Improving student midwives’ practice learning in Uganda through action research: the MOMENTUM project

Joy Kemp*, Eleanor Shaw, Sarah Nanjego and Kade Mondeh

*Corresponding author: Royal College of Midwives, London, UK
Email: joy.kemp@rcm.org.uk

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Abstract
Background and context: The Royal College of Midwives is engaged in a long-term twinning partnership with the Uganda Private Midwives Association. Uganda is one of the poorest countries in the world and only 27% of women and newborns have their needs met (UNFPA, 2014). A well-skilled, competent midwifery workforce is required to meet these needs yet Ugandan student midwives often receive poor-quality clinical education. The Ugandan Nurses and Midwives Council approached the Royal College of Midwives for assistance in designing a system of mentorship for Ugandan midwifery to address this gap. The project was funded by UK-Aid through the Tropical Health and Education Trust.

Aims of the project: MOMENTUM was a 20-month action research project that aimed to develop and pilot a model of mentorship for student midwives in Uganda. This article focuses on one workstream relating to practice development, a twinning project that used work-based learning and appreciative inquiry, embedded in an action research approach, to facilitate practice development.

Conclusions: This project added to the body of knowledge about midwifery twinning for building capacity in mentorship, research, and cross-cultural competence. MOMENTUM created a powerful community of practice that was enabling, fulfilling and transformative. Replication of this would require funding, management capacity and sufficient lead time for participatory planning and piloting. MOMENTUM’s audit tool was a bespoke design for this pilot project and so may not be transferable to other settings without further development, testing and validation.

Implications for practice:

• Twinning, action research, appreciative enquiry and work-based learning can be effective in enabling practice development
• The impact of midwifery twinning on leadership development requires further investigation, together with greater evidence on the reciprocal impact of twinning on the sending country

Keywords: Midwifery, mentorship, twinning, Uganda, action research, appreciative inquiry, work-based learning, practice development, practice learning environment
Introduction

Background to the project

Uganda is one of the poorest countries in the world (Gregson, 2017) and is a multicultural society with 43 languages spoken (Simons and Fennig, 2017) and many different ethnic groups and religions (Ugandan Board of Statistics, 2016). Women of reproductive age make up 22% of the population and there is a high fertility rate of 5.9 (UNFPA, 2014). The most recent State of the World’s Midwifery report (UNFPA, 2014) estimates that only 27% of sexual, reproductive, maternal and newborn healthcare needs are being met in Uganda, and also projects a 74% increase in the population by 2030, further increasing demand. A well-skilled, competent midwifery workforce is needed to meet these needs yet Ugandan student midwives often receive poor-quality clinical education and are not fit to practise at the point of qualification (Jackson, 2009; Ugandan Ministry of Education and Sports, 2010; Royal College of Midwives, 2015).

The Ugandan Nurses and Midwives Council (UNMC) identified mentorship as a potential strategy to address poor practice learning and approached the Royal College of Midwives (RCM) in 2015 for assistance in designing a system of mentorship for the country’s midwifery. As a technical officer at the UNMC observed:

‘We have an issue that half-baked midwives come out of our training institutions... recent graduates could not get registered because they didn’t meet the practice standards... but we didn’t know what was wrong and how to put it right. Then we realised that the students had not been mentored in the rightful way’ (Kemp, 2017).

‘We had a belief that if we trained our mentors they would be able to bring out quality nurses and midwives’ (Adhikari and Nsubuga, 2017).

The RCM is engaged in a long-term twinning partnership with the Uganda Private Midwives Association (UPMA) and the partners had previously implemented the three-year Global Midwifery Twinning Project from 2012 to 2015 (Kemp and Shaw, 2015). Twinning is promoted by the International Confederation of Midwives (2014) to provide opportunities for peer support and peer mentoring, and to facilitate the sharing of ideas, skills and learning. Cadée et al. define twinning as:

‘A cross-cultural, reciprocal process where two groups of people work together to achieve joint goals’ (2016, p 1).

The RCM used its relationships with the Ugandan midwifery community to undertake a needs assessment from January to September 2015 (RCM, 2015a), which resulted in the design of the MOMENTUM project.

MOMENTUM was a 20-month health partnership project (Tropical Health and Education Trust, 2016) that aimed to develop and pilot a model of mentorship for student midwives in Uganda through action research (Kemp et al., 2018a). It was funded by UK-Aid through the Tropical Health and Education Trust (THET) and implemented by the RCM and the UPMA from 2015 to 2017. The project had three separate but related workstreams, to:

- Build the capacity of the UNMC to develop a national standard for mentorship (Kemp et al., 2018b)
- Work in partnership with Ugandan midwifery educators and education institutions to develop and pilot a workbased learning module to train midwives as mentors
- Improve selected practice learning sites

This article will focus on the third workstream of practice learning, as this relates to practice development (Canterbury Christ Church University, 2017). An overview of the project and details of other workstreams are published elsewhere (Kemp et al., 2018a,b).
Literature search
During the needs assessment and project design, literature searches were undertaken in regard to mentorship, midwifery twinning, action research, quality improvement, appreciative inquiry, practice development, workbased learning, behaviour change, organisational capacity assessment and capacity building, and the context of maternal and newborn health in Uganda. Searching for literature was iterative as the project developed and was undertaken not only by the project management teams but by the UK volunteers and project consultants, assisted by the RCM’s librarian. The UK project team and midwife volunteers also undertook bespoke training in action research and mentorship theory with expert practitioners. The Change Exchange initiative (Byrne-Davis et al., 2017) provided behaviour change expertise to the project.

Mentorship
The word mentor means ‘wise advisor’ (Etymonline, 2017). The UNMC (2017) defines a mentor as:

‘A nurse or midwife who has completed an accredited mentorship training by the Council and is skilled, knowledgeable and with a positive attitude to guide students according to their learning needs.’

