The Functions of Diagnoses in Medicine and Psychiatry

Hane Htut Maung

Introduction

Diagnoses are central to the practice of medicine, where they serve a variety of functions for clinicians, patients, and society. They aid communication, explain symptoms, inform predictions, guide therapeutic interventions, legitimize sickness, and authorize access to resources. Insofar as psychiatry is a discipline whose practice is shaped by medical conventions, its diagnoses are sometimes presented as if they serve the same sorts of function as diagnoses in bodily medicine. However, there are philosophical problems that cast doubt on whether the functions of psychiatric diagnoses can legitimately be considered to be equivalent to those of medical diagnoses. The aim of this chapter is to explicate some of these problems, particularly conceptual and epistemological problems pertaining to the roles of diagnoses as explanations. I begin with an overview of the various functions that medical diagnoses normally serve and suggest that many of these functions receive justificatory support from the explanatory roles of the diagnoses. I then present issues regarding the epistemic functions of psychiatric diagnoses and how these issues have featured in the arguments of prominent critics of psychiatry.

Diagnoses in medicine

The purpose of this section is twofold. In the first section, I present a general overview of some of the various functions that diagnoses often serve in clinical practice. Then, I look more specifically at the explanatory function and argue

EBSCO Publishing : eBook Collection (EBSCOhost) - printed on 7/23/2019 12:41 PM via UNIVERSITY OF MANCHESTER

that it is important for providing justificatory support for the other functions of the diagnosis. I focus here mostly on diagnoses in bodily medicine, which will provide a point of comparison for my discussion of psychiatric diagnoses later in the section "The trouble with psychiatry."

The functions of medical diagnoses

(i) Hypothesis. The clinical consultation between patient and clinician usually begins with the clinician taking a history from the patient to elicit his or her symptoms and other relevant information, examining the patient to elicit any signs, and reviewing any available investigation results (Stanley and Campos 2013). In practice, one or more of these steps may be omitted, depending on the particular scenario. For instance, in an emergency scenario involving loss of awareness, the patient is unable to provide a history, and the clinical team has to rely on examination signs and investigation results to make a diagnosis. Conversely, in general practice, many diagnoses are informed by the symptoms and signs, without laboratory or radiological investigations being requested. Nonetheless, these minor differences aside, the diagnostic process normally begins with the gathering of a flexible combination of symptoms, signs, and investigation results, henceforth referred to as patient data.

After the patient data is gathered and consolidated, a diagnosis is inferred from the patient data. Further investigations may then be undertaken to acquire evidence that could support or undermine the diagnosis. Usually, several possible diagnoses are initially stipulated and further assessment is undertaken to help select the correct diagnosis from the list of possibilities, a practice known as differential diagnosis (Longmore et al. 2014: 13). The diagnosis, then, functions as a testable hypothesis about the patient's condition that is informed by the patient data. Indeed, several authors have commented on the similarity between the diagnostic process in medicine and hypothesis formation in science, and consider medical diagnoses to be akin to scientific hypotheses (Aliseda and Leonides 2013; Stanley and Campos 2013; Willis, Beebee and Lasserson 2013). For example, it has been suggested that although its conditions are less controlled than those in a laboratory, the diagnostic process is "an example of science in action" (Willis, Beebee and Lasserson 2013: 501).

(ii) *Explanation*. We have just seen that the diagnostic process is akin to scientific hypothesis formation, whereby the diagnosis is inferred from a set of patient data, consisting of symptoms, signs, and investigation results. In turn, it is often the case that the diagnosis explains the patient data. The idea that

diagnoses in medicine often and ideally function as explanations of patients' symptoms is generally accepted in the philosophy of medicine:

Discomfort makes the patient think that something is wrong with him, and a why-question arises in his mind. ... He complains to the physician of these symptoms. ... All these clinical manifestations (symptoms, signs and laboratory data) require an explanation from the physician, and finally a diagnosis is reached. (Qiu 1989: 199)

When a patient goes to a physician with a set of complaints and symptoms, the physician's first task is to make a diagnosis of a disease that explains the symptoms. (Thagard 1999: 20)

Once formulated, however, a diagnosis can be synthetically described, from a statistical viewpoint, as a relation between a set of findings (signs, symptoms, laboratory test results) and a certain pathological condition attributed to the patient. What kind of relation? According to a common opinion among experts in computational models, medical diagnoses express *explanatory* relations. (Benzi 2011: 365)

Moreover, it is generally accepted that the sort of explanation is normally a causal explanation, whereby the diagnosis explains the patient data by indicating its cause:

To solve a clinical diagnostic problem means first to recognize a malfunction and then to set about tracing or identifying its causes. The diagnosis is thus an explanation of disordered function, where possible a causal explanation. (Schwartz and Elstein 2008: 224)

It is uncontroversial in the medical literature that the ideal diagnosis is a biomedical causal explanation. ... Such a diagnosis posits a physiological cause for a set of physical signs and symptoms. (Cournoyea and Kennedy 2014: 928–929)

And so, there is often a bidirectional epistemic relation between the diagnosis and the patient data. The diagnosis is inferred from the patient data and the patient data is explained by the diagnosis. Later in the subsection "Why explanation is important." I suggest that this explanatory function of a diagnosis is important, because it provides justificatory support for its other functions, such as prediction and intervention.

