

Changing the Trajectory of Adolescent Pregnancy Around the World: Strengthening Prevention, Optimizing Care and Outcomes, and Improving Transition into Motherhood

A Concept Note from the University of California, Berkeley and the University of California, San Francisco
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The Challenge

The world today includes the largest cohort of adolescents in history, yet too often health care services, policies and societal norms undermine the potential of adolescent girls who face early or unintended pregnancy and motherhood. Sixteen million girls aged 15-19 worldwide, and as many as 1 million girls under 15, give birth every year, disproportionately in low- and middle-income countries. Complications from pregnancy and childbirth are the second largest cause of death for adolescents 15-19 years. Meanwhile, every year 7.4 million and 3 million 15-19 year-old girls experience unintended pregnancies and unsafe abortions, respectively (WHO, 2014). Although rates of adolescent pregnancy in the U.S. are down an average 8% across this age group since 2014 (CDC, 2015), this is higher than other western industrialized nations, indicating that there are vulnerable communities worldwide. The increased health risks, and economic and social disadvantages to young mothers, infants, and their communities are well documented--as are exacerbating socio-cultural factors such as marital age: 90% of births to adolescent mothers in low-resource settings occur within marriage (Blum et al., 2015).

Given the complex factors that lead to, and perpetuate adolescent pregnancy, progress in addressing the problem has been slow. It is imperative that new, innovative research efforts turn toward determining causal processes and impact of different components of adolescent sexual reproductive health (ASRH) programs (Denno et al., 2015). There is a need for rigorous research and evaluation to determine how to better deliver services in and outside of facilities, reach marginalized and vulnerable adolescents, and ensure community, partner and parental acceptance of youth-focused services. Developing and implementing strategies to promote the integration and scale-up of successful evidence-based ASRH practices, interventions and policies is paramount (Blum et al., 2015).

Our Approach

The University of California, Berkeley and the University of California, San Francisco are committed to pursuing a joint academic research and implementation science initiative that will advance an innovative, transdisciplinary and collaborative agenda to study and address factors contributing to adolescent pregnancy. Our goal is to coalesce the research and clinical strengths of our two universities to inform and implement evidence-based programs and policies that promote empowerment, choice, well-being and opportunity for girls to reach their full potential.

"We believe that all girls should have the best opportunities in life. Together, we want to dramatically reduce the rate of unintended adolescent pregnancies by understanding the factors that amplify or limit the choices a girl has around her reproductive health, and discover how best to influence these factors. To do this, we will leverage our expertise in public health, clinical implementation science, policy and advocacy. We will incorporate a range of perspectives and actors, from clinical and epidemiological researchers, to those studying broader societal factors such as childhood marriage, poverty, health and human rights, and other economic, political, behavioral and social factors. We will focus on implementing innovative solutions by integrating research, service delivery, and youth participation."

-- Vision statement developed at a UC Berkeley/UCSF Global Adolescent Pregnancy workshop, June 2017

Successful global ASRH projects, such as the PRACHAR Project in Bihar, India, have demonstrated that community-based, youth participatory action is pivotal to success (Jejeebhoy, 2015). Our initiative will seek to impact a girl's life course, from pre-sexual debut to womanhood, whether and when her path includes marriage and/or pregnancy. The initiative will build on an existing understanding and knowledge base of what works--and

what has not--from ASRH service models in different contexts and geographies, taking into consideration the complex challenges of accessing and receiving ASRH services at different points in their young lives. To achieve this goal, our institutions will partner with each other, and with other organizations, to design, develop, and implement interventions and approaches that address three critical priorities that span a girl's reproductive life course:

- (A) strengthening prevention against early and unintended pregnancy;
- (B) optimizing choice, care and outcomes when a girl becomes pregnant; and
- (C) improving transition to motherhood to improve outcomes for young mothers and their infants.

Recognizing that targeting adolescent girls is not enough, the initiative will take a holistic approach, engaging individuals within the girls' larger communities and social/support networks--including boys, men and parents--who have the power to affect reproductive health decisions, as well as formal actors such as health care providers, educators, and policymakers.

To achieve these priorities, we will pursue a range of activities organized under five interrelated goals (Figure 1).

