

**Global Nurse Fellowship Program
Final Report and Post Program Evaluation**

Nurse Fellow: Amanda Breed McSweeney, CNM
Dates of Fellowship: 10/7/22 - 10/21/22
Location: Makeni, Sierra Leone
Program: Center for Global Health Nursing and SEED Global Health partnership
Goals of training program: to support SEED educators at the School of Midwifery at Makeni Reinforce and/or increase knowledge and competency of midwifery students in 7 general areas of learning.
Learning outcomes for each goal: By the end of the educational sessions, the nurses will be able to: 1. Accurately take vital signs 2. Estimate Blood Loss 3. Determine Estimated Due Date (EDD) and Gestational Age (GA) 4. Complete a newborn assessment 5. Complete a gravid abdominal exam, vaginal speculum exam and digital speculum exam 6. Identify risk factors for Postpartum Hemorrhage (PPH), identify PPH, and manage PPH 7. Utilize respectful maternity care
Fellowship Work Activity
1. Background: SEED Global Health operates in five African countries, with its most recent expansion into Sierra Leone. In Sierra Leone, SEED employs four midwives—two based in Makeni and two at a newer site in Bo—each serving one-year contracts. Notably, the two midwives in Makeni have extended their service into a second year and currently serve as faculty at the School of Midwifery in Makeni, teaching both in classrooms and as clinical preceptors at the local government hospital. SEED educator Jenny Rose has tracked outcomes since the program’s implementation and noted substantial improvements: ❖ A 55% reduction in maternal mortality, from 29 deaths in 2021 to 13 in 2022 (out of 2,090 and 2,109 live births, respectively). ❖ A 37% decrease in stillbirths, from 170 in 2020 to 107 in 2021. ❖ A 28% reduction in neonatal mortality, from 13.6% in 2021 to 9.8% in 2022, alongside a 37% increase in SCBU admissions, indicating improved resuscitation and earlier identification of critical cases. The School of Midwifery in Makeni is currently working with its 12th graduating class, which includes approximately 106 students. During the fellowship, students were organized into three cohorts. One group participated in training during the first week, another in the second, while the third cohort was on break and scheduled to complete training with the resident SEED educators at a later time. The educators also facilitated week-long orientations each week to complement the core curriculum. Sierra Leone continues to face the highest maternal mortality rate in the world, estimated between 717 to 1,136 deaths per 100,000 live births (UNFPA). Postpartum hemorrhage (PPH) remains the leading cause of maternal death. MDSR (Maternal Death Surveillance and Response) audits from May 2022 revealed that in three maternal deaths, patients exhibited clear clinical warning signs for at least three hours—and in one case, more than 24 hours—prior to intervention. The inability to recognize abnormal vital signs and respond to PPH underscores the urgent need for enhanced clinical training and adherence to care protocols. Many midwifery students at SOMM (School of Midwifery Makeni) are practicing nurses with diverse clinical backgrounds. In response to national priorities, the Ministry of Health has adopted the International Confederation of Midwives' standards and is transitioning midwifery education to a three-year diploma program. This updated curriculum will be launched with the incoming 13th class.

2. Educational Sessions

Midwifery students were assessed with both pre- and post-tests in three foundational areas: vital signs, estimated due date/gestational age (EDD/GA), and estimated blood loss (EBL). The results are included at the end of this report.

Together with Bobbie Curtis, CNM, I facilitated core midwifery instruction at the School of Midwifery in Makeni, using both classroom and skills lab formats. Prior to our arrival, SEED educators Jenny Rose Wilson and Crishencia Okoso provided curriculum outlines, which focused on the following topics:

1. Vital Signs – Lecture, discussion, practical testing, and pre/post assessment.
2. Estimated Due Date (EDD) & Gestational Age (GA) – Key concepts and 14 practice scenarios, with pre/post testing.
3. Estimated Blood Loss (EBL) & Shock Management – Interactive lecture and simulation-based learning, with pre/post testing.
4. Neonatal Assessment & Apgar Scoring
5. Physical Exams – Abdominal, speculum, and cervical exams, with fetal positioning assessment.

