

## Patients' experience of educating pharmacy undergraduate students

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### Abstract

To work effectively as a pharmacist, it is vital to have clinical skills to identify and solve pharmaceutical care issues; undergraduates therefore need to learn and practice clinical skills. To achieve this aim, a patient focused education programme has been developed at the School of Pharmacy, University of London. The aim of this research project was to explore patients' experiences of teaching pharmacy undergraduates.

Seventeen patients were interviewed and the first 14 were analysed. Patients saw their involvement with pharmacy students as a way of "investing in the future" by creating pharmacists who were patient-focused. Patients also provided students with an "expert view" of their illnesses. Helping to teach students was seen as a way to repay the National Health Service (NHS).

Patients benefited as they gained knowledge about their illnesses, their medicines and they were more questioning of healthcare professionals. Sessions enhanced self esteem and confidence, enabling them to air their feelings and opinions regarding their illnesses and relieved loneliness.

**Keywords:** *Patients as teachers, pharmacy education, communication skills, consultation skills, clinical skills*

### Introduction

"A Vision for Pharmacy in the New NHS" (Department of Health, 2003) sets out a challenging agenda for the pharmacy profession. The key emphasis is "the patient" around whom the plan is designed. To work effectively, pharmacists must be able to communicate well with patients, learn and practise the clinical skills needed to identify and solve pharmaceutical care issues. We believe it is vital that students are exposed to patients early in their undergraduate programme. Patients can be used in the educational programme to teach clinical skills such as retrieving information from patients, problem identification and problem solving skills, communication skills, and for understanding the impact that medicines and illness has on the patient. Patients can also be used to learn how medicines are used in patients with certain diseases. To date little has been published on

using patients in pharmacy education. James et al. (2001) used simulated patients to develop the consultation skills of undergraduate pharmacy students. This study demonstrated that using simulated patients improved students' perceptions of their ability and confidence in conducting an effective consultation.

Patients have always been an essential part of medical education (Kelly and Wykurz, 1998; Spencer et al., 2000). Most of the literature is on the use of standardised patients but there is some on the use of "real" patients. Traditionally patients have been used to teach students about the signs and symptoms of diseases and to practise clinical examination skills. However, more recently patients have also been used to develop students' inter-personal skills, to aid understanding of how patients' lives are affected by diseases, and help students learn to show empathy (Kelly and Wykurz, 1998; Spencer et al., 2000).

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Using patients also puts learning into perspective and encourages students to understand the relevance of what they learn in a classroom situation (Kelly and Wykurz, 1998; Spencer et al., 2000).

The authors believe that the use of patients is rapidly becoming an essential component of pharmacy undergraduate education. At the School of Pharmacy, the authors achieve experiential learning by organising clinical hospital visits and by having patient visits to the School in the first and the fourth year (Shah, 2004). In the first year, 10–12 students have a tutorial on the “healthcare of an ill patient”. This tutorial is led by a practitioner, after which students have an opportunity to ask questions to the patient volunteers about their experiences of being a “patient” and the care they have received. The aim of these sessions is for students to start talking to patients and understand their own role as a pharmacist. In the fourth year, students have individual interviews with patient volunteers (Shah, 2004). The aims of this session are to provide an opportunity for students to develop skills needed to take accurate drug histories, allow students to develop skills needed to communicate effectively with patients and to reach a greater understanding of the impact of illness and treatment on patients. Details on how the sessions work can be found in the article by Shah (2004).

Patient volunteers used at the School of Pharmacy are recruited in many ways including contacting self help groups in local areas and by advertising in their magazines. Patient volunteers have also occasionally been recruited by writing articles in self help group magazines and by presenting to the groups the roles of a pharmacist. We have also recruited volunteers through word of mouth and every year we have one or two volunteers because of this. Over four years we have built up the list of patient volunteers and currently we have about 30 patients who come regularly. Patients are not given any monetary payment for their involvement in the educational programme but their travel expenses and lunch at the School are provided for.

The aim of this research project was to explore these patients’ experiences of teaching undergraduates, their perception of their role and to discover what patients themselves have personally gained from this experience.

## Method

All 30 patients who were involved in the teaching programme were invited by letter to take part in the study. Of the 27 patients who responded, 17 were available for interview within the project time-scale. Interviews were carried out at the School or in the patient’s home or workplace, and were tape-recorded with the patient’s consent. The interview topic guide

was devised to elicit information and views about:

- (1) Patients’ role in educating students
- (2) What patients gain from these sessions
- (3) Reasons for being involved in the educational programme

Interviews were transcribed by SK, and read independently by all authors. Initial analysis was done independently by RS and IS, using the theme framework (Pope, Zeibland and Mays, 2000) described by Stacy and Spencer (1999). IS checked the analysis against the transcripts and the tapes. Themes were combined, and further themes relating to specific pharmacy issues were identified and agreed.