(iii) *Prediction*. In addition to post hoc explanation of patient data, a diagnosis serves a predictive function. The clinician is very often able to make reliable predictions about the likely future outcome for a patient based on the diagnosis. These include predictions about the prognosis, which consists of the clinical course and likelihood of survival, predictions about potential complications,

EBSCO Publishing : eBook Collection (EBSCOhost) - printed on 7/23/2019 12:41 PM via UNIVERSITY OF MANCHESTER

and predictions about responses to treatments. For instance, the diagnosis of acute appendicitis informs the clinician that the patient's condition is likely to deteriorate rapidly without treatment, that a potential complication is appendiceal perforation, and that a good recovery is likely following surgical removal of the appendix. Therefore, a diagnosis serves the epistemic function of supporting inferences about the future.

(iv) *Intervention*. It is uncontroversial that an important function of a diagnosis is to guide intervention. Indeed, theorists have proposed that the value of the diagnosis must be considered relative to the therapeutic goals of medicine. Caroline Whitbeck argues that the diagnosis is "aimed at obtaining the best medical outcome for the patient" (Whitbeck 1981: 326), while Annemarie Jutel (2011: 21) notes that the diagnostic process is very often motivated by the goal to ascertain the correct treatment. Therefore, a diagnosis not only has epistemic value, but also instrumental utility in guiding treatment, which makes it a key component of practical reasoning in medicine.

As alluded to above, this interventional function of a diagnosis is supported by its predictive function. A diagnosis can inform predictions about likely responses to treatments, and so can guide therapeutic decision making. For example, a clinician can predict from the diagnosis of acute appendicitis that the patient is likely to make a good recovery following an operation to remove the appendix, thus supporting the decision to intervene therapeutically with an operation to remove the appendix.

- (v) Denotation. As well as the abovementioned epistemic functions, the hypothesized diagnosis serves a linguistic function as a denotative label for the condition with which the patient is presenting. It comprises a term that is understood to refer to a state of affairs in the patient, such as "acute appendicitis" referring to the rapid onset of inflammation of the appendix. Furthermore, as noted by physician and psychoanalyst Michael Balint (1964: 25), such a diagnostic term provides a useful shorthand description that organizes a variety of disparate clinical features into a unified phenomenon. This is important because it facilitates the communicative exchanges of clinicians. Hence, diagnostic terms constitute part of a common language with which clinicians can reliably and concisely convey clinical information to each other.
- (vi) Classification. Denotation is closely related to classification. Designating a condition with a specific term implies conceptually distinguishing it from other conditions. The diagnosis of acute appendicitis specifically denotes inflammation of the appendix, which is taken to be conceptually and empirically distinct from, for example, inflammation of the gallbladder or obstruction of the

bowel. Moreover, the diagnostic term is not merely taken to denote an individual instance of the condition, but represents a generalized category. Hence, the condition denoted by the diagnosis is often considered to be a repeatable type, of which individual cases are tokens (Sadler 2005: 419–420).

Diagnostic terms, then, demarcate and classify diseases into clinically significant categories. Hence, as Annemarie Jutel claims, the diagnosis is "one of medicine's most powerful classification tools" (Jutel 2011: 15). This is reflected by the profound and pervasive influences of formal diagnostic classification systems on public policy, health insurance, and pharmaceutical research (Cooper 2005: 1). Two of the leading formal diagnostic classification systems in current usage are the World Health Organization's International Classification of Diseases (ICD), now in its tenth revision (1992), and, in the field of psychiatry, the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM), now in its fifth edition (2013). However, even outside the official taxonomies of ICD-10 and DSM-5, the classificatory functions of diagnoses are deeply embedded in everyday clinical practice. For example, the Oxford Handbook of Clinical Medicine (Longmore et al. 2014), which is considered an indispensable resource for medical students and physicians, organizes diagnoses into cardiovascular disorders, respiratory disorders, gastrointestinal disorders, endocrine disorders, infectious diseases, malignancies, and so on.

(vii) Normative. The functions discussed so far have been largely descriptive, that is, they concern the role of the diagnosis in picking out a biological state of affairs that is assumed to be part of the external world, albeit occurring within the body of the patient. However, the diagnosis also has a normative function. Assigning a diagnosis to a patient does not only pick out a state of affairs, but usually implies the evaluative judgment that this state of affairs is abnormal. More specifically, the diagnosis usually implies that the patient has a medical disorder. According to Jerome Wakefield (1992) it is important that a diagnostic category discerns cases of genuine disorder from non-disordered cases, such as variants of normality, and from other sorts of problem, such as social and moral problems. This normative function of a diagnosis is often used to offer vindication for some of the other functions of the diagnosis. With respect to the interventional function, for example, the normative judgment regarding whether the patient's condition is a disorder informs the decision about whether medical intervention is appropriate at all.

(viii) *Semiotic.* So far, I have discussed functions of a diagnosis that are useful for the clinician. However, a diagnosis can also serve a function for the patient. More specifically, it functions as a "semiotic mediator," or a meaningful label

which the patient can use to understand and act upon his or her condition (Brinkmann 2014). For example, a diagnosis could be taken by the patient as legitimizing his or her illness, thus validating his or her personal experience of being unwell as something that deserves to be taken seriously. This draws on the abovementioned normative function of the diagnosis. More broadly, Carl Elliott (1999) proposes that a diagnosis can influence the narrative by which one interprets one's life and shapes one's future. When the effect of the diagnosis on the one's life narrative is significant, such as with a chronic, untreatable, or potentially fatal condition, it can profoundly reorganize one's sense of personal identity and attitude toward what is valuable in life (Kleinman 1988; Tekin 2011; 2014).