Instruction was delivered daily from 8:30 AM to 3:00 PM. Despite the students having at least three years of prior nursing experience, the SEED educators noted a widespread difficulty in performing accurate vital sign assessments. For example, many students would simply read the second hand on a watch rather than actually count heartbeats. Accurate assessment of vital signs is a critical foundation for identifying PPH, shock, fever, and sepsis. Few students had seen or used digital thermometers, and most were unaware of different device modes. To address this, I began with an interactive classroom session followed by hands-on practice in small groups. Bobbie and I then conducted individual assessments of each student's ability to measure temperature, pulse, respiratory rate, and blood pressure. Mary assisted with student testing across both weeks. Names of students who could benefit from follow-up instruction were shared with the SEED educators.

Bobbie led the didactic session on EDD and GA. We distributed Pregnancy Wheels and guided students in downloading a corresponding app on their phones. They then completed 14 practice scenarios based on clinical case examples.

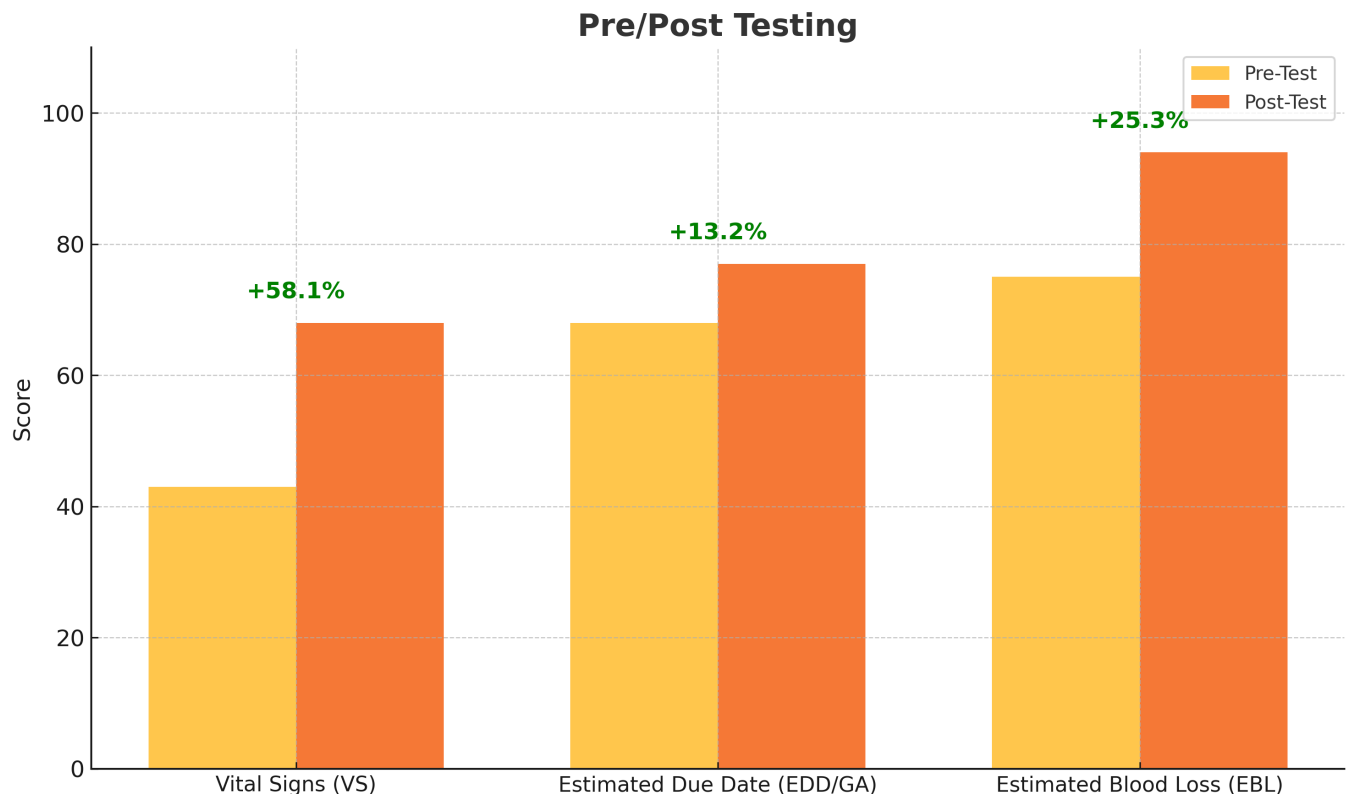
For EBL and shock management, we began with a 90-minute interactive lecture. We then split the cohort (approx. 33 students) into two groups:

- Group One rotated through three skill stations led by Bobbie:
 1. Estimating blood loss using jello and cherry pie filling on various pads and gauze.
 2. Performing Uterine Balloon Tamponade using IV fluid and a condom.
 3. Conducting bimanual exams, manual sweeps, aortic compression, and PPH medication review using the “Mama Natalie” simulator. These stations also emphasized team communication and respectful maternity care, including asking the mother for permission and explaining procedures.
- Group Two, which I led, was also divided into two sub-groups. One completed a full postpartum hemorrhage simulation while the other practiced EDD calculations using the Pregnancy Wheel. The groups then rotated to ensure each student completed every component.

During Week One, Bobbie led the session on neonatal assessment; I led it in Week Two. Students practiced using newborn models to identify normal and abnormal findings. This module was intended as an introduction ahead of their more extensive Newborn Block later in the year.

Finally, Bobbie and I co-taught physical examination skills, including abdominal assessment, fundal height measurement, fetal heart rate detection (via Pinard/Fetoscope at 20 weeks and Doppler at 12 weeks), and Leopold Maneuvers for fetal positioning. We demonstrated speculum exams, specimen collection, and the five key components of cervical exams: dilation, effacement, station, consistency, and position.

3. Evaluation/assessment: Pre and post testing on educational topics



Personal reflections of Fellowship

1. Lessons learned (professional and/or personal)

During my time in Sierra Leone, I gained powerful perspective on how human life is valued differently across cultures. In Sierra Leone, mortality is acknowledged as a part of life, and there is a deep sense of gratitude simply for being alive. In contrast, in Massachusetts, death often comes as a shock—perceived as an unexpected failure rather than an inevitable part of the human experience.

I also discovered a renewed confidence in myself as both an educator and traveler. I was able to teach effectively in a new and challenging environment, and I saw firsthand how even a short two-week engagement can have a meaningful impact across borders.

Finally, I was reminded of how often we chase productivity in the U.S.—filling calendars, checking phones, rushing through days. In Sierra Leone, I was encouraged to slow down, be present, and reconnect with what matters most: genuine human connection. Sometimes, the most powerful gesture is simply looking someone in the eye.

2. Success stories

These students redefined my understanding of what appreciation looks like. Over the years, I've precepted countless students—some for a day, others throughout their entire midwifery education. It's always rewarding to watch learners grow. But these students expressed their gratitude in deeply moving ways. Every day, they sang and danced for us. They had at least three songs memorized, one of which included the lyrics:

*"I want to be a midwife, I want to be a midwife, I want to be a midwife—that is what I want to be.
I want to catch them babies, I want to catch them babies, I want to catch them babies—that is something I want to do.
I want to save the mothers, I want to save the mothers, I want to save the mothers—that is something I want to do."*

This wasn't just unique to this group. It reflects a broader cultural mindset. There is joy in their learning and a deep gratitude

for life itself.

Several students shared reflections that underscored the impact of our time together:

- *“I am learning so much; my head is full!”*
- *“I like the way you teach us. When you go over the pretest right after we take it, I learn.”*
- *“Thank you for sharing your knowledge. I hope you come back before we graduate!”*

A few students have since reached out to stay in touch via WhatsApp. One student, whose house recently burned down, is currently in clinicals in Freetown. She’s in the military and anticipates working at a military hospital post-graduation. She’s expressed that she may reach out for clinical questions, mentorship, and support. Today, she told me: *“What you taught us is what exactly I am seeing.”*

Jenny Rose, one of the SEED educators, shared her own reflections today: *“The students are already doing great in clinical. We’ve had several critical cases that they’ve identified and intervened on. They helped catch a case of severe internal bleeding. Hawa, Crishencia, and another staff nurse all donated blood and saved her life.”*

The statistics Jenny Rose cited (see Background Section) are powerful. But the real evidence of success is found in these stories—the gratitude, the growth, and the lives already being saved.