Developing the role of patients as teachers: literature review

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Abstract

Objectives To identify the roles and settings in which patients participate as teachers in medical education and the benefits to learners, their educational institutions, and participating patients.
Design Review of publications from 1970 to October 2001 providing descriptions, evaluations, or research of programmes involving patients as teachers in medical education.
Data sources 1848 references were identified from various electronic databases. Applying inclusion criteria to abstracts generated 100 articles, from which 23 were selected after independent scrutiny.
Results 13 articles discussed the role of patients in teaching physical examination skills, mostly musculoskeletal examination. Patients also taught pelvic and male genitorectal examination skills. Teaching roles varied, and 19 articles referred to patients' involvement as assessors. 18 articles described patients' training, with some patients being assessed. Reports of learners' experiences were all positive, many valuing the insights and confidence gained from practising skills on patients in a teaching role. Some learners preferred being taught by trained patients rather than doctors. Patients who were consulted enjoyed their teaching role. Several articles commented on the high quality of patients' teaching. Remuneration varied from payment of expenses to an hourly rate. Motivation for recruiting patients included the desire to reduce costs and the value attributed to the consumers' perspective.
Conclusion Involving patients as teachers has important educational benefits for learners. Patients offer unique qualities that can enhance the acquisition of skills and change attitudes towards patients.

Introduction

Doctors acknowledge that they continually learn from patients, gaining new insights that influence their practice.[1] As patients' expertise is harnessed to teach other patients in primary care in the United States and United Kingdom, patients are taking on a more active teaching role in medical training.[2 3] Although patients have always had a role in the education of doctors, the shift into a more active role is new. It has been suggested that the added value of using real patients in medical education requires further scrutiny.[4] To explore the value of involving patients as teachers in medical training we undertook a systematic review.[5] It examines published literature to identify the roles and settings in which patients participate as teachers and to discover the benefits for learners, the patients who participate, and the educational institutions involved.

Methods

Data sources

We systematically searched the databases AMED, British Education Index, CINAHL, Embase, ERIC, Medline, PsycINFO, Web of Science, and also Science Citation Index and Social Science Citation Index. Search terms were used on their own and in combination, using a wildcard (indicated by "$"): "patient$," "health service user$," "consumer$," "teach$," "educat$," "learn$," "instructor$," "student$," "undergraduate$," "postgraduate$ medical," "participation," "partner$," "active partner$," "medical education," "medical school."

Selection of studies

We selected research and evaluation studies plus descriptive accounts of programmes using patients as teachers from a search covering 1970 to October 2001 (for a summary of selection criteria and the reviews included see box on bmj.com). We included articles if patients and carers were "active" teachers, facilitating learning and assessing the acquisition of knowledge, skills, and attitudes associated with medical practice. We excluded programmes that asked "patients" to take the role of a patient or express symptoms of conditions they did not have, including many that used "standardised" and "simulated" patients.[6] We also rejected articles, conference abstracts, letters, and discussion papers that were not written in English. The search generated 1848 hits, of which all but 100 were rejected as they did not meet the selection criteria. Full copies of these 100 items were acquired for further scrutiny. We applied the selection criteria independently and chose 29. The original 100 items were also read by two independent assessors, whose views on disputed papers led to a final selection of 23 studies for analysis.

Results

Key features of the reviewed articles can be found in the table on bmj.com. Most articles were published

P+

A box, a table, and extra references appear on bmj.com

during the 1990s; 15 are from the United States and the remainder from the United Kingdom, Australia, Canada, and New Zealand.

Stage and subject of training

Nineteen programmes were undergraduate programmes and seven involved patients as teachers in postgraduate training. One study described a programme in continuing professional education to improve family practitioners' effectiveness,[7] and in another, consumer organisations nominated non-medical examiners to assess doctors' communication skills for membership of the Royal New Zealand College of General Practitioners.[8]

Thirteen studies focused on physical examination skills, with most concentrating on musculoskeletal examination. Patients also taught pelvic examination skills and male genitorectal examination skills.[9 10] Other topics included children's developmental disabilities, dementia, and cancer.[11–13] Three programmes were devoted to communication skills, and two involved learning from patients in community settings.[11 14]

Patients' roles and training

Patients' roles included giving a presentation, facilitating seminars, demonstrating to small groups, providing personal tuition, and giving feedback on performance (see box 1). Nineteen studies involved patients as assessors. The articles did not always make explicit the duration of learners' training in a specific topic or the proportion of time that patients were involved as teachers. Most initiatives seemed to involve patients in a discrete element of a programme lasting one or more sessions.