Often, the semiotic function served by diagnosis can be helpful for the patient as it can enable the patient to plan his or her life accordingly. This can be the case even if the diagnosis is of a serious condition. For instance, polycystic kidney disease is an autosomal-dominant inherited disease associated with progressive renal failure and a significantly increased risk of subarachnoid hemorrhage. A diagnosis of polycystic kidney disease could enable the patient to take measures to control his or her blood pressure, attend regular neuroimaging scans to screen for cerebral aneurysms, consider the possible need for dialysis in the future, and make an informed decision about family planning in light of it being possible that his or her children could inherit the disease.

(ix) Social. Finally, a diagnosis functions as a social performative that influences attitudes and behaviors at individual, institutional, and cultural levels. At the individual level, John Sadler (2005: 421-422) notes that the diagnosis endows the clinician with certain privileges. These might include initiating pharmacological treatment, surgical intervention, psychological therapy, and potentially invasive testing. Hence, the social function of the diagnosis is closely related to its interventional and normative functions. At an institutional level, a diagnosis entitles the patient to therapeutic, supportive, and financial resources to which he or she had not previously been entitled. For example, the diagnosis of myocardial infarction entitles the patient to a hospital bed, nursing care, laboratory and radiological investigations, medical and surgical interventions, rehabilitation, and outpatient follow-up after discharge into the community. When the illness is more chronic and disabling, a diagnosis can also authorize the patient's access to further supportive and financial resources, including attendance to support groups, carer input, disability benefits, and supported accommodation. At the level of culture, a diagnosis legitimizes sickness and sanctions certain kinds of behavior (Jutel 2011: 7). The sociologist Talcott

EBSCO Publishing : eBook Collection (EBSCOhost) - printed on 7/23/2019 12:41 PM via UNIVERSITY OF MANCHESTER

Parsons (1951: 436–437) proposes that the patient is thrust into a "sick role," which bestows on him or her certain rights and duties. The patient's rights are to not be considered responsible for his or her illness and to be exempt from some of his or her normal obligations, while his or her duties are to try to get well and to seek appropriate medical care.

Why explanation is important

The various functions discussed in the subsection "The functions of medical diagnoses" make the diagnosis a valuable epistemic resource in clinical practice. In this current subsection, I focus my attention specifically on the explanatory function of the diagnosis. I suggest that this explanatory function is important because it provides justificatory support for many of the other functions. My claim is not that the explanatory function is necessary for these other functions, but the more modest proposal that these other functions are strengthened by the explanatory function of the diagnosis.

There is a clear connection between the function of a diagnosis as a hypothesis and its function as an explanation. In general, when we infer hypothesis from a set of data, we want the hypothesis to explain the data. This squares with the idea that the diagnostic process involves abductive reasoning, or inference to the best explanation (Aliseda and Leonides 2013; Stanley and Campos 2013). Moreover, as noted by Peter Lipton (2004), explanatory power is a value that is used to judge the quality of the hypothesis. Hence, explanatory considerations not only motivate and guide the inferential process in diagnostic hypothesis formation, but are appealed to in the evaluation of the hypothesis.

The explanatory function of a diagnosis is also closely connected to its denotative and classificatory functions. Where a diagnosis serves as an explanation of patient data, it does so partly by denoting a kind of causal structure that is instantiated by the actual patient. For example, the diagnosis of acute appendicitis explains a patient's abdominal pain by denoting a distinctive pathological type, in this case acute inflammation of the appendix, which is causing the abdominal pain. Conversely, causal explanatory considerations partly justify why some conjunctions of clinical phenomena, but not others, are made into diagnostic categories and assigned diagnostic terms. According to Neil Williams (2011), it is often the case that when seemingly disparate clinical phenomena are clustered together and characterized as a distinctive category, it is because scientists and medical professionals the clinical phenomena to be connected by a unifying causal explanation. Indeed, a diagnostic category can

EBSCO Publishing : eBook Collection (EBSCOhost) - printed on 7/23/2019 12:41 PM via UNIVERSITY OF MANCHESTER

be discarded and replaced by more precise categories if it turns to be too causally heterogeneous to serve as a satisfactory causal explanation, such as dropsy being discarded and replaced by the more precise categories of congestive cardiac failure, cirrhosis of the liver, and nephrotic syndrome. Hence, the causal explanatory value of a diagnostic category influences our judgments about the validity of the classification. As we shall see in the section "The trouble with psychiatry," this is apparent in some of the recent philosophical critiques of diagnostic classification in psychiatry (Murphy 2006; Poland 2014).

The predictive and interventional functions of a diagnosis are supported by its explanatory function, in particular its causal explanatory function. To be clear, this is not to say that causal explanation is necessary for successful prediction or intervention. As noted by Jennifer Radden (2003: 46), a diagnostic category that is defined by a cluster of symptoms without allusion to an underlying cause can still permit probabilistic predictions. We may not know what causes this cluster of symptoms, but we could nonetheless make inductive inferences about similar cases based on enumerative induction, which can then inform an evidenced-based treatment guideline. Nonetheless, Radden also argues that a diagnosis that is explanatory is superior to one that is merely descriptive, because it opens up possibilities for further hypotheses and targeted interventions. Explaining why a patient has a particular cluster of symptoms provides understanding of the underlying causal structure, which can signal potential targets for therapeutic interventions, inform decisions regarding treatment approaches, and allow us to make predictive inferences that go beyond enumerative induction.

