Strengthening Preservice Midwifery Education in Ghana: Achievements and Phase 2 Expansion Plans

JHP-13

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August 2000

United States Agency for International Development
CREDITS

Editors: Kathleen Hines, Jane Zadlo Sudbrink

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ACKNOWLEDGMENTS

Preservice Midwifery Education Team Members:
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Thanks to:

Ministry of Health:
Dr. Henriette Odoi-Agyarko, Dr. Ken Sagoe, Said Al-Hussein, Dr. Delanyo Dovlo

Nurses and Midwives Council:
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JHPIEGO/Baltimore:
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This publication was made possible through support provided by the Office of Population, Center for Population, Health and Nutrition, Bureau for Global Programs, Field Support and Research, U.S. Agency for International Development, under the terms of Award No. HRN-A-00-98-00041-00. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the U.S. Agency for International Development.

Printed June 2001
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<th>Description</th>
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<tr>
<td>DHMT</td>
<td>District Health Management Team</td>
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<tr>
<td>DHS</td>
<td>Demographic Health Survey</td>
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<tr>
<td>EN</td>
<td>Enrolled nurse</td>
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<td>FP</td>
<td>Family planning</td>
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<td>GOG</td>
<td>Government of Ghana</td>
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<td>HRDD</td>
<td>Human Resources Development Division</td>
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<tr>
<td>IP</td>
<td>Infection prevention</td>
</tr>
<tr>
<td>IR</td>
<td>Intermediate Result</td>
</tr>
<tr>
<td>L&amp;D</td>
<td>Labor and delivery</td>
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<tr>
<td>MCH</td>
<td>Maternal-child health</td>
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<td>MOH</td>
<td>Ministry of Health</td>
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<tr>
<td>MTS</td>
<td>Midwifery training school</td>
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<td>NMC</td>
<td>Nurses and Midwives Council of Ghana</td>
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<td>RH</td>
<td>Reproductive health</td>
</tr>
<tr>
<td>RHMT</td>
<td>Regional Health Management Team</td>
</tr>
<tr>
<td>SM</td>
<td>Safe motherhood</td>
</tr>
<tr>
<td>SRN</td>
<td>State registered nurse</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Since the late 1980s, JHPIEGO has collaborated with the Ministry of Health (MOH) in Ghana to strengthen the national inservice family planning (FP) training system. To achieve more cost-effective and sustainable results, the MOH, with assistance from JHPIEGO and the United States Agency for International Development/Ghana, has now focused on strengthening preservice education for nurses and midwives who provide FP/reproductive health (RH) and safe motherhood services. The phased strategy will ultimately strengthen preservice classroom and clinical training components in all ten midwifery training schools (MTS) in Ghana.

During Phase 1 (FY99 and FY00), efforts focused on the MTS in Kumasi and Koforidua, as well as some work with Korle Bu Hospital in Accra. In Phase 2 (FY01), the program will be expanded to an additional three schools, and the remaining five midwifery schools will be prepared for their participation in Phase 3. During Phase 3 (FY03), the program will focus on preservice education improvements in those remaining schools, and will continue to followup with the original five.

To clarify the needs of the training institutions and guide program planning, two needs assessments were conducted at the MTS in Kumasi and Koforidua. Assessment results shifted the focus of the assessments from data collection for program planning to a change intervention, where important stakeholders were informed of and motivated to make improvements in training programs. Program implementation consisted of 1) training of both clinical instructors (preceptors) and tutors in updated clinical knowledge and skills and in improved teaching and supervisory methods, and 2) introduction of competency-based training materials—the RH Classroom and Clinical Activity Guide for Training Midwives (known as the RH Guide). Ninety-one people were trained in 1999; most were midwives (96%) connected to Kumasi and Koforidua MTS.

Followup visits, supplemented by field visits, were conducted to assess the implementation of the RH Guide, to examine the performance of the tutors and preceptors and improvements at the clinical sites, and to make recommendations for Phase 2 expansion. The followup teams reported appreciable improvement in the quality of practices in the clinical sites and in the skills of preservice nursing and midwifery students and noted that the classroom and clinical training skills of tutors and preceptors had been strengthened. Notable improvement was seen in the areas of clinical care provision, particularly infection prevention (handwashing) and use of the partograph.

