



Federal Ministry of Health



**USAID**  
FROM THE AMERICAN PEOPLE

**HUMAN  
RESOURCES  
FOR HEALTH**

# STRENGTHENING HUMAN RESOURCES FOR HEALTH IN ETHIOPIA

COMPENDIUM OF RESEARCH PUBLICATIONS  
AND PRESENTATIONS, 2012 - 2018



This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the Cooperative Agreement AID-663-A-12-00008. The contents are the responsibility of Jhpiego and do not necessarily reflect the views of USAID or the United States Government.

Contact Information: For any questions or detailed information regarding this document, please contact Firew Ayalew, Jhpiego Research Team Leader, at [firew.ayalew@jhpiego.org](mailto:firew.ayalew@jhpiego.org)

## INTRODUCTION

The Strengthening Human Resources for Health (HRH) is a five-year (2012 – 2018) health systems strengthening project that is working to build local capacity for the development of systems to **manage** human resources for health, **improve the quality** of health worker education and training, and develop the **regulatory capacity** required to support accreditation, licensure, and continuing professional development of the health workforce.

The Project is working to implement the following objectives:

1. Improve human resources for health management;
2. Increase availability of midwives, anesthetists, health extension workers and other essential health workers;
3. Improve the quality of training for health workers
4. Conduct program learning and research

Through partnering with the Federal Ministry of Health, Regional Health Bureaus, Professional Associations and other stakeholders, the Project has generated research and evidence to inform the development of policies, strategies and activities to strengthen HRH development, management and regulation.

The following studies have been conducted:

Period	Study Title	Objective
December 2012	Baseline Study	Assess the existing human resources management capacity and performance and capacity of midwifery, anesthesia and health extension worker pre-service training institutions.
June 2013	Competency Assessment of Graduating Midwifery and Anesthesia Students in Ethiopia	Determine the quality of anesthesia and midwifery education at baseline
December 2013	Task Analysis of Midwives, Health Extension Workers and Anesthetists	Identify needs for strengthening the education, practice and regulation of these cadres.
June 2014	Job Satisfaction and Factors Affecting Health Worker Retention in Ethiopia's Public Health Sector	Identify the factors and approaches to workforce job satisfaction and retention that will assist the Federal Ministry of Health and Regional Health Bureaus in Ethiopia to make evidence-based policy and management decisions regarding the successful recruitment, job satisfaction and retention of workers in the public health sector
Jan – Feb 2015	Assessment of Performance of Midwives in Provision of Care during Labor, Childbirth and Immediate Postpartum Period in Tigray and Amhara Regions, Ethiopia	Assess performance of midwives in provision of care during labor, childbirth and immediate postpartum period in public hospitals and health centers of Amhara and Tigray regions
March 2015	Health Professionals Regulation Study	Generate evidence on the existing FMOH and FMHACA's health professionals' regulation practices in Ethiopia
March 2015	Task Analysis of Medical Doctors, Health Officers, Nurses, Pharmacy Professionals, Medical Laboratory Professionals	Identify needs for strengthening the education, practice and regulation of these cadres.
July – Sept 2016	Competency Assessment of Graduating Midwifery and Anesthesia Students in Ethiopia	Determine the quality of anesthesia and midwifery education at endline

## DATA USE FOR DECISION MAKING

All too often, data sit in reports, on shelves, or in databases and are not sufficiently used in program development and improvement, policy development, strategic planning, or advocacy<sup>1</sup>. The HRH Project has ensured that data generated from research and program learning is effectively shared with key stakeholders, and disseminated in local, regional and international meetings, conferences and publications (see compendium of publications and abstracts below).

Figure A below highlights examples of how findings from the Project research have been used to strengthen program implementation and address existing HRH related challenges in the country.

