RESEARCH

Professional Identity Formation of Pharmacy Students During an Early Pre-registration Training Placement

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Objective. To explore the lived experiences of pharmacy students undertaking an early pre-registration training placement in the United Kingdom, particularly with respect to the development of different aspects of their professionalism.

Methods. Fourteen students returning from an early pre-registration placement (during the third year of their pharmacy degree) were interviewed, using a semi-structured approach. Grounded theory methods were used to analyze the transcripts and a theory was developed.

Results. ‘Developing a professional identity’ was the core process that occurred during the placement. This included four stages: (1) Reflection (2) Selection of attributes (3) Professional socialization and (4) Perception of role. As a consequence of ‘Developing a professional identity’, participants had a strong vision of the kind of pharmacist they wanted to be when qualified. They articulated an increased responsibility as students, and began to see themselves as ‘Now a trainee professional’.

Conclusion. This study strongly supports the use of an early pre-registration period to develop pharmacy students’ sense of professional identity and strengthen their motivation to learn.

Keywords: professionalism, professional identity, professional socialization, grounded theory, student

INTRODUCTION

Development of professional attributes through classroom study and practice placements is considered an essential part of the education of pharmacists, yet the process by which this occurs is poorly understood. Many studies describe the benefits that students and employers gain from exposure to the workplace, and it is widely accepted that it helps students to contextualize knowledge, understand the complexities of the working environment, develop their practical skills, consolidate career choice and begin professional socialization. Cruess et al proposed that development of a professional identity should be a key objective of medical education. Monrouxe proposed that it is vital to gain an understanding of the way identities develop within medical education, as trainees who struggle with this process are likely to develop unstructured coping mechanisms and come into conflict with the professional role, or reject it completely. It is likely that these issues may also surface in student pharmacists as well as medical students. However, the way that student pharmacists make sense of their experiential learning whilst on work-based placements, and how this impacts on their professional development, professional socialization and professional identity is largely unexplored. Since unprofessional behavior from pharmacists and other health care professionals receive public attention the reassurance that registered pharmacists are professional ‘to the core’ has become increasingly important.

Pharmacy students in most countries, including the United Kingdom (UK) and United States of America (USA) are required to undertake work-based placements as part of their education. In the USA this is via mandated introductory pharmacy practice experiences (IPPE) and advanced pharmacy practice experiences (APPE), however in the UK whilst all schools of pharmacy do arrange placements for their students these are usually short term (1-5 days/year). Hammer, Roth and Zlatic regard that the role models students are exposed to during work-based placements are key to their development of professionalism and caution against exposing students to negative role models. Other studies have discussed the potential for placements to have a negative impact on health care students’ development of professionalism and professional socialization. Unprofessional environments can encourage a strategic approach by students to placements and cause disillusionment as a result of the gap between theory and practice.

The term ‘professional socialization’ has been collaboratively defined by the American Pharmacists Association and the Academy of Student Pharmacists-American Association of Colleges of Pharmacy (Council of...
Deans) (AACP-COD) task force as “the process of inculcating a profession’s attitudes, values and behaviors in a professional.” Professional identity is different to the process of professional socialization and has been defined as “the relatively stable and enduring constellation of attributes, beliefs, values, motives and experiences in terms of which people define themselves in a professional role.” In 2014, an AACP-COD taskforce defined professional identity formation as “the transformative process of identifying and internalizing the ways of being and relating within a professional role.” There is now a growing volume of literature worldwide emphasizing the importance of the development of professional identity in pharmacists.

