

Original Paper

**Depression across ethnic minority cultures:
diagnostic issues**

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Abstract Depression is under-diagnosed in primary care all over the world, particularly in ethnic minority populations. Various explanations have been offered for this including the unsatisfactory 'Western' definitions of depression, different explanatory models between patient and doctor, linguistic barriers and variations in presentation. Such problems may also exist in secondary mental health care services. Help-seeking behaviour remains a problem in the management of depression in ethnic minority populations, partly due to stigma associated with mental illness (although this may be changing due to acculturation), and differing illness beliefs. Depression may present with somatic symptoms and cultural idioms of distress in any culture, particularly ethnic minority groups. The common presentation of depression as somatic symptoms in patients from certain cultures may be explained by the traditional illness beliefs within those cultures. The use of trained interpreters, raising awareness of depression and a culturally sensitive approach to clinical practice amongst other strategies may help us diagnose depression and improve help seeking-behaviour.

Key words: depression, health seeking behaviour, minority groups, somatic presentation, idioms of distress

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INTRODUCTION Culture is reflected in the learned, shared beliefs, values, attitudes and behaviours characteristic of a society or population (Bhugra & Mastrogianni, 2004). From the perspective of cultural psychiatry, culture influences the sources, the symptoms and the idioms of distress; the individuals' explanatory models, their coping mechanisms and their help-seeking behaviour; as well as the social response to distress and to disability (Kirmayer, 2001). In this paper, we review the literature on depression in ethnic minority groups and examine the difficulties doctors face in terms of diagnosing this condition. This is of particular interest to clinicians in light of the World Health Organization's prediction that by the year 2020, depression will be the second most important cause of disability after ischaemic heart disease worldwide (WHO, 2002). The problem of depression crosses cultural, international and socioeconomic boundaries, and is one of the great challenges of mental health care today.

Prevalence

Various studies from the USA show that rates of depression are similar among African Americans and White Americans when demographic, sociocultural and socio-economic factors were controlled for (Roberts et al., 1981; Somervell et al., 1989; Diala et al., 2001). Asian Americans have been shown to have a lower prevalence of depression (Jackson-Triche et al., 2000) than majority white populations. Some studies have found Hispanic populations to have a higher rate of depressive symptoms than the majority population (Roberts, 1981), particularly Puerto Ricans (Oquendo et al., 2001).

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In the UK, Shaw et al. (1999) comparing African-Caribbean and White European groups in Manchester, found that the prevalence of depression was higher in the former, especially women. This difference could be explained by genetic or vulnerability factors, or by exposure to different social or environmental experiences (Kendler et al., 1992; Finlay-Jones & Brown, 1981).

Bhui et al. (2001), in a survey in London of general practice attenders, reported that Punjabis were not rated as having more depression than the English participants, yet they did have more depressive ideas. Stansfeld et al. (2004) found that non-UK White girls (mostly of Irish, Greek or Turkish origin) had a higher risk of depressive symptoms relative to White UK pupils. This increased risk was diminished after adjustment for recent migration, suggesting that it might relate to stressors associated with migration. However, Bangladeshi pupils were at decreased risk of psychological distress relative to White UK pupils possibly due to ethnically related protective factors (Costello et al., 1997) such as high levels of family support, religious belief, strong cultural identity and cohesion.

Reasons for variance

Various explanations have been proposed for these variations in depression rates. Recent migration can cause psychological distress as a result of traumatic experiences prior to migration, separation from parents and friends, and difficulties adjusting to a new, alien environment (Bhugra, 2001). On the other hand, certain cultures have family-oriented cultural values, which could be patho-protective. For example, socioeconomic adversity and interpersonal and family problems were found to be major risk factors for depressive disorders in Pakistan, whereas supportive family and friends may protect against development of these disorders (Mirza & Jenkins, 2004). Similar trends have been seen in south-Asian communities in England (Bhugra et al., 1999).

The effects of acculturation add another dimension to the influence of cultural factors on the development of mental illnesses including depression. Studies have shown that the risk of major depression seems to be greater for US-born Mexican Americans than for Mexican immigrants (Burnam et al., 1987) and the lifetime rate in US-born Cuban Americans was significantly higher than for Cuban Americans born in Cuba (Narrow et al., 1990). Possible explanations include that immigrants experience a lower sense of deprivation, retain a stronger family orientation or other protective cultural values or that immigration tends to select for mental health (Lewis-Fernandez et al., 2005a). These figures could also be interpreted to mean that a greater degree of acculturation predisposes to depression, but the high levels of depressive symptoms among Puerto Ricans living in both Puerto Rico (29.1%) and New York City (28.6%) cautions against over-generalisation (Vera et al., 1991).

