

# **Strengthening Pre-Service Education for Family Planning Services in sub- Saharan Africa**

**By Amanda Puckett**

### **Acknowledgements**

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## **Abstract**

**Objectives:** To examine how pre-service education institutions in sub-Saharan Africa are providing family planning training. **Methods:** Literature search of pre-service education family planning training and key informant interviews with experts in the field of family planning pre-service education in sub-Saharan Africa. **Results:** There is a paucity of information available in current literature highlighting specific aspects of pre-service family planning training; however, valuable data were collected via the key informant interviews. Pre-service education institutions in sub-Saharan Africa are training students to provide family planning counseling and service provision, but the extent and quality of the training vary between and within countries. **Conclusion:** Pre-service training institutions should strengthen family planning training so health workers are better equipped to provide essential family planning services.

## **Background**

Reproductive health and family planning programs play an important role in the health of a population. Bolstered by the landmark 1994 International Conference on Population and Development (ICPD) in Cairo, the international health community now recognizes that family planning programs must go further than simply aiming to reduce population growth, ease poverty, and address health and education inequities; family planning must also include the reproductive and sexual needs and rights of individuals. However, despite the enthusiasm of the ICPD, family planning strengthening efforts and funding for family planning programs have dropped on the lists of international development priorities. (1) Donors have failed to integrate and expand their support for family planning and reproductive health as was envisioned at the Cairo conference. (2) Cleland notes, "Most governments in poor countries have appropriate population and family-planning policies but are receiving little encouragement and insufficient funds from international and bilateral donors to implement them with conviction." (1, pp2) Funding levels have drastically dropped since the boom of fiscal family planning support in the 1980s, and current programs are failing to keep pace with the developing countries' growing needs for family planning support. (1) The 2010 Millennium Development Goals report indicated that aid for family planning, as a proportion of total aid, fell from 8.2 percent in 2000 to 3.2 percent in 2008. (3) Experts agree that in order to reap the benefits of family planning, commitments and investments by international donors, as well as country governments should be scaled up.

Family planning programs need to be strengthened and supported the most in sub-Saharan Africa where modern contraceptive use is very low and unmet need for family planning very high. One study indicates that only 18 percent of married women in sub-Saharan Africa report using a modern method. (4) According to Demographic Health

Surveys, 29 to 31 sub-Saharan African countries report levels of unmet need for modern methods exceeding 20 percent, while 19 countries reported levels in the high 30 to 49 percent range. (4) A 2010 World Health Organization bulletin specifically highlighted the stagnation of family planning in sub-Saharan Africa, focusing on the disparities between the significantly lower use of modern contraceptive methods in West Africa when compared with East African countries. (5) These inequities are illustrated in 2006 Demographic Health Surveys in Mali and Uganda, in which current use of any modern contraceptive method in Mali was 6.2 percent compared with 15.4 percent in Uganda. (6,7)

Robust health systems with strong leadership from local governments are important in supporting the provision of family planning service delivery. Supportive policies and sufficient fiscal resources allocated for family planning service delivery also enable family planning services to effectively address client needs. Other aspects that contribute to quality family planning service delivery include service sites' infrastructure, the availability of family planning commodities and organized supply chains.

Appropriately trained health workers are one of the most basic building blocks needed to ensure healthy communities. It is important that service delivery sites are staffed with the sufficient number of health workers who are trained to provide quality family planning counseling and services. The gap between the need for more health workers and the number of health workers providing even basic services to communities is enormous, especially in sub-Saharan Africa. (8, pp24) With only 10 percent of the world's population, Africa suffers greater than 24 percent of the global burden of disease but has access to a mere 3 percent of the global health workforce with less than 1 percent of the world's financial resources. (9)

Key to providing quality health care service delivery in all areas including family planning, particularly with such bleak health worker shortages, is leveraging current

resources to ensure high-quality health workforce education. Pre-service education, in-service training and continuing professional development (CPD) are the educational building blocks of health workforce development. Pre-service education is higher institutional learning before a health worker becomes professionally certified and enters the workforce. (10) For the purposes of this paper, pre-service education refers to medical, nursing and midwifery schools. In-service training programs are used to update provider knowledge and skills, introduce new pharmaceutical or clinical protocols, and improve reporting and management. (11). CPD or continuing education is the process of systematic learning allowing health professionals to update and enhance their skills and address their career and educational goals. (12)

Of the three pillars of workforce development, pre-service education maximizes scarce resources put into global health the most by providing a strong educational foundation for a longer period of time for future health providers. (13) However, severe deficiencies such as a shortage of qualified faculty and limited training resources exist in sub-Saharan African health professional schools. Not only do schools need to scale-up and produce more health workers to meet shortages, they should ensure high-quality health worker education that is aligned with community needs. (13) A report by the Lancet Commission highlights gaps and inequities in health professional education, both between countries and within countries. The report cites systematic problems including: mismatch of competences to population needs; poor teamwork; gender stratification of professional status; narrow technical focus in teaching without broader contextual understanding; imbalances in the professional labor market; and weak leadership in improving health system performance. (14)

The need to improve pre-service education as part of health systems strengthening is becoming more evident as was seen in the closing statement at the January 2011 Second

Global Forum on Human Resources for Health in Bangkok. Included in the outcome statement was a declaration highlighting major gaps in human resources for health. “In many countries, particularly in Africa and complex emergency settings around the world, education and training capacity has to increase to match the growing demand for health personnel. Although supply is not a constraint everywhere, countries with shortages are encouraged to exploit the full range of public policies including inter-country collaboration, that influence supply and demand for the labor force, enhance pre-service training through the adoption of emerging best practices, and ensure that poor and marginalized people get equitable access to quality services.” (15)

Together, health worker shortages, weak health systems and inadequate training for health professionals create the perfect storm hindering quality delivery of family planning and other health services in sub-Saharan African countries.

### **Objectives**

The objective of this paper is to explore how family planning is taught in pre-service health professional institutions in sub-Saharan Africa. This paper underscores the need and importance of strengthening family planning education of future health workers by highlighting salient themes from a literature search and key informant interviews. Key research questions include:

- Are health professional schools currently training doctors, nurses and midwives to provide family planning services?
- To what extent is this training adequate so that health professionals are equipped to deliver high-quality family planning services?
- What are the institutional gaps in providing family planning education?
- What are the challenges in providing high-quality family planning training in pre-service education in sub-Saharan African health professional schools?

