

## Nursing and Midwifery Education in Rwanda: Telling our Story

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### Abstract

This article reviewed the development of the education of nurses and midwives in Rwanda. Nursing and midwifery education started with missionaries providing general nursing education and later evolved into the integration of nursing education in public and private schools. The establishment of the Kigali Health Institute in 1996 greatly advanced nursing and midwifery education with the awarding of an advanced diploma (A1) in nursing and midwifery, followed by the bachelor's (A0) and master's degrees in nursing. This increased level of education for nursing and midwifery was supported by the Ministry of Health (MoH) when in 2007, the five Schools of Nursing and Midwifery were tasked with the goal of upgrading the A2 (enrolled nurses) to A1. More recently in 2011, the innovative Human Resources for Health program (HRH) was initiated by the MoH. The HRH program highlights skill transfer from faculty of leading schools of nursing in the United States to the Rwandan faculty. In 2013 all public higher learning institutions, including the Schools of Nursing and Midwifery, merged to form one University of Rwanda, under the Ministry of Education. In collaboration, Rwandan and US faculty have developed eight tracks within the Master of Sciences in Nursing curriculum which will well prepare nurses and midwives for leadership and educator roles in the Rwandan health care system. This stunning progress in education of Rwandan nurses and midwives over the past two decades promises a brighter future for nursing and midwifery as a profession.

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**Keywords:** nursing, midwifery, education, collaboration

### Background

The history of nursing in Rwanda is compelling, as the profession has made great strides in the last 75 years, with notable improvements in the past ten years. Nursing and midwifery have developed into professions that require advanced education and regulated practice. A number of historical events and influences have impacted the practice and the education of nurses.

Nurse training has evolved from very basic secondary school training to advanced diploma, bachelor's degree and master's level education. Nurse training in Rwanda began with specialized training in secondary school, following primary school completion: an A3 nurse had three years of post-primary school training; and an A2 nurse had seven years of secondary school training with a nursing focus. An A1 nurse in Rwanda would have completed primary school with

seven years of specialized training at the secondary level and completed three years in an institution of higher education. The A0 nursing graduate has an educational focus that includes nursing theory and advanced assessment. This nurse will have completed secondary school and has four years of training at the university level Bachelor of Science (BSc). A masters degree will be an eight speciality programme preparing nurses for leadership and specialized care.

### History

In the early 1940s the education of nurses and midwives was primarily designed and implemented by missionaries. The missionary-led nurse trainings were located in different parts of the country, but were well established in Kabagyi in the south and Rwamagana in the east. In 1949, the Kabagyi Diocese started training assistant midwives. The students were primarily young girls who worked closely with

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the sisters caring for the mothers. This training was conducted by the religious sisters and took place at the bedside. A few years later, in 1952, the midwifery nursing training was upgraded to A3, which was designed as a comprehensive nursing program. The School of Nursing in Kabgayi successfully trained nurses and midwives at A3 level for three years. Ten years later in 1962, this program was upgraded to A2, which included components of theoretical teaching and clinical practice. Rwamagana School of Nursing started training Auxiliary Nurses (A3) in 1962 and continued up to 1966, when the school instituted an upgrade and began training nursing graduates to the A2 level. In the 1970s the primary change in nursing education appeared when nursing students were allowed to enter the National University of Rwanda (interestingly this was for only one cohort). Thereafter nurses continued to be trained at A2 level, but in 2004 the quality of services delivered by A2 nurses was considered insufficient by the MoH; therefore, the training of A2 nurses ended in 2007 (Ministry of Health, 2009). Although the training of A2 nurses has stopped, the vast majority of Rwandan nurses are still at this level (Leuchowius, 2014; Ministry of Health, 2013).

In 1996, in order to overcome the challenge caused by the loss of health professionals due to the 1994 genocide against Tutsi, the Rwandan government, through the MoH, in collaboration with the Ministry of Education, initiated the training of A1 nurses, midwives and allied health professionals at Kigali

Health Institute (KHI). The training enrolled both direct intake and upgrading (A2 nurses to A1). The programmes took 3 years, and upon completion, the graduates were awarded an Advanced Diploma in general nursing, midwifery or mental health nursing (KHI, 2010).

According to the Ministry of Justice (2008) which established the codes and laws of the National Council for Nurses and Midwives (NCNM), an A1 registered nurse and midwife, will hold at least an associate degree or its equivalent, with a license to practice in Rwanda without supervision from another nurse.

