### Learning from community pharmacists' initial experiences of a workplace based training program

#### Abstract

Background: To prepare community pharmacists for the provision of more clinical and patient-focused services, a novel postgraduate course for community pharmacists in the UK was developed. It incorporated personal development planning against a personal development framework, workplace mentoring, employment of work-based assessment tools, activities which encouraged increased interprofessional working, reflection and opportunities for peer support.

Objectives: To identify course components which support development, describe the effect on practice and explore the perceived advantages and disadvantages of this model of postgraduate education.

Methods: Interviews were conducted with a purposive sample of 15 community pharmacists after they had completed approximately one year of the 3-year course. A topic guide covering approaches to learning, rationale for course selection, course experiences to date and impact on practice was used. Interview recordings were thematically analyzed.

Results: Two themes were identified. 'Support for learning' describes the components of the course that provided support for learning, including opportunities to learn with and from others, workplace mentoring and facilitated access to general practitioners. 'Outcomes of learning' encompasses how the course was a way of effecting change within existing roles and the increase in confidence and motivation to change practice identified.

Conclusions: The model used has merit in supporting community pharmacists to develop the confidence and competence required for extended clinical and patient-focused roles. While this model of learning seems to provide educational value, further research is required to determine whether the additional resources required to provide workplace mentoring, use work-based assessment tools and encourage inter-professional working are justified.

Keywords: Community pharmacists; Postgraduate education; Work-based assessment; Workplace learning; Workplace mentoring

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Introduction

In 2011 the UK community pharmacist contract was changed to encourage the delivery of more patient focused services.<sup>1</sup> A 2016 review recommended further expansion that would only be achieved through improved integration of community pharmacists with other primary care professionals.<sup>2</sup> The government also recognized the need to upskill community pharmacists for the provision of clinical services<sup>3</sup> and views them as integral to the provision of services that would improve patient care in the face of funding challenges and increasing inequalities.<sup>4</sup>

Pharmacists in the UK are required to maintain and update their professional skills and knowledge, however it is up to the individual to decide the content of their continuing professional development (CPD).<sup>5</sup> A reliance on self-directed learning does not change practice <sup>6</sup> and learning is selected to simply update knowledge,<sup>7</sup> or is based on personal interest or accessibility rather than by identifying learning needs through a process of reflection.<sup>8</sup> Time constraints may be a factor, particularly in the absence of protected time at work <sup>9,10</sup> and it has been shown that community pharmacists tend to complete distance learning packages in their own time.<sup>11</sup> These themes are repeated in international studies exploring community pharmacist CPD engagement.<sup>12-15 16</sup>

The predominant model of delivery of community pharmacist post-registration training in the UK is distance learning or evening classes in order to minimally disrupt the workplace.<sup>17</sup> Distance learning results in lower costs for the provider, minimal disruption for employers as staff do not need to leave the workplace and limited cost to employees paying their own fees.<sup>18</sup> However, the medical education literature suggests interactive and multifaceted techniques are most effective at changing practice and patient outcomes.<sup>19-24</sup>

Situated learning<sup>25</sup> emphasizes the role of the wider community and the transformation that occurs as learners participate within it. Learning is viewed as an everyday activity and the distinction drawn from working is seen as false. Working and learning activities can occur together when faced with complex issues. Four key ideas relevant to learning in the workplace are identified; learning is a part of social practice; learning takes place in communities of practice; learning takes place through legitimate peripheral participation; and that using the appropriate language of the community has an important role in developing practice.<sup>25</sup>

The constantly changing nature of work requires 'lifelong learning' <sup>26</sup> and it is clear that community pharmacists need support to ensure the learning they undertake is optimized for current and future

roles. There is a growing realization that some learning for work is best obtained in the workplace <sup>27</sup> and learning for practitioners should therefore include an experiential element.