- How can family planning training be improved?

Information and data are compiled from published journal articles, “gray literature” and eight key informant interviews from experts in the field of family planning and pre-service education in sub-Saharan Africa.

The paper seeks to highlight what is known about various aspects of family planning training in several sub-Saharan African countries and identify major gaps in high-quality training that hinder effective family planning counseling and service delivery. Analyzing data collected from the literature search and key informant interviews, this paper puts forth concrete recommendations for strengthening family planning training in pre-service institutions in sub-Saharan Africa. These recommendations are intended to guide policy makers and health professional school leaders in improving family planning training in sub-Saharan African health professional schools.

### **Methodology**

For the purposes of this paper, pre-service training institutions are university-based or affiliated schools of medicine, nursing and midwifery. These training programs must be nationally accredited and meet national and international standards with specific learning objectives, a course curriculum, and competencies that students must obtain before course completion. (16)

In order to properly address the research questions, two methods were employed to inform the content of the paper. First, an extensive literature search was conducted to identify articles pertaining specifically to family planning and pre-service education in sub-Saharan Africa. The search was limited to documents published after 1995. In conducting the literature search, several search engines and organizational websites were used including but not limited to: Google Scholar, the World Health Organization, the World Bank, the Global Health Workforce Alliance, UNFPA, and the International Planned



Parenthood Federation. Key search terms included: pre-service education; health professional schools; family planning programs; family planning training; and sub-Saharan Africa. A search of gray literature was conducted online and in person at IntraHealth International and IPAS, both international non-profit organizations (NGOs) in Chapel Hill, North Carolina. "Gray literature" is defined as a broad body of materials not easily found through conventional publishing channels. This includes research, reports and assessments from government and non-profit resource materials. (17)

In addition to the literature search, eight key informant interviews were conducted with experts in the field of family planning and pre-service education in sub-Saharan Africa. Participants were recruited based on their experience in the following technical areas: family planning pre-service and in-service training; family planning curriculum reform; capacity building of pre-service education institutions including family planning provision; gender expertise in family planning programs; and pre-service family planning education leadership in sub-Saharan Africa. Experts at IntraHealth International, an NGO with over 30 years experience in health worker training and health systems strengthening, suggested several interviewees for the paper. Most of the key informant interviewees are current or former staff at IntraHealth International. Once candidates were contacted about contributing to the paper and agreed to participate, they were sent consent forms to sign before the interview took place. All interviews were conducted in person or via Skype. Interviews were tape recorded for transcription purposes only. The research project received exempt status from the UNC-Chapel Hill Institutional Review Board.

Findings from the literature search yielded a paucity in the data specifically discussing key issues in family planning training in sub-Saharan African pre-service educational institutions. In conducting the literature search, a large body of evidence supporting the importance of pre-service education in sub-Saharan Africa was found in

many forums. Also prevalent was a consensus calling for improved family planning services. However, very little data was found specifically linking pre-service education with family planning in sub-Saharan Africa. Noteworthy were a few articles highlighting family planning pre-service education success stories and several manuals detailing how to train students and health providers on aspects of family planning counseling and service provision. Due to the lack of sufficient and detailed information, the key informant interviews were used to fill the gaps and supplement what was found in the literature search. Content discussed in the interviews included: current family planning pre-service education practices; family planning curricula in pre-service education institutions; family planning training during the clinical practicum; the importance of gender in family planning pre-service training; pre-service institution linkages with other schools, hospitals, health centers and the community; and challenges in ensuring quality family planning training.

### **The landscape of current Family Planning Pre-Service Education in sub-Saharan Africa**

Pre-service education for family planning service varies from country to country in sub-Saharan Africa. Even within a country, family planning and other subject training can differ from school to school. Also notably dissimilar is the family planning training content in public institutions compared with private institutions and faith-based schools. Despite the location or ownership, family planning education in schools is most effective if schools employ trained faculty, have the necessary educational resources and garner support from governments and stakeholders.

As a whole, most sub-Saharan African medical, nursing and midwifery schools offer family planning training, but the extent, quality and time allotted are varied. However, most experts interviewed agree that the institutions offer insufficient training for family planning. Many schools still consider family planning a minor health topic and current approaches are inadequate to prepare students to offer high-quality family planning

counseling and service provision. (18) There is a consensus from many of the experts interviewed that existing family planning training is too theoretical, didactic, lacks depth and inadequately prepares health professionals to offer family planning services. These experts agree there is a need for frequent updating of family planning training so as to keep pace with technological advances.

Since there have been few assessments of family planning training in pre-service sub-Saharan African training institutions, it is difficult to cite exactly how many hours of family planning training students are receiving. A few examples are highlighted in the data from the key informant interviews, which illustrate family planning training in Malawi, Zimbabwe and Mali. In Malawi, the curriculum was updated in 2010 to increase family planning training from 20 to 30 hours. Though the shift in Malawi has been positive, other countries' family planning training has lost steam and a significant place in curricula. In Zimbabwe, for example, the robust family planning training programs in the mid-1980's, which included a four-week family planning module, has since been substantially reduced. Other countries such as Mali have very weak family planning programs in most public pre-service training schools, with limited time allotted and poor curricula focused for family planning training.

Regardless of the country, many institutions' tutors and teaching staff are insufficiently trained to educate students about family planning counseling and service delivery. Noteworthy is the lack of training to provide instruction of the most up-to-date contraceptive advances. Key informant interviews indicated that attention and funding for pre-service family planning in health professional schools has been reduced as other initiatives such as HIV/AIDS have taken precedence, especially in southern Africa.

### ***Family Planning Counseling***

Counseling is an essential part of family planning training. In service delivery, good quality counseling leads to client satisfaction, allowing clients to make their own decisions about family planning use. (19) Students need to learn effective communication skills for family planning counseling. It is important that students are trained to not only discuss various methods of family planning services, but that health professional students understand the sensitivities and complexities of family planning counseling. As health providers, students may encounter the complexities associated with providing family planning services including gender-based violence; challenges with couples counseling; users hiding their use of contraception; misunderstandings of modern family planning methods; and religious and social stigma accompanying family planning. In addition to offering counseling skills, students must learn how to create a comfortable atmosphere for family planning users, present family planning information clearly, respect the values and attitudes of family planning clients, listen to and observe clients, and encourage a safe dialogue on the family planning needs of clients. (20)

The key informant interview data concludes that in most sub-Saharan African pre-service health professional schools, the training on counseling skills is inadequate. Interviewees indicate that family planning counseling training is lumped in with general counseling content areas and the intricacies of family planning in counseling are left unexplored. Though students may get to observe family planning counseling during their clinical practicum, there are limited opportunities for students to practice counseling, even in role-play scenarios with other students.