KHI continued to grow, and in 2006 instituted a four year Bachelor degree in Nursing with two options; Bachelors of Science in Nursing with direct entry or a Bachelor of Nursing Education (2 years) after advanced diploma (KHI, 2010). In 2009 KHI received its first students at the masters level in critical-care nursing (Mukamana, 2012). The MoH, as a visionary leader in the rebuilding of health care for Rwanda, in 2007 initiated the scaling up of the A1 nurses and midwives within five Nursing and Midwifery Schools: Nyagatare, Byumba, Kabgayi, Rwamagana and Kibungo. The enrolled students were trained full time, and in 2012, the MoH implemented a part time study model of innovative E-learning, thus allowing many more students to complete the program of study in all rural communities (Munyemana, 2012). Figure 1 shows the various pathways to becoming a professional nurse or midwife.

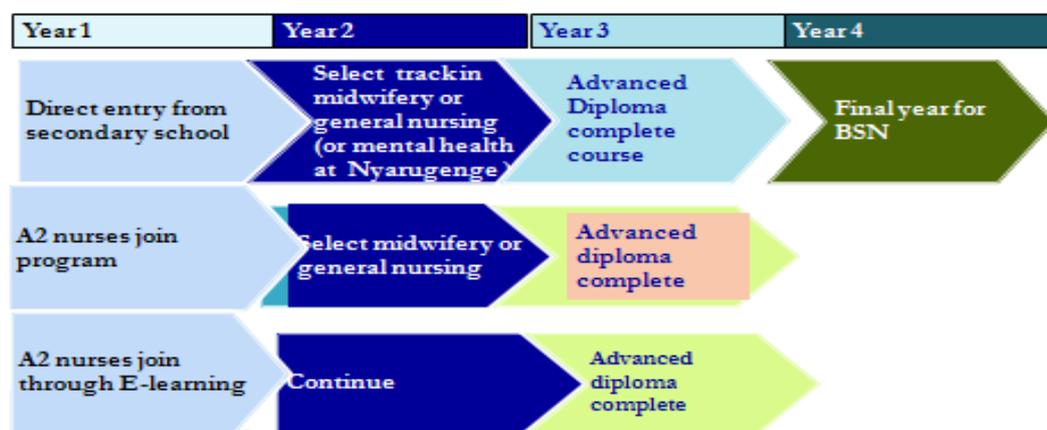


Figure 1. Pathway to nursing /midwifery in Rwanda (Ministry of Health, 2011)

Once the decision was made to upgrade the education level of all nurses and midwives, the issue of the number of qualified faculty had to be addressed. The MoH held consultative meetings on scaling up the education of health professionals, with a focus on the production of qualified teachers.

### **Raising the Quality and Quantity of Nursing and Midwifery Workforce**

In 2011 the MoH's technical working group on Human Resources for Health (HRH) developed a long-term strategy and implemented a plan to increase the quantity of health professionals as well as the quality and diversity of their training. The MoH, in partnership with the Clinton Health Access Initiative, extended invitations to leading universities and academic medical centres from across the USA, for the establishment of an academic consortium (Binagwaho et al., 2013). This unprecedented and innovative HRH program has for its stakeholders: the government of Rwanda, MoH, United States schools of nursing from New York University, Duke University, Howard University, Universities of Texas, Maryland, and Illinois at Chicago, and the University of Rwanda. The program is funded by the US government, the Centers for Disease Control and Prevention, the Global Fund to Fight AIDS, TB and Malaria, and the Government of Rwanda, MoH. Funds flow directly to the MoH, and the MoH contracts with each of the US universities, saving millions of dollars in administrative costs that can then be invested in the program.

This initiative uses the twinning model where US educators partner with their Rwanda counterparts. Goals are set depending upon the departmental needs, personal interests, and the twins' competencies. Over the last three years, one hundred and fourteen foreign nursing and midwifery educators have been appointed by HRH to work in Rwanda. Each of them has committed to at least one full year of teaching in Rwanda. Currently thirty six US nursing and midwifery educators are twins to seventy-two Rwandan college faculty. The twinning model was developed to enhance effective transfer of knowledge and skills.

This HRH program has enabled Rwanda to attract high caliber faculty from the U.S. Institutions (USI) including those with masters and doctoral degrees. Their mentoring and teaching in a collaborative manner have made significant inroads and helped to improve the education of nursing and midwifery students and the clinical care for Rwandan patients.

