

An Evaluation of Pharmacy Pre-Registration Trainees' Perception of Their Placement Tutors in the United Kingdom (UK)

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Abstract. This paper is about a study that investigates the views of pharmacy preregistration trainees regarding their placement tutors. The study employed a quantitative survey approach and questionnaire survey was used to collect data. The questionnaires structure contained both open-ended and closed-ended items to diversify and enrich responses. The participants were purposefully selected, resulting in 14 of them. The resulting data was analyzed using paper, pencil and calculator, due to the sample size. The result shows that while a majority of trainees were positive about their placement tutors, a minority raised very important concerns that are the focus of this article. The concerns include insufficient support from the tutors; lack of clear direction of their placement; tutor lacks necessary skills to support trainees; lack of clearly agreed plan or structure for their placement. Furthermore one trainee felt that her tutor treated her like a small child that makes her feel uneasy. Based on the result, it is concluded that despite of a small sample size respondents, serious and relevant concerns have been raised that need serious attention. Otherwise preregistration trainees may go through the placement without a clear demonstration of requisite competencies.

Keywords: Placement tutors; United Kingdom; pre-registration trainees; pharmacy trainees; workplace-based learning

Introduction

Work-based learning at higher education level in the UK has a long history (Little and Harvey, 2006:1):

... in the 1950s the National Council for Technology Awards (NCTA) advocated that undergraduate program vmmes in engineering and technology should incorporate planned periods of industrial placements. Since that time, undergraduate programmes incorporating such work-based placements have been introduced across a wide range of subject area. In some programmes the placement is a year-long activity 'sandwich' between significant periods of on-campus learning and the sandwich placement may be optional. In other programmes, often those seen as meeting both academic and professional

development objectives shorter blocks, of placements are interspersed throughout the undergraduate programme (and the blocks are compulsory). More recently there have also been growths in undergraduate programmes that allow students to opt to take a work-based unit which involves a short 6-10 weeks, placement as part of their overall programmes.

Workplace learning contributes to the development of the learner's attitudes, behavior and skills, thus leading to professional growth (Lee, Schafheutle and Noyce, n.d.). Jee et al. (n.d.) regards it as a means of socializing learners into the profession. Further, Spencer, Blackmore, Heerd, MCCrorie, Mchaffie, Scherpbier, Gupta, Singh and Southgate, (2008) observe that workplace learning introduces learners to the practice environment and therefore integrates theory and practice. Elvey, Lewis, Schafheutle, Willis, Harrison and Hussell, (2011) regards it as a means of bridging the gap between education and professional practice. Elvey et al. (2011) also comments that it introduces trainees to the world of work. However, Schafhuetle, Hassell, Ashcroft, Hall and Harrison, (2010) note that differences exist regarding the stage at which trainees or learners are socialised into the work- based learning environment. For instance, medical undergraduate students or trainees are introduced to clinical environment much earlier in their course or career, while Pharmacy students who are introduced much later in their course or programme i.e. after four years of masters of pharmacy (Mpharm) degree. This suggests minimum exposure to practice within the four years of training period. This may further suggest limited workplace learning during the course prior to pre-registration placement (Schafheutle et al., 2000). Similar concerns have been reported by McAteer et al. (2004).

The importance of pre-registration has been underscored by Hammer (2000), in terms of enabling the trainees to acquire the necessary competencies required in professional practice reflected in knowledge, attitude and behavior. Little and Harvey (2006), identifies other benefits associated with pre-registration training and include: communication, problem solving, creativity, personal and social skills, interpersonal skill and organizational skills. Elvey et al. (2011) also note that the one year (52 weeks) pre-registration, in terms of introducing trainees to the world of work. Elvey et al. (2011), further observe that pre-registration serves two purposes, namely, socializing trainees professionally and developing their professional skills e.g. effective communication. Elvey et al. (2011), also argue that a majority of the pre-registration trainees undertake their placement or training either in a single community pharmacy or hospital which have significant differences between them. However, they further observe that training at one hospital or single community pharmacy may also suggest limited exposure (Elvey, et al., 2011). And according to General Pharmaceutical Council, 2012) during pre-registration trainees are assigned a tutor whose responsibility is to supervise and assessment trainees. The tutor's role can easily be placed into two broad categories but still within the assessment realm i.e. signing of three 13 weekly appraisals and confirming that the trainee is ready for the final examination, which will qualifies him or her for registration (General Pharmaceutical Council, 2012). The current study investigates the views of pre-registration trainees regarding their placement tutors.

