Why general practitioners do not implement evidence: qualitative study

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Abstract

Objectives To explore the reasons why general practitioners do not always implement best evidence.
Design Qualitative study using Balint-style groups.
Setting Primary care.
Participants 19 general practitioners.
Main outcome measures Identifiable themes that indicate barriers to implementation.
Results Six main themes were identified that affected the implementation process: the personal and professional experiences of the general practitioners; the patient-doctor relationship; a perceived tension between primary and secondary care; general practitioners' feelings about their patients and the evidence; and logistical problems. Doctors are aware that their choice of words with patients can affect patients' decisions and whether evidence is implemented.
Conclusions General practitioner participants seem to act as a conduit within the consultation and regard clinical evidence as a square peg to fit in the round hole of the patient's life. The process of implementation is complex, fluid, and adaptive.

Introduction

Evidence based medicine is based on universally appealing ethical and clinical ideals in that it promotes the identification of the best methods of health care and helps patients and doctors to make better informed choices.[1] Its framework for searching out and critically appraising evidence helps doctors ask answerable questions to help patients make appropriate decisions.[2]

Although evidence based medicine has heightened awareness of the most effective management strategies for many conditions, much of the evidence is not acted on in everyday clinical practice.[3] Numerous strategies to improve implementation of such evidence have been tested,[4] and various impediments have been identified.[5] General practitioners have been cautious about the evidence based model generally.[6] In one study that asked general practitioners why they depart from evidence based practice, the commonest reason was reluctance to jeopardise their relationship with the patient.[7] Apparent hesitation in applying evidence in specific clinical areas such as atrial fibrillation has been attributed to patients' unwillingness to take the drugs.[8]

In a recent questionnaire study of general practitioners' attitudes to evidence based medicine, answers to an open question suggested that there are unique barriers to implementing evidence in general practice within a patient centred context.[9] This study set out to explore the issues raised by these responses. We used a qualitative approach to explore the reasons why and circumstances in which doctors had not implemented evidence they knew about.

Participants and methods

Three focus groups of established general practitioners were set up in three areas, each located around a different district general hospital. The hospitals were in the south west of England and covered the area served by a single primary care research network. Each area is geographically separate by about 80 km and tends to develop its own medical community. The groups did not contact each other throughout the study and were not in regular social or professional contact outside the study. By using these separate groups, we aimed to improve the trustworthiness of the data.

Participants were asked to discuss their behaviour in individual cases, which could be seen as sensitive. We therefore adapted the standard focus group techniques to use a Balint-style model. This style of group work is widely recognised in general practice, and derives from the work of the psychotherapist Michael Balint.[10] The focus groups were not pure Balint groups because they did not include a psychoanalyst. However, a widely used modified form of these original Balint groups has become common in general practice.[11] The particular Balint-style feature of these groups that distinguished them from standard focus groups was that each meeting focused around the case notes of a particular patient, the doctor-patient relationship, and the feelings that were generated. Basic rules of confidentiality are a prerequisite for convening the group, and the participants agree not to discuss material raised in the group outside. The same group of doctors met on several occasions in the hope that, as the group matured, they would feel more comfortable about exploring honest reasons behind their failure to implement evidence.

The groups consisted of six to eight volunteer general practitioners, each led by an experienced group leader. The group leader was given an honorarium to lead and administer the groups and operate the tape

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BMJ 2001;323:1–5

recorder. The plan was to have the groups meet about once a month on six occasions, each meeting lasting about two hours. Two of the groups consisted of doctors from different practices and one group comprised doctors from one practice. Participating doctors represented a mix of urban, rural, and semirural practices. There were a total of 19 doctors: 13 men and six women. Their length of time as a principal varied from three to 25 years. Fourteen held the membership examination of the Royal College of General Practitioners, and seven were general practice trainers.

At each meeting, a group member was asked to present the details of a case in which he or she had knowingly not followed evidence based practice. Participants were advised to anonymise the patient details and not present any material that could lead to the identification of a particular patient. We asked the groups to discuss the case and explore the implementation issues arising from it as well as the doctor's feelings about these issues. The local research ethics committee approved the study.

The researchers were not part of the group, but before the first meeting of each group a researcher attended and explained the research agenda. We explained that the individual doctors would be anonymous. We had no further contact with the groups. We returned copies of the transcripts to the groups, and each member understood that if they were not happy with the content that transcript would not be used.

