

Community pharmacy experiential placement: Comparison of preceptor and student perspectives in an Australian postgraduate pharmacy programme

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Abstract

Background: Community Pharmacy Placements are an integral component of the pharmacy curriculum. Their success relies heavily on the willingness and capability of pharmacists to precept.

Aims: To explore community pharmacy preceptors' perceptions about factors that assist them facilitate student learning, and the corresponding pharmacy students' perception of their experiential learning.

Method: Preceptors (n=75) and their preceptees (n=83) were asked to complete anonymous surveys immediately following the placement. Descriptive statistics were conducted on surveys returned [53 preceptors, 51 students].

Results: Preceptors positively rated support from the University and their teams. Students rated their experiential placement as productive. Preceptors indicated difficulty precepting in busy and complex situations.

Conclusion: Placements are valuable for preceptees. Preceptors are supported through information provided by the University, however guidance could be provided around managing students in complex and difficult situations. Quality pharmacy preceptor guidance should ensure continuation of positive learning experiences for students.

Keywords: *work-integrated/experiential learning, community pharmacy placements, preceptors, preceptor training, students, support needs*

Introduction

Pharmacy placement experience is an integral component of the pharmacy curriculum as it provides opportunities for students to experience authentic practice, and to develop their knowledge and skills through engagement with their environment (Egan & Jaye, 2009), as well as professionalism through practice exposure and role models (Schafheutle, Hassell *et al.*, 2010). While the graduate of a pharmacy degree may explore a diversity of employment opportunities, such as industrial, hospital/clinic, administration, teaching/education and/or research, most will find employment in 'retail' settings, as Community Pharmacists (DoHA, 2008). Data indicate that 85% of Australian pharmacists are employed in 'retail' settings, with 78% in the role of Community Pharmacist (DoHA, 2008). Pharmacy students begin their supervised practice experience early in their scholarship, prior to professional registration (Australian Pharmacy Council, 2009). The Australian Pharmacy Council stipulates that "students must be given exposure to pharmacy practice from the first year" and clinical placement experiences must be "embedded in the curriculum in a manner which integrates student's experiences and the study of pharmacy practice, therapeutics and pharmaceutical

sciences" to aid the socialisation of students into the profession (Australian Pharmacy Council, 2009). It is therefore imperative that the learning context during the community pharmacy placement is appropriately structured and industry educators supported to assist in the provision of the best learning outcomes for the student. Positive learning experiences are largely dependent on effective communication and collaboration across the three key players, community pharmacists, academics, and students (Stupans, McKauge *et al.*, 2011). However, little research has explored this aspect of the pharmacy curriculum in detail.

Community pharmacy 'preceptor' is the term used to denote a registered, practising pharmacist who supervises pharmacy students during placement. Preceptors are required to supervise, guide and support students during placements, when the students are developing knowledge, skill and attitudes as they work towards clinical competence (Marriott, Taylor *et al.*, 2005). One of the challenges that Australian pharmacy preceptors are facing at the pre-intern preceptorship level is being able to offer a range of rich placement learning experiences to students. This challenge is consistent regardless of the university placement structure. Pharmacy preceptors in Australia receive no compulsory

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training on 'how to be a preceptor' (at the pre-intern level), nor do they receive any remuneration for their time and effort as a preceptor during the student placement though they are provided with administrative support and guidance by university placement teams.

Australian placement programmes are heavily reliant on the willingness and ability of pharmacists to perform preceptorship roles with their work teams. The increasing numbers of students entering pharmacy courses are creating further challenges due to the corresponding increase in the number of pharmacists and placement sites required to provide quality educational experiences in order to produce capable graduates (Rodger, Webb *et al.*, 2008). The workplace learning literature acknowledges that clinicians require guidance, adequate preparation, acceptance and recognition of their facilitating role by managers and peers, and effective organisation of workload (Billett, 2003; Yonge, Krahn *et al.*, 2002; Henderson, Alexander *et al.*, 2010). Students participating in health care environments need to be motivated and engaged, and require guidance to effectively assimilate into the placement context (Egan & Jaye, 2009). It is important to explore placements from both the perspective of the pharmacy preceptors and the students to identify information about learning opportunities and experiences in a systematic way, thus informing the focus of future initiatives.