---

1 Nutley T. Improving Data Use in Decision Making – An Intervention to Strengthen Health Systems. Measure Evaluation, Aug 2012. Available at <https://www.measureevaluation.org/resources/publications/sr-12-73>

# DATA USE FOR DECISION MAKING



# **COMPENDIUM OF ABSTRACTS**



**Study Title:** Competency Assessment of Graduating Midwifery and Anesthesia Students in Ethiopia

**Publication**

**Title:** How well does pre-service education prepare midwives for practice: competence assessment of midwifery students at the point of graduation in Ethiopia

**Published in:** BMC Medical Education, 2015. 15:130

**Authors:** Tegbar Yigzaw, Firew Ayalew, Young-Mi Kim, Mintwab Gelagay, Daniel Dejene, Hannah Gibson, Aster Teshome, Jacqueline Broerse and Jelle Stekelenburg

**Background:** Midwifery support and care led by midwives is the most appropriate strategy to improve maternal and newborn health. The Government of Ethiopia has recently improved the availability of midwives by scaling up pre-service education. However, the extent to which graduating students acquire core competencies for safe and effective practice is not known. The purpose of this study was to evaluate the quality of midwifery education by assessing the competence of graduating midwifery students.

**Methods:** We conducted a cross-sectional study to assess the competence of students who completed basic midwifery education in Ethiopia in 2013. We interviewed students to obtain their perceptions of the sufficiency and quality of teachers and educational resources and processes. We assessed achievement of essential midwifery competencies through direct observation, using a 10-station Objective Structured Clinical Examination (OSCE). We calculated average percentage scores of performance for each station and an average summary score for all stations. Chi-square test, independent sample t test, and linear regression analysis were used to assess the statistical significance of differences and associations.

**Results:** We assessed 484 graduating students from 25 public training institutions. Majority of students rated the learning environment unfavorably on 8 out of 10 questions. Only 32 % of students managed 20 or more births during training, and just 6 % managed 40 or more births. Students' overall average competence score was 51.8 %; scores ranged from 32.2 % for manual vacuum aspiration to 69.4 % for active management of the third stage of labor. Male gender, reporting sufficient clinical experience, and managing greater numbers of births during training were significant predictors of higher competence scores.

**Conclusions:** The quality of pre-service midwifery education needs to be improved, including strengthening of the learning environment and quality assurance systems. In-service training and mentoring to fill competence gaps of new graduates is also essential.

**Study Title:** Competency Assessment of Graduating Midwifery and Anesthesia Students in Ethiopia

**Publication**

**Title:** Preparing the Health Workforce in Ethiopia: A Cross-sectional Study of Competence of Anesthesia Graduating Students

**Published in:** Education for Health, 29 (1) April 2016

**Authors:** Sharon Kibwana, Damtew Woldemariam, Awoke Misganaw, Mihereteab Teshome, Leulayehu Akalu, Adrienne Kols, Young-Mi Kim, Samuel Mengistu, Jos van Roosmalen, Jelle Stekelenburg

**Background:** Efforts to address shortages of health workers in low-resource settings have focused on rapidly increasing the number of higher education programs for health workers. This study examines selected competencies achieved by graduating Bachelor of Science and nurse anesthetist students in Ethiopia, a country facing a critical shortage of anesthesia professionals.

**Methods:** The study, conducted in June and July 2013, assessed skills and knowledge of 122 students graduating from anesthetist training programs at six public universities and colleges in Ethiopia; these students comprise 80% of graduates from these institutions in the 2013 academic year. Data was collected from direct observations of student performance, using an objective structured clinical examination approach, and from structured interviews regarding the adequacy of the learning environment.

**Results:** Student performance varied, with mean percentage scores highest for spinal anesthesia (80%), neonatal resuscitation (74%), endotracheal intubation (73%), and laryngeal mask airway insertion check (71%). Average scores were lowest for routine anesthesia machine check (37%) and preoperative screening assessment (48%). Male graduates outscored female graduates (63.2% versus 56.9%,  $P = 0.014$ ), and university graduates outscored regional health science college graduates (64.5% versus 55.5%,  $P = 0.023$ ). Multivariate linear regression found that competence was associated with being male and attending a university training program. Less than 10% of the students believed that skills labs had adequate staff and resources, and only 57.4% had performed at least 200 endotracheal intubations at clinical practicum sites, as required by national standards.

