The Role Of A Smartphone App For Providing Feedback On Midwifery Training

Dr. Thomas G. Gray[1] , Dr. Laura French[2], Dr. Rosalind Haddrill RCM[3], Professor Tom Farrell[4]

[1]MBChB(Hons) MCROG PG Dip Healthcare Ed (corresponding author) Specialty Registrar Obstetrics and Gynaecology , Sheffield Teaching Hospitals NHS Foundation Trust, Royal Hallamshire Hospital, Glossop Road, Sheffield, S10 2JF
and
Visiting Fellow ,Faculty of Health and Wellbeing, Sheffield Hallam University, City Campus, Howard Street, Sheffield, S1 1WB
Home address: 44 Brooklands Crescent, Sheffield, S10 4GG,

[2]MBBS DTM&H, Specialty Registrar Obstetrics and Gynaecology, Sheffield Teaching Hospitals NHS Foundation Trust, Royal Hallamshire Hospital, Glossop Road, Sheffield, S10 2JF
&
[3]PhD, Lecturer in Maternal Care, School of Healthcare, University of Leeds, Leeds, LS2 9JT
&
[4]MD FCROG, Consultant Obstetrician and Gynaecologist, Sheffield Teaching Hospitals NHS Foundation Trust, Royal Hallamshire Hospital, Glossop Road, Sheffield, S10 2JF
and
Faculty of Health and Wellbeing, Sheffield Hallam University, City Campus, Howard Street, Sheffield, S1 1WB

Abstract

Background: Student midwives currently provide feedback at the end of a placement. Smartphone technology allows student midwives to provide specific daily feedback on their placement and allows mentors to provide daily feedback on the student's performance.

Methods: Surveys of students and mentors were undertaken to assess current perceptions of feedback at Sheffield Teaching Hospitals.

Results: 55 student midwives and 61 mentors completed the surveys.

56% of students only provided formal feedback on the mentoring they received annually.

52% of mentors disagreed that they had enough opportunities to provide feedback on the performance of their mentees. 85% said that they never received feedback on their performance as a mentor.

Conclusions: Using a Smartphone App to provide daily feedback on mentoring could allow students to provide a daily assessment of their training. Mentors could use the App to provide daily feedback on the student's performance. This would help overcome the issues highlighted by the survey.

Keywords: Smartphone, App, Feedback, Training, Mentoring

Introduction

Good quality feedback on performance is essential for driving learning and development for student midwives and likewise to help midwife mentors, who are providing educational or clinical supervi-sion to student midwives, to develop as trainers and leaders.

Midwifery students currently spend up to 50% of their undergraduate time on placement, using practice-based learning to enhance their academic

study. During this period they are assigned a suitably qualified midwife as a mentor, who oversees their practice and helps them to develop their skills in the clinical environment. One of the roles of the midwifery mentor is to provide feedback on performance of the student midwife, both formally and informally (RCN, 2007). There are professional standards for mentors, as outlined in the 2008 NMC publication 'Standards to support learning and assessment in practice' (SLAiP). This document explains that all mentors are accountable for ensuring that students develop sound knowledge and skills required for practice. The additional new role of 'sign-off' mentor is also identified within this document. Sign-off mentors have an enhanced role and are expected to have additional experience. These experienced mentors assess students to ensure they have achieved all prescribed NMC (2004, 2009, 2010) proficiencies for registration and ratify that they are fit to practice, and fit for purpose (Rooke 2014).

Healthcare Supervision Logbook (HSL) is a Smartphone App developed at Sheffield Teaching Hospitals (Figure 1).
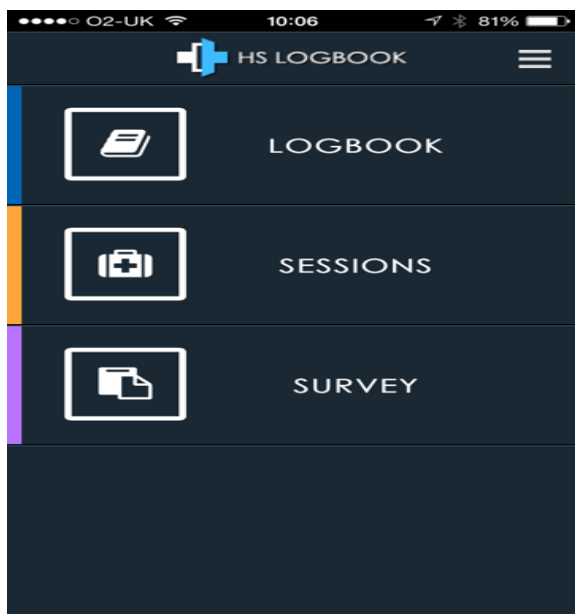
It was originally developed for use by doctors working in obstetrics and gynaecology (Gray, Hood and Farrell, 2014), but has subsequently been adapted for use in midwifery. Versions for both student midwives and their mentors have been developed. It is designed to allow healthcare trainees from medical and midwifery disciplines to provide feedback about their training experiences, including the quality of the mentoring they have received during a day on placement. It also allows mentors to provide feedback about a student/trainee's performance after they have been supervising them during a clinical session. The data recorded is collated onto a content management system controlled by the course organisers, allowing for easy summary of the feedback provided by the student about their placement experiences and by the mentor about the performance of the students.