Mentorship is increasingly being adopted in global maternal, newborn and reproductive health programmes in resource-constrained settings (Catton, 2017; Ojemeni et al., 2017; Sayani et al., 2017). The words mentorship, preceptorship and supervision are sometimes used synonymously (Gopee, 2015) but during MOMENTUM mentorship was defined as the process of facilitating student learning in practice, as it is in UK nursing and midwifery (NMC, 2008). There are three dimensions to effective mentorship (Women4Health, 2015): the student, the mentor and the learning environment. The model of mentorship developed during MOMENTUM places midwifery students at the centre, supported by the contribution of appropriately prepared clinical mentors, a supportive clinical learning environment and appropriate teaching and assessment tools. It also acknowledges the role of educational institutions, the regulatory framework, wider stakeholders and the policy environment in enabling the development of competent midwives. This article focuses on effective mentorship and the contribution of the learning environment to practice learning.

Practice development approaches
Practice development can achieve sustainable change through practitioners, as well as the emancipation of those practitioners (Manley and McCormack, 2008). MOMENTUM aimed to develop practice to facilitate more effective student learning. The project assumed that improving students’ practice learning through mentorship would mean they were more adequately prepared for practice on qualification. However, measurement of students’ competence as practitioners on qualification was beyond the scope of this project.

MOMENTUM used several practice development approaches including action research, appreciative inquiry and workbased learning. Ebert et al. (2016) suggest that practice learning is dependent on the context and culture in which experiences occur. Action research is useful for exploring and facilitating change in the culture and context of healthcare (Mash et al., 2016) and is becoming more popular in Africa (Whitehead, 2012; Mash et al., 2016; Tetui et al., 2017). It is particularly suited to research in midwifery and for exploring complex situations in clinical practice (Deery and Hughes, 2004; McKellar et al., 2010). There is also growing interest in using appreciative inquiry and appreciative dialogue (Dewar and Sharp, 2013) to support practice development in healthcare (Hung, 2017), as these approaches can help to create a safe, positive environment in which to try new ideas. Workbased learning is a curriculum design that deliberately supports learning in the workplace (Raelin, 1997; Workman, 2007); as workplace learning occurs in the circumstances of practice (Billett, 2014), it demands an enabling learning environment.
Aims of the project
As required by the project’s donors, MOMENTUM was planned using a logical framework approach to provide a systematic structure for identifying, planning and managing projects; logical frameworks require predetermined goals, outcomes and outputs along with an associated monitoring and evaluation framework, including indicators and strategies (Jensen, 2013). The overall goal of the project was to improve the knowledge, skills and attitudes of targeted student midwives (n=84). This goal was developed by all project partners during the participatory project design process. One of three outcomes, the workstream described in this paper aimed to improve the practice learning environment at the project’s seven clinical pilot sites so that it could be used for students’ learning during the project and beyond. This would be achieved through twinning of UK practice development midwives with equivalent Ugandan counterparts to strengthen the culture of mentorship in the practice learning environments and improve mentorship support systems.

Methodology
Setting and participants
As MOMENTUM sought to develop a model of mentorship appropriate to the Ugandan context, selection of pilot sites aimed to reflect the different types of healthcare provision (public, faith-based, private, rural/urban) within the project’s resource limits. MOMENTUM collaborated with the Ugandan Ministry of Health to identify selection criteria and visited all potential sites. UK volunteer midwives were competitively selected and interviewed. Previous practice development and international experience was required. Table 1 outlines the selected sites and actors, and relevant support teams.

<table>
<thead>
<tr>
<th>Category</th>
<th>UK actors</th>
<th>Ugandan actors/sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management team</td>
<td>• UK project lead&lt;br&gt;• UK project officer&lt;br&gt;• Support staff in UK: finance officer, communications, HR and marketing personnel&lt;br&gt;• Executive support and governance</td>
<td>• Ugandan project coordinator&lt;br&gt;• Ugandan monitoring and evaluation officer&lt;br&gt;• Ugandan support staff: driver, secretary, finance officer, caretaker/guard&lt;br&gt;• Executive support and governance</td>
</tr>
<tr>
<td>Twinned units</td>
<td>• Seven UK midwives</td>
<td>• 11 Ugandan midwives</td>
</tr>
<tr>
<td>Pilot sites</td>
<td></td>
<td>• Two level IV health centres (small hospitals)&lt;br&gt;• One private, not-for-profit, faith-based hospital&lt;br&gt;• Four private midwives clinics</td>
</tr>
<tr>
<td>Mentors trained</td>
<td></td>
<td>• 41 Ugandan midwives: 37 employed in pilot sites and four in other private clinics</td>
</tr>
</tbody>
</table>

