemic harms. Buchman et al. (2017) argue that patients with chronic pain in general frequently face testimonial injustice when self-reporting on their pain in clinical encounters, which means that their testimony is *unfairly* doubted or dismissed. In this paper, we have focused on the distinctively gendered forms that this epistemic harm can take.

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[16] In some cases, psychogenic diagnoses may follow diagnostic testing that returns normal results. But of course, a normal test result does not always mean an absence of pathology. For example, standard ultrasound frequently fails to detect endometriosis (Mackenzie and Royce 2020).

We want to pay special attention to cases where patients deny that their symptoms are caused by psychological distress, but providers claim that they are. This sort of conflict might lead patients to doubt whether they are reliable witnesses to their own experiences, particularly given the common tendency of patients to defer to providers who possess the medical expertise that most patients lack.[17] This kind of self-doubt can be incredibly psychologically taxing. Not only that, but it can actually increase one's pain, because stress and anxiety associated with one's testimony being unjustly doubted can amplify how painful an already painful condition is (Shapiro and Teasell 1998, 26). For recall that chronic pain is considered multifactorial, arising from an interplay of biological, psychological, and social factors.

Living with any kind of chronic pain is often an isolating experience. This is, in part, because of the challenges involved in effectively communicating experiences of pain to others. These challenges, and the isolation that often results, are compounded when one feels that one cannot trust medical providers to believe one when one claims that the pain is not, or is not *only*, psychological in nature. This is also a central source of antagonism between patients and providers.

It can be very difficult for individuals with chronic pain to come to terms with the uncertainty surrounding what is known about chronic primary pain, since this involves accepting that there likely will not be a clear and quick way to treat their pain. The process is further hampered when others, especially medical experts, deny there being etiological uncertainty in the first place. Such denial also robs patients of a potentially valuable source of support in the difficult process of learning to live with this uncertainty. As O'Leary writes, there is a need to develop tools and techniques that could help providers help patients "grapple with uncertainty," rather than denying its existence (2018b, K10).

At this point, we need to address a worry that one might have with our argument. Barnes (2020) argues that advocates' efforts to push back on the psychologizing of women's pain

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[17] Consider, for example, this patient testimony: "I not only have felt that providers thought I was crazy, but now I believe I am crazy. This doesn't make any sense anymore and I feel as though perhaps they are correct about it being in my head." (Moss et al. 2025, Table 4).

might end up harming patients whose pain *is* psychologically caused (see also Canavera et al. 2018). This might happen, for example, through the reinforcement of prejudicial ways of thinking about mental illnesses. In particular, some advocates argue that psychologizing women's pain is dismissive *because* it delegitimizes the reality or severity of their symptoms. As Barnes notes, this problematically implies that psychological conditions are somehow less real or pressing compared to physical illnesses.

We agree with Barnes that this is a worrying line of reasoning that can cause harm. We therefore want to clarify that we are not suggesting that it is never apt to identify psychological contributors for someone's pain, or that doing so is *always* a way to dismiss a patient's pain and deem it as less worthy of care. While we are concerned with the *over*-psychologizing of women's pain, it would also be problematic to argue that pain *must* be caused by physical dysfunction for it to be a serious problem. An exclusively biomedical approach to pain also carries risks, including unnecessary invasive procedures and the implication that pain without identifiable pathology is somehow less real or deserving of care (for further discussion of this point, see Cormack et al. 2023; Mescouto et al. 2022). Moreover, thinking of pain as entirely physical would run counter to the current view that pain, especially chronic pain, is etiologically complex and multifactorial. In fact, we hope that approaches that highlight the etiological complexity of pain might also help de-stigmatize psychological contribution to pain, and reduce mental health stigma in general. So, importantly, we do not think that the notion of psychogenic pain is dismissive in itself. Our concern is only that when patients receive this diagnosis without adequate justification, which is usually the case, they can be harmed in ways we have outlined above.