Literature review

Understanding Pre-registration training placement

According to Jee, et al. (n.d) pharmacy education and training in the UK is a five year training period, consisting of four years university training and one year work environment training (otherwise known as pre-registration). Jee et al. (n.d.) note that placement offers trainees a unique learning opportunity prior to registration. Similarly, Spencers, et al. (2000) argue that work-based placement or learning exposes and/or introduces trainees or learners to the real work environment, thereby integrating theory and practice (Spencers, et al., 2000). Placement therefore offers trainees an opportunity to work and interact with qualified professionals in the sector or field. Elvey, et al., (2011) report that pre-registration in the UK is a 52 weeks placement period during which time trainees are placed at either a hospital or community pharmacy to undertaking workplace- based training. However, Elvey and his colleagues note that, in some minority or rare cases trainees are placed in a non-patient environment such as industry or academia (Elvey, et al., 2011). Besides, Elvey et al. (2011) report that a significant proportion of trainees take their placement either a community pharmacy or hospital. Important benefits associated with pre-registration placement or training have been reported by Elvey, et al (2011) and Hammer, et al. (2000) and include offering a link between education and the world of work, being socialized professionally and acquiring the necessary professional skills. Besides, acquiring the professional practice- related behavior, skills and knowledge.

The current pre-registration training is situated at the end of the four years (full time) master of pharmacy (Mpharm) degree. It actually commences immediately after the four years of training and consists of 12 months or 52 weeks of practice-based placement (Schafhuetle et al., 2010). In a majority of the cases trainees only limited option their placement that's a hospital or community pharmacy and as noted earlier in the introduction the two exposes the trainees to different work-based environment orientations, which may raise concerns regarding the career progression of the trainees. Does this seem to suggest that those who undertake their placement in a hospital ends up working in hospitals and those who undertake their placement in community pharmacy ends up working in community pharmacies due to the nature of workplace-based socialization? Jee, et al., (n.d., Para. 6) report "that community pharmacies are independently owned, part of national chains or supermarket and operate with a single pharmacist assisted by different support staff (pharmacist, pharmacy technicians, and counter assistants)". Further, Jee and his colleagues report that "in hospital, pharmacists work in the actual pharmacy as well as wards, and thus work with a large team of pharmacists, pharmacy technicians and other support staff, as well as other healthcare professionals including doctors and nurses"(Jee et al., n.d., Para. 6). Besides, "trainees in community pharmacy would work in a smaller team, while in hospital they would work with larger

and more multi-professional team with a wider variety of role models” (Jee et al., n.d., Para. 7). This indicates two distinctively different placement or workplace-based learning environments as mentioned elsewhere in this article. The two are not just generic placements but fashioned according to the work environment and interactions.

The placement in pharmacy is significantly different from the undergraduate medical degree one, “in that medical students are exposed to the practice environment earlier in their career and the integration between theory and practice occurs through a range of clinical placements during undergraduate education, which is reflected in the curriculum” (Grant, 2010; Spencers et al., 2000; Jee, et al., n.d., Para. 3). The importance of integration of theory and practice is underscored by the General Medical Council, thus “the integration of practice-based learning in the clinical environment for medical students is an important part of the medical degree” (Jee et al., n.d., Para. 3.). Helmich et al (2001) and Diemers, Van De Wiel, Scherphies, Heinemann and Dolman’s (2011) note that the exposure or contact with patients early in education has significant advantages, namely, development of communication skills and empathy, biomedical and clinical knowledge and clinical reasoning.

In the UK General Pharmaceutical Council (GphC) and General Medical Council (GMC) are two regulating bodies that are responsible for setting standards for pharmacy and medicine respectively (General Pharmaceutical Council, 2009; 2012; 2013). It is the expectation of GphC that trainee gain practical experience of working within the healthcare environment during their Master of Pharmacy Degree programme Schafheutle et al. (2010). However Schafheutle and his colleagues note that in some situations the practical experiences are achieved through simulations, which may not offer adequate workplace learning and experience prior to pre-registration placement (Schafheutle et al., 2010).

Interestingly, according to Lee and his colleagues “pharmacy education and training in the UK does not have formal arrangements for continued support or mentorship for learning beyond registration” (Jee, et al. n.d., Para. 7). Therefore, they argue that “it is important for pharmacists to finish pre-registration training with the full range of competencies required to practice” (Lee et al., n.d., Para, 7). According to the Pre-registration Trainee Handbook (2014), at the end of pre-registration training students are expected to demonstrate that they have acquired the necessary competencies against performance standards. The handbook further states that once the students have met the performance standards, they can then sit for registration examination which will qualify them as pharmacists (Pre-registration Trainee Pharmacist Handbook, 2014).