Data collection and analysis
This was a complex project with many data sources. Data were regularly reviewed during the project’s lifetime for routine reporting purposes. However, qualitative data were systematically mapped (and where necessary transcribed) and analysed by the project lead from October 2017 to January 2018, using methods common to qualitative research (Morse et al., 1996; Harding and Whitehead, 2010). Byrom and Downe’s (2008) thematic framework was adapted to organise the resulting themes then validated by selected participants. Relevant data have been included in the results section to illustrate the themes (Table 2).
<table>
<thead>
<tr>
<th>Source</th>
<th>Author/recorder</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOMENTUM needs analysis</td>
<td>UK project management team</td>
<td>Needs analysis undertaken from April to September 2015. Two in-country visits and UK desk review</td>
</tr>
<tr>
<td>Project midterm evaluation report</td>
<td>Project management team</td>
<td>Separate reports were prepared by UK and Ugandan project management teams then compiled by the project leader</td>
</tr>
<tr>
<td>Project final evaluation report</td>
<td>External consultant team (UK and Ugandan)</td>
<td>Multiple data collection methods: observation visits to all seven pilot sites; interviews with key stakeholders (n=10); reviews of available policy documents (project reports, monitoring and evaluation report, etc.); focus group discussions with student midwives (n=3); and attendance at meetings and the project closing workshop in Kampala</td>
</tr>
<tr>
<td>Meeting minutes, volunteer briefing/ debriefing events</td>
<td>Project lead and project officer</td>
<td>Two-day briefing meeting, one-day debriefing</td>
</tr>
</tbody>
</table>
| Volunteer reports                                  | UK volunteer midwives                                | Two reports: January 2016 and January 2017. Included consolidated data from:  
  • Mentors’ skills framework  
  • Student midwife clinical practice assessment tool  
  • UNMC standards capacity assessment tool  
  • Reflective grid for mentors  
  • Reflective grid for students  
  • Students’ evaluation of mentors  
  • Student midwives’ tracking tool  
  • Volunteers’ reflective diaries  
  • Volunteers’ field notes  
  • Focus group interviews |
| Consultant reports                                 | One RCM consultant and two consultants from The Change Exchange | Reports from June 2016 workshop and site visits                      |
| Field notes                                        | Project lead                                         | Detailed handwritten field notes from April 2015 to November 2017 (seven visits/notebooks) |
| Voice/video recordings of project participants and Ugandan project team | RCM project team                                    | Five recordings. Transcription of relevant sections highlighted in field notes |
| Workshop/meeting minutes                           | RCM and Ugandan project team                         | One visit/workshop for needs assessment, five project workshops/in-country visits, one follow-up visit/workshop (November 2017) with associated opening and closing project team meetings and evaluation forms |
| PowerPoint presentations                          | Project participants and project management team     | Nine presentations from final project workshop, January 2017          |
| Donor reports                                      | Project management team                              | Three reports                                                         |
The action research process

MOMENTUM used four cycles of action research (Figure 1). A project set-up cycle allowed for reconnaissance and objective setting (Casey et al., 2017) and there were three subsequent implementation cycles of observation, reflection, planning and action. Workshops at both ends of each cycle brought the three project workstreams together. Facilitation is an important aspect of action research (Dewar and Sharp, 2013, p 2); the UK volunteer midwives acted as insider researchers, facilitating change (McKellar et al., 2010; Koshy et al., 2011) supported by the UPMA’s monitoring and evaluation officer and the RCM’s support team. Facilitators who authentically engage in practice development should be collaborative, using mutual engagement and practice sharing (Fielding et al., 2005). Volunteers had four hours of action research training with an expert professor and were required to engage with relevant literature. In order to coordinate the different action research streams, to conduct routine monitoring and evaluation, and to comply with donor requirements, MOMENTUM had project management teams in the UK and in Uganda.

Case study: action research through twinning

UK midwife (AA) was placed in a public level IV health centre outside Kampala for two four-week placements during MOMENTUM. First, AA met her Ugandan midwife ‘twin’ to establish a relationship, to share expectations for the project and to explore mutual motivation. Motivation, along with capability and opportunity, is important in facilitating behaviour change (Byrne-Davis et al., 2017). This was critical in developing trust and a positive environment for practice development. This approach mirrors the first steps in appreciative inquiry, which focus on possibility rather than deficit (Cooperrider et al., 2003; Maclean, 2007; Dewar and Mackay, 2010). It also established the Ugandan twin as gatekeeper for access to the practice environment and to other staff.

AA first observed the workplace culture and systems, mapping the context of care and benchmarking against the Ugandan Ministry of Health-assigned capacities for level IV health centres, while remaining mindful of the standards in her own professional code (NMC, 2016). Mapping is an important first step in action research (Bergstom et al., 2012; Chevalier and Buckles, 2013). These observations informed the later development of the MOMENTUM practice audit tool.

AA then reflected on her observations with her twin and other health centre staff, expressing gratitude and privilege for being welcomed into the centre, giving feedback on the good practice she had identified and celebrating the compassion and skill the Ugandan midwives displayed under extremely challenging circumstances. AA also engaged in daily personal reflection using her field notes and research diary, and in group reflection with her fellow UK volunteer midwives. The context of public maternity care in Uganda is very different from that in the UK, with overwhelming workloads and few resources; group reflection was essential in acknowledging emotions, protecting wellbeing and forming appropriate responses.

Planning was participatory, bringing all project participants together to share observations, ideas and opportunities for change, initially one opportunity per service area (booking, antenatal follow-up and intrapartum care). Specific action plans were developed together and further refined during workshops, determining what would be done and how, by whom, with what and by when.

AA collaborated with local staff to action the planned changes, leading by example, working alongside midwives and students and mindful of the importance of co-presence (Ackers and Ackers-Johnson, 2014) where UK professional volunteers should always be working alongside local counterparts in an environment that promotes skills transfer. AA also maintained remote contact in between visits, at least once per month, using smartphones and the WhatsApp messaging app. In addition, AA’s Ugandan twin came to the UK on a peer exchange visit in October 2016 for reciprocal observation of UK systems, reflection, planning for change and subsequent action.
UK twins observing PLEs: ethnographic observation of clinical pilot sites, observing workplace culture, client flow, ward systems, existing mentorship systems, staffing levels, relationships and local stakeholders, equipment, documentation, quality of care.