Several guides and handbooks have been created to help service professional provide improved family planning counseling services such as the EngenderHealth's Integrated Counseling for Reproductive Health. (21) Though comprehensive and useful in

addressing needs for family planning counseling, training guides and handbooks are only truly valuable if they are disseminated and used by faculty, tutors and preceptors. One area of concern identified in the interviews for pre-service education, is that useful tools are disseminated to in-service delivery sites through donor-funded in-service trainings, therefore failing to reach students in pre-service training institutions. Though dissemination to in-service delivery sites is important, an appropriate balance is needed to ensure both students and current health workers have access to family planning tools such as updated training guides and handbooks.

### ***Education on Contraceptive Methods and Technologies***

Students are exposed to various contraceptive methods in pre-service training institutions; but according to the key informant interviews, some courses do not sufficiently cover all family planning methods. Though taught at different levels and using varying curricula, students generally learn about contraceptive implants, combined oral contraceptives, barrier methods such as male and female condoms, progestin-only injectables, progestin-only pills, emergency contraceptive pills, lactational amenorrhea method (LAM), fertility awareness methods and withdrawal. Specific to these contraceptive methods, students are taught how they work, client eligibility criteria for various methods, and possible side effects and complications of various methods.

There are many online “e-resources” that schools may use to help train students on family planning contraceptive methods. Knowledge for Health or K4Health, a USAID-funded project guiding information dissemination in traditional and new media, highlights family planning method toolkits that specifically guide in-service and pre-service education. These include toolkits on implants, IUDs, condoms, injectables, LAM, oral contraceptives, and standard days method. Information for HIV/AIDS and family planning integration and community-based family planning programs are also available. In addition to toolkits,

elearning courses and forums are available for health professional schools to strengthen family planning training. (22) As more health professional schools gain access to the Internet, faculty and students are afforded further opportunities to increase their exposure to the most up-to-date family planning knowledge. However, noteworthy is the cost incurred to procure information technology equipment such as computers, and sustain Internet connectivity. For many health professional schools in developing countries, this is a significant barrier hampering student and faculty access to knowledge of family planning.

According to some of the key informant interviews, long-acting contraception methods receive less attention in pre-service training, particularly intrauterine contraceptive devices and to some extent, implants such as Norplant. A few decades ago, long-acting contraceptive methods were more prevalent in family planning. More recently their popularity has declined, especially since family planning priorities have weakened due to increased momentum and attention to other health concerns such as HIV/AIDS. Coupled with a shortage of supply of some long-acting commodities, data from the key informant interviews indicated it has become more difficult to find health professionals with proper training in long-acting family planning methods in recent years. Family Health International compiled a set of eight advocacy briefs: Long-Acting and Permanent Methods: Addressing Unmet Need for Family Planning in Africa, to specifically address long-acting methods for women and men. (23) Though these may be helpful for students in pre-service training institutions, challenges of trained faculty, the difficulty of commodity shortages and the insufficient dissemination of information hinder this area of family planning training and service delivery.

There have been numerous efforts by non-governmental organizations (NGOs) to integrate aspects of family planning into pre-service training in schools. Several projects have addressed issues such as healthy timing and birth spacing, post-abortion care and

fertility awareness into training. (24-26) However, success stories of these programs and their tools have been slow to reach a wide-range of health professional schools throughout the continent. Due to time and funding constraints, donors supporting these projects may only be able to implement health education strengthening in a few schools, limiting consistent pre-service education strengthening in a country or region.

***Challenges with Faculty and Resources in Pre-Service Institutions***

Nearly every interviewee agreed that a significant challenge to providing quality family planning training is the shortage of adequately trained faculty in schools who are equipped with the most up-to-date knowledge of family planning services. In addition to faculty shortages, many instructors and tutors currently working in medical, nursing and midwifery schools have outdated family planning knowledge, especially in West African countries such as Mali. Staff training and retention are areas of significant concern for health professional schools in general, and institutions need to use creative approaches such as maximizing public-private partnerships to ensure adequate faculty to train students. (13)

As pointedly stated by one of the key informant interview participants, “We expect people to teach but tutors themselves do not have skills.” In Mali, an interviewee noted that in one public school, midwives who were first trained on family planning methods over 30 years ago and have little knowledge of modern family planning methods currently teach students. Also mentioned was that in some discussions, natural methods and traditional methods were given equal credibility as modern hormonal methods.

Training staff and tutors takes time, money and commitment. High turnover of staff often thwarts efforts to invest in faculty training, especially in an environment with constrained budgets and resources. Innovative solutions such as training faculty alongside health providers during in-service trainings could leverage scarce training resources and

strengthen the teaching ability of health professional school faculty. Integrating this training can also build bridges between health professional schools and service delivery sites.

Another noteworthy problem highlighted in both the literature and key informant interviews is that pre-service education schools lack resources and the infrastructure needed to train students in family planning. If schools have updated curricula and trained faculty, but lack adequate resources such as books, computers, pelvic models, and other resources, students will not receive the high-quality education needed for family planning counseling and service provision. Lecture halls, skills labs, hard copy and on-line reference materials, computers, Internet connectivity, job aids and audio-visual equipment are essential to health professional training.

#### **Family Planning Knowledge Update in East Africa: A Success Story**

Successful workshops and trainings have resulted in improved family planning education in health professional schools. One example is the partnership of the East, Central and Southern African Community, Africa's Health in 2010 and the USAID-funded Capacity Project, which collaborated to provide a week-long 2008 training on "Contemporary Issues in Family Planning" for midwifery tutors in Kenya, Uganda and Tanzania. This workshop delivered updated contraceptive knowledge and useful tools into the hands of pre-service education midwifery tutors. Some trainees admitted they had not received any refresher family planning training in over ten years. The benefit of this workshop was seen not only in the enthusiasm of the participants, but also in a post-workshop survey in which 94 percent of the tutors reported using the workshop materials to update their colleagues.

