

- 1 Holland R, Battersby J, Harvey I, Lenaghan E, Smith J, Hay L. Systematic review of multidisciplinary interventions in heart failure. *Heart* 2005;91:899-906.
- 2 Blue L, Lang E, McMurray JJ, Davie AP, McDonagh TA, Murdoch DR, et al. Randomised controlled trial of specialist nurse intervention in heart failure. *BMJ* 2001;323:715-8.
- 3 Goodyer I, Miskelly F, Milligan P. Does encouraging good compliance improve patients' clinical condition in heart failure? *Br J Clin Pract* 1995;49:173-6.
- 4 Varma S, McElnay JC, Hughes CM, Passmore AP, Varma M. Pharmaceutical care of patients with congestive heart failure: interventions and outcomes. *Pharmacotherapy* 1999;19:860-9.
- 5 British Heart Foundation. *Living with heart failure*. London: British Heart Foundation, 2004. (Heart Information Series No 8.)
- 6 Rabin R, de Charro F. EQ-5D: a measure of health status from the EuroQol Group. *Ann Med* 2001;33:337-43.
- 7 Holland R, Smith RD, Harvey I, Swift L, Lenaghan E. Assessing quality of life in the elderly: a direct comparison of the EQ-5D and AQL. *Health Econ* 2004;13:793-805.
- 8 Rector TS, Cohn JN. Assessment of patient outcome with the Minnesota living with heart failure questionnaire: reliability and validity during a randomized, double-blind, placebo-controlled trial of pimobendan. *Am Heart J* 1992;124:1017-25.
- 9 Jaarsma T, Stromberg A, Martensson J, Dracup K. Development and testing of the European heart failure self-care behaviour scale. *Eur J Heart Fail* 2003;5:363-70.
- 10 Stewart S, Pearson S, Horowitz JD. Effects of a home-based intervention among patients with congestive heart failure discharged from acute hospital care. *Arch Intern Med* 1998;158:1067-72.
- 11 Botelho R. *Motivational practice: a resource guidebook for skills development*. Rochester, NY: MHH Publications, 2004.
- 12 Elwyn G, Edwards A, Kinnersley P, Grol R. Shared decision making and the concept of equipoise: the competences of involving patients in healthcare choices. *Br J Gen Pract* 2000;50:892-7.
- 13 Community Pharmacy Medicine Management Project Evaluation Team. The MEDMAN study: a randomized controlled trial of community pharmacy-led medicines management for patients with coronary heart disease. *Family Practice* 2007 (advance access doi:10.1093/fampra/cm1075).
- 14 British Heart Foundation. Heart failure nurses. www.bhf.org.uk/living_with_heart_conditions/patient_support_resources/heart_nurses/heart_failure_nurses.aspx.

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"I haven't even phoned my doctor yet." The advice giving role of the pharmacist during consultations for medication review with patients aged 80 or more: qualitative discourse analysis

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ABSTRACT

Objective To explore the advice giving role of pharmacists during consultation for medication review with patients aged 80 or more.

Design Discourse analysis.

Setting Participants' homes.

Participants Subsample of consultations within a large randomised trial of home medication review among patients aged 80 or more who had been admitted to hospital.

Main outcome measures Extent to which advice given by pharmacists was accepted and acknowledged by patients.

Results Pharmacists found many opportunities to offer advice, information, and instruction. These advice giving modes were rarely initiated by the patients and were given despite a no problem response and deliberate displays of competence and knowledge by patients. Advice was often resisted or rejected and created interactional difficulties and awkward moments during the consultations.

Conclusions The advice giving role of pharmacists during consultations with patients aged 80 or more has the potential to undermine and threaten the patients' assumed competence, integrity, and self governance. Caution is needed in assuming that common sense interventions necessarily lead to health gain.