Collecting baseline data/clinical placement audit

Cultural observation

Monitoring visits

Reflection

Listening as a partnership

Literature review

Evaluation of previous mentorship pilot

Sharing expectations, storytelling

Video recordings and photographs

Appreciative inquiry/dialogue

Management team reflection

Case study presentations

Volunteer debriefing

Rehearsing and recap

Storytelling

Games

What has changed, what still needs to change, barriers and enablers of change

Critical reflection during midterm evaluation

Using the virtual community for reflection

Reflecting on peer exchange visits

Workshop evaluation forms

Review of M&E tools

Action

Stakeholder visits and engagement

Project management activities

Purchasing phones and equipment

Project management activities

Stakeholder visits and engagement

Testing the model: training the mentors, mentoring the students

Testing tools

Meeting immediate felt needs – ‘low-hanging fruit’

Refining the model

Revision of M&E tools

Technical working group UNMC

Meeting immediately felt needs

Project management activities

Selecting mentors

Communication strategies

Planning peer exchange visits to UK

Develop audit tools, draft module, reflective frameworks

Ethical approval

Planning research

Resource development

Planning final evaluation as a team

Individual and organisational action plans

Planning for sustainability

Individual and organisational action plans

Communication strategies

Key


Cycle 3: June 2016-Jan 2017 • Cycle 4: Jan 2017-April 2017
Development of the MOMENTUM practice learning environment audit tool

Audit allows risk assessment of the practice learning environment, dissemination of good practice, and joint development of action plans for improvement (University of East Anglia, 2015). Quality assurance and audit are not new to Uganda but audit of the practice learning environment for student midwives was piecemeal before the MOMENTUM project, with no nationally recognised tool or associated standards. Jhpeigo (2011) advises that interventions in pre-service health education should be framed around established accreditation or educational standards. The draft national standard for nursing and midwifery mentorship in Uganda (UNMC, 2017), developed during the MOMENTUM project, requires education institutions and health facilities to ensure availability of the required resources (material and human) for mentorship and to create and maintain effective learning environments. However, it does not provide an audit tool for this purpose.

In the first action research cycle the participating Ugandan and UK midwifery educators, working as a team, identified existing practice audit tools in Uganda and undertook a literature search for tools from similar contexts, while also contributing audit tools from UK universities. These were benchmarked against international standards and competencies for midwifery education (World Health Organization, 2011; International Confederation of Midwives, 2012, 2013). The quality of care available in the participating practice learning environments was also mapped against The Lancet’s (2014) Framework for Quality Maternal and Newborn Care. Then, using the principles of quality, safety and support (University of East Anglia, 2015) as a framework, a bespoke, contextually appropriate audit tool was developed (Table 3). During subsequent action research cycles the tool was further developed and revised, as the new UNMC (2017) draft national standard for mentorship was developed and various other standards and frameworks for respectful and quality maternity care became available (K4Health, 2016; WHO, 2016a). The tool aims to assess practice and mentorship systems, the workplace culture and the midwifery workforce (see Figure 1). Initially developed to capture qualitative data only, a scoring system was introduced with 15 categories and a maximum total of 65 points. This allowed for incremental comparison of audit scores (Table 3).
Table 3: The MOMENTUM practice learning environment audit tool

<table>
<thead>
<tr>
<th>Area</th>
<th>SCORE OUT OF 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>Jan 2016</td>
</tr>
<tr>
<td>Systems</td>
<td></td>
</tr>
<tr>
<td>1. Infection control</td>
<td></td>
</tr>
<tr>
<td>2. Patient flow</td>
<td></td>
</tr>
<tr>
<td>3. Equipment requisition and repair</td>
<td></td>
</tr>
<tr>
<td>4. Drug supply</td>
<td></td>
</tr>
<tr>
<td>5. Documentation</td>
<td></td>
</tr>
<tr>
<td>Mentorship systems</td>
<td></td>
</tr>
<tr>
<td>6. Tracking students</td>
<td></td>
</tr>
<tr>
<td>7. Assigning mentors</td>
<td></td>
</tr>
<tr>
<td>8. Assigning students’ shifts</td>
<td></td>
</tr>
<tr>
<td>9. Midwife-to-student ratio</td>
<td></td>
</tr>
<tr>
<td>10. Student orientation and learning objectives identified and recorded</td>
<td></td>
</tr>
<tr>
<td>11. Completing student documentation</td>
<td></td>
</tr>
<tr>
<td>12. System to address problems</td>
<td></td>
</tr>
<tr>
<td>13. Relationship to sending organisation</td>
<td></td>
</tr>
<tr>
<td>14. Resources to support student learning</td>
<td></td>
</tr>
<tr>
<td>15. Use of mentor support folders</td>
<td></td>
</tr>
<tr>
<td>Workplace culture</td>
<td></td>
</tr>
<tr>
<td>Professional behaviours</td>
<td></td>
</tr>
<tr>
<td>• Staff uniforms</td>
<td></td>
</tr>
<tr>
<td>• Access to learning materials</td>
<td></td>
</tr>
<tr>
<td>• Promotion of a friendly and supportive working environment</td>
<td></td>
</tr>
<tr>
<td>• Encouragement of staff to pursue CPD</td>
<td></td>
</tr>
<tr>
<td>Quality of care</td>
<td></td>
</tr>
<tr>
<td>• Evidence-based policies, procedures and guidelines are in place</td>
<td></td>
</tr>
<tr>
<td>• There is evidence of clinical and non-clinical risk management</td>
<td></td>
</tr>
<tr>
<td>• Respectful maternity care is seen to be carried out</td>
<td></td>
</tr>
<tr>
<td>• The WHO quality of care framework is being used</td>
<td></td>
</tr>
<tr>
<td>Workforce</td>
<td></td>
</tr>
<tr>
<td>Staffing levels</td>
<td></td>
</tr>
<tr>
<td>Registration check of staff</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
</tr>
</tbody>
</table>

Ethical considerations

Ethical considerations have been documented elsewhere (Kemp et al., 2018a,b). The project was not submitted for institutional research ethics board approval as it was considered by all major stakeholders to constitute a quality development initiative. However, ethical issues were addressed and protocols established. Subsequent qualitative research has been granted ethical approval.

