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SUPPLEMENT ARTICLE

Preparing the next generation of maternal and newborn health leaders: The maternal and newborn health champions initiatives

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ABSTRACT

A champion in health care can be defined as any health professional who has the requisite knowledge and skills in a relevant health field, who is respected by his/her peers and supported by his/her supervisors, and who takes the lead to promote or introduce evidence-based interventions to improve the quality of care. Jhpiego used a common approach during two distinct initiatives to identify individuals in Africa, Asia, and Latin America and the Caribbean whose expertise in their clinical service area and whose leadership capacity could be strengthened to enable them to serve as champions for maternal and newborn health (MNH). These champions have gone on to contribute to the improvement of MNH in their respective countries and regions. The lessons learned from this approach are shared so they can be used by other organizations to design leadership development strategies for MNH in low-resource countries.

1. Background

Recent reports from UN agencies regarding Millennium Development Goals (MDGs) 4 and 5, which set targets for reductions in maternal and child mortality, have shown that progress has been made in both areas. At the global level, according to WHO data, maternal mortality ratios have declined from 380 to 210 maternal deaths per 100 000 live births between 1990 and 2013 [1]. Similarly, UNICEF reported a reduction in under-5 child mortality rates from 88 to 57 per 1000 live births for approximately the same period [2]. These global trends hide regional disparities, however, with most of the progress being made in Asian and Latin American countries. In Sub-Saharan Africa, for example, maternal mortality ratios remain as high as 510 per 100 000 live births [1], and Sub-Saharan Africa is the only region in which under-5 child mortality has not been cut by half since 1990 [3].

Several challenges have impeded significant progress in the reduction of maternal and newborn mortality in Sub-Saharan Africa [4], including shortages of human resources, poor infrastructure, scarcity of equipment and commodities, and insufficient implementation of evidence-based interventions [5]. Although the number of health workers plays a critical role, the quality of services delivered (resulting from those workers' knowledge, skills, and attitudes) is of equal importance. For example, in a multicountry survey conducted by the Maternal and Child Health Integrated Program (MCHIP)—USAID's flagship maternal, neonatal, and child health (MNCH) program from 2008 to 2014—the mean knowledge score among frontline healthcare workers for the management of pre-eclampsia/eclampsia was just 25% in Kenya [6]. In Tanzania, 95% of partographs, which are intended to be used during labor to monitor and anticipate complications, were completed after delivery [7]. Furthermore, the mean knowledge score for actions to be taken for a retained placenta was 33% in Ethiopia [8], and the mean performance score for woman-friendly care was 58% in Rwanda [9]. These findings suggest that significant knowledge and practice gaps need to be addressed to promote high-quality care and the use of essential interventions that have proven valuable in the reduction of maternal and newborn mortality [10,11].

There are also examples from some low-resource countries showing that besides competent health workers, strong political will along with good leadership in reproductive health are essential elements for the reduction of maternal mortality [6]. As a result, there is an apparent need for providers who possess not only up-to-date clinical skills but also strong leadership skills, and who are well-established and respected within their field of practice. Such healthcare workers should be able to advocate for the use and scale-up of evidence-based interventions [9], engage with decision makers to commit them to update national and subnational policies where necessary, and advocate for increased funding for MNCH. In addition, they should be able to act as role models, demonstrating quality care that is evidence-based and woman-friendly while guiding and inspiring others to do the

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same [12]. Health workers possessing such leadership and clinical skills could be called "champions."

1.1. Champions in health care

The concept of champions originated in the management field with the notion of product champions. Champions and the promotion of innovation are intimately linked. Champions can be defined as individuals who contribute decisively to the innovation process by overcoming resistance to innovations, building support for them, and making sure that they are implemented [13].

There is a distinct role for champions in bringing changes and improvement in health care [14,15]. Various types of healthcare champions have emerged, including executive champions who hold leadership positions within organizations; managerial champions who are responsible for managing clinical departments, wards or units; and clinical champions who are frontline clinicians. All of these champions, however, perform at least the following five functions: they advocate, disseminate knowledge, navigate boundaries between professional groups, build relationships, and achieve consensus.