Tutors also used the workshop materials to update curricula. "We have already incorporated the contraceptive technology updates into the training curricula (Certificate and Diploma Nursing Curricula), and we are also planning to update the Advanced Diploma and Degree Nursing curricula," said a nursing officer from the Tanzania Ministry of Health and Social Welfare.

Participants were enthused that the training led them to "spice up their lectures" and integrate content on healthy timing and spacing of pregnancy, medical eligibility criteria, Standard Days Methods/cycle beads and postpartum family planning.

Though these workshops require funding and a lot of planning, the success stories of this one workshop are the collaborative nature of regional partnerships and the accelerated dissemination of family planning knowledge from partners to faculties and to students. (27)



### **Family Planning in Pre-Service Education Curriculum**

Curricula in pre-service health professional schools in developing countries tend to be very theoretical in nature, failing to respond to the knowledge, skills and attitudes most relevant to regional health problems. (13) Some curricula rely on equipment, materials and other resources not supported by health training facilities. (18) If curricula focus on essential competencies of public health and primary care, health workers will have robust training properly preparing them to deliver high-quality health services. This is especially true for family planning training; particularly in regions with high fertility rates and high unmet need for modern family planning contraceptive methods.

Though much variation exists, experts participating in the key informant interviews agree that curricula specifically addressing competencies in family planning need to be updated. Data from the key informant interviews present a picture of family planning curriculum in the different regions of sub-Saharan Africa. West African and some Central African curricula have traditionally been developed with heavy influences from the French training system and are the most out-of-date compared with other regions on the continent. Curricula in Southern Africa are out-of-date too, with family planning training having diminished since the focus on HIV/AIDS prevention and treatment has increased in the past decade. Despite efforts to integrate HIV/AIDS and family planning in service delivery, less is known about integration endeavors in pre-service health professional schools in sub-Saharan Africa. The most current curricula for family planning can be found in East Africa where Western NGOs have been most influential. Still, given the pace of technological advances in family planning, many of these curricula are out-of-date.

Interviewees also agree that current curricula fail to allow students to engage with the varied aspects of family planning, including gender, social and cultural norms. Understanding these and other issues takes time, and with very few exceptions, current

curricula and training modules are insufficiently geared toward this depth of family planning training. As a whole, not enough time is allotted in current curricula for family planning training.

***National Standards– helpful roadmaps or unattainable aspirations?***

Family planning curricula are linked with national standards set forth by country governments. Often too, national standards are linked with international standards, such as those set forth by the World Federation for Medical Education and the Conférence Internationale des Doyens des Facultés de Médecine d’Expression Française. (13) In theory, these benchmarks are helpful for health professional training but outdated national standards result in outdated institutional curricula. As identified by experts contributing to the Global Alliance for Pre-Service Education Community of Practice, another problem is found in countries where governments have modified their national standards to include family planning updates but competencies in school curricula are poorly linked with those updated standards. (18) Also, some schools’ curricula within a country may be linked to national standards while others have not had resources to update their curricula, resulting in an imbalance of knowledge of health professionals who are delivering family planning services within countries and regions.

***Curriculum reform – a time consuming investment***

The development and execution of pre-service curriculum revision in family planning or any content area is a time-consuming and challenging process requiring support and input from a variety of stakeholders. (28) Before changes are made to academic programs, the rationale for introducing new or updated content must be understood and accepted by those inside and outside of teaching institutions. (28) These may include stakeholders from the Ministry of Health, Ministry of Education, professional associations, regulatory or accreditation bodies, specific task forces and those leading and teaching in

health training institutions. Prior to curriculum updates, assessments identify specific needs to be addressed in the curricula reform. This is followed by an analysis of the data with subsequent recommendations for carrying forward the curriculum revisions. One challenging part of the process is leadership, which is needed to advance assessment recommendations, resulting in curriculum updates. Once curricula are updated, institutions must ensure that faculty and preceptors are trained on updated curriculum modules and have access to books, equipment and other resources necessary to supplement the curriculum revisions. Given the many competing priorities of not just health professional schools but also other stakeholders, curriculum reform is a challenging undertaking that often fails to come to fruition.

Updating family planning curriculum need not be an arduous task. Often the only portions of curricula that need to be revised are information on new family planning methods, new health care practices such as post-abortion care, and clinical care guidelines focusing on integrating services such as family planning and HIV/AIDS services. (28) To support curricula revision, there are many published guides and standards from the WHO, international NGOs and other entities that will facilitate easier curricula updates for family planning training. There may be a ripple effect of benefits in updating portions of curricula. For example, strengthening curricula in one subject, such as family planning training, can spur demand for similar curricula strengthening in other subjects. (13)

### ***Successes in Updating Family Planning Curricula in sub-Saharan Africa***

Despite time limits and requirements for performance results, some excellent strides have been made to update family planning curricula in pre-service education training institutions. For example, the USAID-funded Capacity Project supported curricula reform at health professional schools in Rwanda and Mali. Implementing the Learning for Performance (LFP) approach, a systematic instructional design process was applied, using a

set of analytical tools to focus training on the essential skills health education workers need on the job. Emphasizing efficiency, relevance and job performance, LFP addresses specific gaps in health workforce development, including training to provide family planning counseling and service provision. (29)

In Rwanda, a 2005 performance needs assessment revealed that Rwanda nursing graduates were performing at varying levels depending on their training institution. As a result, the government closed all but five of the country's nursing schools in an effort to rebuild and improve the quality of nursing education. In collaboration with the Belgian Technical Cooperation, APEFE and Columbia University, the Capacity Project assisted in procurement of education resources, infrastructure renovations and an overhaul of the country's nursing curriculum, which included a phase out of the lower level A2 nursing education and strengthening of the higher level A1 nursing program. (30) The family planning curriculum update included the latest in contraceptive technologies and other aspects of family planning, including healthy timing and birth spacing and gender. Also strengthened were clinical practicum trainings, including linkages with rural communities and health centers. (30)

As one teacher at the Rwamagana Nursing School in Rwanda describes the curriculum, "HIV family planning, maternal and child health and gender content are integrated into the courses. Students learn the knowledge and theory in the classroom, go into the community to become aware of client needs and illnesses and then go to clinical practicum in the health centers and hospitals to learn how to practice their skills." (30)

The Capacity Project also made great strides in Mali where the health care system is strained by a shortage of qualified health care professionals, especially in the rural northern part of the country. Nearly 75 percent of all of the country's nurses and midwives are located in the country's capital, Bamako. (31) One strategy to address this maldistribution is

to train service providers in areas where health professional shortages persist in anticipating that those native to a particular region are committed to serving the area's local population.