**Discussion:** Ethiopia has successfully expanded higher education for anesthetists, but a focus on quality of training and assessment of learners is required to ensure that graduates have mastered basic skills and are able to offer safe services.



buffs  
 $V_0 = 0.5 - 1.5 \text{ ml}$   
30 - 90

60 ml  
H<sub>1</sub> receptor antagonists

- diphenhydramine
- moderate emetic
- chlorpheniramine

ciprofloxacin

**Study Title:** Competency Assessment of Graduating Midwifery and Anesthesia Students in Ethiopia

**Publication**

**Title:** Trainers' Perception of the Learning Environment and Student Competency: A Qualitative Investigation of Midwifery and Anesthesia Training Programs in Ethiopia

**Submitted**

**To:** Nurse Education Today

**Authors:** Sharon Kibwana, Rachel Haws, Adrienne Kols, Firew Ayalew, Young Mi Kim, Jos van Roosmalen, Jelle Stekelenburg

**Background:** Ethiopia has successfully expanded training for midwives and anesthetists in public institutions. This study explored the perceptions of trainers (instructors, clinical lab assistants and preceptors) towards the adequacy of students' learning experience and implications for achieving mastery of core competencies.

**Methods:** In-depth interviews with 96 trainers at 9 public universities and 17 regional health science colleges across Ethiopia were conducted to elicit their opinions about available resources, program curriculum suitability, and competence of graduating students. Using Dedoose, data were thematically analyzed using grounded theory.

**Results:** Perceptions of anesthesia and midwifery programs were similar. Common challenges included unpreparedness and poor motivation of students, shortages of skills lab space and equipment, difficulties ensuring students' exposure to sufficient and varied enough cases to develop competence, and lack of coordination between academic training institutions and clinical attachment sites. Additional logistical barriers included lack of student transport to clinical sites. Informants recommended improved recruitment strategies, curriculum adjustments, increased time in skills labs, and better communication across academic and clinical sites.

**Conclusions:** An adequate learning environment ensures that graduating midwives and anesthetists are competent to provide quality services. Minimizing the human resource, infrastructural and logistical gaps identified in this study requires continued, targeted investment in health systems strengthening.



**Study Title:** Assessment of Performance of Midwives in Provision of Care during Labor, Childbirth and Immediate Postpartum Period in Tigray and Amhara Regions, Ethiopia

### **Abstract**

**Title:** Competence of Midwives in Providing Care during Labor, Delivery and Immediate Postpartum period, in Amhara region, Ethiopia

### **To be**

**Presented at:** The International Confederation of Midwives (ICM) Congress, Toronto, June 2017

**Authors:** Fantu Abebe, Tegbar Yigzaw, Lalem Member, Sharon Kibwana, Firew Ayalew, Ashebir Kidane, Equilinet Misganaw, Desalegn Ademie, Yewulsew Assaye, Girma Shifa

**Background:** Competent and supported midwives can provide essential midwifery care to women of Ethiopia. However, their effectiveness in improving maternal and newborn health outcomes depends on the quality of that care.

**Objectives:** This study aimed at determining competence of midwives in providing labor, delivery and immediate postpartum care and factors associated with midwives' clinical performance.

**Methods:** A cross-sectional study was conducted with an adequate and representative sample, selected using a two-stage cluster sampling procedure. Competence was measured using direct observation by expert midwives employing global rating scale. Inventory of essential resources was done guided by a checklist. Structured interview was also conducted with study participants to assess perceptions of the availability of factors that influence performance. Data were entered to EpiData for cleaning and coding and exported to STATA for analysis.

**Result:** Direct observation of 150 midwives providing intrapartum care found that 16.6%, 71.4% and 12.0% of study participants had unsatisfactory, satisfactory and superior performance, respectively. The inventory of resources found that only small proportions of health facilities had all essential drugs (16.3%), medical equipment (17.3%) and supplies (6.1%). The majority of respondents said that they had standard job aids (62-86.7%), medical equipment, drugs and supplies (76.5-96.7%), and basic infrastructure (66.7%). As high as 55.3% and 26% of respondents, respectively, said they had not received regular quarterly supportive supervision and technical update training in the last two years. Holding a Bachelor's degree (AOR=6.0, 95%CI: 1.3, 33.6) and presence of infection prevention infrastructure (AOR=8.8, 95%CI: 2.2, 34.8) predicted improved performance of midwives.

### **Conclusion and**

**recommendation:** Most midwives provide satisfactory but not high quality intrapartum care. Midwives' performance was impeded by limited availability of essential resources and learning opportunities. We discuss implications of the findings to improving quality of midwifery care and education.