Like O'Leary, we think that embracing uncertainty is the best course of action.[18] To explain why, let us consider two hypothetical scenarios involving a woman with medically unexplained chronic pain, say fluctuating pain in the back, neck, and jaw area. In the first scenario, the woman has a psychological or psychiatric condition (e.g., depression) which is a key causal factor responsible for her pain. In the second scenario, she has the exact same condition, but it contributes only partially to her pain condition, with other, more important factors (e.g., chronic inflammation) also playing parts. Our

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[18] This aligns with recent calls for more conservative approaches to diagnosis that acknowledge the limits of clinical knowledge, and with evidence that patients can respond positively when clinicians communicate diagnostic uncertainty transparently. For more on these points, see Schiff et al. (2018) and Bontempo (2023).

worry is that, in the majority of cases, *providers cannot determine which scenario applies*. Attributing the patient's pain to depression might help avoid some unnecessary or potentially harmful tests and treatments in the first scenario. But in the second scenario, such attribution would risk obstructing access to appropriate biological care. In both scenarios, if the patient resists the psychogenic explanation, insisting on it might compound her suffering.

So weighing the harms and benefits, we suggest that providers ought to avoid psychogenic framings, especially when the patient is not receptive to them. This is because *a psychogenic diagnosis seems to have very little clinical utility*. In our first scenario, if there is independent evidence of a psychological or psychiatric condition, then treating that condition might also alleviate the pain, and a psychogenic diagnosis is not needed to mediate access to care. A diagnosis of chronic primary pain appears to be sufficient, and treatment of the psychological or psychiatric condition can appropriately form one element of a flexible, multimodal care plan. In the second scenario, such treatment may likewise be a helpful component of a care plan, as long as the plan remains open to revision as new information emerges.

To recap: while we acknowledge the existence of psychological contributors in pain conditions, we argue that psychogenic framings are often both unnecessary and poorly justified, and can come with serious harms. In light of what we know about chronic pain (e.g., that it is etiologically complex) and what we do not know (e.g., its precise mechanisms) we recommend avoiding such framings. Again, the issue is not so much whether psychogenic pain exists, but that we (currently) lack the tools to reliably diagnose it. In cases of diagnostic uncertainty, we encourage providers to suspend judgment on the ultimate cause of the pain, and continue to classify the pain as unexplained or as having a complex etiology. This is consistent with what many patient advocates are, in effect, calling for, which is simply to suspend judgment on the complete causal story of their chronic pain until such judgements are justified.[19] This approach need not come at the cost of further stigmatizing mental illness.

7 Are psychogenic diagnoses pragmatically justified?

In sections 2–5, we argued that psychogenic diagnoses for women's pain are epistemically problematic. In section 6, we argued that there are also strong moral reasons to resist psychogenic diagnoses. We will now argue that countervailing pragmatic considerations are insufficient to justify the continued use of psychogenic diagnoses. We discuss two pragmatic justifications: that psychogenic diagnoses may be justified in a resource-constrained healthcare system, and that they may be justified because they enhance the effectiveness of psychological interventions.

7.1 Rational Allocation of Limited Resources

In real-world settings, healthcare resources are limited and chronic pain cases are often diagnostically complex. This might motivate providers to look for the most *cost-effective* ways to help patients. Psychological interventions might then seem like a particularly attractive option. These interventions come in various forms, including cognitive behavioral therapy, pain neuroscience education, and different kinds of mindfulness-based approaches, all of which can be comparatively cheap, especially when delivered online and/or in group settings (see, e.g., Dear et al. 2022; Alldredge et al. 2023). They can also lead to significant pain relief and generally carry fewer risks than many biological (e.g., surgical or pharmacological) treatment options (see, e.g., Driscoll et al. 2021; Fisher et al. 2018).

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[19] Patient advocates do not typically frame their position in terms of 'suspending judgment' (they tend to focus on what providers should *do* rather than what attitude they should hold toward causal claims). However, their calls for increased research funding can be understood as indirectly expressing a commitment to suspending judgment, since many advocacy groups are not denying that psychological factors may play a role, but rather insisting that we need to know more before drawing conclusions. For instance, the Chronic Pain Research Alliance (CPRA) is a patient-led advocacy organization that frames its mission around advancing "understanding of the risks, causes and mechanisms" of chronic pain conditions (Chronic Pain Research Alliance n.d.-a). This language remains agnostic about what research will discover. As CPRA notes, these conditions are "poorly understood" precisely because research has been underfunded (Chronic Pain Research Alliance n.d.-b). Similarly, chronic illness therapist and patient advocate Rowan Crawfish emphasizes that providers should be honest about uncertainty: "if somebody doesn't have the answer and they don't know how to say, 'I don't know,' and instead they gaslight you or make you feel like you're wrong about your body, then it's time to look for somebody else" (Davis 2024).