The original needs assessment showed that the link between the classroom and clinical sites needed strengthening. Findings from the followup visits revealed that, according to clinical staff, there was an increase in the frequency of visits or interactions between the tutor and the clinical site in 24% of the facilities. Other improvements in the clinical sites included 46% of the sites reporting that students have a copy of the RH Guide. Overall, the RH Guide received strong positive feedback from students, tutors and clinical instructors. A significant improvement was the students’ use of the guide during times in the clinic setting when there were no patients (21%). Students reported that the guide gave them confidence to promote better practice in the clinical site in accordance with national guidelines. The guide is already considered essential both to the midwifery curriculum and to the competency-based licensure examination.

Recommendations for continued expansion of the preservice training program include ensuring that clinical preceptors remain in their posts for at least two years for consistency and efficiency of the program. In addition, improved communication between the preceptors and tutors is
recommended. Further development of a peer support system among schools will ensure the long-term success of the program. Linking the schools and clinical training sites to a supervision quality assurance system at the regional and district levels is also essential to the success of the program as well as its sustainability. Finally, an affordable pricing system for the RH Guide should be developed, and a distribution plan needs to be established and put into practice.

Phase 1 of the preservice midwifery training program has made documented achievements in the classroom and clinical training areas in targeted hospitals. Phase 2 intervention has begun with expansion of the preservice training program to three more schools. Important issues from Phase 1, such as production and distribution of the RH Guide and linkage to the quality assurance system at the regional and district levels, are now the focus and keys to the success of Phase 2.
Strengthening Preservice Midwifery Education in Ghana: Achievements and Phase 2 Expansion Plans

INTRODUCTION

This report documents the Phase 1 implementation of an intervention for family planning (FP) and safe motherhood (SM) preservice education at midwifery schools in Ghana, and the recommended strategy for expansion of the program. It describes the initial intervention, the progress of the program during two years of implementation and the outcomes as of August 2000.

OVERVIEW

Reproductive Health and Family Planning in Ghana

The most recent revision of the 1969 population policy in Ghana demonstrates the commitment of the Government of Ghana (GOG) to population issues as an integral part of its development program. Despite this commitment, Ghana’s population of 16.9 million represents a doubling of the population since 1970. With a 3% annual rate of natural increase, the population is expected to double again in the next 23 years. The revised population policy (National Population Council 1994) outlines general strategies to reach a number of targets by the year 2020.¹

In recent years, much progress has been made toward these targets. The 1998 Demographic Health Survey (DHS) showed a marked improvement in many areas related to FP and population. The total fertility rate decreased from 5.5 in 1993 to 4.6 in 1998, and modern contraceptive use increased from 10% to 13%. These improvements, however, fall short of the goals set forth in the 1994 population policy, and do not address the amount of unmet need for services in the country. The 1998 DHS found that 23% of Ghanaian women had an unmet need for contraceptives to space or limit births. Moreover, the high level of maternal mortality indicates the need for expanded access to and improved quality of antenatal, labor and delivery (L&D) and postnatal care services (Ghana Statistical Service Division and Macro International, Inc. 1999).

Although Ghana has shown some encouraging signs of progress toward reaching the government’s population policy goals, national FP and SM programs need further strengthening to reach desired objectives. Program efforts must address the unmet demand for high quality services. To this end, the GOG has supported, among other strategies, the strengthening of training in FP, reproductive health (RH) and SM for healthcare providers.

¹ Targets set include: reducing the annual population growth rate from 3% to 1.5%, reducing the total fertility rate of 5.5 children per woman (Ghana Statistical Service Division and Macro International, Inc. 1994) to 3.0, increasing the use of modern contraceptive methods from 10% (Ghana Statistical Service Division and Macro International, Inc. 1994) to 15% and reducing the maternal mortality ratio from 220 maternal deaths per 100,000 live births to 55.
Midwifery Education in Ghana

There are ten midwifery training schools (MTS) in Ghana, and two types of programs. Two schools (the MTS in Kumasi and Korle Bu in Accra) have 1-year programs for state registered nurses (SRNs). The other eight midwifery schools offer 2-year programs for enrolled nurses (ENs) and community health nurses already practicing in the health system. The 2-year program covers anatomy and physiology for antenatal, puerperium, L&D and postnatal care (the first year focuses on normal care; the second covers abnormal care). Students follow a schedule of a 1-month class followed by a 2-month clinical rotation. By the end of the first year, when students are in normal L&D, they receive two weeks of FP training, so that they can offer it in their practices. (It is recommended that every pregnant woman have a FP counseling visit and choose a method before she leaves the hospital after delivery.)

