This month • vocal behaviour • hypopituitarism • osteoporosis • nursing homes • prevention

Vocal behaviour of doctors

DO you reveal more to patients on the telephone than you think? Speech on the telephone, as in face to face conversations, contains two concurrent sources of information, the verbal component, that is, what you say and the vocal component, that is, how you say it. Vocal cues may be more valuable than verbal cues since they are under less conscious control.

In Harrigan and Gramata's study the recorded telephone conversations of American family physicians were independently assessed by 60 subjects to describe the doctors' performance on the telephone using scales for empathy, dominance and calmness. The greeting and middle phases of the conversations were identified and the amplitude of the voice measured. It was found that the middle phase of the conversation had the most effect on the overall impression of the doctor and the advice given while the greeting phase was usually stereotyped and conveyed little. Women were more likely to judge personal attributes of the doctor by the vocal cues and therefore any vocal effects may be more significant in women. As might be expected dominance was found to increase with increased amplitude and rate of speech.

Overall, the study suggests that the vocal cues of the middle part of a telephone conversation are important and that telephone conversations should be treated in the same way as the consultation. Patient-centred rather than doctor-centred telephone conversations could encourage compliance with the advice given and lessen the patient's anxiety. In other words: it's not what you say, it's the way you say it.

(J.A.)

Source: Harrigan JA, Gramata JF. It's how you say it: physicians' vocal behaviour. *Soc Sci Med* 1989; **28:** 87-92.

Hypopituitarism in the elderly

NO one knows how common hypopituitarism is in the elderly. The onset is usually insidious and when the diagnosis is finally made it is often clear that the condition has been present for several years. General practitioners need to be particularly vigilant to discover new cases among the many patients they see with vague malaise. However, it is a particularly satisfying diagnosis to make, with the potential to restore years of active life to an individual on the verge of senility.

The report of two cases by Beringer and colleagues in Belfast amply demonstrates this point. A woman aged 70 years and a man aged 75 years were referred for long term geriatric care. On examination they were discovered to have hypopituitarism. Introduction of hydrocortisone replacement therapy produced a dramatic response enabling both patients to return to full independence at home.

What was unusual about these patients was that they had both been first diagnosed as having primary hypothyroidism on the basis of low serum thyroxine levels with elevated thyroid stimulating hormone levels. Thyroxine replacement had only produced a short lived response prior to their reassessment. This contradicts standard teaching that pituitary failure is impossible in the presence of elevated thyroid stimulating hormone levels.

Having had a patient in whom a pituitary tumour was diagnosed too late for precisely this reason I have been alerted to this admittedly 'small-print' exception. However, we should all consider whether elderly patients with vague malaise could be suffering from hypopituitarism and should remember that elevated thyroid stimulating hormone levels do not exclude the diagnosis.

(J.H.)

Source: Beringer T, McClements B, Weir I, *et al.* Hypopituitarism in the elderly in the presence of elevated thyroid stimulating hormone levels. *Postgrad Med J* 1988; **64:** 943-944.

Reduced bone mass in daughters of women with osteoporosis

OSTEOPOROSIS is a disorder associated with considerable morbidity and mortality. A family history of osteoporosis has been cited as an important risk factor despite there being little experimental evidence.

This study aimed to determine whether premenopausal daughters of women with postmenopausal osteoporosis have a lower bone mass than other women of the same age. The patients studied were 25 mothers with postmenopausal osteoporosis and 32 of their daughters. Control patients were 20 normal mothers and 22 of their daughters. Measurements were made of the bone mineral content of the lumbar spine, femoral neck and femoral midshaft in the four groups.

It was found that postmenopausal women with osteoporosis had a significantly lower bone mineral content in the three bone regions studied when compared with normal postmenopausal women. The premenopausal daughters of women with osteoporosis also had a lower bone mineral content compared with control subjects. The deficit in mineral content was significant for the lumbar spine and femoral neck.

This reduction in bone mass, found in daughters of women with osteoporosis, may put them at increased risk of fractures. A family history of osteoporosis is therefore an important factor when considering hormone replacement therapy.

(V.O.)

Source: Seeman E, Hopper JL, Bach LA, *et al.* Reduced bone mass in daughters of women with osteoporosis. *N Engl J Med* 1989; **320:** 554-558.