Some aspects of the development of professional socialization and professional identity have been studied in the UK, where the standard model of pharmacist training involves a four year Master of Pharmacy (MPharm) degree followed by employment for one year whilst completing a practice-based ‘pre-registration training placement’ (PRTP) under supervision of a pharmacist tutor, and without direct contact with the university. Graduates must pass a regulatory exam at the end of this ‘pre-registration’ year in order to qualify as a pharmacist and register with the General Pharmaceutical Council. Jee and colleagues have investigated the development of professional socialization in MPharm graduates over the course of their PRTP. Ratings of all aspects of professionalism as measured by both trainees and their tutors, increased both quantitatively and qualitatively. Trainees felt that the people who had influenced them the most throughout the year were their pre-registration tutor and other pharmacists. Trainees’ confidence grew throughout the year as did the importance they assigned to professionalism. These studies gave an initial insight into how pre-registration pharmacists become professionally socialized whilst on placement. One university in the UK has run an ‘intercalated’ Pharmacy MPharm programme for the last 45 years where students undertake two six-month PRTPs in different years of the programme; an ‘early’ placement and a ‘late’ placement (in years 3 and 5 respectively), which can be in different sectors, and are independent of the university. This offers an opportunity to study the development of professionalism earlier (e.g. in students rather than graduates). There is currently no published literature on the impact of these placements on students’ professional development, professional socialization and professional identity. The aim of this study was to use a grounded theory approach to explore the lived experiences of MPharm students when undertaking an early PRTP as part of an intercalated programme, particularly with respect to the development of different aspects of their professionalism. Ethical approval for the study was gained from the University of Bradford Ethics Committee on the 22nd August 2012 (Ref E.244).

METHODS

A qualitative, grounded theory approach was appropriate for this study as the aim was to generate theory about how and why a phenomenon occurs, rather than simply describe it. Constructivist grounded theory methods were used in this study to ensure that any substantive theories generated were firmly and demonstrably grounded in data.

Data were collected by face-to-face semi-structured interviews, with each interview lasting up to one hour. Whilst focus groups would have been a justifiable method of data collection for this study, it was felt that the ability to discuss in detail a participant’s personal experience and views made one-to-one interviews more pertinent. Participants may also have had concerns about confidentiality in focus groups, particularly if they had negative views of their placement, as they were still studying and may not have wanted to disagree openly with their peers.

All interviews took place in a neutral venue and were audio-recorded. The interview guide is outlined in Table 1, with initial questions focusing on the participant’s previous work experience and the setting of the PRTP, before moving on to asking what the participant had learned about ‘being a professional’ on their placement. Discussions were then tailored according to both the participant’s responses and categories that had arisen from previous interviews. A professional transcriber who was not otherwise involved in the study transcribed all interviews and the transcripts were checked for accuracy by the primary researcher before coding began.

Recruitment for the study was voluntary with inclusion criteria being that the participants were currently studying the MPharm five year (intercalated) degree programme and had recently successfully completed their first PRTP. All eligible students (approximately 80-90 students per year) were invited by the primary researcher to participate via both email communication and a short presentation at the beginning of lectures. Participation was voluntary, confidential and by informed consent, therefore participants were self-selecting. Participants were made aware that they could withdraw themselves and their data from the study at any time. Before interviews were commenced the aim of the study and any ethical issues relating to confidentiality and anonymity were reiterated to the participant in a neutral way.

Grounded theory methodology uses specific methods of data analysis, primarily coding and the constant comparative method. Initial, focused and theoretical coding were used in this study. Line-by-line coding was used to complete initial coding, although where appropriate incidents within the lines were also coded. Microsoft Word and Excel were used to collate, store and analyze the codes. The first interview was coded by all three authors, with subsequent interviews being coded by the primary author. Regular meetings were held to discuss the emerging themes and to ensure a reflexive approach was employed throughout the study.
Focused coding was then used to make use of the most significant or frequent earlier codes to examine the data. The codes produced were more selective and conceptual than those generated by line-by-line coding and helped to identify which of the initial codes were the most useful to help categorize and analyze the data.

The constant comparative method fundamental to grounded theory was used to compare and contrast incidents within the same interview and between different interviews. This helped to uncover different views of the same process and define the properties and dimensions of categories in order to move from descriptive coding to a more abstract level.