The emerging model for postgraduate healthcare professional development is through building portfolios consisting of a range of different types of evidence which demonstrate development <sup>28</sup> and reflective practice. Commonly, development is linked to a competency framework whereby practitioners identify their development needs with the support of a mentor and then undertake activities to meet them. This process is facilitated with workplace based learning tools, which provide formative feedback, and, opportunities to discuss experiences with peers. Ideally, the portfolio becomes more than the sum of its parts, demonstrating practice achievements, learning, and recognition of and plans for future development.<sup>29,30</sup>

Competency frameworks can be used to enable the learner to identify their development needs and structure their learning. However, because individuals may lack the self-assessment skills to identify appropriate development areas,<sup>31</sup> independent recognition of their abilities is important.<sup>32</sup> The degree with which individuals recognize learning opportunities in the workplace can also be variable.<sup>33</sup> Guidance from someone more experienced can address this. For example, a tutor, defined as someone who acts as both education supervisor and mentor,<sup>34</sup> can provide support with identifying personal development needs and plans, and evaluate progress.

The University of East Anglia utilized local government agency funding to provide and test a postgraduate course which develops professional decision making, consultation, management and medicines optimization skills through encouraging workplace learning and work-based assessment with tutor support. The aims were to identify those course components which support community pharmacists' development, describe the perceived effect on their practice and explore the perceived advantages and disadvantages of participation.

# Method

Research ethics approval was granted by the University of East Anglia's Faculty of Health Research Ethics Committee in 2011.

The university developed a three-year course divided into two levels of 18 months. Level one covered pharmacy practitioner development in the health system and applied pharmacy practice skills, while level two addressed the pharmaceutical care of patients with short and long-term conditions.

Community pharmacists undertaking the course (students) maintained a learning portfolio, and measured progress and identified development needs using the General Level Framework (GLF).<sup>35</sup> Figure 1 summarizes the variety of methods and support provided to develop competence in the different areas covered by the framework, including workplace learning and practice activities, work-based assessment tools, directed reading, assignments and study days.

A steering group met quarterly to ensure the contents of the course met the needs of stakeholders including employers and primary care organizations. Box 1 provides an overview of the study day program. Study days were comprised of two topics, each delivered face to face by an academic or expert clinician. Box 2 summarizes the associated assessments.

Students were assigned an experienced community or primary care-based pharmacist as tutor to support them in selecting appropriate workplace learning activities and to conduct workplace and work-based assessments. Tutors were reimbursed and selected using the criteria summarized in Box 3.

Support from a local general practitioner (GP) practice was desirable to facilitate learning opportunities such as access to patient clinical records. To facilitate access, the university provided a letter explaining the course requirements which students could use to introduce themselves.

The research team wished to explore the experiences and perceptions of students. As their responses could not be predetermined, a qualitative approach provided the most appropriate method.<sup>36</sup> An overview of the method used is included here, full details are available in the main author's doctoral thesis.<sup>17</sup>

Interviews were chosen to facilitate a deep understanding of personal perspectives and experiences. To minimize risk of social desirability bias,<sup>37</sup> a trained interviewer (JS) was used who was independent of course design and delivery. Students were made aware that the interviewer was a community pharmacist. A topic guide was prepared which covered approaches to learning, rationale for course selection, course experiences to date and impact on practice.

All students enrolled on the course were invited to participate. Fifteen students were purposively sampled from the 25 who consented to ensure a diverse representation of the cohort using criteria obtained from the demographic questionnaire they completed. Table 1 summarizes the demographic composition of the sample alongside the identifier used for each student.

An inductive thematic analysis approach<sup>38</sup> facilitated a broad analysis of students' experiences, opinions and perspectives. This process was discussed by the research team throughout with

agreement reached that the final themes provide an accurate representation of the meanings evident in the dataset.

## Results

Two themes are presented; support for learning and outcomes of learning.

#### Support for learning

Students described their previous approach to learning. Most described this as unfocused and based on personal interest:

"As soon as I qualified I went on the [continuing education provider] website and ordered every single pack. Basically I lined them all up...and it was just a case of looking at which one was most interesting." 10M

Collating a portfolio and using the GLF allowed students to identify gaps in their competence and reflect on their learning needs, consequently structuring their own learning:

"...it's very good because then I can reflect on my work...think what I've done good, what I've done wrong..." 4F

The majority considered the workload associated with the course as high, describing how they struggled to balance this with other commitments, both at work and home. Many viewed the requirement to provide evidence against all GLF competencies as a paper exercise of limited value, especially for those elements not relevant to their current roles:

"Your review comes and then you spend the whole week before doing mapping, mapping, mapping, mapping." 14F

The course provided further opportunities for students to reflect upon their competence, including reflecting on their own and colleagues' performances in study day role-plays:

"...you realize what their faults are and what your faults are and how you can improve or you take on board what their strengths are, how they've implemented something that has really worked for them." 3F

The majority viewed the tutor as an enabler of learning. The relationship seemed to work best where the student was clear that they were accountable for their own development. The nature of the roles and work environments of both parties meant that a flexible approach was required. 7F explained

how she arranged for her tutor to visit on her day off to observe some planned patient consultations "so it didn't interfere with the workload."

