

# Engendering and appraising professionalism within the UK pharmacy pre-registration year: Identifying the current barriers

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## Abstract

**Aims:** To determine pre-registration tutor perceptions on the level of preparedness of pharmacy graduates with respect to professionalism, identify attributes perceived as not achievable at registration and/or are difficult to assess.

**Method:** A self-completed questionnaire based on the professional competence and principles of professionalism was developed, piloted and distributed via gatekeepers in four UK locations.

**Results:** 38 (79.2%) questionnaires were returned. Less than 20% of pre-registration tutors believed that graduates had sufficient 'know how' to communicate effectively with other healthcare professionals, make ethical decisions, handle conflict and demonstrate leadership. A subset of these was perceived as not achievable even at registration and some principles were rated as difficult to assess.

**Discussion:** The MPharm degree requires a greater focus on professionalism to better prepare students for their pre-registration year. New learning experiences and better assessment tools may be required to enhance engendering of all principles and enable holistic assessment of professionalism prior to registration.

## Keywords:

## Introduction

The term 'professionalism' has grown in popularity in both medical and pharmacy education over the last 20 years and over this time its meaning has become 'more slippery and varied' (Wear and Zarconi, 2010). Without a uniform definition in the context of modern healthcare, professionalism becomes difficult to develop and measure. Stern reviewed a plethora of definitions for the concept of professionalism and emphasised the need for an explicit definition to guide assessment (Stern, 2006). Stern's believes that whilst professional competence, communication skills and ethical understanding form the foundation stones of professionalism, it is only when these skills are applied with the following principles that professionalism is demonstrated:

- Excellence: a commitment to competence and a desire to exceed ordinary standards
- Humanism: respect, compassion, empathy, honour and integrity
- Accountability: includes self-regulation, standard setting, managing conflicts if interest and the acceptance of responsibility
- Altruism: acting in the best interests of patients and not self-interest

In the USA, a Task Force on professionalism comprised of different pharmacy associations (American Pharmaceutical Association Academy of Students of Pharmacy and American Association of Colleges of Pharmacy Council of Deans Task Force on Professionalism, 2005), agreed that professionalism is the active demonstration by students and trainees of the following 10 broad traits:

- Knowledge and skills of the profession
- Commitment to self improvement of skills and knowledge
- Service orientation
- Pride in the profession
- Covenantal relationship with client (patient)
- Creativity and innovation
- Conscience and trustworthiness
- Accountability for his/her actions
- Ethically sound decision-making
- Leadership

It can be seen how all of these traits, with the exception of creativity and innovation, can be aligned with the broader

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definition by Stern (2006). The USA definition of pharmacy professionalism resulted from the profession questioning whether Schools of Pharmacy were fostering professional attitudes and behaviours (Hammer et al, 2003; Chrisholm, 2004). In response to these criticisms, a toolkit was developed to support schools of pharmacy in engendering professionalism (American Pharmaceutical Association Academy of Students of Pharmacy and American Association of Colleges of Pharmacy Committee on Student Professionalism, 2004).

Traditionally within the UK there have been no explicit requirements within the MPharm course accreditation criteria (RPSGB, 2002) relating to the fostering of professionalism behaviours in undergraduate pharmacy students. Current standards require students to acquire a set of knowledge and skills in pharmacy practice which is fundamental to the build-up of professionalism as defined by Stern (2006) but do not require demonstration and assessment of the application the principles of professionalism.

In 2009 a Code of Conduct for UK pharmacy students was introduced by the professional/regulatory body (RPSGB, 2009a) and this was in preparation for the introduction of 'Fitness to Practise' procedures (RPSGB, 2009b) which are to be evoked when student behaviour is found to violate the code. This policy change demonstrates a clear belief by the profession that undergraduate students should exhibit the principles of professionalism, but there has been no guidance or advice to-date on how to engender these behaviours. The use of professional frameworks and students signing up to 'Codes of Conduct' are already being reported in the literature by UK Schools of Pharmacy (Patel et al, 2009; Eggleton et al, 2007). However, in the absence of explicit criteria, this is a piecemeal approach and when combined with a 'fitness to practise' procedure, designed to only identify and report abhorrent behaviours, it is likely to result in similar concerns in the UK as those expressed in the USA.