Ballenger et al. (2001) suggest that variations in prevalence rates across ethnic groups may be consequences of methodological issues and a lack of culturally appropriate instruments. This debate reflects on the use of either etic or emic instruments for the recognition and evaluation of mental health disorders, (Kleinman, 1988; Thakker & Ward, 1998). Hence researchers now attempt to combine quantitative research with a more flexible approach (Weiss et al., 1992; Lloyd et al., 1996). Bhui suggests that epidemiologists need to learn more about qualitative data analysis, its use with quantitative data and the limitations of each approach (Bhui, 2001; Bhui & Bhugra, 2001). Furthermore, gathering accurate data on the prevalence of depression in ethnic minority populations has proved difficult. Mental health problems may be denied for various reasons e.g. it was found that Canadian migrants did so to improve their chances of employment (Sartorius & Schulze, 2005).

DIAGNOSTIC CHALLENGES

Underdetection

Depression is under-recognised and under-treated in primary care (Ballenger et al., 2001; Lecrubier, 2001). In the WHO study (Sartorius et al., 1996) which examined depression prevalence in primary care across 14 countries, clinicians detected only half of the cases of depression and marked variations between centres were recorded.

Primary care research has shown that in the UK, people of south Asian origin are less likely to have their psychological difficulties (especially depression) identified (Gillam et al., 1980; Bhui et al., 2001). Studies from the USA have also shown that primary care physicians are less likely to detect depression among African American and Hispanic patients than among Whites, especially if doctor and patient are of a different race (Leo et al., 1998; Borowsky et al., 2000). In Australia too there are substantial variations in the detection of depressive symptoms in GP patients depending on the ethnic background of patients, with Asian patients being particularly under-diagnosed (Comino et al., 2001).

Explanatory Models

Explanations for this almost universal phenomenon of underdetection of depression in primary care are shown in Table 1. In addition, most authors agree that the 'Western' classifications of depression are not entirely satisfactory for use in non-Western cultures (Manson, 1995; Bhugra, 1996). The term 'depression' itself is absent from the languages of many cultures (Manson, 1995); it is used rarely in others (Hamdi et al., 1997), or it is construed differently (Abusah, 1993; Lee, 1998). Although DSM-IV suggests a cultural formulation as a supplement to the multiaxial assessment (American Psychiatric Association, 1994), it has been argued that it still represents Western concepts of illness and might not be easily applicable to other cultures (Ballenger et al., 2001; Kirmayer, 2001).

Table 1: Underdetection of depression in primary care in transcultural settings. (Bhugra & Mastrogianni, 2004)

Explanation	Study
<i>Different explanatory models between patient and clinician</i>	Jacob et al (1998) Ballenger et al (2001) Bhugra (2001) Bhui et al (2001)
<i>Unwillingness to disclose all symptoms to the doctor; somatic presentations</i>	Weiss et al (1995) Jacob et al (1998) Bhui et al (2001) Lecrubier (2001)
<i>Variation of clinical features across cultures; use of somatic metaphors</i>	Bebbington (1993) Manson (1995) Bhugra et al (1997a) Patel (2000)
<i>Linguistic, cultural and racial barriers between doctor and patient</i>	Brewin (1980) Leo et al (1998)
<i>Insufficient probing by the clinician</i>	Weiss et al (1995) Ballenger et al (2001) Comino et al (2001)
<i>Physician's familiarity with depression and attitude towards depression</i>	Leo et al (1998) Borowsky et al (2000)
<i>Patient's age; coexistence of a somatic diagnosis</i>	Lecrubier (1998)

Similar problems arise in secondary services providing mental health care. In the UK, one study found that the knowledge of mental health staff was constructed upon stereotypes of eastern cultures as repressive, patriarchal and inferior to a western cultural ideal. These ethnocentric attitudes have the potential to misdirect diagnosis and therefore, treatment pathways (Burr, 2002).

Solutions

To improve recognition of depression and poor help-seeking behaviour in ethnic minority populations, various measures can be taken by health care providers. The use of trained medical interpreters can result in a higher quality of physician-patient interaction. The use of family, friends, children, untrained language-speaking staff, non-clinical staff, and persons from the waiting area should be avoided (Lewis-Fernandez et al., 2005a).

