

# Literature Search Results

## Blended Learning and Midwifery

### Research question or topic:

A refresh of a previous search on blended/ online and flexible learning with a focus on midwifery

### Name of person/ team requesting search:

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**Completed by:** HEE Knowledge Management Team

**Date:** 10/07/20

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## Complete numbered list of results with links

### 1. Evaluation of an educational program for midwifery students to enhance clinical judgement about perinatal abnormalities.

**Author(s):** Tokyo Healthcare University Chiba Faculty of Nursing; Yaeko KATAOKA; Akiko HIRUTA

**Source:** Journal of Japan Academy of Midwifery; Jan 2020; vol. 34 (no. 1); p. 92-102

**Publication Date:** Jan 2020

**Publication Type(s):** Academic Journal Available at [Journal of Japan Academy of Midwifery](#) - from Unpaywall

**Abstract:** Purpose Midwifery students have increasing opportunities to care for women at risk for developing perinatal abnormalities during pregnancy and labor due to their increased age at the time of pregnancy. The purpose of this study was to develop and evaluate the new educational program targeting midwifery students to increase knowledge and enhance clinical judgement to respond high-risk pregnancies. Methods We developed an educational program based on the blended learning approach that combined web-learning in advance with clinical conference style and role play or simulation in class. The themes of program were premature abruption of placenta/eclampsia and hypertensive disorders of pregnancy/HELLP syndrome. Participants were 11 midwifery students in the master's course. The knowledge and self-efficacy to assess and respond to situations were measured before and just after program and four months after program. The knowledge test for premature abruption of placenta/eclampsia (9 items; 0-36 points) and the knowledge test for hypertension/HELLP syndrome (16 items; 0-64 points) were used with multiple-choice questions. In addition, the self-efficacy test for premature abruption of placenta/ eclampsia (12 items; 0-93 points;  $\alpha=.93$ ) and the self-efficacy test for hypertension/HELLP syndrome (10 items; 0-40 points;  $\alpha=.91$ ) were on a 4-point Likert scale. These data were collected from November 2016 through March 2017. Bonferroni's test was used to detect difference across multiple times. This study protocol was approved by the St. Luke's International University Research Ethics Committee. Results Medians of the total score of knowledge test for premature abruption of placenta/eclampsia were 12.0 points before the program, 24.0 points just after program and 20.0 points at four months after the program ( $p=0.007$ ). In addition, medians of the total score of the knowledge test for pregnancy induced hypertension/HELLP syndrome increased from 24.0 points before the program to 48.0 points, and 44.0 points at four months after the program ( $p<0.001$ ). The median scores of self-efficacy for premature abruption of placenta/eclampsia were 20.0 points before the program, 36.0 points just after the program and 35.0 points at four months after the program. The medians selfefficacy score before the program (15.0 points) increased just after the program (28.0 points) and remained higher four months after the program (25.0 points). Conclusion The educational program which we developed might be effective to increase knowledge and enhance clinical judgement after the program and keep them until 4 months after the program high.

**Database:** CINAHL

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### 2. The Effect of Virtual Education on Midwifery Students' Knowledge of Child Sexual Training.

**Author(s):** Mohamadi-Bolbanabad, Samira; Farnam, Farnaz; Pakgozar, Mino

**Source:** Iranian journal of nursing and midwifery research; 2019; vol. 24 (no. 5); p. 337-342

**Publication Date:** 2019

**Publication Type(s):** Journal Article

**PubMedID:** 31516518

Available at [Iranian journal of nursing and midwifery research](#) - from Europe PubMed Central - Open Access

Available at [Iranian journal of nursing and midwifery research](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Iranian journal of nursing and midwifery research](#) - from Unpaywall