## Results

Overall 17 interviews were conducted and the first 14 were analysed. The final three interviews were poorly recorded and analysis was not possible.

The mean age of patients was 61.9 years (range 40–80 years) and there were five female and nine male patient volunteers. All the patients interviewed were Caucasian White. Ten patients had 3 years experience with the programme and the rest had 1–2 years experience. Patients were from a variety of self help groups (Table I).

Two patients were interviewed over the phone, two patients were interviewed at home, one patient was interviewed at the workplace and nine patients were interviewed at the University.

Three main themes emerged from the analysis (Figure 1): Why did patients become involved; What did patients gain; and, How patients saw their role.

### Why did patients become involved?

All patients thoroughly enjoyed their involvement in teaching pharmacy undergraduates and felt positive about the teaching. Patients seemed to have a selfless nature and were genuinely willing to help students.

... I just like helping people. That’s why I do it...  
[11 male cardiac]

For those who were retired, or not able to work, being involved gave them something different to do and the opportunity to get out of the house.

Table I.

Name of self help group	Number of patients
Asthma group	3 patients
Cardiology group	3 patients
Epilepsy group	6 patients
Diabetes group	1 patient
Kidney failure group	1 patient

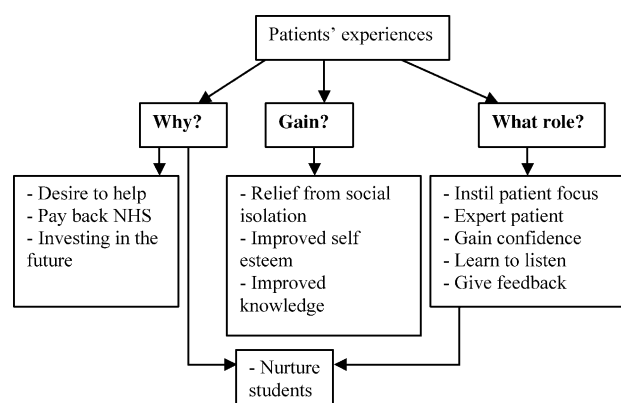


Figure 1. Summary of patients' experiences.

I would like to do the whole lot, you know. As I say I suppose I'm being selfish because... [I: In what way?] Well Tuesdays and Thursdays, well I only work Monday, Wednesday and Friday in the morning, so Tuesdays and Thursdays I'm on my own indoors except for a cat and... if I was up here I'd be in company. So I am being selfish if you look at it that way. [2 male diabetes]

The opportunity to meet people and do something enjoyable was also a motivating factor.

Well it's fun to do and it's good to be helpful and as long as R\_ keeps asking, I will come if I can manage it, if I'm in the state of health where I can manage, I will come. It's nice to still be doing things useful. It's nice to see the other patients year after year. [5 male renal]

People also took part because they were interested in, or curious about, pharmacy education.

...quite honestly being retired it didn't mean it meant taking any of my time and it's quite an interesting thing to do. And also find out something about the university and what they did! [I: What do you find interesting about the experience?] Well how they were being taught and whether I felt it was worthwhile what they were being taught for the business. [3 male asthma]

Many patients perceived their contribution as a demonstration of gratitude for having been treated within the National Health Service (NHS) and saw this involvement as a way of doing something in return.

...In many ways I'm so lucky that I feel I ought to give something back. I live a pretty good life and I've taken a lot out of the NHS for many years now, unwillingly but I have to and I'd like to just put a little back if I can... [13 female epilepsy]

These results are very similar to that found in medical education (Lynöe et al., 1998; Coleman and Murray, 2002). In the study by Lynöe et al. (1998),

88% of patients stated that their reasons for wanting to participate in medical education originated from altruistic considerations or from confidence in the health care system.

Taking part in teaching was also a way of investing in their own future and that of other patients like them.

These students are going to be the pharmacists of tomorrow and we're all going to need them. We've all got to be 'investors in people', because if we don't invest in their education and training we're going to be in a right mess because they're going to be the brains of tomorrow. [6 male epilepsy]

Patients had a vision of an "ideal pharmacist" and they wanted to nurture the students so that they could fulfil this ideal. Patients had developed this vision because of their experiences with pharmacists—both good and bad.