Increasing the cultural competency of physicians and other health care providers has been suggested as one mechanism for reducing such disparities by improving the quality of care across ethnic groups (Brach & Fraser, 2000; Betancourt, 2003). Cultural competency training is increasingly common in medical school (Dolhoun et al., 2003), and as part of postgraduate medical training (Culhane-Pera et al., 1997) but further progress is needed. In order to make accurate diagnoses across cultural boundaries and formulate treatment plans acceptable to the patient, the DSM-IV (American Psychiatric Association, 1994) proposes the use of the Cultural Formulation as a systematic model for cultural assessment. It is designed to supplement a standard clinical evaluation by highlighting the effect of culture on the patient's identity, personality development, symptoms, explanatory models of illness, help-seeking preferences, stressors and supports, therapeutic relationships, and outcome expectations.

HELP-SEEKING The non-recognition of depression in primary care is compounded by help-seeking behaviours displayed by members of ethnic minority groups (Karasz, 2005). South Asian people in the UK underutilise health services compared with White people (Hussain & Cochrane, 2004). Shaw et al (1999) found that African Caribbeans in the UK held beliefs such as: "the doctor can't help with this sort of problem"; "it's not an illness"; "I can manage on my own"; "doctors are there to give you tablets and I don't want tablets.

In a New York study, European Americans offered biological explanations for depression such as "hormonal imbalance" or "neurological problem", while South Asians proposed "situational stress" or "life problems" as the cause (Karasz, 2005). It has been suggested that tolerance for depression, in terms of willingness to admit to it and seek help, might be greater amongst Jews than Protestants in England which may represent favourable beliefs about mental illness (Loewenthal et al., 2002).

Explanatory Models

Social stigma associated with mental illness in some cultures may play a role, although stigma levels in relation to depression may be changing in some ethnic groups due to acculturation (Fogel & Ford, 2005). Furthermore, intergenerational conflict between migrants and their Western-born children which reduces family support may be a factor in their seeking professional psychiatric help. Cultural reluctance to endorse mental symptoms (Weissman et al, 1996) and less than favourable illness beliefs (Schraufnagel et al, 2006) may be important factors. Family members, other personal contacts or traditional healers may be sought instead of professional help after symptom onset (Bhugra & Mastrogiani, 2004).

Solutions

Multi-factorial educational approaches for both the public and general practitioners, such as the Defeat Depression campaign in the UK, and strategies for the detection and management of depression at a local and national level are other measures that could alter practice, by increasing awareness and changing illness beliefs (Bhugra, 1996; Rait et al., 1999). Educational leaflets on depression targeted to specific communities have also proved successful (Bhugra & Hicks, 2004).

VARIATIONS IN CLINICAL PRESENTATION An important consideration in depression in ethnic minority patients is presentation with somatic symptoms. Early studies suggested that somatisation of depressive symptoms was mostly seen in non-Western cultures. However, several studies since have shown that somatic presentations of depression are frequent across different cultural and ethnic groups (Kleinman, 1995; Kirkmayer & Young, 1998). In addition, it has been reported that Punjabi patients visiting their general practitioner more often had depressive ideas, but were no more likely to have somatic symptoms than English patients (Bhui, 2001). However, in the USA, somatic presentation may be particularly common among Hispanic subgroups, who have been found to present psychological distress in the form of physical symptoms (Mezzich & Raab, 1980; Canino et al., 1987; Canino et al., 1992). In one study, Mexican American women were found to be more likely to report somatic symptoms of depression than white women (Escobar et al, 1987).

Culturally patterned idioms of distress (Guarnaccia, 2003; Lewis-Fernandez et al., 2005b) are linguistic and bodily styles of expressing and experiencing illness (Nichter, 1981) i.e. cultural ways of talking about distress. In the case of depression, these often take the form of somatic metaphors (see Table 2). Knowledge of these cultural idioms can facilitate diagnosis of depression, establish rapport, and minimise the risk of misdiagnosis. For example, clinicians aware that some depressed Latinos may express acute fits of emotionality known as *ataques de nervios* (attacks of nerves) in response to interpersonal stressors can more easily prevent their misdiagnosis as syncopal, ictal, or panic episodes (Lewis-Fernandez et al., 2005b).