The meetings were taped, and the tapes delivered to us. The tapes were transcribed, and each researcher separately analysed the transcripts. Each researcher used a grounded theory approach in developing theoretical principles (or at least explanatory principles).[12] This was to ensure that the coding of themes consistently and robustly followed grounded theory rules and that all the emerging themes were directly supported by verbatim data from the meetings. We did not set out with the overarching aim of generating theory from the findings.

We met to compare analysis and identify common themes. To ensure compatibility of analysis, we each analysed three transcripts jointly and the others separately. For the separate analyses, we were given the transcripts recorded out of our own area to minimise the recognition of names, accents, or circumstances that could lead to the identification of patients or participating doctors.

Results

Transcripts for 11 meetings were available for analysis. Two of the groups met six times each, and the third once only—that is, 13 meetings. The recordings of two of the groups could not be used because of poor sound quality.

The main clinical areas the general practitioners discussed included hypertension, ischaemic heart disease, and anticoagulation. Other topics developed in the groups discussion included diabetes, chronic obstructive pulmonary disease, menorrhagia, cholesterol, and the use of investigations. Six main themes emerged from the data (box).

Main themes from data

- The process of implementing clinical evidence is affected by the personal and professional experiences of the doctor
- The relationship that the doctor has with individual patients also affects the process
- There is a perceived tension between primary and secondary care: the doctors thought that specialists approach evidence based practice differently
- The practitioner's feelings about their relationships with patients and about the evidence have an important role in modifying how clinical evidence is applied
- The doctor's choice of words in consultations can sway patients to accept or reject clinical evidence. Doctors realise this and can use it to pre-empt patients' decisions
- Implementation comes up against logistical problems, which affect how evidence is applied

Personal and professional experience of practitioner

Our data show that doctors' personal and professional experiences influence how clinical evidence is implemented. Despite being a relatively homogeneous group, the general practitioners' enthusiasm for the evidence and the way in which they implemented it varied. This seemed to be partly explained by their previous experience of clinical practice.

Two influences were relevant: the doctors' life experience and experience of hospital medicine as students or juniors doctors. "My grandfather died when he was shocked," recalled one participant, discussing anticoagulation in atrial fibrillation, "so I reach for a decent dose of warfarin and digoxin no hesitation at all." Another said: "I actually had two 50 year olds who had strokes from atrial fibrillation because they didn't get warfarin … that really hit me." In another group, one general practitioner said, " I lost a patient as an SHO, so that puts me off warfarin."

Accidents, mishaps, or spectacular clinical successes have a direct influence on subsequent practice. Commenting again on anticoagulation in atrial fibrillation, a participant exclaimed, "I'm back on it." This doctor had previously been uneasy about anticoagulating patients in atrial fibrillation but had recently seen one of his patients who was not given warfarin have a cerebrovascular event. This theme was taken up in another group: "But I suppose if we had a run of people who … then had terrible hemiplegias and ended up being a huge workload on the community … if we saw the ones the papers were talking about, we would probably be warfarin zealots, wouldn't we." One doctor summed up this view. thus: "We are influenced at least as much, if not more, by the experiences of individual patients as we are by the evidence."

Doctor's relationship with individual patients

Implementation was influenced by the relationships that doctors developed with their patients. "Even if the evidence was extremely good," one general practitioner said, "most of us would only ever interpret it in the context of the patient." Perceived patient characteristics could have a positive or negative effect on implementation. "Of course, if they're the sort who always want the specialist, then you follow their [the specialist's] advice." Another explained, " I think you

have to judge how people feel about it. I try to get patients to reveal to me where they lie in the game … from I want it mate to I don't want to know nothing about it doc … I make tremendous judgments."

Patients could influence clinical decisions as a result of their own experiences. "Well he's a farmer, so every time he calls the vet he gets antibiotics." Another patient reportedly said, "My brother died on warfarin, I'm not taking rat poison." Some doctors found that personal relationships tended to make practising evidence based medicine "harder because you have a close relationship with them." At other times patients could simply block a doctor's attempts to practise evidence based medicine: "Sod that, says the patient, I'm fine."

The assumptions doctors made about their patients seemed at times paternalistic. Some were described by their doctor as " the type who did not want to rock the boat," others as "depressive cum fatalist." "Somatisers," declared one doctor, "eventually get something." By using these descriptions, the contributors were suggesting that their view of the patient modified how and when they applied the evidence.

One doctor built up the relationship with the patient by initially not following the guidelines and then, in a position of greater trust, was able to implement the guidelines properly. "I have now followed the guidelines of course, but in a sneaky way and it's taken about three months to do it."