Findings/results

Audit scores and student evaluation

Audit of the practice learning environments took place in January 2016 (baseline), June 2016 (midpoint) and January 2017 (endpoint). Audits were undertaken by the same team, ensuring inter-rater reliability. The audit scores were not intended to demonstrate statistical significance; any changes were suggestive rather than indicative of improvement. However, all the practice learning
environments achieved an improved audit score over the course of the project, with the majority of the improvements taking place in the first half of the project (Figure 2). Most sites continued to see improvements across the length of the project, although level IV clinic 1 and the training hospital saw no further improvements between the midpoint and the endpoint audit assessments. All sites were also visited in April 2017 during the final project evaluation and at a post-project needs assessment in October 2017. Qualitative data from these visits suggested that the majority of improvements made had been maintained. Data from students’ evaluation forms and focus groups showed that students all had an identified mentor, practice mentoring had significantly improved and the practice learning environments were more supportive of learners.

**Figure 2: Baseline, midpoint and endpoint audit scores in MOMENTUM pilot sites**

<table>
<thead>
<tr>
<th>CLINICAL SITES</th>
<th>BASELINE</th>
<th>MIDPOINT</th>
<th>ENDPOINT</th>
<th>% ABOVE BASELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level IV clinic 1</td>
<td>16</td>
<td>26</td>
<td>26</td>
<td>62.5%</td>
</tr>
<tr>
<td>Level IV clinic 2</td>
<td>9</td>
<td>26</td>
<td>26</td>
<td>62.5%</td>
</tr>
<tr>
<td>Training hospital</td>
<td>27</td>
<td>40</td>
<td>40</td>
<td>244.4%</td>
</tr>
<tr>
<td>UPMA clinic 1</td>
<td>32</td>
<td>34</td>
<td>40</td>
<td>62.5%</td>
</tr>
<tr>
<td>UPMA clinic 2</td>
<td>34</td>
<td>42</td>
<td>46</td>
<td>123.5%</td>
</tr>
<tr>
<td>UPMA clinic 3</td>
<td>38</td>
<td>48</td>
<td>48</td>
<td>26.3%</td>
</tr>
<tr>
<td>UPMA clinic 4</td>
<td>38</td>
<td>46</td>
<td>48</td>
<td>26.3%</td>
</tr>
</tbody>
</table>

**Thematic analysis**
In addition to quantitative results from the audit tool, thematic analysis of the project’s qualitative data (informed by Byrom and Downe, 2008) identified two major themes, six sub-themes and 26 codes. MOMENTUM was found to have created a community of practice (major theme 1) that was enabling, fulfilling and protective. It had also brought about transformation (major theme 2), changing the workplace culture, changing the physical environment for learning and quality maternity care and developing participants, both professionally and personally (Table 5).
### Table 5: MOMENTUM thematic analysis

<table>
<thead>
<tr>
<th>Major theme</th>
<th>Sub-theme</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community of practice</td>
<td>Enabling</td>
<td>Connection and exposure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Without hierarchies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Learning and reflection</td>
</tr>
<tr>
<td></td>
<td>Fulfilling</td>
<td>Fulfilled dreams</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feeling proud</td>
</tr>
<tr>
<td></td>
<td>Protective</td>
<td>Protective from burnout</td>
</tr>
<tr>
<td>Transformation</td>
<td>Changing the workplace culture</td>
<td>Person centred, relationship based</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A culture of learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Respect for carers and clients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>From blame to understanding</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implementation culture</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Engaging culture</td>
</tr>
<tr>
<td></td>
<td>Changing the physical environment</td>
<td>Equipment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infection control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Respectful care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Client flow</td>
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**The MOMENTUM community of practice**

A healthcare community of practice ‘shares a common domain of interest in which health workers collaborate to promote practice, enhance professional expertise and augment institutional knowledge’ (Siebert, 2015). The participatory nature of action research lends itself to developing a collaborative community of practice (Kilbride et al., 2011). Selected data are included to illustrate participants’ experience of being in the MOMENTUM community of practice.

**Enabling**

MOMENTUM created a community of practice that enabled connection and exposure across countries, sectors and organisations:

‘**Through MOMENTUM I have made new friends**’ (Tutor).

‘**Being a part of the MOMENTUM community has meant that I have had a chance to rub shoulders with big people like the RCM, UNMC and the Ministry of Health**’ (Mentor).

‘**UPMA is now well known due to the exposure to the Ministry of Health that RCM has facilitated. We also have a better relationship with the UNMC**’ (UPMA executive).
‘The UK visit removed the veil completely. We now understand what mentorship is. Unveiling mentorship, getting to know it.’ (UNMC manager).

‘Being a part of the MOMENTUM project made me gain financial skills and meet donors such as THET, to help in my role’ (Finance officer).

‘I fell in love with... the private midwives in Uganda who bridge the gap between the women and the public system’ (Public service midwife).

‘We had a chance for our midwives to visit the UK midwives and they saw physically for themselves. What we saw in the UK is an endless story’ (UPMA executive).

The MOMENTUM community of practice also enabled flattened hierarchies:

‘I have noticed a change in this workshop; we all seem more confident, more engaged and more free to speak. No one has not spoken. I really believe that learning has taken place’ (Tutor).

‘I feel honoured to have been a part of the MOMENTUM community. I have learned that people at different levels can co-exist and achieve something if they have a common goal’ (Ministry of Health staff member).

‘Being a part of the MOMENTUM community has helped me to develop confidence to speak in groups. I have been inspired by the midwives and I want to be like them’ (Student).

‘There is now good communication between staff and students in clinical practice. We have increased confidence in approaching mentors’ (Students’ focus group).

Enabling learning and reflection were also features of the MOMENTUM community of practice:

‘MOMENTUM has helped me to understand how to do qualitative research, how to submit a proposal to an ethics committee and how to organise proposals’ (UPMA officer).

‘MOMENTUM was a timely project for me and helped me to choose a focus for my PhD studies. It motivated me. I am currently doing a literature review about the impact of mentoring on student nurse and midwives’ experience and abilities’ (Tutor).