Students said their confidence increased, in part due to the support and encouragement from their tutor, however there were exceptions. 8F felt that her tutor struggled with "knowing where to draw the line between helping to give deadlines and asking for things [summative assignments] to be done in a certain time."

The intensity of the pharmacy business where the student worked could have an impact on assessment of patient interactions:

"Sometimes [when my tutor visits] it's very quiet and I don't have any [patients] and sometimes it's very busy so I cannot get proper feedback..." 4F

Several benefits from using the tools were shared. 7F said that "...the case-based discussions were fab. I loved doing those because that made me look at patients and subjects... that I didn't really know much about..."

Other students described how the feedback they received increased their confidence in their practice. As 1F explained, "after you qualify, no one actually evaluates [you]."

Interaction with fellow students was beneficial. 7F described how on the study days, "it was really nice to meet with pharmacists all facing similar pressures and discuss...how people have handled various situations..."

Using a range of expert facilitators to deliver study sessions introduced new perspectives:

"...if you just speak to pharmacists you get the pharmacist point of view...if you get other speakers to come in I think it gives a bigger picture..." 3F

National legislation regarding pharmacy supervision, coupled with long opening hours made it difficult to establish face to face contact with other healthcare professionals. As a result, interaction with GPs had been reactive:

"...sometimes it gets as late as half seven and we close. So you can't really go [to meetings with GPs] after work, can't go before work because we open at 8.45 and we don't close for lunch..." 10M

Asking GP practices to support their educational needs was a strategy used by many. The documentation provided by the University which could be used to introduce themselves facilitated this:

"...the forms that were given to us...yes, just opened the door. I had free range, whatever I wanted, and every surgery I've gone to has been the same." 15M

Students noted that much of their learning on the course took place while they were at work. Student 2M summed up the benefits of this:

"...most of my undergraduate days, things I've actually read...I've forgotten them...but things that you actually get involved in, and you find out the solutions yourself, they kind of stay more with you..."

#### Outcomes of learning

Students spoke of how the course would help them improve their service. 12F referred to the prescription-checking focus of her role and how the course had contributed to her feeling that she wanted to do more by "...trying to develop service[s]...with more interaction with patients" rather than signing her name on dispensing labels "a thousand times in a day."

14F explained how increasing confidence enabled her to work more closely with the GPs at her practice-based pharmacy, which increased her confidence further:

"I am more confident in my role than when I started...and the more confident I am, obviously the more I engage and the more I ask, it's like a positive circle."

Students described how the course had given them confidence to challenge the clinical decisions of other healthcare professionals. 8F provided a typical example:

"... [it] gave me the confidence to actually initiate that conversation with the doctors... I think it just made me think more about how I approach things and getting all the information first and not being scared to ask the questions."

Some students described how the course was increasing their motivation in their current roles and influencing their career direction. For example, 13M said, "I think definitely the fact that the pharmacist is moving to a more clinical role that gives more professionality to the position, to the job satisfaction...my motivation has increased in practicing as a pharmacist."

## Discussion

This is the first study to consider the appropriateness of workplace learning which utilizes a learning portfolio of work-based assessments and reflective practice in the development of community pharmacists.

### Main messages

Many students felt the course supported them to engender change in their existing role and an increase in confidence and motivation to implement change in practice was identified. Opportunities to learn with and from others, learning in the workplace with tutor support and facilitated access to GPs appeared to support development.

#### Strengths and limitations

Students were purposively sampled to reduce possible biases within the sample frame. However, all had self-selected to undertake the course which suggests recognition of some development needs. Furthermore, the interviewer's background in community pharmacy and association with the university may have influenced the responses received and their interpretation.

Interviews were conducted after approximately one year of the course and major effects on practice would not be expected, however a number of changes have been identified. While the findings may be representative of students' experiences of the university's postgraduate course they cannot be generalized further. However, inferences can be drawn concerning the design and delivery methods used and students' experiences of development post-registration.

