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COMMENTARY

Screening for depression and cognitive impairment in older people from ethnic minorities

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Introduction

In the next decade the UK will experience an increase in the number of older people from ethnic minority groups, particularly those who originated from the Caribbean and the South Asian sub-continent [1, 2]. Ethnicity may be seen as a personal expression of identity which may change with time, life experiences and place of habitation [3]. Ethnic minority elders can be described as heterogeneous groups of older people with defined cultural backgrounds [4].

Most psychiatric literature on old age is from North America and Western Europe [5]. The detection and management of dementia and depression among older people from ethnic minority groups has received relatively little attention, despite being associated with considerable disability. This is probably due to the complexity of cross-cultural issues [6, 7]. Currently available screening tests may not be applicable to these groups because of cultural and language constraints. Migrants may have different cultural perspectives and experiences after settling in the UK [8] and so screening instruments developed in the country of origin may not be relevant.

Cross-cultural development and use of screening instruments

To provide a scientific basis for the study of mental disorders across cultures, instruments should be designed which can be used in different cultures and provide reliable and valid data. Traditional approaches in cross-cultural research have been classified according to the standard anthropological terms 'emic' and 'etic' [9, 10]. The emic approach uses variables and observations that are culturally specific to a particular group, at a certain period in time, to develop an instrument. This does not allow for comparative research as it looks at variables in terms of language and culture and the instrument may not be relevant to other groups. The etic approach applies the same instrument in different cultures and by default does not provide insight into any cultural differences between groups and misses culturally specific symptoms. The ideal for comparative research would be a design that incorporated the descriptive qualities of the former approach with the validity across cultures of the second.

An anthropological approach to developing psychological instruments involves spending time in the culture of interest, generating a vocabulary for psychological distress and researching the cultural concepts associated with it [6]. This is often time-consuming and impractical. A modification involves the use of focus groups, formed to elaborate on key issues by using structured or semi-structured interviews, informal discussions, questions and vignettes. Such groups may include professionals (e.g. psychiatrists, sociologists and anthropologists) and lay members with experience of the culture and language. Good translation and back-translation are cardinal features [11–13].

Screening for mental illness

Certain ethnic minority groups have higher rates of physical illness, for example coronary artery disease [14], diabetes mellitus [15] and hypertension [16].

Physical disability has been related to a higher rate of depression [17]. The community prevalence of depression in South Asian elderly subjects may approach 20% [18] and is 13–19% in black people from Africa and the Caribbean [19]. The community prevalence of dementia shows greater variability, with figures ranging from 2–8% for English-speaking black people from Africa and the Caribbean [19], higher levels for non-English speakers (black Africans and Chinese) and lower levels (4%) in elderly South Asians [18].

Screening instruments for cognitive impairment and depression are available in primary and secondary care [20], but may give false positives, especially for cognitive impairment [21, 22]. They are better used where the prevalence of mental illness is higher (for example in residential and nursing homes) [23] or if there is clinical suspicion of psychiatric illness.

Some general practitioners may not feel adequately trained to screen for and manage mental health problems [21]. This problem is accentuated when dealing with elderly people from different ethnic minorities, where culture and language may affect the presentation and consultation. The burden of untreated mental illness on the patient, caregivers and statutory services is high. Ethnic minority elders are under-represented in health, social, mainstream and voluntary services [24–26]. Depression in older people is common and treatable. Early identification of dementia allows for greater support, therapeutic intervention for concurrent illness and facilitating health and community services. Screening instruments can assist diagnosis.

Precedents have been set for using screening instruments devised in the West in other communities. Ideally they need to be validated in community populations, compared with a standard and have high sensitivity and specificity. Some instruments have now been translated, but few have been validated and little is known about their psychometric properties.

Screening for cognitive impairment

Cognitive impairment has been documented and studied in many countries. The criteria of the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* for dementia require the effects of culture and education to be considered when reaching a diagnosis. Different cultures have unique patterns of experience, such as education, which influence performance during cognitive testing. Screening tests for cognitive function rely greatly on language recognition and ability.