INTRODUCTION

Community pharmacists have been seen as ideally placed to deliver many of the preventive healthcare initiatives proposed by the UK government white paper "Choosing health." Medication review is one service offered in the new community pharmacy contract.¹

In practice the changing role of community pharmacists in the United Kingdom is under-researched²⁻⁵ and their role as advice giver or drug counsellor is ill

defined and diverse.⁶ Little training exists for these new roles and even less in-depth research has been done into the implications of this approach to the work of pharmacists and its effect on relationships between healthcare professionals and patients.^{3,7}

We previously evaluated whether domiciliary medication review affects hospital admission rates and quality of life among people aged 80 or more.⁸ We report on a qualitative element of the trial that focuses on the ways in which pharmacists and older patients engage in the medication review consultation.

PARTICIPANTS AND METHODS

We invited patients recruited to the HOMER trial between October and December 2002 to take part in the additional study. Twenty nine of 758 eligible participants with an abbreviated mental test score of eight or more (88.7% of the trial sample) were recruited.

Eleven of the 22 review pharmacists from the parent trial expressed an interest in the substudy. Seven (six were women) took part in the 29 observed and taped consultations. The pharmacists did not know the patients. They were working as community pharmacists and had a minimum of 15 years' experience (range 15-40) and at least one postgraduate qualification each (see bmj.com).

One researcher (CS) observed, taped, and transcribed the consultations. She noted any non-verbal cues, facial expressions, and body language. Participants were revisited by CS within a month to collect data on their perceptions of the encounter. Interviews were carried out with the pharmacists before and after the consultation.

CS transcribed and examined the transcriptions and notes by hand using transcription conventions adopted by Jefferson (box 1).⁹

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Box 1 | Transcription conventions⁹

Underlining—word stressed or emphasised by speaker

Single parentheses—non-verbal, contextual, or interpretive information

Double parentheses—unintelligible or uncertain transcription

Units in parentheses—pauses and periods of silence, in tenths of a second

Equals sign—no interval between adjacent utterances

RESULTS

The medication review consultations showed a uniform shape. A strong mode of talking or discourse of advice giving was identified. During many of these episodes of advice giving, disruptions or critical moments occurred.

The style of advice giving was essentially didactic. The pharmacists provided advice, information, or instruction on a constant basis. During the 29 consultations there were almost no patient initiated requests for advice or information. Only once did a patient announce that he wanted to ask a question. Advice given was often unsolicited and invariably in the absence of a patient initiated problem or request for advice. It was often resisted or rejected by the patients, who adopted a variety of strategies.

Patients' knowledge and experience as a challenge to the pharmacists' advice giving role

Patients' attempts to resist advice included assertions of knowledge and experience. In box 2 the pharmacist asks whether the patient knows she cannot take paracetamol and co-codamol together (line 10). The patient

Box 2 | Conversational attempts to resist advice

1. Ph 05. Have you had any changes since you've been into hospital
2. Pt 04. What medication
3. Ph 05. Hhm
4. Pt 04. No still the same things as I said to you the only thing they give
5. Pt 04. me is hhm=
6. Ph 05. =Paracetamol
7. Pt 04. Because I do take co-codamol=
8. Ph 05. =You do
9. Pt 04. Yes from the doctors
10. Ph 05. Do you know that you can't take the two together
11. Pt 04. Oh I don't take the co-codamol at the moment
12. Ph 05. You don't=
13. Pt 04. =No=
14. Ph. =Do you take these (paracetamol)=
15. Pt 04. =Yes not while I've got those=
16. Ph 05. =So you know that its either one thing or the other=
17. Pt. 04 =Yes they did tell me at the hospital
18. Ph 05. How many would be a maximum of those
19. Pt 04. Well I was having four a day when I first went in with the pain
20. Pt 04. in fact I kept on having an injection as well but as its eased off I
21. Pt 04. take two in the morning and then two at night before I go to bed
22. Ph 05. Well the maximum is eight in twenty four hours
23. Pt. 04 Yes I know I do know yes I wouldn't do any more than that=
24. Ph 05. =You have to be careful with paracetamol as you already realize
25. Ph 05. because co-codamol contains paracetamol and=
26. Pt 04. =Yes I have read all the leaflets because you know=

Box 3 | Advice given after interruption by pharmacist (italics indicate overlapping speech)