Goal 1. Improve access to information and care for adolescents

Our objective is to empower adolescents to make informed choices by generating demand for and improving access to sexual, reproductive and maternal health services. Potential activities, building on the innovative research of our faculty, will identify and understand the factors that enable or hinder a young person's ability to access information and services during their sexual life course. We will determine what factors influence the full and effective use of innovations in programs and practice, and identify and target alternate delivery points for information and services. We anticipate that this work will lead to a range of recommendations, as well as tools to help communities, practitioners and programs.

Goal 2. Transform health care services to provide quality sexual, reproductive and pregnancy care

Our objective is to improve access to and quality of care, including provider training to ensure youth-friendly health services meet the reproductive health needs of adolescents. Our activities and interventions will draw from the clinical excellence of our institutions, to map best practices, identify gaps in training and service delivery, as well as develop new innovative training methods across a spectrum of ASRH and pregnancy services. Doing so will allow us to design and test new models of ASRH services while also assessing provider motivations, behaviors, attitudes and skills. Services will also focus on youth-centered prenatal care and newborn care.

Goal 3. Target schools as a setting and access point for information and services

Our objective is to optimize schools as a setting and access point for ASRH curriculum, and work with educators and school partners to deliver comprehensive ASRH education and contribute to demand-generating activities. Activities carried out under this objective would include conducting landscape assessment of successful school-based practices in ASRH education for 10-14 year olds; engaging youth in innovative curriculum design and delivery approaches such as mobile innovations; and exploring different methods for training teachers and other key educators in schools to implement ASRH curriculum.

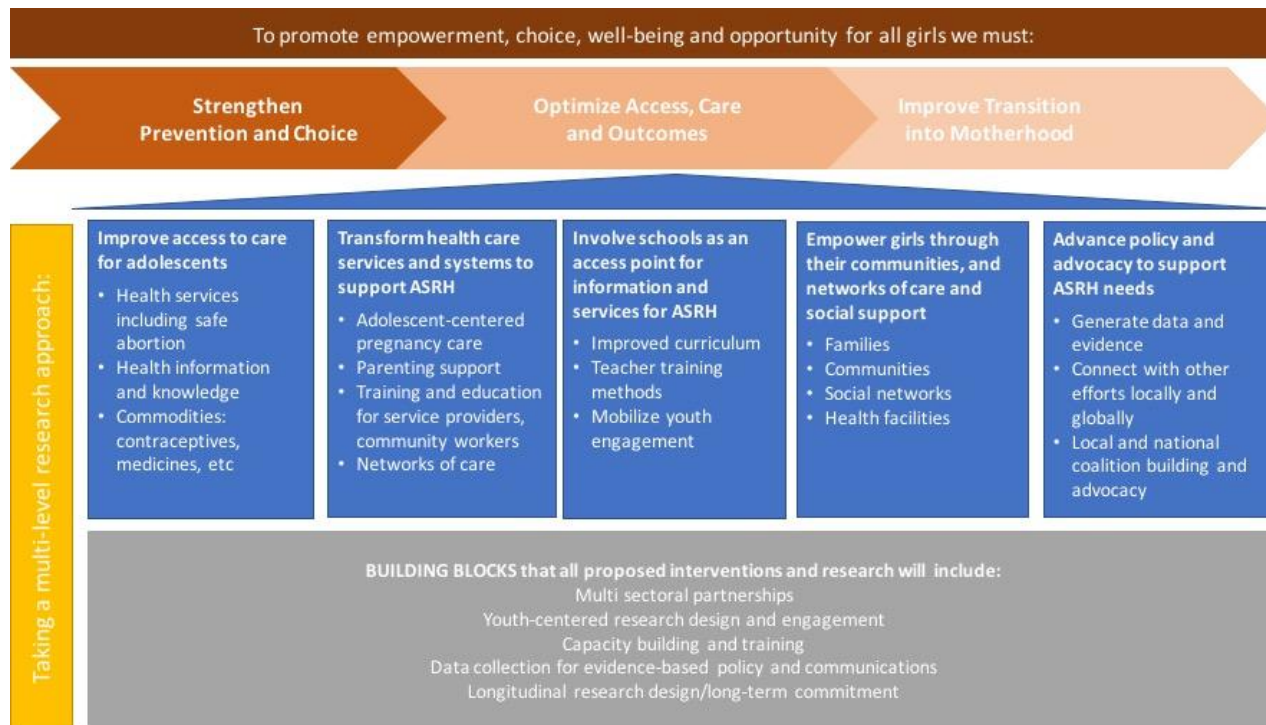
Goal 4. Empower girls by addressing social norms and generating networks of care and social support