A rift between the outputs of the MPharm degree and the expectations of pre-registration tutors and trainers when receiving graduates for their pre-registration training is already well documented (Wilson et al, 2005). The requirement for developing both professional competence and the principles of professionalism within the UK pharmacy pre-registration year are embedded in the performance standards which need to be achieved at the point of registration (RPSGB, 2010). However, again the term 'professionalism' is not explicitly stated at any point. This lack of signposting to the concept of professionalism throughout all of the professional body documentation is in contrast to the strong belief that professionalism should be taught explicitly (Cruess and Cruess, 1997; Swick, 2000).

Research (Merton et al, 1957; Simpson, 1967; Sherlock and Morris, 1967) has shown that the factors which are most predictive of students' practice behaviours on registration are:

- The values, attitudes and behaviours of the students when they entered the program
- The environment in which they learned
- The role modelling of those from whom they learned

Role modelling was identified as the most influential factor and this may partially explain the current models in which the focus for development of professionalism principles is during the pre-registration training year where the pre-registration trainee pharmacist spends the majority of their time surrounded by professional role models and have an assigned pre-registration tutor who assumes overall responsibility for their professional development. It is therefore important that pre-registration tutors (mentors) not only exhibit 'role model' qualities but also have robust knowledge of professionalism in order to engender and assess such behaviours effectively within the pre-registration year (Hammer, 2006; Humphrey, 2010)

The current UK criteria for becoming a pre-registration tutor include: being a registered pharmacist for at least three years, work for a minimum of 28 hours a week in approved premises and must not be subject to 'fitness to practise' proceedings or under criminal investigation by the Police. There are currently no requirements for tutors to have received training in mentorship or in particular the concept of professionalism which has traditionally not formed part of any UK pharmacist's undergraduate education. Despite this, pre-registration tutors are expected to be able to develop and assess aspects of professionalism with no additional training. Research to determine tutor confidence in the ability to undertake and deliver on this role has not been undertaken.

Furthermore, the extent of the rift between university education and pre-registration tutor expectations of pharmacy graduates with respect to professionalism has not been determined. If pharmacy students are graduating from university with little understanding of the concept of professionalism and this is a major requirement for the pre-registration year then this may be placing an unreasonable expectation on pre-registration tutors to address this within a relatively short period of time, with limited formal training on the subject.

The aim of this pilot study is to determine tutor perceptions on the level of preparedness of MPharm graduates with respect to both the professional competence and principles of professionalism, identify which of the expected competencies in professionalism are demonstrated by the end of the pre-registration year and to identify attributes which tutors perceive as being the most difficult to assess.

## **Method**

Ethical approval for the study was not necessary as it was deemed to be a service evaluation by local NHS ethical committee.

### *Questionnaire development*

A questionnaire designed for self-completion was developed by adapting Stern's definition of professionalism (Stern, 2006) to create seven main section headings applicable to pharmacy. A number of sub-topics were identified to provide a more comprehensive description of each of the main section headings:

- Communication skills and team Working (Professional competence)

- Pharmacist knowledge and skills (Professional competence)
- Legal & ethical understanding (Professional competence)
- Accountability (Professionalism principle)
- Altruism (Professionalism principle)
- Humanism (Professionalism principle)
- Excellence (Professionalism principle)

For each identified sub-topic, respondents were asked to state their opinion on: student preparedness on graduation, whether students were able to achieve the expected level of performance at registration and to identify which topics they found difficult to assess. The levels of performance were defined utilising Miller's triangle (Miller, 1990) and set at graduation to 'knows how' and at registration to 'does'.

Respondents were given the option to agree, disagree or answer 'not sure' to questions on preparedness and level of performance on graduation. To rate difficulty of assessment, a Likert scale was used with 1 being very easy, 3 being average and 5 being very difficult.

The questionnaire was professionally presented, peer reviewed & piloted before final distribution with stamped addressed envelopes.

#### Setting

Questionnaires were completed by pre-registration tutors within secondary care settings in East Midlands (LNR), East

of England (NSC), South Central (Thames Valley) and one London teaching hospital.