1. Ph 05. Yeah okay and you're happy with the box that you are using
2. Pt 09. Yeah I can manage them (0.2) they ain't all the same some of them have
3. Pt 09. got a slide but you have to watch you don't uncover more than one
4. Pt 09. hole=
5. Ph 05. =Yes yeah I've actually brought some with me here
6. Pt 09. You see
7. Ph 05. I think the one you mean is (0.2) is it like that (0.3) is it like that so you
8. Ph 05. have to be careful when you pull the *slides out*
9. Pt 09. *That's right* yeah they're the ones
10. Ph 05. Yeah
11. Pt 09. Yeah (0.3) so that just pull one pull pull down to them morning
12. Ph 05. Pull down to the one you want
13. Pt 09. And then the next dinner time
14. Ph 05. Yeah and make sure you only go so far with them=
15. Pt 09. =That's right
16. Ph 05. Yeah
17. Pt 09. Otherwise you'll mix your pills up
18. Ph 05. But if you wanted to have one in particular that you felt was easier for
19. Ph 05. you
20. Pt 09. No (0.2) I ain't that far gone yet I mean I can=

brushes the question aside, "oh I don't take the co-codamol at the moment" (line 11). The pharmacist continues cross examining as well as inserting advice, thus creating a blend of question and instruction (lines 14, 16, and 18). Despite at least four attempts by the patient to reassure the pharmacist and to assert her competence (lines 11, 15, 17, and 19-21), the pharmacist continues offering advice (line 22). At line 24 the pharmacist manages to impart her advice yet again. The patient interrupts the advice giving string, saying that she has "read all the leaflets" (line 26).

Patients could also be categorical in their rejection of offers of advice (see bmj.com). When the pharmacist asks if the patient would like to know what his medicines are for, the patient's response is negative and categorical. It represents a rebuttal that embarrasses the pharmacist and causes interactional uncertainty.

Advice was often given after an interruption by the pharmacist. In the sequence in box 3 the pharmacist offers the patient a new medicine tray. The pharmacist interrupts in several instances. The patient, despite the interruption, explains how he manages (lines 2-4). When the pharmacist makes an offer of a new tray (line 18) she receives a rebuttal (line 20).

Calling on the higher authority of the doctor

One of the strongest rebuttals to the pharmacists' attempts to give advice was patients' use of the higher

Box 4 | Invoking the higher authority of the doctor

1. Pt 03. My son sorts it all out for me
2. Ph 05. So does he will he fill that up every week
3. Pt 03. He will do=
4. Ph 05. =He will do okay so that's your yeast tablets they're fine
5. Ph 05. they're a course of treatment and how often do you take
6. Ph 05. those
7. Pt 03. I don't know
8. Ph 05. Do you just do you go by what's on here
9. Pt 03. What's put in the box yes
10. Ph 05. So you don't (0.2) do you look at the labels at all
11. Pt 03. No I don't dear (0.2) he does
12. Ph 05. And how often do you take this for
13. Pt 03. I don't know it is all (written) down there
14. Ph 05. How long will you be taking warfarin
15. Pt 03. I don't know dear
16. Ph 05. 'Til you're told
17. Pt 03. Yes (0.2) I haven't even phoned my doctor yet

authority of the doctor. In one consultation the pharmacist asked the patient if he was still taking his cod liver oil. The patient announced that he would restart but only as “soon as the doctor says I can.” In the sequence in box 4 the patient consistently resists the pharmacist's intervention and line of questioning (lines 7, 11, and 15). The patient is a retired nurse. Later in the consultation she reveals a wealth of knowledge and experience of medicine taking. However, in common with other patients in the study she did not want information or advice from the pharmacist.

The pharmacist was often thwarted in her advice giving role by mention of the doctor. In one case the pharmacist attempts to advise the patient about her swollen ankles but is met with resistance and a defensive tone (see bmj.com).