Our objective is to understand and promote a supportive social and familial environment that facilitates a young person's utilization of ASRH services. Potential activities would include identifying gaps in existing evidence or programming as it relates to interpersonal relationships to inform theories of change that can influence a young person's decision-making, identity, values and behaviors. We will use the generated evidence to design and implement community toolkits, training and interventions that will strengthen a young woman's familial, community and social ties to improve decision-making, identity, values and behaviors, thus reducing unintended pregnancy, and improving young people's agency and health outcomes.

Goal 5. Advance policy and advocacy to support adolescent sexual and reproductive health needs

Our objective is to use the evidence generated in the previous aims to ensure that adolescents have the legal and social autonomy over equitable health and future prospects. Our activities would include a landscape assessment to understand the context-specific policies that impact ASRH, both inside and outside of the health sector; an assessment of political will for ASRH across multiple sectors; the creation and effective implementation of new policy; and, advocacy initiatives that enable adolescents to drive decisions about their reproductive health.

Figure 1. Conceptual framework for the UC Berkeley-UCSF Initiative



How We Will Collaborate

As part of a wider global effort to address global adolescent pregnancy, this initiative relies on our institutional strengths in building research and implementation science capacity, and our experience employing a comprehensive ground-up approach. We will harness the power of our universities' rich portfolio of ASRH projects, partners, and research expertise around the globe, from specific centers of expertise including the School of Public Health, Bixby Center for Population Health and Sustainability, Innovations for Youth, Human Rights Center, Center for Global Public Health, and Center on the Developing Adolescent at UC Berkeley; and the Global Health Sciences Maternal & Newborn Health Research Cooperative, Preterm Birth Initiative East Africa, Bixby Center for Reproductive Health, and Advancing New Standards in Reproductive Health (ANSIRH) at UCSF. Leveraging these resources, we will:

1. Increase the impact of our work through **youth-centered research design, engagement**, and participation. We are committed to giving youth a voice and ownership in the initiative, from design to implementation to knowledge transfer. These efforts will help build the evidence base for youth participatory research.
2. Engage in strong **multi-sectoral partnerships** with NGOs, governments, multilateral partners and civil society, and with national and global strategies. As academic institutions with limited direct presence in countries and local communities, we will leverage relationships and work closely with on-the-ground partners to: co-develop and co-lead in-country research and data collection; provide critical input and a feedback loop on what does and does not work; and pilot/test new approaches.

3. Ensure sustainable impact by working with our partners to **build organizational capacity**--among youth to be their own voices; among research and implementation partners to carry out rigorous research and evaluation; among NGOs and health care providers to provide high-quality services and support. We will prioritize this focus within each community to strengthen the foundations, skills and capacity from the ground-up, and to sustain local efforts and ongoing research beyond the end of the initiative.
4. Implement an **evidence-based policy focus**, making sure we collect policy-relevant data as we go, mapping the policy landscape, building partnerships with advocacy and policy organizations--and focusing our research towards policy and practice. We will leverage our universities' expertise in implementation science to ensure robust design, evaluation and uptake of interventions. We will work with local and regional policy-makers and implementing partners to translate evidence into practice, programs and policies that support ASRH and empower youth. We will also seek to make data accessible and user-friendly for diverse audiences.
5. If funded, we will implement a **longitudinal cohort** study, allowing us to test and evaluate the impact of interventions in stable cohorts over 5+ years, and truly understand long-term impact and sustainability of interventions for different cohorts.

Drawing on these approaches across all our five goals, we will determine which interventions can provide long-term impact on adolescents--particularly delaying or averting pregnancy--at specific intervention points for diverse populations.