‘We introduce students to the paperwork and the reflective grids and we use them every time we teach a new skill and sign them off after discussion with the supervisor’ (Mentor).

‘We also now require the students to write reflective journals during their placement. The reflection captures the engagement with the mentors’ (Tutor).

‘I have learned so much from Uganda. I see my own situation with different eyes and see things that I didn’t see before. This experience has inspired me to return to university and study for a masters degree’ (UK midwife).

Fulfilling
Participants expressed that being a part of the MOMENTUM community of practice was a fulfilling experience, in which dreams could be realised and in which they could feel proud and special:

‘MOMENTUM has given me the opportunity to travel, to get exposed to a new world and to meet a royal princess’ (Tutor, after meeting HRH The Princess Royal).
‘It was one of my dreams to go to the UK and MOMENTUM has fulfilled it’ (Mentor).

‘Being involved in the MOMENTUM community has made me feel special because I’m involved in making better midwives before I retire’ (Tutor).

‘I have learned new clinical skills, eg always checking for a second twin. I have learned about teamwork and communication. I have learned that UK midwives have lost some of the key primary skills of midwifery, for example [facilitating] vaginal birth. It has given me a wider perspective and appreciation. It has changed me, made me appreciate what we have’ (UK midwife).

‘I am proud of MOMENTUM because we are being mentored. We have been given a certificate. I am able to mentor all the staff in my clinic and when I identify gaps I can meet them. I have a relationship with my friends [in the MOMENTUM community]’ (Mentor/UPMA executive).

‘...the certificates, which we display proudly in our clinics and health centres, allow our work to be admired’ (Mentors’ focus group).

‘I feel we are spearheading this and now working so closely with the [Nurses and Midwives] Council and the Ministry of Health, now they’ve come to realise that UPMA midwives are skilled and are now consulting us. We feel very proud of that hope and the module will be useful not only for midwives but also for other cadres’ (UPMA executive).

Protective
The MOMENTUM needs assessment found that, before the project, morale among Ugandan midwives was low. Midwife mentors were not prepared for their role, were overwhelmed by the need for care and were unable to provide good-quality mentorship to their students (RCM, 2015b). These findings resonate with the concept of ‘burnout’, characterised by emotional exhaustion, depersonalisation and a reduced sense of personal accomplishment (Sandall, 1998; Heeb and Haberey-Knuessi, 2014). Midwifery workforce shortages and burnout are not unique to Uganda. A survey of the UK midwifery workforce in 2016 (RCM, 2016) found that high levels of stress and burnout and poor workplace cultures impact on the quality of maternity care that women and their families receive. The largest global survey of midwifery personnel (WHO, 2016c) highlighted midwives’ widespread experience of disrespect, subordination and gender discrimination, alongside socio-cultural, economic and professional barriers to providing quality, respectful maternity care.

At the outset of the project, concerns were expressed that midwives might be resistant to taking on a new role for which there was no financial reward, in an already overloaded system. However, the MOMENTUM community of practice appeared to protect participating midwives against burnout and, rather than adding to their workload, reduced it:

‘I feel good to work with students because they help me to complete my work’ (Mentor).

‘[Mentorship] feels great and interesting because they learn from me and I from them’ (Mentor).

‘We are enjoying it, I have changed my attitude, it is my responsibility, I do it with interest’ (Mentors’ focus group).

‘How we speak to students has changed. We no longer shout, we are giving feedback to students and they are giving us feedback’ (Mentors’ focus group).

‘Since MOMENTUM mentors now give us time. They are willing to teach’ (Students’ focus group).
‘For the first time, we midwives have received a written document from the students appreciating us. That made the mentors feel very good’ (Midwife manager).

**Transformation**

**Transformation the workplace culture**

Transforming workplace or internal culture is a core value of practice development and appreciative inquiry, and is critical to achieving large-scale social change (McCormack et al., 1999; Grant and Humphries, 2006; Celep et al., 2016). A quality learning environment for students is dynamic and democratic, has valued and highly motivated staff and recognises the contribution of students, who should participate in care to maximise learning opportunities (Nursing and Midwifery Board for Ireland, 2015). Workplace culture in MOMENTUM participating pilot sites was transformed to become more person centred and relationship based, more respectful of clients and learners, more understanding and less blame orientated, more engaged and more focused on implementation.

‘I am the lead midwife in [a government level IV health centre]. Before the MOMENTUM project we viewed students only as a source of manpower for cleaning, collecting supplies, taking samples, taking patients to theatre, etc. My midwifery staff developed a positive attitude to mentoring students and qualified as knowledgeable mentors, equipped with reference information. There are improved student-mentor relationships and students receive more supervision and more hands-on experience’ (Mentor).

‘[Since MOMENTUM] there is peace at work. We get praised rather than criticised’ (Students’ focus group).

‘Midwives are reporting a change in students’ attitudes. They are no longer abusing patients’ (Tutor).

However, the practice learning environments still face enormous challenges:

‘We still have great challenges with staffing. We have a total of only three midwives; one is on long-term sick leave and another is on study leave. I don’t know how we will continue to manage’ (Mentor).

Health workers have a right to safe and decent working environment; respectful maternity care should include respectful treatment of midwives (WHO, 2016b; 2016c).

**Transforming the physical environment**

MOMENTUM transformed the clinical environment through improving availability of equipment, improving infection control, changing midwifery care to become more respectful, improving client flow through clinical areas, making learning resources available and (in most sites) increasing uptake of care in facilities.