This research explored community pharmacy preceptors' perceptions about specific factors in their working situation that have been recognised as assisting practitioners to facilitate students learning. General preceptor feedback is regularly sought by the School's Placements Team as part of ongoing quality control and evaluation - however, this research examined the adequacy of preceptor support through structured anonymous feedback. Feedback was also sought concurrently from the students who were placed with these community pharmacists about their perceptions of the learning experience during placement. This two pronged approach enables the perceptions of pharmacists and students to be compared and contrasted thereby better articulating the particular areas of need that require attention. The research also seeks to identify external factors – outside of the direct control of the University, but which the University could strategically influence – which may affect the community pharmacy preceptors' ability to facilitate student learning during placements whilst managing their demanding workloads. Human Ethics Committee approval was obtained from Griffith University.

Context

At the Griffith University School of Pharmacy, pharmacy placement experience forms a significant component of the curriculum. Pharmacy students begin their community pharmacy placement experience in the second and third year of the Bachelor of Pharmaceutical Science degree and continue on throughout the 4th year of the Master of Pharmacy (MPharm) degree (Table I).

At the undergraduate level of scholarship, students have very limited exposure to clinical and pharmacy practice knowledge with only 12 hours of work based learning. In the first year of the MPharm students participate in pharmacy practice experience during both semesters where it forms a major component of the Advanced Practical Experience (APE)

(Table I). In Semester 1, students are required to complete a series of 10 full working days within the community pharmacy, over a 10 week period (1 day/week). The final series of placements takes place also in year 4, at the end of Semester 2 when students are required to complete a total of 15 days supervised practice. This includes a compulsory week in a hospital pharmacy where students undergo structured clinical exposure, and in the remaining 10 days, students elect to undertake combinations of other hospital or community pharmacy, rural pharmacy, or other specialty areas placements in Australia or overseas. The present study sought feedback from preceptors and students about the experience of the regular community pharmacy placements of Masters Students once a week for 10 weeks in Semester 1 of MPharm.

Table I: Griffith University School of Pharmacy Undergraduate and Postgraduate programme Placement distribution

Undergraduate (BPharmSci)	Year 2 4 hours, community pharmacy (on-site)
Undergraduate (BPharmSci)	Year 3 8 hours, community pharmacy (on-site)
Postgraduate (MPharm)	Year 4, Semester 1, Advanced Practical Experience 1 (APE1) 1 day/week for 10 weeks – 10 days total (on site, off-campus), community pharmacy Workshop discussion of Placement as follow-up (post-Placement) for 10 weeks (on campus), 1 day/week Placement site visits*
Postgraduate (MPharm)	Year 4, Semester 1 + 2, Advanced Practical Experience 1 & 2 (APE1 & APE2) 3 hour introductory hospital placement (on site, off-campus)
Postgraduate (MPharm)	Year 4, Advanced Practical Experience 2 (APE2) 3-week placement block (15 days on-site) Community, hospital, rural pharmacy, pharmacy specialty areas in Australia & overseas

*present study was conducted during these visits

Community pharmacy preceptors are provided support from Griffith University School of Pharmacy throughout Semester one. Placement Coordinators, prior to commencement of student placement, make contact either via telephone, mail or email. Preceptors and students are provided with Community Pharmacy Placement Manuals in advance – outlining teaching, learning and contact details, legalities, codes of conduct, and assessment and feedback forms for both students and preceptors. It is the assumption of the School that the Manuals provided to preceptors will be read in advance by the preceptor and student and used to facilitate both preceptor and student in optimising learning during placement. Students also attend pre-placement lectures where they are given comprehensive information about placements (as well as 10 post-placement on-campus discussions throughout the semester). Dialogue between Community Pharmacy Preceptors and the School placement team is openly

encouraged before and during placements. Unique to the Griffith University School of Pharmacy, members of the Placements Team (the course convenor, tutors and placement Coordinators) visit each placement site during the placement period in Semester 1 of MPharm programme, encouraging dialogue between all stakeholders. It was during these visits that the survey forms seeking feedback were distributed.

Placement Sites

Placement sites are mostly concentrated within the Gold Coast region, but also extend north to include suburbs of the greater Brisbane area and south to neighbouring suburbs of northern New South Wales. Community pharmacy placement sites generally comprise one to two registered pharmacists and a small number of support staff.

The specific aims of the present study were to examine through survey:

1. Pharmacy preceptors' perceptions of factors in their work situation that assists in their ability to preceptor; and
2. Pharmacy students' perceptions of their learning context.

Methods

Participants

All preceptors (n=75) and preceptees (students) (n=83) participating in the placement of Semester 1 Community Pharmacy Placement of MPharm, Griffith University School of Pharmacy 4th year APE 2010 cohort (Table I) were asked, during regular placement site visits, to complete anonymous survey questionnaire forms and return to the university in a supplied replied paid envelope at the completion of the clinical placement. Reminder emails to students and phone calls to preceptors took place post-visit to encourage responses. Fifty-three preceptors and 51 students returned completed questionnaires, with response rates of 70.7% for the preceptors and 61.4% for the students.