Based on descriptions from the literature [16–18], a clinical champion can be further defined as a physician, nurse, midwife, physician assistant, or other healthcare professional who has the requisite knowledge and skills in a given discipline, who is respected by his or her peers and is supported by the system hierarchy, and who takes the lead in introducing a new practice or innovation to improve the quality of care. We define a maternal and newborn health (MNH) champion as a specific kind of clinical champion: a health professional (doctor, midwife, nurse) with up-to-date knowledge, practices, and attitudes in MNH (i.e. an expert in his or her respective field of practice), who, through advocacy and action, promotes policies, practices, and programs that will help achieve MDGs 4 and 5 in his or her country and region.

The present article describes two Jhpiego-led initiatives to develop MNH champions in countries with some of the most challenging MNH indicators in the world. We describe the MNH champion development process, identify ways in which the process evolved over time (including differences between the two initiatives), highlight MNH champion contributions through a series of case studies, and discuss lessons learned and challenges encountered.

2. Context and evolution for the champions initiatives

One of the objectives of USAID's flagship Maternal and Neonatal Health Program, which was implemented from 1998–2004 by Jhpiego and partners, was to increase MNH providers' use of evidence-based standards of care, tools, and approaches. To achieve this goal as rapidly as possible, the Maternal and Neonatal Health Program developed a network of experts from Africa, Asia, and Latin America and the Caribbean who could "champion" the inclusion of essential interventions in national policies and in pre-service and in-service education curricula for doctors, midwives, and nurses at all levels of service delivery. This effort, Jhpiego's first MNH champions initiative, was called the "Regional Expert Development Initiative." Forty-three midwives and obstetricians from 18 countries participated over a period of 12 months, receiving continuing professional development activities to ensure that they were proficient in life-saving best practices and advanced clinical training techniques, and that they understood the principles of advocacy for MNH [19]. As their expertise and experience was recognized, many of these champions subsequently fulfilled the Maternal and Neonatal Health Program's expectations for improving MNH in their regions, and they were later called upon to collaborate with the ACCESS Program, the follow-on USAID project that was also awarded to a Jhpiego-led consortium and implemented in 2004–2009. In addition, the champions were involved in MNH projects implemented by other organizations in their respective countries.

Based on the successes and accomplishments of the MNH champions who participated in the Regional Expert Development Initiative, and faced with the need for strong local leadership for MNCH in programs across more than 40 countries, particularly in Africa, the next Jhpiego-led and USAID-sponsored MNCH program, MCHIP, aimed to replicate and improve upon the first initiative and focus on the African region. This new leadership initiative, entitled the "Africa MNH Champions Program," was designed in collaboration with the WHO's Regional Office for Africa, the UNFPA, the West African Health Organization (WAHO), and other regional institutions. As a result of this partnership, WAHO was able to assist with institutional, logistic, and financial support for participants to complement the funding provided by USAID through MCHIP. Funding was provided to the champions for travel expenses to the courses, but they did not receive any other compensation for their participation in the initiative.

The Africa MNH Champions Program was an 18-month initiative that used a modern, evidence-based, "blended learning" (online and face-to-face) approach to build the technical, training, and advocacy capacity of MNH experts from 10 African countries, five Anglophone and five Francophone countries. Champions from each country were grouped into interdisciplinary teams comprised of midwives, obstetricians, and pediatricians, for a total of 30 champions. Due to original selection and attrition, the final composition was 26 and more heavily weighted toward midwives and obstetricians (Table 1). All champions, at the time of selection, were in leadership positions either in their facilities as chief of services and/or as pre-service education faculty. Since commencement of the program, the champions have been putting the knowledge and skills learned into practice at all levels of the healthcare delivery system in their respective countries. All have conducted step-down technical updates for colleagues in their own institutions, and all have been involved in national training workshops and revisions of pre-service and in-service curricula—designed by Jhpiego and partners—either during or following their participation in the program.

3. Development process for both champions initiatives

Some common elements of and key differences between the two MNH champions initiatives are described below.