### Main discussion

The benefits identified seem largely to be derived from the components that facilitated learning and working with others.

It was clear that many pharmacists had difficulty establishing effective working relationships because of the isolation they experienced. Community pharmacists' isolation from other healthcare professionals has previously been reported,<sup>39-41</sup> and reasons identified here included pharmacy legislation and long working hours.

The course provided the opportunity to establish peer relationships and peer mentoring was evident in the learning described from discussions with peers. Vicarious learning<sup>42</sup> appeared to be facilitated in line with previous work which has suggested that informal interactions provide significant learning opportunities amongst peers.<sup>43,44</sup>

Pre-existing GP relationships were described as reactive, corresponding with GP views that relationships with community pharmacists are purely to do with prescription exchange.<sup>45</sup> Previous research found GPs' respect for pharmacists increased as they spent time working together.<sup>41,46</sup> This

was the perception here and increased knowledge and confidence in their own abilities supported the students in developing these relationships.

From a situated learning theory<sup>25</sup> perspective, students' isolation had resulted in the wider community playing a minimal part in their development prior to the course. Limited peer interactions and inadequate inter-professional relationships reduced opportunities for the learning that can occur in communities of practice.<sup>47</sup> The course supported students to overcome this; study days provided opportunities for learning though social interactions and course requirements for approaching GPs facilitated improved relationships. Effective tutors performed a mentoring function which improved student perceptions of self-efficacy.<sup>48</sup> Subsequent iterations of the course redefined the tutor role to focus on mentoring, and their role in summative assessment was removed as this was seen to have a negative impact on the relationship.

The opportunity afforded to have performance assessed directly in the workplace, and indirectly, for example through study day role-plays and discussing experiences with peers, provided validation of good practice and supported the identification of learning needs. Both contributed to an improved confidence in practice. This is similar to Martin et al's<sup>49</sup> finding that assessment and feedback in conjunction with distance learning materials improved the confidence and perceived abilities of those receiving it compared with those that only undertook the distance learning components, thereby adding to the arguments for delivering postgraduate training using multifaceted approaches<sup>21,22,24</sup> and underlining the key role played by tutors.

Workload was viewed as excessive with the need to collect evidence for all GLF competencies appearing to be a major contributor. As a result the course was revised to allow students to focus on developing capability important to their current and future practice.

The workplace based approaches adopted by the course were an important factor in enhancing learning and focusing development in areas that improved practice, rather than in areas dictated by the university or selected for ease or convenience by students. Confidence and inter-professional relationships in particular were seen to develop as a result of participation, and a positive influence on job satisfaction was apparent. However, the program evaluated here was not entirely workplace based and this may be an important educational consideration in light of the issues identified around professional isolation and inter-professional relationships.<sup>50,51</sup> The type of learning supported by this course is not readily facilitated for community pharmacists because of these issues and this study has

highlighted the importance of including methods for overcoming them when designing educational interventions.

# Conclusions

These findings suggest there is a clear need to develop competence and confidence amongst UK community pharmacists if they are to fully meet the role envisaged for them.<sup>1-4</sup>

The model used here has merit in the preparation of community pharmacists for the roles expected of them, and some of this can be attributed to the fact that it facilitated situated learning. It is recognized that considerable investment is required to support learning in the workplace with tutor support and release from the workplace to undertake learning with peers, however these findings suggest it would be worthwhile further investigating this model of learning to explore whether the perceived changes in practice result in benefits to patients and employers.

