duced as individual tests in the universal form used now.

The number of new diabetics detected, the ramifications of the glucose tolerance test results and their significance, and the number of diabetics who emerged from those who initially tested negative, have all been extensively reported in the publications of the Working Party.

The data from these studies, particularly those from the reviews over the following 10 years, contributed to the national debates on an agreed set of criteria for glucose intolerance.[7]

The study highlighted the importance if a multi-disciplinary approach. Although initiated and coordinated by a working party of the Birmingham Research Unit of the College of General Practitioners, it would not have been possible without the equal involvement of local consultants and laboratory-based colleagues, the GPs from the practices involved, local nurses and health visitors, and the pharmaceutical industry.

It is ironic that our main finding at that time[2,8,9,10] was the inefficiency of mass screening of urine for presence of glucose as a method for uncovering previously undiagnosed diabetes. The best approach, as now, was one based on constant awareness by the GP of the possibility of diabetic risk, where age, being overweight, family history, and the presence of cardinal symptoms, physical signs, and other commonly associated pathology might indicate an increased likelihood.

Studies of the family history of diabetes,[11] diabetes as a community health problem,[12] and disease concurrence in diabetes[13] were also carried out. The diabetic syndrome[14,15] and the use of disease registers[16] were evaluated.

Bullimore and Keyworth would have done well to take note of this earlier work on the subject of screening for diabetes by urinanalysis. The passing years have not lessened the value of one of the earliest pieces of cooperative research by a College working party consisting of GPs, diabetologists, and statisticians.

L A PIKE
D L CROMBIE

Birmingham Research Unit
Lordswood House
54 Lordswood Road
Harborne
Birmingham B17 9DB

References

1. Bullimore SP, Keyworth C. Finding diabates: a method of screening in general practice. *Br J Gen Pract* 1997; **47:** 371-374.
2. Report of a working party appointed by the College of General Practitioners. A diabetes survey. *BMJ* 1962; **i:** 1497-1503.
3. Crombie DL. Diabetes surveys. *Research Newsletter of the College of General Practitioners* 1957; **4:** 319-321.
4. Research Committee of Council. Diabetes detection drives. *J Coll Gen Pract* 1959; **2:** 189-192.
5. Report by the Birmingham Diabetes Survey Working Party. Five-year follow-up report on the Birmingham diabetes survey of 1961. *BMJ* 1970; **3:** 301-305.
6. Report by the Birmingham Diabetes Survey Working Party. Ten-year follow-up report on the Birmingham diabetes survey of 1961. *BMJ* 1976; **2:** 35-37.
7. Fitzgerald MG, Keen H. *BMJ* 1964; **1:** 1568.
8. Editorial. Detection of diabetes. *BMJ* 1962; **i:** 1536-1538.
9. Crombie DL. Testing in family practice for diabetes. *J Coll Gen Pract* 1964; **7:** 379.
10. Crombie DL. Diabetes mellitus - incidence, causation and management. *Proceedings of the Royal Society of Medicine* 1962; **55:** 205-207.
11. Report of a Working Party appointed by the College of General Practitioners. The family history of diabetes. *BMJ* 1965; **1:** 960-962.
12. Crombie DL. *Diabetes: a community health problem. The view of the general practitioner.* (Excerpt from the papers read before the Health Congress of the Royal Society of Health.) London: Royal Society of Health, 1963.
13. Fleming DM, Crombie DL, Cross KW. Disease concurrence in diabetes mellitus: a study of concurrent morbidity over 12 months using diabetes mellitus as an example. *Journal Epidemiology and Community Health* 1991; **45:** 73-77.
14. Crombie DL. The diabetic syndrome. A hypothetical model. *Lancet* 1964; **1:** 626-629.
15. Crombie DL. The diabetic syndrome. *J R Coll Gen Pract* 1968; **15:** 428-436.
16. Fleming DM. Diabetic registers in general practice. *BMJ* 1994; **308:** 134.