In 2007, the project assisted a private institution, the Gao Nursing School, (Ecoles des Infirmiers de Gao) by using the LFP approach to improve and adapt content of the school's pre-service reproductive health/family planning curricula. This process involved local partners, community health associations, the regional health directorate, former Gao students and the school's teachers and practicum preceptors. An evaluation after the implementation of the revised curricula found high satisfaction, particularly with the LFP approach. The challenge is to integrate this reproductive health/family planning curricula at the rest of the country's health professional pre-service education institutions. (31-32)

#### **"The" Family Planning Guide**

One of the most concrete tools published in recent years to specifically provide practical and up-to-date guidance in family planning knowledge is *Family Planning: A Global Handbook for Providers*. This World Health Organization resource, published in 2007, is the follow-on publication to *the Essentials of Contraceptive Technology* published by Johns Hopkins University in 1997. *Family Planning: A Global Handbook for Providers* reflects the following updates: increased information about emergency contraceptive pills, monthly injectables, new implants, female condoms, fertility awareness methods, the combined patch, combined vaginal ring, the levonorgestrel intrauterine device and withdrawal; evidence-based information on reported side effects, health benefits and health risks of family planning methods; updated medical eligibility criteria and checklists for managing family planning contraceptive methods; guidance on family planning methods for people living with HIV; statements correcting misunderstandings about family planning methods; information on contraceptive effectiveness; and new sections on adolescents, men, women nearing menopause, maternal and newborn health, postabortion care, violence against women, infertility and infection prevention.

The advantage of a tool such as *Family Planning: A Global Handbook for Providers*, is the plethora of standardized and updated information about family planning and reproductive health. Experts from across the globe contributed to and helped develop this tool. However, the challenge is disseminating tools such as this to ensure they are not only available to health providers in service delivery sites, but also information from these tools is incorporated into both national standards and family planning curriculum in sub-Saharan Africa. (33)

### **The Clinical Practicum: Essential on-the-job learning or a missed opportunity?**

The clinical practicum is an integral part of pre-service education, allowing a student the opportunity to apply theoretical knowledge gained in the classroom to hands-on practice in a real-life setting under professional supervision. Successful practicum in higher education yields several benefits: a forum for students to develop job skills and on-the-job performance; the enhancement of interpersonal and social skills; the development of maturity in students; improvements in attitudes toward supervision, self confidence, job-knowledge and practical reasoning. (34)

#### ***The clinical practicum in sub-Saharan Africa***

For health professionals in Africa, as in many parts of the world, the clinical practicum is a highly valued and required component of education. For family planning training, the key informant interviewees noted that clinical practicum training is especially important since family planning curricula are often out-of-date and fail to allow for adequate classroom training for family planning; faculty lack the most up-to-date training to adequately educate students; and schools sometimes lack the resources needed to train students on new contraceptive technologies.

Despite the good intent and necessary purposes of a clinical practicum, literature and experts interviewed concur that obvious deficiencies in the clinical practicum hinder student experiences in many areas of sub-Sahara Africa. Practicum sites are often poorly prepared to support conducive learning environments for students, including a shortage of available preceptors, not enough clients for students and shortages of family planning commodities. The USAID-funded PRIME project helped the National Family Planning Programme in Tanzania develop a checklist to assess the status of clinics as practicum training sites. This included questions about the status of the facility; clinic organization; staffing at the clinic; training needs; the technical competency of the service providers;

maximizing access and quality of care during reproductive health service provision; basic equipment and supplies; family planning client methods used; and the quantity of contraceptive commodities available in the clinic stock. (35) Though useful in identifying needs and problems for suitable practicum sites, checklists such as these are only useful if they are utilized consistently and are drawn on to spur action to improve practicum training sites.

Another area contributing to deficiencies in the clinical practicum is poor coordination between schools and service delivery sites hosting students. Failing to ensure proper coordination and management of the student practicum often results in too many students overwhelming practicum sites and preceptors at one time, preventing students from adequately gaining hands-on clinical experience. (18) Improved coordination would also benefit clients, ensuring a smooth client flow for family planning services so that students could be staggered to offer family planning services and clients wait times could be reduced. Properly coordinating the clinical practicum takes careful scheduling yet this aspect is often overlooked in busy school training programs.

Adding to practicum woes, shortages and high turnover of preceptors and mentors adversely influence students' practicum education. Also, preceptors are unaware of the details of school curriculum. The weak linkages between schools and service delivery sites affect the ability of the preceptor to know what to teach students in order to meet their curriculum criteria, especially in family planning counseling and service provision. Furthermore, preceptors often lack training in how to teach, resulting in poor supervision. Though clinical knowledge is needed to instruct students, positive personal attributes and skills are needed to help students think through their service delivery decisions (36). Preceptors need to be prepared for what their roles entail, what students must learn, and effective strategies to teach and evaluate students. (37)

An additional problem identified in the key informant interviews is that students are often far from practicum sites, facing logistical challenges. Schools sometimes lack funding to pay for student transportation to practicum sites, forcing students to lose out on valuable clinical practicum experience. Examples of schools facing this problem are Walter Sisulu University in South Africa and Mali University in Mali, which have both specifically cited inadequate student housing near clinical sites as hindering student practicum experiences. (38)

Also important to consider is how well students are trained before going into their clinical practicum. Students must understand not only the theoretical and provisional competencies for family planning, they should be equipped with communication skills as well as have a grasp of social and gender norms in the areas where they are providing services. For example, a student in a rural health center may encounter clients who are less knowledgeable and less positive about family planning services compared with health centers in urban settings. Students must be able to educate clients, counsel them on their options, ensure all of clients' questions about family planning services are addressed and administer commodities as needed.

Other issues identified in the key informant interviews that impede successful clinical practicum experiences in family planning include contraceptive availability and the lack of on-the-job experience in family planning counseling. Additionally, there are few systems in place to properly evaluate and improve clinical practicum programs.