The final stage of coding was theoretical coding; codes that integrate focused codes to specify relationships between the codes move the researcher towards a grounded theory. Mindmapping was used in order to link categories with other categories. In addition the paradigm model was also used as an analytical tool to help clarify the emerging ideas, create and ensure richness of categories and identify areas for further exploration.

Memo-writing to help analysis is a cornerstone of grounded theory methodology. Both memos and diagrams were used as methods to think about and analyze a topic. These helped to achieve theoretical sampling by adding new aspects for exploration to the interview guide. In keeping with grounded theory methodology, data collection and analysis continued until saturation of the categories was achieved.

With the use of the above tools and the constant comparative method, the emerging categories were refined and the properties and dimensions of each were identified. The relationship of the core category to the other major categories was also continually explored and refined.

The substantive theory evolved over the course of the study and underwent many iterations. The final theory was discussed and agreed with a group of final year MPharm students as a method of member checking the findings.

RESULTS

Fourteen students (11 female and three male) were interviewed for the study. Interviews were conducted between 11th October 2012 and 26th October 2015. Nine students had undertaken their early PRTP in community pharmacy and five in hospital pharmacy. This was a three year period due to the necessity to fully transcribe and analyze each transcript between interviews. The early PRTP took place from July to December each year and so interviews needed to be conducted when students returned to university. In addition the researcher took a year of maternity leave during this time.

The final grounded theory (Figure 1) consisted of five major categories; (1) Realizing the reality of the profession; (2) Developing practical knowledge and skills; (3) Learning from mentors; (4) Developing a professional identity (the core category); (5) Now a trainee professional.

The first three major categories were required for ‘Developing a professional identity’ to occur but were not the core process themselves. Therefore this paper will outline the core process, ‘Developing a professional identity’ and consider the consequence of being ‘Now a trainee professional’.

Without exception, participants discussed in depth how their placement had enabled them to think about the kind of pharmacist they wanted to be when they qualified. This was the culmination of the whole placement, the point of it and was a process that began at the beginning of the PRTP, continued throughout the placement, and on return to university education. Participants acknowledged that the process was not yet complete and that their professional identity was not yet fully formed.

The process of ‘Developing a professional identity’ itself included four stages: (1) Reflection (2) Selection of attributes (3) Professional socialization and (4) Perception of role. Individuals did not progress through the stages in a linear fashion; they moved from one stage to any other and back again. This is illustrated with the use of double-headed arrows in Figure 1 and representative quotes are presented in Table 2.

For example, a participant might have undertaken a task that did not go well. They reflected on this and considered how one of their role models would have approached the task. They then decided which aspects of that approach they would like to emulate. The next time they approached the task they consciously considered these, gradually internalizing professional behaviors. At any time they may have reflected again on the situation, and/or compared it to what they thought they should do, from the perspective of their current perception of the role of a pharmacist.

Stage one of ‘Developing a professional identity’ was ‘reflection’ and all participants described reflecting on their experiences in some way. Some participants explained how they reflected comprehensively on errors they had made themselves or they had seen others make. This reflection was sometimes explicit (quote 1, participant 6, female, community). Others did not explicitly use the term ‘reflection’, but described the process of thinking about an event and considering what they would change. This was considered to be implicit reflection.

This reflection on their placement continued even when back at university (quote 2, participant 11, female, community).

Stage two was ‘selection of attributes’ which refers to the way participants decided what aspects of behavior they did or did not want to be part of their own professional identity.
Many participants stated that they did this very consciously and explicitly throughout the process (quote 3, participant 14, female, community).

Others were less explicit but were clearly undertaking a process of considering the professional and unprofessional aspects of what they observed in the workplace (quote 4, participant 1, female, hospital).

Interestingly, all participants struggled to specify how they knew what was professional or unprofessional behavior. They felt it was a part of them and they ‘just knew’. They were unsure whether this could be taught (quote 5, participant 8, male, hospital).