The Mini-Mental State Examination (MMSE) [27] was originally developed in institutionalized subjects but has been widely used for population screening to estimate the prevalence of severe cognitive impairment. The MMSE has been assessed in primary care and shown to increase recognition of cognitive impairment, be acceptable to patients and have consistency between interviewers [22]. It is a popular instrument in cross-cultural research and has already been modified and translated into languages including Chinese and Finnish [28], Korean [29] and Hindi [30]. There has been criticism that the MMSE has cultural and educational bias [31–37]: the association between years of education and test performance is shown in community and hospital samples. This is pertinent when considering the use of MMSE in populations who have fewer years of education, whereby lower attainment would result in lower scores and possible mis-classification as cognitive impairment. The use of age- and education-specific equations has been suggested to improve interpretation of scores [38, 39]. Studies have also shown independent relationships with ethnic background [40] and associations with lower socio-economic status [41]. Current studies are validating the use of the MMSE with South Asian and African Caribbean groups in the UK [42]. The Abbreviated Mental Test Score [43] has also been translated [44], with similar reservations about its performance across cultures.

Some instruments are devised for specific communities using a combination of items from different scales and new items, rather than using a single scale or developing a new one. This approach has generated a cognitive instrument for Cree Indians and English-speaking Canadians [45]. This instrument has high sensitivity and specificity and the approach is now being tested in other cultural groups.

Screening for depression

There are similarities in the pattern of depression across cultures [9]. The vocabulary employed to describe symptoms of depression can be complex and interpretation of analogies or local idiom can be very difficult. For example, in some South Asian languages the words used to describe pain may be used to signify a physical pain and an expression of emotional pain or distress (heartache). The translated meaning may not be conveyed, or may be lost.

There are many screening instruments for depression including the Geriatric Depression Scale (GDS) [47], Hospital Anxiety and Depression Scale [48] and the BASDEC [49].

The GDS and BASDEC have been specifically developed for an older population. The GDS was originally devised as a 30-question scale. Shorter versions are more suitable for general practice, with the 15-item scale demonstrating a sensitivity of 91% and specificity of 72% in a community sample [50]. It has been studied in physically ill and cognitively impaired subjects. Examples of adapting the GDS include its use in India with a rural illiterate population [51] and with Chinese immigrants in the USA [52].

The BASDEC (an adaptation of the Brief Assessment Schedule) is presented as a deck of 19 cards. The cards are presented to the patient one at a time and can be read by them or to them. Sensitivities and specificities of 71% and 88% [49] and 91% and 85% [53] have been demonstrated with hospital inpatients but no data are available on community populations. Although the BASDEC cards have been translated into South Asian languages, they have not yet been validated in these groups but are being used in current research [42].

Studies with the older people from Somali and Bengali communities in London have used pre-existing scales, including one for assessing anxiety and depression. This was translated by health care professionals, it demonstrated good internal consistency and allowed for comparison of results across communities [54].

Various scales have been translated and modified in the UK, but not specifically for older people. The Hospital Anxiety and Depression Scale has been translated into Urdu [55].

There are few examples of screening instruments developed specifically for particular elderly groups. This may reflects the degree of initial work required or perhaps a lack of research interest. In London an instrument for detecting emotional distress in older African-Caribbeans has been developed [56]. After semi-structured interviews with older African-Caribbeans, a lay classification of mental illness and 13-point screen were produced [57]. This allowed community participation, discussion of cultural concepts and formulation of an instrument which reflected these considerations.

Conclusion

The use of existing screening instruments has the advantages that they are readily available, accessible and familiar. This saves time and money. It is also reassuring to have a previously validated instrument as a basis for modification. With so many minority groups in the UK, a well-constructed and practical protocol for modifying present instruments may be sufficient. The disadvantages are those of cultural inappropriateness and the necessity for a rigorous translation and modification process, without compromising validity.

New instruments have the advantage that they are developed for a specific community, are culturally sensitive for that group and provide pertinent information. However, this may lead to less comparable results between groups and limited applications. Moreover, developing new instruments can take a long time.

Descriptions of emotional concepts associated with depression tend to be unique to particular cultures, and cognitive screening depends on greatly on language ability. If rating scales are not newly developed and rely on pre-existing scales then the use of focus groups, assessment, pre-testing and piloting are essential. The ratings may also have to be reviewed in the context of a subject's education, culture and gender. Also, with the evolution of communities instruments may need refinement and updating with time.

No nationally validated screening instruments are yet available for South Asian and African-Caribbean elderly people. Research in the UK is now being directed towards screening instruments in these groups [56, 58, 59]. The comparison of newly developed culture-specific tests with modified existing tests in different ethnic groups may reveal whether current screening instruments can be adapted to provide sufficient and acceptable information or whether they should be superseded by specifically designed instruments.

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