Understanding the role of the placement tutor

According to Jee, et al (n.d. Para. 7):

During pre-registration training, each trainee is allocated a pre-registration tutor who is responsible for their supervision and assessment which involve carrying

out and signing off three 13 weekly appraisals and one final declaration confirming the trainee is declared fit to join the register.

Tutors are expected to reflect on their performance continually so as to make any necessary adjustment so as to provide or offer training in accordance with GphC guidelines (Al-Ahmad Liu, 2014). The GphC guidance consists of three parts, namely: Part one describes the initial education and training of pharmacists and pharmacy technicians; Part two identifies the five GphC standards of conduct, ethical and performance, that are particularly relevant to the role of a tutor (Al-Ahmad, and Liu, 2014) and Part three serves to provide help to tutors in their delivery preregistration training particularly in the area of induction, assessment and providing feedback and support to trainees (Al- Ahmad and Liu, 2014).

The guidance provides guidelines on what the tutor should do to achieve the following (Al- Ahmad and Liu, 2014):

- Being a professional role model;
- Delivering the training programme;
- Assessing your trainee performance;
- Giving feedback to your trainees;
- Supporting your trainees.

Based on the above guidelines, the tutor is expected to demonstrate high level of professionalism and competence, and to support trainees appropriately.

Mills, Blenkinsopp and Black (2013) identify three important criteria for becoming a pre-registration tutor: to have practiced in the relevant sector for three or more years; to be a registered pharmacist and not currently under investigation by GphC. The three are in line with the pharmacy pre-registration scheme which lies within the General Pharmaceutical Council (GphC). However, there is no requirement for tutors to attend training or demonstrate expertise in workplace assessment (Mills et al., 2013). In other words training is not mandatory. The main barrier to making training mandatory is that the role of the pre-registration tutor does not attract additional remuneration and is often see as an 'addition' on top of all the other roles that the pharmacist must undertake (Mills et al., 2013). However, tutors are required to sign a self-declaration that they meet the criteria (Mills, et al., 2013). Having said that, it is important to note that tutors have the final decision as to whether the trainee has achieved the required standards relating to performance standards (Mills, et al., 2013: 82).

Understanding pre-registration perception on university-based training and placement

Review of literature reveals varying students views regarding the university-based training and the work-based training in general. Regarding university-based training some trainees were very positive citing sufficient pharmacy practice with experience as an important means of facilitating transition from training to work (Jee et al, n.d.). Students found knowledge and use of pharmacy

law to be relevant to the practice, medical chemistry as being less important to the practice (Jee, et al., n.d.). Trainees also noted a tremendous discrepancy between university learning experience and workplace experience (Jee et al., n.d.). Some students mentions difficulties associated with adjusting to their roles, which they link to limited work-place based learning during the four years at university (Jee et al., n.d.).

A study conducted by Willis, Seston and Hassell (2008: 2-3), regarding students' choice of placement reveal the following:

- Students chose posts that offered them good preparation for the registration of examination (91.5%);
- Students chose a post that contributes to professional development;

Other findings on students' placement based on a study conducted by Willis and his colleagues include (Willis, et al., 2008: 2-3):

- Trainees described their workplace training as enjoyable (80.9%) and contribute to their professional knowledge and their clinical skills (72.7%);
- About a quarter (26%) felt that they not receive significant feedback at work;
- Just over a third (36.5%) felt that they were overloaded with work.

Besides, Jee, and his colleagues report that some trainees lacked confidence at the initial stage of their pre-registration training, associated with difficulties in applying their clinical knowledge in practice (Jee, et al., n.d.).

Method

This study was conducted to offer insights on pharmacy pre-registration students' perception of their placement tutors in the United Kingdom (UK). The study employed a quantitative research approach and questionnaire survey was used to collect data. The questionnaire format consisted of open-ended, closed-ended and rating scale for the purpose of increasing response diversity. The open-ended items allowed the respondents' opportunity to make comments on their thought in relation to closed- ended items. This is necessary to enable the readers and researchers gain some understanding of students' perspective regarding their perception of placement tutors. The study respondents consisted of pharmacy students on their pre-registration placement who were purposefully selected for the study. Students were recruited for the study at a workshop conducted in Reading in Berkshire in the UK. This initial recruitment formed the basis for subsequent recruitment using snowball sampling technique (see Makori et al., 2015). Respondents were made aware of various ethical considerations such as confidentiality and anonymity, consequently they offered verbal consent. Some survey questionnaires were issued during the workshop in Reading while others were sent to the respondents through their personal email contacts. Data collection exercise lasted for 5- 6 months. The response rate was sixty per cent. Due to the size of the sample (14) closed-ended items were

analyzed using pen, paper and calculator resulting in descriptive data, whereas open-ended data or comments were analyzed into themes or categories.