**Abstract:** Background Midwives, as the first family trainers, play a significant role in the proper formation of children's sexual identity. Virtual education allows flexible learning for an unlimited number of students. This study aims to examine the influence of virtual education on midwifery students' knowledge of child sexual training. Materials and Methods This study was conducted as a clinical trial from March 2015 to March 2016, on 75 midwifery students studying in two state universities in Tehran, Iran. By flipping a coin, universities were randomly divided into intervention and control groups. Through census sampling, all students of one university were recruited as the intervention group (40 students) and those of the other university were recruited as the control group (35 students). The education offered to the intervention group included eight 1-h virtual education sessions consisting of PowerPoint, audio and video files. Both groups' knowledge was assessed before and 3 months after the completion of the course. A researcher-made questionnaire was used to measure students' knowledge based on certain scenarios. T-pair and t-test ( $p < 0.05$ ) were used for within-group and between-group analyses, respectively. Results The mean score difference of sexual knowledge before and after education was 17.60 and 1.59 in the intervention and control groups, respectively; an independent t-test showed a significantly higher level in the intervention group ( $t_{73} = 6.86$ ,  $p = 0.001$ ). Conclusions When in-class learning in the field of child sex training is not feasible for various constraints, virtual education can be used as a feasible and effective method.

**Database:** Medline

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### 3. Attitudes toward substance misusing pregnant women following a specialist education programme: An exploratory case study.

**Author(s):** Hooks

**Source:** Midwifery; Sep 2019; vol. 76 ; p. 45-53

**Publication Date:** Sep 2019

**Publication Type(s):** Academic Journal

Available at [Midwifery](#) - from Unpaywall

**Abstract:** To explore the attitudes and opinions of student midwives toward drug use before educational intervention. To measure the attitudes of student midwives toward substance using pregnant women before and after educational intervention. To explore the role of the education on attitude change toward pregnant drug users following educational intervention. The research used case study methodology. It was conducted in 3 phases; Likert style questionnaires (Jefferson Scale of Physician Empathy and Medical Condition Regard Scale), Virtual Learning Environment discussion board analysis and semi-structured interviews. The 'case' was a single

delivery of a university distance-learning module 'Substance Misusing Parents.' The participants were 48 final year student midwives across eight NHS Trusts in the UK. The general empathy levels showed no significant change ( $p = 0.539$ ), but empathy toward pregnant drug users statistically improved following the education ( $p = 0.012$ ). Furthermore, students' experiences of the education demonstrated the importance of sharing and reflecting on practice with peers; the mode of delivery; the experiences of drug users, both positive and negative; and making sense of these experiences, thus bridging the 'theory-practice divide,' as key in influencing this change. The study has provided new insights into, the position of student midwives in the UK in terms of their attitudes toward pregnant drug users. It has also provided insight into the required nature of education aimed at altering attitude toward drug use; demonstrating the importance of critical reflection, offering e-learning as an effective model for education design. It has furthermore, confirmed the work of others regarding stigmatisation of drug users in practice and the importance of service user input to education. This research demonstrates the positive potential of education in changing attitude and offers suggestions for effective methods of educational delivery to help reduce stigma in midwifery and other areas of practice.

**Database:** CINAHL

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#### **4. Millennial midwifery: Online connectivity in midwifery education.**

**Author(s):** Geraghty ; Bromley, Angela; Bull, Angela; Dube, Mpho; Turner, Cindy

**Source:** Nurse Education in Practice; Aug 2019; vol. 39 ; p. 26-31

**Publication Date:** Aug 2019

**Publication Type(s):** Academic Journal

**Abstract:** The aim of this study was to explore graduate midwives' experiences of completing a Bachelor of Midwifery online theory course and how that experience led to preparation for practice and future employment as a midwife. This study used a questionnaire, with the core research design having a quantitative component using open-ended questions, via the use of an electronic platform. The main themes emerging from the data that the graduates considered important issues were flexibility, isolation and lack of support. Course completion, experience of online learning/preparation for practice, and recommendations for improvement were identified as areas of importance for graduates of the online midwifery theory course. What is already known about the topic (see Table 3) • Limited literature exists on the experiences of midwifery students and the outcomes relating to the transition from traditional on-campus learning to online modes of educational delivery. • The assessment of graduate's experiences is vital to determine the overall success of programs and future directions towards a more contemporary approach to midwifery education. • Higher education institutions have witnessed a growth in enrolments in online midwifery education, as new technologies provide platforms for learning that are mobile, accessible for rural and remote students, and provide flexibility, work-life balance and is cost effective. What this paper adds • This paper has identified important factors including flexibility, isolation and support, that should be considered when online midwifery theory courses are designed. • Midwives who have graduated from online courses have forged successful careers in midwifery.