The explanatory function of a diagnosis is often considered to justify its normative and social functions. As noted by Annemarie Jutel, a diagnosis "explains certain kinds of deviance in terms of disease rather than of moral failing" (Jutel 2011: 229). This is then regarded as a reason to excuse the patient from certain responsibilities and grant him or her certain rights according to the "sick role" (Parsons 1951). For instance, a child diagnosed with influenza may be temporarily granted absence from school, because his or her failure to concentrate is explained as being due to an unpleasant and unfortunate medical problem, rather than deliberate school refusal. Furthermore, by indicating that a patient's symptoms are caused by a particular kind of condition, the explanatory function of a diagnosis can support the mobilization of therapeutic and supportive resources of the sorts deemed by medical professionals and policymakers to be beneficial for the particular kind of condition.

Finally, the function of the diagnosis as a semiotic mediator draws on its explanatory function. Part of why a diagnosis serves as a meaningful sign for the

patient is because it is taken to provide an explanation of why he or she has been suffering from his or her symptoms. Kirmayer et al. (2004: 664) suggest that "explanations may offer some reassurance and consolidation, promote coping and resilience, and allow the person to plan realistically for the future." Similarly, Winston Chiong (2004: 129) writes that a diagnosis "can also be an explanation for patients who have had symptoms but do not know their cause," which "may seem to resolve the mystery, such that even patients with intractable, chronic diseases may feel relief when diagnosed." And so, the explanatory function of a diagnosis does not only have epistemic significance and instrumental utility for the clinician, but also has intrinsic value for the patient.

The trouble with psychiatry

Having laid out the roles of medical diagnoses as causal explanations of symptoms, I now turn to issues concerning the functions of psychiatric diagnoses. In the first subsection, I show how diagnoses in psychiatry are sometimes portrayed in clinical discourse as if they serve as causal explanations in ways analogous to diagnoses in bodily medicine. In the next two subsections, I present two problems, respectively derived from two arguments by Thomas Szasz (1960), which raise doubts about the legitimacy of invoking psychiatric diagnoses as explanations. I respectively call these the conceptual problem and the ontological problem. Finally, I look at how these problems have featured in more recent normative critiques of psychiatry by mental health practitioners and philosophers of psychiatry. I do not, in this chapter, provide solutions to these problems, as my intention here is merely to explicate them, but I have offered philosophical solutions to the ontological and conceptual problems elsewhere (Maung 2016a; b).

The uses of diagnoses in psychiatric discourse

I showed in the previous two sections that medical diagnoses often explain patients' symptoms by indicating the underlying conditions responsible for causing the symptoms. In clinical discourse, psychiatric diagnoses are sometimes portrayed as if they also serve such causal explanatory roles. This is perhaps unsurprising, given the historical and cultural underpinnings of psychiatry as a medical discipline. As noted by Jeffrey Poland (2014), psychiatry is a discipline

AN: 1934181; Tekin, Serife, Bluhm, Robyn.; The Bloomsbury Companion to Philosophy of Psychiatry

whose practice occurs in a context shaped by medical traditions. Hence, it is understandable that its practitioners apply to it the methods and conventions of other medical disciplines.

Such portrayals of psychiatric diagnoses as causes or explanations of symptoms can be found in clinical textbooks, as shown by the following passages:

The diagnosis of antisocial personality disorder is not warranted if the symptoms can be *explained by* schizophrenia, mania or mental retardation. (Sethi 2008: 109, italics added)

As an example, think of the differential diagnosis of a patient with episodes of anxiety and breathlessness. These symptoms are often *caused by* panic disorder. (Stevens and Rodin 2010: 74, italics added)

Depression and anxiety *cause* tiredness as do some somatization disorders. ... Anaemia, liver failure, coeliac disease, cancer, Parkinson's, alcohol overdose and rare disorders such as myasthenia gravis and motor neurone disease can also cause tiredness. (Wright, Dave and Dogra 2010: 152, italics added)

Similarly, A Guide to Psychiatric Examination lists schizophrenia, mania, and depression alongside dementia and medical conditions as "common causes of psychoses" (Aquilina and Warner 2004: 79). These passages suggest that psychiatrists are encouraged to think about diagnoses in psychiatry as being analogous to diagnoses in bodily medicine.

Such causal claims can also be found in health information resources about psychiatric disorders that are targeted at the general public. Consider the following passages about schizophrenia and major depressive disorder from Patient.info and NHS Choices:

Schizophrenia is a serious mental health condition that *causes* disordered ideas, beliefs and experiences. (Patient.info 2013, italics added)

Depression affects people in different ways and can *cause* a wide variety of symptoms. They range from lasting feelings of sadness and hopelessness, to losing interest in the things you used to enjoy and feeling very tearful. (NHS Choices 2014: italics added)

Such portrayals of psychiatric diagnoses are significant, because they can influence how patients perceive and respond to their conditions. In a qualitative study of adults diagnosed with attention-deficit hyperactivity disorder, Svend Brinkmann (2014) notes that the participants commonly mediate understanding of their problematic behaviors by invoking their diagnoses as explanations of these behaviors. Hence, there is some evidence that patients

think of psychiatric diagnoses as if they refer to underlying conditions that cause symptoms.

