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Editorial

'Diagnostic overshadowing': worse physical health care for people with mental illness

It is now well established that people with mental illness die prematurely and have significantly higher medical co-morbidity compared with the general population (1), and that there are a number of possible reasons for this *as discussed by Leucht* et al. *in the November issue 2007 of the Acta Psychiatrica Scandinavica* (2). One of these may be 'diagnostic overshadowing', a process by which physical symptoms are misattributed to mental illness. This concept has received little attention in the psychiatric literature but mental health service users have reported its widespread occurrence (3) and its potential impact has been emphasized in two recent reports (4, 5).

'Diagnostic overshadowing' and learning disability

The term 'diagnostic overshadowing' was first used in 1982 to refer to the tendency for clinicians to attribute symptoms or behaviours of a person with learning disability to their underlying cognitive deficits and hence to under-diagnose the presence of co-morbid psychopathology (6). Possible explanatory factors for the 'overshadowing' include those related to the disorder (e.g. severity, specific psychiatric conditions), those related to the patient (e.g. degree of cognitive impairment) or those related to the clinician (e.g. years of experience, cognitive complexity) (7). The majority of studies investigating this phenomenon find 'overshadowing' to exist, irrespective of such variables. One exception is the 'cognitive complexity' of the clinician, which refers to the tendency of the clinician to view a presenting problem in a 'multi-dimensional fashion'. Clinicians who have greater 'cognitive complexity' have been reported to be more likely to detect co-morbid psychopathology.

There are limitations of such research. Most studies use clinical vignettes; so, the findings may be the result of a methodological artefact. However, despite possible limitations, such research is a starting point in trying to understand possible differences in clinical decision making for different patient groups.

Worse physical health care in other minority groups

Similar methods of research have been used to examine possible disparate care in other minority groups. However, whereas the focus in the learning disability research has been whether physical diagnoses are missed because of falsely attributing symptoms to the underlying learning disability, research of other minority groups has focussed more on possible bias or discrimination in diagnostic or treatment decisions because of race, gender or age.

More sophisticated methods have been used in this research. In one study, investigators examined whether clinicians' recommendations for cardiac catheterization differed according to the race and gender of the patient (8). Rather than using simple vignettes, they video-recorded actors portraying patients with particular types of chest pain. The study found strong evidence that African-American women were less likely to be referred for catheterization than white men and the authors concluded that the ethnic group and gender of a patient could independently influence diagnosis and recommendations for interventional treatment. Another study showed that particular ethnic groups (African-Americans and Latinos) were less likely to be referred to hospital or to have investigative or treatment procedures, after controlling for diagnosis, severity of illness and access to care (9). It also found there was little evidence to suggest that patient preference explained such disparities, and suggested that the doctor–patient interaction was likely to be a critical factor.

Following such studies, there have been attempts to more closely examine the clinical encounter between doctor and patient as a possible source of disparity in minority groups. One such paper proposed three possible mechanisms: prejudice of doctors, communication difficulties or clinical

uncertainty associated with different interpretation of symptoms in a minority group, and stereotypes about health-related behaviour in minority groups (10). Another study with potential relevance to patients with mental illness, showed that doctors are more likely to view patients positively and to involve them more in treatment decisions if they perceive the patient to have a positive affect, to be less contentious or to be more likely to adhere to treatment (11).

Diagnostic overshadowing and mental illness

Many of these issues need consideration when trying to understand the phenomenon of 'diagnostic overshadowing' in people with mental illness. It cannot be viewed simply as doctors missing symptoms because they are assumed to relate to their psychiatric disorder or because of a doctor's lack of knowledge about how a psychiatric condition may present. Similarly, it would be too simplistic to suggest that 'diagnostic overshadowing' is only because of bias or discriminatory attitudes. While it is likely that such reasons might be involved in some cases, a range of other factors related to the communication between doctor and patient may also be relevant.

There is a need for research to better understand these potential contributing factors and how they may relate to higher mortality and morbidity in people with mental illness. Although the causes of different patterns of care are likely to be complex, there has been little attempt to empirically examine how clinicians' decision making regarding physical diagnosis and treatment may be influenced by the presence of a mental illness in their patients.

We are not aware of any studies that specifically investigate possible reasons for missed or incorrect diagnosis of physical illnesses in people with mental illness. However, some research on treatment of physical health problems in those with mental illness show results similar to the results of some of the studies in other minority groups. For example, two studies have shown that people with mental illness and ischaemic heart disease requiring hospitalization were less likely to have a revascularization procedure (12, 13). Similarly, people with co-morbid mental illness and diabetes who presented to an emergency department were less likely to be admitted to hospital for diabetic complications than those with no mental illness (14). This difference was not found across all mental health conditions: those people with non-psychotic illnesses were significantly less likely to be admitted to hospital compared with people with no mental illness, while those with psychosis were not less likely to be admitted to hospital. Another study found that people with schizophrenia who were admitted to medical and surgical wards were found to have significantly higher rates of infections, post-operative complications (including intensive care unit admission or death) and increased length of stay (15). These findings raise further questions about the possibility of disparate treatment for certain types of mental illness.

Such research suggests that when considering the issue of less and worse physical care in people with mental illness, both diagnosis and treatment needs to be considered. 'Treatment overshadowing' is a term, which has been proposed to describe possible biases in actual treatment decisions (7). Such a term needs to include all components of a treatment plan that can be overlooked, such as an unwillingness to address possible barriers to appropriate care. A combined term of 'diagnostic and treatment overshadowing' may be more helpful when planning future research, so that a broader range of possible causes for disparate care are considered.

Future research into this area needs to investigate how often physical diagnoses are missed in people with mental illness, examine the impact of such errors and explore why this occurs. Explanatory factors may include some clinicians' limited knowledge about mental illness, their discomfort in dealing with people with mental illness and other staff attitudes. From the Disability Rights Commission report (4), it seems that the risk of 'diagnostic overshadowing' may also be more problematic in certain medical settings. For example, emergency departments were one setting in which service users reported feeling that their physical problems were consistently attributed to mental illness without sufficient assessment.

Discrimination can also occur by failing to try to overcome some of the potential barriers to optimal care which may exist. Research into the size of this problem, why it occurs and how it can be addressed is also needed. Consideration of research that has examined such issues in different racial groups may be helpful. For example, several studies have examined patients' perceptions of quality of care in a number of different domains (e.g. information provided, access to care, co-ordination of care, confidence in the service provider) and have considered ways treatment may be adapted according to different patterns of service use (16, 17).

In conclusion, the concept of 'diagnostic (and treatment) overshadowing' in patients with mental illness seems to be an important under-investigated problem. There is an opportunity to build on a body of research from the learning disability and medical fields, to try to understand its potential

role in the poor physical outcomes in people with co-morbid mental illness. Such research should consider reasons for its occurrence and possible preventative measures, so we can minimize this phenomenon in future.

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Simon Jones, Louise Howard & Graham Thornicroft
Invited Guest Editors

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