Geography and Timeline

UC Berkeley and UCSF researchers currently lead robust studies and enjoy strong partnerships with universities, NGOs, and other partners in over 60 countries around the world. Program countries will be selected in conversation with funding partners, but will ideally build on existing relationships and collaborations. Examples could include Rwanda, Ethiopia, Uganda, and Nigeria in Africa; Bangladesh or India in Asia; Mexico and Brazil in Latin America; and the Central Valley or Northern California in the United States. We seek to launch a longer-term research effort with an initial 3-5-year, multi-faceted initiative targeted toward filling key gaps in evidence and implementation, in a small number of geographies in a limited number of countries. This initial effort will form the evidence base and help shape the focus of subsequent phases of work. Our hope is that this effort could include the launch of a longitudinal cohort study that would be renewed and extended over time, providing a platform for in-depth study of cohorts and comparative evaluation of interventions to delay motherhood, along with a better understanding of how to support the transition to adolescent parenting.

Long-Term Impact

The proposed UC Berkeley/UCSF joint initiative seeks to leverage our collective expertise to make progress on the issues and challenges of adolescent pregnancy. We hope our research contribution will be demonstrated through improved SRH outcomes for adolescents worldwide, including reduced rates of pregnancy in general, and in unintended pregnancies specifically, coupled with delayed first birth and greater birth spacing, driven by girls' personal choices and improved maternal and newborn outcomes. Additionally, we seek to influence national and local policies that support a girl's right to choose, and give her access to tools to effectively and safely delay or prevent pregnancy. By helping girls to delay pregnancy until they are ready, we seek to empower not only the girls, but also their partners and families, to allow them to participate in educational and economic development opportunities, and become full contributors to their communities and countries.

Organizational Capacity

UC Berkeley and UCSF are two world-renowned universities with a long history of cooperation and collaboration across research, teaching and service, driven by the two campuses' complementary strengths. By combining our academic strengths and engaging with our local and global partners, we believe we have a unique opportunity to truly advance the understanding of the diverse and complex factors that lead to early and unintended pregnancies among adolescent girls. The proposed initiative will bring together over 40 committed faculty and research leaders in the area of ASRH who are already leading some of the world's most specialized research centers and

initiatives. Our researchers are world experts in family planning, maternal and adolescent health in the clinical domain--from pre-term birth and high-risk pregnancy, to maternal and newborn care. We conduct research, impact, and evaluation on contraception, gender norms, reproductive, rights, and safe abortion. We are leaders in public health--engaging with community through youth participatory action, and translating evidence to policy and practice through transdisciplinary research, and community-based interventions and implementation.

Leadership and Expertise

Ndola Prata, MD, MSc, is Fred H. Bixby Endowed Chair in Population and Family Planning; Director, Bixby Center for Population, Health and Sustainability; Co-Director, Innovations for Youth (I4Y) at UC Berkeley; and Co-director of the Center of Expertise on Women's Health, Gender and Empowerment for the UC Global Health Institute. Dr. Prata is a public health physician and medical demographer from Angola. Her principal research involves the design, implementation and evaluation of reproductive health (RH) interventions that make the best use of existing health care infrastructure and maximize human resources in developing countries. She has had a large role in the translation of evidence to policy surrounding the inclusion of misoprostol for postpartum hemorrhage and medical abortion, and has led many projects in developing countries that test innovative RH service delivery models, including for youth, that have contributed to policy and program changes.

Dilys Walker, MD, is Professor, UCSF Obstetrics and Gynecology and Global Health Sciences; Director, Preterm Birth Initiative East Africa; Co-director, Maternal Newborn Health Research Cooperative at UCSF; and President and co-founder of PRONTO International. Dr. Walker works jointly in the Obstetrics and Gynecology, and Global Health Sciences departments at UCSF. Dr. Walker is also affiliate faculty at UC Berkeley and a visiting Professor in Reproductive Health at the National Institute of Public Health in Mexico. Her principal research involves implementation trials addressing issues related to quality of antenatal and obstetric care, designing and implementing innovative provider training strategies using highly realistic simulation and team-training as well as group models of antenatal care. Dr. Walker is the Principal Investigator on global maternal and neonatal health focused grants and collaborates with partners in India, Kenya, Uganda, Mexico, and Guatemala.

Purnima Mane, PhD is an internationally respected expert on SRH who served as the President and CEO of Pathfinder International, a post she held from 2012 to 2016. Other earlier appointments include United Nations Assistant Secretary-General; Deputy Executive Director of Programs at UNFPA; and Director of Policy, Evidence and Partnership for the Joint United Nations Program on HIV/AIDS (UNAIDS). She currently serves as an expert advisor to the development of the UC Berkeley/UCSF adolescent pregnancy initiative.

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