The focus on resource limitations introduces an interesting challenge to our argument against psychogenic diagnoses: in an ideal world with unlimited resources, we would certainly expect providers to do their best to figure out the full etiological picture of a patient's condition, but in a nonideal world with scarce resources, it might be pragmatically justifiable to treat chronic pain that cannot be *easily* linked to a physical cause as psychogenic, communicate this interpretation to the patient, and bring the diagnostic process to a close. This would help direct limited resources to patients who are easier to diagnose and treat, and therefore more likely to benefit from what biomedicine currently has to offer.

While we do not deny that resources are limited and that many patients might benefit from psychological treatments, we argue that, on balance, this approach risks doing more harm than good. As outlined in the previous section, psychogenic diagnoses often leave patients without appropriate care, feeling isolated and disbelieved, with their trust in the medical system severely damaged. These are serious harms. And what makes the practice even more problematic is that it is gendered. If psychogenic thinking stems from identity prejudice, it reinforces patterns of medical neglect that disproportionately harm women.

We are not saying that providers should not recommend psychological interventions for chronic pain. Such treatments can be effective, both in alleviating pain and in helping patients cope with their pain (see, e.g., Driscoll et al. 2021). But, as already mentioned, the success of these interventions does not entail that the pain was solely/primarily psychologically caused. We are also not saying that psychological interventions should only be introduced after the diagnostic investigation is complete; in many cases, it might be helpful to promote these options early on, especially since the diagnostic process tends to be slow and arduous for many conditions that present with persistent pain (see, e.g., Dusenbery 2018, Ch. 4; Fryer et al. 2024), and psychological treatments might also help patients manage their expectations.

The point we want to get across is that psychogenic diagnoses are overused, often unwarranted, and potentially harmful, and that these are good reasons to refrain from making them and communicating them to patients, *even in a resource-constrained healthcare system*. Luckily, psychological interventions can be recommended without invoking contested or oversimplified causal claims, as we explain in the next section.

7.2 Effectiveness of Psychological Interventions

In some cases of chronic pain, providers might feel fairly confident that tissue damage was never involved, or at least is no longer involved. For example, with chronic back pain, imaging studies might provide reasonable evidence about the absence of structural abnormalities in the relevant body parts. Many experts seem to feel that psychological interventions are particularly apt in these cases.

Providers might then be concerned with how best to "market" these interventions to patients. Such concerns are legitimate, considering that patient buy-in is often necessary to ensure successful outcomes from treatment interventions. For example, emphasizing the absence of certain kinds of tissue damage and highlighting the contributions of psychological factors could serve important therapeutic goals such as encouraging physical activity. The problem, however, is that well-meaning providers might be willing to cut too many corners. They might think, for example, that emphasizing the etiological complexity of pain could dilute patients' sense of agency or diminish their confidence in the effectiveness of psychological treatments, and so reduce the actual effectiveness of those treatments. In other words, they might think that attributing pain solely to psychological causes offers a more straightforward explanation of the pain, and that this sort of streamlined, "simple" causal narrative increases patient buy-in. This is because a patient might be more inclined to accept and benefit from such an intervention if they believe their pain has a distinctly psychological origin. On this view, informal psychogenic diagnoses could be seen as pragmatically justified because they enhance the perceived appropriateness and efficacy of psychological treatments. Or that is the idea anyway.[20]

But in many cases of chronic pain, especially in the early stages of disease, tissue damage is difficult to rule out. And, more importantly, even if tissue damage could be reasonably ruled out, there might be relevant physical factors that extend beyond such damage (see, e.g., García Cancela et al. 2025, 10). For example, as mentioned before, the higher prevalence of chronic pain in women might stem in part from sex-based differences in

