Physical and mental illnesses: implications of similarities and differences for services and law

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It appears self-evident that psychiatry should be classified as a particular specialty within the broader field of medicine. Psychiatrists, being first and foremost doctors, have undertaken an identical basic training to their physician and surgical peers and, as in general medicine and surgery, the biomedical model is a central pillar of psychiatric practice. Within psychiatry, signs and symptoms are elicited, diagnoses made and very often physical interventions (in the form of psychotropic agents) are employed. However, familiar institutional conventions can conceal the fact that psychiatry suffers from greater uncertainty regarding its conceptual foundations than other fields of medicine. In fact, the conceptual challenges arising within psychiatry are reflected in its thriving field of philosophy, and although there exists a dedicated philosophy of medicine, no other specialty is equal to psychiatry's breadth of conceptual debate.

Fulford (1998) has discussed psychiatry's tendency to encompass a greater divergence in values than other specialties. Central to psychiatric theory and practice is the 'biopsychosocial' model. Ghaemi (2009, p. 4) expresses concern about the usefulness of this model, arguing that it 'devolves into mere eclecticism, passing for sophistication'. But this pronouncement on the model's failure may not indicate a fault with the model per se, but instead may merely highlight our limited understanding of the relations between its three domains. For psychiatry, elucidating the nature of the relations within the ‘biopsychosocial’ model is a particularly pressing task.

Here we will consider two conceptual problems that pose deep questions regarding the nature, or ontology, of the phenomena with which psychiatry deals. These conceptual challenges are central to achieving greater intelligibility of the biopsychosocial model.

Medicine of the mind or brain?

Traditional psychiatry, like medicine generally, has a primary theoretical and practical focus on a particular system or part of the body, in this case the brain. However, in addition to attending to the body, psychiatry is equally concerned with the ‘mind’. This means that a central issue for psychiatry is understanding the nature of the (psycho–bio) relationship between mind and body.

This so-called 'mind–body problem' unfolds from the simple observation that conscious experience involves experiential properties, such as feeling warm or nauseous, smelling roses or hearing middle C. However, when scientifically investigating the body, or specifically the brain, we describe instead the physical properties of neuronal activation states, neurotransmitters, receptor binding and so on. The seemingly irreconcilable differences between the manifest properties of mind versus the properties of physical objects famously led the philosopher Descartes to the dualist conclusion that there are two distinct 'substances' – the mind and the body – that interact via the pineal gland.

Chalmers (2003) provides an overview of proposed philosophical solutions to this problem, including: several versions of mind–brain identity
(the prevalent assumption in neuroscience that ‘experiences = brain states’); mind and matter as distinct aspects of one substance (neutral monism); Cartesian dualism; and mind as an ‘emergent’ property of matter. Contemporary neuroscience provides increasing understanding of brain function (see for example Panksepp, 2012). A recent survey of philosophers found that a majority viewed consciousness as physical (Bourget & Chalmers, 2009). Nevertheless, many argue that, even with a complete understanding of the so-called neural correlates of consciousness (NCCs), the explanatory gap between the concepts of brain science and the ‘raw feel’ of experience will remain just as wide as it is now.

The culture of psychiatry pragmatically reflects this conceptual duality of mind and brain. Psychologists employ a language of beliefs, desires and intentions, whereas biological psychiatrists generally refer instead to the purported monoamine dysfunction in depression, for example. The divergent use of ‘mental’ versus ‘physical’ concepts is also demonstrated by the differentiation of clinical services into specific psychology services and the more biomedical approaches found in the psychiatric ward or clinic.

The distinction between the concepts of physical and mental is brought into sharp relief when forensic psychiatrists are asked to make judgements about criminal responsibility. At stake is whether we consider ‘responsibility’ to be grounded in the domain of beliefs, desires and intentions – what McDowell (1996) calls the ‘space of reasons’ – or the realm of physical laws. The law may exculpate offenders from full criminal responsibility if they suffer the dopamine dysregulation of schizophrenia, but how far should neurophysiological mitigation go? Gazzaniga & Steven (2005) note that, in the USA, ‘Defence lawyers are looking for that one pixel in their client’s brain scan that shows an abnormality – some sort of malfunction that would allow them to argue: “Harry didn’t do it. His brain did it. Harry is not responsible for his actions”.

Even if ‘faulty neurons’ are deemed culpable in court, it is far from clear that we could in principle make sense of a ‘brain’ being responsible for anything, Bennett et al (2007) argue that we can rationally attribute psychological predicates such as ‘responsible’ only to persons (not brains) embedded in linguistic communities. This tension between what we might call the purely physical or ‘syntactic’ aspects of causation in mental states and behaviour and the meaning-laden ‘semantic’ aspects is particularly acute in psychiatry, and especially at the interface with law.