**Database:** CINAHL

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### 5. Developing and evaluating an online learning tool to improve midwives' accuracy of visual estimation of blood loss during waterbirth: An experimental study.

**Author(s):** Burns ; Hunter, Louise; Rodd, Zoe; MacLeod, Megan; Smith, Lesley

**Source:** Midwifery; Jan 2019; vol. 68 ; p. 65-73

**Publication Date:** Jan 2019

**Publication Type(s):** Academic Journal

Available at [Midwifery](#) - from Unpaywall

**Abstract:** Abstract Objective The principal objective was to test the effectiveness of an online learning tool to improve midwives' accuracy of blood loss estimations in a birthing pool environment. The secondary objective was to assess the acceptability of the online learning tool to the midwives using it. Design A one group pre-test, post-test experiment with immediate and six weeks follow-up to test ability together with an online questionnaire to assess perceived usefulness of an online learning tool. Setting A large NHS maternity hospital comprising an acute care obstetric unit, a small district unit labour ward, one alongside midwifery-led unit and three freestanding midwifery-led units. Participants Volunteer NHS employed midwives who had experience in caring for women labouring and giving birth in water (n = 24). Intervention An online learning tool comprising six randomly ordered short video simulations of blood loss in a birthing pool in real time, and a tutorial giving verbal and pictorial guidance on making accurate blood loss estimations in water was developed then piloted. Midwives' accuracy scores for estimating blood loss in each of the videos were calculated at three timepoints; pre and immediately post the learning component, and six weeks later. The estimated blood loss volume was subtracted from the actual blood loss volume, to give the difference between estimated and real blood loss in millilitres (ml) which was then converted to percentage difference to standardise comparison across the six volumes. The differences between pre- and post-learning for each of the six blood volumes was analysed using a repeated measures ANOVA. Statistical significance was set at  $p < 0.05$ . An online questionnaire incorporated questions using Likert scales to gauge confidence and competence and free text. Free text responses were analysed using a modified form of inductive content analysis. Findings Twenty-two midwives completed the online learning and immediate post-test, 14 completed a post-test after six weeks, and 15 responded to the online questionnaire. Pre-test results showed under-estimation of all blood loss volumes and particularly for the two largest volumes (1000 and 1100 ml). Across all volumes, accuracy of estimation was significantly improved at post-test 1. Accuracy diminished slightly, but overall improvement remained, at post-test 2. Participants rated the online tool positively and made suggestions for refining it. Key conclusions and implications for practice This is the first study measuring the accuracy of midwives' blood loss estimations in a birthing pool using real-time simulations and testing the effectiveness of an online learning tool to improve this important skill. Our findings indicate a need to develop interventions to improve midwives' accuracy at visually estimating blood loss in water, and the potential of an online approach. Most women who labour and/or give birth in water do so in midwifery-led settings without immediate access to medical support. Accuracy in blood loss estimations is an essential core skill

**Database:** CINAHL

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### 6. Distance learning for maternal and child health nurses and midwives in Mongolia: a qualitative evaluation.