**Study Title:** Task Analysis of Midwives, Health Extension Workers and Anesthetists\*

**Publication**

**Title:** Using task analysis to generate evidence for strengthening midwifery education, practice, and regulation in Ethiopia

**Published in:** International Journal of Women's Health, 2016;8:181-190. doi:10.2147/IJWH.S105046.

**Authors:** Tegbar Yigzaw, Catherine Carr, Jelle Stekelenburg, Jos van Roosmalen, Hannah Gibson, Mintwab Gelagay

**Purpose:** Realizing aspirations for meeting the global reproductive, maternal, newborn, and child health goals depends not only on increasing the numbers but also on improving the capability of midwifery workforce. We conducted a task analysis study to identify the needs for strengthening the midwifery workforce in Ethiopia.

**Methods:** We conducted a cross-sectional study of recently qualified midwives in Ethiopia. Purposively selected participants from representative geographic and practice settings completed a self-administered questionnaire, making judgments about the frequency of performance, criticality, competence, and location of training for a list of validated midwifery tasks. Using Statistical Package for the Social Sciences, Version 20, we computed the percentages and averages to describe participant and practice characteristics. We identified priority preservice education gaps by considering the tasks least frequently learned in preservice, most frequently mentioned for not being trained, and had the highest not capable response. Identification of top priorities for in-service training considered tasks with highest “not capable” and “never” done responses. We determined the licensing exam blueprint by weighing the composite mean scores for frequency and criticality variables and expert rating across practice categories.

**Results:** One hundred and thirty-eight midwives participated in the study. The majority of respondents recognized the importance of midwifery tasks (89%), felt they were capable (91.8%), reported doing them frequently (63.9%), and learned them during preservice education (56.3%). We identified competence gaps in tasks related to obstetric complications, gynecology, public health, professional duties, and prevention of mother to child transmission of HIV. Moreover, our study helped to determine composition of the licensing exam for university graduates.

**Conclusion:** The task analysis indicates that midwives provide critical reproductive, maternal, newborn, and child health care services and supports continuing investment in this cadre. However, there were substantial competence gaps that limit their ability to accelerate progress toward health development goals. Moreover, basing the licensure exam on task analysis helped to ground it in national practice priorities.

\* A similar study was conducted for other cadres, including medical doctors, public health officers, nurses, medical laboratory professionals, and pharmacy professional

**Study Title:** Task Analysis of Midwives, Health Extension Workers and Anesthetists\*

**Publication**

**Title:** Identifying Gaps in the Practices of Rural Health Extension Workers in Ethiopia: A Task Analysis Study

**Submitted to:** BMC Health Services

**Authors:** Firew Ayalew, Girma Temam, Damtew Woldemariam, Catherine Carr, Jos van Roosmalen, Jelle Stekelenburg, Assefa Bulcha, Adrienne Kols, Young Mi Kim

**Background:** Health extension workers (HEWs) are the frontline health workers for Ethiopia's primary health care system. The Federal Ministry of Health is seeking to upgrade and increase the number of HEWs, particularly in remote areas, and address concerns about HEWs' pre-service education and practices. The aim of this study was to identify gaps in HEWs' practices and recommend changes in their training and scope of practice.

**Methods:** A cross-sectional descriptive task analysis was conducted to assess the work of rural HEWs who had been in practice for six months to five years. One hundred participants were invited from 100 health posts in five regions of Ethiopia. HEWs self-reported on 62 tasks on: frequency, criticality (importance), where the task was learned, and ability to perform the task. Descriptive statistics, including frequencies and percentages, were computed for each variable. Task combinations were examined to identify tasks performed infrequently or for which HEWs are inadequately prepared.

**Results:** A total of 82 rural HEWs participated in the study. Nearly all HEWs rated every task as highly critical to individual and public health outcomes. On average, most HEWs (51.5%-57.4%) reported learning hygiene and environmental sanitation tasks, disease prevention and control tasks, family health tasks, and health education and communication tasks outside of their pre-service education, primarily through in-service and on-the-job training. Over half of HEWs reported performing certain critical tasks infrequently, including management of supplies, stocks and maintenance at the facility and management of the cold chain system. Almost all HEWs (95.7-97.2%) perceived themselves as competent and proficient in performing tasks in all program areas.