Sir,

By recording the extent of negative attitudes to the diagnosis of type 2 diabetes in a screening programme, Bullimore and Keyworth (June *Journal*) have made a valuable contribution to a very limited literature.[1] However, they also present but do not comment on the significance of data that suggest they may have encountered a much more serious type of resistance to accepting the diagnosis of diabetes. This needs to be addressed if calls for wider screening are to be implemented[2] in view of the uncertainty about the long-term impact of screening, both on those who test positive and are subsequently followed up, and also on those who are told they are not at risk.[3]

Fifteen of the 32 individuals who originally recorded their urine test as positive subsequently said that they had made a mistake and that their test had been negative. Although it is possible that this was the result of a mistake in completing the return slips, the change in response may also represent a form of denial of being at risk of diabetes, which could obstruct necessary immediate follow-up and subsequent attempts to carry out further screening or encourage lifestyle modification.

Perhaps explanations for the positive test other than the onset of diabetes had become more convincing to the subjects before they were followed up, leading them to doubt the validity of their self-administered screening tests. For example, students offered tests for a fictitious risk factor subsequently rated the test as being less accurate if they were diagnosed as being at risk rather than testing negative. The tendency to denigrate the test accuracy was even more marked when told that they alone had tested positive out of the group.[4] The explanation offered for these findings was that more thought is given to undesirable than desirable facts. In other words, if it is good news, then relatively little further attention is offered. If it is bad news, then a complex set of thoughts is triggered in which alternative (and perhaps more acceptable) explanations might be uncovered.

Reluctance to acknowledge a diagnosis of diabetes is only one of a number of social and psychological issues that need to be addressed through further research alongside current work to establish whether screening for type 2 diabetes is likely to be effective.

ANDREW FARMER

Health Services Research Unit
Department of Public Health
University of Oxford
Institute of Health Sciences
Old Road, Headington
Oxford OX2 7LF

References

1. Bullimore SP, Keyworth C. Finding diabetics - a method of screening in general practice. *Br J Gen Pract* 1997; **47:** 371-374.
2. Macready N. American Diabetes Association calls for testing all those over 45. *BMJ* 1997; **315:** 11.
3. Stewart-Brown S, Farmer A. Screening could seriously damage your health. *BMJ* 1997; **314:** 533-534.
4. Jemmott JB, Ditto PH, Croyle RT. Judging health status: effects of perceived prevalence and personal relevance. *J Pers Soc Psychol* 1986; **50:** 899-905.

Sir,

In their study on postal screening for diabetes (June *Journal*), Dr Bullimore *et al* express surprise at finding that some patients 'showed surprisingly negative attitudes to the diagnosis of an illness, and

in some cases a lot of persuasion was necessary to get the patient to agree to follow-up and treatment.'

Diabetes is a lifelong illness with a significant morbidity and mortality. Most patients will have preconceived ideas about such a diagnosis, and to lay the responsibility of screening for this on them by means of a postal test is an unjustified abrogation of responsibility.

As in any screening, be it cervical smears, blood pressure, or mammography, most patients' expectation is that the test will be normal. Unlike those symptomatic patients who attend our surgeries, they have not considered the possibility of some pathology being found. If then, the patient gets a positive home dipstick result, are they not likely to be upset, fearful, and anxious? While it is easy to say that these fears are unfounded or allayed by offering a contact number, perhaps those patients who were reluctant to cooperate in this study were struggling with their new found 'pathology'.

Although the authors have outlined a cheap screening method, I am not satisfied that the pitfalls and potential harm justify the saving, nor indeed is it clear to me that, although the majority of patients found it acceptable (i.e. those reassured by a negative test), this applied to those for whom the result was positive.

There is no substitute for a face-to-face discussion on the implications and significance of a test (however simple to perform) that could have such profound and lifelong consequences.

CLARE CAMPBELL

The Health Centre
Holmes Rd, Broxburn
West Lothian EH53 0AY

Reference

1. Bullimore SP, Keyworth C. Finding diabetics - a method of screening in general practice. *Br J Gen Pract* 1997; **47:** 371-373.