### **Gender and Family Planning Pre-Service Education Training**

The relationship between gender and reproductive health is undeniable yet very little attention is given to the intricacies of gender in providing family planning counseling and service provision. Gender refers to the different social, cultural, economic and political opportunities and constraints associated with being male or female. (39 pp20) Gender



norms and inequities can greatly influence male and female behaviors and actions in accepting and using family planning. It is important that health professionals who deliver family planning services understand the complexities of gender specific to family planning in their own work settings. Highlighted in the key informant interviews is the fact that pre-service training is the most opportune time to deepen sensitivities for health professionals, yet students in sub-Saharan African health professional schools currently do not fully understand the importance and depth of gender pertaining to family planning.

***The intricacies of gender and family planning – it's more than a concept***

It is important for students in health professional institutions to understand that gender is more than a male and female dynamic but rather has deep complexities, especially in family planning. As pointed out in the interviews, these include gender dynamics that influence family planning decision-making and fertility choices. In many sub-Saharan African regions, men want larger families than women. (40) Also, in some countries such as Kenya and Zambia, studies have shown that women are afraid to ask their husbands' permission to use family planning. (41) It is important that students understand that gender norms and social complexities have a great influence on family planning acceptance and use.

Gender-based violence (GBV) includes behaviors directed at women and girls because of their sex, including spousal abuse, sexual assault, dowry-related abuse, marital rape, female genital mutilation and other forms of abuse. (42) Experts interviewed agreed that students need to understand GBV, including signs associated with GBV, how GBV can influence family planning acceptance, use and continuation, and how, as a provider, students can help clients who have experienced GBV. Violence against women can specifically lead to unwanted pregnancies, adverse pregnancy outcomes and gynecological problems. (43) Health providers need to be aware of these issues and be nonjudgmental in

order to respond to the security, emotional and health needs of victims of GBV. (43) Pre-service training is the ideal time to begin educating health professionals, especially those providing reproductive health services to address GBV. The interviewees noted that there are few pre-service training programs that adequately discuss GBV and violence against women.

Also important are the intricacies of male involvement and partner negotiation, especially since family planning typically tends to be a female dominated field. The United Nations Development Programme and other agencies and institutions have highlighted the importance of male involvement in family planning, which includes using men to increase contraceptive prevalence of women, increasing male-dependent contraceptive methods including vasectomy, and increasing support from men for women's use of family planning. (44) A study in Uganda found that when negotiating reproductive health outcomes, there is a significant element of bargaining, weighing of costs and benefits and the use of bargaining chips by individuals within couples. (45)

Another aspect highlighted in the key informant interviews concerning family planning and gender is the marketing of family planning commodities. Experts recommend that students should be aware of how this may affect family planning acceptance and use. For example, if you compare marketing for male and female condoms, male condoms are widely marketed as a prevention method protecting users from HIV/AIDS and other sexually transmitted diseases. Marketing male condoms as a family planning method is not as common. The marketing and promotion of female condoms, however, is rare and many women in sub-Saharan Africa do not have access to female condoms as a family planning method. Not only are female condoms less likely to be stocked in pharmacies and health service delivery sites, they are also more expensive than male condoms.

Finally, data from the interviews and the literature search concur that students must understand stereotypes and cultural norms affecting family planning acceptability and use by their clients. These differ greatly by country and within countries. Anxieties, fear of side effects, cultural traditions and rituals, including religious customs, affect reproductive health behaviors including family planning. Students will not be able to understand and fully grasp these aspects before entering into the workforce, but they must recognize that this is a key aspect of family planning that cannot be ignored when delivering family planning counseling and services. The interviewees agreed that pre-service education is the ideal time to introduce these complex gender and family planning issues so they enter the workforce with a solid foundation for understanding.

***Strategy: gender integration***

A large body of evidence supports integration of gender into pre-service education curriculum for health workers. A smaller evidence base details how to integrate gender into curriculum. Very little published literature discusses gender integration into family planning training in pre-service training institutions in sub-Saharan Africa. (These findings have been corroborated by an unpublished literature review: IntraHealth International 2010)

Gender integration refers to the strategies that account for gender norms and compensate for gender-based inequalities. In the household and community, the roles and relative power of men and women shape the division of labor, allocation of responsibilities and behavior affecting reproductive health and health service utilization. (46) The Interagency Gender Working Group (IGWG) of USAID evaluated reproductive health programs that integrated gender since the 1994 Cairo Conference. Though not specific to pre-service training in sub-Saharan Africa, this evaluation is still applicable to family planning training. Using the 2004 publication “The So What? Report: A Look at Whether

Integrating a Gender Focus Into Programmes Makes a Difference to Outcomes,” the IGWG concluded that (the evidence suggests) integrating gender into reproductive health programs has a positive impact on outcomes. (47) Specific gains of gender integration into reproductive health programs include increases in women’s decision-making power; greater mutual support between partners; increased men’s knowledge of women’s health; raised women’s self efficacy; and other increased gender-equitable attitudes and outcomes. (47)

***How do you integrate gender into family planning education?***

Integrating gender into family planning is more than ensuring students understand a checklist of questions asking about intimate partner violence and household decision-making. As gender training modules are created and added to existing curricula, it is important for faculty to be sensitized, trained and prepared to educate their students. Faculty must understand and accept the role and importance of gender in family planning training.

Several key informant interviewees provided guidance for gender integration steps. First, for schools to have a thoughtful family planning training program with strong gender components they must first evaluate how their theoretical and skills courses currently address gender. Educators must also be aware of national gender policies and be able to link their curricula to those policies as well as international human rights commitments made by their respective countries. There should be no disconnections between national policies and pre-service training curricula.

The IntraHealth International/Southern Africa Human Capacity Development Project developed “The Preservice Education Family Planning Reference Guide” to assist pre-service training institutions in Malawi. Specific gender components of this guide include: Understanding the Importance of Gender for Family Planning Services; Provider

Response to Gender Issues; the effects of GBV on Family Planning Issues; GBV in Malawi; and Provider Response to GBV. These modules are supplemented with activities allowing students to identify gender constraints and opportunities in their own lives as well as cite ways that gender can change over time and what this might mean for family planning. Though this guide is specific to Malawi, it is an ideal model of how gender can and should be integrated into pre-service education family planning training.

Teaching the intersections of gender and family planning in pre-service education takes time. A simple lecture or two will not fully educate students on the role gender plays in family planning acceptance and use. It is valuable for students to have a forum to reflect on their experiences and understanding of gender in their own lives and be able to apply what they understand about gender into the context of providing family planning services.