Perceived tension between primary and secondary care

The general practitioners talked at length about their relationships with secondary care doctors. They felt that specialists approached evidence based practice differently, treating "diseases rather than patients" in a context that they perceived as much more controlled than the "real life" of general practice. On the whole, the relationship was described in pejorative terms. "They do seem a slightly different breed," one general practitioner said, referring to cardiologists. A doctor in another group described cardiologists as "being a bit of an evidence based mafia."

Specialists were accused of failing to realise just how tricky it was controlling some common diseases. "You get stroppy letters from the clinic saying your patient's blood pressure is still 160, and I go … yes, yes, I know. You feel under pressure from the guidelines, but you know it's not from want of trying." In one group, quite a fundamental difference in approach to clinical practice between primary and secondary care was described. "A few hypertensives, without any symptoms, they're well. They're just running a risk. We give them a drug and a side effect—change the quality of their life," said one doctor. A female participant in the same group agreed, saying, "Show me one GP who doesn't think like this, show me one cardiologist who does. I mean, this is the problem, isn't it?"

Clinical evidence can evoke feelings among doctors and patients

For the doctors in our study, clinical evidence is not just an intellectually celibate commodity that is lifted out of medical journals and transferred to a patient. It has an emotional impact on practitioners and patients. "Yes it does make me feel anxious … all the *BMJ*s, all the rags … these people must be on warfarin." "With me messing about with his medication and trying to practise evidence based medicine, I found it was making him [the patient] feel more anxious." Sometimes the knowledge that the evidence existed, waiting to be applied, was seen as a burden in itself: "We get bogged down with perhaps putting the evidence first and consecrating it."

Another aspect of this theme reflected the doctors' feelings about the consequences of failing to act on clinical evidence. One participant poignantly described how, after the death of a young man who had been inadequately anticoagulated for a venous thrombosis, he felt unease "standing behind his widow in the greengrocer queue." Another group, taking up this theme, distinguished between probability and certainty, reflecting the tension general practitioners feel about predicting the clinical course in any one person: "You don't know, do you? You just don't know."

The group discussions also produced data that indicated doctors' familiarity with the evidence and a positive attitude to it. They described its importance to everyday practice: "I think it's always the basis for most of what I do … it's fundamentally evidence based but it's tailored completely." They recognised that evidence based medicine gives new emphasis: "That is the one that I have been hammering, the diabetic blood pressures, to try and get them to 140/80, and I am certainly getting them better than I was but it is hard work." For some of the general practitioners evidence based medicine was revolutionary: "I think that is the first time I have become aware of one study, or group of studies, that has actually changed my practice within a week."

Words used by doctors can influence patients' decisions

Doctors realised that the words they chose to present the evidence could have a strong influence on the patient's decision. They effectively limited the options while seeming to invite the patient to make the decision. The contributors framed these themes with phrases such as "It's how you put it over," and "It depends on how you feed information to people." The semantics then affect the way in which evidence is implemented by swaying the patient in a particular direction. "There is a reasonable chance of you having a stroke in the next year or so if you don't do something about your blood pressure … I'm as barbaric as that," commented one participant.

The participants realised that this in effect "pre-empted" the decision that they were encouraging patients to take during consultations. Some talked of "selling" a particular view on clinical evidence. This tension between encouraging autonomy and effectively limiting options by the slanted presentation of relevant material was a relatively strong theme: "I make these judgments in theory with the patient but probably on my own." Another contributor described the problem as, "How much are we obliged to persuade people, or do we let them make up their own minds?"

The choice of words or the use of metaphors like "slanting" or "selling" were mechanisms the doctors used to influence patients to make a decision about their treatment that was consistent with what the doctor had decided was appropriate. Doctors would

refer to "rat poison" when describing warfarin if they felt its use would be difficult or inappropriate, or describe pills as "having been shown to keep the heart young" when they wanted a patient to agree to treatment. When a doctor argued that it "depends on how you feed information to people," other members of the focus groups debated the issue hotly: doctors might influence decisions, they said, but patients can refuse to accept advice too.

Logistics of general practice

The doctors in this study described some tricky logistical problems that made them less enthusiastic about implementing clinical evidence. "Risky," "hard work," and a "hassle" both for doctors and patients were typical descriptions of the problems of starting treatment. One doctor said, "The problem is starting him on the ACE because he is very anxious about any medication change, and every time you change the medication it entails another four or five visits to go and see him and to try and reassure him that he is on the right medication."

Complications always tended to happen "over the weekend," and those practitioners who, for example, did not always have nursing staff to help do blood tests seemed to be less enthusiastic about implementing evidence on anticoagulation. When discussing the potential side effects of warfarin, one participant said, " It's not a minor bleed if your patient is 30 miles from the nearest transfusion service."