The GOG has focused on training ENs as midwives to put more midwives into the healthcare system, especially for practice in peripheral/rural areas. Nurses attending 2-year schools are, on average, about 40 to 45 years old. In each school year, most schools have approximately 50 students, with one intake every November. It is known that these women have limited academic skills. They are not used to writing or reading in English, so their ability to express themselves in that language is somewhat limited.

Ghana is changing to the semester system with credits available for each semester finished. The SRN program will be six semesters long; upon successful completion a diploma will be awarded. ( Afterwards, an additional two years of study is required to receive a Bachelor of Arts/Bachelor of Science degree.) If a SRN then goes on to midwifery school, it is to a 1-year program.

JHPIEGO’s Work in Ghana

JHPIEGO assists the GOG to achieve population and maternal-child health (MCH) service improvement goals primarily through strengthening training systems. Within the results framework of the United States Agency for International Development (USAID)/Ghana’s, JHPIEGO’s activities contribute to the achievement of Strategic Objective 3, Improved Family Health, with an Intermediate Result (IR) of Increased Use of RH Services. Supporting this IR are four Sub-Results: Increased Demand for RH Services, Improved Quality of RH Services, Increased Access to RH Services and Improved Policies for RH Services. (See Figure 1.)

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2 The schools are: Korle Bu MTS, Accra (Greater Accra); Komfo Anokye Teaching Hospital MTS, Kumasi (Ashanti); Koforidua MTS (Eastern); Atibie MTS (Eastern); Ashanti Mampong MTS (Ashanti); Offinso–Maase MTS (Ashanti); Hohoe MTS (Volta); Berekum MTS (Brong Ahafo); Jirapa MTS (Upper West) and Bolgatanga MTS (Upper East).

3 They will be changing to a September intake in 2001 with the new semester system.
By focusing on strengthening preservice and inservice training in Ghana, JHPIEGO contributes to the second Sub-Result, *Improved Quality of RH Services*. JHPIEGO also supports dissemination of RH protocols and policies in the preservice arena, contributing to the fourth Sub-Result, *Improved Policies for RH Services*.

JHPIEGO’s collaboration with the Ministry of Health (MOH) in Ghana to strengthen a national inservice FP training system began in the late 1980s. Since 1995, this program has been financed by donors and managed by the MOH. Although there are numerous inservice training programs in RH topics (FP, SM, protocols, counseling), targets set in the 1994 revised population policy are still not being reached. One strategy for reaching the targets is to expand training efforts into the preservice arena to ensure that new service providers have the necessary basic skills in FP/RH and SM before being posted following graduation.

**THE PRESERVICE REPRODUCTIVE HEALTH/FAMILY PLANNING AND SAFE MOTHERHOOD INTERVENTION**

Because nurses and midwives play a vital role in the provision of FP/RH and SM services throughout the country, the MOH, with assistance from JHPIEGO and USAID/Ghana, has focused on strengthening preservice education for nurses and midwives who provide FP/RH and SM services. The strategy is to strengthen preservice classroom and clinical training components in the ten MTS in Ghana.

The preservice strategy uses a phased approach to working with the midwifery schools. During Phase 1 (FY99 and FY00), efforts focused on the midwifery training schools (MTS) in Kumasi and Koforidua, as well as some work with Korle Bu Hospital in Accra. During Phase 2 (FY01), the program will be expanded to an additional three schools (Attibie, Mampong and full implementation at Korle Bu), and the remaining five midwifery schools will be prepared for their... 

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4 JHPIEGO initially focused preservice efforts on Ghana’s medical schools; however, the medical schools needs assessment showed that 40% or more of graduate physicians did not stay in the country (Smith et al 1997). At the same time, it was determined that nurses and midwives make up the majority of providers responsible for RH services in the country, thus the focus of the program shifted to those cadres.
participation in Phase 3. During Phase 3 (FY03), the program will focus on preservice education improvements in the remaining five midwifery schools, as well as continuing followup to the original five. This phased-in approach allows for lessons learned in each phase to shape the expansion in the next phase.

**PHASE 1: KUMASI AND KOFORIDUA MIDWIFERY TRAINING SCHOOLS**

For Phase 1, it was decided to work with one 1-year MTS and one 2-year MTS. Kumasi MTS, a 1-year school, was chosen because it is smaller and more manageable than the other 1-year school, Korle Bu. Koforidua MTS, a 2-year school, was chosen because it is a national SM training center and thus already had a certain level of training within its structure. Table 1 shows the demographics of these two schools.