Death and the general practitioner

Sir,

I note the comments made by Jeremy Brown in the International digest section (June *Journal*)[1] about the expectations of the family practitioner by relatives of deceased patients.[2]

I recently had the good fortune to visit the department that produced this paper, which is a residency programme in central Ohio run by an experienced group of family practitioners. The authors were principally residents at the department and the director of the Department of Family Practice. Jeremy Brown makes some pertinent comments about the differences between American and British general practice on this particular issue.

While I was present at the residency programme, we discussed the role of the GP dealing with death and the dying patient and home visits. All of the American family physicians I spoke to were astonished that British GPs tend to visit the bereaved relative as a routine courtesy. This was only one of a number of variations between the way we practice in the UK and the way our colleagues practise in the USA.

I would agree that the questions in the paper were devised by the authors and reflected their expectations; the results, pleasingly for the authors, confirmed these expectations. Looking at any one area of US family practice and comparing with British general practice, the gulf is massive; this paper is only one of many that highlight the differences in clinical behaviour, attitudes, and relationship with the patients. This came as a great surprise to me and emphasized the unique doctor–patient relationships that exist in the UK.

I would disagree somewhat with Jeremy Brown's assumption that all American doctors are extraordinarily reluctant to visit patients' homes, although I did note the increasing pressure to visit only with the approval of the HMO (Health Maintenance Organzation), which is the Insurance Company that approves the need for a visit in the first place.

I suspect there are a great many things that can be learned from the experiences of doctors visiting America and vice versa that would enhance the quality and content of general practice, but it is particularly exciting to be given the opportunity to see this at first hand and be able to comment on these issues.

PAUL DOWNEY

Pendeen Surgery
Kent Avenue
Ross on Wye HR9 5AL

References

1. Brown J. Death and the general practitioner. [International digest.] *Br J Gen Pract* 1997; **47:** 407.
2. Dangler LA, O'Donnell J, Gingrich C, Bope E. What do family members expect from the family physician of a deceased loved one? *Fam Med* 1996; **28:** 694-697.

Sir,

There has been a recent flurry of literature that appears to convey a message that the primary health care team is no longer perceived as being sufficiently competent to undertake the care of the dying.[1,2,3] This message was first delivered in this context in 1984 by Smith, then deputy editor of the *British Medical Journal,* when he stated that 'the era of well-intentioned amateurism is to be succeeded by hard-headed professionalism.'[4]

An extended role for specialist palliative care has been proposed again this year,[1] and it certainly has its place. However, no mention is made of the role already undertaken by the primary health care team and the extent to which palliative care is successfully implemented with cancer patients in the community. Furthermore, an increased need for specialist palliative care of non-cancer patients has also been postulated.[1] This is despite that fact that a large number of patients with non-cancer diagnoses are already given palliative care within the community by doctors with whom they have built therapeutic relationships over many years.

Is there evidence of a deficiency in the quality of care currently received in the community by both cancer and non-cancer patients that would warrant specialist referral? This needs to be verified before such proposals concerning the transfer of care are made, which may lead to a potential disintegration of the continuity of care provided by the primary health care team and its highly personalized approach in favour of the specialist.

Care of the dying is central to the work of the primary health care team. There is a role for the specialist, but it is the primary care generalist or 'gatekeeper' who should decide when this is appropriate. Furthermore, dying is a natural process, and the involvement of a specialist, who may be viewed as a symptomatologist, has the potential to further medicalize the situation.[5]

It is just over a decade since a palliative care specialist poignantly reiterated in this journal the role of the generalist in this important facet of primary care when he stated, 'Perhaps we should remind ourselves that it is better to help a colleague with a difficult case than to tell him he is wrong and that he should make way for the expert.'[6]

RODGER CHARLTON

School of Postgraduate Medicine
Keele University
Centre for Primary Health Care
North Staffordshire Hospital
Thornburrow Drive
Hartshill
Stoke-on-Trent ST4 7QB