The conceptual problem

The passages quoted in the previous subsection suggest that psychiatric diagnoses are sometimes communicated to clinicians, patients, and the public as if they are causal explanations of patients' symptoms, much like the diagnoses in other medical specialties. However, there are worries about psychiatric diagnoses that raise doubts whether they actually do explain symptoms. One such worry concerns the way that psychiatric diagnoses are defined. I call this the conceptual problem. According to the most recent editions of DSM, psychiatric diagnoses are formally defined in terms of their symptoms. Consider the following excerpts from DSM-5:

The essential feature of a major depressive episode is a period of at least 2 weeks during which there is either depressed mood or the loss of interest or pleasure in nearly all activities. (American Psychiatric Association 2013: 163, italics added)

Panic disorder refers to recurrent unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes. (American Psychiatric Association 2013: 209, italics added)

The essential feature of generalized anxiety disorder is excessive anxiety and worry (apprehensive expectation) about a number of events or activities. (American Psychiatric Association 2013: 222, italics added)

These descriptive definitions in DSM-5 suggest that psychiatric diagnoses are constituted by their symptoms. It is fairly uncontroversial that causes are distinct from their effects. That is to say, something cannot be its own cause. Therefore, if psychiatric diagnoses are mere labels for clusters of symptoms, then they cannot refer to the causes of these symptoms.

While the DSM formalized the descriptive approach to defining psychiatric diagnoses, the worry that psychiatric diagnoses merely have definitional connections with their respective symptoms had been present even before the introduction of the fully descriptive nosology in DSM-III. In "The Myth of Mental Illness" (1960), the psychiatrist and leading figure of the antipsychiatry movement Thomas Szasz presents two arguments against the validity of the concept of mental illness. The first argument is that mental illness diagnoses are mere shorthand labels for certain kinds of behavior, and so cannot also be invoked to refer to causes of these behaviors:

EBSCO Publishing: eBook Collection (EBSCOhost) - printed on 7/23/2019 12:51 PM via UNIVERSITY OF MANCHESTER

AN: 1934181; Tekin, Serife, Bluhm, Robyn.; The Bloomsbury Companion to Philosophy of Psychiatry

This is obviously fallacious reasoning, for it makes the abstraction "mental illness" into a cause, even though this abstraction was created in the first place to serve only as a shorthand expression for certain types of human behaviour. (Szasz 1960: 114)

The second argument is that mental illnesses are not genuine disorders because, unlike bodily illnesses, they are not characterized by pathophysiological lesions, but by deviations from social and moral norms. I turn to the second argument in my discussion of the ontological problem in the subsection "The ontological problem," but it is the first argument that is at the core of the conceptual problem.

Tim Thornton (2007: 16) offers an interpretation of Szasz's first argument in terms of necessity and contingency, with reference to David Hume's ([1748] 2000) analysis of causation. According to Hume, causal connections are contingent. We perceive causes and effects as distinct events, but do not perceive any necessary connection between them. Even if the causal chain is broken down further, we only perceive a finer succession of distinct causes and effects, but not any glue between them. Hence, one can conceive one event occurring without the other. For example, while it may be the case that a particular patient's abdominal pain is caused by acute appendicitis, it is conceivable that acute appendicitis could occur without abdominal pain or that abdominal pain could occur without acute appendicitis. However, if a psychiatric diagnosis is defined by its symptoms, then the connection between the diagnosis and the symptoms is not contingent, but necessary. One cannot have panic disorder without having panic attacks, or generalized anxiety disorder without having excessive anxiety. Since contingency is an essential feature of causal connections, it follows that the connection between a psychiatric diagnosis and its symptoms is not causal.

Szasz's argument can also be hinged at the level of language, and examined in terms of analyticity and syntheticity. According to Immanuel Kant ([1781] 1998), an analytic proposition is true in virtue of its meaning, as its predicate concept is contained in its subject concept. A classic example is the proposition "all bachelors are unmarried." This proposition is analytically true, because the concept "unmarried" is contained in the concept "bachelor." By contrast, a synthetic proposition can only be true in virtue of its relation to the state of affairs in the world, because its predicate concept is not contained in its subject concept. For example, the proposition "all bachelors are unhappy," is synthetic, because the concept "unhappy" is not contained in the concept "bachelor." Applied to diagnoses, the proposition "this patient with acute appendicitis has abdominal pain," is synthetic, because the concept "abdominal pain" is not contained in the concept "acute appendicitis." However, the proposition "this

EBSCO Publishing : eBook Collection (EBSCOhost) - printed on 7/23/2019 12:51 PM via UNIVERSITY OF MANCHESTER

AN: 1934181 ; Tekin, Serife, Bluhm, Robyn.; The Bloomsbury Companion to Philosophy of Psychiatry

patient with panic disorder has recurrent unexpected panic attacks," is analytic, because, according to the *DSM*-5 definition, the concept "recurrent unexpected panic attacks" is contained in the concept "panic disorder." Again, this suggests that the relations between psychiatric diagnoses and their symptoms are not empirical, but definitional.

The above considerations raise serious doubts about whether psychiatric diagnoses can serve the same causal explanatory functions as medical diagnoses. Jennifer Radden (2003) notes that while the purely descriptive approach to defining and classifying psychiatric diagnoses in the most recent editions of the *DSM* does permit probabilistic predictions, it renders its diagnostic categories devoid of explanatory value. Because the connection between a psychiatric diagnosis and its symptoms is definitional rather than causal, such a diagnosis does not explain its symptoms, but merely describes them. The diagnosis of panic disorder does not explain why a patient has recurrent and unexpected panic attacks any more than a man's bachelorhood explains why he is unmarried.