**Table 1. Midwifery Training School Demographics for Koforidua and Kumasi**

<table>
<thead>
<tr>
<th></th>
<th>Koforidua MTS</th>
<th>Kumasi MTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Students</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Total Number of Graduates/Year</td>
<td>30</td>
<td>80</td>
</tr>
<tr>
<td>Total Number of Faculty</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Approximate Faculty/Student Ratio</td>
<td>1/27</td>
<td>1/16</td>
</tr>
</tbody>
</table>

**Needs Assessment for Phase 1**

To clarify the needs of the training institutions and guide program planning, JHPIEGO, in conjunction with the Human Resources Development Division (HRDD), MCH/FP in the MOH and the Nurses and Midwives Council of Ghana (NMC), conducted needs assessments at the Kumasi and Koforidua MTS. Two assessments at both schools examined the schools’ FP/RH and SM preservice training efforts.

In the first needs assessment, the needs of the training institution and its related clinical training sites were assessed. In the course of the assessment, administrators, tutors and preceptors were encouraged to examine the linkages between classroom and clinical settings, and students were able to talk about their learning experiences and voice concerns about their skills. When the needs assessment team returned to conduct the second assessment (which was focused on SM), they found improved communication in the form of regular meetings between the clinical preceptors and the tutors.

Interestingly, the assessments prompted an unexpected change intervention. The presentation of the results of the first needs assessment was an important first step in Phase 1 of the program work. Stakeholders’ meetings brought together key people in the field of FP/RH and SM training in Ghana. Following the second assessment (on SM), JHPIEGO debriefed and presented its recommendations to the MOH. MOH counterparts were able to provide immediate feedback to further refine the strategy. By using the findings of the needs assessments in this

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5 The needs assessments were conducted by content area, FP/RH first followed by SM:
way, the assessments shifted from just data collection for program planning to a change intervention, where important stakeholders were informed of and motivated to make improvements in training programs. The first steps identified were the development of competency-based materials and training updates for tutors and preceptors.\(^6\)

Several key findings demonstrated specific needs for improvement in preservice FP/RH and SM training:

- Nursing students were usually trained in maternal and RH topics by midwifery tutors (thus, improved training for midwifery tutors would also benefit preservice nursing students).
- There was a gap between the classroom training and the clinical training, where classroom faculty did not know what was being taught to the students in the clinical training sites. Students were learning practices in clinical sites that were contradictory to what they learned in the classroom. In some cases, classroom information was out of date.
- No criteria had been established to guide schools in determining where students went for their clinical training. This situation meant that students were often placed in settings where there were not enough women coming for services, or where quality of care was substandard.
- A majority of the sites used for clinical placement showed poor infection prevention (IP) practices.
- None of the schools had all of the equipment needed for competency-based FP/RH/SM training. In particular, schools needed anatomic models for students to practice on, especially in light of low caseloads.
- Many tutors had not provided clinical services for several years.
- There was a lack of awareness on the part of both clinical instructors and tutors regarding the National RH Policy and Service Protocols.
- Three-fifths (62\%) of midwifery students and 64\% of nursing students at the schools felt that the training they received was inadequate for them to competently and confidently provide FP services after their FP/RH clinical practice.

\(^6\) The needs assessments identified that the midwifery school curriculum had just been revised and approved. Thus, the identified need was for a clinical practice guide and related materials.
Program Implementation

The findings from the needs assessments had distinct implications for programming. Interventions to strengthen preservice programming were developed with stakeholder input and implemented at Phase 1 schools. There were two major interventions:

♦ Clinical instructors (preceptors) and tutors were updated in clinical knowledge and skills, and their teaching and supervisory methods were strengthened.
♦ Competency-based training materials—e.g., the *RH Classroom and Clinical Activity Guide for Training Midwives* (known as the RH Guide)—were developed and introduced.

Ninety-one clinical instructors and tutors were trained in 1999; most were midwives (96%) connected to the two institutions. Most of the midwives trained came from health centers and clinics, hospitals and teaching university hospitals (85%), while the rest came from midwifery and nursing schools (11%). They represented 33 service delivery points associated with the Kumasi and Koforidua nursing and midwifery schools.

The RH Guide is composed of four modules (antenatal care, L&D, prenatal care and FP) based on the National RH Policy and Service Protocols. It includes checklists, learning guides, case studies and other learning resources to guide students in skills acquisition during the clinical placements. (The tutor/preceptor version includes additional information on how to use the RH Guide with students.)