Tools

The Community Pharmacy Preceptor questionnaire was adapted from the Support Instrument for Nurses Facilitating the Learning of Others (SINFLO), a valid and reliable tool that measures Registered Nurses perceptions of support they receive to fulfil their role in supporting the learning of others. Principal component analysis from registered nurse data identified 5 distinct sub scales represented by 17 items with good reliability: workload 0.953; communication 0.847; acknowledgement 0.858; teamwork 0.852; preparation 0.942 (Henderson, Eaton & Burmeister, 2012). This tool was modified for the model of pharmacy placements. Also a further two questions were asked about whether the students appreciated the pharmacists. The modified tool did not undergo factor analysis because of the small sample sizes, however was considered appropriate given clinicians across health disciplines value workplace support (Henderson, Alexander *et al.*, 2010).

The Griffith University School of Pharmacy student questionnaire was adapted from the Student Clinical Learning Culture Survey (SCLCS). This nineteen question survey

measures four subscales important for students' learning during their clinical practicum. (Henderson, Creedy *et al.*, 2010). Previous testing with nursing students identified reasonable Internal reliability across the four subscales, i.e., Cronbach alpha was staff engagement .87, student motivation .75, student satisfaction .67, student dissatisfaction .78.

For both SINFLO and SCLCS, a five point Likert scale was used to score items: 1 = 'Strongly Disagree', 2 = 'Disagree', 3 = Neither Agree nor Disagree 4 = 'Agree', 5 = 'Strongly Agree'. Both the Community Pharmacy Preceptor and the Griffith University School of Pharmacy Student Questionnaires have yet to be validated, however, there is evidence that the issues in nursing (from which these questionnaires have been adopted) are similar to those across the broader health professions (Henderson, Alexander *et al.*, 2010).

Analysis

The data collected from survey responses from preceptors (pharmacists) and preceptees (students), after the completion of community pharmacy placement, were entered into Excel[®] spread sheets by an experienced member of the research team, with accuracy of entry tested for every 5th entry. The scoring for negative items was reversed on the preceptor survey form, and for one negative question (as indicated on Table IV).

Results

Response Rate

Fifty-three preceptors of a total of 75 preceptors responded (70.7%); and 51 of a total of 83 students responded (61.4%).

The average number of years of practice of preceptors was 10.44 years, ranging from 1 to 35 years of experience. The majority of pharmacists were within their first five years of practice. The remainder of pharmacists were relatively evenly distributed across the range of 6 to 30 years of practice (refer Table II).

Table II: Pharmacists reported years of experience practising as a pharmacist

Years of experience	Number of pharmacists
1-5	27
6-10	6
11-20	10
21-30	8
31-35	1

Preceptors' response about how they are supported to perform their role in facilitating students learning was generally positive. The higher the score indicates that preceptors felt more supported in relation to the particular sub-scale of interest. All scores were above the average.

Preparation, team work and communication were the three areas that pharmacists rated as most highly, scoring 4 or above on the Likert scale (4.14; 4; 4.0 respectively) (refer Table III). The two lowest scores were acknowledgement and modification of workload, (3.54; 3.55) respectively (refer Table III).

Discussion

Preceptors

Preceptors rated support for their role facilitating student learning as positive. Particular areas were rated higher than others and these differences are worthy of exploration.

Preceptors rated the subscale preparation highest. This suggests preceptors were satisfied with the information provided, understood what was expected of them and had confidence in their ability to perform this role. The results indicate preceptors feel they have the skills and knowledge to communicate, facilitate and motivate pharmacy students in their placement learning. This finding is consistent with the pharmacy literature that suggests during clinical placements each party rates the domain that they have most control over

as most favourable (Stupans, McKaige *et al.*, 2011). For example, students rated their motivation most highly (Table IV), which is the area that they have most responsibility for positively influencing.

Communication is important because preceptors should feel comfortable to discuss with the university questions that arise during the student placement. Preceptors indicated communication with the university around student learning needs was favourable, however it seems that it could be improved upon by discussing preferred modes of communication, timing and frequency (Walker, Henderson *et al.*, 2011)

Teamwork pertains to the environment of community pharmacy and the preceptors' perception of support from within this community. The result (3.99) is encouraging, indicating a strong support for the preceptor from within the pharmacy. As each pharmacy is a commercial enterprise and there is no financial remuneration for teaching pharmacy students during placements this not only suggests goodwill of the preceptor, but a professional ethos to teach.