In box 5 the extract takes up after a sequence of advice about eye drops. The pharmacist had told the patient that she ought to be using her eye drops every day. The patient said she saw no reason as her eyes seemed fine and that as they did not use eye drops in hospital she had concluded they were not important. The pharmacist is reading through some scripts when the patient begins with praise for her doctors (line 7). She and her husband state that they do not want to be seen as “rocking the boat” or complaining (lines 15-18). This provides a further illustration of how pharmacists' intervention can have an unsettling effect on patients and their assumptions about their healthcare network and medicines regimen.

DISCUSSION

Review pharmacists take every opportunity to offer advice and information. This is often resisted or rejected by the older patients in this study. Advice was often given in the absence of any stated problem by the patient and often provided even after displays of a patient's knowledge and competence. Resistance was shown through displays of knowledge and authority as

well as calling on a higher authority such as the hospital or general practitioner. Furthermore, the pharmacists' advice giving role during the medication review consultations seemed to have the potential to undermine and threaten the patients' assumed competence, integrity, and self governance.

The use of the researcher as an observer could have an effect on the consultation and may inhibit either party. A further limitation of this study is that we only included patients aged 80 or more and it is possible that other patients may accept advice from a pharmacist. This study, however, supports the findings of the only other reported sociolinguistic study of consultations between pharmacists and patients.⁶

The strength of this study is that observation and follow-up interviews increase the credibility of the findings: pharmacists confirm the awkward nature of their advice giving task and patients regularly confirm that they have learnt little from the consultation. In addition, the same reported speech patterns were manifest in interactions involving the male pharmacist.

Box 5 | Unsettling effect on patients of pharmacists' intervention

1. Ph 01. So (0.2) I think it is important that we do use the drops (0.2) regularly
2. Pt 06. Yeah
3. Ph 01. And (0.2) it is very important that I think I'll ll have to let the doctor
4. Ph 01. know (0.2) so that (0.2) it might be necessary to have another pressure
5. Ph 01. test in between
6. Pt 06. Could I just say (0.2) that I feel that the way that my medicines have
7. Pt 06. been managed have been wonderful to keep me going so long in my
8. Pt 06. condition (0.2) that hh you know I'm so pleased really it's worked out
9. Pt 06. well=
10. Ph 01. =Good
11. Pt 06. Yes marvellous I mean when you think how long I've gone on in fair
12. Pt 06. health for me (0.2) I think (0.2) you no I don't feel like rocking the boat
13. Pt 06. if you know what I mean
14. Husband. No we don't wish to complain
15. Pt 06. No we don't wish to complain
16. Ph 01. No oh gosh no I'm not here to hh hh upset or rock the boat about
16. Ph 01. anything hhm
17. Pt 06. I think they've done wonderfully to work out what I need to keep
18. Pt 06. me going and she ((GP)) too has been very good (0.2) but I think it started
19. Pt 06. with doctor (name) who seemed to take a real interest in it they worked very
20. Pt 06. hard to get the right mixture for me (0.2) and it seems to be doing very well

WHAT IS ALREADY KNOWN ON THIS TOPIC

No research has been published on pharmacists' communicative competence in their extended roles in the United Kingdom; meanwhile medication review services are being implemented nationwide

Pharmacists have not traditionally been trained in healthcare communication

WHAT THIS STUDY ADDS

Reception and acknowledgement of advice in medication review consultations with pharmacists is affected by context and communicative competence and may lead to negative health gain

The extended role of the pharmacist is uncertain in older patients' (80 or more) management of their medicines

This study shows that interventions for medication review need to develop further to ensure their relevance; it questions assumptions about the appropriate advice giving role of the pharmacist; it shows the pharmacy professions' need for further training in communication skills; and it establishes that context and competence are important for advice giving.¹⁰