**Conclusion:** HEWs were insufficiently prepared during pre-service education for all tasks that fall within their scope of practice. Many learned tasks through in-service or on-the-job training, and some tasks were not learned at all. Some tasks that are part of expected HEW practice were performed infrequently, potentially reducing the effectiveness of the Health Extension Program to provide preventive and basic curative health care services to communities. Findings should alert policy makers to the need to review HEWs' scope of practice, update pre-service education curricula and prioritize in-service training modules.

\* A similar study was conducted for other cadres, including medical doctors, public health officers, nurses, medical laboratory professionals, and pharmacy professionals

**Study Title:** Task Analysis of Midwives, Health Extension Workers and Anesthetists\*

**Publication**

**Title:** Education, Practice and Competency Gaps of Anesthetists in Ethiopia: Task Analysis

**Submitted to:** Journal of Perianesthesia Nursing

**Authors:** Sharon Kibwana, Mihereteab Teshome, Yohannes Molla, Catherine Carr, Leulayehu Akalu, Jos van Roosmalen, Jelle Stekelenburg.

**Purpose:** The aim of this study was to assess the needs and gaps in the education, practice and competencies of anesthetists in Ethiopia.

**Methods:** A cross-sectional study design was used. A study tool consisting of 74 tasks was completed by 137 anesthetists who had been in practice for six months to five years.

**Findings:** Over half of the respondents rated 72.9% of the tasks as being highly critical to patient outcomes, and reported that they performed 70.2% of all tasks at a high frequency. More than a quarter of respondents reported that they performed 15 of the tasks at a low frequency. Nine of the tasks rated as being highly critical were not learned during pre-service education by more than one-quarter of study participants, and over 10% of respondents reported that they were unable to perform 5 of the highly critical tasks.

**Conclusions:** Anesthetists rated themselves as being adequately prepared to perform a majority of the tasks in their scope of practice.

\* A similar study was conducted for other cadres, including medical doctors, public health officers, nurses, medical laboratory professionals, and pharmacy professionals

**Study Title:** Job Satisfaction and Factors Affecting Health Worker Retention in Ethiopia's Public Health Sector

**Publication**

**Title:** Factors Affecting Turnover Intention among Nurses in Ethiopia

**Published in:** World Health & Population, 16(2) December 2015: 62-74

**Authors:** Firew Ayalew, Adrienne Kols, Young Mi Kim, Anne Schuster, Mark Emerson, Jos van Roosmalen, Jelle Stekelenburg, Damtew Woldemariam, Hannah Gibson

**Background:** Reducing turnover is essential to address health worker shortages in the public sector and improve the quality of services. This study examines factors associated with Ethiopian nurses' intention to leave their jobs.

**Methods:** Survey respondents (a sample of 425 nurses at 122 facilities) rated the importance of 20 items in decisions to leave their jobs and reported whether they intended to leave their jobs in the next year. Descriptive and inferential statistical analyses were used to identify predictors of nurses' intentions to leave their jobs.

**Results:** Half (50.2%) the nurses said they intended to leave their jobs in the next year. A multivariate analysis identified three significant predictors of nurses' intention to leave their jobs: holding a university degree rather than a diploma (adjusted odds ratio (OR)=2.246, 95% confidence interval (CI)=1.212, 4.163;  $p<0.01$ ), having worked fewer years in the public health system (adjusted OR=0.948, 95% CI=0.914, 0.982;  $p<0.01$ ) and rating the importance of limited opportunities for professional development more highly (adjusted OR=1.398, 95% CI=1.056, 1.850;  $p<0.02$ ).

**Conclusion:** Interventions to increase the retention of nurses at public health facilities in Ethiopia should target young nurses who are completing their compulsory service obligation and nurses with a university degree. They should include both non-financial and financial incentives. Study Title Assessment of Performance of Midwives in Provision of Careduring Labor, Childbirth and Immediate Postpartum Period in Tigray and Amhara Regions, Ethiopia

**Study Title:** Job Satisfaction and Factors Affecting Health Worker Retention in Ethiopia’s Public Health Sector

**Publication**

**Title:** Perceptions of health managers about factors that affect job satisfaction and intention to stay or leave their current jobs among public-sector health workers in Ethiopia: A cross-sectional study

**Submitted to:** Human Resources for Health

**Authors:** Shelemo Shawula, Tegbar Yigzaw, Ummuro Adano, Firew Ayalew, Damtew Woldemariam, Asfaw Demissie, Mesfin Kifle, Zeine Abosse

**Background:** Health managers in decentralized health systems usually have wide decision space to influence health workers’ job satisfaction and retention. If they understand the factors that affect health workers’ job satisfaction and retention, they can use the decision space to influence job satisfaction and retention positively. We examined the perceptions of health managers about the factors that affect health workers’ job satisfaction, turnover intention and how their organizations were performing against job satisfaction factors.