**Author(s):** Willott, C; Sakashita, R; Gendenjamts, E; Yoshino, Y

**Source:** International nursing review; Dec 2018; vol. 65 (no. 4); p. 577-585

**Publication Date:** Dec 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29570214

Available at [International nursing review](#) - from Unpaywall

**Abstract:** BACKGROUND Continuing education is vital for the development of the competencies of nurses and midwives. We analysed the effectiveness of a distance education programme for maternal and child health nurses and midwives in Mongolia, assessing its strengths and limitations and ways in which it could be improved. The aim of this research is to provide an analysis of the successes and failures of the programme, in order to improve future versions of this and similar programmes in Mongolia and elsewhere. METHODS We carried out a qualitative descriptive study in Mongolia in August 2015. This consisted of three semi-structured interviews and two focus groups in the Second National Hospital, Ulaanbaatar, and three semi-structured interviews and one focus group in Dornogovi Provincial Maternal Hospital, Sainshand, Dornogovi Province. In total, there were 22 participants in our research. Data from the interviews and focus groups were thematically coded and analysed using NVivo version 10. FINDINGS The distance education programme is well received by participants. They suggest that it has improved their clinical practice and education in a number of areas, and are anxious for the programme to continue. A number of alterations would be necessary to improve both the quality of the programme and the ability of participants to foster change on the basis of what they have learnt. This provides challenges for both the programme organizers and the providers of maternal and child health services in Mongolia. IMPLICATIONS FOR NURSING AND/OR HEALTH POLICY The success of the distance education programme suggests that collaborations of this type are a cost-effective method of disseminating best practice in policy and practice to improve the quality of care provided to mothers and children in low-resource settings. CONCLUSIONS A distance education programme is vital to link maternal care providers in Mongolia to new trends in care. Mongolia's relative isolation means that this programme is particularly valuable there. However, the programme could work equally well in other developing country settings.

**Database:** Medline

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### 7. Midwifery education and technology enhanced learning: Evaluating online story telling in preregistration midwifery education.

**Author(s):** Scamell ; Hanley, Thomas

**Source:** Nurse Education Today; Mar 2018; vol. 62 ; p. 112-117

**Publication Date:** Mar 2018

**Publication Type(s):** Academic Journal

Available at [Nurse education today](#) - from Unpaywall

**Abstract:** Background A major issue regarding the implementation of blended learning for preregistration health programmes is the analysis of students' perceptions and attitudes towards their learning. It is the extent of the embedding of Technology Enhanced Learning (TEL) into the higher education curriculum that makes this analysis so vital. Objectives This paper reports on the quantitative results of a UK based study that was set up to respond to the apparent

disconnect between technology enhanced education provision and reliable student evaluation of this mode of learning. Design Employing a mixed methods research design, the research described here was carried to develop a reliable and valid evaluation tool to measure acceptability of and satisfaction with a blended learning approach, specifically designed for a preregistration midwifery module offered at level 4. Methods Feasibility testing of 46 completed blended learning evaluation questionnaires - Student Midwife Evaluation of Online Learning Effectiveness (SMEOLE) - using descriptive statistics, reliability and internal consistency tests. Results Standard deviations and mean scores all followed predicted pattern. Results from the reliability and internal consistency testing confirm the feasibility of SMEOLE as an effective tool for measuring student satisfaction with a blended learning approach to preregistration learning. Conclusions The analysis presented in this paper suggests that we have been successful in our aim to produce an evaluation tool capable of assessing the quality of technology enhanced, University level learning in Midwifery. This work can provide future benchmarking against which midwifery, and other health, blended learning curriculum planning could be structured and evaluated.

**Database:** CINAHL

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### **8. Developing nursing and midwifery students' capacity for coping with bullying and aggression in clinical settings: Students' evaluation of a learning resource.**

**Author(s):** Hogan, Rosemarie; Orr, Fiona; Fox, Deborah; Cummins, Allison; Foureur, Maralyn

**Source:** Nurse education in practice; Mar 2018; vol. 29 ; p. 89-94

**Publication Date:** Mar 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29223660

Available at [Nurse education in practice](#) - from Unpaywall

**Abstract:** An innovative blended learning resource for undergraduate nursing and midwifery students was developed in a large urban Australian university, following a number of concerning reports by students on their experiences of bullying and aggression in clinical settings. The blended learning resource included interactive online learning modules, comprising film clips of realistic clinical scenarios, related readings, and reflective questions, followed by in-class role-play practice of effective responses to bullying and aggression. On completion of the blended learning resource 210 participants completed an anonymous survey (65.2% response rate). Qualitative data was collected and a thematic analysis of the participants' responses revealed the following themes: 'Engaging with the blended learning resource'; 'Responding to bullying' and 'Responding to aggression'. We assert that developing nursing and midwifery students' capacity to effectively respond to aggression and bullying, using a self-paced blended learning resource, provides a solution to managing some of the demands of the clinical setting. The blended learning resource, whereby nursing and midwifery students were introduced to realistic portrayals of bullying and aggression in clinical settings, developed their repertoire of effective responding and coping skills for use in their professional practice.