Development of the RH Guide was a collaborative process involving the two schools, HRDD, MCH/FP, NMC and the key stakeholders. The draft RH Guide has been disseminated to Kumasi MTS and Koforidua MTS and to the related clinical sites where midwifery students receive clinical instruction. Followup of the implementation of the guide was conducted in the 1999–2000 academic year to examine the usefulness and application of the guide, and to identify how best to package, distribute and pay for the guide.

ASSESSING THE EFFECT OF PHASE 1

Followup visits were conducted (September 1999, March 2000) to assess the training of preceptors and tutors and the implementation of the RH Guide, and to make recommendations for the Phase 2 expansion. These visits were supplemented with field visits by an evaluation expert and program staff. The findings from followup visits come from the routine program monitoring conducted by the MOH with support from JHPIEGO (September 1999, March 2000). The assessment visits consisted of both observations and interviews by the teams examining the areas of focus in the RH Guide. Followup visits at the MTS and clinical sites assessed preceptor and tutor performance, skills, knowledge and retention/application of skills after training. Approximately 60% of those trained were seen at followup visits. Approximately 28% of those trained were followed up two or more times.

Two forms were used to capture the findings of the team on these followup visits: the observation and interview guide and the summary of feedback session. (See Table 2.)
The findings from the followup visits were then synthesized across content areas.

**FINDINGS FROM PHASE 1**

One purpose of the followup visit was to examine the performance of the tutors and preceptors and improvements at the clinical sites. The assessment team also looked for evidence of the RH Guide’s impact—both how extensively it had been used and how effective and useful it was for both providers and students.

**Improvements in Quality of Care**

The observations indicated appreciable improvement in quality of practices in the clinical sites and in the skills of preservice nursing and midwifery students, due in part to this intervention and use of the RH Guide.

The followup team visited 19 clinical sites where midwifery students are trained. The bulk of these were wards in hospitals (42%), while 8% were health centers, 6% were clinics and 3% were health posts.

The observation and interview guide documented areas of clinical care provision, which showed notable improvement. IP practices (especially handwashing), and use of the partograph were the most improved areas. Improvement in the quality of care at clinical sites is shown below in Table 3.
Table 3. Areas of Clinical Care Showing Improvement

<table>
<thead>
<tr>
<th>Area of Clinical Care</th>
<th>Improvement in Quality of Care</th>
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<tbody>
<tr>
<td></td>
<td>n=33</td>
</tr>
<tr>
<td>IP: Decontamination and sterilization</td>
<td>24</td>
</tr>
<tr>
<td>IP: Handwashing</td>
<td>17</td>
</tr>
<tr>
<td>IP: Use of personal towels/alcohol rubs</td>
<td>4</td>
</tr>
<tr>
<td>IP: Appropriate disposal of used syringe</td>
<td>2</td>
</tr>
<tr>
<td>IP: Running water available</td>
<td>2</td>
</tr>
<tr>
<td>Use of partograph</td>
<td>11</td>
</tr>
</tbody>
</table>

Findings from followup visits showed that the skills of the nursing and midwifery students had improved as well. Almost half of the students said they had improved their skills as a result of using the RH Guide. Skills specifically mentioned included improved use of the partograph and improved physical and vaginal examinations. Increased interest on the part of the students was also noted. Details of the improvement in students’ skills are listed in Table 4 below.

Table 4. Improvement in Nursing and Midwifery Students’ Skills

<table>
<thead>
<tr>
<th>Skills/Areas Showing Improvement</th>
<th>Improvement in Quality of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=33</td>
</tr>
<tr>
<td>General improvement due to use of the RH Guide</td>
<td>15</td>
</tr>
<tr>
<td>Use of the partograph</td>
<td>3</td>
</tr>
<tr>
<td>Physical and vaginal examinations</td>
<td>3</td>
</tr>
<tr>
<td>Counseling/client relations</td>
<td>2</td>
</tr>
</tbody>
</table>

Improvements in the midwifery students’ skills are not as marked as the improvements in the quality of care given by the preceptors. These results are expected because the initial effect of the newly trained clinical preceptor would be an improvement of the type of care they provided to their clients. The next effect would be the change in student performance as they are coached by the preceptors.

Improvements in Communication Between Schools and Clinical Training Sites

An area needing continued attention is the collaboration between the schools and the clinical training sites. There must be a stronger link between the classroom and the clinical site so that the students’ theoretical knowledge is supported by appropriate clinical procedures. To do this, the clinical sites need formal learning objectives for the students, visits from tutors to assure that the learning process is on track and a means of assessing the students’ skills in the subject areas. In the needs assessment, this classroom/clinical link was shown to be an area of weakness for many clinical sites and schools.