3.1. Planning and design

Both initiatives were planned during a series of consultation meetings among Jhpiego, its partner organizations, and USAID. Their design was guided by the following principles: (1) involvement of all parties in the selection of countries and candidates; (2) competitive selection of candidates; and (3) ensuring local participation by involving regional organizations and ministries of health as much as possible. To move implementation forward, a "facilitator team" was formed that included senior midwives, obstetricians, and pediatricians, serving as Jhpiego staff or consultants.

3.2. Selection criteria

The facilitator team agreed on selection criteria for the candidates that were based on clinical capacity as well as perceived motivation and leadership skills (Box 1). For the first initiative, an announcement

Table 1
Composition of the Africa MNH Champions Program.

Region	Original composition	Attrition	Final composition
Anglophone Africa	Midwives: 7	Midwives: 1	Midwives: 6
	Obstetricians: 5		Obstetricians: 5
	Pediatricians: 3	Pediatricians: 2	Pediatricians: 1
Francophone Africa	Midwives: 5		Midwives: 5
	Obstetricians: 5		Obstetricians: 5
	Pediatricians: 5	Pediatricians: 1	Pediatricians: 4

Box 1
Selection criteria for MNH champions initiatives.

- Midcareer healthcare professionals (midwives, nurses, or physicians)
- Clinically proficient in provision of maternal and newborn health services
- Currently active in clinical work
- Committed to remaining in clinical practice
- Involved in in-service training or a pre-service education system
- Able and motivated to do self-paced, independent learning
- Recognized as being, or having the potential to be, leaders in the MNH field

for applications was sent through Jhpiego's networks alone; for the second initiative, an announcement was also sent through MCHIP partner country offices as the "MNH Africa Champions Program Concept Note" to WHO, ministries of health, and USAID's and UN agencies' country offices. Once received, candidates' applications were compared against the selection criteria to determine eligibility, and the final decision on champions from those eligible was made by a multiagency selection committee.

Because both initiatives involved multiple activities taking place over a period of 12–18 months, and also because of the high expectations from the facilitator teams, each selected champion was asked to sign an agreement confirming that they would complete the entire program. Champions' supervisors or institutional representatives were also asked to sign agreements allowing the champions to commit to full participation.

3.3. Representative activities

Table 2 shows the types of activities included in both initiatives to bolster champions' clinical, training, and leadership skills. The ultimate goal of these activities was to create a group of proficient clinical trainers with standardized clinical skills who could educate others and advocate for improved MNH in their respective countries and regions. Training materials included those developed by Jhpiego and its partners, such as the WHO manual, "Managing complications in pregnancy and childbirth: a guide for midwives and doctors" [20] and the "Emergency Obstetric Care for Doctors and Midwives Learning Resource Package" by the Maternal and Neonatal Health Program and the Averting Maternal Death and Disability (AMDD) Program of Columbia University's Mailman School of Public Health [21].

Table 2
Representative activities for MNH champions initiatives.

Activity	Objective
Knowledge and clinical skills standardization course	Ensure that champions are familiar with the latest evidence in MNH (including malaria in pregnancy, PMTCT, and quality improvement) and have strengthened their clinical practice skills
Clinical training skills course	Enable champions to serve as master trainers who can effectively train other MNH providers
Leadership and advocacy course	Empower champions to be change agents and advocates for maternal and newborn health
Follow-up visits	Mentor the champions as they transfer new knowledge and skills to their workplaces and implement an action plan for training and advocacy

Abbreviation: PMTCT, prevention of mother-to-child transmission.

3.4. Monitoring and evaluation

Several monitoring and evaluation tools were used to follow up and track the outcomes of the various activities and action plans. These tools included reviews of activity logs, site visits between activities, and—in the second initiative, with its blended learning approach—analysis of the e-learning courses; however, improvement of knowledge and skills of individuals trained by the champions was not measured. Because the majority of champions were already leaders in their respective facilities or institutions when they were selected for the initiatives, they were well-positioned to carry out all activities and use the periods in between activities to implement action plans, organizing training sessions on specific themes and supervising implementation of best MNH practices. In addition, because many of the facilities in which champions practiced were large-volume clinical practice sites for medical and midwifery preservice education programs, students at these sites were exposed to the champions' new knowledge and skills, and the sites themselves therefore benefitted early and consistently from the latest evidence-based care.