**Database:** Medline

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### 9. Blending virtual with conventional learning to improve student midwifery skills in India.

**Author(s):** Balasubramaniam, Sudharsanam Manni; Bhargava, Saurabh; Agrawal, Neeraj; Asif, Rashmi; Chawngthu, Lalhmangaihi; Sinha, Pallavi; Kumar, Somesh; Sood, Bulbul

**Source:** Nurse education in practice; Jan 2018; vol. 28 ; p. 163-167

**Publication Date:** Jan 2018

**Publication Type(s):** Journal Article

**PubMedID:** 29101835

Available at [Nurse education in practice](#) - from Unpaywall

**Abstract:** India's state of Bihar has suboptimal quality of pre-service training for auxiliary nurse midwives. To address this, state government of Bihar implemented a blended training model to supplement conventional classroom teaching with virtual training. A 72-hour virtual training package with updated content on key maternal and newborn health practices was developed for final year students and broadcasted from one instructor location simultaneously to two auxiliary nurse midwives training centres. This pre-post intervention study compared skills of two auxiliary nurse midwife student cohorts. Eighty-five students from pre-intervention cohort of academic year 2012-13, received only conventional teaching during the final year. The 51 students in the post-intervention cohort from successive academic year 2013-14, received a combination of the both conventional and virtual training. The two cohorts were objectively assessed on identified midwifery skills. A passing score was set at achieving 75% or higher. The students exposed to blended learning scored 32.57 points ( $p = <0.001$ ) more than their counterparts, who received only conventional teaching. In the post-intervention cohort, 55% students ( $N = 28$ ) passed as compared to none in the pre-intervention cohort. We found blended learning approach effectively improved access to quality training, and identified key midwifery skills of auxiliary nurse midwife students from remote locations.

**Database:** Medline

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### 10. First year midwifery students' experience with self-recorded and assessed video of selected midwifery practice skills at Otago Polytechnic in New Zealand.

**Author(s):** McIntosh, Carolyn; Patterson, Jean; Miller, Suzanne

**Source:** Nurse education in practice; Jan 2018; vol. 28 ; p. 54-59

**Publication Date:** Jan 2018

**Publication Type(s):** Journal Article

**PubMedID:** 28950150

**Abstract:** Studying undergraduate midwifery at a distance has advantages in terms of accessibility and community support but presents challenges for practice based competence assessment. Student -recorded videos provide opportunities for completing the assigned skills, self-reflection, and assessment by a lecturer. This research asked how midwifery students experienced the process of completing the Video Assessment of Midwifery Practice Skills (VAMPS) in 2014 and 2015. The aim of the survey was to identify the benefits and challenges of the VAMPS assessment and to identify opportunities for improvement from the students' perspective. All students who had participated in the VAMPS assessment during 2014 and 2015 were invited to complete an online survey. To maintain confidentiality for the students, the Qualtrics survey was administered and the data downloaded by the Organisational Research Officer. Ethical approval was granted by the organisational ethics committee. Descriptive statistics were generated and students' comments were collated. The VAMPS provided an



accessible option for the competence assessment and the opportunity for self-reflection and re-recording to perfect their skill which the students appreciated. The main challenges related to the technical aspects of recording and uploading the assessment. This study highlighted some of the benefits and challenges experienced by the midwifery students and showed that practice skills can be successfully assessed at distance. The additional benefit of accessibility afforded by video assessment is a new and unique finding for undergraduate midwifery education and may resonate with other educators seeking ways to assess similar skill sets with cohorts of students studying at distance.