#### Sample

Convenience sampling was used in the four different locations. Tutors with more than 2 years experience) in tutoring MPharm graduates were approached by gatekeepers at each location. Questionnaires were anonymous and returned in stamped addressed envelopes to a central location. Completion and return of questionnaires was separately recorded by the gatekeepers to enable response rate in each location to be determined.

#### Data analysis

SPSS version 15.0 was used for all statistical analysis. Simple descriptive analysis was used to report responses. 'Unsure' responses were not included within any results tables to improve clarity. In all cases the difference between the total of agree and disagree responses and 100% was attributable to unsure responses.

#### Results

Response rates (based on number of completed distributed questionnaires to each gate keeper) were as follows: East Midlands, LNR (8 of 10, 80%); East of England, NSC (12 of 15, 80%); South Central, Thames Valley (14 of 18, 78%), Guys & St Thomas's Hospital (4 of 5, 80%). A total of thirty eight (38) pre-registration tutors completed and returned the questionnaire resulting in an overall response rate of 79.2%.

**Table I Pre-registration tutor opinions on the professional competence of trainees**

	Aspects that most trainees are able to apply			
	On graduation (knows how)		On registration (does)	
	% Agree	% Disagree	% Agree	% Disagree
<b>Communication skills and team work.</b>				
<b>Communicate effectively with:</b>				
Immediate pharmacy team	84.2	10.5	94.7	2.6
Mentor/Supervisor Tutor	92.1	5.3	97.4	2.6
Other healthcare professionals	13.2	55.3	81.6	5.3
Patients and carers	21.1	57.9	92.1	5.3
Work effectively as part of a team	68.4	21.1	94.7	2.6
Recognise value of immediate team members	50.0	31.6	94.7	2.6
<b>Pharmacy Practice Competence (knowledge and Skills)</b>				
Overall ability to undertake pharmacy practice duties	31.6	44.7	100	0
Demonstrate good knowledge in area of work	26.3	55.3	84.2	2.6
Demonstrate commitment to Personal Development planning and self reflection	63.2	23.7	89.5	2.6
Exhibit positive attitude to learning and acquisition of skills	94.7	2.6	100	0
<b>Legal understanding and Code of Ethics</b>				
Understand and follow legislation relevant to Pharmacy Practice	65.8	15.8	100	0
Be conversant with the Code of Ethics	44.7	36.8	92.1	5.3
Handle ethical decision making appropriately	13.2	60.5	55.3	10.5
Debate ethical dilemmas	26.3	44.7	68.4	2.6
Treat all patient information as confidential	81.6	10.5	100	0
Follow principles of equality and diversity	76.3	13.2	86.8	2.6
Act with honesty and integrity in all professional relationships	78.9	5.3	94.7	2.6

The median (range) number of years tutor experience with MPharm graduates was 5 (1,8) years and the median (range) number of MPharm graduates tutored was 6.5 (1,15). Four (10.5%) of the respondents reported having received training in professionalism.

Table I provides a summary of the responses to whether tutors believed the elements of professional competence are currently being met on graduation ('knows how' level) and at registration ('does' level). It can be seen that tutors generally agree that MPharm graduates do not know how to communicate with other healthcare professionals, patients and

carers or recognise the value of members within their own team. Students are generally not believed to know how to undertake pharmacy practice duties and do not demonstrate good knowledge in areas of work. Furthermore less than half of the graduates are perceived to be conversant with the 'Code of Ethics' (44.7%) and even fewer as knowing how to debate ethical dilemmas (26.3%) or handle ethical decision making appropriately (13.2 %). More than 85% of tutors believe that nearly all fundamental elements of professionalism are addressed by registration with the exception of the ability to debate and handle ethical dilemmas, 55 and 68% respectively.