This article presents the results of a survey designed to assess current perceptions amongst student midwives and their mentors towards existing feedback methods and discusses how using *Healthcare Supervision Logbook* could address issues identified.

Methods

This study was registered as a service evaluation at the clinical effectiveness unit at Sheffield Teaching Hospitals. Ethical approval was not required. Two surveys (one for student midwives and a second for midwife mentors) were designed. The surveys were distributed, managed and analysed using a recognised survey website system (Surveymonkey.com).

The survey for student midwives was distributed to all student midwives in the second and third year of the midwifery course at Sheffield Hallam University (n=99). The survey for mentors was distributed to all midwife mentors involved in educational and clinical mentoring of student midwives at Sheffield Teaching Hospitals (n=200).

The survey for student midwives comprised nine short questions (see table one), all of the answers were multiple choice:

Table 1: *Survey questions for student midwives*

1. Which year group are you in?
2. How frequently are you currently able to PROVIDE formal (i.e. recorded) feedback about the mentoring you receive as part of your training?
3. How frequently are you currently able to PROVIDE informal (i.e. not recorded) feedback about the mentoring you receive as part of your training?
4. Do you feel that you get enough opportunities to PROVIDE feedback on the mentoring you receive as a student midwife?
5. Do you feel that the feedback you RECEIVE on your performance as a student midwife is representative of your abilities?
6. Do you think that the feedback you provide makes a difference to the quality of placement you receive?
7. Overall, do you think that the mentoring you receive is of a high quality?
8. Do you own a Smartphone (e.g. Apple iPhone, Samsung Galaxy)?
9. If yes, would you be willing to use an App on your Smartphone to provide daily feedback on the mentoring you receive as a student midwife?

The survey for midwife mentors comprised eight short questions along similar lines (see table two).

Table 2: *Survey questions for midwifery mentors*

1. How long have you been involved in mentoring student midwives?
2. How frequently are you able to PROVIDE formal recorded feedback about a student midwife's performance?
3. Do you feel that you get enough opportunities to PROVIDE accurate feedback about a student midwife's performance?
4. What in your opinion prevents you from providing regular feedback about the student midwives you are mentoring?
5. How frequently do you currently RECEIVE formal feedback on your performance as a mentor for student midwives?
6. Do you feel that you RECEIVE enough feedback on your performance as a mentor for student midwives?
7. Do you own a Smartphone (e.g. Apple iPhone, Samsung Galaxy)?
8. If yes, would you be willing to use an App on your Smartphone to provide daily feedback on the performance of the student midwife you are mentoring after each session?

The surveys were each live for a period of four weeks, during which time a weekly reminder was sent to all potential participants by email.

The results were analysed using the Survey Monkey content management system and Microsoft Excel.

Results

Student Midwives

55 students (56% response rate) completed the survey for student midwives in total, 29 from year two, 26 in year three. The results for student midwives are summarised in Table 3.

