

LETTERS

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Validation of the 10/66 Dementia Research Group's 10/66 Dementia diagnosis in Iran

A recent review of the prevalence of dementia in all world regions revealed a particular paucity of data from the Middle Eastern region (Ferri *et al.*, 2005). Iran is one of the largest countries in this region, with a population of 70 million, of whom 5.2% are aged 65 years and over and where life expectancy is already 71 years (www.amar.ir – Iranian Government Statistics site). Our best estimates suggest that there may be nearly 200,000 people living with dementia in Iran at the moment (Ferri *et al.*, 2005). The 10/66 Dementia Research Group developed and validated a cultural- and education-fair dementia diagnosis in 26 centers worldwide (Prince *et al.*, 2003). We have now assessed the feasibility and validity of a Farsi version of the 10/66 dementia diagnostic system in Ekbatan, Tehran, Iran.

Sixty people with dementia and 60 similarly aged controls who were free of dementia were selected from registers held by the Iran Alzheimer's Association (IAA) and invited to participate. Those with dementia had already sought help from the IAA; the diagnosis (according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994) criteria) was reconfirmed by an independent clinician. Controls were selected from a partial register of older residents, military veterans' associations, and volunteer organizations. Another clinician (NN) administered the interviews comprising the Geriatric Mental Status (GMS; Copeland *et al.*, 1986), the CERAD 10 word list learning with delayed recall (Ganguli *et al.*, 1996), the Community Screening Instrument for Dementia (CSI-D, informant and participant versions; Hall *et al.*, 1993). All instruments were translated to Farsi, back translated to English and assessed for acceptability. Informed consent was obtained for all participants and the study approved by the ethics committee of the Memory and Behavioral Neurology Department (MBND) at Tehran University of Medical Sciences. Nearly all interviews were conducted privately at the IAA, and the interviewer (NN) was masked to case/control status where possible. For each cognitive test we calculated the area under the curve (ROC) and their specificity and sensitivity at the optimum cut-off point. We also calculated the sensitivity, specificity and agreement (kappa) of GMS/AGECAT dementia, probable

dementia using the CSI-D cognitive test and cognitive test and informant interview combined, and the 10/66 Dementia algorithm that incorporates information from GMS, CSI-D and CERAD 120 word list against the gold standard of the clinician's DSM-IV dementia diagnosis.

The age distribution of dementia cases (mean 74.9 years, SD 6.4, range: 65–89) and controls (mean 72.0 years, SD 5.6, range: 65–87) was similar. By design, the male to female ratio was 1:1 for both cases and controls. The area under the ROC curve was high for all the cognitive measures (between 0.95 and 0.99), with the CSI-D DF-SCORE (combining information from the cognitive test and the informant report) performing best of all (see Table S1 available online as supplementary material attached to the electronic version of this letter at www.journals.cambridge.org/jid_IPG). The optimum cut-off points were similar to those previously recommended for the CSI-D (Hall *et al.*, 1993) and to those identified in the previous 10/66 international pilot study. The 10/66 diagnostic algorithm performed better than GMS diagnostic assessments, with a kappa of 0.97 and sensitivity and specificity of 98.3%.

The study is limited by the purposive selection of participants, and the difficulty of maintaining masking to case status. Furthermore, controls needed to be healthy enough to travel to the AAI centre for assessment. Hence, the very favorable sensitivities and specificities recorded in this study may not be achievable in population surveys. Nevertheless, this pilot study suggests that the 10/66 assessment protocol is feasible and practical, and that the 10/66 dementia diagnosis is likely to be as valid in this setting as in the many other regions and cultures in which it has already been tested. The Farsi version of these measures will be made available to download from the 10/66 study website at www.alz.co.uk/1066.

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The contribution of elderly suicide rates of the three constituent countries of the United Kingdom to the overall national suicide rate

We recently reported age-associated suicide rates and trends over time for elderly suicide rates for the whole of the U.K. and its three constituent countries (England and Wales, Scotland and Northern Ireland) (Shah and Coupe, 2009). That study, in part, was conducted to examine the impact of the suicide prevention policies for each of the three constituent countries as the governmental suicide reduction targets for 2010, 2011 and 2013 move closer for England, Northern Ireland and Scotland respectively.

Each of the three constituent countries has developed its own national suicide prevention strategy. The governmental initiative *Health of the Nation* (Department of Health, 1992) set a target to reduce the suicide rate by 15% by 2000 in England. A subsequent initiative, *Saving Lives: Our Healthier Nation* (Department of Health, 1999), set a further target to reduce the suicide rate by at least 20% by 2010 in England. This was supported by the National Suicide Prevention Strategy for England (Department of Health, 2002). A suicide prevention action plan for Wales is currently being developed (Welsh Assembly Government, 2008). The national suicide prevention strategy *Choose Life* for Scotland (Scottish Executive, 2002) is a 10-year plan with a target reduction of 20%, from 17.4 per 100,000, to be reached by 2013. In Northern Ireland, the national suicide prevention strategy was initially implemented through the *Promoting Mental Health* strategy (Department of Health, Social Services and Public Safety Northern

Ireland, 2003) and subsequently enhanced by a separate suicide prevention strategy *Protect Life* (Department of Health, Social Services and Public Safety Northern Ireland, 2006) with the aim of reducing the overall suicide rate by 10% by 2008 with a further reduction of 5% by 2011.

If the impact and relative contribution of the suicide prevention strategies for each of the three constituent countries on the overall elderly suicide rates for the U.K. is to be evaluated then it would be important to examine the contribution of elderly suicide rates in each of the three constituent countries to the overall elderly suicide rates in the U.K.

Data on suicide rates in the age-bands 65–74 years and 75+ years for both sexes in the U.K. and the three constituent countries were ascertained from the WHO website (www.who.int/whosis/database/mort/table1_process.cfm) for each of the 24 years from 1979 to 2002. Multiple regression analysis with the Enter method was used to examine the relative contribution of each of the three countries to the time trends in elderly suicide rates for the whole of the U.K. for both sexes; elderly suicide rates for the whole of the U.K. was the dependent variable and the suicide rates for each of the three constituent countries, the elderly population size for the whole of the UK and each of the three constituent countries were the independent variables. The WHO website (www.who.int/whosis/database/mort/table1_process.cfm) provided data on the elderly population size. Elderly population size was included as an independent variable because there is previous evidence of a positive correlation between elderly population size and elderly suicide rates (Shah *et al.*, 2008a), a positive correlation between elderly dependency ratios and elderly suicide rates (Shah *et al.*,