Table III: Community Pharmacy Preceptor perceptions of support

Subscale	Survey Questions	Subscale average
WORKLOAD	<ul style="list-style-type: none"> I have sufficient time to supervise a pharmacy student I have sufficient time to supervise a pharmacy student when they perform new skills I have sufficient time to provide a pharmacy student with feedback I have sufficient time to answer a pharmacy student's questions I am able to manage my usual workload when I work with a pharmacy student My workload is reduced to provide time to interact with a pharmacy student 	3.55
ACKNOWLEDGMENT	<ul style="list-style-type: none"> I am assisted to develop strategies to improve a pharmacy student's performance Members of my pharmacy team appreciate that I work with a pharmacy student I am assisted to implement strategies to improve a pharmacy student's performance The organisation does not recognise my contribution to the learning of others (-ve) 	3.54
TEAMWORK	<ul style="list-style-type: none"> The team approach in my workplace makes supervision of a pharmacy student manageable The cooperation among the pharmacy team assists me when working with a pharmacy student Members of the pharmacy team assist with my workload when I am working with a pharmacy student 	4 (3.99)
COMMUNICATION	<ul style="list-style-type: none"> I know how to find out what a pharmacy student is and is not allowed to do (scope of practice) I know who to ask if I have questions about what a pharmacy student can do I know how to seek assistance if I am having difficulties with a pharmacy student's attitude I am able to find out what a pharmacy student needs to achieve I am given sufficient notice when I am required to work with a pharmacy student 	4.00
PREPARATION	<ul style="list-style-type: none"> I am able to facilitate the learning of others I have the communication skills to constructively interact with a pharmacy student I know how to motivate a pharmacy student I feel adequately prepared to work with pharmacy students I am able to develop strategies to improve a pharmacy student's performance 	4.14
APPRECIATION from students	<ul style="list-style-type: none"> Pharmacy students appreciate the assistance I provide them I receive thanks from the pharmacy students I work with 	4.25 4.43

Table IV: Pharmacy Student feedback about their placement experience

Subscale	Questions	Subscale average
ENGAGEMENT	Q1: The pharmacy Preceptor often thinks of interesting learning ACTIVITIES. Q2: There are opportunities for me to proceed at my own PACE. Q3: The pharmacy Preceptor working with me HELPS me when I am having trouble with the work. Q4: I have a SAY in how my Placement day is spent. Q5: Placement workplace assignments are CLEAR so that I know what to do. Q6: Pharmacy Preceptor tells me how and why they are DOING things Q7: The pharmacy Preceptor is UNFRIENDLY and inconsiderate towards students (-ve) Q11: The pharmacy Preceptor working with me considers my feelings. Q12: Workload allocation in this workplace is carefully planned. Q22: The pharmacy Preceptor working with me goes out of his/her WAY to help me. Q23: Staff are PUNCTUAL here.	4.23
DISSATISFACTION	Q10: This is a DISORGANISED clinical Placement (-ve) Q14: This clinical Placement is a WASTE of time (-ve) Q15: This clinical Placement is BORING (-ve) Q16: No one is interested in my PROBLEMS (-ve)	2.33
SATISFACTION	Q8: I ENJOY coming to this workplace. Q18: This clinical Placement is INTERESTING. Q19: I look forward to coming to this clinical Placement.	4.22
MOTIVATION	Q9: I put EFFORT into what I do in the workplace. Q13: I pay ATTENTION to what others are saying Q21: The pharmacy Preceptor talks with me as an INDIVIDUAL	4.45

(NOTE – negative questions reversed)

Workload refers to the preceptors' perception of his/her workload when facilitating students, in particular integrating the preceptor-preceptee interactions during routine practice. The results indicate that preceptors do not receive as much support around workload as other factors necessary for facilitating learning. When isolated, the statements that specifically refer to the time taken to supervise the student are rated most negative. Perhaps due to the sometimes unpredictable busy dynamic of community pharmacy practice, there may be periods of time where the preceptor feels they are restricted in their ability to properly supervise the pharmacy student. It would be valuable to develop practical education and 'doable' tips on how students can be effectively managed during pharmacists' busiest periods.