### ***Gender and Faculty***

Gender inequities among faculty can hinder quality education in any academic arena and at any educational level. One study conducted by the University of Sussex in the United Kingdom investigated how gender equity was promoted and obstructed in higher learning institutions in several low-income countries including Nigeria, Tanzania, Uganda and South Africa. The study indicated patterns of sexual harassment, other gender violence, barriers in access and women staff facing exclusion from promotion and continued professional development. (48)

There were no data found supporting gender equity among staff teaching family planning in pre-service health professional schools, but the same principles apply to staff teaching any subject at any level. Examples of specific issues include maternity leave, opportunities for professional development and promotion, occupational segregation and sexual harassment. Gender equity among faculty is an important part of pre-service education health workforce development strengthening in sub-Saharan Africa.

### **Linkages Supporting Family Planning Pre-Service Education**

Health professional schools in sub-Saharan Africa, like training institutions in other countries, will be most efficient and effective in training qualified, high-quality health workers by working closely with local government, other schools, alumni, communities and other support systems. These linkages leverage resources and manpower, and create synergies conducive to the successful education of health workers. Fostering linkages between stakeholders who are competing for resources and priorities is difficult. Health professional schools have many priorities other than family planning, thus developing and sustaining relationships to support only one academic area is challenging. However, these linkages are largely missing in pre-service education, resulting in another missed opportunity in health professional training for family planning in sub-Saharan Africa.

Discussed in the key informant interviews, it is important for schools to be strongly linked with their respective national governments. The role of the Ministry of Education is to support training and education in any capacity of a country. As previously mentioned, curriculum is linked to national standards set forth by the government, mainly the Ministry of Education. Therefore it is fundamental for schools to be linked closely with the government so they are aware of new national standards so as to update their curricula. The Ministry of Education should also be well-versed in needs of health professional schools in order to ensure budgets allocate appropriate funds for resources. This is particularly critical for family planning training as funds for clinical practicum and equipment such as simulated training models are important for quality training.

It is also important for health professional schools to be closely linked with the Ministry of Health since students in schools who go on to work in the public sector will be employed by the government, under the Ministry of Health. Given the extreme shortages of health professionals in sub-Saharan Africa, this is an especially important linkage for health

professional schools and local governments. Strategies of bonding health workers to providing services in public sector after training have largely failed because health workers have evaded the system, most likely opting to work in the private sector for higher salaries. (49) Building innovative bridges for employment is an essential aspect of health systems strengthening.

Schools should also create networks with each other. These alliances will strengthen training programs, especially where resources are lacking. Supported by Africa 2010 and ECSA, the Kenya Medical Training College (KMTC) at Kitui was chosen in 2010 to be a Centre of Excellence for Family Planning and Reproductive Health. (50) Championing reproductive health and family planning, KMTC Kitui is evolving into a national and regional leader for pre-service education institutions. The goal is for KMTC Kitui to be a national and regional leader in family planning and reproductive health pre-service training, and in general pre-service training for nurses. In preparation for the April 2010 launch of the center, the KMTC Kitui staff have received additional intensive family planning and reproductive health training, including distance learning and e-learning training modules, and support from University of North Carolina School of Nursing to enhance the skills laboratory. Additional resources such as computers and local area network installation have also been procured.

Another linkage rarely taken advantage of is the one between schools and their alumni. Highlighted in the key informant interviews, connecting and building networks with students who have graduated from training institutions and transitioned into the workforce offers several advantages. First, reconnecting with alumni would allow schools to identify gaps in their own training by finding out what students are doing on the job that they were and were not trained to do in the educational institution. Secondly, this provides an ideal opportunity for schools to learn about new family planning information, which they

could incorporate into their curricula. Finally, pairing alumni with current students creates mentorships and bridges from pre-service training into the workforce.

One of the most important linkages needed to strengthen family planning training in pre-service education institutions is the one with communities. Without community acceptance and understanding of the benefits of family planning, health providers will lack clients. Interviewees agreed that students need to be aware of the perceptions, social norms as well as the needs of the communities where they will provide family planning services once in the workforce. The best way to gain this insight is not by sitting in the classroom, but getting out into communities and talking with men and women about their reproductive health needs. As previously mentioned, nursing school curriculum was updated in Rwanda after a 2005 assessment. At this time, the country's five nursing schools initiated a program whereas students would participate in a one-week community rotation to a village in order to spend time with families to learn about their reproductive and other health needs. Students worked alongside women in community gardens and interviewed families. The students participated in this rotation in their first year of training so that when they partook in their third-year clinical practicum, they were already aware of the needs of community. This successful program not only improves family planning education of students but it also fosters trust from communities of those providing reproductive and other health services. (30)

There are other linkages that health professional schools should explore to strengthen family planning pre-service training. These may include connections with professional associations, regulatory and accreditation bodies, country-based and international working groups, and global councils and consortiums. The Global Health Education Consortium, the Global Health Workforce Alliance, or International Planned



Parenthood Federation are examples of global resources that are viable partners to help strengthen pre-service workforce development.

In order for health professional schools to effectively create and manage linkages with other schools, alumni, communities, professional associations, the government and others, they must possess strong leadership. The time and resources invested in fostering these linkages are worthwhile to strengthen family planning training in sub-Saharan African health professional schools.

### **Discussion: Major Challenges and Key Recommendations**

Many challenges, barriers and gaps to providing high quality family planning training in sub-Saharan pre-service health professional education institutions have been highlighted in this paper. Those challenges listed most in the literature search and key informant interviews include: a shortage of faculty and tutors, specifically those updated with the most recent family planning knowledge; out-of-date curricula and limited specific family planning content in curricula; the missed opportunity of the clinical practicum in providing hands-on training for students; and a shortage of resources and money to support the infrastructure for pre-service education family planning training.

Addressing these and the other challenges persisting in family planning pre-service education training will take time, concentrated efforts from stakeholders, resources and most importantly leadership and support from national governments. Sustained leadership, support and investments are vital to properly educating health workers in sub-Saharan Africa on family planning counseling and service provision. Once health workers are equipped with a solid education and background in family planning, they will be most effective in delivering essential family planning services to women and men.

This paper sets out seven recommendations to strengthen family planning training in sub-Saharan African medical, nursing and midwifery schools. These recommendations

have been derived after analyzing and synthesizing the information found in the literature search and the data from the key informant interviews. These recommendations address deficiencies in family planning training in pre-service training institutions, and pave the way for improvements.