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- 1 NHS. *The new community pharmacy framework*. London: N HS Confederation, 2004.
- 2 Hibbert D, Bissell P, Ward PR. Consumerism and professional work in the community pharmacy. *Social Health Illness* 2002;24:46-65.
- 3 Salter C. Medication review: a study of the pharmacist-older patient encounter, using discourse analysis. PhD thesis, University of East Anglia, 2005.
- 4 Mays N. *Health services research in pharmacy: a critical personal review*. Manchester: Pharmacy Practice Research Unit, 1994.
- 5 Harding G, Taylor K. Responding to change: the case of community pharmacy in Great Britain. *Social Health Illness* 1997;19:547-60.
- 6 Pilnick A. The interactional organization of pharmacist consultations in a hospital setting. *J Pragmatics* 2001;33:1927-45.
- 7 Edmunds J, Calnan M. The reprofessionalisation of community pharmacy: an exploration of attitudes to extended roles for community pharmacists amongst pharmacists and general practitioners in the United Kingdom. *Soc Sci Med* 2001;53:943-55.
- 8 Holland R, Lenaghan E, Harvey I, Shepstone L, Lipp A, Christou M, et al. Does medication review keep older people out of hospital? The HOMER randomised controlled trial. *BMJ* 2005;330:293.
- 9 Coupland J, Coupland N. *Language, society and the elderly: discourse identity and ageing*, 1991.
- 10 Pilnick A. "Patient counseling" by pharmacists: advice, information, or instruction. *Social Q* 1999;40:613-22.

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When I use a word

Words that count

I have previously described the difference between count (or unit) nouns and non-count (or mass) nouns (*BMJ* 2004;329:30). Briefly, a count noun can be both singular and plural (a filler, my filler, those fillers, many fillers), whereas a non-count noun, which usually takes a singular form (furniture, some furniture, much furniture), is strictly speaking neither singular nor plural. If you can put the indefinite article, "a" or "an," before a noun—indeed, if it requires some such determiner—it is a count noun. Some nouns can be of both types, with different meanings—two glasses (count noun), some glass (non-count noun). This happens, for example, when a noun can mean both an object (a medication—that is, a medicine) and an act (medication).

Here are some bêtes noires—plural forms of non-count nouns:

- Methodologies (use "methods")
- Mortalities (use "deaths")
- Surgeries (use "operations" when it doesn't mean doctors' places of work)
- Symptomatology or symptomologies (use "symptoms")
- Toxicities (use "adverse effects" and remember that toxic effects form a subset of all adverse effects; see *BMJ* 2004;328:1173).

Other erroneous forms that I have spotted include anaphylaxes, bioavailabilities, functionalities, monitorings, safeties, and numerous hypos and hypers (such as hypocalcaemias, hypoglycaemias, hypernatraemias, and hyperkalaemias).

But some nouns that are properly non-count can still have plural forms. This happens if there are different types of the thing. For example, one reads about chemistries (organic, inorganic, etc), comorbidities, musics (classical, heavy metal, ska, etc), pathologies, and technologies, even though these are non-count nouns.

"Palpitations" is an interesting case. Palpitation is a non-count noun, but the plural form has largely taken over in colloquial use. The definition of palpitation that appeared in the second edition of the *Oxford English Dictionary* (1989) was: "The beating of the heart; esp. a violent and rapid pulsation resulting from exercise, strong emotion, etc; throbbing; *spec.* such increased activity of the heart arising from disease of the organ itself or other parts of the body."

However, the definition in the current online version of the *OED* recognises modern use and helpfully distinguishes the singular and plural forms thus: "Throbbing, quivering, or contraction of a part of the body; *spec.* perceptibly fast, strong, or irregular beating of the heart; an instance of this (freq. in *pl.*)". So, it would make sense to regard palpitation and palpitations as two non-count nouns, with singular and plural forms and related but different meanings (like damage and damages), respectively the violent and rapid beating and the symptoms that you get from it. In this interpretation palpitation causes palpitations, and, conversely, one can have palpitations without palpitation. The misuse of "palpitations" to mean "palpitation" is not new; the earliest example cited in *OED* is from a 1728 poem called "Spring" by James Thomson ("Her wishing Bosom heaves With Palpitations wild").

However, bioscience authors have not abandoned "palpitation" altogether: when I searched all fields in PubMed, I found 951 hits for "palpitation" and 2049 for "palpitations"—a large but not overwhelming majority. Even so, there are several examples in which the two forms are used interchangeably, and it is not clear that authors always acknowledge a difference of the type that I have described.

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