**Where is mental disorder?**

This is at first sight a strange question, but it signals another deep conceptual problem at the heart of psychiatry. Unlike in much of medicine, in psychiatry we must be open to the possibility that not only the causes but conceivably also components of the disorders we treat extend beyond the body. For many ‘biological reductionists’, it is axiomatic that mental disorders are brain disorders. However, there is a school of thought, most recently developed by ‘extended mind’ theories (see Clark, 2011), that conceptualises the mind as extending beyond the body and into the environment. From birth, individuals are ‘enculturated’ by language and other symbols, and brain changes occur throughout life via informational continuity with a changing culture. Therapists may discover individual beliefs or desires that cause suffering but that originate primarily in the culture. For example, a person with depression may hold a culturally derived belief that unemployment is shameful and yet be unable to secure a job. Schizophrenia, a disorder often regarded as quintessentially neuropsychological, is associated with social isolation, adversity (particularly childhood abuse) and ‘social defeat’ (Boydell & Allardyc, 2011). The social dimension of psychosis is emphasised by the finding that schizophrenia can show significant placebo response, a response ‘reveal[ing] aspects of the biology of interpersonal relationships and the social environment’ (McQueen & St John Smith, 2012, p. 2). If mental disorders are in part constituted by aspects of the social milieu, then we need to question a conception of neuronal pathology as the key locus of mental disorder, and perhaps regard such lesions as ‘neural signatures’ of broader sociocultural disorders. The crucial issue is how we conceptualise the relation of the social to the biological and psychological in the biopsychosocial model.

Conceiving mental disorders as ‘extended’ into society prompts a rethinking of how services are designed. Often patients are extruded from their milieu to the ward or the consulting room, and we risk focusing too narrowly on their particular experiences and the putative brain disorder that explains their suffering. However, according to the ‘extended’ model of mind, this is like the error of a physician who attends only to finger-clubbing without understanding it as a local manifestation of chest disease. It would be unfair, though, to caricature psychiatric practice. Child psychiatry embraces this systemic view when it employs family therapy. Adult psychiatry may use group therapies, and it operates within policies that address, for example, elder abuse and domestic violence; adult psychiatry also recognises the therapeutic importance of social networks and rewarding occupation.

‘Meaningful’ relationships in a family or social matrix are generally more important in the cause or constitution of psychiatric disorder than in general medicine or surgery. But the difference is relative, not absolute. Research suggests that ‘semantic’ factors such as one’s perceived social status can seriously affect physical health (Wilkinson & Pickett, 2010). Consequently, psychiatry must place more emphasis on psychosocial approaches. In addition to the psychotropic modification of ‘neural signatures’, psychiatry must address the relations of patients to their immediate social
nexus (family therapy, occupational therapy, social support). More broadly, psychiatric public health should address the social matrix at a population level; such a therapeutic framework is provided by the ‘ecological public health’ articulated by Lang & Rayner (2012), which integrates material, biological, social and cultural aspects in understanding the determinants of disease.

This raises the issue of the purpose of mental health law, which tends to relate to ‘risk’. Attention is therefore narrowed to individuals, but this forecloses consideration of those social factors that have brought a person before the law or a mental health review tribunal.

There are examples in medicine of the health-promoting use of law, such as the restriction of tobacco advertising and in Scotland the minimum pricing of alcohol. The Marmot review found social inequality to be detrimental to physical and mental health (Marmot et al., 2010). Perhaps greater public funds should be dedicated to policies or laws that modify the ‘meaningful’ aspects of the social matrix in the promotion of mental well-being.

References
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Health and homosexuality: a world-view
David Skuse

Amid the current controversy in the UK about whether or not homosexual couples should be allowed to marry in church, it is all too easy to lose sight of the fact that in most countries the mere admission that one’s erotic fantasies are directed towards the same sex could bring about social opprobrium, discrimination or even death.

Hanneke van den Akker and colleagues present an important analysis of health and happiness among homosexual couples in European countries. Their report is based on data gathered from households by the European Social Survey of over 30 countries; remarkably, only 9 countries could provide responses from more than 50 couples living in a same-sex relationship. The implication is that in many European countries it would not be acceptable to admit, even in a survey of this type, that one’s living arrangements reflect homosexuality. Their findings are provocative and indicate the need for a deeper understanding of the social adjustments such couples have to make, even in relatively enlightened countries such as the UK, Denmark and the Netherlands.

We were delighted to receive from Hong Kong a report about attitudes towards homosexuality among Chinese people, provided by Joseph Wu and Diana Kwok. The attitudes in question, surveyed among medical students and social work students, were surprisingly negative – especially among those with professed Christian beliefs. Sadly, it appears stereotyping and homophobia are endemic in school counselling services too. Unsurprisingly, the net effect of this prejudice on the mental health of people with a homosexual preference leads to a reduced quality of life.

Finally, we present a review of attitudes to people from sexual minorities in Africa, prepared by Marc Epprecht. We hear much about the serious risk of harm to people in some African countries who admit their sexual orientation is unconventional. Not all countries on that diverse continent are as intolerant as Uganda, and some – such as Botswana, Mozambique and Malawi – are acting to protect such minorities from discrimination. On the other hand, it is chilling to learn that neo-conservative Christian groups in the USA are providing money to Africans who want to force sexual conversion on deviants, reviewed in a report (available to download) entitled Colonializing African Values, by Dr Kapya Kaoma, an Anglican priest.