Eighteen articles described patients' training, which varied in style, duration, and intensity. Training could entail individual or group instruction, practice with students, use of audio or video tapes, and home study. Some patients teaching musculoskeletal examination skills received up to 50 hours of training, with additional home study.[15] Patients teaching physical diagnosis skills for cardiovascular and pulmonary examinations were given an instructor's manual written in lay language.[16] In one programme, arthritis educators had to attain 90% in a test to become an evaluator.[17]

Evaluation of patients' involvement

Most articles refer to learners' views about the patients' role in their training, but not all seek the patients' perspective on their experiences. Patients who were consulted referred to their experiences as positive and enjoyable. They appreciated sharing their knowledge, using their condition to facilitate learning, and contributing to doctors' training. Some patients felt empowered by their experience.[12 18] Others referred to their increased learning and the value of their training.

Reports of learners' experiences were all positive. Some preferred the teaching they received on specific topics from trained patients to the teaching received from doctors. Many commented on gaining new insights and confidence when practising examination skills on patients who gave constructive feedback. Such training increased their respect for patients and deepened understanding of the experience of disease.

Box 1: Educational initiatives involving patients as teachers

- Physical examination skills:
  - General physical examination
  - Musculoskeletal examination (arthritis)
  - Male genitorectal examination
  - Pelvic examination
- Diagnostic skills (cardiovascular and pulmonary)
- Communication skills
- Developmental disabilities of children
- Dementia
- Ambulatory care of patients with HIV
- Cardiac care and mental health
- Holistic understanding of health

Benefits and challenges

Articles emphasised the positive contribution of patients in a teaching role, with one reporting that lay examiners from consumer organisations could reliably assess the communication skills of general practitioners.[8] Authors commented on learners' increased confidence and reduced anxiety when undertaking physical examinations. Several commented on the high quality of patients' teaching, with one article referring to patients working as instructors as "true colleagues in medical care."[19] Another study concluded that using patients as teachers improved local delivery of health care, changed professional behaviour, and was cost effective.[7]

Some articles indicated potential difficulties patients where were involved as teachers. Patients' emotional wellbeing and physical stamina were sometimes of concern where they might experience stress when sharing potentially painful issues or undergoing repeated examinations. This required monitoring to resolve difficulties that might lead to patients leaving the programme. The sustainability of reviewed programmes required resources to train patients, maintain their skills, and ensure that the faculty was committed to working in partnership with patients in their teaching role.[14]

Recruitment, remuneration, and status of patients

Motivation for recruiting patients as teachers and assessment of their value seemed to vary between programmes. Several recruited selectively to ensure that patients met specific criteria based on their teaching ability. Some viewed the programmes as a cheaper alternative to traditional methods,[20] others valued the consumer perspective.[8] Patients were recruited by doctors, from a standardised patients' pool, or for their professional (albeit not medical) background. Some received remuneration in the form of compensation whereas others received an hourly rate. Payment was associated with the status given to the patient-teacher, which could influence the programme's success. One article was coauthored by the chairperson of a carers' organisation, which implies a close partnership.[13]

Value of involving patients as teachers

This review shows that meeting real patients with firsthand experience of a condition, who have knowledge and teaching skills, offers learners important educational benefits (see box 2). This was particularly evident in physical examination teaching by

trained patients. Learners found the experience less intimidating and developed confidence in examination skills. Through instruction and constructive feedback, the developing rapport between learners and patients seemed to improve the acquisition of physical examination and communication skills and respect for patients. Patients' teaching of musculoskeletal examination skills for arthritis was at least as good as that of consultants.

Most authors emphasised the positive contribution of patients as teachers. Although this may reflect publication bias,[21] the authors provided explicit evidence of the patients' value. The disadvantages that emerged do not seem to negate the principle of involving patients as teachers but highlight the responsibilities of programme directors who choose to involve them. To benefit from being involved as teachers, patients must be adequately trained, supported, and remunerated.

The process of choosing patients for their teaching roles was not always clear in the articles; this raises the issue of how far the patients who were selected represent "communities" associated with the programmes. Teaching ability seemed to be an important criterion in the selection of suitable patients. The basis on which this is applied may, however, preclude able people unless recruitment processes are open and transparent, particularly when participation from diverse ethnic groups is sought.