The ontological problem

While the conceptual problem concerns the semantic relations between diagnostic terms and descriptions of symptoms, the ontological problem raises doubts about the causal bases of psychiatric syndromes. This is related to Szasz's second argument, to which I alluded earlier. Szasz argues that mental illnesses are not genuine illnesses, because they are not characterized by distinctive pathophysiological lesions:

The crux of the matter is that a disease of the brain, analogous to a disease of the skin or bone, is a neurological defect ... For example, a defect in a person's visual field may be satisfactorily explained by correlating it with certain definite lesions in the nervous system. On the other hand, a person's belief ... cannot be explained by a defect or disease of the nervous system. (Szasz 1960: 113)

It is perhaps fair to say that our scientific understanding of some psychiatric disorders has progressed since the publication of Szasz's paper. However, Szasz's argument still resonates strongly. Empirical research has revealed an array of causes associated with many of the major psychiatric syndromes, but the story has not been one of definite lesions. Rather, it has been one of complexity and heterogeneity at multiple levels of analysis, including the biological, psychological, and social (Bolton 2012; Kendler 2008; Murphy 2006). Hence, it may be that a given diagnostic category in psychiatry does not correspond to a distinctive

causal structure, but is associated with a range of possible causal pathways, each involving complex interactions of diverse factors across different levels.

This causal heterogeneity suggests that a psychiatric diagnosis does not pick out a distinctive structure or process that is citable as a cause in a causal explanation. Rather, it subsumes a range of possible causal structures, each made up of varying combinations of biological, psychological, and social factors. In other words, in different patients with the same diagnosis, the symptoms may be caused by different sorts of process. This raises doubts about the explanatory value of a psychiatric diagnosis, as it suggests that the diagnosis does not specify what is causing the patient's symptoms. Therefore, it falls short of the paradigmatic case in bodily medicine where the diagnosis explains a patient's symptoms by indicating the cause.

Recent criticism of psychiatric diagnosis

The problems explicated above have featured in various forms in recent critiques of psychiatry. In both psychiatry and philosophy, theorists have considered the symptom-based definitions of psychiatric diagnoses and the issue of causal heterogeneity to raise doubts about the validity of psychiatric classification. Kendell and Jablensky write:

[T]he surface phenomena of psychiatric illness (i.e., the clustering of symptoms, signs, course, and outcome) provide no secure basis for deciding whether a diagnostic class or rubric is valid, in the sense of delineating a specific, necessary, and sufficient biological mechanism. (Kendell and Jablensky 2003: 7)

Similarly, the philosopher Jeffrey Poland (2014) criticizes the epistemic shortcomings of the current psychiatric diagnoses in the *DSM*:

The *DSM* categories and associated epistemic practices related to information processing, inferential practice, explanatory practice, and clinical understanding, are ineffective and harmfully biased because, given their atheoretical focus on clinical phenomenology, they do not effectively identify and represent important features, problems, contexts, and processes ... (i.e., they do not underwrite sound clinical inferences and judgments concerning what is wrong and what is likely to be helpful). (Poland 2014: 48)

Poland's critique suggests that explanatory failure is connected to other shortcomings regarding classification, prediction, and intervention. That is to say, psychiatric diagnoses that do not adequately inform us about the processes underlying patients' problems are unlikely to support reliable inferences or guide

effective treatment decisions. He describes such diagnoses as "free riders" that contribute little over and above descriptions of symptoms (Poland 2014: 34).

In light of these problems, some theorists have suggested that diagnostic classification in psychiatry ought to be revised, so that its diagnostic categories correspond to more stable kinds of causal structure (Murphy 2006; Tsou 2015). According to Dominic Murphy (2006: 323–324), this would bring psychiatry in line with the rest of medicine, where diagnoses correspond to the causal antecedents of symptoms. However, it has also been argued that the high degrees of causal complexity associated with mental disorders pose significant problems for the prospects of such an etiological classification that would be acceptable for practitioners and researchers (Bolton 2012).

There are also concerns regarding the semiotic roles of psychiatric diagnoses. Again, these concerns relate to doubts regarding their explanatory functions. Şerife Tekin (2011, 2014) argues that the symptom-based approach to diagnosis in the *DSM* might contribute to impoverished self-insight because such a descriptive approach ignores the individual factors and circumstances that are relevant to the development of the patient's condition. Moreover, Tekin suggests that the assumption of a biomedical disease model, whereby a given psychiatric category is assumed to reflect a particular kind of biological causal structure, further compounds this impoverished self-insight, because it fails to acknowledge the causal complexity of the disorder and ignores important causal contributory factors, such as psychological features, social context, and interpersonal dynamics.

In addition to the above criticisms offered by philosophers, the epistemic roles of psychiatric diagnoses have also recently been contested by mental health practitioners. Joanna Moncrieff (2010), a psychiatrist and a leading figure of the currently active critical psychiatry movement, criticizes the uses of psychiatric diagnoses in social discourse. Drawing on the work of David Ingleby (1982), Moncrieff argues that psychiatric diagnoses are only allowed to instigate the social responses of mobilizing clinical resources and sanctioning certain behaviors because they are presented by the psychiatric profession as designating diseases that are responsible for the patients' symptoms, much like diagnoses in other medical specialties. However, she suggests that such social responses are not entirely justified, because psychiatric diagnoses do not genuinely designate diseases that explain patients' symptoms.