... I'd like to think that... it will benefit them later on when they actually become chemists to remember that when they're dealing with someone, perhaps they ought to consider more of a relationship with that individual... More of a relationship than: Oh here you are, thank you very much, good bye. Because as a chemist you can help people... [9 male epilepsy]

Patients wanted students, as future pharmacists, to be what some patients described as "peoples persons". The essence of this was that they wanted students to realise that there was a "functioning human being at the end of the drugs they dispensed" and that as a practising pharmacist they need to take an interest in and care about that person they deal with.

... I think a place like this must need interaction with the outside world quite a bit actually because when I saw the students they were a bit cocooned up inside of here, they don't really get to know the ways of the world. I think there is a big part to play by members of the public perhaps who come in and spend a day with students and bend their ear on anything and get to know them [6 male epilepsy]

### How patients saw their role in educating pharmacy undergraduates

Patients confirmed that they had an important role to play in improving students' communication which was one of the main aims of the programme. Many felt that their contribution to pharmacy education would enhance students' self confidence and probably motivation as well. Patients saw and commented on students' lack of confidence, both in the first year and final year. Some students were clearly nervous and always consulting a checklist of questions.

The fact that I've seen some of them very uncomfortable, very uncomfortable, because they're not, they don't feel relaxed at all. Well

that's something I can't do anything about, but I don't think that I feel negative about it. I just feel sad, and I will put a comment on the sheet, you see, because I think that's something the School needs to put right, in its own way, however, it chooses to do it. Because they shouldn't leave the school as pharmacists without being able to cope with whatever is thrown at them. [1 female asthma]

Some patients liked the fact that students used checklists because it meant that the shy students did ask something but others felt that this hindered students from exploring the patient's life and illness and medicine experience.

Most of them have a checklist which they go through, which is okay when you're practising, but it's something you couldn't really do in front of a whole string of patients, you wouldn't have time to keep referring to a checklist. It's something that they've got to learn to do automatically in their job eventually, so they've got to start somewhere and we're as good as any to start with because it doesn't matter if they make mistakes with us [5 male renal]

### Patient focus

Patients talked about the types of questions that students should be asking and the approach they should use to develop a patient focus.

...having to come and talk to somebody like me who until that moment they've never met before is just like they'll be [doing] when they get in their pharmacy. They have to come out of their little hutch and come and talk. So I think it's a very vital part of the learning process for pharmacists. [I: Anything else?] They can get an idea of what different people are like... because you can never really catalogue the public, because they don't all come in the same bracket. They can be happy, sad, some of them can be angry and dealing with angry and difficult people who may well be angry through no fault of your own and you've got to be polite, nice to them all the time. It's not easy, it is a skill that you can't really learn it unless you get out and have a go. I can't really teach, they can work out how to cope with me. [6 male epilepsy]

Focusing on the individual patient, not on the disease or the drugs, was a strong theme in the interviews. As one patient stated:

... to be aware of ways of conducting one's life which may have an impact on medication, which is not all that clear often in the written notes that accompany the medication. But if you have the experience of talking with many people who have taken certain medications you build up in your own mind almost a folk lore of what to watch out for with

particular tablets and you can advise accordingly. [8 male cardiac]

Being patient focused meant showing empathy. Patients wanted students to understand them and the impact illnesses and medicines have on them.

... realise as a pharmacist that people's lives are not very comfortable, they are not as they want to be and you've to be gentle with them as well and not say 'well if you take your medicine, you'll be alright. You've still got to say it, but you've got to find a way to say it ... [1 female asthma]

To be empathic meant learning to listen to what patients and carers had to say and take this into account in reaching any conclusions. A number of patients felt that pharmacists tended to be theoretical in their approach and failed to take patient's views and previous experiences into account. One patient summarised this viewpoint as follows:

I: What are you most interested in telling the students?

P: To listen to the patients. Listening is a vital skill to have when you are in the medical profession dealing with ill people. Some of us may be so ill that we can't even go to the local chemist to pick up a prescription, in that case listen to the patient's representative. Listen, even when you think you're right. ... we have been taking the drug for a very long time, we know how it will affect our bodies. ... I want them to listen and I want their help. It's a two way process. I would like them to listen to what I have to say before they make a judgement [10 female epilepsy]

### Patients as experts

Another role patients felt they had in educating undergraduate students was in their capacity as an "expert patient". Patients wanted to teach students about their medical conditions and the medicines they were taking because they had personal experience of medical conditions and the medicines which students would not be able to obtain from books and from other sources.