Results

Table 1: Showing trainees' perception of their placement tutors

Trainees' perception	Strongly Disagree (% , n=14)	Disagree (% , n=14)	Agree (% , n=14)	Strongly Agree (% , n=14)	No response (% ,n=14)	Total %
I feel that I am not getting enough support for my placement	7%	43%	36%	7%	7%	100%
I feel my tutor looks down upon me and treats me like a small child	29%	64%	7%	0%	0%	100%
I expect my tutor to be positive and supportive	14%	7%	21%	57%	0%	100%
I don't think I have a clear direction where my placement is going	36%	43%	14%	7%	0%	100%
I have a clearly agreed plan or structure for my placement	29%	7%	36%	14%	14%	100%
I feel my tutor has no clue on what is happening with my placement	14%	71%	0%	14%	0%	99%
I feel that my tutor has not been well trained to support students during placement	43%	29%	29%	0%	0%	101%
I feel my tutor lacks the skills required to support students effectively during their placement	36%	50%	7%	7%	0%	100%
Based on what I gather from my colleagues in placements in other companies or stores it appears that every tutor support students differently	0%	7%	29%	57%	7%	100%
I expect tutors to be well trained and be able to support students in a consistent way across the board.	21%	0%	21%	57%	0%	99%

Characteristics of respondents

- Four of the trainees were male and ten were female
The respondents were mainly from three ethnic backgrounds: Asian (7); African (4) and British (3).
- They all attended nine different Universities in the UK. .
- They were based in five counties: Oxfordshire (4), Berkshire (5), Hampshire (3); Buckinghamshire (1) and Northamptonshire (1) for their preregistration workplace-based placement.
- They worked at three community chemist or pharmacies: Rowland (1), Lloyds (1) and Boots (12).

Student perception of their placement tutors

The following analysis is based on Table 1:

- Just over 2/5 of the trainees felt that they were not getting enough support for their placement. Further analysis reveals that four of the students who felt so were female, while two were male. The six students were all working with boots community chemist or pharmacy at the time of the study. Three of them were based in three different counties. The six students were of different ethnic background: three female British, one female Asian, one male white and one male African.
- Just fewer than 80% (n=14) of the trainees expected their tutors to be positive and supportive. Further analysis; reveal that ten of the trainees were working at Boots community chemist or pharmacy and one at Lloyds community chemist or pharmacy at the time of the study. The trainees were based in five different counties. Of the eleven students, eight were female and three male. The students were from three main ethnic backgrounds: Africans (3), Asian (5) and British (3).
- 21 % (n=14) of the trainees felt that they was no clear direction for their placement. All the three students were female who worked in Boots, two British and one Asian and were based in three different counties.
- 14% (n=14) of the trainees felt that their tutor lacks the necessary skills to support students during placements. The two trainees were both female, one Asian and the other British, both worked at Boots community chemist or pharmacy. They were based in different counties.
- 14% (n=14) of the trainees felt that their tutors have no clue of what is happening with their placement. The two trainees were African male and White female. They both worked in Boots community pharmacy or chemist and were based in two different counties in the UK.
- 36% (n=14) of the trainees indicated that they did not have a clearly agreed plan or structure for their placement. Four of the trainees indicated 'strongly disagree', suggesting that their placement did not have any agreed plan or structure. Further analysis reveal that all the five trainees were all female, one

African, two Asian and two British. They were based at various counties in the country.