The usual standard for monitoring clinical sites is for tutors to go to the site to observe during an all-morning visit. The tutors from each MTS claim that there is a routine for visits to the clinical sites, but there is no documentation indicating how regularly these visits happen.
According to reports of the clinical staff, in 24% of the facilities there has been an increase in the frequency of visits or interactions between the tutor and the clinical site. Twenty-four percent of the sites reported no change, and 18% of sites indicated that more frequent visits were needed. Although 3% commented that the quality of the interaction between the school and the clinical site had improved, another 3% reported that the quality of this interaction needed improvement.

**Improvements Due to the Reproductive Health Guide**

**General**

The RH Guide received strong positive feedback from students, tutors and clinical instructors. One of the most frequently mentioned improvements was the students’ use of the guide during times in the clinic setting when there were no patients (21%). Tutors felt that practices at the clinical sites were being updated because the students had the RH Guide modules with them and were using them. Clinical instructors reported improved confidence in their own skills because the guide covered the standard practices they were supposed to demonstrate to the students.  

**Access to and Use of the Reproductive Health Guide**

In both of the Phase 1 schools, the students have had access to the school’s copies of the RH Guide modules. In one institution, the head of the midwifery school photocopied the guide so that each study group (6 to 7 students) would have access to at least one copy. Some students photocopied the guide to have copies of their own. Although there was no specific question on this topic, it was mentioned in 46% of the observation guides. Many students would like to be able to have the modules to take with them after they graduate, but limited cash flow for many of them is a factor that should be considered when decisions are made about how to package the guide. Recently, a few medical students and medical schools have requested copies of the guide.

At Koforidua, one of the tutors has adapted the guide for the 10-week obstetrics clinical placement of nursing students (in the nursing curriculum FP is taught in both public health and obstetrics).

**Tutor/Preceptor Use of the RH Guide**

Tutors and preceptors are pleased with the guide. One clinical preceptor said it has helped the students learn better what to do in the clinic. The students can conduct their own practice, and therefore have better experiences in the clinical setting.

The Koforidua MTS clinical preceptors reported that they frequently used the guide’s case studies, and found them more useful than the role plays for discussing key issues and concepts.

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7 In the needs assessment, students often scored higher than clinical instructors on knowledge questions because many clinical instructors had not had inservice training to refresh their knowledge and skills.

8 At Koforidua, it cost 78,000 cedis (US $19) per guide to copy/bind all four modules. By comparison, the Myles textbook is 40,000 cedis (US $9.65).

9 Two students at Koforidua, for example, asked for everything to be bound together in one large book to have one manual to take with them. Other students at one clinical site liked the individual modules because they could fold them back when using them in the exam room.
with students. They also found it useful to supplement the case studies with examples from their own experience.

Forty-six percent of clinical training sites reported that students have a copy of the RH Guide (photocopied, in many cases). Nine percent of the sites reported that there is better interaction between students and clinical staff, with more sharing of ideas and more cordiality and 3% reported a general improvement in staff attitude. In two sites, students were being assessed using the guide.

**Student Feedback**

Students reported that the guide—backed up by national protocols—gave them the confidence to promote better practice at the clinical site.\(^{10}\) When students are in unfamiliar territory (i.e., working in a clinic on the types of cases not covered in their coursework), the guide helps them to understand better what they are seeing, what they should be doing and how they should be doing it.

**Feedback from the National Level**

According to feedback from the NMC, the guide is already considered essential for both the midwifery curriculum and the competency-based licensure examination. The guide has helped standardize the procedures for every area in which students need competence. It has also guided both students and clinical preceptors in planning for clinical training.

**Improvements in Classroom-Clinical Site Linkages**

One mechanism to improve classroom/clinical collaboration was implemented in March 2000. A clinical experience form ([Reproductive Health [Midwifery] Training: Student Introduction to Clinical Experience](#)) was designed to cover five different topic areas.\(^{11}\) The tutor fills out the form to indicate what has been covered in the classroom and what areas should be covered in the clinical training. The student takes the form to the clinical site and gives it to the preceptor. The form then helps the clinical preceptor track the student’s performance in selected skill areas over the course of the clinical rotation. It also identifies specifics for students needing additional skill practice after the clinical placement is completed. Because the student knows she will be assessed on specific key skills and will actually be observed in a practical session, the tutors believe she will make the extra effort to learn the skill correctly and do it well.\(^{12}\) The students can also use this form to remind the clinical trainer of the training exposure they should receive. (The tutors believe that this form could be useful for the nursing school as well but it would need to be adapted both for the shorter clinical block and the changed emphasis on the skills.)