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[20] For example, Ashar et al. (2022) present evidence that pain reprocessing therapy (PRT)—which aims to help patients reconceptualize primary chronic pain as a brain-generated false alarm caused by "psychophysiologic processes"—can lead to substantial reductions in pain intensity in patients with chronic back pain in the absence of structural abnormalities. The authors also appear to suggest that psychological interventions might be *less* effective when they frame the causes of pain as multifaceted (2022, 14; 21). While the authors do not explicitly label chronic primary pain as psychogenic, their skepticism toward psychological interventions that emphasize the multifactorial nature of pain might reflect such an attitude.

endocrine, nociceptive, and/or immune system function. A psychogenic framing would likely lead the provider to ignore these potentially important etiological factors.

So even when psychogenic framing stems from a genuine desire to help patients in pain, we believe there are compelling reasons to resist it. The narrative simplicity of such framings tends to come at the expense of accuracy, and it is not clear that patient buy-in could not be achieved just as effectively through accurate, accessible explanations of pain's multifactorial nature. For example, Moseley and Butler’s (2015) pain education model describes the pain system as a “protectometer” that integrates danger and safety cues from various sources, including the nociceptive, immune, endocrine, motor, and cognitive systems. We see no reason to think that the value of psychological interventions couldn’t be effectively communicated within this kind of framework, without resorting to the harmful notion of psychogenesis. And, in any case, we have not come across good evidence that psychogenic framing *actually* improves treatment outcomes.

8 What should providers do with difficult-to-explain pain?

Although we have called for caution and epistemic humility in cases where pain seems difficult to explain and emphasized the need to communicate the diagnostic uncertainty to the patient, we have not attempted to explain what this would mean in practice. In this section, we make some preliminary suggestions. Our discussion centers on the novel diagnostic category of chronic primary pain (CPP), i.e., pain that is etiologically ambiguous by definition, as discussed in Section 2.

While the notion of chronic primary pain is potentially useful for clinical practice, it is important to keep in mind that novel medical terminology has been routinely co-opted to reinforce psychogenic thinking. Consequently, ‘chronic primary pain’ might also be used as a code for psychogenic pain in some contexts. What makes this concern more pressing is that the diagnosis of CPP could be given together with a psychiatric diagnosis, such as that of bodily distress disorder (BDD/SSD). Although the description of BDD does not attribute the relevant bodily symptoms to psychological causes, the focus on distress and excessive attention could encourage psychogenic interpretations.

The psychologization of difficult-to-explain pain, especially in women, is a practice introduced already during medical education: prejudicial attitudes are passed down through both formal and hidden curricula (Dusenbery 2018, 203-204; Brown et al. 2024), and without adequate instruction in the science of pain, many students likely assume that such attitudes are based on reality. Against this background, changes to medical classifications might have limited effectiveness. Provider education is therefore crucial, and we echo the calls for detailed, integrated pain medicine education (e.g., Shipton et al. 2023) and explicit instruction on issues related to pain and bias (Brown et al. 2024).

But what should a provider do when confronted with difficult-to-explain pain? First, *the diagnosis of CPP should not be given prematurely*. A provider needs to do their due diligence to rule out other conditions that might better account for the chronic pain presentation (Nicholas et al. 2019, 29-30). This, in turn, requires sensitivity to how male-centric diagnostic guidelines and identity prejudice against women complicate the diagnostic process. It is important to acknowledge that a medical explanation for a woman's pain might exist but be concealed by bias.

Second, *the diagnosis of CPP should be understood in the context of the limits of our existing knowledge and diagnostic tools*. The diagnosis "is intended to embrace a number of poorly understood conditions" (Nicholas et al. 2019, 34) and what is medically unexplained today could be medically explained tomorrow (see, e.g., Dusenbery 2018, Ch. 4). This might be the case especially for many female-predominant conditions that have historically been stigmatized and underresearched; for example, preliminary evidence suggests that at least some cases of fibromyalgia have an immune-related component (Goebel et al. 2021). In the name of transparency, providers might consider explaining to the patient that their diagnosis might change as medical knowledge advances, and that the category of chronic primary pain in fact anticipates such developments. Providers might also wish to openly acknowledge that medical science is shaped by biases that have historically delayed research into certain conditions.