Table 2: Somatic idioms of distress (Bhugra & Mastrogianni, 2004)

Country/ culture	Study	Somatic idiom
India	Bhugra et al (1997a,b)	'Sinking heart' 'Feeling hot' 'Gas'
Nigeria	Ebigbo (1982)	'Heat in the head' 'Biting sensation all over the body' 'Heaviness sensation in the head'
Mexican Americans	Jenkins (1988)	'Nervios' 'brain ache' 'brain exploding' 'uncontrollable'
Chinese	Parker et al (2001)	'Shenjing shuairuo' neurasthenia
Dubai	Sulaiman et al (2001)	'Sadri dayeq alayya' 'My chest feels tight' 'Tabana' 'I am tired, fatigued' 'Jesmi methasser' 'broken body'
United Arab Emirates	Hamdi et al (1997)	'The heart is poisoning me' 'As if there is hot water over my back' 'Something is blocking my throat'

Explanatory Models

It has been suggested that somatisation is a concept that reflects the dualism inherent in Western biomedical practice, whereas in most traditional medical systems a sharp distinction between the 'mental' and the 'physical' does not occur (Kirmayer & Young, 1998). For example, Chinese people have lower rates of depression and tend to deny depression or express it somatically (Sartorius et al., 1996; Zhang et al., 1998). This fits in with the traditional epistemology of disease causation on the basis of disharmony of vital organs and imbalance of *qi* (Bhugra & Mastrogianni, 2004). Pang (1998), exploring ways in which elderly Korean immigrants in the USA express depression, concluded that they also express emotions symbolically or physically. This is in accordance with Korean traditional medicine, which allots symbolic functions to each body organ: the lungs are related to worry, sorrow and low spirit; the liver to anger; the kidneys to fear (Bhugra & Mastrogianni 2004).

Arab populations are also more likely than Westerners to associate depression with aches, pains and weakness, and use a variety of somatic metaphors to describe depression (Hamdi et al., 1997; Sulaiman et al., 2001). This correlates well with traditional Islamic or 'Prophetic medicine' which incorporated ideas assimilated from Hellenistic society (Arafa, 2000). The ancient Indian 'Ayurvedic' system also takes a more combined physical and mental approach. Symptoms of 'gas' and 'feelings of heat' were identified by Punjabi women in London (Bhugra et al, 1997a) which is in accordance with traditional *ayurvedic* models of hot and cold.

An alternative theory is that some patients may emphasize somatic symptoms to negotiate a biomedical system and thus may actually be trying to "speak the language" of the biomedical practitioner (Lewis-Fernandez, 2005b). It has been noted that as acculturation proceeds, Asian immigrants tend to experience more affective and less somatic symptoms of depression possibly due to changes in the focus of self-attention (from somatic to affective) with increased acculturation (Chen et al., 2003).

Solutions

A number of steps can be taken to avoid missing somatic presentations of depression, and to formulate an acceptable management plan for both patient and doctor (Table 3). In general, evaluating somatic symptoms with an approach that considers biological, psychological, and social factors can help primary care physicians to detect cases of depression that have predominantly somatic presentations (Rosen et al., 1982).

Table 3: Managing somatic symptoms of depression (modified from Lewis-Fernandez et al, 2005a)

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| <ol style="list-style-type: none">1. Awareness of the possibility of somatic presentations, and enquiring about the patients' understanding of the somatic symptoms.2. Clarifying the patients' use of specific cultural idioms of distress to describe the somatisation process and being familiar with somatic metaphors.3. Recognition that somatic symptoms are real and not imagined.4. Exploring physical symptoms in the context of stressors with open-ended questions such as: "What are the problems that you are facing now that create difficulty or distress?"5. Relevant medical investigations should be performed but over-investigation should be avoided. Not conducting any tests may be negligent or taken as a sign of lack of caring. Discussion of negative laboratory or imaging tests with the patient is usually helpful.6. Discussing the patient's physical distress in relationship to their life situation and stressors should be discussed. Many patients will find a biopsychosocial interpretation helpful.7. Rare possibilities should be considered e.g. Somatosensory amplification; patients are hypervigilant to irrelevant bodily stimuli and report their awareness of bodily sensations as physical distress and Alexithymia; an extreme inability to verbalize feelings or emotional states, such patients are likely to express emotions purely or primarily with physical symptoms. |
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CONCLUSIONS The cultural difficulties in the diagnosis of depression in ethnic minority populations, including explanatory models have been described and some of the practices and skills that psychiatrists and general practitioners can employ to overcome these have been identified. The process of globalisation and continuing migration mean that the cultural boundaries that we have to negotiate in the management of diseases such as depression will change. Psychiatrists will have to become more sensitive to multiple belongings, multi-ethnic communities, long-distance networks and flexible identities (Bibeau, 1997). The key to successful treatment of depression in this multicultural setting is further research into the experience and management of depression across cultures, increasing awareness of cultural differences amongst clinicians, training in culturally sensitivity and novel strategies that help overcome these cultural boundaries.

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