**Table II Pre-registration tutor opinions on trainee ability to demonstrate principles of professionalism**

	Aspects that most trainees are able to apply			
	On graduation (knows how)		On registration (does)	
	% Agree	% Disagree	% Agree	% Disagree
<b>Accountability</b>				
Punctuality	81.1	10.8	92.1	0
Attendance	89.2	5.4	100	0
Professional dress	81.1	8.1	92.1	0
Demonstrate logical approach to work	61.1	22.2	97.4	0
Demonstrate positive attitude to work	97.2	0	97.4	2.6
Able to prioritise work	24.3	45.9	75.7	5.4
Manage conflict of interest	8.1	45.9	52.6	5.3
Manage time	43.2	18.9	78.4	2.7
Take responsibility for working practices	48.6	27.0	91.1	0
<b>Altruism</b>				
Act in the best interest of patients i.e. promote the good of every patient	76.3	5.3	97.4	2.6
Treat all patient information as confidential	84.2	10.5	100.0	0
Do not promote self interest	68.4	13.2	89.5	0
<b>Humanism</b>				
Show respect for others	100	0	97.4	0
Show compassion and empathy	73.7	2.6	100	0
Demonstrate emotional intelligence	54.1	16.2	71.1	0
Demonstrate trustworthiness	94.7	0	100	0
Not demonstrate cynicism	71.1	13.2	78.9	2.6
Not demonstrate dogmatism	60.5	21.1	78.9	0
Recognise and respect the values of and abilities of other members of the healthcare team	36.8	42.1	97.4	2.6
Recognise and respect roles of non clinical staff within organisation	21.1	57.9	81.6	7.9
<b>Excellence</b>				
Commitment to achieving competence	86.8	5.3	100	0
Desire to exceed ordinary standards	52.6	13.2	65.8	5.3
Take initiative	36.8	36.8	84.2	5.3
Show enthusiasm	89.2	2.7	97.4	0
Demonstrate leadership	15.8	60.5	34.2	28.9
Demonstrate pride in the profession	71.1	13.2	81.6	2.6
Inspire confidence to colleagues and patients	28.9	47.4	76.3	10.5

Table II provides a summary of the responses to whether tutors believed the principles of professionalism are currently being demonstrated on graduation and registration. Nearly 50% of tutors believed that MPharm graduates do not know how to prioritise work, manage conflict of interest, recognise and respect the value of other healthcare staff and inspire confidence within colleagues and patients. The majority of tutors also believed that MPharm graduates do not know how to demonstrate leadership behaviours. This was the only principle of professionalism which nearly 30% of tutors felt is not achieved at the point of registration. Also only half of the

tutors felt that their trainees could manage conflicts of interest at registration.

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Table III shows pre-registration tutor opinions on their ability to assess professional competence. The areas which they found most difficult were assessing student ability to debate ethical dilemmas (35.9%) and make appropriate ethical decisions (48.7%). A minority of tutors (15-20%) felt that it was difficult to assess trainees' ability to communicate effectively with other healthcare professionals, recognise the value of immediate team members and follow principles of equality and diversity.

Table IV summarises tutor perceptions of their own ability to

assess the application of the principles of professionalism. It can be seen that overall, assessment of the principles of professionalism was perceived as being more difficult compared to the assessment of profession competence. In the context of accountability, tutors perceived that 'managing conflict of interest' (66.7%) and 'taking responsibility for own working practices' (35.9%) were difficult or very difficult to assess. Within 'humanism' about 40% of tutors perceived that it was difficult to assess the ability of their trainee pharmacists to 'handle ethical decision making appropriately', 'treat all patient information as confidential' and 'follow principles of equality and diversity'. Finally 41% of tutors found it difficult to assess the demonstration of leadership skills.