‘Together with my twin, we made changes in the learning environment. We now have solar light, we put proper infection control and prevention in place, the labour ward was transformed with a clean environment, partitions for privacy and equipment for effective delivery. Our deliveries have increased, we are now sterilising our instruments, cleaning the beds and washing our hands. There have also been changes in the systems and the patient flow. We have controlled the number of relatives and are better at managing obstetric emergencies such as shoulder dystocia and post-partum haemorrhage. We are making fewer referrals for asphyxiated babies and sepsis. We also have more support from the local health administration’ (Mentor, public health centre).
Transforming people: personal and professional development

People have been transformed through their participation in MOMENTUM. Participants reported: increased confidence; leadership development; increased professional recognition; improved self-awareness; better skills in communication, negotiation and giving feedback; improved clinical skills; and competence to perform audit and to meet cultural challenge.

‘[MOMENTUM] has helped me so much. Before my attitude was only fair but I got help and encouragement and was challenged in the workshop and will take it back. I have developed my leadership skills’ (Mentor, ward manager).

‘[Since participating in MOMENTUM] I have become more involved with the RCM and more politically active. My job in the UK is around workforce planning and I can make comparisons with Uganda. [Whatever our setting] there are never enough midwives’ (UK midwife).

‘MOMENTUM has made me look at midwifery in a different way. I have realised that mothers and midwives are the same the world over’ (UK midwife).

Discussion

Limitations and challenges

MOMENTUM was a pilot project, limited in scale and scope. Funding was short term and goals had to be set in advance. Only four action research cycles were feasible in the 20 months, possibly insufficient to reach replicability (Fusch and Lawrence, 2015). As MOMENTUM did not measure outcomes for women and newborns, anecdotal evidence for improved outcomes could not be confirmed. The audit tool was a pilot tool and requires further refinement and a more robust scoring system to demonstrate the statistical significance of any improvements. Donation of equipment, highly valued by Ugandan participants, may not have been sustainable.

The under-resourced health system, staff redeployments and absences posed challenges, as did bureaucracy, hidden hierarchies and protocols. Local project managers and stakeholders proved invaluable for complex negotiations. Student throughput in practice areas was inconsistent. Cultural challenges included different expectations of twinning, the place of religion in society, sensitivities regarding appropriate clothing and different interpretations of what it meant to be a student or to be a professional. There were communication difficulties resulting from problems with power supply and internet connection, differences in time and expectations, and smartphone availability/familiarity. The project did not address the felt need for preceptorship for newly qualified midwives in Uganda. It is suggested that this would be a pertinent area for future work.

‘Those who are new in service, and those who are old and worn out, need support’ (UNMC officer).

Action research and workbased learning were new concepts to most of the project’s participants and management team. While challenging, this also provided opportunities for learning:

‘Action research was something new. We came to understand it and that is a great learning we can apply even if the project is over’ (UPMA executive).

Action research and midwifery twinning

This project has added to the body of knowledge about midwifery twinning for building capacity in mentorship, research, and cross-cultural competence. Facilitation of action research by the twin pairs, illustrated in the case study, resonates with Dewar’s (2013) ‘7Cs of caring conversations’ (Being Courageous; Connecting emotionally; being Curious; Collaborating; Considering other perspectives; Compromising; and Celebrating). The insider/outsider role (Deery and Hughes, 2004) of the action research facilitators was reflected at various levels. First, the project management teams in the UK
and Uganda, who ran the project and took a lead in promoting change among the wider stakeholder networks and negotiating access. Second, the UK midwives were action researchers within their practice learning sites, twinning with Ugandan midwives and implementing the action research cycles. Finally, as the representative Ugandan midwives worked alongside their UK twins, they also participated in the project workshops and so represented a third layer of practice development facilitators, as they went back to their workplaces to encourage and implement change. The Ugandan midwives did not merely implement the action plans developed with their UK twins, but actively contributed to changing the culture of their workplaces by running additional training, promoting the concept and value of mentorship, and negotiating the systems and structures of the workplace to enhance student learning.

MOMENTUM’s twinning approach mirrors WHO’s (2016d) guiding principles for implementation of nursing and midwifery capacity building: ethical action, relevance, ownership, partnership and quality. MOMENTUM did not set out to measure improvements in quality of care/respectful maternity care, but thematic analysis showed that mentorship impacted on this significantly. Downing et al.’s (2016) palliative care leadership project in Uganda, using remote mentors, followed a similar approach.

Twinning enhanced cultural competence in UK and Ugandan counterparts. Demonstration of cultural competence was required of UK midwives at selection but not of their Ugandan twins. However, other twinning projects demand mutual preparation (Cadée et al., 2013). While cultural competence training has been found to be effective (Renzaho et al., 2013, p 261), it is clear that such competence must also be learned socially and shared in the workplace (Dauvin and Lorant, 2015, p 209). It is only by being in place in country during the project that volunteers were truly able to begin to develop their cultural competence in working with Ugandan midwives.

Action research through twinning facilitated deep learning. Workbased learning proved to be suitable in Uganda as it ensured that already low staffing levels were not further depleted and embedded knowledge, allowing teaching materials to be tested in real time. Facing previously unknown experiences and cultures through peer exchange allowed for personal transformation, changing participants’ schema; Cheng et al. (2012) suggest that international exposure can change world views and participants’ cognitive frameworks. Uncertainty in healthcare can be seen as a problem (Han et al., 2011) or an opportunity for fostering creativity (Beutow, 2011) and for the growth of transformational leadership, especially for midwives (Byrom et al., 2010); disequilibrium can trigger significant personal growth (Chang et al., 2012). This is congruent with theories of complexity pedagogy and emergent learning, in which interrelated tools are used over time as a platform to deepen and institutionalise a group’s ability consistently to achieve or exceed desired outcomes, even in the midst of unpredictable challenges (Darling et al., 2016).

**Sustainability**

External evaluation of MOMENTUM (Adhikari and Nsubuga, 2017) concluded that the project had achieved a great deal more than it had aimed to achieve, and suggested that it would strengthen and improve the quality of healthcare provision in Uganda in the long term.