The quiet nursing home

NURSING homes providing care for frail elderly and occasionally ex-psychiatric patients have become big business in this country and in the USA. In 1969–73 in the USA the nursing home population aged 65 years and older with chronic mental disorders more than doubled while the number of residents in this age group in psychiatric facilities fell by 30–40%. Ninety per cent of former state mental patients are now in alternative settings. Nursing home staff are seldom trained to meet the needs of these patients and there is often heavy reliance on strong psychotropic drugs as a form of control.

Massachusetts led the move towards nursing homes and in a recent study of the care requirements and the nature and extent of psychoactive drug use the clinical status and medication of 1201 residents were reviewed. The nursing homes were then visited and the clinical records, staff and residents interviewed. In a follow-up study a sub-sample of nursing homes with 837 residents was studied further to determine medication use, residents' clinical status, and staff members' knowledge of the drugs they were using.

Half of the residents were aged 75 years or older and 26% were aged 85 years or older. Most were women and 45% had never been married. One third had a

history of psychiatric hospitalization and the median length of stay was three years. Nineteen per cent of residents were reported to have been psychotic in the previous year. Overall 55% of residents were taking at least one psychoactive drug and 11% received medication from two or more drug categories. In the previous three years, the mean number of changes to drug dosage for each medication was 1.1. A mean of 3.8 entries had been made by the physician in the residents' records in the previous 12 months while a quarter of residents had no notes made by the physician during this period. Despite the fact that many of these residents were taking antipsychotic drugs no mention was made of tardive dyskinesia for any of the residents. However, on clinical survey moderate or severe signs of tardive dyskinesia were found in 4% of residents.

Staff were presented with vignettes to test basic levels of understanding of the drugs that they were administering. A mean of 50% gave the correct answer. For example, when asked about diazepam, 39% of the staff thought it was an antidepressant, 6% thought it was an antipsychotic drug and 15% did not know its purpose.

The authors conclude that there is a very high level of psychoactive medication used in nursing homes and that there are a group of mentally ill patients receiving important therapy with minimal professional supervision. They doubt whether such a high level of medication is necessary and suggest that more vigorous regulatory monitoring is needed. In the continuing debate in this country about the care of older people in private nursing homes, the findings of this study serve as a warning.

(T.O'D.)

Source: Avorn J, Dreyer P, Connelly K, Soumerai SB. Use of psychoactive medication and the quality of care in rest homes. *N Engl J Med* 1989; **320**: 227-232.

Cost effectiveness of hypertension programmes

HOW do you persuade a politician reelected every four to five years, that it is worth spending money on prevention in primary care? And if you do, how do you persuade colleagues that general practitioners can organize cheaper preventive care than health authorities' special programmes? This paper by Edgar and Schnieden is an important start towards clarifying the situation.

Two hypothetical five-year programmes were designed, realistically based on the results of the Medical Research Council trial on mild hypertension and prevention of stroke. One was based on health authority clinics run by specially trained health visitors in the evenings and the other was an opportunistic screening programme using local general practitioners in Stockport. The cost to the National Health Service in terms of the number of prevented strokes was determined for both models using statistics from previous screening programmes. In the target population aged 35–65 years (102 000 men and women) full take-up of the opportunistic programme run by general practitioners would result in a cost of £13 750 per prevented stroke as opposed to £16 500 for the clinic-based screening programme. Fourteen strokes would be prevented by the general practitioners and 12 by the clinics. However, if only 50% of the possible general practice patients had their blood pressure checked the cost per prevented stroke would rise to £17 550 and only seven strokes would be prevented.

The authors do note that preventive care can look expensive in the short-term compared with curative care but they do not take into account the economic and social costs of a disabling or fatal stroke in a young person. The authors also use the MRC trial figures which many experts believe underestimate the success of detecting and treating hypertension using older, less sophisticated methods.

This interesting paper supports those who believe that opportunistic screening by general practitioners is more cost effective than clinic-based screening programmes run by health authorities. The challenge to general practice is to ensure that it remains economical by keeping the rate of opportunistic screening at the highest possible level. But will that make me exceed my new budget?

(J.A.)

Source: Edgar MA, Schnieden H. The economics of mild hypertension programmes. *Soc Sci Med* 1989; **28**: 211-222.

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Contributions to the Digest pages are welcome from all readers. These should be from recent papers in research journals which general practitioners might not normally read. Send to: The Editor, Journal of the Royal College of General Practitioners, 8 Queen Street, Edinburgh EH2 1JE. Please quote the full reference to the article (authors, title, journal, year, volume, page range).

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