

On balance, this study shows that NSAIDs should not be given routinely after hip replacement surgery, but they might be used cautiously after due consideration of the overall likely benefits and risks to the patient.

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Ageism in services for transient ischaemic attack and stroke

Could be cut by emulating successful efforts against ageism in heart disease care

Societies based on market driven economies have deeply embedded value systems that inherently favour economically productive younger citizens and marginalise non-productive older citizens. Health services reflect the societies they serve. One manifestation of institutionalised ageism is overt and covert rationing of health care that discriminates against older people. This might be acceptable if the clinical outcomes of treating older people were inferior. However, the notion of age based rationing of treatment has become unsustainable and unethical as robust evidence has accumulated that shows comparable outcomes for treatment of older and younger people.

In England, decades of health service underfunding have provided an environment in which ageism has flourished—it is endemic.¹ Whenever a clinical stone is turned over, ageism is revealed—for example, in cancer services,² coronary care units,³ prevention of vascular disease,⁴ and in mental health services.⁵ To this list we must now add the management of transient ischaemic attacks and minor strokes, as a study in this week's *BMJ* by Fairhead and Rothwell shows.⁶

Fairhead and Rothwell investigated the management of transient ischaemic attacks and minor stroke in routine clinical services compared with a nested population receiving care based on national clinical practice guidelines.⁶ In the routine service they found substantial under-referral for carotid artery imaging and subsequent undertreatment of symptomatic

carotid artery stenosis in patients over the age of 80. The two study populations were comparable in terms of age, sex, and socioeconomic status and, for patients under 80, similar rates of performing clinical investigations were seen. Avoiding a disabling stroke is a priority in all patients, irrespective of age, and the authors conclude that the older patients in the population given routine care were discriminated against.

This study lacked, however, a view from the practitioners who invisibly contributed by providing care for these patients. Did they really make inconsistent clinical choices biased by the patients' ages? One qualitative study of the management of cardiovascular disease that identified ageism as a factor in suboptimal care for older people showed that doctors felt uncertain about the best and safest clinical practice, were unaware of the latest relevant research evidence, and were hampered by problems with local services.⁷

From an older person's perspective this apparently benign form of age discrimination is just as damaging as blatant ageism because older patients are still denied potentially beneficial treatments openly available to younger people. But understanding the reasons for such discrimination does suggest a role for education as an important corrective.

At the heart of the educational argument for stroke lies the counterintuitive notion that carotid endarterectomy for symptomatic carotid artery stenosis confers

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greater benefit for older people by virtue of their higher absolute risk for future stroke.⁸ Stroke specialists have a responsibility to disseminate these principles of good practice actively in their local healthcare communities. One way is to redesign stroke services and to integrate specialist and primary care responses to the management of transient ischaemic attacks in a similar manner to the approaches developed for coronary heart disease, which have led to a welcome reduction in the degree of related ageism.⁹

Ageism will always prosper when resources are inadequate for the target population. The UK government has recently been embarrassed into action by a damning report from the National Audit Office that highlighted deficiencies in specialist stroke services nationally, including the underprovision of clinics for patients with transient ischaemic attacks.¹⁰

Tackling institutionalised age discrimination more broadly in health services will require national leadership, with governments and health services openly acknowledging the presence of ageism. In England some early progress has been made, almost certainly due in part to a policy initiative delivered through the National Service Framework for Older People since 2001.¹¹ Mortality from coronary heart disease and cancer declined between 1993 and 2003, and access to elective surgery increased between 2000 and 2003.¹²

Some will argue, however, that ageism is so deeply embedded in our health service that policy initiatives will never represent more than a tinkering round the edges. Don't be surprised if older people lose trust in

their health service and lobby for protection through anti-discrimination legislation. The result would indeed be a patient led health service.

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Predictive genetic testing for type 2 diabetes

May raise unrealistic expectations

The discovery earlier this year that a variant of the TCF7L2 (transcription factor 7-like 2) gene is associated with type 2 diabetes was reported in a front page story in the *New York Times*.^{1,2} The principal investigator, Kari Stefansson, told the newspaper that the discovery could lead to a diagnostic test to identify people who carry the variant gene. People who knew of their extra risk, he said, would be motivated to avoid the lifestyle habits that lead to diabetes. A Scottish scientist headed the research team, which led the Glasgow Herald to report, "Discovery of holy grail will help scientists treat diabetes."³

Undeniably this discovery is noteworthy. Type 2 diabetes is a leading cause of morbidity and mortality in the developed world and is increasing in prevalence worldwide. The association is robust—the finding has been replicated in three large independent study populations and offers potential new insight into the pathobiology of diabetes. Yet the claim that this knowledge will lead to a diagnostic test and hence to disease prevention—now routine for such genetic discoveries—may not be true. We believe that this syllogism (a logical argument in which one proposition (the conclusion) is inferred from two others (the premises))

oversimplifies the research findings and the challenge of translation and, above all, misleads the public.

The investigators estimated a 21% population attributable risk for the risk genotypes. This means that 21% of cases of the disease can be prevented when the negative effects of the genetic "exposure" are eliminated. However, by itself, a large population attributable risk does not indicate what efforts are needed to reduce the prevalence of diabetes in terms of the number who need intervention or the effectiveness of the preventive strategy. If this discovery led to a 100% effective intervention that specifically targeted the effects of the genetic variant, 45% of the general population would need to receive this intervention to prevent 21% of diabetes cases. If we assume an overall lifetime risk of diabetes of 33%,⁴ 88% of heterozygous carriers and 63% of homozygotes might not benefit from this intervention because they would not develop diabetes despite their TCF7L2 carrier status or they would develop diabetes from other causes. An intervention that specifically targets the effects of TCF7L2 variants would need to be cheap, harmless, and burdensome to warrant such substantial overtreatment.