- One student felt that her tutor looks down upon her and treats her like a small child. The student is an African and worked in Boots.
- 57% (n=8) and 29 % (n=14) indicates strongly agree and agree respectively that tutors support trainees differently. This may further suggest that just over 80% of the trainees felt that tutors' support was varied. That may raise further concerns of lack of uniformity of support offered to trainees. Five of the trainees who indicate 'strongly agree' were female and three male. Three of the trainees who indicate 'agree' were female and one male. Of the female trainees who indicate 'strongly agree' three were Asians and two British. Of the male who indicate 'strongly agree' two were Asians and one African. Three of those who indicate 'agree' were female and one male. Three were British, one African and one Asian. Seven of those who indicate 'strongly agree' worked with Boots community chemist or pharmacy and one worked with Roland community chemist or pharmacy. They were based at various counties in the country.
- 57% (n=14) and 21 % (n=14) indicates strongly agree and agree respectively, that they expected tutors to be well trained and being able to support trainees in a consistent way cross the board. This may further suggest that just fewer than 80% of the trainees were not happy with the training of the tutors and the support they offered them. Six of the trainees who indicate 'strongly agree' were female and two male. Two of the trainees who indicate 'agree' were female and one was male. Of the female trainees who indicates 'strongly agree' two were Africans, three were Asians and one was British. Six of the trainees who indicate 'strongly agree' worked with boots community chemist or pharmacy, one other trainee worked with Rowland community chemist or pharmacy, the other worked with Lloyds. The three trainees who indicate 'agree' worked with boots. They were based at various counties in the country.

Discussion

Workplace- based training or learning has been recognized in the literature reviewed as a means of facilitating transition from training institutions to work or practice environment. It plays a crucial role in the "development of learners' attitudes, behaviors and skills that are important for the practice profession". It is also a means of socializing students professionally in the workplace environment (Jee, et al., n.d., Para. 1)

Preregistration is a form of workplace-based training specifically designed for pharmacy students. It has been recognized for enabling students to acquire important skills such as communication skills, interpersonal skills, clinical knowledge and skills, clinical reasoning, among others which are necessary in the workplace environment (Helmich et al., 2011; Diemars, et al. 2011; Lee et al., n.d.). However, the success of preregistration programed is dependent on an effective and competent tutor. But how can competency among tutors being fostered when training and ascertaining their expertise is not mandatory

(Preregistration Trainee Pharmacist Handbook, 2014). Effective training ensures that workers are consistently competent to perform their tasks effectively. One wonders how individuals who are not trained can be entrusted with the responsibility of assessing and signing off the work of pre-registration trainees. How possible is it that people who are not trained are charged with the responsibility of determining who should join the pharmacist register? If people are not trained then variations in assessment would be anticipated. If people are not trained then disparity in training and support would be anticipated. In this study the respondents raised very pertinent concerns (summarized in Table 1); they are pertinent because they all suggest something about training:

- Trainees were not getting enough support for their placement (42%);
- Trainees expected their tutors to be positive and supportive (80%);
- Trainees had no clear direction for their placement (21%);
- Trainees felt that tutors had no clue of what was happening with their placement (14%)
- Trainees had no clearly agreed plan or structure for their placement (50%)
- Trainees received varied support (80%)
- Trainees expected tutors to be well trained and being able to support them effectively (78%)
- Trainees felt that their tutors have not been trained to support student during placement (29%).

According to the guidance for tutors (Al- Ahmad and Liu, 2014), they are expected to be supportive, role model, deliver training and assess training performance. This is expected to occur uniformly across the pharmacy preregistration programme in the UK. This can or may only occur if all the tutors were uniformly trained so that all sang from the same hymn sheet. Otherwise, pharmacy preregistration would continue to be offered variously resulting in serious disparity.

Conclusion and Recommendations

This study has demonstrated that workplace-based training is an important activity in terms of facilitating transition from training institutions to work environment. A number of benefits have been cited in relation to workplace-based training, for instance, trainees gain confidence, communication improves and trainees also acquire skills such as clinical knowledge and skills, clinical reasoning, interpersonal skills and empathy. All these benefits are very crucial in a working environment, and especially when somebody is crossing over from a university or training institution to the practice environment. However, the study finding raises serious concerns regarding placement tutors. Some of the concerns include, lack of clearly agreed structure or plan; various tutors support (lack uniformity); lack of training; lack of direction and lack of support.

The study therefore recommends that tutors, be well trained (mentorship) in order to enhance uniformity in the preregistration training and support systems. The mentorship course can last 3- 6 months and tutors can attend one day a week. Also tutors to be offered some allowances for tutoring preregistration trainees. This may motivate them to participate in various training in relationship to their role as preregistration tutors.

References

Al-Ahmed, N. and Liu, P. (2014). The steps pre-registration tutors must take to support their trainees. *The pharmaceutical Journal* 11Jun 2014, 292 (7814), 610. www.pharmaceutical-journal.com/learning/learning-article/the-steps-pre-regitration-tutors-must-take-to-support-theirtrainees/11139065.article [Accessed on 30/08/2015].