***Seven Recommendations for Action***

1. Governments, stakeholders and schools must prioritize family planning as an integral part of pre-service education and provide appropriate funding;
2. Stakeholders must build networks and engage in dialogue to support family planning in pre-service education;
3. Schools must be held accountable for updating family planning curricula in pre-service education, including gender specific curricula;
4. Faculty, including preceptors, must be able to teach the most up-to-date family planning counseling and service provision content;
5. Family planning in the clinical practicum for pre-service education must be strengthened;
6. Aspects of pre-service and in-service family planning training must be integrated;
7. Efforts must be intensified to gather, analyze and use data in order to provide concrete information to improve family planning in pre-service education institutions.

**1. Governments' prioritization of family planning:** In order for any substantial progress to be made in strengthening family planning training in sub-Saharan pre-service educational institutions, country governments must promote and invest in family planning training and service delivery. Steps governments may take include: ensuring task forces are supported; national standards are updated to regularly reflect contraceptive technology advances; support for health professional schools in family planning training programs; fiscal resources are allocated for family planning training and service delivery. Additionally, ministries within the government such as the Ministry of Health, Ministry of Education and the Ministry of Finance, should work together to support family planning.

**2. Stakeholder Networks:** Family planning needs champions, especially in ensuring the future health workforce of sub-Saharan Africa is trained to provide high quality family planning counseling and service provision. Regional and country networks must be created and sustained to advocate for strong pre-service family planning training in health professional schools. Alliances and partnerships may result in updated curricula in schools, improved linkages with clinical practicum sites, and stronger gender components in family planning training. Stakeholder networks can also assist in cohesive family planning training in countries, linking public, private and faith-based training institutions.

**3. Curricula Updates:** Curricula in private, public, rural, urban faith-based schools need to be up-to-date and reflective of the most current technological advances in family planning. The roadmap for health worker training is curriculum and ensuring a comprehensive program in family planning counseling and service provision will adequately prepare future health workers. Curricula must include not only theoretical training modules but also interactive modules including role-playing and skills labs with simulation models. Also, curricula must flow and integrate other aspects of health that intersect with family planning such as HIV/AIDS, STI prevention, and MCH. Finally, family planning curricula must thoughtfully and thoroughly integrate gender in order for students to fully understand and appreciate the sensitive intersections of gender and family planning.

**4. Train the Faculty:** Faculty must be trained to provide quality education on family planning counseling and service provision. One of the largest barriers to quality pre-service education is an adequate number of trained teachers and preceptors. Local governments and health professional schools in sub-Saharan Africa must focus efforts on supporting faculty. Opportunities for professional growth must be integrated with continuing education programs. Staff must feel valued, appreciated and supported by their training institutions.

**5. Strengthen the Practicum:** Improving clinical practicum is a necessary investment for family planning pre-service education in sub-Saharan African health professional schools. Health professional schools must prioritize this critical aspect of student learning by strengthening communication with preceptors. These preceptors should be valued as faculty and involved in school curricula updates and participate in professional development trainings offered to institution staff. Furthermore, school management should ensure preceptors are equipped with the necessary resources to teach students. Innovative ways to inform staff and preceptor knowledge of up-to-date family planning technologies should be explored, including harnessing e-learning and mhealth opportunities.

The clinical practicum can also be strengthened by improved logistical organization between schools and clinical practicum sites. Often preceptors are overwhelmed with too many students therefore reducing the quality of on-the-job training that students receive.

**6. Integrate pre-service and in-service training:** Health workers must receive life-long education to be most effective in service delivery. It is inconceivable that health workers will gain all of the knowledge needed for their careers during their pre-service training. This is especially true for family planning given the development of new technologies. For this reason, in-service training is ideal to update health worker knowledge. However, in-service training is costly, time consuming and takes health workers away from their posts, impacting service delivery for clients. Many times too, health workers are receiving in-service training that should have been done during their pre-service education. (13)

To ensure scarce funding is invested wisely, country governments and international donors must not choose to invest in either pre-service training or in-service training, but rather integrate aspects of health worker training at both levels. By bridging training and including students, faculty, preceptors and current health workers, a cohesive approach can be applied to family planning training. Additionally, this will level the playing field of

faculty and preceptors, offering both the opportunity to continue their family planning and reproductive health professional development. Integrating training will also foster linkages between schools and service delivery sites, creating improved practicum and health worker placements for students.

**7. Data for informed family planning training decision-making:** Finally, in order to strengthen aspects of family planning training, both now and in the future, more data are needed to inform governments, stakeholders and training institutions. Time and money must be invested to assess and analyze information on how and the quality of family planning training. Student knowledge of family planning is an ideal measurement of the quality of training but little is known about how students score on family planning examination materials. Also, student performance must be measured alongside the quality of training they receive from their respective institutions. Faculty knowledge, counseling and service delivery experience in the clinical practicum, and the exposure and use of resources such as up-to-date family planning information and the equipment in skills labs, should be assessed. Once stakeholders and governments are able to determine specific details of family planning training efforts in pre-service training institutions, more directed and precise steps can be taken to improve training.

## **Conclusion**

Family planning is an important aspect in the health of sub-Saharan populations. In order for high-quality counseling and service delivery of family planning commodities, health workers must be trained to provide the most up-to-date family planning services.

Health professional pre-service training institutions in sub-Saharan Africa possess an array of deficiencies in family planning training. These vary by country and within countries. Though some best practices and success stories of efforts to improve family planning training can be found in sub-Saharan Africa, the majority of schools in the region

lack high-quality, comprehensive family planning education. The quality of training does not match the family planning needs of sub-Saharan African populations; especially in areas with high fertility rates and high unmet need for family planning. In order to improve the landscape of family planning training at pre-service schools, country governments and stakeholders must prioritize family planning training and ensure that appropriate funds and resources are available for pre-service training. Supporting family planning training at all levels, stakeholder networks must be strengthened and supported to ensure family planning training is at its highest quality and most comprehensive. Health professional schools must ensure curricula for family planning are up-to-date and faculties are adequately trained to teach and support family planning training. In addition, health professional schools must work with clinical sites to strengthen the clinical practicum so students are afforded opportunities to apply themselves to clinical family planning counseling and service provision. As a means of strengthening training and leveraging resources, efforts must be made to integrate pre-service training and in-service training. This should include faculty, tutors and preceptors for family planning services. Finally, more data is needed to monitor, analyze and advise family planning training in pre-service education.

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