The primary care environment is familiar to people with long-term conditions, as they are invited to attend regularly for review. For those at increased risk of dementia, this is a convenient, cost-effective and non-stigmatising environment to enquire about and/or identify concerns where the person, their family and carers can receive holistic consideration.

In these times of austerity, if the needs of the growing number of people with dementia, their families and carers are to be met, all those involved in the design and provision of dementia care must ensure the most efficient use of resources. Therefore, recognition of dementia earlier in the course of illness by targeting 'at risk' people aged 65 to 74 is necessary and entirely justified.

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General practitioners should be conducting targeted screening for dementia in people aged 65 to 74

NO

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Screening for dementia syndrome is not justified by available evidence, applying the Wilson and Jungner criteria for screening and the definition of screening on the UK Screening Portal.[1] Screening becomes appropriate and ethical when four sets of conditions—about the condition, its diagnosis, its treatment and the costs of treatment—are met.

The condition

The condition must be important, with detectable risk factors and disease markers, a recognisable latent or early symptomatic stage and a clearly understood natural course. All cost-effective primary prevention interventions should have been implemented as far as practicable.

There is no doubt that dementia syndrome is important. It costs the health and social services more than cancer, heart disease and stroke combined, and its prevalence is rising. It is a syndrome of symptoms that includes a range of neurodegenerative disorders that share two common features: they are progressive, and no disease-modifying treatments are available for them despite decades of research. The survival time for most people who develop dementia is short, being 4.5–5 years from symptom onset[2] to 3.5 years from diagnosis,[3] making dementia a condition in need of palliation.

Risk factors for dementia are similar to those of cardiovascular disease, but with some evidence of genetic vulnerability, especially in those who acquire the syndrome relatively early in life. As yet, there are no disease markers available for population screening.

Mild cognitive impairment, the presumed prodromal state of dementia syndrome, is problematic

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because a proportion of those with it revert to 'normal' cognitive function. The natural course of dementia is supposedly different between dementia subtypes (Alzheimer's disease, vascular dementia, and so on) but these clinical descriptions overlap and the 'natural history' varies greatly.

No primary prevention interventions have been consciously implemented, but the incidence of dementia seems to be declining,[4] possibly because of systematic medical attention to cardiovascular risk factors.

The diagnostic test

> There must be a simple, safe, precise and validated screening test that is acceptable to the population. There should be an agreed policy on the further diagnostic investigation of individuals with a positive test result.

Although questions about memory problems have been included in general practice (GP) screening in the United Kingdom (UK), they are a poor predictor of who gets dementia syndrome. Palmer's Swedish study[5] demonstrated that asking questions about memory, using the mini–mental state examination (MMSE) as a second-stage screening question, and following up those with lower MMSE scores, identified less than one in five of those who subsequently developed dementia. Subjective memory complaints are common in the older population, and are associated with depression, trait anxiety and physical frailty.[6]

A recent systematic review[7] concluded that there are few brief cognitive function tests with good performance available for use in primary care, the exception being the MMSE, which has the longest administration time and is not free for public use. Most brief instruments had been validated in only one community-based study.

In the UK, there is agreed policy in investment in memory clinics to further diagnostic investigations, even though there is little evidence to support this form of service organisation,[8] other than self-evaluations of innovative clinics. Expansion of memory clinics in the National Health Service in the UK has been substantial.

Effective treatment

> There should be an effective treatment for patients identified through early detection, with evidence of early rather than late treatment leading to better outcomes. This evidence should come from high-quality randomised controlled trials showing that the screening programme is effective in reducing morbidity. The benefit from the screening programme should outweigh the physical and psychological harm (caused by the test, diagnostic procedures and treatment). All other options for managing the condition should have been considered (e.g. improving treatment, providing other services), to ensure that no more cost-effective intervention could be introduced within the resources available.

The currently available medical treatments (the cholinesterase inhibitors and memantine) produce small changes in cognitive function in some people with dementia, but at the population level their clinical benefits are probably negligible

There is no evidence available that suggests that earlier diagnosis affects clinician, patient or family decision-making.[7] The trials have simply not been carried out. The currently available medical treatments (the cholinesterase inhibitors and memantine) produce small changes in cognitive function in some people with dementia, but at the population level their clinical benefits are probably negligible.[7]

Complex non-pharmacological interventions, like cognitive stimulation and exercise, can show

small beneficial effects for patients or carers, but the availability of such complex interventions is limited. There are no experimental studies to refute or confirm harms of screening. Other options for responding to dementia syndrome have not been debated in the UK.

Costs

> The opportunity cost of the screening programme (including testing, diagnosis and treatment, administration, training and quality assurance) should be economically balanced in relation to expenditure on medical care as a whole (i.e. value for money). Adequate staffing and facilities for testing, diagnosis, treatment and programme management should be available prior to the commencement of the screening programme.

No economic evaluations of dementia screening have been carried out, but there has been pressure to secure funding for testing and diagnosis programmes, which are now incentivised in general practice as part of the Quality and Outcomes Framework.

Conclusions

We need to understand the true balance of benefits and harms of dementia screening, especially given the small, uncertain benefits of treatment seen on continuous measures of cognitive function or carer burden. Screening programmes for dementia should not have been introduced until we had measured their benefits and harms, and learned more about the impact of therapies.

General practitioners should instead enhance their diagnostic skills, aiming to recognise the features of dementia syndrome as it emerges in individual patients, and acquire the repertoire of responses that serve the best interests of their patients, and of family carers. The challenge is to minimise misattribution of cognitive or behavioural changes to ageing or personality, and to respond in a timely way to the concerns of people with dementia symptoms, and their families. These may be difficult tasks, but they do not reduce the practitioner to a screening technician, operating a potentially flawed system.

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COMPETING INTERESTS

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