Bowes, L. and Harvey, L. (1999). The impact of sandwich education on the education of graduates six months post-graduation Birmingham, University Central England, Centre for Research into quality.

Dean, B; Schachter, M; Vincent C. and Barber, N. (2002). Causes of prescribing erroe in hospital in-patients: a prospective study. *The Lancet*, 359, 1373-1378.

Diemers, A.D; Van De Wiel, M.W. Scerphies, A.J.; Heireman, E. and Dolmans, D.H. (2011). Pre-clinical patient contents and the application of Biomedical and Clinical Knowledge. *Medical Education*, 45, 280- 288.

Elvey, R; Lewis, P; Schafheutle, E. I; Willis, S; Harrison, S and Hussell, K. (2011). Patient-centred professionalism among newly registered pharmacists, London: Pharmacist Practice Research Trust

General Medical Council (2009). *Tomorrow's Doctors*, London: General Medical Council.

General Pharmaceutical Council (2011a). *Future pharmacist: standards for the initial education and training of pharmacist*, London: General Pharmaceutical Council.

General Pharmaceutical Council (2011b). *Tutor development resources*, London: General Pharmaceutical Council.

General Pharmaceutical Council (2012). *Pre-registration manual 2012- 2013* [online]. Available: <http://www.pharmacyregulaion.org/preregistration> [Accessed 10/04/2013]

Grant, J. (2010). Principles of curriculum design. In: Swanwick, T. (ed). *Understanding medical education: evidence, theory and practice*. ChichesterWiley Blackwell.

Hammer, D.P. (2000) Professional attitudes and behaviours: The "A's and B's" of professionalism. *American Journal of Pharmaceutical Education*, 64, 455- 464.

Harvey, L; Moon, S; Geall, V and Bower, R. (1997). Graduates' work organizational change and student's attributes. Birmingham CRQ and AGR (supported by DfEE and CICHE) ISBN 1859201113

Helmich, E; Bolhuis, S; Laan, R. and Koopmans, R. (2011). Early clinical experience: do students learn what we expect? *Medical Education*, 45, 731- 740.

Jee, S; Schafheutle, E. and Noyce, P. (n.d.) A critical perspective of workplace learning in pharmacy education and training with medicine serving as a comparison. http://file:///C:/Users/Downloads/samwel_lee.pdf [Accessed on 28/08/15]

Little, B and Harvey, L. (2006). Learning through work placements and beyond. A report for HECSU and Higher Education Academy's work placements organization Forum. www.hecscu.ac.uk/assets/documents/Learning_through_work_placemnts_and_beyond.pdf [Accessed on 20/08/2014].

Little, B. (2000). Undergraduates work based learning and skills development. *Tertiary Education and Management*, 6, 119- 35.

Mason, G; William, G; Grant, S. and Guile, D. (2003). How much does higher education enhance the employability of graduates? http://www.hefce.ac.uk/pubs/_drepints/2003/vol13_03 [Accessed on 03/07/2015]

MCateer, S; John, D. and Luscombe, D.K. (2004). Views of preregistration graduates on the UK pharmacy, undergraduate course as preparation for preregistration training. *International Journal of Pharmacy Practice*

Mills, E; Blenkinsopp, A; Black, P. (2013). Quality management in pharmacy pre-registration Training: Current practice. *Pharmacy Education*, 13(1), 82-86.

Preregistration Trainee Pharmacist Handbook (2014). Health Education KSS preregistration Trainee Pharmacist. Developing people for health and healthcare. Health Education, Kent, Surrey and Sussex. www.ksspharmacy.nGs.uk/dyn/-assets/-folder4/prereg_handbook/preregGuide2014-15FINAL.pdf [Accessed on 30/08/2015]

Spencer, J; Blackmore,D; Heerd, S.; MCCrorie, P; Mchaffie, D; Scherpbier, A; Gupta, S; Singh, K and Southgate, L. (2000). Patient-oriented learning: a review of the role of the patient in the education of medical students. *Medical education*, 34, 851- 857.

Willis, S; Seston, L; and hessell, K. (2008). Working lives of preregistration trainee. A longitudinal cohort study of pharmacy careers. The pharmacy Practice Research Trust. www.pharmacyresearchuk.org/waterway/wp-content/uploads/2012/11/working-lives-of-preregistration_Trainees.pdf [Accessed on 30/03/2015].