Box 2: Value of involving patients as teachers

For learners

- Enables access to personal knowledge and experience of condition and use of services
- Deepens understanding
- Provides constructive feedback
- Reduces anxiety
- Increases confidence
- Influences attitudes and behaviour
- Improves acquisition of skills
- Increases respect for patients
- Places learning in context

For patients

- Uses their disease or condition positively
- Uses their knowledge and experience
- Acknowledges their expertise
- Creates a sense of empowerment
- Provides an opportunity to help future patients
- Increases their knowledge
- Provides new insights
- Improves their understanding of doctors

For trainers

- Provides additional teaching resources
- Improves quality of teaching
- Offers alternative teaching opportunities
- Develops mutual understanding
- Enlists new advocates
- Provides value for money

What is already known on this topic

Patients have a crucial role in medical education, but their involvement tends to be passive

Simulated and standardised patients are commonly used as alternatives to real patients in teaching communication skills and clinical examinations

What this study adds

The value of involving patients in an active teaching role, where learners can benefit from patients' experience and expertise, is being recognised

The experience of being taught by a trained patient can increase confidence, reduce anxiety, and generate new insights

When patients are given adequate support, training, and remuneration, they can become colleagues in medical training, not just a teaching resource

This review has been restricted by being limited to English language articles. There may be other programmes where patients see themselves as active teachers, although this may not be explicit in the course design. In an article omitted from this review, patients were recruited as subjects for students' community projects but viewed themselves as teachers.[22]

Our review seems to be the first published review of patients as active teachers and indicates the diverse settings in which they have been engaged. Most of these have been in secondary rather than primary care, but there does not seem to be anything intrinsic to the programmes described that would preclude adopting them in training programmes in primary care.

Conclusions

Patients are a valuable resource as potential teachers in all stages of medical education. If patients are given appropriate support, training, and remuneration, evidence shows that, in specific settings, patients offer unique qualities that can improve the acquisition of physical examination skills and communication, instil confidence, and change attitudes towards patients.

Our review generated only 23 articles giving details of programmes in which patients had an active teaching role. This implies that the potential of this untapped resource has yet to be fully realised. As government programmes recognise the importance of using patients' experience and expertise to enhance programmes for self management that are led by users, those responsible for medical training could usefully explore opportunities for using patients as teachers.

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Of middle years and white coats

You're told it's important to go for a "medical" when you turn 40. I'm not sure how many do. I guess the reluctance to go is really because you don't want to accept the arrival of your "middle years." You feel well; you certainly don't feel middle aged (even though your son is getting taller than your shoulders, and recently you've wondered if you need glasses for reading small print and doing procedures like siting an umbilical catheter).

I think what got me moving was the reminder from occupational health that my levels of hepatitis B antibodies needed checking, and I thought, "Why not throw in a few 'routine' tests?" I was relieved to find none of the numbers was bad except for a highish cholesterol concentration. Then I wondered about the vague, frequent headaches that I seemed to have; I couldn't remember when I last had my blood pressure checked. The sister at my outpatient clinic kindly obliged—144/106 mm Hg. She frowned, checked her equipment, and inflated the cuff again—146/100. My heart sank. There we go—high cholesterol, hypertension, and whatever next? "Hypertension is a real killer"—the words of my erudite professor of medicine rang in my ears. Now I had to see my general practitioner. I suppressed the anxious urge to ring for an appointment immediately. I looked up various web references and worried with my wife about the estimates of my risk of coronary heart disease (which came up in red in the web pages).

I waited with increasing uneasiness for my appointment. Another blood pressure measurement meanwhile was depressingly high(er). Finally, I had my "medical" at the end of a busy day for me, the day's last appointment for my general practitioner. It was the first time I had met the pleasant bloke, though he had registered four years back. He noted the lack of family history of hypertension, hyperlipidaemia, or coronary disease, checked my blood pressure, rechecked it, and suggested: "Maybe we ought to do a kidney ultrasound after all and urinary vanillylmandelic acid," and then, as an afterthought, "ambulatory blood pressure measurement perhaps [I hadn't thought of that]. We'll do that first."

I wore the cuff on my arm under my sleeve through a working day: it inflated and deflated automatically with a faint grunt every 30 minutes. Thankfully, none of our senior house officers and registrars seemed to notice it during the teaching session that afternoon. That night, the thing was programmed to inflate only hourly, so, after a couple interruptions, I slept well. Off to the cardiorespiratory laboratory next day for the readings to be downloaded.

With a welcome feeling of anticlimax, I stared at the verdict—mean blood pressure 120/78, with very benign looking graphs. So I have "white coat" hypertension, how strange. It must be something to do with me being a paediatrician (paeds don't wear white coats). My general practitioner seemed pleasantly surprised as well and said : "We'll need to repeat the blood pressure check later, maybe in six months, no need for statins just yet but watch the diet." Depressing, but true perhaps: had my middle years arrived?

What else? All the trainees had noticed the cuff grunting on and off but, of course, were too polite to mention it; I've got a pair of those "reading" glasses; and the headaches have gone (I think after I started drinking a couple of cups of water during the working day, or it may be the glasses). I definitely need to go for a walk today—I missed it in the past two weeks—and, guess what, it's raining. Anyway, nothing much to worry about just yet—until the next visit to my general practitioner and the blood pressure check.

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