3.5. Key differences between the initiatives

Although both MNH champions initiatives contained the same essential elements, there were some key differences, outlined in Table 3, that were largely due to the regional focus of the Africa MNH Champions Program and the increased use of technology and rapid emergence of online learning platforms by the time that initiative was implemented. Before each of the face-to-face workshops held for the Africa MNH Champions Program, online content was delivered to champions in modules, including one on basic emergency obstetric and newborn care (BEmONC) and one on effective teaching skills, via the Qstream platform, which uses a self-paced, spaced, learning approach [22]. By giving champions online courses to cover this content prior to the workshops, the workshops were able to cover in-depth technical information and clinical skills more rapidly. For the Africa MNH Champions Program, email communication was also possible to conduct follow-up monitoring and evaluation, and a Community of Practice, or online site to share resources and public discussions, was established to facilitate continued exchange of experiences and resources. Some participants even exchanged communications through social media. Neither of the initiatives provided additional funding to increase services or improve upon those services that were currently provided in each of the champions' facilities.

4. Case studies from the first MNH champions initiative

The MNH champions participating in both initiatives have accomplished a great deal in their workplaces, countries, and regions. A survey of the champions from the Regional Expert Development Initiative indicated that many were able to practice the skills learned in the trainings and thus felt more competent and confident in their use. Some went on to become particularly notable and successful leaders. While champions' facilities did not receive equipment, commodities, or funding, champions became advocates to their ministries of health and facilities to improve MNH services. The case studies below are drawn from that first initiative and highlight the contributions of these champions in their respective countries or regions.

4.1. Case study 1: Implementing best practices locally, educating regionally, advocating globally

One obstetrician/gynecologist from Africa who was the head of an obstetrics and gynecology unit at a large teaching hospital joined the champions initiative with a keen interest in learning and implementing new evidence-based approaches to improve health outcomes at her hospital. She immediately began using the knowledge that she gained

Table 3
Key differences between the two MNH champions initiatives.

	MNH Regional Experts Initiative	Africa MNH Champions Program
Selection criteria	No technology requirements	Possess a computer and have computer skills
Composition	Midwives and obstetricians	Teams of midwives, obstetricians, and pediatricians (ideally 1:1:1)
Geographic distribution of participants	Anglophone, Francophone, and Spanish-speaking participants from 3 continents: Africa, Asia, and Latin America and the Caribbean	Limited to Anglophone and Francophone Africa
Training strategy	Face-to-face only	"Blended learning" approach (online and face-to-face)
Communication among the participants during and after participation in the program	No formal mechanisms	Community of Practice, email, social media

to make several changes that are still in place in the hospital today. For one, she reorganized the "factory assembly-line approach" in the prenatal clinic to create a more personalized, women-friendly service, allowing each woman to be seen by one nurse in a screened-off area instead of by many providers in a public area. Second, she introduced an emergency triage system that was especially beneficial for her busy service because it acted as a referral site for a large catchment area and treated many women with complications on a daily basis. Finally, she worked with her hospital's administration to advocate for a more consistent supply of drugs to treat pre-eclampsia/eclampsia and postpartum hemorrhage—the greatest causes of maternal mortality in her country.

Although the hospital's maternity unit remains small and crowded, it is still used as a clinical training site because of the evidence-based practices that were supported by the champion and implemented there, in areas such as infection prevention, active management of the third stage of labor, magnesium sulfate for pre-eclampsia/eclampsia, and newborn resuscitation. The champion has gone on to facilitate regional trainings in these, and additional, best practices, and she has also worked at the global level as a contributor to a WHO technical working group and a member of the editorial review committee of the *African Journal of Reproductive Health*.

