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'Treating' patients differently:

A qualitative study of how clinical and social factors shape interactions between doctors and patients

Kevin Dew, Tony Dowell, Maria Stubbe, Elizabeth Plumridge, Lindsay Macdonald

Correspondence to: Kevin.dew@vuw.ac.nz

***Kevin Dew** is a Professor of Sociology in the School of Social and Cultural Studies, Victoria University of Wellington and a member of the Applied Research on Communication in Health Group. He has a PhD in sociology, teaches social research methods courses and has published on a wide range of health-related topics.*

***Tony Dowell** is Professor of Primary Health Care and General Practice at the University of Otago, Wellington, and a general practitioner in Wellington. He is a member of the Applied Research on Communication in Health Group, and has published many articles on a wide range of topics relating to primary health care.*

***Maria Stubbe** is a senior research fellow in the Department of Primary Health Care and General Practice at the University of Otago, Wellington and a member of the Applied Research on Communication in Health Group. She has a Masters degree in Linguistics and has published widely in the fields of workplace communication and interactional sociolinguistics.*

***Elizabeth Plumridge** is a senior researcher and member of the Applied Research on Communication in Health Group. She has a PhD in Pubic Health and has published many articles using a variety of approaches of qualitative research. She has a particular interest in using Conversation Analysis and related approaches.*

***Lindsay Macdonald** is a research fellow in the Department of Primary Health Care and General Practice at the University of Otago, Wellington and a member of the Applied Research on Communication in Health Group. She is a registered nurse and has a Masters degree in Linguistics. Her thesis explored nurses' talk.*

ABSTRACT

Aim

To demonstrate how general practitioners' sensitivity to social circumstances means patients with similar complaints are treated differently.

Methods

Case study analysis of three purposefully selected consultations drawn from the wider dataset of 58 patients consulting seven general practitioners in New Zealand, collected for a larger qualitative study of clinical decision-making. Consultations were video and audio-recorded. Three consultations involving the same GP were chosen to illustrate relationships between clinical and social factors in consultations where patients presented with symptoms of URTI.

Results

The interaction analyses showed a variety of approaches taken by a single GP to three similar clinical presentations. The social circumstances of patients influence the information the GP conveys to the patient and the clinical outcome.

Conclusions

Given the complexity of general practice consultations, it is not surprising that patients may be treated differently despite apparently similar clinical presentations. Exploring these issues supports current thinking that clinical practice goals should not be to treat everyone in the same way, but rather to focus on ensuring appropriate treatment and equal outcomes.

Keywords

Doctor–patient interaction, clinical decision-making, equity

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Introduction

When health professionals are presented with evidence of different treatment outcomes for different populations, a common response is to say that clinicians treat everyone the same. For example, in research looking at how surgeons used clinical priority tools, most respondents claimed that there was no difference in the way they treated their patients.[1] One surgeon was quoted as saying:

'For me as a practitioner, as a surgeon, I don't look at what colour they are, where they come from, or what their religion is, none whatsoever. If somebody's got a condition that needs treatment, we give it, and I can vouch for all other surgeons in this hospital, or any other hospitals.'[1]

Such a statement implies that clinicians can act in a neutral and detached manner and not be influenced by their own values or characteristics or the values and characteristics of the patient. However this perspective does not reflect what has long been known from research. In 1976 research using vignettes showed that medical practitioners would prescribe antibiotics according to the social attributes of the patient, including, for example, such attributes as whether students were sitting exams or the social status of a child's parents.[2] More recent research by McKinlay and colleagues has also demonstrated a correlation between patient attributes such as gender and ethnicity on diagnosis and treatment decisions.[3,4]

Variability and variation in medical practice is an important theme in the literature. It is often considered in a negative context with implications of inequality. Systematic work on variation in medical practice was first undertaken in the early 1970s by Wennberg and Gittelsohn who used small area analysis to characterise variability in health care utilisation.[5] They found substantial differences in the age and sex adjusted per capita rates for specific procedures across the 13 hospital areas in Vermont in the USA. Their own and others' work has led to an extensive literature in such diverse areas as the treatment of myocardial infarction and heart disease, prescribing, obstetrics and diagnosis.