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10 In one visit, students reported that there was a guide in every examination room and this was verified when the postnatal guide was indeed found there. There was evidence of it being used on a regular basis.

11 **Reproductive Health (Midwifery) Training: Student Introduction to Clinical Experience:**
   - L&D
   - Antenatal Care
   - Neonatal Care
   - Postnatal and Neonatal Care
   - FP

12 The tutors at Koforidua were enthusiastic about using the clinical experience form, which they helped the key trainers develop.
PHASE 2 INTERVENTION

JHPIEGO and the MOH are now expanding the preservice training program to three additional schools: Atibie, Mampong and full implementation at Korle Bu. The decision to expand the program was based on the success at the Kumasi and Koforidua locations, the interest of the new schools and the support of the MOH.

Several factors made these schools the best choices for the Phase 2 expansion. One was the already-existing network between the new schools and the pilot schools. Atibie is in the same region as Koforidua, and Mampong is in the same region as Kumasi. The two sets of schools are geographically proximate and have a precedent of working together. These factors are important because an essential part of the expansion will be support and input from the Phase 1 schools through a “buddy” system or mentoring relationship. To foster these relationships, the schools are expected to exchange faculty and give support to other relevant activities to help institute the improvements that the Phase 1 schools have made.

ISSUES TO BE CONSIDERED FOR PHASE 2 AND BEYOND

Expansion to Additional Schools: In the long-term expansion to cover all ten schools, some schools, especially Northern region schools, have very few tutors. Training sessions requiring the attendance of all tutors need to be reconfigured so that these schools are not drained of their teaching capability for the duration of the training. The option of having some tutors and preceptors from the Phase 3 schools attend the upcoming training events is being considered.

Dissemination of the RH Guide: It is clear that the guide is quite popular with students, tutors and clinical instructors, and those in the Phase 1 schools have found it very valuable. The NMC suggested that the guide be introduced in all regions at the same time because all students need to be able to perform the same procedures in the practical part of the licensing examination beginning this year. The NMC recommended a 3-day workshop to introduce the guide throughout the country to supplement the regular networking meeting among the schools.

Costing of the RH Guide: Cost-recovery is also an important consideration for the guide. It would be ideal to develop a distribution system, in which at least some of the costs are recovered, to add to the sustainability of producing the guide. JHPIEGO will work with the schools to examine issues such as student willingness and ability to pay for the guide, production of the guide all in one unit or in separate units and the impact of unit-centered production on cost. This background information will be synthesized to help establish pricing that is both affordable to the users of the guide (primarily students) and also lends itself to the sustainable production of the guide within the existing system.

The potential effect the new semester system will have on student clinical practice time: It is possible that the new scheduling, which may reduce the total amount of time in the academic year, may cut into the clinical practice time and could thus affect students reaching competency.

Role of the Regional and District Health Management Teams: Another important factor influencing the expansion is the need for stronger linkages between the preservice institutions and the Regional Health Management Teams (RHMTs) and the District Health Management Teams (DHMTs). These linkages are critical for ensuring (through their quality assurance role) that quality services are provided by all providers—even those in training—as well as for sustainability of the preservice intervention.
DISCUSSION

Followup visits supplemented by additional field visits have demonstrated the success of the intervention to strengthen preservice midwifery education. It has addressed the major findings of the needs assessments, is progressing as planned and is ready for expansion.

Key successes include:

♦ Improved provider skills and practices at clinics where practical training occurs
♦ Strengthening of tutor/preceptor classroom and clinical training skills
♦ Integration of classroom and clinical learning experiences
♦ Increased preceptor, tutor and student confidence in their respective roles

Guided clinical practice through the RH Guide is cited as the key to these successes.

