Descriptive study of cooperative language in primary care consultations by male and female doctors

J R Skelton, F D R Hobbs

Department of
Primary Care and
General Practice,
University of
Birmingham,
Edgbaston,
Birmingham
B15 2TT

J R Skelton,
senior lecturer
F D R Hobbs,
professor

Correspondence to:
Mr Skelton
j.r.skelton@bham.
ac.uk

BMJ 1999;318:576-9

Abstract

Objective To compare the use of some of the characteristics of male and female language by male and female primary care practitioners during consultations.

Design Doctors' use of the language of dominance and support was explored by using concordancing software. Three areas were examined: mean number of words per consultation; relative frequency of question tags; and use of mitigated directives. The analysis of language associated with cooperative talk examines relevant words or phrases and their immediate context.

Subjects 26 male and 14 female doctors in general practice, in a total of 373 consecutive consultations.

Setting West Midlands.

Results Doctors spoke significantly more words than patients, but the number of words spoken by male and female doctors did not differ significantly.

Question tags were used far more frequently by doctors ($P < 0.001$) than by patients or companions. Frequency of use was similar in male and female doctors, and the speech styles in consultation were similar.

Conclusions These data show that male and female doctors use a speech style which is not gender specific, contrary to findings elsewhere; doctors consulted in an overtly non-directive, negotiated style, which is realised through suggestions and affective comments. This mode of communication is the core teaching of communication skills courses. These results suggest that men have more to learn to achieve competence as professional communicators.

Introduction

The consultation process is at the heart of primary care and is largely realised through language. However, research into the communication that takes place in doctor-patient interaction in primary and secondary care settings has had little to say on language issues. Reviews of doctor-patient communication¹⁻³ are overwhelmingly weighted towards studies in which language features are either not analysed or analysed in a linguistically naive fashion.⁴ The broadly socio-linguistic tradition of language research is less well known.⁴⁻⁶ Furthermore, though tools of discourse analysis have revolutionised other areas of language study,^{7,8} they have gained little credence within the health professions.⁹

We used an alternative approach to medical language research, combining quantitative and qualitative techniques, to consider whether male and female primary care practitioners use aspects of "cooperative talk" with similar frequency and in similar fashions in the consultation. Gender language is a complex field, beset with large numbers of contradictory studies. Nevertheless, a major critical review reported a broad

consensus that female language in most situations is generally more cooperative.¹⁰ As a cooperative consulting style in medicine is viewed as the most appropriate style, there are implications for training if clinicians differ in the type of language they use.

A quantitative inquiry on this topic is unlikely to be sufficient for the understanding of communication, as dealing only with word counts deprives any study of language context. This study therefore also offers an examination of the contextual uses to which ostensibly cooperative language is put, by exploring aspects of what is known of the characteristics of male and female language in the English speaking Western world and comparing the use of some of these characteristics by male and female primary care practitioners during consultations.

Methods

Empirical studies of gender speech have concentrated on the language of dominance and support as represented through a wide variety of linguistic realisations.¹¹ We selected three areas to give a balance in the study between the purely quantitative (and therefore reliable but decontextualised) and the qualitative (less reliable, but with context giving validity). These study outcomes were compared in male and female doctors.

(1) Mean number of words per consultation—One objective marker of dominance is verbosity. It is "established unambiguously"¹⁰ that men dominate mixed gender talk, even at work when women have superior status,¹² and specifically with male patients consulting female doctors.¹³

(2) Relative frequency of question tags (such as *don't you?* and *isn't it?*)—Question tags are grammatical entities and therefore easy to identify with certainty. They may be divided into two main categories, those that are "affective" or "facilitative" (*it's sore there, isn't it?*), and those that are confirmatory (*It's Mr X, isn't it?*). We considered only the former, which have been claimed as part of women's language.^{14,15} This kind of tag can be seen as a marker of support.

(3) Use of "mitigated directives"—Roughly, mitigated directives are suggestions such as *and then maybe you could try these...*, as opposed to such "aggravated directives" as *try these*. It has been argued that women offer more mitigated directives and more general markers of tentativeness, specifically that women doctors do so and that this results in greater compliance.^{16,17} "Directive" is a functional, rather than a formal, grammatical category, however, and quantitative claims should be treated with caution; this part of the present study is therefore primarily qualitative.

Participants

The study is based on the language used by 26 male and 14 female doctors, based in 17 practices, in a total of 373 consultations. All these doctors have some

need be for the first two months you could do that/ if it's going to be OK, so what you could do is you you could have the withdrawal bleed in July yeh <P> drink <D> you can what you could do initially is just by is right away, yeh.<P> yeh <D> So you could try that <write3> If you want to no <C> Right, OK.<D> uh what you could do is erm keep an eye on them <C> out it'll help it to come out, you could massage it you know but I are slightly erm at on etime you could always say right the 19th <D> yes things it would be an idea if you could lose a bit of/ weight.<C> We feel goozy/<D> yes / Yes What you could still do is use this on top <P> Oh

Examples of "you could" for suggestion, spoken by doctors, in Cobuild concordancing program. <D>=doctor, <P>=patient, <C>=companion (for example, a mother with a young child)—these occur at the start of an utterance; <write3> is to be read as "doctor writes for 3 seconds"

involvement in medical education; most have been general practice trainers or undergraduate tutors. Four male doctors were of Asian or mixed ethnic origin, but all were educated in the United Kingdom. The mean number of years since qualification was 15.2 (range 5-34).