4.2. Case study 2: Leading the way, bringing hope to underserved areas

Another Africa champion, a nurse-midwife who participated in the initiative as she began leading an organization for private midwives, has influenced the expansion of her organization from approximately 30 members working in private maternity practices in seven of the country's 30 regions to 75 members across 18 regions. Since the organization's founding, its members have assisted at nearly 10 000 births, targeting under-served communities where other health professionals often do not want to work. These committed midwives give women the all-important option of a skilled provider for their pregnancy and birth at an affordable cost. As the reach of the organization's members has grown, the champion continues conducting in-service trainings for members to build skills in infection prevention, use of the partograph, and newborn resuscitation. She also carries out supportive supervision as funds allow.

4.3. Case study 3: Sharing a passion for evidence-based practice, respectful care, and innovation

One active champion from Latin America, an obstetrician/gynecologist who has worked throughout the region with several international nongovernmental organizations to strengthen MNH, is now an assistant professor of obstetrics and gynecology at the national medical school. Since his participation in the champions initiative, he has advocated to the ministry of health in his country to adopt the WHO Integrated Management of Pregnancy and Childbirth (IMPAC) guidelines for use in all health facilities to curb unnecessary "routine" practices such as episiotomy and cesarean delivery. His own facility has been able to drastically decrease the rates of these practices, from 90% to 16% for episiotomy and from 50% to 24% for cesarean delivery—rates that still hold true today. Through the many talks that he has given throughout the region, he has educated other providers about the respectful maternity care principles that were highlighted for him during the champions initiative. Another of his ongoing advocacy efforts is the promotion of a modified insertion technique used to reduce expulsions of the postpartum intrauterine contraceptive device by straightening the uterine–cervical angle postpartum implantation. This idea originated during the time that he was involved in the initiative. He has collaborated with programs in India and the Philippines to develop training materials and train providers using his approach.

4.4. Case study 4: Demonstrating the broad applicability of leadership training

The first champions initiative reached Southeast Asia as well. One obstetrician/gynecologist from Jakarta, Indonesia, was the deputy chief of medical services at a private hospital when he participated in the initiative and has gone on to apply what he learned, particularly the training and leadership skills, in a variety of other regional and global positions in MNH. For example, he has led trainings for several international nongovernmental organizations in Indonesia and Afghanistan; served as a principal researcher for a World Bank Project; and worked with the University of Aberdeen's project on maternal and newborn near misses in Indonesia. He is now the director of his private hospital, which is a partner on a USAID-supported project for MNH.

5. Lessons learned from the second champions initiative

The second initiative, the Africa MNH Champions Program, had similar accomplishments to the first (Table 4) and improved upon the first by involving multiple partners in soliciting candidate applications, organizing champions as interdisciplinary teams of midwives, obstetricians, and pediatricians, and utilizing technology to increase opportunities to transfer learning. Still, the initiative encountered a number of challenges that might reflect universal issues to be considered when designing any MNH champions program.

5.1. Country selection

The selection of countries from which the initiative could solicit candidates was necessarily driven by stakeholder preferences. The terms for the Africa MNH Champions Program required selection of five Anglophone and five Francophone countries, and all of the partners supporting USAID in designing the program—the WHO's Regional Office for Africa, UNFPA, WAHO, and other regional institutions—had different and competing suggestions for those 10 countries. Ultimately, USAID made the final selection from a list of its own identified priority countries. Individuals from a number of countries not included in that final selection expressed a strong desire for their country to be part of a future champions initiative, indicating the limited number and geographic diversity of candidates because of country selection as well as the high perceived value of the program.

Table 4
Selected accomplishments of the Africa MNH Champions Program.