At a policy level, there is significant appetite for scale-up of MOMENTUM within Uganda:

‘The RCM has recently helped us to find a solution for many of the challenges we have found in midwifery. We have to identify the enablers of mentorship then create awareness to different stakeholders... mentorship must also be included in the curriculum and be continuously updated through monitoring and evaluation’ (UNMC officer).

‘The Ministry of Health is prioritising the training of midwives. Investing in midwives is very important. We also want to scale up mentorship, which is a key factor in improving care’ (Ministry of Health official).
‘MOMENTUM has laid a foundation for the ministry to build upon. We appreciate the alongside mentorship that UK midwives have provided in clinical facilities. We need to extend mentorship at the clinical level, to see whether it works and what is needed. We need enabling environments for mentorship and a sustainable supply of equipment’ (Ministry of Health official).

‘We need the RCM to develop more pilot sites and involve more high-level people at the ministry and in other agencies’ (UNFPA/Ministry of Health national midwifery advisor).

‘Mentorship is very important. We recently revised the midwifery curriculum and are working to encourage young girls to take up midwifery education. However, will they stay in the profession once trained? Education certificates mean nothing without skills’ (Ministry of Education and Sports official).

Mobilising political will, working together and developing policy and leadership dovetails with WHO’s (2016d) strategic directions for nursing and midwifery. Evidence from a follow-up visit in November 2017 showed those who had been mentored went on to mentor others, even after the programme had finished:

‘Students who took part in the MOMENTUM project have now become peer mentors for more junior students...[and] in October an exchange visit took place with four UPMA mentors visiting our [private] hospital. We exchanged ideas on mentoring and some of the challenges and they visited the [attached] midwifery school’ (Midwife mentor/manager).

‘As students we are becoming new mentors through peer mentorship’ (Students’ focus group).

Additionally, many mentors had continued to support students using the knowledge and skills gained during MOMENTUM and had plans for ongoing improvements in the learning environment:

‘We have been sorting out our space... and [improving] client flow and the nurses’ [rest/changing] room. We have some teaching materials and we plan to start a CPD programme. Eight mentors have been trained [here], now I have devolved responsibilities for mentorship to others. Midwives have been empowered through mentorship. We used to use the students as cleaners and runners but now we prioritise teaching skills. We still have the reflective grids’ (Midwife manager, public health centre level IV).

However, some midwives had not retained the key knowledge and skills for mentorship:

‘I asked [midwife] to describe how she would go about mentoring a student and she had clearly forgotten the four-stage technique and the feedback sandwich. Even when prompted she couldn’t recall any of the steps. The MOMENTUM toolkit was on the shelf but not in use’ (Project leader’s field notes).

Improvements in the practice learning environment had been maintained at most clinics but not at one:

‘We have [overwhelming client load] and only three midwives for the whole service. When I attended the recent MOMENTUM workshop [another midwife] had to work two 24-hour shifts in a row to cover me and those who have been trained as mentors are not being replaced. There are no working BP machines and the [Doppler] needs new batteries’ (Midwife manager, public health centre level IV).

‘There is some evidence of system change but things are getting cluttered again’ (Project leader’s field notes).
Normalisation process theory helps in understanding and explaining how new ideas or evidence are implemented (McEvoy et al., 2014); MOMENTUM followed three of its essential constructs (coherence, cognitive participation and collective action). However, the remaining construct (reflexive monitoring) will require continued investment and ensembles of action (Forster et al., 2011; May et al., 2016; Parker et al., 2017). Rycroft-Malone et al. (2002) suggest that implementation is not necessarily a linear or logical process and requires facilitation and contextual awareness in addition to consensus evidence.

Conclusion and recommendations
MOMENTUM has shown the effectiveness of action research in developing a model of mentorship for midwifery in Uganda. The project’s success was built on the preceding Global Midwifery Twinning Project (Adhikari and Nsubuga, 2017). MOMENTUM created a powerful community of practice that was enabling, fulfilling and transformative. WHO (2016b) supports the development of enabling work environments to strengthen nursing and midwifery. The project also demonstrated that the concept of mentorship can work in the varied Ugandan context. However, the MOMENTUM practice development workstream was embedded in the wider action research project and may therefore not be replicable in other contexts. System change would be needed to sustain and scale up MOMENTUM, in particular to address workforce shortages. Without these critical investments, Ugandan midwifery will fail to address the sexual, reproductive, maternal, newborn and adolescent health needs of Uganda’s growing population.

Twinning, action research, appreciative enquiry and work-based learning were successful in effecting change during MOMENTUM. Other practice development projects can learn from this success. The replicability of this model depends on the funding and capacity to manage such a labour-intensive project; this project was externally funded and had two management teams. Any follow-on project must have sufficient lead time to develop the monitoring and evaluation framework, to ensure planning and set-up is entirely participatory, and to pilot and adapt tools before baseline measurements. MOMENTUM’s audit tool requires further development before use in other settings; this project was externally funded and had two management teams. Any follow-on project must have sufficient lead time to develop the monitoring and evaluation framework, to ensure planning and set-up is entirely participatory, and to pilot and adapt tools before baseline measurements. MOMENTUM’s audit tool requires further development before use in other settings; in future projects, a longer set-up phase would enable more thorough identification of existing tools and benchmarking to national standards.

MOMENTUM was a complex intervention and offers several avenues for further research. Sandall (2012) suggests that when researching complex interventions theoretical understanding and a thorough process evaluation are needed to distinguish how the intervention causes change and to identify implementation problems. The impact of midwifery twinning on leadership development requires further investigation, together with greater evidence of the reciprocal impact of twinning on the sending country.

References


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Eleanor Shaw (MA Glasgow, MA London), Former Global Projects Officer, the Royal College of Midwives. London, England.

Sarah Nanjego (PG Dip, Cert CP, BA), Monitoring and Evaluation Officer, Uganda Private Midwives Association, Kampala, Uganda.