As the patient quoted above pointed out:

... I have a chronic condition and I don't think they can learn everything about it just by reading journals. They learn from my own personal statements of living with epilepsy. Books don't always answer the questions you want answered, we are here to answer those questions as best as we can ... [10 female epilepsy]

The other reason for wanting to teach about their medical conditions and their medicines was that

patients did not want to be compartmentalised into disease categories as they felt that they were not all the same. They wanted to teach students that each patient was an individual with their own experiences. Patients talked about this in the context that there were many different types of epilepsy and that each patient was affected very differently from the next and thus it was important for the students to understand this. The other example which patients gave was the fact that there were different reactions to medicines which were unique to individual patients.

### **Giving feedback**

An important role for patients was to assess fourth year students on their performance. A checklist was provided to patients on what areas to give feedback. Patients also had an opportunity to write down any comments. Patients on the whole were honest in the feedback they gave to students. However, there were apprehensions about being negative and patients felt that being negative could de-motivate the students. As a result patients tended to give positive feedback to students.

Yeah you do tend to pull your punches. But you still give an honest—I do anyway—an honest appraisal of what I've seen and heard. But if it is so bad, well, I say "so bad", if it is bad you tend to gloss over it a bit. But most of them are alright. As I say you just get the odd one or two ignorant one. [2 male diabetic]

I don't like to say "Oh this student was a bit hesitant in asking the questions." They had to stop and think too many times what to ask me next so I should probably mark them down on that but I don't like doing so. The poor student might think "Oh they don't like me!" But you want honest replies obviously. [7 male cardiac]

Notwithstanding this, there were some patients who were critical in the feedback they gave to students. As one patient explained:

...I'm very honest with my criticisms. If I feel that somebody has asked the wrong questions or gone off on a side stream or isn't broad enough, I will actually say so. I don't think it in any way gets them into trouble. I see that it will help them so that next time they do the same process, an interview with someone else, they will bear in mind that they're a little bit weak on that... [1 female asthma]

Patients who had more experience in educating pharmacy undergraduates tended to be more critical in their feedback and knew what sort of issues to look out for. They also tended to compare between students. Patients who were new to this type of experience tended to struggle a bit with the feedback.

The majority of patients were not keen to give verbal feedback to students. They tended to write down any

comments and then give the comments sheet back to the School tutor. They were also not keen to give the comments sheet back to the students directly.

### **What did patients gain?**

All the patients gained something from the experience in terms of their quality of life. All the patients involved in the programme suffered with chronic illnesses, which left some of them unable to work, with resulting feeling of worthlessness. Involvement in teaching gave them a sense of worth and pleasure, as they were able to talk about something they knew. In one case a patient with epilepsy learnt how valuable it was to talk about the emotional side of her illness and this improved the patient's self confidence and self esteem.

She expressed this by saying:

It has definitely helped me by talking to the students. I hope I'm making a difference for the future and that it is worthwhile for the students. It's definitely been worthwhile for me because it makes my epilepsy seem much less important...it has improved my quality of life and has made me accept my epilepsy. [10 female epilepsy]

There was another patient with diabetes who had never in his life talked to people like he did when he came to the school. This really improved his confidence and he now also works in the hospital as a volunteer in the diabetic clinic.

As a result of increased confidence and self esteem, patients were also able to cope better with their illnesses. Similar results have been found in other medical education studies (Stacy and Spencer, 1999).

As one patient said:

... it's helped me talk about it. I've never spoken about it as much as I have when I was up there. [12 female epilepsy]

Some patients also gained increased knowledge about their medicines.

By participating in teaching, students and patients' became more aware of their medicines and as a result were more questioning about the treatment they were receiving.

... my knowledge on side effects has improved and I tend to ask questions to health professionals regarding them... [8 male cardiac]

For many patients, participation was viewed as a social opportunity to meet and interact with "young people" which they found stimulating.

... It's largely social actually, the students look after us, sat with us, have their meals with us and we have quite interesting conversations with the students. I hope they can learn a lot by talking to us old and retired. I can honestly say I've enjoyed joining in

with the youngsters, they're very good. . . . I've gained respect, the feeling that I'm not completely lost to the world, I still can be of some use to people. [7 male cardiac]

I've talked to one or two students who we've got things in common. Up until recently I used to do running and one of the Indian chaps who interviewed me, he was a runner, we had a chat about running. So it's quite nice to meet someone who's got something in common, despite the fact that you're 30 odd years older them. [5 male renal]

They also gained by talking to other patients. One patient with epilepsy had been anxious about the impact of her condition on her employment prospects. Another patient had given her information about the legal situation, which made the patient feel better.

One issue which several patients raised was the lack of follow-up information on how students progressed, and what students had learned as a result of the session.