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### References

- Pharmaceutical Services Negotiating Committee. Community Pharmacy Services briefing for GP practices. <u>http://archive.psnc.org.uk/data/files/PharmacyContract/Contract changes 2011/GP guide to</u> <u>\_contract\_changes\_Aug\_2011.pdf.</u> Published August 2011. Accessed 13 February 2020.
- 2. Murray R. Community pharmacy clinical services review. London: NHS England. 2016.
- NHS England. Pharmacy Integration Fund of £42 million announced. NHS England. <u>https://www.england.nhs.uk/2016/10/pharmacy-integration-fund/</u>. Published 2016. Accessed 13 February 2020.
- Department of Health. The NHS Long Term Plan. <u>www.longtermplan.nhs.uk.</u> Published January 2019. Accessed 13 February 2020.
- General Pharmaceutical Council. Revalidation Framework. <u>https://www.pharmacyregulation.org/sites/default/files/document/gphc\_revalidation\_framewor</u> <u>k\_january\_2018.pdf</u>. Published 2018. Accessed 13 February 2020.
- 6. Kostrzewski AJ, Dhillon S, Goodsman D, Taylor KMG. The influence of continuing professional development portfolio records on pharmacy practice. Int J Pharm Pract. 2009;17(2):107-113.
- Culshaw M, Lala R. Are pharmacists actually benefiting from following the formula for CPD? Pharm J. 2012;289(7730):489.
- Gidman WK, Hassell K, Day J, Payne K. The impact of mandatory continuous professional development and training to deliver the new contract on female community pharmacists: A qualitative study. Pharm Ed. 2007;7(3):223-233.
- Attewell J, Blenkinsopp A, Black P. Community pharmacists and continuing professional development: a qualitative study of perceptions and current involvement. Pharm J. 2005;274(7347):519-524.
- 10. Miller D, Jones S. Focus group to explore issues surrounding continuing professional development for locum community pharmacists. Int J Pharm Pract. 2004;12:R50.
- 11. Wilson V, Bagley L. Learning at a distance: the case of the community pharmacist. Int J Lifelong Educ. 1999;18(5):355-369.

- 12. Gelayee DA, Mekonnen GB, Birarra MK. Involvement of community pharmacists in continuing professional development (CPD): a baseline survey in Gondar, Northwest Ethiopia. Global Health. 2018;14(1):15.
- Wilbur K. Continuing professional pharmacy development needs assessment of Qatar pharmacists. Int J Pharm Pract. 2010;18(4):236-241.
- 14. Mohamed Ibrahim O. Assessment of Egyptian pharmacists' attitude, behaviors, and preferences related to continuing education. Int J Clin Pharm. 2012;34(2):358-363.
- Elsayed TM, Jamshed SQ, Elkalmi RM, Shamsuddin S-KB, Alshahmi AM, Othman NB. Malaysian community pharmacists' perceptions of and barriers to the first year of mandatory continuous education: A nationwide exploratory study. Curr Pharm Teach Learn. 2015;7(6):826-835.
- 16. Marriott J, Duncan G, Namara KPM. Barriers to pharmacist participation in continuing education in Australia. Pharm Ed. 2007;7(1):11-17.
- Sokhi J. Is there a role for workplace based postgraduate diplomas in the development of community pharmacists? United Kingdom: School of Pharmacy, University of East Anglia; 2015.
- 18. Dunn W, Hamilton D. Competence-based education and distance learning: a tandem for professional continuing education? Stud Higher Ed. 1985;10(3):277-287.
- Bloom BS. Effects of continuing medical education on improving physician clinical care and patient health: A review of systematic reviews. Int J Technol Assess Health Care. 2005;21(3):380-385.
- Davis D, O'Brien M, Freemantle N, Wolf FM, Mazmanian P, Taylor-Vaisey A. Impact of formal continuing medical education: Do conferences, workshops, rounds, and other traditional continuing education activities change physician behavior or health care outcomes? JAMA. 1999;282(9):867-874.
- 21. Davis DA, Thomson M, Oxman AD, Haynes R. Changing physician performance: A systematic review of the effect of continuing medical education strategies. JAMA. 1995;274(9):700-705.
- 22. Oxman AD, Thomson MA, Davis DA, Haynes RB. No magic bullets: a systematic review of 102 trials of interventions to improve professional practice. CMAJ. 1995;153(10):1423-1431.

