- Simpson M, Buckman R, Stewart M, Maguire P, Lipkin M, Novack D, et al. Doctor-patient communication: the Toronto consensus statement. *BMJ* 1991;303:1385-7.
- 2 Roter D. Which facets of communication have strong effect on outcome—a meta-analysis. In: Stewart M, Roter D, eds. *Communicating* with medical patients. Newbury Park, CA: Sage, 1989.
- 3 Stewart M. Effective patient-physician communication and health outcomes: a review. *Can Med Assoc* 1995;152:423-33.
- 4 Mishler E. The discourse of medicine: dialectics of medical interviews. Norwood, NJ: Ablex, 1984.
- Fisher S, Todd D, eds. The social organization of doctor-patient communication. Washington, DC: Center for Applied Linguistics, 1983.
   West C. Routine comblications: troubles with talk between doctors and batients.
- West C. Routine complications: troubles with talk between doctors and patients. Bloomington: Indiana University Press, 1983.
   Coulthard M, Ashby M. Talking with the doctor. J Communication
- Bruton C, Candlin C, Leather J. Doctor speech functions in casualty con-
- 8 Bruton C, candin C, Leatner J. Doctor speech functions in casually consultations: predictable structures of discourse in regulated settings. In: Nickel G, ed. Proceedings of the 4th International Congress on Applied Linguistics. Freiburg: Rombach, 1976:297-309.
- 9 Sinclair J, Coulthard M. Towards an analysis of discourse: the English used by teachers and putpils. London: Oxford University Press, 1975.
- Coates J. Women, men and language. London: Longman, 1993.
   Cameron D. Feminism and linguistic theory. 2nd ed. Basingstoke:
- Macmillan, 1992. 12 Woods N. Talking shop. In: Coates J, Cameron D, eds. Women in their speech
- communities. London: Longman, 1989.
  13 West C. When the doctor is a "lady": power, status and gender in physician-patient encounters. *Symbolic Interaction* 1984;7:87-106.
- physician-patient encounters. *Symbolic Interaction* 1984;7:87-106.
  14 Holmes J. Hedging your bets and sitting on the fence: some evidence for hedges as support structures. *Te Reo* 1984;27:47-62.

- 15 Cameron D, McAlinden F, O'Leary K. Lakoff in context: the social and linguistic functions of tag questions. In: Coates J, Cameron D, eds. Women in their speech communities. London: Longman, 1989:74-93.
- 16 Goodwin MJ. Directive-response speech sequences in girls' and boys' task activities. In: McConnell-Ginet S, Borker R, Furman N, eds. Women and language in literature and society. New York: Praeger 1980:153-73.
- 17 West C. Not just 'doctor's orders': directive response sequences in patients' visits to women and men physicians. *Discourse in Society* 1990;1:85-112.
- 18 Atkinson J, Heritage J, eds. Structures of social interaction: studies in conversation analysis. Cambridge: Cambridge Univesity Press, 1984.
- 19 Sinclair J, ed. Collins' Cobuild English Language Dictionary. London: Collins, 1987.
- 20 Coulthard M. On beginning the study of forensic texts: corpus concordance collocation. In: Hoey M, ed. Data, description, discourse: papers on the English language in honour of John McH Sinclair. London: Harper Collins, 1993:86-97.
- 21 Hoey M. Patterns of lexis in text. Oxford: Oxford University Press, 1991.
- 22 Sinclair J. Looking up: an account of the Cobuild project London: Collins, 1989.
- 23 Glaser BG, Strauss AL. The discovery of grounded theory: strategies for qualitative research. London: Weidenfeld and Nicholson, 1968.
- 24 Caldas-Coulthard CR, Coulthard M, eds. Texts and practices: readings in critical discourse analysis. London: Routledge, 1996.
- 25 Elyan O, Smith P, Giles H, Bourhis R. RP-accented female speech: the voice of perceived androgyny? In: Trudgill P, ed. Sociolinguistic patterns in British English. London: Arnold, 1978;122-31.