Acknowledgement, which refers to recognition that community pharmacists receive in their role of facilitating student learning, was the lowest scoring subscale in relation to pharmacists' perception of support. Statements in the subscale of acknowledgement referred to preceptors' perception of assistance offered to develop and implement strategies to improve a pharmacy student's performance. The provision of assistance to pharmacists to improve student learning and develop their own skills can indicate to the pharmacist that their role is acknowledged. Assistance provided to pharmacists around improving student performance is closely linked to open communication and useful feedback to the student. The ability of community pharmacists to give timely and specific feedback is variable and can involve difficult conversations. Such conversations can be challenging for clinicians because of their existing workload and at times the limited preparation that they may receive prior to precepting a student (Henderson, Alexander *et al.*, 2010). Preparation, through the provision of information, and student manuals, does not

routinely coach staff in providing 'critical' feedback. Therefore the university, through the existing communication and public relations work, could focus specifically on coaching of preceptors in difficult conversations and situations. Furthermore, pharmacy preceptors are more likely to invest time and effort and adopt positive learning practices, such as feedback, in practice if they are acknowledged or rewarded in some form (Schoonbeek, Henderson, 2011). Rewards/recognition incentive schemes that acknowledge individuals and teams to encourage their continuous investment in students could be very worthwhile. Acknowledgement in the form of a written communication in a timely fashion has been successful in engaging nursing staff interactions with students (Schoonbeek & Henderson, 2011) and this form of communication is also nurtured at the School of Pharmacy, Griffith University. On-going feedback to seek further clarification should be sought to identify the specific assistance required by preceptors to develop and implement strategies to improve student performance and increase preceptor level of satisfaction.

Students

High scores from students' perceptions about engagement indicate students perceive they are engaged in the placement experience. It is possible that students' level of engagement is closely related to the efforts of the preceptor, providing support and guidance as they undertake their placement experience. Engagement is an important factor in effective precepting (Marriott, Taylor *et al.*, 2005). The results suggest that students understand the purpose of the placement, taking responsibility for completion of workplace assignments, and identifying learning opportunities.

The results for motivation (4.45) suggest students feel they put effort into their conduct in the workplace, and that they pay attention to what is being said in the workplace. Not surprisingly, as students tend to rate their own contribution to the placement experience as high (Owen, Ryan *et al.*, 2011). The results also indicate motivation to be closely linked to the student-preceptor relationship, emphasising the importance of facilitating and nurturing these relationships in the future.

Students' indicated a low level of dissatisfaction with the community placement experience, thus current placements can be interpreted as providing students with experience that is valued and appreciated by the students. This is commensurate with the high results for satisfaction (4.45). The study results indicate positive student experiences that arguably were enabled by well prepared student and preceptors by the School of Pharmacy (Marriott, Taylor *et al.*, 2005). From the preceptors' perspective, they feel well prepared however acknowledgement and assistance in maximising learning opportunities for students from the university could be valuable in supporting them in this professional role.

There are currently no specific programmes for preceptor training and it would perhaps be prudent to develop such a programme to address this area. Meaningful communication in the form of discussions with preceptors about students' performance could better inform the assistance the University should provide to the preceptor. These discussions could be encouraged by the University offering reward and recognition for preceptors who take an active interest in students through their willingness to engage in these conversations.

There are several limitations in this study, for example the relatively small and unrepresentative sample size of preceptors and students and the possibility that the participants gave socially desirable responses as they knew they were part of the research project. However, these influences cannot be eliminated, only acknowledged and put into context when interpreting the results.

In order to improve validity and reliability of the research findings, it would be valuable to complement current study results in the following ways:

- Conduct follow-up qualitative research (e.g. through interviews, focus groups) in order to further explore individual interpretation of meaning behind the quantitative research questions (and, indirectly, the findings themselves), seek participants' advice and suggestions on how the current situation could be improved, check correlation between the preceptors' own experience and value of their personal experiential placement programme, and investigate if there are any factors that the participants find relevant and that were not included in the survey;
- Conduct follow-up research to explore the opinions of those participants who did not wish to participate in the original study in order to find out the nature of their opinions, interests, and values, and compare these with the original findings; and
- Conduct follow-up research at a later stage (expanding the original study into a longitudinal one) in order to examine if participants' attitudes/opinions have changed over time and how.

Conclusion

This study has confirmed that preparation and execution of placements at Griffith University School of Pharmacy is well received by both preceptors and preceptees. This is largely attributable to preparation in the form of information, productive teams in community pharmacies, and continuous dialogue between the university and pharmacies. Given the demands for placements in the future this study highlighted potential to support and guide pharmacists when preceptoring students. This could be in the form of pharmacy preceptor training programmes and coaching following this during placements.

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