There are two categories in the HRH faculty: lead-

ership, management, and strategy (LMS) and clinical educators. Faculty in the LMS positions work with Rwandan faculty in education and clinical leadership and management positions such as the dean or directors of schools of nursing and midwifery (SONMs); the Director of the Center for Teaching, Learning and Research of the College of Medicine and Health Sciences; and Chief Nursing Officers in the hospitals. Specialty advisors within this LMS group are primarily in the SONM and they include an E-learning Advisor (providing education on online course development for five district schools of nursing and midwifery), Simulation Advisor (teaching simulation technologies for clinical teaching of faculty and students), Curriculum Advisor and Professional Standards Advisor for nursing and midwifery (designing and evaluating curriculum and addressing policies for accreditation and registration of nurses and midwives), all of whom provide expert guidance and teaching in their designated areas.

The clinical educators work with Rwandan nurses and midwives on clinical education assignments working with students, nurses and midwives in the hospitals. They partner with clinical instructors from the SONM to ensure students have a valuable learning experience in the clinical setting. Numerous in-service trainings for bedside nurses at multiple hospitals is just one example of how clinical educators impact the knowledge and skills of Rwandan nurses and midwives. All of these faculty members provide expert guidance and teaching in their designated areas. For effective skills transfer, and to ensure the sustainability of the program, a twinning model was implemented in which a USI faculty clinical educator is twinned with a Rwanda educator to work together and achieve the goals they have set. Their efforts are geared towards capacity building of Rwandan faculty and practitioners by mentoring, teaching, training, and providing various learning experiences for Rwandan nurses and midwives.

USI faculty members have collaborated with Rwandan educators to develop the Bachelor of Midwifery program and a Masters in Nursing in several clinical specialty areas.

This unique venture is not without its challenges. The most pressing one being that Rwandan schools of nursing have a shortage of clinical instructors and hospital nurses who are prepared to teach students in the clinical setting – limiting the time at clinical teaching sites and mentorship. To overcome this, the program has adopted the MoH model of 20/80, where the college faculty spend 80% of their time

on teaching activities and 20% on clinical care, and the hospital clinicians are responsible to spend 20% of their time teaching and 80% on clinical care as was shown in Rwanda human resources for health program (Rwanda Minister of Health, personal communication, January 25<sup>th</sup>, 2015).

Efforts are also being made by the College of Medicine and Health Sciences along with the MoH to increase the number of faculty. The current nursing and midwifery workforce and the number of students enrolled in schools of nursing and midwifery shows that the targeted workforce will be achieved by 2019 (School of Nursing and Midwifery, 2013, Human resources data. Kigali-Rwanda. Unpublished report).

### Reorganization of Nursing and Midwifery Education

In September 2013, all the public higher learning institutions were combined under one umbrella to form the University of Rwanda. The current School of Nursing and Midwifery is now on six campuses, made up of the five former schools of nursing and KHI under the University of Rwanda, College of Medicine and Health Sciences. The first cohort of the new bridging program for midwives from A1 to A0 was also instituted in 2013. The combined vision in the advancement of nursing and midwifery in Rwanda is demonstrated by the MoH, the Ministry of Education and the University of Rwanda in the recently developed, and soon to be implemented, Masters of Science in Nursing with eight specialty tracks at the College of Medicine and Health Sciences, School of Nursing and Midwifery.

The leadership of the University of Rwanda, the Rwandan Board of Education and the Ministry of Health has spearheaded these important upgrades to the educational opportunities for Rwandan Nurses and Midwives. For PhD studies in nursing, Rwandan nurses and midwives are being educated abroad, mainly in South Africa and Canada. These PhD candidates in nursing are encouraged to return to Rwanda and work, thus strengthening the infrastructure and workforce of professional nursing in Rwanda.

The plans are underway to build by 2019, a Rwandan nurse and midwifery workforce comprising of 5,095 nurses or midwives with Advanced Diploma, 1011 nurses with Bachelors in Nursing or Midwifery degree and 160 nurses with Masters in Nursing degree, who will gradually replace all the US faculty and take their rightful place at the helm of health care in Rwanda (Ministry of Health, 2011).

### Conclusion

Together nursing and midwifery in Rwanda, through education, resource development, and collaboration with the health care team, will continue to be an important foundation in the vision and infrastructure development for the professional care of the population of Rwanda. Rwandan nursing leaders and educators will advocate for nursing within the East African region and globally with innovations in research, education and leadership.

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