**Database:** Medline

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### **11. Online postgraduate midwifery education increases knowledge integration into practice: Insights from a survey of Otago Polytechnic's postgraduate midwifery students.**

**Author(s):** Miller ; Griffiths, Christine

**Source:** New Zealand College of Midwives Journal; Dec 2017 (no. 53); p. 53-59

**Publication Date:** Dec 2017

**Publication Type(s):** Academic Journal

Available at [New Zealand College of Midwives Journal](#) - from Unpaywall

**Abstract:** Background: The Midwifery Council of New Zealand requires that registered midwives are engaged in education as one aspect of demonstrating ongoing competence. Barriers to engagement include geographical isolation, inability of workplaces to release midwives, potential for the post-registration student to be unavailable to her Lead Maternity Care clients, and financial constraints associated with travel to where the study is offered. In New Zealand, the Otago Polytechnic postgraduate midwifery programme offers a range of clinically focussed and theoretical papers that are delivered at distance in a blended model, combining online learning with synchronous and asynchronous online discussion opportunities. This model enables midwives to up-skill and build "communities of practice" regardless of their physical location, with no resultant loss of availability to their community or workplace. Aim: This research aimed to explore midwives' perceptions of how their engagement in online postgraduate midwifery education had influenced their practice, potentially benefiting childbearing women in their care. Method: Following ethical approval, an online survey was sent to all midwives who were enrolled in postgraduate midwifery courses at Otago Polytechnic in the period 2012 to 2013. Data were collected in April 2014, from a survey that used a combination of Likert scales, yes/no responses, and provision for qualitative comments. Data were analysed using descriptive statistics and thematic analysis. Results: Fifty-five out of 117 (47%) surveys were returned. Midwife respondents practised across a range of settings from urban to remote rural locations, and midwifery care was provided at home and at primary, secondary and tertiary birth facilities. Respondents felt that participation in online postgraduate midwifery education had improved their knowledge base and their ability to practise in an evidence-informed way, and they felt connected to a community of practice in a virtual sense, gaining the benefits of support and encouragement from fellow learners and lecturers. They believed that the care they provided to women was enhanced because they had practice currency and could apply their knowledge to clinical situations with increased confidence. Conclusion: For these midwives, engagement in online postgraduate midwifery education informed their midwifery practice, and therefore the care that women received. Online postgraduate midwifery education enabled these midwives through its accessibility.

**Database:** CINAHL

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**12. Living with autism: What's your superpower? A personal reflection.**

**Author(s):** Kitson-Reynolds ; Kitson, William; Humphrys, Kevin

**Source:** British Journal of Midwifery; Nov 2015; vol. 23 (no. 11); p. 808-814

**Publication Date:** Nov 2015

**Publication Type(s):** Academic Journal

**Abstract:** Following the Autism Act 2009 and subsequent publications, the University of Southampton's Faculty of Health Sciences introduced an interactive e-learning package through enhancing and harmonising its learning resources, to enable students to effectively work with individuals living with an autism spectrum disorder (ASD). The resource encompasses reading material, quizzes checking self-knowledge, links to external resources, video links and hearing those living with autism, and can be accessed by students at a time convenient to their learning needs and placement activities. With the increasing numbers of women with a known ASD, midwives will need to adapt behaviours, environments and care packages, and support women through their transition to parenthood. Based on the lead author's experience as a parent and carer of someone living with an ASD, this article explores the challenge for midwives to experience the world from a different perspective, embrace it and become understanding and more tolerant of difference and diversity.

**Database:** CINAHL

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**13. e-learning による分娩後出血対応に関する助産師継続教育プログラムの評価.**