Another important research tradition has been the direct measurement of individual variation in medical decision making. There have been a number of approaches to this sort of measurement, including straight observational studies monitoring practice against guidelines or appropriateness standards, asking practitioners about their decisions in hypothetical cases or vignettes and even observing differences in the treatment of simulated patients.[6–11] The main strands of explanation which have been posited in the literature include uncertainty, and differing levels of knowledge among individual practitioners.[12]

In New Zealand there has been a significant body of work exploring variation at both the individual practitioner and group level. Payment and organisational systems have been a consistent feature of this discussion, with recognition of the drivers introduced by differing levels of government funded and fee-for-service systems.[13] Prescribing has been a significant area with exploration of the distinctive characteristics of high and low cost prescribers in general practice[14] and regional variation in prescribing.[15] Love et al. used the example of back pain to model the underlying drivers of variation in New Zealand general practice.[12]

This paper provides further insight into the reasons why clinicians might treat people differently, and why this is not ipso facto inappropriate. It draws on earlier research that explored decision making processes in medical consultations, initially based on evaluations of the use of clinical priority assessment criteria (CPAC) in elective surgery.[1,16-18] In the CPAC research clinicians rejected the idea that social characteristics of the patient influenced their scoring.

This paper focuses on three consultations with the same general practitioner to illustrate how patients with very similar complaints are 'treated' differently, both socially and clinically. In two of the cases the treatment outcome is the same – antibiotics are prescribed – but the responses given to each patient and the type of information provided to them are different. In the other case antibiotics are not prescribed.

Method

The data for this paper were collected as part of a New Zealand Health Research Council funded project exploring clinical decision-making when rationing is explicit. For this research video recordings were made involving seven general practitioners (GPs) from the Wellington region in 58 consultations, and four surgeons in 17 consultations. GPs were initially approached by telephone and the study explained to them, and then information sheets and consent forms were delivered. GPs were recruited on a purposive sampling basis, and data were obtained from a range of practice types and socio-economic populations. Once a GP had agreed to participate, patients attending the clinic session were approached and invited to participate if they fulfilled the criteria (those under 18 and acute cases were excluded). A digital camera and audio device were turned on by either the research nurse or clinician, for consultations that were to be recorded. The research nurse was not in the room during the consultation. A similar process was followed to capture recordings of surgical consultations in four outpatient clinics. Ethical approval was obtained from the Wellington Ethics Committee.

All recorded consultations were fully transcribed and the transcripts and viewing of the videos used to analyse features of communication. An overview of the findings of the study from which these data are taken has been published previously.[19] The rationale for selecting three consultations with the same GP from the data set for this paper is to enable an examination of variation in the interaction that is not a product of GP difference or specific to particular conditions. Within the dataset there is a great deal of variety in the interactions and so examining the interactions with the same GP and the same (or very similar) complaints negates the view that variation is simply the product of different GP styles. The following demonstrates that the same GP treating the same condition will call upon a variety of interactional strategies with different clinical outcomes.

Consultations transcriptions were analysed using a modified conversa-

tion analysis format. This is a convention that enables the identification of details in the talk such as overlaps in talk, pauses and changes in intonation. For the purposes of this paper the conventions have been deleted to allow for ease of reading. The analysis of the unfolding of the interaction allows a close examination of how and what issues are 'recognised' and 'attended to' by clinicians. Following Heritage and Maynard[20] the approach taken in this paper assumes that *'physician and patient – with various levels of mutual understanding, conflict, cooperation, authority, and subordination – jointly construct the medical visit as a real-time interactional product.'* By analysing actual interactions various socio-medical dilemmas can be identified and also the interactional resources deployed by the interactants in response to such dilemmas.[21]

Descriptive Discourse Analysis

All of these interactions involve the same GP, a male New Zealand European in his 40s.

Consultation 1 – GP02-06

In this consultation a Chinese man, aged 22, is consulting the GP for a cough.
GP: so how can I help you today
PT: [coughs] I think it's– I got the big trouble basically– I could not s-[coughs] sorry stop my cough
GP: right– yep
PT: if it is four to five days
GP: right– okay– yep
The patient then states that he feels *'very tense always because it's close to my biggest exam day.'*

The GP asks further questions about symptoms elsewhere and conducts an examination, providing feedback to the patient as the examination progresses. There is a range of remarks from the GP in relation to this. So when the temperature is taken:
GP: good normal temperature so that's good– yep

Then when he looks at his throat:
GP: okay that's not too bad
Then when he listens to his chest:
GP: have a seat there it– it sounds a little bit rough down there but not too bad

Following the examination the patient talks to the GP about his consultation with his 'personal' Chinese doctor. The GP listens but responds minimally.