Table 3: Summary of results for student midwives

Question	Summary of responses
Which year group are you in?	Year 2- 53% Year 3- 47%
How frequently are you currently able to PRO-VIDE formal (i.e. recorded) feedback about the mentoring you receive as part of your training?	Annually: 56% Monthly: 33% Fortnightly or more frequently: 11%
How frequently are you currently able to PRO-VIDE informal (i.e. not recorded) feedback about the mentoring you receive as part of your training?	Annually: 33% Monthly: 30% Fortnightly: 6% Weekly: 17% Daily: 15%
Do you feel that you get enough opportunities to PROVIDE feedback on the mentoring you receive as a student midwife?	Strongly disagree: 13% Disagree: 40% Neither agree nor disagree: 15% Agree: 31% Strongly Agree: 2%
Do you feel that the feedback you RECEIVE on your performance as a student midwife is representative of your abilities?	Strongly disagree: 2% Disagree: 9% Neither agree nor disagree: 27% Agree: 58% Strongly Agree: 4%
Do you think that the feedback you provide makes a difference to the quality of placement you receive?	Yes: 31% No: 29% Not Sure: 40%
Overall, do you think that the mentoring you receive is of a high quality?	Strongly disagree: 0% Disagree: 0% Neither agree nor disagree: 25% Agree: 69% Strongly Agree: 5%
Do you own a Smartphone (e.g. Apple iPhone, Samsung Galaxy)?	Yes: 96% No: 4%
If yes, would you be willing to use an App on your Smartphone to provide daily feedback on the mentoring you receive as a student midwife?	Yes: 82% No: 4% Not sure: 14%

Mentors

61 mentors completed the survey (response rate approx. 35%). The results for midwifery mentors are summarised in Table 4.

Table 4: Summary of results for mentors

Question	Summary of responses
How long have you been involved in mentoring student midwives?	1-3 years: 15% 4-6 years: 6% 6+ years: 79%
How frequently are you able to PROVIDE formal recorded feedback about a student midwife's performance?	Daily: 5% Weekly: 16% Fortnightly: 26% Monthly: 37% Annually: 6% Never: 10%
Do you feel that you get enough opportunities to PROVIDE accurate feedback about a student midwife's performance?	Strongly disagree: 5% Disagree: 47% Neither agree nor disagree: 21% Agree: 27% Strongly Agree: 0%
What in your opinion prevents you from providing regular feedback about the student midwives you are mentoring?	Lack of time: 90% Lack of clear mechanisms to do so: 7% Other: 3%
How frequently do you currently RECEIVE formal feedback on your performance as a mentor for student midwives?	Daily: 0% Weekly: 0% Fortnightly: 2% Monthly: 2% Annually: 11% Never: 85%
Do you own a Smartphone (e.g. Apple iPhone, Samsung Galaxy)?	Yes: 84% No: 16%
If yes, would you be willing to use an App on your Smartphone to provide daily feedback on the performance of the student midwife you are mentoring after each session?	Yes: 45% No: 24% Not sure: 31%

Discussion:

The results of this survey highlight a number of issues with regard to feedback. It is clear that student midwives feel that they do not get enough opportunities to provide formal feedback on their training, with 56% only able to provide this annually and only 33% agreeing that there are enough

opportunities to do this. Student midwives currently provide feedback at the end of each of their placements. As 74% of students agreed that the mentoring they received was of high quality, this suggests that collecting feedback on their placements more frequently could be used to support the quality of training that is occurring at Sheffield Teaching Hospitals.

There was a wide variation in the frequency with which mentors said that they were able to provide feedback on a student midwife's performance, perhaps highlighting the differences in feedback that students seem to get depending on their placement and mentor. More than half of the mentors disagreed that there were enough opportunities to provide feedback, with 90% citing a lack of time as one of the reasons. Remarkably, 85% of mentors said that they did not ever receive feedback on the quality of the mentoring they provide to student midwives. This is because when current student midwives provide feedback at the end of a placement, the overall assessment they make of the mentoring they have received is not provided to their mentor for feedback .

The use of paper, or online based forms, to provide feedback is also time consuming and requires organisation. Using the *Healthcare Supervision Logbook* Smartphone App could represent a way to address these issues.

Healthcare Supervision Logbook benefits midwifery students by providing a platform for them to rate the educational value of a clinical or teaching session they attend, including the mentoring provided in the session ('Sessions' function) after each day they spend on placement. At the end of the daily session the student midwife will fill in a short proforma on the App with some brief details about the session and a rating (out of ten) for the mentoring they have received during the session (Figure 2).

The data collected via this function is collated on the content management system and allows placements to be rated and identified as poor to excellent for training. This allows training program organisers to appropriately assess the standard of training provided within a specific placement.