**Methods:** We conducted a cross-sectional study from May 28 9 to June 14, 2014. A total of 245 health managers from randomly selected 108 hospitals, 127 health centers and 12 management structures were included in the study. Data were collected using structured questionnaires.

**Results:** More than 81% of managers agreed that 17 of 18 factors or management practices that affect employees’ job satisfaction are important to their context as well. Three factors were rated by 94% of the managers as the most important were “placing people in jobs for which they are suited,” “valuing and respecting each worker,” and “creating a climate in which people get along and have friendships at work.” The majority (90-95%) of managers also reported that their organizations were performing very well or adequately against these three factors. While more than 95% considered salary and various financial allowances as significantly important for health workers’ decisions to stay in or leave their jobs, only 21% of them saw their organizations were able to offer fair salary packages. Ninety three percent (93%), 81%, and 80% of the health managers, respectively, considered “low pay,” “high cost of living,” and “poor access to higher education” were the most important factors affecting employees’ decisions to stay in or leave their jobs.

**Conclusions:** Health managers clearly indicated that management practices, incentive packages and work climate affect health workers’ job satisfaction and turnover intention. Most of the managers indicated their organizations had limitations in paying fair salaries and benefits and creating conducive work climate. The perceptions of health managers should be part of the policy dialogue and decision-making process in the health sector.

**Study Title:** Health Professionals Regulation Study

**Abstract**

**Title:** Generating an evidence base on health professionals' regulation in Ethiopia: a cross sectional study

**Presented at:** World Health Professions Regulation Conference, Geneva, May 2016

**Authors:** Samuel Mengistu, Manuel Kassaye, Tegbar Yigzaw, Damtew Woldemariam, Daniel Dejene, Firew Ayalew, Fitsum Girma, Sharon Kibwana, Mastewal Kerebih and Heran Gerba

**Aim:** The study was intended to generate evidence on the current health professionals' regulation system, procedures and practices in Ethiopia and inform design of possible interventions to strengthen health professionals regulation.

**Methods:** A nationwide, cross-sectional study with mixed qualitative and quantitative methods was conducted in March 2015 using a semi-structured questionnaire. A total of 554 multidisciplinary health professionals practicing from a sample of 102 public health facilities (22 health centers and 80 hospitals) participated. Data was gathered from 31 key informants representing stakeholders at national, subnational and facility levels. Quantitative data was analyzed using descriptive statistics using SPSS 20 statistical software while thematic analysis principles were used to analyze qualitative data.

**Results:** All 554 sampled health professionals (52.5% male, 47.5% female) participated in the study. Percentage of respondents registered was 67.5%. The major motivator (39%) among registered professionals was requirement for employment. Among professionals required to renew their professional license (n=246), the percentage who renewed their license was only 27.2% (n=67). Practice outside defined professional scope was reported by 22.0% of respondents. Unavailability of qualified professionals was reported as a major reason for practicing beyond scope; 65.6% (80/122).

**Conclusion:** Evidence shows that current HRH regulation procedures and practices do not conform to set standards. Ethiopia needs to revamp its professional registration and, licensure systems and procedures to ensure fitness-to-practice monitoring mechanisms, compliance to standards of registration, licensure, and scope of practice. In addition, institutional and human capacity development is required to enforce and monitor compliance to standards.

Study Title Assessment of Performance of Midwives in Provision of Care during Labor, Childbirth and Immediate Postpartum Period in Tigray and Amhara Regions, Ethiopia

**Study Title:** Assessment of Performance of Midwives in Provision of Care during Labor, Childbirth and Immediate Postpartum Period in Tigray and Amhara Regions, Ethiopia

### Abstract

**Title:** Competence of Midwives in Providing Care during Labor, Delivery and Immediate Postpartum period, in Amhara region, Ethiopia

### To be

**Presented at:** The International Confederation of Midwives (ICM) Congress, Toronto, June 2017

**Authors:** Fantu Abebe, Tegbar Yigzaw, Lalem Menber, Sharon Kibwana, Firew Ayalew, Ashebir Kidane, Equilinet Misganaw, Desalegn Ademie, Yewulsew Assaye, Girma Shifa

**Background:** Competent and supported midwives can provide essential midwifery care to women of Ethiopia. However, their effectiveness in improving maternal and newborn health outcomes depends on the quality of that care.