The GP then tells the patient what he intends to do – this comes after the examination and discussion about the Chinese doctor. The GP does however remain highly sensitive to the patient's anxiety about his upcoming exam and the need to be well for this. The GP explicitly references his decisions about clinical treatment back to that issue:
GP: we need to try and give you something to try and get rid of it more quickly and I think probably some antibiotics would be a good idea for your chest they may not help very much it may be the– the flu
PT: oh [coughs] yeah
GP: that you've got really um but the amount that you're coughing is
PT: oh that's all– [coughs]
GP: quite a lot and so I think we should perhaps give you something.

The GP then provides instructions on the use of the antibiotics:
GP: I'll give you an antibiotic tablet to have one now yep
PT: oh yeah yeah yeah yeah
GP: three times a day for five days that– and that should help.

After this the GP provides a prognosis and repeats instructions:
GP: by the twenty third you should be getting better by then yep
PT: [coughs]
GP: should be improving if you're not improving then that means that the antibiotics may not be working and I'd want to perhaps review again
...
GP: so that– that's the antibiotic tablet augmentin three times a day
PT: yep

During the GP investigation, he initially provides positive feedback to the patient about what he is finding, until he listens to the chest when it 'sounds a bit rough.' This finding provides a warrant for the treatment plan. The GP then provides information about when to take the medication and advice on what to do if the problem persists.

Consultation 2 – GP02-05

In this consultation a 66-year-old New Zealand European man is consulting about a 'bug'.
GP: how are you?
PT: oh this is very simple um I've got this bug that's going round and I've got brown junk coming out of my nose and yellow junk coming out of my lungs.

Similarly to consultation 1, the GP inquires about other symptoms, and they also talk about the patient having quit smoking. During the inquiry about symptoms the following occurs:
PT: I'm actually better today than I have been but
GP: feeling– yep yep yep
PT: this is costing me four hundred bucks a day
GP: [typing] I'm not sure that I can speed the process up dramatically but what I can do I think with the– and I think you need some antibiotics more from the point of view of trying to prevent a secondary infection.

This occurs before the examination. The GP has again referenced his decision back to the social circumstances of the patient. He proceeds with the examination and commentary to the patient explaining that the clinical symptoms are minor. During the lung examination:
GP: good yep good the odd little squeak at the back there nothing too bad

The GP and patient talk about a recent film during the examination, and after the examination they talk about the impact of health system changes.

The GP then talks about the antibiotic and gives instructions:
GP: you probably need to be on it for about a week even if things are sort of clearing up before that time just– just to make sure

The GP does not tell the patient how many times a day to take the antibiotic. But near the end of the consultation he talks about side effects and how to take the antibiotic:
GP: there shouldn't be a problem for the antibiotics but occasionally they

cause sort of slightly loose bowel motions so take it with food.

An important feature in this consultation is the patient's opening statement, with the patient making it clear that he is in control of the situation as he has already determined that the issue is simple, and therefore, presumably can be easily remedied. The GP responds to this, and the issue of the patient losing money, with an alignment to the presumed remedy, an antibiotic prescription, even before the examination commences.

Consultation 3 – GP02-03

In this consultation a 48-year-old New Zealand European male is consulting the GP in relation to a number of issues. The first issue relates to a discussion of gout and the treatment he is receiving for it. Then the following occurs:

PT: the main reason I'm here is that I haven't been too well over the weekend. I don't know if it's just bad cold or whatever but [clearing throat]...had a temperature and shaking going quite uncontrollably [clears throat]...taking panadol has almost an instant effect it stops the the shaking [clears throat] that calms it right down
GP: yep
PT: as usual it's complicated by travel arrangements

The GP follows this by inquiries about other possible symptoms, to which the patient responds:

PT: yes yes I got um [clears throat] sore throat [clears throat] producing phlegm. I don't have a headache [clears throat] but I just feel sort of groggy
GP: right yep aching in your body?
PT: a bit of aching mainly around the sort of kidney area I've found

The GP then examines the patient with feedback:

GP: so you haven't got a temperature at the moment but that's probably because well at least partly because you've been taking panadol which will help bring temperatures down
PT: right
GP: breathe in and out through your mouth yeah looks a bit red and inflamed there at the back

During the lung examination:

GP: yeah no it's all clear down in the lungs there. All right well it does look like you've got the lurg so whatever flu like illness's doing the rounds at the moment

The GP then goes on to suggest a course of action:

GP: okay yeah I think that's the- the wise thing cos while you're feeling lousy like this I mean you won't- your concentration won't be up to much anyway so you just take it take it quietly. Lots of fluids, lemon and honey drinks, that sort of stuff. Keep going with the panadol regularly two every four hours is fine for you and that'll help keep the aches and pains and the – the fevers down a bit as well. The general pattern is that that seems to take sort two to four days to run its course. You may find the cough goes on for a bit longer than that it certainly, if by Friday most of your symptoms have settled but the cough is persisting and quite productive and you know generally nasty not seeming to improve then with you travelling I think it would be reasonable to have some antibiotics at that stage to try and knock anything else on the head but at this stage I'd say (little bit of) flu-like illnesses unfortunately.

In this consultation the patient expresses a concern in relation to future travel arrangements in his opening problem presentation. However, he also presents information on how he is able to deal with some of the symptoms, through the use of panadol. So even though the GP finds a number of symptoms he has found in the other consultations, he opts for a different treatment plan. The patient is neither anxious nor forceful in his problem presentation, and his infrequent throat clearing contrasts with the persistent coughing of the first example.

Discussion

This analysis is based on three consultations with a single doctor. Clearly it is not possible from this basis to judge the representativeness of the three consultations to the practice of this GP, or the degree to which any conclusions reached here may be generalised across consultations involving other doctors and patients. Nevertheless, the consultations focussed on here are adequate to the purpose of our analysis: to explore the complex relationship between clinical and social factors that underpin GP consultations. These complex relationships need to be understood as a process, and interactional research can reveal these processes. Once the richness and complexity of the consultation is better understood, complementary attempts to measure and quantify aspects of the consultation can be better made.

There are obvious similarities and differences between these consultations. In all three cases the GP inquires about symptoms, conducts an examination and prescribes a course of action. However, further analysis reveals several points of variation. In two cases antibiotics are prescribed but not in the third. In the first of these two 'antibiotic cases' the GP tells the patient about side effects and how to try to avoid them, but not in the other. In one case the GP provides advice regarding the frequency of taking the antibiotics, but not in the other. The GP tells one patient of his intention to prescribe before examination, but for the other the intention to prescribe follows the examination.

There are a number of possible explanations for these differences, not least the different time courses of the illness and possible differences in clinical findings that are not apparent from the transcripts or video. However it is clear that the relationship between the patient and the GP is very different in the two antibiotic cases. For one patient there is a history of past consultations, and social chit chat about movies and the health system. For the other there is no social chit chat and the patient talks about approaches to health that the GP does not respond to. The presentation of symptoms is made quite differently with the prescription-before-examination case occurring where the patient had forcefully de-

clared the financial cost of being ill to the GP.

For the non-prescription case the consultation starts with a different issue before moving on to the 'flu-like illness'. The feedback during examination is very similar to the other cases where the GP notes some problems. Although there are differences in the time course of the presentation these are unlikely to make a difference. In the non-antibiotic case the patient does not raise issues of losing money at work or preparing for examinations. By comparing these similar cases the importance of context and particular interactional features that lead to different outcomes can be discerned.

Conclusions

Looking at the unfolding of the consultations in this way provides clues that the decision-making is a social event as well as a clinical one. The social nature of the interaction makes it inevitable that the GP will respond to cues from the patient and interact differently with each patient. The examples presented here demonstrate how this can lead to different information being conveyed to the patient and different treatment being provided. We are not suggesting that any one of these outcomes was clinically more appropriate than another. However, by exploring the social nature of clinical encounters we have demonstrated that it is possible to observe clinicians treating people differently despite similar clinical presentations.

Given the increasing evidence on the complexity inherent in general practice consultations, the thesis that people are treated differently should be seen not just as a possibility, but indeed as something that should be expected. Clinicians are making decisions for and with patients whose lives are complex even if clinical issues are seemingly straightforward. Examining these issues supports current thinking that clinical practice goals should not be to treat everyone uniformly, but rather, to focus on ensuring appropriate treatment and equal outcomes. In addition this form of research provides insight into the actual working practices of GPs, as opposed to retrospective accounts about what goes on in consultations and information on demographics and consultation outcomes. A more in-depth understanding of the actual work of both GPs and patients in the consultation provides a firmer foundation for considering interventions to improve health outcomes at the practice level.