Healthcare Supervision Logbook can be set up so that the student midwife does not name the specific mentor, rather the placement they are working in when providing this feedback. It is possible to add the names of specific mentors, so that feedback specific to an individual mentor, rather than a department or unit, could be recorded. This function could benefit the mentors by providing them with specific individual feedback, which will allow them to reflect on the training they provide and improve as needed. The feedback can also be used to guide allocation of student midwifes to placements likely to provide them with the best

training opportunities. This function will allow midwife mentors to receive feedback on the quality of the mentoring they are providing; something which 85% felt that was never received currently. It will simultaneously provide the student midwife with a mechanism for formally providing feedback on their placement on a daily basis- an improvement on the current situation where 56% feel that they are only able to provide formal feedback annually. This will empower the 69% of student midwives who were unsure or felt that the feedback they provided was not used to improve the quality of their placements.

Using *Healthcare Supervision Logbook* to provide feedback in this way is accessible, as the App is on the user's personal device, and quick- it takes under a minute to log in and provide feedback.

The mentor's version of *Healthcare Supervision Logbook* provides a platform for the supervisor to easily and quickly provide feedback on the student's performance after each session in which they have provided mentoring to a student ('Training' function). After the day's session the midwife mentor completes a proforma on the *Healthcare Supervision Logbook* App rating the performance of the student midwife during the session for a number of competencies. As 52% of mentors felt that they did not have enough opportunities to provide feedback on the students they mentor, this function should go a long way to addressing this area.

This function will benefit students, by collecting feedback on their performance after every clinical session, which can be used to create an accurate report on a student's performance on a regular basis. This will provide valuable information, highlighting training needs and areas for improvement and development far more promptly than current mechanisms allow. It would also provide a very accurate assessment of a student's performance over a whole placement providing context for the student's assessment and sign off at the end of the placement. As 38% of student midwives did not

feel that the feedback they received was representative of their abilities, it s hoped that this function will improve this situation.

Healthcare Supervision Logbook is supported by a content management system, which allows reports for a student midwife's performance (generated via the 'Training' function) to be produced at any time and compared with their peers within the department. Similar reports can be produced regarding the training quality within a department, summarising the feedback provided by student midwives using the 'Sessions' function.

Smartphone ownership and therefore accessibility to the App was high for both student midwives and their mentors. As *Healthcare Supervision Logbook* is quick to use and provides a clear mechanism for providing feedback, it is anticipated that it will overcome the barriers of time constraints and clear mechanisms for providing feedback highlighted by the mentor's survey.

There is increasing evidence that the tripartite sign off style of student midwives (involving the student and mentor, with support from the university lecturer to ensure the correct process is followed and to advise the mentor) may lack validity in terms of the university lecturers ability to reliably assess the student, based on the amount of contact time they have had with them (Passmore, Chenery-Morris). This means that we will be increasingly moving towards sign-off mentoring to ratify that students are ready for practice. Therefore, having regular feedback on the quality of the mentoring occurring, as well as the performance of the students being mentored will be an increasing requirement as we seek to ensure the quality of this process. Using Smartphone technology would be a simple way to contribute towards this quality assurance process.

Limitations:

This survey related to the experience at Sheffield Teaching Hospitals and therefore may not necessarily be applicable to other hospitals, however it is likely that the feedback experience would be

similar. A good percentage of the student midwives and mentors completed the survey, so the results should reflect the situation at Sheffield Teaching Hospitals accurately. Only 45% of mentors agreed that they would be willing to use a Smartphone App, which may present a barrier to implementation. However, this figure rose to 91% among the newer mentors who had been involved in mentoring for three years or less. With good support and training, it is hoped that mentors would be willing to adopt the use of *Healthcare Supervision Logbook* to provide feedback on the student midwives they mentor.

The use of a Smartphone App to provide feedback on training is a new concept and has potential to change the way feedback is collected and analysed.

A trial of *Healthcare Supervision Logbook* is currently underway at Sheffield Teaching Hospitals. Student midwives in the first and third years of their training, working on labour ward having been using the App to provide daily feedback on their placement. They will complete a further survey to assess their perceptions of feedback using the App, as well as an evaluation of the App itself. This will help to further refine and validate *Healthcare Supervision Logbook* for student midwives. The mentor version will also undergo a similar validation process as we look towards rolling the App out for wider use in clinical practice.

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COMPETEING INTERESTS
None to declare

AUTHOR'S CONTRIBUTIONS

TGG, RH and TF designed the surveys. TGG and LF collected and analysed the data. TGG and TF designed the concept and content of *Healthcare Supervision Logbook*. RH and TG worked together to adapt HSL for midwifery students and mentors. RH provided educational leadership advice on this content and the piloting of HSL. TGG, LF, RH and TF wrote the manuscript together; all authors reviewed a final version of the manuscript prior to submission.