Stage three was ‘professional socialization’ and participants were professionally socialized to varying extents. Several participants described how they had seen at least one pharmacist who they considered to be at an ‘ideal’ level of professionalism (quote 6, participant 7, female, hospital).

They also identified aspects of unprofessional behavior that they did not want to emulate (quote 7, participant 5, female, community).

Most participants had taken on an increasing amount of responsibility throughout their placement. Due to their level of training this was necessarily always under the supervision of a qualified pharmacist. There were clear examples of participants demonstrating professional socialization (quote 8, participant 1, female, hospital).

For the most part however, the extent of the participants’ professional socialization at this stage can only be gauged by their descriptions of what they would do in a particular situation, or their reaction to a situation (quote 9, participant 11, female, community).

One participant described how she had developed some unprofessional aspects of behavior she had seen on placement, such as a lack of punctuality and casual dress. Her explanation for this was that she mimicked the behavior of her role models (quote 10, participant 2, female, hospital).

Whilst only this single participant gave examples of adopting potentially unprofessional attributes, this highlights the potentially negative aspects of professional socialization on work-based placements.

Stage four of the process was ‘perception of role’ meaning that participants felt that the six month placement helped them to understand what knowledge and skills they would need as a pharmacist (quote 11, participant 2, female, hospital).

Where topics covered at university were not felt to be necessary in the future, there was less motivation to learn about them, however, where participants felt topics were important they were keen to ensure they had enough knowledge (quote 12, participant 4, female, community).

Participants also felt that they now knew which sector they wanted to work in in the future, and were convinced that this would not change. Only one participant voiced any uncertainty about their future; the others appeared totally confident that they had already chosen their preferred sector and this was where they would spend their career.

As a consequence of ‘Developing a professional identity’, participants had a strong vision of the kind of pharmacist they wanted to be when qualified; they felt they were ‘now a trainee professional’. They felt an increased responsibility as students, and began to see themselves as somehow different to other students within the University. They also began to realize the value of the “Code of Conduct for pharmacy students” and to view themselves as ‘Now a trainee professional’.30,31 Participants described how their attitude as a student had become more professional as a result of completing their PRTP (quote 13, participant 11, female, community).

Participants also noticed this change in some (but not all) of their peers on return to university (quote 14, participant 9, male, community).

This transition to a trainee professional often resulted in a change to participants’ motivation to learn. They put more emphasis on learning whilst on their PRTP and on return to university (quote 15, participant 5, female, community).

As participants developed a vision of the kind of pharmacist they wanted to be, they also considered what they needed to do to get themselves there. They began to internalize the professional norms and became highly motivated to learn; they did not want to be become the unprofessional pharmacist with insufficient knowledge. In turn, their learning and change in attitude also fed back into the development of their professional identity.

DISCUSSION

Using grounded theory methods, ‘Developing a professional identity’ was the core process that occurred whilst these MPharm students were on their early PRTP. This comprised four stages: reflection, selection of attributes, professional socialization and perception of the role. It resulted in participants perceiving that they were now a trainee professional, as opposed to a student, and increased their motivation to learn on return to their studies. We note that students were not randomly selected, but volunteers, therefore a motivation to volunteer may relate to their views on professionalism both before and after their placement. For example only one student commented that they had displayed unprofessional behavior as a result of professional socialization; this may have been more prevalent in a larger group of students.
This university is unique in offering pre-registration training placements separated in both time and sector, for home students. The impact of these placements has not previously been explored in either published or unpublished studies. Other studies have however, explored the process of professional socialization in pharmacists undertaking a one year pre-registration training placement, using different methods.31-33 It is possible that the grounded theory developed in this study represents a process that occurs for pharmacy trainees regardless of the setting or length of time of the placement, and further consideration of this would be beneficial.

