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Mental Disorders and Naturalism

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One of the central questions in the philosophy of psychiatry is whether the diagnosis of mental disorder is a matter of natural facts or social norms (1). The debate exists as part of a larger debate on the concept of "disease," which is relevant to all of medicine (2). Naturalism (or objectivism) maintains that concepts of health and disorders are predominantly driven by objective natural categories of biological function and dysfunction, which may interact with social values and norms but exist independently of them (3). A naturalist view of disease maintains that a harmful departure of organ systems from "natural functions" constitutes "disease." All naturalists contend that the determination of biological dysfunction is an objective scientific matter; some naturalists (such as Boorse) argue that determining whether a malfunction is detrimental to human well-being is also an objective matter, but most naturalists (such as Wakefield) concede that it is determined by normative considerations (2). The opposing philosophical position is constructivism (or normativism), which argues that the disease concept is normative and denies that a biological dysfunction can be identified independently of human values. For naturalists, diseases are objectively malfunctioning biological processes that cause harms; while for constructivists, diseases are harms with an associated biological process that is identified as dysfunctional only because it causes that harm (2). There are others who belong to neither camp who argue that there is no general concept of disease in medicine coherent enough to be analyzed (4) or that a conceptual understanding of disease is irrelevant to most clinical decisions (5). While the development of medicine has benefitted tremendously by a focus on discrete disorders underpinned by specific pathologies with specific treatments (6), these developments are still amenable to a constructivist account, and naturalism by itself is a post hoc philosophical account with little prospective utility in the development of medical specialties.

NATURALIST ACCOUNTS OF MENTAL DISORDER

There are three main naturalist approaches to mental disorders in literature.

Szasz's eliminativist account.
Thomas Szasz (7) is an intriguing case, as he is naturalist about physical disease but a constructivist about mental disorders. Szasz has a very strict objectivist concept of disease as demonstrable anatomical or physiological lesions. His argument is that disease requires a physical lesion; the mind is non-physical; ergo, the mind cannot be diseased (7). He argues that mental disorders are instead problems in living, human conflicts, and unwanted behaviors. Szasz is also a "simple naturalist" in the sense that he sees disease as a failure of physiology, regardless of its impact on functioning (2). The flaw in Szasz's argument lies in the assertion that biological dysfunction can only manifest in physical lesions. It has been successfully argued that a structurally and functionally intact brain can instantiate a variety of mental patterns, including dysfunctional ones (3). This is aside from the fact that a number of neurobiological abnormalities have now been discovered for most, if not all, conditions we call mental disorders.

Boorse's biostatical account.
Christopher Boorse (8, 9) holds that mental disorder can be defined entirely in a scientific and objective manner without recourse to value judgments. He defines health as normal species functioning, which is the statistically typical contribution of all the organism's parts and processes to the organism's overall goals of survival and reproduction, and disease is a statistical deviation of functioning below normal species functioning (8, 9). Statistical typicality is measured with respect to a reference class, consisting of all the individuals belonging to the same age group, sex, and race. There are several problems with this account (10, 11). First, in conditions currently held to be mental disorders, statistical rarity is neither necessary nor sufficient (major depressive disorder, for instance, is widely prevalent). Second, psychological and behavioral traits are often normally distributed, and there is no non-arbitrary cut-off in statistical terms. Third, there is no objective value-free way of determining which reference classes should be used, and it is unclear if there is such a thing as human species typical functioning (12). Boorse's account also leads counterintuitively to a number of conditions being labeled as diseases. For instance, Cooper (13) has argued that a woman's suppression of her fertility by oral contraceptive pills will be considered as a disease state per Boorse's account, even though ingesting contraceptives is not a disease.

Wakefield's harmful dysfunction.
Jerome Wakefield (14, 15) has proposed a hybrid evolutionary account of "harmful dysfunction," which requires a value criterion, as well as a factual criterion. For a condition to be a mental disorder, it has to be harmful as judged by the standards of the person's culture, and there has to be a biological dysfunction independent of any values (14, 15). Wakefield defines dysfunction as a failure of a natural mental or behavioral mechanism

to function as designed in evolution (14, 15). There are several problems with this account as well. The dysfunction associated with mental disorders may emerge from a mismatch between evolutionary design and the environment, rather than a failure of the evolutionary design per se, and we cannot distinguish between the two. Furthermore, Wakefield's account is highly revisionist. It re-labels many conditions we now consider disorders as non-disorders and places many conditions out of the realm of disorder altogether. For instance, whether the ability to read and its problems should be included in the realm of medicine depends on what exact causal role it plays in our evolutionary history (3). Furthermore, if it is shown that a particular DSM disorder does not have an underlying evolutionary design failure, but it nonetheless leads to distress and disability warranting treatment, we gain little by not calling it a mental disorder. Wakefield's approach turns the diagnosis of mental disorder into an indeterminate hypothesis about evolutionary causes, making a diagnosis of mental disorder unreliable and impossible in the clinic, and a hypothesis that is for all DSM disorders uncertain and controversial (12).