- 23. Mansouri M, Lockyer J. A meta-analysis of continuing medical education effectiveness. J Contin Educ Health Prof. 2007;27(1):6-15.
- 24. Alvarez MP, Agra Y. Systematic review of educational interventions in palliative care for primary care physicians. Palliat Med. 2006;20(7):673-683.
- Lave J, Wenger E. Situated learning: Legitimate peripheral participation. Cambridge: Cambridge University Press; 1991.
- Commission of the European Communities. Memorandum on lifelong learning. <u>https://arhiv.acs.si/dokumenti/Memorandum on Lifelong Learning.pdf.</u> Published October 2000. Accessed 13 February 2020.
- Illeris K. Workplaces and Learning. In: Malloch M, Cairns L, Evans K, O'Connor BN, eds. The Sage Handbook of Workplace Learning. London: Sage Publications Limited; 2013:32-43.
- Mills E, Blenkinsopp A, McKinley RK, Black P. The Assessment of Observed Practice: A Literature Review. United Kingdom: Keele University; 2011.
- Schuwirth LW, van der Vleuten CP. Medical education: Challenges for educationalists. BMJ.
  2006;333(7567):544-546.
- 30. Yancey KB. Teachers' stories: Notes toward a portfolio pedagogy. In: Portfolios in the writing classroom. An introduction. Urbana: National Council of Teachers of English; 1992:12-19.
- Austin Z, Gregory PAM, Galli M. "I just don't know what I'm supposed to know": Evaluating selfassessment skills of international pharmacy graduates in Canada. Res Social Adm Pharm. 2008;4(2):115-124.
- 32. Morris C, Blaney D. Work-based learning. In: Swanwick T, ed. Understanding Medical Education. Evidence, Theory and Practice. Second ed. London: Wiley Blackwell; 2014:97-107.
- Eraut M. Non-formal learning, implicit learning and tacit knowledge in professional work. In:
  Coffield F, ed. The necessity of informal learning. Bristol: The Policy Press; 2000:12-21.
- 34. Wright D, Morgan L. An independent evaluation of frameworks for professional development in pharmacy. MPC Workstream 2 Project. United Kingdom: School of Pharmacy, University of East Anglia; 2011.
- 35. Competency Development and Evaluation Group. General Level Framework (GLF): A Framework for Pharmacist Development in General Pharmacy Practice (2nd edition).

http://www.codeg.org/fileadmin/codeg/pdf/glf/GLF\_October\_2007\_Edition.pdf. Published 2007. Accessed 13 February 2020.

- 36. Seale C. The Quality of Qualitative Research. London: Sage Publications Ltd.; 1999:189-192.
- Schostak J. Interviewing and Representation in Qualitative Research. Maidenhead: Open University Press; 2006: 9-25.
- 38. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77-101.
- 39. Bell H, McElnay J, Hughes C, Woods A. A qualitative investigation of the attitudes and opinions of community pharmacists to pharmaceutical care. J Soc Adm Pharm. 1998;15(4):284-295.
- 40. Kennedy E, Blenkinsopp A, Purvis J. A diary record study of the nature, purpose and extent of communication between community pharmacists and general medical practitioners. J Soc Adm Pharm. 1997;14(3):143-151.
- 41. Cooper R, Anderson C, Avery T, et al. Stakeholders' views of UK nurse and pharmacist supplementary prescribing. J Health Serv Res Policy. 2008;13(4):215-221.
- 42. Bandura A. Social learning theory. Englewood Cliffs, NJ: Prentice-Hall; 1977:24-27
- Boud D. Situating academic development in professional work: using peer learning. Int J Acad Dev. 1999;4(1):3-10.
- 44. Boud D, Middleton H. Learning from others at work: communities of practice and informal learning. J Work Learn. 2003;15(5):194-202.
- 45. Lloyd F, Hughes CM. Pharmacists' and mentors' views on the introduction of pharmacist supplementary prescribing: a qualitative evaluation of views and context. Int J Pharm Pract. 2007;15(1):31-37.
- Weiss MC, Sutton J, Adams C. Exploring Innovation in Pharmacy Practice: A Qualitative Evaluation of Supplementary Prescribing by Pharmacists. London: Royal Pharmaceutical Society of Great Britain; 2006.
- 47. Wenger E. Communities of practice. Learning, meaning, and identity. Cambridge: Cambridge University Press; 1998.
- 48. Bandura A. Self-efficacy. The exercise of control. New York: WH Freeman; 1994.

- Martin BA, Bruskiewitz RH, Chewning BA. Effect of a tobacco cessation continuing professional education program on pharmacists' confidence, skills, and practice-change behaviors. J Am Pharm Assoc. 2010;50(1):9-16.
- 50. Blenkinsopp A, Bond C, Celino G, Inch J, Gray N. National evaluation of the new community pharmacy contract, June 2007. Pharmacy Practice Research Trust 2007.
- 51. Cooper R, Bissell P, Wingfield J. 'Islands' and 'doctor's tool': the ethical significance of isolation and subordination in UK community pharmacy. Health. 2009;13(3):297-316.