Accomplishment	Role of champion	Recipient of champion's support
Participated in national reproductive health meetings	Invited representative	National ministry of health
Involved in establishing midwifery regulations	Consultant	National ministry of health
Developed MNH guidelines or training materials	Facilitators/consultants	National ministry of health, local and international nongovernmental organizations
Contributed to drafting of reproductive health law	Team Leader	National ministry of health
Facilitated trainings on emergency obstetric care, pre-eclampsia/eclampsia	Trainers	Teaching hospitals
Facilitated trainings on the Helping Babies Breathe approach	Course organizers, trainers	Teaching hospitals
Coordinated regional trainings for basic emergency obstetric and newborn care	Regional coordinator, lead trainer	District facilities
Introduced evidence-based practices	Organizer, facilitator	Teaching hospitals

5.2. Participant selection

Participant selection occurred on a tight timeline, likely affecting the number and quality of candidates from selected countries. The pool of candidates from the Francophone region was larger and more balanced in cadre than that of the Anglophone region because of the stronger existing networks in the Francophone region that facilitated outreach to more contacts. Even though there was a requirement that candidates possess and be able to use a computer, the candidates chosen were not necessarily ideal for the online learning methods that were central to this initiative. For many, internet connectivity was poor and often irregular, and comfort with online learning varied from a beginning level of competence to expert, with similar ranges of competence experienced within each cadre. As a result, those who would have benefitted most from the program might not have been reached.

5.3. Involvement from partners and national ministries of health

Partner involvement was strongest in West Africa, with support from WAHO that even included travel funds. Champions' activity logs document a high level of participation by UNFPA, UNICEF, WHO, and a number of USAID-funded programs. Early country and regional engagement seemed to facilitate a higher level of partner participation. In some countries, champions teams included those employed by the national ministry of health or other government ministries, or the facilitators team was able to introduce teams to the relevant ministries and discuss champions' potential as leaders and advocates. Those countries experienced strong early successes during and after the initiative as champions were asked with increasing frequency to participate in national or subnational strategies, trainings, assessments, and programs, as evidenced by the champions' activity logs. Engagement of partners and national ministries at the start of the initiative, including selection of champions with connections to the ministries, therefore appeared to lead to greater potential for immediate activity and use of the champions' skills.

5.4. Individual and team participation

Despite agreements signed at the beginning of the initiative committing champions to full participation, participation was varied and appeared to depend on previous experience with similar programs, geographic proximity to other team members and activities, and overall team cohesion. Teams with champions located in the same city generally had an easier time coordinating their work and calling on each other for support. Additional on-site follow-up between activities would have been useful to increase participation and improve team integration but was not possible because of budget limitations. In addition, the initiative was not designed to measure improvements in knowledge and skills of those trained by champions—evaluations that would have been useful to determine the impact these initiatives had on MNH services. The four champions who dropped out of the initiative ostensibly did so because of personal circumstances, but it is possible that they did so because of logistic difficulties and challenges working with their team. The most successful teams were able to leverage their identity as a cohort of champions to influence national health policies, initiate regional mentoring programs, and introduce evidence-based care in teaching hospitals. Participation in the initiative garnered respect for and lent credibility to each champion's opinions, but their collective endorsement appeared to build even greater momentum for broad changes in national health systems.

5.5. Adaptation to online activities

Particularly given the connectivity and other technology challenges experienced by some of the champions, completion of the Qstream modules was high, with completion rates of 80% and 97% on the BEmONC and Effective Teaching Skills modules, respectively. As expected, modules that were translated into French had higher completion rates from the Francophone group. All 26 champions in the initiative successfully enrolled in the Community of Practice, but few made use of it, citing barriers that included lack of time, logistical issues with registering and obtaining new passwords, and ongoing connectivity difficulties. Redundancy with other resource sites and discussion boards may also have contributed to lack of use. For many champions, internet connectivity was irregular even at work sites, and few had internet access at home. Approximately 25% of participants funded their own internet use. For online activities to be successful in a champions initiative, they must be readily available and at least as accessible as in-person activities.

6. Conclusion

These two Jhpiego-led MNH champions initiatives have used similar approaches that can provide a foundation for future efforts in capacity-building and leadership development in MNH. Despite the challenges that come with multicountry initiatives, the investment was worth it in the light of what the experts/champions have accomplished collectively and individually. However, a more rigorous and long-term evaluation of the impact of these initiatives should take place before expanding the approach.

Conflict of interest

The authors have no conflicts of interest.

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