**Author(s):** 聖路加国際大学大学院博士後期課程; 片岡 弥恵子; 五十嵐 ゆかり; 蛭田 明子

**Source:** Journal of Japan Academy of Midwifery; Apr 2015; vol. 29 (no. 1); p. 77-86

**Publication Date:** Apr 2015 **Publication Type(s):** Academic Journal

**Abstract:** Objective The purpose of this study was to evaluate an e-learning program on postpartum hemorrhage (PPH) for midwives. Methods Participants were midwives who worked at an obstetrics ward at a hospital, birth clinic, or birth center in the Kanto area. The e-learning program consisted of four parts. We measured knowledge about PPH using a pre- and a posttest, and evaluated the program using questionnaires. Results We analyzed 48 midwives. Knowledge scores significantly increased from the pre- to posttest ( $t = 10.27, p < .001$ ). The average total score on the knowledge pretest was 15.85 (range 11-21, SD 2.78) and posttest 20.02 (range 14-23, SD 2.21). The percentage of questions correctly answered significantly increased with respect to 12 items: "characteristics of atonic bleeding," "clotting factors and hemorrhage," "percentage decrease of circulating blood volume as a cause of hemorrhagic shock," "circulating blood volume of adults," "support for patients with hemorrhagic shock," "characteristics of dilutional coagulopathy," "configuration of extracellular fluid," "characteristics of obstetric disseminated intravascular coagulation syndrome (DIC)," "causes of increased blood volume," "circulating hemorrhage volume according to the shock index," "blood infusion," and "components of blood plasma." No significant changes were found for two items: "colloid oncotic pressure" and "crystalloid pressure." Furthermore, we analyzed the relationship of the average total score with participants' characteristics (two-way factorial analysis of variance). No significant associations were detected. The design of the e-learning program was useful because of the positive assessment by the trainees of the mode of operation, appropriateness of the program, and overall satisfaction. Conclusion An e-learning program is an effective method for improving trainees' knowledge. There are limitations with regard to the effectiveness of teaching of physiology related to fluid therapy. We are planning on modifying the program; it required longitudinal assessment of knowledge retention.

**Database:** CINAHL

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### 14. The use of blended learning to create a module about ill-health during childbirth for pre-registration midwifery students.

**Author(s):** Young, Nicki; Randall, Jayne

**Source:** Nurse education in practice; Jan 2014; vol. 14 (no. 1); p. 87-91

**Publication Date:** Jan 2014

**Publication Type(s):** Journal Article

**PubMedID:** 23643822

Available at [Nurse education in practice](#) - from ProQuest (Health Research Premium) - NHS Version

**Abstract:** Reforms in the way higher education is delivered in order to address the needs of learners in the 21st century are increasingly being considered by university departments. This has led academics to combine e-learning with more traditional classroom based methods of teaching when designing new modules of study, a method commonly called blended learning. This paper will describe the different teaching and learning methods which were blended together to create a module for second year pre-registration midwifery students in England, which focused upon ill-health during pregnancy and childbearing. It is imperative that at the point of registration midwifery students possess the skills to identify deviations from normal, initiate immediate actions and make appropriate referrals. The health of women all over the world is of concern to health care professionals. Midwives are increasingly being upon to provide expert care. Midwives need a sound education to allow them to carry out their roles effectively. The International Confederation of Midwives global standards for midwifery education (2010) attempts to address the need for competent caring midwives to help women and families in every corner of the world. The paper will also cover the pedagogical issues considered when blending together the different elements of learning namely: traditional discursive lectures, small group work, e-learning, formative presentations and the use of simulation during a skills and drills day.

**Database:** Medline

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### 15. The Virtual Maternity Clinic: a teaching and learning innovation for midwifery education.

**Author(s):** Phillips, Diane; Duke, Maxine; Nagle, Cate; Macfarlane, Susie; Karantzas, Gery; Patterson, Denise

**Source:** Nurse education today; Oct 2013; vol. 33 (no. 10); p. 1224-1229

**Publication Date:** Oct 2013

**Publication Type(s):** Journal Article

**PubMedID:** 22766199

**Abstract:** BACKGROUND There are challenges for midwifery students in developing skill and competency due to limited placements in antenatal clinics. The Virtual Maternity Clinic, an online resource, was developed to support student learning in professional midwifery practice. OBJECTIVES Identifying students' perceptions of the Virtual Maternity Clinic; learning about the impact of the Virtual Maternity Clinic on the students' experience of its use and access; and learning about the level of student satisfaction of the Virtual Maternity Clinic. DESIGN Two interventions were used including pre and post evaluations of the online learning resource with data obtained from questionnaires using open ended and dichotomous responses and rating scales. The pre-Virtual Maternity Clinic intervention used a qualitative design and the post-Virtual Maternity Clinic intervention applied both qualitative and quantitative approaches.