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Competing interests

None declared.

References

1. McLeod D, Dew K, Morgan S, Dowell A, Cumming J, et al. Equity of access to elective surgery: reflections from NZ clinicians. J Health Serv Res Policy 2004; 9 Suppl 2:41-7.
2. Howie J. Clinical judgement and antibiotic use in general practice. BMJ 1976; 2(6043):1061-64.
3. Adams A, Buckingham C, Lindenmeyer A, McKinlay J, Link C, et al. The influence of patient and doctor gender on diagnosing coronary heart disease. Sociol Health Illness 2008; 30(1):1-18.
4. McKinlay J, Link C, Freund K, Marceau L, O'Donnell A, Lutfey K. Sources of variation in physician adherence with clinical guidelines: results from a factorial experiment. J Gen Intern Med 2007; 22(3):289-96.
5. Wennberg J, Gittelsohn A. Small area variations in health care delivery. Science 1973; 182(117):1102-8.
6. Davis P, Yee R, Millar JS. Accounting for medical variation: the case of prescribing activity in a New Zealand general practice sample. Soc Sci Med 1994; 39(3):367-74.
7. Davis P, Gribben B, Scott A, Lay-Yee R. Do physician practice styles persist over time? Continuities in patterns of clinical decision-making among general practitioners. J Health Serv Res Policy 2000; 5(4):200-7.
8. Fertig A, Roland M, King H, Moore T. Understanding variation in rates of referral among general practitioners: are inappropriate referrals important and would guidelines help to reduce rates? BMJ 1993; 307(6917):1467-70.
9. Chassin M, Kosecoff J, Park R, Winslow C, Kahn K, et al. Does inappropriate use explain geographic variations in the use of health care services? A study of three procedures. JAMA 1987; 258(18):2533-7.
10. Peterson S, Eriksson M, Tibblin G. Practice variation in Swedish primary care. Scand J Prim Health Care 1997; 15(2):68-75.
11. Rethans J, Saebu L. Do general practitioners act consistently in real practice when they meet the same patient twice? Examination of intradoctor variation using standardised (simulated) patients. BMJ 1997; 314(7088):1170-3.
12. Love T, Dowell AC, Salmond C, Crampton P. Quality indicators and variation in primary care: modeling GP referral patterns. Fam Pract 2004; 21:160-5.
13. Davis P, Gribben B, Scott A, Lay-Yee R. The 'supply hypothesis' and medical practice variation in primary care: testing economic and clinical models of inter-practitioner variation. Soc Sci Med 2000; 50(3):407-18.
14. Jaye C, Tilyard M. A qualitative comparative investigation of variation in general practitioners' prescribing patterns. Br J Gen Pract 2002; 52(478):381-6.
15. Roberts E, Norris P. Regional variation in anti-depressant dispensings in New Zealand: 1993-1997. NZ Med J 2001; 114(1125):27-30.
16. Dew K, Cumming J, McLeod D, Morgan S, McKinlay E, et al. Explicit rationing of elective services: implementing the New Zealand reforms. Health Policy 2005; 74(1):1-12.
17. McLeod D, Morgan S, McKinlay E, Dew K, Cumming J, et al. Use of, and attitudes to, clinical priority assessment criteria in elective surgery in New Zealand. J Health Serv Res Policy 2004; 9(2):91-9.
18. McLeod D, Morgan S, McKinlay E, Dew K, Cumming J, et al. Clinicians' reported use of clinical priority assessment criteria and their attitudes to prioritization for elective surgery: A cross-sectional survey. Aust NZ J Surg 2004; 74(11):1003-09.
19. Dowell A, Macdonald L, Stubbe M, Plumridge E, Dew K. Clinicians at work: What can we learn from interactions in the consultation? NZ Fam Physician 2007; 34(5):345-50.
20. Heritage J, Maynard DW. Introduction: analyzing interactions between doctors and patients in primary care encounters. In: Heritage J, Maynard DW, editors. Communication in medical care: interaction between primary care physicians and patients. Cambridge: Cambridge University Press; 2006. p.1-21.
21. Dew K, Plumridge E, Stubbe M, Dowell A, Macdonald L, Major G. 'You just got to eat healthy': The topic of CAM in the General Practice consultation. Health Sociol Rev forthcoming; 17(4).