(Accepted 10 December 1998)

## Influence of symptoms of anxiety on treatment of depression in later life in primary care: questionnaire survey

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While studies of the prevalence of major depressive disorders in elderly people have produced rates of 1% to 2%, depression that is clinically significant has been shown to have a prevalence of at least 10% among older people and represents the most common mental disorder in later life. Most of these depressed older people, however, do not receive any treatment for their depression.<sup>1</sup> Prominent symptoms and syndromes of anxiety commonly accompany late life depression in the community<sup>2</sup> and may contribute to the low level of detection of the primary depressive disorder and to inappropriate treatment with benzodiazepines. As part of a naturalistic study of mental disorders among elderly people living in the community in Dublin<sup>3</sup> we studied the influence of concurrent anxiety symptoms on the likelihood of them receiving pharmacological treatment for depression.

#### Subjects, methods, and results

People aged 65 years and over on the practice lists of five urban general practices and not living in residential care were identified. We interviewed 1737 participants (82%) with the geriatric mental state and automated geriatric examination for computer assisted taxonomy instrument, which generates "cases" and "subcases" of mental disorder (subcase level representing symptoms not reaching the criteria for case level disorder). The level of depression among cases has been shown to correspond with what psychiatrists usually recognise as a depressive disorder and has been validated against the combined categories of major depression and dysthymia from the *Diagnostic and Statistical Manual of Mental Disorders*, third edition (DSM-III), with good agreement.<sup>4</sup> In addition to the primary diagnosis each subject is allocated a level of confidence on all (eight) diagnostic clusters and, therefore, the presence of symptoms or disorders comorbid with the principal diagnosis is recorded. Current use of psychotropic drugs was recorded by direct inspection of medications.

There were 184 (11%) cases of depression among the elderly people. Of these, 84 (46%) were receiving a psychotropic drug, with a similar proportion of depressed men (22/53, 42%) and women (62/131, 47%). Sixty four (35%) depressed participants were taking a benzodiazepine and 34 (19%) were taking antidepressant medication. Of the 184 depressed people, 36 (20%) had a comorbid anxiety disorder (case level anxiety or phobia), 115 (63%) had concurrent anxiety symptoms (anxiety, phobic, or obsessional symptoms at subcase level), and 33 (18%) were free of anxiety. The table compares the use of psychotropic drugs in these three subgroups. The presence of concurrent anxiety in depression was significantly associated with the use of any psychotropic drug ( $\chi^2$ 8.0; df = 2; P = 0.02), a benzodiazepine ( $\chi^2$  9.3; df = 2; P = 0.01), or an antidepressant ( $\chi^2$  6.6; df = 2; P = 0.04).

### Comment

Unless elderly people with depression have concomitant symptoms of anxiety they are less likely to receive Mercer's Institute for Research on

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BMJ 1999;318:579-80

Numbers (percentages) of elderly people who received psychotropic drugs for depression classed according to geriatric mental state and automated geriatric examination for computed assisted taxonomy questionnaire

Details of drug treatment	Depression with case level anxiety (n=36)	Depression with subcase anxiety (n=115)	Depression without anxiety (n=33)
Any psychotropic	22 (61.1)	53 (46.1)	9 (27.3)
Benzodiazepine	18 (50)	41 (35.7)	5 (15.2)
Antidepressant	12 (33.3)	17 (14.8)	5 (15.2)

pharmacological treatment in primary care. To our knowledge no previous study has examined this issue. Sartorius et al showed that the presence of comorbid anxiety disorders with depression increased the chance that depression would be recognised and some treatment offered but excluded elderly patients and did not consider depression with concomitant anxiety symptoms of less severity than anxiety disorder.<sup>5</sup>

Whereas depression in later life was undertreated, depression with prominent anxiety did tend to receive some pharmacological intervention, whether appropriate treatment or otherwise. It would seem that the concurrent symptoms of anxiety rendered the depression "loud" and attracted the attention of the doctor. Having recognised this important aspect of the presentation of depression in later life we may be able to direct attempts to improve diagnosis and to alter the practice of symptomatic treatment with benzodiazepines in a more focused way. The corollary to anxious depression being loud is, of course, that depression which is not flagged by symptoms of anxiety remains "silent" and is at particular risk of being missed.

We thank our colleagues in general practice for their cooperation.

Contributors: BL and DC initiated the project. MK and BL discussed the core issue and existing literature and were responsible for the design of the study. Data were collected and analysed by IB, AR, AD, and MK. The paper was written by MK and revised and approved by BL. MK and BL are the guarantors.