Perhaps a follow-up programme could be included after the interviews to find out what the students have learned from us. It would be nice to see them again after a while and to explore any issues they may have had during or even after the interview which they want to find out. It would be nice to get an update of the sessions before you leave university. [10 female epilepsy]

## Discussion

Relatively few studies have been conducted investigating the views of patients participating in medical education. To date we have found no literature on the views of patients participating in pharmacy education.

A number of studies investigating patient participation in medical education found that the majority of patients were very positive about being involved in medical education and were willing to participate indefinitely (Coleman and Murray 2002; Jackson, Blaxter and Lewando-Hundt, 2003). This finding is similar to the results of our study. We did not have any patients with negative issues regarding their involvement in the educational programme. Whilst there were some patients who did not want to continue with the educational programme after one experience, we did not get the chance to interview this cohort of patients to look at their reasons. In the study by Jackson et al. (2003), two patients felt negative about their experience. One of the patients reported that they felt confused following the interview with the students. This was because they were not sure whether the student had learned anything and whether the experience had been of any value to the students. The authors found the same theme in our patient cohort, but as a positive suggestion for the future.

The second patient in Jackson's report felt negative because it brought back the sequence of events before her son was diagnosed with cerebral palsy and this led to her being angry as she realised how badly she had been treated at the time. In our study, several patients had difficult experiences relating to the diagnosis and management of their condition. This was a motivating factor in their participation as they wanted to educate future healthcare professionals.

In other medical literature, there are incidences of negativity arising due to patients not being consented, doctor and student talking about the patient and ignoring the patient and that the doctor was more interested in the student rather than in the care of the patient (Lynöe et al., 1998). These situations arose when students were observing doctors in their surgeries. The issue of consent is very important and it is essential that patients are consented to take part in educating students. The authors obtained verbal consent from patients and we also gave a written explanation of what is expected of patients and the programme for the day. A written form is signed by the patient and handed back to the tutor at the University so that we know that the patient has read the information. There is also the issue of confidentiality which we did not explore in our study but is a concern which has been raised in medical education (Williamson and Wilkie, 1997; O'Flynn, Spencer and Jones, 1997).

Patients in our study wanted to nurture students and mould them as future pharmacists. Similarly patients participating in medical education also wanted to nurture medical students. In the study by Jackson et al. (2003), patients talked about the importance of listening skills and how these educational programmes would instil such skills in students. Similarly Weisser and Medio (1985) stated that patients wanted to be involved in medical education as they hoped that the outcome would be a better care for future patients.

Not surprisingly, patients talked about being "experts" in whatever illnesses they have and they felt that this is something they could share with students. In our study the authors did not investigate in greater depth what actual knowledge patients were sharing with the students. For instance in the study by Jackson et al. (2003) patients felt that their involvement was more in teaching students the emotional aspect of illness rather than the medical aspect of it. Patients had a unique contribution to make through the knowledge and expertise of knowing the way patients felt and how this impacted on their ability to cope and deal with the medical condition, something about which doctors might have no idea. However, in the study by Stacy and Spencer (1999) patients described the type of information they would give to medical students and this included giving technical information about the medical conditions, showing

and demonstrating things to the students and how the illnesses have affected their lives and their coping strategies.

As far as we are aware there is no published research on patients giving feedback to medical students. Our patients were reluctant to give feedback directly to students; the reasons for this need to be explored in further work. More work also needs to be done in training patients to be assessors.

## Conclusion

This has been a successful programme which has now been on-going for 4 years. Patients are an untapped resource in pharmacy education and they should be used more extensively. They have a valuable part to play in undergraduate education which one patient expressed by saying:

A four year course is like a jigsaw, by the time you've done your four years and you've got the jigsaw complete in front of you, hopefully you're ready for the final exam. And it would be nice if my input was the last piece of the jigsaw and without it they haven't got the full picture. [9 male epilepsy]

In pharmacy education we need to ensure early patient contact to promote good communication skills, better understanding of patient's experiences about their illnesses and their medicines and to establish the pharmaceutical needs of patients.

We also need to achieve greater diversity in the types of patients so that students get experience in communicating and eliciting information from a variety of patient types. This does not just mean recruiting patients from different ethnic background but it also means recruiting patients with different illnesses and should also include communicating with carers.

In future, to enhance the learning experience perhaps students should follow the progress of a patient over a longer period of time (for instance, having regular quarterly contact with the same patient) so that students get an insight into how patients are responding to different medicines and how the healthcare system in the country responds to their needs. This would also allow patients to get

feedback on whether their teaching had in fact helped students learn and improve.

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Thanks to all the patients who have participated in this educational programme and have shown their dedication and commitment for a number of years.

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## **Author Queries**

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**Q1** Kindly provide caption for Table I.