**SETTINGS** Three campuses of Deakin University, located in Victoria, Australia.

**PARTICIPANTS** Midwifery students enrolled in the Bachelor of Nursing/Bachelor of Midwifery and Graduate Diploma of Midwifery were recruited across three campuses of Deakin University (n=140).**METHODS** Thematic analysis of the pre-Virtual Maternity Clinic intervention (return rate n=119) related to students' expectations of this resource. The data for the post-Virtual Maternity Clinic intervention (return rate n=42) including open-ended responses were thematically analysed; dichotomous data examined in the form of frequencies and percentages of agreement and disagreement; and 5-rating scales were analysed using Pearson's correlations ( $\alpha=.05$ , two-tailed).**RESULTS** Results showed from the pre-Virtual Maternity Clinic intervention that students previously had placements in antenatal clinics were optimistic about the online learning resource. The post-Virtual Maternity Clinic intervention results indicated that students were satisfied with the Virtual Maternity Clinic as a learning resource despite some technological issues. **CONCLUSIONS** The Virtual Maternity Clinic provides benefits for students in repeated observation of the practice of the midwife to support their professional learning and practice development.

**Database:** Medline

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### 16. Flexible learning to support safe, person-centred care

**Author(s):** Rae, Ann

**Source:** Nursing Management; 2012; vol. 18 (no. 9); p. 32-33

**Publication Date:** 2012

Available at [Nursing Management](#) - from ProQuest (Health Research Premium) - NHS Version

Available at [Nursing Management](#) - from Unpaywall

**Abstract:** Effective Practitioner is an educational initiative that supports nurses, midwives and allied health professionals to deliver person-centred, safe and effective care. It offers access to flexible work-based learning and development resources. This article describes the progress of the initiative and sets out the expected effects on service delivery, as well as exploring the Scottish context and the initiative's relevance to the rest of the UK and abroad. [Abstract]

**Database:** HMIC

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### 17. Students' experiences of blended learning across a range of postgraduate programmes.

**Author(s):** Smyth, Siobhan; Houghton, Catherine; Cooney, Adeline; Casey, Dympna

**Source:** Nurse education today; May 2012; vol. 32 (no. 4); p. 464-468

**Publication Date:** May 2012

**Publication Type(s):** Research Support, Non-u.s. Gov't Journal Article

**PubMedID:** 21645947

**Abstract:** The article describes the students' experiences of taking a blended learning postgraduate programme in a school of nursing and midwifery. The indications to date are that blended learning as a pedagogical tool has the potential to contribute and improve nursing and midwifery practice and enhance student learning. Little is reported about the students' experiences to date. Focus groups were conducted with students in the first year of introducing blended learning. The two main themes that were identified from the data were (1) the benefits

## Blended learning: midwifery

of blended learning and (2) the challenges to blended learning. The blended learning experience was received positively by the students. A significant finding that was not reported in previous research was that the online component meant little time away from study for the students suggesting that it was more invasive on their everyday life. It is envisaged that the outcomes of the study will assist educators who are considering delivering programmes through blended learning. It should provide guidance for further developments and improvements in using Virtual Learning Environment (VLE) and blended learning in nurse education.

**Database:** Medline

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## Appendix

### Sources and Databases Searched

Healthcare Databases Advanced Search (HDAS) was used to search the following databases: Medline; HMIC and CINAHL.

### Search Strategy

I re-ran the search conducted previously on the effectiveness of blended/ online/ distance and flexible learning and nursing.

I added in midwifery as a concept and limited the results to 2015-2020.

Key words included: “flexible learning”; “distance learning”; “online learning”; “blended learning”; “midwifery education”, midwives and midwifery. The search strategy is below should you wish to replicate the search:



HDAS-ST880264-S-1  
-medium-200713-08

Searching the literature retrieved the information provided. We recommend checking the relevance and critically appraising the information contained within when applying to your own decisions, as we cannot accept responsibility for actions taken based on it. Every effort has been made to ensure that the information supplied is accurate, current and complete, however for various reasons it may not represent the entire body of information available.

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