Knowing the patient's personal situation influenced implementation too. Doctors took into account the patient's behaviour, capabilities, or rural location when making decisions. One doctor felt reluctant to anticoagulate one 88 year old woman because "she had an alcohol problem, kept falling. She was forever in casualty being stitched up, bandaged up, whatever."

Discussion

This study suggests that the general practitioner acts as a conduit in consultations in which clinical evidence is one commodity. For some doctors the evidence had clarified practice, focused clinical effort, and sometimes radically altered practice. But a stronger theme from our data is that doctors are shaping the square peg of the evidence to fit the round hole of the patient's life. The nature of the conduit is determined partly by the doctors' previous experiences and feelings. These feelings can be about the patient, the evidence itself, or where the evidence has come from (the hospital setting). The conduit is also influenced by the doctor-patient relationship. The precise words used by practitioners in their role as conduit can affect how evidence is implemented. In some settings, logistical problems will diminish the effectiveness of the conduit.

Strengths

The strengths of our study derive from the fact that three groups were held separately (enhancing the trustworthiness of identified themes). There was good concordance in the analysis of jointly reviewed transcripts, and validation by respondents did not show serious disagreement with the analysis. One group could not continue in the study, and dropped out. This group consisted of doctors in a single practice; one of the partners was enthusiastic about the project but was unable to sustain the other partners' interest. Because the group consisted of doctors in a single practice, the discussions involved the whole practice allocating time whereas in the other groups, individual general practitioners made their own arrangements to attend.

For the two groups that met six times, the Balint format seemed to work well. The doctors spoke honestly about difficult clinical situations in which their practice was incompatible with the principles of evidence based medicine. Over the course of the meetings, doctors developed sufficient confidence in the confidentiality of the group to allow them to speak in a way that probably could not have been captured as well by another qualitative instrument. Semistructured interviews might have offered an alternative: but careful listening to these tapes suggests that the honest interaction among group members encouraged individuals to be more explicit about their experiences than they might have been in a one to one interview.

Implementation of evidence

Doctors in the groups were talking about situations in which they already knew the evidence but had not implemented it. Although the groups did not confine their discussion exclusively to incidents in which the clinical evidence was not applied, the data focus wholly on implementation issues. We felt that if a wider brief had been given to the groups—for example, to discuss implementation generally—the detail of the difficulties these practitioners had implementing evidence would have been less likely to come up. There was plenty of evidence that the doctors were implementing evidence and were happy to do so. The data also indicated that doctors were working together with patients and for the benefit of their patients. Sometimes these factors and the doctor's experience lead to the conclusion that strictly sticking to the rules of guidelines is not appropriate. Whether that is the strength of individual doctoring in a long standing and trusting relationship with a patient or a weakness remains open to debate.

The doctors associated evidence based medicine with randomised controlled trials and systematic reviews. There was no data to show that they were aware of evidence from qualitative or observational research, although such studies are beginning to inform evidence based medicine.

What is already known on this topic

General practitioners do not always act on evidence in clinical practice

General practitioners are reluctant to jeopardise their relationship with the patient and sometimes feel that patients are unwilling to take drugs

What this study adds

Implementation of evidence by general practitioners is a complex and fluid process

Decisions are influenced by the doctor's personal and professional experience as well as by their knowledge of and relationship with the patient

Doctors' choice of words can influence patients' decisions about treatment

Put together, these themes illustrate the complexity of implementing evidence from well structured clinical trials in individual patients. Our findings are supported by other studies in the United Kingdom,[8 13] the Netherlands,[7] and Australia.[14] In some ways, our study illustrates what Kernick has described as the parallel universes of scientific research and general practice.[15] We argue that the doctors in this study were exploring personal importance—that is, the "key to the transfer of an idea to and the evaluation and interpretation of an idea by the doctor and patient together."[16] Evidence is not implemented in a simple linear way, as some definitions of evidence based practice imply, but in an evolving process whereby reciprocal contributions from the doctor and the patient over time influence how evidence ultimately is used.

We thank the general practitioners who gave their time to help in this research.

Contributors: ACF conceived the idea for this project, was involved at every stage of the study, and contributed to the analysis and all sections of the final paper. KS was involved at all stages of the study, and contributed to the analysis and all sections of the final paper. ACF is the guarantor.

Funding: This research was supported by a grant from the NHS South West Research and Development Executive.

Competing interests: None declared.

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(Accepted 6 August 2001)