**Table III Tutor perceived ability to assess professional competence**

	Degree of difficulty to assess				
	Very Easy	Easy	Average	Difficult	Very Difficult
<b>Communicate effectively with:</b>					
Immediate pharmacy team	33.3	56.4	10.3	0	0
Mentor/Supervisor Tutor	56.4	35.9	5.1	2.6	0
Other healthcare professionals	10.3	38.5	35.9	15.4	0
Patients and carers	15.4	48.7	30.8	5.1	0
Work effectively as part of a team	23.1	59	17.9	0	0
Recognise value of immediate team members	5.1	56.4	20.5	17.9	0
<b>Pharmacy Practice Competence (knowledge and Skills)</b>					
Overall ability to undertake pharmacy practice duties	23.1	48.7	23.1	5.1	0
Demonstrate good knowledge in area of work	12.8	64.1	20.5	2.6	0
Demonstrate commitment to Personal Development Planning and self reflection	10.3	48.7	35.9	5.1	0
Exhibit positive attitude to learning and acquisition of skills	20.5	51.3	23.1	5.1	0
<b>Legal understanding and Code of Ethics</b>					
Understand and follow legislation relevant to Pharmacy Practice	10.3	46.2	33.3	10.3	0
Be conversant with the Code of Ethics	5.1	41	30.8	23.1	0
Handle ethical decision making appropriately	0	20.5	12.8	48.7	17.9
Debate ethical dilemmas	2.6	20.5	25.6	35.9	15.4
Treat all patient information as confidential	30.8	48.7	20.5	0	0
Follow principles of equality and diversity	10.3	25.6	43.6	17.9	2.6
Act with honesty and integrity in all professional relationships	13.2	26.3	39.5	21.1	0

## Discussion

This study is based on a relatively small convenience sample of pre-registration tutors, working within one element of the UK healthcare system. Although the questionnaire provided explanation of definitions used to describe the professional competence and the principles of professionalism, the actual level of understanding and interpretation by tutors was not validated. Consequently results from this study should be viewed with some caution. However, the average number of years of the respondents' tutoring experience combined with the number of MPharm graduates they reported supervising shows that the respondents are in a position to be able to comment

with some confidence on the professionalism of UK MPharm graduates and pre-registration trainee pharmacists as well as their own ability to assess professionalism.

The results of the study mirror those of Wilson et al (2005) demonstrating that student preparedness for their pre-registration training year following a four year MPharm degree fall below the expectations of pre-registration tutors within placement settings. It must be acknowledged that there is currently limited and variable exposure to practice within the UK undergraduate degree programmes. Without extending this remains difficult for Schools of

**Table IV Tutor perceived ability to assess application of principles of professionalism**

	Degree of difficulty to assess				
	Very Easy	Easy	Average	Difficult	Very Difficult
<b>Accountability</b>					
Punctuality	74.4	17.9	5.1	2.6	0
Attendance	82.1	17.9	0	0	0
Professional dress	71.8	23.1	0	5.1	0
Demonstrate logical approach to work	10.3	46.2	33.3	7.7	2.6
Demonstrate positive attitude to work	23.1	56.4	20.5	0	0
Able to prioritise work	2.6	46.2	43.6	5.1	2.6
Manage conflict of interest	0	15.4	17.9	51.3	15.4
Manage time	10.3	43.6	43.6	2.6	0
Take responsibility for working practices	2.6	25.6	35.9	30.8	5.1
<b>Altruism</b>					
Act in the best interest of patients i.e. promote the good of every patient in a caring but fair manner	5.1	38.5	43.6	10.3	2.6
Treat all patient information as confidential	33.3	41	17.9	7.7	0
Do not promote self interest	10.3	25.6	30.8	25.6	7.7
<b>Humanism</b>					
Show respect for others	15.4	41	38.5	5.1	0
Show compassion and empathy	10.3	41	33.3	15.4	0
Demonstrate emotional intelligence	0	30.8	28.2	33.3	7.7
Demonstrate trustworthiness	5.1	53.8	25.6	15.4	0
Not demonstrate cynicism	2.6	28.2	30.8	30.8	7.7
Not demonstrate dogmatism	2.6	28.2	30.8	30.8	7.7
Recognise and respect roles of non clinical staff within organisation	2.6	33.3	23.1	35.9	5.1
<b>Excellence</b>					
Commitment to achieving competence	17.9	46.2	33.3	2.6	0
Desire to exceed ordinary standards	7.7	35.9	38.5	12.8	5.1
Take initiative	7.7	41	35.9	12.8	2.6
Show enthusiasm	30.8	51.3	17.9	0	0
Leadership	2.6	20.5	35.9	33.3	7.7
Pride in the profession	2.6	38.5	38.5	17.9	2.6
Inspire confidence to colleagues and patients	2.6	35.9	38.5	20.5	2.6

Pharmacy to engender professionalism which require students to know how best to work with patients and carers and how to communicate with and respect colleagues both within and outside the pharmacy team. Exposure to inter-professional learning has traditionally only been required within those Schools of Pharmacy which can provide it. Pharmacy students at universities which don't have immediate access to students from other healthcare disciplines are only exposed to other professionals via practice placements. The previous UK government agenda for pharmacy, which has not yet been realised, was to increase exposure to clinical practice throughout the degree programme (Department of Health, 2008). Without the opportunity of extended practice placements pharmacy students will continue to graduate with gaps in their professional competence.