In light of these concerns, some clinical psychologists have advocated moving away from using categorical diagnoses in psychiatry and have recommended alternative approaches. For example, Richard Bentall (2009) suggests that

assessments of patients should focus on individual complaints, such as paranoia and auditory hallucinations, rather than syndromes, such as schizophrenia and bipolar disorder. Lucy Johnstone (2014) argues that a categorical diagnosis fails to capture important information about the patient's condition and instead recommends the use of a case formulation, which consists of a narrative account that is individualized to the patient's particular case. While Johnstone presents the formulation as an alternative to the diagnosis, the view put forward by the World Psychiatric Association (2003) is that the diagnosis and the formulation have complementary roles. The general idea is that the assessment of the patient ought to include a categorical diagnosis and an individualized formulation, which together comprise a more comprehensive account of the patient's condition.

And so, the issues considered throughout this section highlight some differences between diagnoses in medicine and those in psychiatry. First, diagnoses in medicine are often, though by no means always, defined in terms of the pathologies that produce symptoms, while diagnoses in psychiatry tend to be defined in terms of the clusters of symptoms themselves. Second, the diagnostic categories in medicine tend to correspond to reasonably stable and distinctive causal structures, while there is evidence to suggest that many of those in psychiatry are associated with high degrees of complexity and heterogeneity with respect to their underlying causal processes. These differences are important, because they cast doubt on whether medical diagnoses and psychiatric diagnoses can be considered to serve equivalent epistemic functions. This subsection has looked at some of the concerns raised about the roles of psychiatric diagnoses in explanation, prediction, intervention, classification, and the sanctioning of social responses. In addition to these, I suggest that there are potential ethical implications for psychiatric discourse. As noted in the subsection "The uses of diagnoses in psychiatric discourse," psychiatric diagnoses are often communicated to the public as if they refer to conditions that causally explain symptoms. However, if they do not serve such explanatory functions, then it is likely that patients and the wider public are being misinformed about psychiatric diagnoses. This raises the possibility that patients are misled into believing that their symptoms are being explained, when they are merely being labeled.

Summary

This chapter has explored some of the philosophical problems inherent in the comparisons between the functions of diagnoses in psychiatry and those of

diagnoses in the rest of medicine. In the course of the discussion, I have provided an overview of the various functions that medical diagnoses normally serve, shown how many of these functions receive justificatory support from the roles of the diagnoses as causal explanations of symptoms, presented conceptual and ontological problems concerning the explanatory statuses of psychiatric diagnoses, and looked at how these problems have featured in recent critiques of psychiatry.

References

- Aliseda, A. and Leonides, L. (2013), Hypothesis Testing in Adaptive Logics: An Application to Medical Diagnosis, *Logic Journal of the IGPL*, 21: 915–930.
- American Psychiatric Association (2013), *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition. Arlington, VA: American Psychiatric Publishing.
- Aquilina, C. and Warner, J. (2004), A Guide to Psychiatric Examination, Cheshire: PasTest.
- Balint, M. (1964), *The Doctor, His Patient, and the Illness*, 2nd edition. London: Churchill Livingstone.
- Bentall, R. P. (2009), *Doctoring the Mind: Why Psychiatric Treatments Fail*, London: Allen Lane
- Benzi, M. (2011), Medical Diagnosis and Actual Causatio, L&PS—Logic and Philosophy of Science, 9:365–372.
- Bolton, D. (2012), Classification and Causal Mechanisms: A Deflationary Approach to the Classification Problem, pp. 6–11. In *Philosophical Issues in Psychiatry II: Nosology.* K. S. Kendler and J. Parnas, eds. Oxford: Oxford University Press.
- Brinkmann, S. (2014), Psychiatric Diagnoses as Semiotic Mediators: The Case of ADHD, *Nordic Psychology*, 66:121–134.
- Chiong, W. (2004), Diagnosing and Defining Disease, pp. 128–135. In *Health, Disease, and Illness: Concepts in Medicine*. A. L. Caplan, J. J. McCartney, and D. A. Sisti, eds. Washington, DC: Georgetown University Press.
- Cooper, R. (2005), Classifying Madness: A Philosophical Examination of the Diagnostic and Statistical Manual of Mental Disorders, Dordrecht: Springer.
- Cournoyea, M. and Kennedy, A. G. (2014), Causal Explanatory Pluralism and Medically Unexplained Physical Symptoms, *Journal of Evaluation in Clinical Practice*, 20:928–933.
- Elliott, C. (1999), A Philosophical Disease: Bioethics, Culture and Identity, New York: Routledge.
- Hume, D. (1748/2000), *An Enquiry concerning Human Understanding*, Oxford: Oxford University Press.
- Ingleby, D. (1982), The Social Construction of Mental Illness, pp. 123–143. In *The Problem of Medical Knowledge: Examining the Social Construction of Medicine*. P. Wright and A. Treacher, eds. Edinburgh: Edinburgh University Press.