Funding: The Health Research Board contributed to the funding of this project.

Competing interests: None declared.

- Blanchard MR, Waterreus A, Mann AH. The nature of depression among older people in inner London, and the contact with primary care. Br J Psychiatry 1994;164:396-402.
- 2 Kua EH, Ko SM, Fones SLC, Tan SL. Comorbidity of depression in the elderly—an epidemiological study in a Chinese community. Int J Ger Psychiatry 1996;11:699-704.
- 3 Kirby M, Radic A, Bruce I, Coakley D, Lawlor BA. Mental disorders among the community dwelling elderly. Br J Psychiatry 1997;171:369-372.
- Copeland JRM, Dewey ME, Griffiths-Jones HM. Dementia and depression in elderly persons: AGECAT compared with DSM-III and pervasive illness. *Int J Ger Psychiatry* 1990;5:47-51.
   Sartorius N, Ustun TB, Lecrubier Y, Wittchen H-U. Depression comorbid
- 5 Sartorius N, Ustun TB, Lecrubier Y, Wittchen H-U. Depression comorbid with anxiety: results from the WHO study on psychological disorders in primary health care. *Br J Psychiatry* 1996;168(suppl 30):38-43.

(Accepted 15 September 1998)

### A fairy story that I now understand There's nothing really new

Once upon a time a King had a little daughter for whom he would do anything. She wanted an apple made of pure gold, and because he was rich he had one made for her. The princess wanted a pony with a coat of the purest white and because he was powerful, he had the land searched and the best one sent to the palace for her. One night she looked into the dark sky from her bed chamber and asked for the moon.

The King sent for the court astronomer and said, "Tell me about the moon." "The moon, sire," he said, "is three miles above the earth and made of green cheese." The King sent for his engineer, and said, "My daughter wants the moon. Please get it down for her." "Sire," he said, "what the astronomer did not tell you is that the moon is in fact very large and heavy and suspended on thick chains. Even with my longest cranes I could not reach it, and even with my best tower of pine tree scaffolding, it would be impossible to free it and bring it to earth." The King, exasperated, shared the dilemma with the court jester. "Let me talk with her, Sire," he said.

He told the Princess her bedtime story and looking out of the window together he asked, "What is the moon like?" "The moon is the size of my thumb nail." "How do you know?" asked the jester. "Look," she replied, "I can just cover it with the end of my thumb, and it is made of beautiful silver." The court jeweller made a moon to the Princess's specifications and she was content.

To complete the story I would have to explain how they coped with the reappearance of the silver moon in the sky at the same time as the Princess had the moon hanging around her neck on a little chain, but that is enough of the fairy story for now.

I was reminded of the tale by the recent reports of the successful use of a tiny impeller pump as a replacement heart. Since the 1960s surgeons have told engineers that the heart is a pumping chamber, of such and such a capacity and pressure characteristics, with inflow and outflow valves. Like the court engineer, they have tried to please the King. They have been largely defeated by the combined difficulties of the mechanics of the pumping chamber, pistons and pusher plates, the procoagulant nature of the materials, and the need for two valves which will neither fail nor clot. The brilliance of the little pump implanted with such success by Steve Westaby in Oxford is that it does what the heart does, but in a way achievable by engineers. Someone, somewhere managed to get beyond a description of the heart as we know it and asked the question, in bare essentials, what do you want the heart to do? The engineered device does not work on intermittent volume displacement, which is the solution reached by evolutionary biology, but by a continuous stream of blood driven by an electromagnetically coupled impeller spinning in the blood stream, creating continuous unidirectional flow.

The point that the story brings to mind is that when surgeons talk to scientists, bioengineers, or computer programmers, they are very ready to tell them what they want but it may be not what they really need.

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We welcome articles up to 600 words on topics such as *A memorable patient, A paper that changed my practice, My most unfortunate mistake,* or any other piece conveying instruction, pathos, or humour. If possible the article should be supplied on a disk. Permission is needed from the patient or a relative if an identifiable patient is referred to. We also welcome contributions for "Endpieces," consisting of quotations of up to 80 words (but most are considerably shorter) from any source, ancient or modern, which have appealed to the reader.