The poor rating of student knowledge of practice on graduation may actually reflect reality or may demonstrate an unrealistic expectation from tutors. The pre-registration year is where trainee pharmacists are expected to develop their knowledge and apply it to practice and much of this can only be gained from experiential learning. Further exploration of this perception is required to understand what, if anything, schools of pharmacy can be doing to improve the level of student knowledge in terms of pharmacy practice.

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The results of the study mirror those of Wilson *et al* (2005) demonstrating that student preparedness for their pre-registration training year following a four year MPharm degree fall below the expectations of pre-registration tutors within placement settings. It must be acknowledged that there is currently limited and variable exposure to practice within the UK undergraduate degree programmes. Without extending this remains difficult for Schools of Pharmacy to engender professionalism which require students to know how best to work with patients and carers and how to communicate with and respect colleagues both within and outside the pharmacy team. Exposure to inter-professional learning has traditionally only been required within those Schools of Pharmacy which can provide it. Pharmacy students at universities which don't have immediate access to students from other healthcare disciplines are only exposed to other professionals via practice placements. The previous UK government agenda for pharmacy, which has not yet been realised, was to increase exposure to

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The ability to debate and handle ethical dilemmas is a requirement within the current undergraduate MPharm degree and is a major focus within all schools of pharmacy as it is a repeated degree accreditation requirement (RPSGB, 2002). To further enhance this in 2003 a joint initiative between a number of UK schools of pharmacy was set up to improve the quality of teaching of law and ethics within the undergraduate pharmacy curriculum (Applet, 2002). The perception of inadequate preparation in this area by tutors may be a reflection of the reported difficulty in assessing this attribute rather than in the abilities demonstrated by pharmacy graduates. The limited opportunity afforded to 'closely supervised' pre-registration trainee pharmacists to respond to ethical dilemmas may also contribute to this difficulty in assessment. It may only be possible to accurately assess performance in ethical decision making when pharmacists are afforded more autonomy i.e. post-registration and therefore artificial methods of assessment may be required at the pre-registration level.

The majority of principles where tutors agreed that which trainees were less able to demonstrate on graduation were those which can only be realistically developed within the workplace. Principles such as time management, prioritising work and taking responsibility for working practices can be developed within the undergraduate curriculum.

Unsurprisingly, the simple measures of professionalism such as professional dress and punctuality were rated as relatively easy to assess. These are repeated actions which can be measured relatively objectively. The principles which were identified as being difficult to assess are those which occur rarely within a pre-registration year largely due to the lack of autonomy of pre-registration trainee pharmacists and the lack of frequency of such events. Consequently new learning experiences and assessment tools may need to be introduced to support the assessment of all professionalism attributes. There are limited opportunities to assess student ability to 'manage conflict of interest' or undertake 'ethical decision making' during the pre-registration year and perhaps unsurprisingly it was rated by tutors as being difficult to assess. This principle could be potentially developed by undertaking learning experiences designed to develop and assess ethical decision making. Introduction of ethical debates into study days combined with discussion of related individual experiences may enable tutors to assess trainee ability to respond to conflicts of interest and ethical dilemmas.

Tutors were relatively confident in their ability to assess most elements of professionalism during the pre-registration year with only those principles which can be observed only irregularly or not at all, being identified as being difficult to assess. Consequently it may not be additional training of tutors which is required but the inclusion of new assessment tools and learning experiences to enable tutors to obtain a better picture of student ability.

It would be beneficial to repeat this study on a larger more representative sample which consisted of pre-registration tutors from all sectors of the healthcare system. Furthermore detailed follow up utilising interviews or focus groups would provide a better explanation for some of the responses.

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