- Johnstone, L. (2014), A Straight Talking Introduction to Psychiatric Diagnosis, Monmouth: PCCS Books.
- Jutel, A. G. (2011), Putting a Name to It: Diagnosis in Contemporary Society, Baltimore, MD: Johns Hopkins University Press.
- Kant, I. ([1781]1998), A Critique of Pure Reason, Cambridge: Cambridge University Press.
- Kendell, R. E. and Jablensky, A. (2003), Distinguishing between the Validity and Utility of Psychiatric Diagnoses, American Journal of Psychiatry, 160:4-12.
- Kendler, K. S. (2008), Explanatory Models for Psychiatric Illness, American Journal of Psychiatry, 165:695-702.
- Kirmayer, L. J., Groleau, D., Looper, K. J., and Dao, M. D. (2004), Explaining Medically Unexplained Symptoms, Canadian Journal of Psychiatry, 49:663-671.
- Kleinman, A. (1988), The Illness Narratives: Suffering, Healing, and the Human Condition, New York: Basic Books.
- Lipton, P. (2004), Inference to the Best Explanation, 2nd edition. London: Routledge.
- Longmore, M., Wilkinson, I. B., Baldwin, A., and Wallin, E. (2014), Oxford Handbook of Clinical Medicine, 9th edition. Oxford: Oxford University Press.
- Maung, H. H. (2016a), Diagnosis and Causal Explanation in Psychiatry, Studies in History and Philosophy of Biological and Biomedical Sciences, 60:15-24.
- Maung, H. H. (2016b), To What Do Psychiatric Diagnoses Refer? A Two-Dimensional Semantic Analysis of Diagnostic Terms, Studies in History and Philosophy of Biological and Biomedical Sciences, 55:1-10.
- Moncrieff, J. (2010), Psychiatric Diagnosis as a Political Device, Social Theory and Health, 8:370-382.
- Murphy, D. (2006), Psychiatry in the Scientific Image, Cambridge, MA: MIT Press.
- NHS Choices (2014), Clinical Depression, URL= http://www.nhs.uk/Conditions/ Depression/Pages/Introduction.aspx Retrieved April 4, 2016.
- Parsons, T. (1951), The Social System, Glencoe, IL: The Free Press.
- Patient.info. (2013), *Schizophrenia*, Available online: http://patient.info/health/ schizophrenia-leaflet Retrieved April 4, 2016.
- Poland, J. (2014), Deeply Rooted Sources of Error and Bias in Psychiatric Classification, pp. 29-64. In Classifying Psychopathology: Mental Kinds and Natural Kinds. H. Kincaid and J. Sullivan, eds. Cambridge, MA: MIT Press.
- Qiu, R. Z. (1989), Models of Explanation and Explanation in Medicine, International Studies in the Philosophy of Science, 3:199-212.
- Radden, J. (2003), Is This Dame Melancholy? Equating Today's Depression and Past Melancholia, Philosophy, Psychiatry, and Psychology, 10:37-52.
- Sadler, J. Z. (2005), Values and Psychiatric Diagnosis, Oxford: Oxford University Press.
- Schwartz, A. and Elstein, A. S. (2008), Clinical Reasoning in Medicine, pp. 223-234. In Clinical Reasoning in the Health Professions. J. Higgs, M. A. Jones, S. Loftus, and N. Christensen, eds. 3rd edition. Amsterdam: Elsevier.
- Sethi, S. (2008), Textbook of Psychiatry, New Delhi: Elsevier.

AN: 1934181; Tekin, Serife, Bluhm, Robyn.; The Bloomsbury Companion to Philosophy of Psychiatry

- Stanley, D. E. and Campos, D. G. (2013), The Logic of Medical Diagnosis, *Perspectives in Biology and Medicine*, 56:300–315.
- Stevens, L. and Rodin, I. (2010), *Psychiatry: An Illustrated Colour Text*, 2nd edition. London: Churchill Livingstone.
- Szasz, T. (1960), The Myth of Mental Illness, American Psychologist, 15:113-118.
- Tekin, Ş. (2011), Self-Concept through the Diagnostic Looking Glass: Narratives and Mental Disorder, *Philosophical Psychology*, 24:357–380.
- Tekin, Ş. (2014), Self-Insight in the Time of Mood Disorders: After the Diagnosis, Beyond the Treatment, *Philosophy, Psychiatry, and Psychology*, 21:139–155.
- Thagard, P. (1999), *How Scientists Explain Disease*, Princeton, NJ: Princeton University Press.
- Thornton, T. (2007), Essential Philosophy of Psychiatry, Oxford: Oxford University Press.
- Tsou, J. Y. (2015), DSM-5 and Psychiatry's Second Revolution: Descriptive vs.

 Theoretical Approaches to Psychiatric Classification, pp. 43–62. In *The DSM-5 in Perspective: Philosophical Reflections on the Psychiatric Babel*. S. Demazeux and P. Singy, eds. Dordrecht: Springer.
- Wakefield, J. C. (1992), On the Concept of Mental Disorder: On the Boundary between Biological Facts and Social Values, *American Psychologist*, 47:373–388.
- Whitbeck, C. (1981), What Is Diagnosis? Some Critical Reflections, *Metamedicine*, 2:319–329.
- Williams, N. E. (2011), Arthritis and Nature's Joints, pp. 199–230. In Carving Nature at Its Joints. J. K. Campbell, M. O'Rourke, and M. H. Slater, eds. Cambridge, MA: MIT Press.
- Willis, B. H., Beebee, H., and Lasserson, D. S. (2013), Philosophy of Science and the Diagnostic Process, *Family Practice*, 30:501–505.
- World Health Organization (1992), *International Classification of Diseases*, 10th revision, Geneva: World Health Organization.
- World Psychiatric Association (2003), Essentials of the World Psychiatric Association's International Guidelines for Diagnostic Assessment (IGDA), *British Journal of Psychiatry*, 182:S37–S66.
- Wright, B., Dave, S., and Dogra, N. (2010), 100 Cases in Psychiatry, Boca Raton, FL: CRC Press.