In this study ‘Developing a professional identity’ refers to the development of a future identity in a professional context, that of a student aspiring to be a pharmacist. Participants in this study were describing the kind of pharmacist they wanted to be in future, rather than the student pharmacist they are. ‘Developing a professional identity’ is therefore, an aspirational concept: a goal, and without longitudinal studies, it is not possible to know what kind of pharmacist the participants in this study will actually turn out to be. There is however, recent literature demonstrating that, in general, students who are connected with a view of their future selves are likely to be more motivated, have increased self-control and achieve better academic performance.33 This aligns with the concept that, on return to university participants’ self-perception changed to that of trainee pharmacist rather than a pharmacy student.

Since the concept for this study was developed, there has been a surge in interest in professional identity, partly as result of a Carnegie study in the USA which identified addressing professional identity formation explicitly in the medical curriculum as one of its four main areas for reform, in order to minimize the likelihood of students rejecting the professional role.34 There have been many studies in the area, with role modelling and reflection emerging as important aspects of developing a professional identity.35-37 Niemi also used terms such as evaluation, selection and organisation of self-perceptions to describe this process in medical students in Finland.38 The similarities between the terms used in these studies and those that emerged in this paper (reflection, selection, professional socialization and perception of role) are clear. If these skills can be actively and consistently developed in pharmacy students, both within the explicit and hidden curricula, it is likely to help them to develop an enhanced professional identity earlier in their career.

Adequate preparation and debriefing processes before and after any exposure to the pharmacy environment are vital to reduce the ‘reality shock’ of realizing the reality of the professional role and enable students to respond positively when exposed to negative role models.39 The selection of innovative teaching methods in these areas is important to enable students to understand these areas on an emotional level as well as on an intellectual level. Given the importance of reflection in development of professional identity, as found in this study and others, enhancing the teaching of reflective practice amongst pharmacy students is likely to increase their ability to take positive learning outcomes from exposure to poor placements and role models, so they become committed, developing or participating reflectors.38,40 Universities should also consider how they teach students to explicitly consider the attributes they hope to emulate, or not, in the role models they encounter both on placement and within the university environment. Most universities employ lecturer-practitioners; staff who are both academics and practising pharmacists and serve as important role models for students. Other academics and mentors within schools of pharmacy should consider the way that they themselves are perceived as role models and be aware of the impact they may have on students’ behaviors and attitudes. This may require additional training of both groups of staff. Finally, since accepting increasing responsibility is important in the process of professional socialization universities should consider ways to encourage students to take increasing levels of responsibility both during the taught programme and whilst on placement.21,41

This does currently happen informally but it is inconsistent. It is also likely that some students may be given fewer opportunities to take on additional responsibilities than others, which may then exacerbate poor professional socialization.

CONCLUSION

This study suggests that the change in students’ behaviors, attitudes, and motivation to learn can be harnessed through early exposure to work-based placements to ensure they get the most benefit from their studies. In this study the increased receptiveness to more independent learning was a factor identified. This study strongly supports the use of an early PRTP to develop pharmacy students’ sense of professional identity. It also suggests that if students can develop skills in reflection and selection of positive attributes they can learn valuable lessons, even from PRTPs that may not be ideal. The findings of this study also suggest benefits in a curriculum focus on developing the ability of pharmacy students and trainee pharmacists to be able to confidently navigate the process of developing a professional identity that may be more beneficial in the long term. As suggested this involves the development of skills in reflection and selection of attributes as well as interventions to begin early professional socialization and an understanding of the role.

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REFERENCES


Table 1. Interview Topic Guide

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<td>1. What work experience did you have in pharmacy before undertaking your early pre-registration training placement?</td>
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<td>2. In what setting did you undertake your pre-registration training placement?</td>
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<td>3. Can you tell me what you think you have learned from your placement about “being a professional”?</td>
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<td>4. I am particularly interested in the subject of ‘professionalism’ in students. Can you tell me what you understand by the term ‘professionalism’?</td>
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