For each practitioner, all consultations during one standard surgery session were recorded on to a professional tape recorder. All patients consented to their consultations being recorded. A record was kept of patients' and doctors' age and sex.

We used standard transcribing conventions,¹⁸ adapted in discussion with Cobuild plc, whose concordancing software was used for analysis. Recordings were transcribed by trained staff, with double entry of samples of data to ensure adequate levels of accuracy. All completed transcripts were checked against original tapes by the chief transcriber, and 10% of these data were in turn validated by JRS.

Concordancing analysis

Software programs for language analysis were originally developed for lexicography and subsequently for a wide variety of uses, including forensic linguistics and the study of scientific language.¹⁹⁻²¹ The Cobuild concordancing program, used here, is the best known of these.²²

The point of entry is a word or phrase, and the program lists all examples of this in the database, with its immediate context (figure). The length of context on screen may be varied from a few characters, as shown, to the complete text—for this study, a complete general practice consultation. More complex queries are also possible: for instance, the database could be asked for "all examples of either 'isn't it' or 'haven't you' spoken by a female doctor followed within eight words by a patient talking."

The qualitative element of this study looked at the way in which language associated with cooperative talk is used in context. It derives from elements of grounded theory and critical discourse analysis.^{23 24}

Results

Doctors spoke significantly more words than patients, but the number of words spoken by male and female doctors did not differ significantly (944 *v* 909, respectively; difference 35, *P*=0.75) (table 1). Affective question tags were used far more frequently by doctors than by patients or companions (399 *v* 176; *P*<0.001). *Isn't it* is the most common question tag (254 examples,

of which 243 were affective, and therefore relevant); the next most common was *don't you*, with 52 examples (table 2). Frequency of use of question tags was similar in male and female doctors.

Qualitative results

There was no clear evidence that either male or female doctors used a greater number of mitigated directives, but this was in part because there was no clear distinction between mitigated and other directives. For example, *if you don't see any good improvement with it then come back and I'll move you up a scale of sort of erm potency really, give you something a bit stronger*. Is this a straightforward directive (it has an imperative), or a mitigated directive (the tentative *if* and *sort of* soften it), or simply a statement about what might happen? This kind of difficulty in interpretation of language context makes quantitative claims—that male doctors are dogmatic and female doctors cooperative in speech—dubious.

In particular, cooperative talk was associated with clusters, rather than single instances, of suggestions and question tags, and these in turn were further sup-

Table 1 Words spoken by participants in consultation

Speaker	No of consultations	Mean (SD) No of words per consultation	Proportion (%) of total words
Doctors:	373	933 (927.1)*	54
Female (n=14)	113	909 (951.0)†	53
Male (n=26)	260	944 (918.0)†	55
Patients	373	691 (666.5)*	40
Companions (n=118)	373	103 (294.2)	5
Other (eg nurse) (n=17)	373	4 (23.0)	<1

*Difference (doctors' words—patients' words) 242, 95% confidence interval 127 to 359; *P*<0.001 (*t* test).

†Difference (female doctors—male doctors) -35, 95% confidence interval -243 to 175; *P*=0.75 (*t* test).

Table 2 Use of facilitative phrases "isn't it" (243 affective uses) and "don't you" (52 affective uses) by male and female general practitioners in 373 consultations

Sex of doctor	No of consultations	Mean (SD) No of uses
"isn't it"		
Female	113	0.92 (1.94)*
Male	260	0.83 (1.58)*
"don't you"		
Female	113	0.26 (0.71)†
Male	260	0.10 (0.38)†

*Difference 0.09 (95% confidence interval -0.32 to 0.495); *P*=0.68 (*t* test).

†Difference 0.16 (95% confidence interval 0.018 to 0.29); *P*=0.027 (*t* test).

ported (as in the example above) by tentative markers such as *if*, *sort of*, *I think*, etc. A cluster occurred when one marker of cooperation was followed within 25 words by another—for example, *I think that what you said about panic feelings I think that it's partially sort of anxiety and stress all the pressure that you're under*. Thus, *sort of* within 25 words of *sort of* occurred 71 times; *if*, *sort of*, and *you know* 65 times; and *sort of* and question tag 36 times.

Such language tags are used to transmit not content but mood. Cooperative language is best regarded as a pervasive feature of consultations that are difficult for patients. For example, a woman recently had a child stillborn, and consulted because of vaginal discharge. The doctor raised the question of a further pregnancy, using clusters of cooperative and tentative language:

D: It's just important we get this cleared up before you you sort of you know try again isn't it you know

P: <cry> no <cry> they said it could have been handicapped anyway.