**Objectives:** This study aimed at determining competence of midwives in providing labor, delivery and immediate postpartum care and factors associated with midwives' clinical performance.

**Methods:** A cross-sectional study was conducted with an adequate and representative sample, selected using a two-stage cluster sampling procedure. Competence was measured using direct observation by expert midwives employing global rating scale. Inventory of essential resources was done guided by a checklist. Structured interview was also conducted with study participants to assess perceptions of the availability of factors that influence performance. Data were entered to EpiData for cleaning and coding and exported to STATA for analysis.

**Result:** Direct observation of 150 midwives providing intrapartum care found that 16.6%, 71.4% and 12.0% of study participants had unsatisfactory, satisfactory and superior performance, respectively. The inventory of resources found that only small proportions of health facilities had all essential drugs (16.3%), medical equipment (17.3%) and supplies (6.1%). The majority of respondents said that they had standard job aids (62-86.7%), medical equipment, drugs and supplies (76.5-96.7%), and basic infrastructure (66.7%). As high as 55.3% and 26% of respondents, respectively, said they had not received regular quarterly supportive supervision and technical update training in the last two years. Holding a Bachelor's degree (AOR=6.0, 95%CI: 1.3, 33.6) and presence of infection prevention infrastructure (AOR=8.8, 95%CI: 2.2, 34.8) predicted improved performance of midwives.

### Conclusion and

**recommendation:** Most midwives provide satisfactory but not high quality intrapartum care. Midwives' performance was impeded by limited availability of essential resources and learning opportunities. We discuss implications of the findings to improving quality of midwifery care and education.

**Study Title:** Assessment of Performance of Midwives in Provision of Care during Labor, Childbirth and Immediate Postpartum Period in Tigray and Amhara Regions, Ethiopia

**Abstract**

**Title:** Are midwives in Tigray, Ethiopia, providing quality care during childbirth and the postpartum period? An Assessment of Competency

**Presented at:** International Federation of Gynecology and Obstetrics/AFOG/SAGO/Burkina Faso Society Conference, Ouagadougou, November 2016

**Authors:** Miruts Goshu, Fantaw Bihonegn, Firew Ayalew, Tegbar Yigzaw, Sharon Kibwana, Hagos Godefay

**Objective:** To assess competence of midwives in provision of care during labor and the immediate postpartum period in public health facilities in Tigray, Ethiopia.

**Methods:** A cross-sectional study design was used to collect data through direct observation of 144 midwives from 57 randomly selected health facilities. Midwives were observed using skills checklists adopted from the essential competencies for basic midwifery practice defined by International Confederation of Midwives. Skills assessed includes rapid initial evaluation of women, history taking, physical examination, use of partograph, assisting the woman to have a safe and clean birth, immediate postpartum care, clinical judgment/decision-making and infection prevention. Multivariable linear regression analysis was used to identify factors influencing competency of midwives.

**Result:** The mean competency score of the midwives was 51.2%; scores ranged from 41% for rapid initial evaluation of women at first contact, to 58.2% for organization, efficiency and team work. The mean competency score for male and female midwives was 56.2% and 49.1% respectively. Being male (coefficient = 5.45, p-value = 0.022), availability of up-to-date job aids (coefficient = 4.38, p-value = 0.04) and recognition of performance (coefficient = 5.75, p-value = 0.005) were significantly associated with competency of midwives.

**Conclusion:** Midwives working in health facilities in the Tigray region were found to have low levels of competency. Efforts should be made to address performance gaps by strengthening pre service education and continuing professional development. Stakeholders should also further explore the role that recognition of individual performance can play towards improving performance and identify specific challenges faced by female midwives.



**Jhpiego Ethiopia Country Office**

Kirkos Sub-city, Kebele 02/03 Wollo Sefer, House No. 693

P.O.Box 2881, Code 1250, Addis Ababa, Ethiopia

Tel.: 251(0) 115-502-124

Fax: 251(0) 115-508-814