Just as important, unanticipated effects include:

♦ **Marked improvement in quality of care at selected clinical sites.** As a result of the training provided to clinical preceptors, women are receiving better quality care. Preceptors have begun to:
  - Train colleagues at their respective sites in improved clinical practices (especially those related to IP)
  - Introduce new practices at the clinical site (e.g., appropriate decontamination, consistent handwashing by staff, screening and draping of clients to enhance privacy/dignity)
  - Develop job aids (charts and posters for walls) to remind and guide colleagues and students in appropriate clinical practices

♦ **Tutors and preceptors are continuing to enhance and improve their practices and clinical skills on their own.** They review and use checklists and learning guides in training students. One midwife reported that review of the learning guide for suturing an episiotomy showed her that she had been using an incorrect technique for suturing. The step-by-step guide enabled her to correct and improve her technique. The principal of one of the midwifery schools has brought two clinical preceptors on as part-time faculty and is arranging for all tutors to spend regular time working in the maternity units to ensure that their clinical practices are updated. (This practice is very important in light of the needs assessment findings documenting that the majority of midwifery tutors had not provided clinical services for years.)

♦ **Reinforcement/dissemination of National RH Policy and Service Protocols is occurring at clinical sites.** Because the RH Guide is based on Ghanaian national protocols, students are learning the national standards from the beginning of their training (and not after habits based on outdated practices have been formed).

♦ **Expansion of the midwife’s role as midwives and physicians engage in more meaningful dialogue.** Previously, at many clinical sites, physicians were admitting and managing all women in labor and allowing midwives to perform only routine nursing care (e.g., taking blood pressure and vital signs). As physicians have seen midwives practicing skills, and as they learn more about the preservice program intervention, they are becoming more confident in the decision-making skills of midwives. One physician mentioned that the
midwives can now consistently use the partograph to monitor a woman’s progress in labor. He trusts that labor is progressing normally and knows that he must act immediately if the midwives alert him that labor is no longer progressing normally (i.e., the plot of cervical dilation crosses the action line).

**RECOMMENDATIONS**

♦ **Linkages between the schools and clinical sites**: The MTS faculty recommend that the MOH and stakeholders determine how to ensure that clinical preceptors remain in their posts for at least two years. The schools need that commitment and consistency to ensure the efficiency of having trained preceptors in the places where students are in clinical training. One suggestion was to work with the matrons to identify preceptors who would be interested in teaching to ensure that the best clinicians are trained.

♦ **Further develop peer support system among schools**: This development will be critical for the success of preservice improvements at the new schools. The buddy system will formalize a way for the new schools to learn from the experience of the Phase 1 schools.

♦ **Develop a supervisory monitoring system for work with the RHMTs and DHMTs**: This is an area where support will be critical because the integration of the RHMT/DHMT is a relatively new focus and because the adoption of the program by district-level colleagues is key to the success and sustainability of the program.

♦ **Continue to work on improved communication between preceptors and tutors**: Although improvements have been seen in the communication between the Phase 1 schools and their related clinical sites, this communication needs to be further developed in the Phase 1 schools and emphasized in the new schools. It remains one of the most important areas of improvement in preservice education as well as one of the most feasible.

♦ **Determine cost-recovery issues for the RH Guide and distribute**: All of the feedback on the guide indicates that it is a very useful tool for improved training and learning of FP/RH/SM topics. At this stage, it is critical to determine a packaging and pricing system for the guide, which will be both sustainable and affordable for students, faculty and institutions.

♦ **Re-examine clinical practice time once the semester-system schedule has been formalized**: The schools and their related clinical sites will need guidance on how to reconfigure clinical practice time.

**CONCLUSION**

Phase 1 of the preservice midwifery strengthening intervention with its 2-pronged focus has made documented achievements in only two years. The RH Guide, an important job aid, is ensuring that quality services are being provided in accordance with national guidelines and has given confidence to all involved in basic training of midwives—tutors, preceptors and the midwives in training. The program has begun expansion, with Phase 2 instituting a buddy system between Phase 1 and Phase 2 schools to maximize the efficiency of scarce training resources. Phase 3 will then encompass the remaining MTS, covering the entire country.
National-level changes are also supporting the expansion. All stakeholders—MOH, NMC, the training institutions, donors and international implementing agencies—are addressing key issues including how to produce and distribute the RH Guide. Linking the schools into the supervision/quality assurance system at the regional and district levels will support sustainability of the intervention.
REFERENCES


Notes From the Ghana Files:

♦ Discussions with key trainers in Ghana–10 April 2000
♦ Meeting with R. Gyang, NMC–11 April 2000
♦ Notes from a visit to Atibie MTS–12 April 2000
♦ Notes from a visit to Koforidua MTS–12 April 2000
♦ Debrief with J. Amuzu, K. Lazelle, USAID/Ghana–14 April 2000