D: Well that's right I mean if you've got a if you've got a erm a situation like that it m[ay] may have been and so that's all right with your rational mind isn't it. It's just that it hurts deep inside

P: yeh

This difficult and upsetting consultation contained a total of 14 instances of the doctor using *sort of*.

Moreover, such clusters are also common when doctors are giving details of management and advice in difficult areas—they are not merely empathic noise but are integral to the conduct of the consultation. This woman cannot have children: the doctor reminds her that her sister may become pregnant again:

P: She wants me to help cos she knows I'm good with children

D: Yeh

P: cos she's seen the way that erm I am with [name] and [name]

D: Well, we talked about this before erm I mean I think if you can accept the role as a loving aunt that would be a very big step you and I think I mean that's a very valuable role to play

Discussion

These measures of cooperative language do not support the hypothesis that male and female doctors use different, gender specific speech styles in consultation. There is, however, an important qualitative characteristic which may enrich this conclusion. It seems clear that examples of cooperative language tend to occur in clusters, and that these clusters are not merely empathic noise but integral to the conduct of the consultation. These data suggest, nevertheless, that male and female doctors use a speech style that is not gender specific; contrary to findings in other studies,^{12 15} the professional role of doctor seems to override the gendered characteristics of speech style.

There are limitations to the generalisability of these data. Though the 40 doctors who participated in the study were volunteers and were involved in education, they were representative of practitioners in group teaching practices. The data may not be generalisable beyond an English speaking, Western context, and a different model may be used in the United Kingdom

Key messages

- Standard teaching on medical communication promotes a cooperative approach to doctor-patient interaction
- In everyday life, however, cooperative language is more typical of female speech style, and this suggests that male doctors may find it harder to develop appropriate consulting styles; in a sample of 373 consultations, male and female general practitioners used examples of cooperative language equally
- Language based study of doctor-patient interaction can deepen understanding and provide useful insights

and elsewhere if there is a substantial non-Western population. Differences between men and women might surface if data were controlled for sex or social class of patient, or first presentations were differentiated from consultations for chronic conditions (where doctor and patient might have a less overtly professional relationship).

Implications

Communication is often thought of as a skill, as if doing it well were a matter of learning discrete pieces of surface behaviour. Our data show an atmosphere of empathy in these general practice consultations, created partly by clusters of cooperative language. But it is hard to see how this kind of clustering could be formally taught as a piece of behaviour to imitate: rather it is the manifestation of an appropriate attitude, which may be more difficult to teach and learn.

The language features we studied are surface representations of the overtly non-directive, negotiated style—which is realised through suggestions and affective comments—that is taught to medical students in communication skills courses. At least in these respects, medical students are being trained to use what linguists would describe as female speech style in their communication with patients.

Women's language, it has been said, shows a degree of "psychological androgyny"²⁵: that is, women have the ability to approximate male speech styles when necessary—in a male dominated workplace, perhaps. There is also a widely held belief, in medicine and throughout the professions, that women have to "be like men" for career advancement. Our findings suggest that although women may have to adapt to the conventions of medical professional life, it is men who are required to adapt their usual communication style in the consultation. This in turn suggests that men—who have to acquire characteristics of speech that are thought of as representative of female talk—have further to travel than women to achieve competence as professional communicators.

Contributors: JRS and FDRH jointly developed the programme of research of which this is one project. JRS supervised data collection and transcription, and undertook the first analysis. JRS and FDRH developed the analysis and wrote the paper. JRS is guarantor for the paper.

Funding: Programme grant from Sir Siegmund Warburg Voluntary Settlement.

Competing interests: None declared.

- 1 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.
- 5 Fisher S, Todd D, eds. *The social organization of doctor-patient communication*. Washington, DC: Center for Applied Linguistics, 1983.
- 6 West C. *Routine complications: troubles with talk between doctors and patients*. Bloomington: Indiana University Press, 1983.
- 7 Coulthard M, Ashby M. Talking with the doctor. *J Communication* 1975;25:140-7.
- 8 Bruton C, Candlin C, Leather J. Doctor speech functions in casualty 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. *Towards an analysis of discourse: the English used by teachers and pupils*. London: Oxford University Press, 1975.
- 10 Coates J. *Women, men and language*. London: Longman, 1993.
- 11 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.
- 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 University 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

Michael Kirby, Aisling Denihan, Irene Bruce, Alicja Radic, Davis Coakley, Brian A Lawlor

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.¹ Prominent symptoms and syndromes of anxiety commonly accompany late life depression in the community² 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 Dublin³ 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.⁴ 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 (χ^2 8.0; df=2; P=0.02), a benzodiazepine (χ^2 9.3; df=2; P=0.01), or an antidepressant (χ^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 Ageing, Saint James's Hospital, Dublin 8, Ireland
Michael Kirby, research registrar
Aisling Denihan, research registrar
Irene Bruce, research nurse

Department of Medicine for the Elderly
Davis Coakley, professor

Department of Psychiatry for the Elderly
Brian A Lawlor, professor

Health Research Board, Dublin 2, Ireland
Alicja Radic, epidemiologist

Correspondence to: Dr Kirby

BMJ 1999;318:579-80