DSM-5 DEFINITION OF MENTAL DISORDER

DSM-5 defines mental disorder as a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning (16). DSM-5 further clarifies that mental disorders are usually associated with significant distress or disability in social and occupational activities. (There are exceptions, such as the DSM-5 diagnostic criteria for pyromania do not include the criterion for clinically significant distress or impairment.) Culturally appropriate reactions to stressors are not considered mental disorders. Socially deviant behavior and conflicts between the individual and society are also not considered mental disorders unless they result from a dysfunction in the individual (16).

PROBLEMS WITH MENTAL DISORDER

DSM-5 states that in the absence of clear biological markers, it is not possible to identify boundaries for pathology based on symptomatic criteria alone, and therefore the criterion for clinically significant distress or disability is utilized (16). This criterion conceptually conflates pathology with disability, which is problematic from the point of view of naturalism.

In the DSM-5 definition, the clinical syndrome constituting mental disorder is considered to be reflective of a psychological/biological/developmental dysfunction, but the diagnostic criteria for the vast majority of mental disorders are clinical with no reference to underlying biological/psychological processes. (There are some exceptions; for example, diagnostic criteria for narcolepsy include low CSF hypocretin levels, and frontotemporal neurocognitive disorder requires imaging or genetic support, etc.)

Boundaries of mental disorders as defined by DSM are subject to human interests given the criterion of clinical significance, making it difficult for them to correspond to the natural world (16). "Clinical significance" is a universal characteristic of mental disorders in the DSM; however, it is not explicitly defined (although DSM-5 encourages the use of the World Health Organization Disability Assessment Schedule and information from family members and third-parties for the purpose) (16). Bolton (12) explains that a study of the literature surrounding the development of DSM reveals that it refers to the idea that the kind and severity of the condition is such that these problems are brought to psychiatric attention (17, 18). He notes: "[T]he idea behind these expressions is the recognition that the conditions listed in the manuals … are the kinds of problems people bring to the clinic" (12, p. 13). This raises important philosophical considerations with regard to "folk psychiatry" (19) and the social organization by which these problems are brought to psychiatric attention rather than elsewhere.

PROBLEMS WITH NATURALISM

The primary challenge for naturalism is the problem of establishing a satisfactory objective, scientific distinction between normal and abnormal human functioning, and this becomes even more problematic when it comes to issues of mental health and mental disorders. As we have discussed, none of the leading naturalist accounts of mental disorders are satisfactory. Furthermore, aside from psychiatry, there are a number of medical disorders, such as

KEY POINTS/CLINICAL PEARLS

- Naturalistic accounts of mental disorder define disorder as biological dysfunction, which can be determined as a matter of objective natural fact, without recourse to social or moral value judgments.
- DSM conflates pathology with disability and diagnosis with need for treatment. It does not define dysfunction and makes little to no reference to underlying dysfunction in diagnostic criteria. The boundaries of disorders are based on clinical significance. All of these are problematic from the point of view of naturalism.
- The primary challenge for naturalism is the problem of establishing a satisfactory objective, scientific distinction between normal and abnormal human functioning, and none of the leading naturalist accounts of mental disorders (by Szasz, Boorse, and Wakefield) are satisfactory.
- Many medical disorders (such as fibromyalgia, irritable bowel disease, tension headache) cannot be adequately conceptualized in naturalistic terms, which brings into question the utility of naturalism.

chronic fatigue syndrome, fibromyalgia, irritable bowel disease, and tension headache, that share problems similar to those in psychiatric disorders with regard to absence of clear biological markers and lack of well-defined underlying biological dysfunction (20), which does not fit in a naturalist account. In essence, many of the medical disorders cannot be adequately conceptualized in naturalistic terms, which questions the utility of naturalism, and the expectation that psychiatric disorders should conform to naturalistic accounts remains without sufficient justification.

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