Third, *the diagnosis of CPP should not mark the end of clinical inquiry* as "the identification of physiological, psychological, and social contributors to pain is specifically encouraged" (Nicholas et al. 2019, 34-35). Identifying such contributors in close collaboration with the patient is important as this "opens the way for multimodal interventions that can address these factors and potentially enhance treatment outcomes" (*ibid.*, 34-35). This is also true of chronic secondary pain, likewise assumed to be complex and multifactorial. As Cohen et al. (2021) note:

> Pain is a dynamic consequence of a host of biological, psychological, and social factors; hence, guidelines have recommended interdisciplinary treatment, which ideally makes use of a personalized approach with a shared-decision model. (Cohen et al. 2021, 2086; see also Guven Kose et al. 2022, S58.)

Whereas psychogenic framings of pain tend to limit treatment options to psychological interventions and medications targeting mood, anxiety, and central pain modulation, the diagnosis of CPP is meant to open the door for a wider class of treatments, including different pharmacological options, restorative therapies, procedural interventions, behavioral treatments, and complementary and integrative therapies (see Cohen et al. 2021, 2087). To encourage follow-through and to empower the patient to take an active role in identifying treatment options that bring relief, it is important for the provider to communicate the current scientific understanding of chronic pain to the patient. This also aligns with the notion of patient-centered communication, which emphasizes dialogue, mutual respect, and active inclusion of patients in medical decision-making (e.g., Kwame and Petrucka 2021).

There is preliminary evidence that patients with chronic pain themselves approve of the novel classification of chronic pain conditions in the ICD-11. For example, Korwisi et al. (2024) found that the participating patients (N = 690) not only accepted the diagnoses "but welcomed them and the change they hope it will bring to people living with chronic pain" (2024, 2360). This suggests that (at least some) people living with persistent pain are open to diagnoses that highlight the complexity and multifactoriality of their conditions. In fact, many participants expected the new diagnoses to reduce stigma, open access to treatment, and make the "pain understandable to others who have not taken them seriously" (ibid., 2361).

9 Conclusion

In this paper, we have focused on the problematic inferences and systemic issues that underlie the attribution of women's pain to psychological causes and discussed how these factors interact to create vicious feedback loops. In short: we have argued that psychogenic diagnoses are misaligned with contemporary scientific understandings of chronic pain, often arise from identity prejudice, gendered research gaps, and male-centered diagnostic paradigms, and in turn help perpetuate those identity prejudices, gaps, and paradigms. We have also outlined how such diagnoses harm individual patients: they can obstruct access to appropriate care, lead to credibility deficits, foster feelings of self-doubt and isolation, and cause more pain. In our view, all this points to a rather obvious conclusion: the common attribution of women's pain to psychological causes is a deeply flawed practice that needs to end.

We have focused on specific issues and have not discussed, for example, how intersecting identity prejudices or the routine dismissal of certain types of pain (e.g., gynecological pain) might exacerbate or combine with the problematic tendency to psychologize women's pain (on the latter point, see Dusenbery 2018, Ch. 6; Wiggleton-Little 2024). Our discussion is also situated within a particular historical moment, and future developments might give additional reasons to resist psychogenic diagnoses, or perhaps justify their use in specific contexts. Although we have expressed general skepticism about the usefulness of the notion of psychogenic pain in clinical practice, we have also tried to leave space for the possibility that psychogenic diagnoses might in some cases be appropriate. We have, however, pushed back against the idea that psychogenic framings of pain might be justified by an appeal to resource limitations or the increased effectiveness of psychological interventions. The harms outweigh the benefits.

Our discussion has drawn on recent advances in pain science and the emerging understanding of pain as an etiologically complex phenomenon. This understanding has recently been codified in the ICD, but it is unclear how much effect this codification has had on the attitudes of providers in the field. We therefore believe that more should be done to communicate the emerging understanding to both providers and patients. This would help support providers in their efforts to effectively diagnose and treat patients in pain, and hopefully empower patients to take a more active role in their medical journey.

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